

**Standard No. 20: Preceptors:** The college or school has a sufficient number of preceptors (practice faculty or external practitioners) to effectively deliver and evaluate students in the experiential component of the curriculum. Preceptors have professional credentials and expertise commensurate with their responsibilities to the professional program.

1) **Documentation and Data:**

**Required Documentation and Data Uploads:**

- List of active preceptors with credentials and practice site (**APPENDIX 20A**)
- Number and percentage of required APPE precepted by non-pharmacists categorized by type of experience. (**APPENDIX 20B**)
- Description of practice sites (location, type of practice, student/preceptor ratios) (**Narrative + APPENDIX 20A**)
- Policies and procedures related to preceptor recruitment, orientation, development, performance review, promotion, and retention (**APPENDICES 20C-D,F**)
- Examples of instruments used by preceptors to assess student performance (**APPENDICES 20L-N**)
- Curriculum vitae of administrator(s) responsible for overseeing the experiential education component of the curriculum (**APPENDICES 200-Q**)
- Description of the structure, organization and administrative support of the Experiential Education office (or equivalent) (**Narrative**)

**Required Documentation for On-Site Review:**

*(None required for this Standard)*

**Data Views and Standardized Tables:**

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Student – Questions 61, 62
- AACP Standardized Survey: Preceptor – Questions 9, 14-18, 38, 39, 40, 41

**Optional Documentation and Data:**

Other documentation or data that provides supporting evidence of compliance with the standard.

- 1) **College or School's Self-Assessment:** Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>20.1. Preceptor criteria</b> – The college or school makes available and applies quality criteria for preceptor recruitment, orientation, performance, and evaluation. The majority of preceptors for any given student are U.S. licensed pharmacists.	●	○	○
<b>20.2. Student-to-preceptor ratio</b> – Student to precepting pharmacist ratios allow for the individualized mentoring and targeted professional development of learners.	●	○	○
<b>20.3. Preceptor education and development</b> – Preceptors are oriented to the program’s mission, the specific learning expectations for the experience outlined in the syllabus, and effective performance evaluation techniques before accepting students. The college or school fosters the professional development of its preceptors commensurate with their educational responsibilities to the program.	○	●	○
<b>20.4. Preceptor engagement</b> – The college or school solicits the active involvement of preceptors in the continuous quality improvement of the educational program, especially the experiential component.	●	○	○
<b>20.5. Experiential education administration</b> – The experiential education component of the curriculum is led by a pharmacy professional with knowledge and experience in experiential learning. The experiential education program is supported by an appropriate number of qualified faculty and staff.	●	○	○

2) **College or School’s Comments on the Standard:** The college or school’s descriptive text and supporting evidence should specifically address the following. Use a check  to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.

- How the college or school applies quality criteria for preceptor recruitment, orientation, performance, and evaluation
- A discussion of the college or school’s student-to-preceptor ratio and how the ratio allows for individualized mentoring and targeted professional development of learners
- How the college or school fosters the professional development of its preceptors commensurate with their educational responsibilities to the program
- How the college or school solicits active involvement of preceptors in the continuous quality improvement of the education program, especially the experiential component
- How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- Any other notable achievements, innovations or quality improvements

- Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

**[TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)**

### **Preceptor Recruitment**

The preceptors for the experiential program are “voluntary” and are a great asset to the NDSU SOP and students. All IPPEs and required APPEs are precepted by licensed pharmacists ([Appendices 20A-B](#)). In the current 2019-2020 experiential year, the school is utilizing 314 preceptors for IPPEs and APPEs, the majority (99.4%) of which are licensed pharmacists. The two non-pharmacists precept APPE elective rotations (research and academic) and are NDSU faculty PhDs.

Since the last accreditation visit the new preceptor recruitment process has become standardized and more robust. The School applies quality criteria to preceptor recruitment through a new preceptor application form available online ([Appendix 20C](#)) to formalize the recruitment process and assist in the recruitment of quality pharmacy preceptors. Preceptors must answer, “Why do you wish to precept students?” on the application form to demonstrate a desire to teach. To ensure a consistent process, an email template was developed in the rotation management system to refer new inquires to this form. The Director of Experiential Outreach and Assessment (DOA) or designee evaluates the site and preceptor according to established criteria using a standard template documented in the rotation management system ([Appendix 20D](#)).

Preceptors are provided the SOP IPPE/APPE Preceptor Handbook ([Appendix 20E](#)) and rotation-specific syllabus prior to accepting students. They are also provided preceptor development resources including, a free continuing professional education (CPE) online module, “Preceptor Orientation”, from CEImpact. Other orientation topics to be covered with the DOA or designate include SOP mission and goals, experience goals and objectives, assessment, student roles and responsibilities, student supervision, and setting expectations ([Appendix 20D](#)). Instructions for free access to CEImpact’s compliment of CPE modules and the services of the NDSU library system are also sent to all new preceptors as part of the orientation process. Active preceptors are considered “Adjunct Faculty Members in the NDSU School of Pharmacy.”

### **Preceptor Performance and Evaluation**

Current preceptors are evaluated by each student on every rotation using a standard electronic evaluation generated by the rotation management system in an anonymous fashion which does not affect the grading process ([Appendix 20F](#)). The Experiential Directors are notified electronically of any preceptor/site receiving a low score (defined as a numerical score of two or below indicating disagree or strongly disagree) on a final evaluation. Low scores are tracked and follow up action is taken as necessary including moving site and/or preceptor to inactive status if required.

Students also complete an end of rotation reflection for all rotations. The reflections are reviewed by the appropriate directors (APPE or IPPE) and provide additional information as to a site’s learning

environment and/or need for reclassification, contact from the Experiential Education office to improve the rotation, or inactivation of the site. For the 2018-2019 rotation year two rotation sites/preceptors were inactivated. Reasons included rude staff at one site reported by multiple students and one site where the preceptor was suspended from his job (both out of state APPEs).

On the 2018 AACP Preceptor Survey, 79.8% of preceptors agreed or strongly agreed the criteria for evaluating their performance as a preceptor was clear which is in line with peer and national averages. Through our continuous quality improvement (CQI) process, however, we determined that some current preceptors did not know how to access the evaluations completed by students. The information on viewing student evaluations has since been added to the Preceptor's Handbook, newsletter, preceptor CPE and site visit information.

Student evaluations of preceptors in aggregate are provided to the Assessment Committee. Evaluations are trended over time and are consistently positive for SOP preceptors. For 2018-2019 on a five point Likert scale evaluation (1=strongly disagree; 5=strongly agree) adjunct faculty (e.g. volunteer) APPE preceptors had an average total score of 4.52, faculty APPE preceptors 4.71, IPPE 1 preceptors, 4.6 and IPPE 2 preceptors, 4.62 on questions relative to preceptor and/or site quality ([Appendix 20G](#)).

#### **Student: Preceptor Ratio**

In 2019-2020 most (91%) APPE/IPPE preceptors have a 1:1 student-to-preceptor ratio, with the remaining having a 2:1 ratio with one exception. One IPPE rotation has a 3:1 student-to-preceptor ratio. Of the preceptors at a 2:1 ratio, 40% are SOP faculty. All NDSU students (100%) rated as agree or strongly agree with the 2019 AACP Student Survey question, "Preceptors provided individualized instruction, guidance and evaluation". Nearly all SOP preceptors (98.2%) rated the 2018 AACP Preceptors Survey question, "The student-to -preceptor ratios at my site are appropriate to maximize learning," as agree or strongly agree compared to the national average (95.4%) for public schools.

#### **Preceptor Professional Development**

NDSU SOP began a partnership with the CEImpact to offer free online preceptor training modules (including the Pharmacist Patient Care Process) and pharmacist recertification modules to foster preceptors' continuing professional development as experiential educators and clinicians. All modules are ACPE-accredited CPE and are available online and on-demand via the rotation management system. Additionally, NDSU SOP developed a "*From the Schoolhouse*" series on teaching and clinical topics which is also ACPE accredited CPE that is offered in a live webinar, or in on-demand format to reach the greatest number of preceptors. CEImpact modules were accessed by 66 preceptors (~21%) in the past year and 98 "*From the Schoolhouse Series*" recordings were accessed during the first year of CPE recorded offerings.

The SOP hosts a four-hour research and full day teaching seminar annually that are also available to preceptors in a live or recorded version. The research seminar was promoted as a resource for preceptors who may be taking BPS Certification exams. The teaching seminar includes both didactic and experiential teaching information. The SOP, in collaboration with NDPhA and North Dakota Society of Health System Pharmacists professional organizations, sponsored "Advance: A Leadership Workshop" for pharmacists,

residents and students in the fall of 2018 which offered five and half hours of ACPE-accredited CPE. Twelve preceptors claimed CPE from the Advance Leadership Workshop. A second ACPE accredited CPE Leadership workshop was delivered in September 2019 with a similar number of preceptors attending.

A new “*Pastries with Preceptors*” event initiated in 2018 by the SOP provided an opportunity for preceptor education including the PPCP, introduction of the co-curriculum, and opportunity for multiple preceptors to engage in CQI of the program by offering their feedback on areas students excel as well as gaps in student pharmacist knowledge. The “*Pastries with Preceptors*” event continues as an annual event coinciding with the SOP Career Fair in an effort to interact with pharmacists from around the region.

Preceptors are also educated during site visits as of fall 2018 on topics including PPCP, EPAs and new co-curriculum information. During the site visits recommendations for preceptor development topics are solicited ([Appendix 20H](#)). Regular emails are sent to preceptors highlighting all of the preceptor development opportunities available to them and that individualized training can be requested from sites based on their needs. Finally, a preceptor newsletter is released twice per year to increase/improve communication and engagement of the preceptors regarding experiential education ([Appendix 20I](#)).

On the 2018 AACP Preceptor Survey, 82.2% of NDSU preceptors agreed or strongly agreed the SOP has an effective continuing professional development program that is consistent with preceptor responsibilities (question 41). This score is essentially the same as the national average of 84.4%. In an effort to improve, the SOP offered ACPE continuing education on preceptor development at the Annual North Dakota Pharmacy Convention in 2018 and 2019. Modules of an online preceptor “Boot Camp” with instructional videos specific to the SOP (new EPA evaluations and SOP curriculum year by year) are also available in the rotation management system ([Appendix 20J](#)).

Because our preceptors are voluntary, there are no ramifications for failing to take advantage of any of the preceptor development or education listings currently offered. To remedy this gap, starting in fall 2019 APPE students were charged with providing a brief training on the PPCP to each of their preceptors while on rotation. The students were educated on the PPCP in the pre-APPE curriculum and provided with a preceptor training outline. Once the PPCP preceptor training is completed the student submits a form signed by the preceptor ([Appendix 20K](#)). For future years, a menu of student-delivered training options will be available for preceptors to choose from. This process will augment the already robust offerings available to NDSU preceptors and ensure all active preceptors are receiving preceptor development.

### **Preceptor Involvement in CQI**

NDSU solicits active involvement of preceptors in CQI. One way this is accomplished is by including multiple non-faculty (e.g. adjunct) and faculty preceptors as members of the Experiential Education Committee (EEC). The number of non-faculty preceptor representation in the Committee doubled in 2019-2020. A non-faculty preceptor is also included on both the Curriculum and Assessment Committees. All preceptors complete evaluations of students assigned to them ([Appendices 20L-N](#)). On the 2018 AACP Preceptor Survey, 98.8% of preceptors strongly agreed or agreed that they know the process for documenting and addressing student performance, which was above peer (97%) and national averages

(97.6%). Aggregate evaluations are reviewed by the Assessment Committee to assess trends in student performance on rotations that signal improvement efforts. Other opportunities to involve preceptors in CQI include soliciting their feedback at pharmacy events such as the annual *Pastries with Preceptors* and annual North Dakota Pharmacy Convention. The SOP also encourages participation in the AACP Preceptor survey which in 2018 had nearly double the response rate (34.8%) of other national public schools to identify areas of strength and weakness.

A call for volunteers was included in the experiential education newsletter to pilot new EPA evaluations which allowed preceptors to provide input. Site visit comments are recorded specifically asking areas NDSU students are excelling and gaps identified in students on rotations. Preceptor feedback is discussed with the Experiential Education Committee. Aggregate comments are discussed with the Curriculum Committee where trends and opportunities for improvement are noted. An example of a recent improvement involved changes to the timing and content of the Top Drugs curriculum for 2019 based on feedback from preceptors during site visits in 2018.

### **Office of Experiential Education**

The experiential education team reports to the Chair of the Pharmacy Practice Department and consists of 3 faculty members with knowledge and experience in experiential learning ([Appendices 200-Q](#)). Each of the faculty members have additional academic responsibilities so that only 2.05 FTE is actually allocated to Experiential Education. Additionally, the team is supported by two staff members (2.0 FTE), an Experiential Education Administrative Assistant and an Experiential Education and eValue Coordinator. In 2018, 91.4% of NDSU preceptors agreed or strongly agreed that they receive the needed support from the office of Experiential Education which is well above peer (85.4%) and national public school averages (84.9%).

The EEC consists of the Office of Experiential Education plus four faculty preceptors, a lab faculty and four adjunct faculty preceptors. The EEC is a subcommittee of the Curriculum Committee and routinely has preceptors involved in the evaluation of courses to prepare students for rotations. The EEC reviews policies and procedures related to experiential, approved the new EPA evaluations, gives final approval of new sites and provides oversight of the quality assurance process for the experiential program among other tasks. The School of Pharmacy Assessment Committee provides oversight for the assessment of student learning.

### **Notable achievements, Innovations, Quality improvements**

There has been a focus on increased education of our pharmacist preceptors since the last accreditation visit. The DOA position was created to focus efforts on preceptor and site development. Many improvements to preceptor professional development have been made since the new position was created (see professional development of preceptors above). Deliberate feedback is solicited from preceptors regarding student strengths and weaknesses during site visits which is relayed to the Experiential and Curriculum Committees. The Practice Facilities and Preceptor Quality Assurance Process was approved which describes the nature and frequency of required experiential contact ([Appendix 20D](#)) and a new preceptor application form is currently in use ([Appendix 20C](#)).

Additionally, in response to a recent Currents in Pharmacy Teaching and Learning article<sup>1</sup> recommending gamification of a learning platform to increase preceptor engagement, an ACPE continuing education Preceptor Development Gaming activity was developed and delivered to preceptors. Two faculty members presented at a District meeting of NDPhA and then at the North Dakota Pharmacy Convention in 2019 as an ACPE CPE activity for preceptors. Content included the PPCP, mission and vision of the School and preceptor resources. Plans are underway to contribute the findings to the literature to share with colleagues.

1. Mulherin K, Walter S, Cox CD. National preceptor development program (PDP): Influential evidence and theory. The first of a 3-part series. *Curr Pharm Teach Learn*. 2018;10(3):255-266. doi:10.1016/j.cptl.2017.12.002

4) **College or School’s Final Self-Evaluation: Self-assess** how well the program is in compliance with the standard by putting a check in the appropriate box :

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul style="list-style-type: none"> <li>• No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance <b>/or</b></li> <li>• Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul style="list-style-type: none"> <li>• Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>• Adequate information was not provided to assess compliance</li> </ul>
<input type="checkbox"/> Compliant	<input checked="" type="checkbox"/> Compliant with Monitoring	<input type="checkbox"/> Partially Compliant	<input type="checkbox"/> Non Compliant

5) **Recommended Monitoring: If applicable, briefly describe issues or elements of the standard that may require further monitoring.**

- Monitor documented orientation of new preceptors prior to accepting students
  - Education was completed in the EE office on the process for entering new preceptors (not allowed to take students unless go through the portal)
  - Learning management template developed to refer new email inquiries to this portal
  - Rotations will not be filled prior to preceptor approval
  - Out of area rotations/preceptors for 2020-2021 and going forward to only include existing rotation sites unless a unique experience approved through established processes is added
  
- Monitor completion of documented student lead preceptor training



## APPENDIX 20A

### NDSU Preceptors 2019-2020

**All rotations have student:preceptor ratio of 2:1 or less for APPE; 3:1 or less for IPPE. See standard 20 for details.**

**Alaska Native Medical Center - Anchorage, AK - Oncology, 4315 Diplomacy Dr, Anchorage, AK, 99508**

**Bott, Anne Marie, PharmD, BCOP, BCPS,**  
Oncology

**Alaska Native Medical Center - Anchorage, AK - Quality Assurance/Quality Improvement, 4315 Diplomacy Dr, , Anchorage, AK, 99508**

**Doran-Atchison, Sara, Pharm. D.**  
Quality Assurance/Quality Improvement

**Alaska Native Medical Center - Anchorage, AK - Transitions of Care, 4315 Diplomacy Dr, , Anchorage, AK, 99508**

**Locke, Michelle, Pharm. D., BCPP**  
Transitional Care/Discharge Counseling

**Albertsons - Bozeman, MT, 200 S 23rd Ave, , , Bozeman, MT, 59718**

**Baker, Katie, Pharm. D.**  
Community Advanced

**Allina Cambridge Medical Center - Cambridge, MN, 701 South Dellwood St., , , Cambridge, MN, 55008**

**Solbrack, Diane, Pharm.D.**  
Institutional  
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**Allina Cambridge Medical Center Outpatient Pharmacy - Cambridge, MN, 701 South Dellwood St., , , Cambridge, MN, 55008**

**Enger, Jeremy, Pharm.D.**  
Community Advanced

**Allina Community Pharmacy (Management) - Minneapolis, MN, 920 East 28th St., , , Minneapolis, MN, 55407**

**Byre, Ann, Pharm. D.**  
Management

**Allina New Ulm Medical Center - New Ulm, MN - 1324 5th St. N., 1324 5th St. N., , , New Ulm, MN, 56073**

**Horning, Reid, Pharm. D.**  
Institutional

**Allina St. Francis Regional Medical Center - Shakopee, MN, 1455 St. Francis Ave, , , Shakopee, MN, 55379**

**Torkelson, Bryant, PharmD**  
Acute Care

**Alomere Health - Formerly Douglas Co. Hospital - Alexandria, MN, 111 17th Ave E, , , Alexandria, MN, 56308**

**Becker, Katie, Pharm. D.**  
Institutional

**Altru Health System - Clinic Pharmacy - Grand Forks, ND, 1380 S Columbia Rd, , , Grand Forks, ND, 58201**

**Eastman, Amanda, Pharm. D.**  
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**Altru Health System - Grand Forks, ND - Anticoagulation, 1200 S Columbia Rd, , , Grand Forks, ND, 58206**

**Cairns, Melanie, R.Ph.**  
Anticoagulation

**American Pharmacists Association - Washington, DC, 2215 Constitution Avenue, NW, , , Washington, DC, 20037**

**Lawson, Brian, Pharm. D.**  
Management

**Amery Regional Medical Center - Amery, WI, 265 Griffin Street East, , , Amery, WI, 54001**

**Tryggstad, Mark, R. Ph.**  
Institutional  
Rural

**Anoka Metro Regional Treatment Center - Anoka, MN, 3301 N 7th Ave, , , Anoka, MN, 55303**

**Zwack, Andrew, Pharm. D., BCPP**

Psychiatry

**Avella Specialty Pharmacy - Phoenix, AZ, 23620 N. 20th Drive Ste 12, , , Phoenix, AZ, 85085**

**Mathews, Kelly, Pharm. D.**

Specialty Pharmacy

**Avera Marshall Regional Medical Center - Marshall, MN, 300 s. Bruce St., , , Marshall, MN, 56123**

**Kunde-Davis, Rachele, Pharm. D., BCACP**

Institutional

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**Avera McKennan Hospital and University Health Center - Sioux Falls, SD, 1325 South Cliff Avenue, Ste 220, , Sioux Falls, SD, 57117**

**Beck, Bradley, Pharm. D., BCOP**

Oncology

**Hepper, Nicole, Pharm. D., BCPS**

Acute Care

Institutional

**B & B Northwest Pharmacy - Minot, ND, 20 Burdick Exp W, , , Minot, ND, 58701**

**Mohl, Lance, R.Ph.**

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**Billings Clinic - Billings, MT, 2800 10th Ave N, , , Billings, MT, 59107-7000**

**Coggins, Reina, PharmD, BCPS**

Institutional

**Bloomington Drug - Bloomington, MN, 509 W 98th St, , , Bloomington, MN, 55438**

**Schaffer, Jeff, Pharm.D.**

Compounding - Pt Care

**Bureau of Prisons Federal Medical Center - Ambulatory Care - Rochester, MN, 2110 E Center St., , , Rochester, MN, 55904**

**Gustafson, Jeremy, Pharm. D.**

Ambulatory Care

**Bureau of Prisons Federal Medical Center - Institutional Rochester, MN, 2110 E Center St, , , Rochester, MN, 55904**

**Thompson, Beth, Pharm. D.**

Institutional

**Campbell County Mem Hosp - Gillette, WY, 501 S Burma Ave, , , Gillette, WY, 82716**

**Graham, Danica, Pharm. D. RPh.**

Institutional

**Cardinal Health - Moorhead, MN, 1610 30th Ave S, , , Moorhead, MN, 56560**

**Bohmer, Daniel, R.Ph.**

Nuclear Pharmacy

**Carrington Area Rotation - Carrington, ND, 990 Main St, , , Carrington, ND, 58421**

**Paulson, Matt, R.Ph.**

Rural

**CarrisHealth Rice Memorial Hospital CentraCare - Willmar, MN - Institutional, 301 Becker Ave SW, , , Willmar, MN, 56201**

**Cervin, Kristine, Pharm.D.**

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**Goracke, Nathan, Pharm.D.**

Institutional

**CarrisHealth Rice Memorial Hospital CentraCare - Willmar, MN - Oncology, 301 Becker Ave SW, , , Willmar, MN, 56201**

**Goracke, Nathan, Pharm.D.**

Oncology

**Cashwise Pharmacy - Hutchinson, MN, 1020 Hwy 15 S, , Hutchinson, MN, 55350**

**Longie, Laura, R.Ph.**

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**Cashwise Pharmacy - Moorhead, MN, 3300 Hwy 10 E, , Moorhead, MN, 56560**

**Burnside, Corey, R.Ph.**

Community Advanced

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**Cashwise Pharmacy - Willmar, MN, 101 Willmar Ave, , Willmar, MN, 56201**

**Hansen, Julie, Pharm.D.**

Ambulatory Care

Community Advanced

**Center for Family Medicine - Bismarck, ND, 701 E. Rosser, , Bismarck, ND, 58501**

**Krush, Billie Jo, R. Ph.**

Ambulatory Care

**Center for Family Medicine - Minot, ND, 1201 11th Ave SW, , Minot, ND, 58701**

**Klein, Katherine, Pharm.D.**

Ambulatory Care

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**CentraCare Health - Monticello, MN, 1013 Hart Blvd, , Monticello, MN, 56362**

**Drake, Kathryn, PharmD**

Institutional

**Kern, Jackie, Pharm. D.**

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**CentraCare Health - Paynesville, 200 First St. W, , Paynesville, MN, 56362**

**Klocker, Jennifer, Pharm. D.**

Ambulatory Care

**CentraCare Health Long Prairie - Long Prairie, MN, 20 SE 9th Street, , Long Prairie, MN, 56347**

**Hagen, Chris, Pharm.D.**

Institutional

PHRM 355 Introductory Pharmacy Practice Experience I

**CentraCare Health System - Sauk Centre, MN, 425 N Elm Street, , Sauk Centre, MN, 56378**

**Heinen, Dennis, R.Ph.**

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Rural

**Centracare St. Cloud Hospital - St. Cloud, MN - Acute Care, 1406 6th Ave N, , St. Cloud, MN, 56303**

**Nelson, Angela, Pharm.D.**

Acute Care

**CentraCare St. Cloud Hospital - St. Cloud, MN - Transitions of Care, 1406 Sixth Avenue North, , St. Cloud, MN, 56303**

**Akers, Michael, Pharm. D.**

Patient Care

**Central Avenue Health Mart Pharmacy - Valley City, ND, 323 N. Central Avenue, , Valley City, ND, 58072**

**Sayler, Doreen, R.Ph.**

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Rural

**Central Pharmacy - Carrington, ND, 990 Main St, , Carrington, ND, 58421**

**Wendel, Shane, R.Ph.**

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**CHI - ePharmacist Direct - Fargo, ND - Institutional Telepharmacy, 801 Page Drive, , , Fargo, ND, 58103-2315**

**Finck, Karen, Pharm. D.**

Institutional

**CHI - Lisbon Area Health Services - Lisbon, ND, 905 Main St, PO Box 353, , Lisbon, ND, 58054**

**McRitchie, Jill, Pharm.D.**

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Rural

**CHI - Mercy Hospital - Valley City, ND, 570 Chatauqua Blvd, , , Valley City, ND, 58072**

**Noeske, Amy, Pharm.D.**

PHRM 355 Introductory Pharmacy Practice Experience I

Rural

**CHI - St. Alexius Devils Lake Hospital - Devils Lake, ND, 1031 7th St NE, , , Devils Lake, ND, 58301**

**Hurly, Kimberly, Pharm.D.**

PHRM 355 Introductory Pharmacy Practice Experience I

**CHI - St. Alexius Health - Dickinson, ND, 2500 Fairway St., , , Dickinson, ND, 58601**

**Lucklum, Mindy, Pharm. D.**

PHRM 355 Introductory Pharmacy Practice Experience I

**CHI - St. Alexius Med Ctr - Bismarck, ND - Acute Care, St. Alexius, 900 E. Broadway, , Bismarck, ND, 58501**

**Deutsch, Katie, Pharm. D.**

Acute Care

**CHI - St. Alexius Med Ctr - Bismarck, ND - Community Pharmacy, 900 E Broadway, PO Box 5510, , , Bismarck, ND, 58501**

**Peterson, Krissi, Pharm.D.**

Community Advanced

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**CHI - St. Alexius Med Ctr - Bismarck, ND - Critical Care, 900 E. Broadway, , , Bismarck, ND, 58501**

**Mcperson, Dan, R.Ph.**

Critical Care

**CHI - St. Alexius Med Ctr - Bismarck, ND - Home Infusion, 900 E. Broadway, , , Bismarck, ND, 58501**

**Koch, Natalie, Pharm.D.**

Ambulatory Care

**CHI - St. Alexius Med Ctr - Bismarck, ND - Infectious Disease, 900 E Broadway, , , Bismarck, ND, 58501**

**Sorenson, Carrie, R.Ph.**

Infectious Disease

**CHI - St. Alexius Med Ctr - Bismarck, ND - Institutional, 900 E Broadway, Box 1658, , , Bismarck, ND, 58501**

**Germolus, Allison, RPh.**

Institutional

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**Gion, Jill, Pharm.D.**

Institutional

PHRM 355 Introductory Pharmacy Practice Experience I

**Porsborg, Chad, Pharm.D.**

PHRM 355 Introductory Pharmacy Practice Experience I

**CHI - St. Alexius Med Ctr - Bismarck, ND - Pediatrics, 900 E. Broadway, , , Bismarck, ND, 58501**

**Mcperson, Debra, R.Ph.**

Pediatrics

**CHI - St. Alexius Med Ctr - Bismarck, ND - Surgery, 900 E. Broadway, , , Bismarck, ND, 58501**

**Roehrich, Mike, R.Ph.**

Surgery

**CHI - St. Francis Medical Center - Breckenridge, MN, 2400 St. Francis Dr., , Breckenridge, MN, 56520**

**Allison, Brianne, Pharm.D.**

Institutional

PHRM 355 Introductory Pharmacy Practice Experience I

Rural

**CHI - St. Joseph's Area Health Services - Park Rapids, MN, 600 Pleasant Ave, , Park Rapids, MN, 56470**

**Kosel, Scott, R.Ph.**

PHRM 355 Introductory Pharmacy Practice Experience I

Rural

**CHI - Unity Family Healthcare - St. Gabriels Hospital - Little Falls, MN, 815 2nd St SE, , Little Falls, MN, 56345**

**Miller, Debra, Pharm. D.**

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**Children's Hospitals & Clinics of Mn - Mpls, MN, 2525 Chicago Ave S, , Minneapolis, MN, 55404**

**Stay, Lisa, Pharm.D., BCPPS**

Pediatrics

**Churchill Pharmacy - Bismarck, ND, 1190 W Turnpike Ave, , Bismarck, ND, 58501**

**Churchill, Daniel, Pharm.D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**City Drug Store - International Falls, MN, PO Box 111, 314 3rd St, , International Falls, MN, 56649**

**Anderson, Gary, R.Ph.**

Rural

**Clinic Pharmacy, Inc. - Dickinson, ND - 2615 Fairway St., 2615 Fairway St., , Dickinson, ND, 58601**

**Duletski, Carla, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Coborn's Pharmacy - Big Lake, MN, 711 Rose Dr, , Big Lake, MN, 55309**

**Roesler, Brad, R.Ph.**

Community Advanced

**Coborn's Pharmacy - Elk River, MN, 19425 Evans St NW, , Elk River, MN, 55330**

**Hughes, Mark, RPh**

Community Advanced

**Coborn's Pharmacy - Glencoe, MN, 2211 11th St E, , Glencoe, MN, 55336**

**Higgins, Kelly, Pharm. D.**

Rural

**Coborn's Pharmacy - Hastings, MN - 225 33rd St. W, 225 33rd ST W, , Hastings, MN, 55033**

**Anderson, Troy, Pharm. D.**

Community Advanced

**Coborn's Pharmacy - Isanti, MN, 209 6th Avenue Northeast, , Isanti, MN, 55040**

**Olson, Rita, Pharm. D.**

Community Advanced

**Coborn's Pharmacy - Mora, MN, 710 Frankie Ln, , Mora, MN, 55051**

**Burklund, Tara, PharmD**

Community Advanced

**Coborn's Pharmacy - Ramsey, MN - 7900 Sunwood Dr., 7900 Sunwood Drive NW, , Ramsey, MN, 55303**

**Krebs, Tekla, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Coborn's Pharmacy - Sartell, MN, 707 First Ave N, , Sartell, MN, 56377**

**Skoe, Anne, R. Ph.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Coborn's Pharmacy - Sauk Centre, MN, 214 12th St, , Sauk Centre, MN, 56378**

**Schiffler, Kurt, Pharm.D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Coborn's Pharmacy - St. Cloud, MN - Cooper Ave, 900 Cooper Ave S, , St. Cloud, MN, 56301**

**Engelman, Brian, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Corner Drug Store - Wahpeton, ND, 619 Dakota Ave., , Wahpeton, ND, 58075**

**Glarum, Luke, Pharm. D.**

Rural

**Crosslake Drug - Crosslake, MN, 14311 Gould St., PO Box 578, , Crosslake, MN, 56442**

**Kappes, Steven, Pharm.D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Cub Pharmacy - Baxter, MN -14133 Edgewood Drive N, 14133 Edgewood Drive N, , Baxter, MN, 56425**

**Cooper, Ben, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Cub Pharmacy - Blaine, MN 12595 Central Ave NE, 12595 Central Ave NE, , Blaine, MN, 55434**

**Koski, Duane, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Cub Pharmacy - Burnsville, MN - 1750 W Cty Rd #42 W, 1750 W Cty Rd #42 W, , Burnsville, MN, 55337**

**Hagie, Robert, Pharm. D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**Cub Pharmacy - Burnsville, MN - 300 E Travelers Trail, 300 E Travelers Trail, , Burnsville, MN, 55337**

**Kortan, Kayla, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Cub Pharmacy - Maplewood, MN - 2390 White Bear Ave, 2390 White Bear Ave N, , Maplewood, MN, 55109**

**Wong, Jessica, Pharm. D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**Cub Pharmacy - Plymouth, MN - 4445 Nathan Lane N, 4445 Nathan Lane N, , Plymouth, MN, 55442**

**Hamilton, Sara, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Cuyuna Lakes Pharmacy - Crosby, MN, 320 E Main St, Suite 2, , Crosby, MN, 56441**

**Hirschey, Jennifer, Pharm.D.**

Rural

**CVS Caremark - Bloomington, MN, 8300 Norman Ctr Dr, Suite 750, , Bloomington, MN, 55437**

**Larson, Jeffery, R.Ph.**

Management

**CVS inside Target Pharmacy - Plano, TX - 2200 Dallas Pkwy, 2200 Dallas Parkway, , Plano, TX, 75093**

**To, Michael, Pharm. D.**

Community Advanced

**CVS inside Target Pharmacy - Rochester, MN - 3827 Marketplace Dr., 3827 Marketplace Dr NW, , Rochester, MN, 55901**

**Brennan, Joe, R.Ph.**

Community Advanced

**CVS Pharmacy - Chandler, AZ - 180 N Dobson Rd, 180 N. Dobson Rd, , , Chandler, AZ, 85224**

**Holmes, Matt, Pharm. D.**

Community Advanced

**CVS Pharmacy - Fargo, ND - 19th Ave N., 1321 19th Ave N, , , Fargo, ND, 58102**

**Lies, Tami, Pharm.D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**CVS Pharmacy - Haslet, TX - 13901 Sendera Blvd, 13901 Sendera Ranch Blvd, , , Haslet, TX, 76052**

**Al-Hourani, Mohammed, Pharm. D.**

Community Advanced

**CVS Pharmacy - Honolulu, HI - 1748 Liliha St., 1748 Liliha St, , , Honolulu, HI, 96817**

**Mikami, Ian, Pharm. D.**

Community Advanced

**CVS Pharmacy - Mesa, AZ - 1230 S Longmore Ave., 1230 S Longmore Ave., , , Mesa, AZ, 85212**

**Pasquale, Anthony, PharmD**

Community Advanced

**CVS Pharmacy - Mesa, AZ - 2809 S. Sossaman Rd, 2809 S. Sossaman Rd, , , Mesa, AZ, 85212**

**Coahran, Hillary, PharmD**

Community Advanced

**CVS Pharmacy - Montgomery, AL - 3190 Zelda Rd., 3190 Zelda Rd, , , Montgomery, AL, 36106**

**Lipinsky, Caroline, PharmD**

Community Advanced

**CVS Pharmacy - Naples, FL - 8863 Tamiami Trail North, 8863 Tamiami Trail North, , , Naples, FL, 34108**

**Jackson, Timothy, PharmD**

Community Advanced

**CVS Pharmacy - Round Rock, TX - 800 West Old Settlers Blvd, 800 West Old Settlers Blvd, , , Round Rock, TX, 78664**

**Kandimalla, Aparna, PharmD**

Community Advanced

**Dakota Clinic Pharmacy - Fargo, ND - University Dr, 1702 University Dr, , , Fargo, ND, 58103**

**Smithers, Carly, Pharm. D.**

Community Advanced

**Dakota Drug - Stanley, ND, 107 S. Main St, , , Stanley, ND, 58784**

**Dick, Terry, R.Ph.**

Rural

**East Ottertail Pharmacy - Perham, MN, 1000 Coney St. West, , , Perham, MN, 56573**

**Wallace, Duane, R.Ph.**

Rural

**Economy Drug - Elgin, ND, 201 N Main St, , , Elgin, ND, 58533**

**Oien, Charles, Pharm. D.**

Rural

**Essentia Deer River Healthcare Center - Deer River, MN, 1002 Camstock Drive, , , Deer River, MN, 56636**

**Litchke, Sarah, Pharm. D.**

PHRM 355 Introductory Pharmacy Practice Experience I

Rural

**Essentia Health - Fargo, ND - Acute Care, 3000 32nd Ave S, , , Fargo, ND, 58103**

**Bubach, Julie, R.Ph.**

Acute Care

**Wehner, Carly, Pharm. D.**

Acute Care

**Essentia Health - Fargo, ND - Anticoagulation, 3000 32nd Ave S, , , Fargo, ND, 58103**

**Bubach, Julie, R.Ph.**

Patient Care

**Essentia Health - Fargo, ND - Institutional, 3000 32nd Ave S, , , Fargo, ND, 58103**

**Bubach, Julie, R.Ph.**

Institutional

PHRM 355 Introductory Pharmacy Practice Experience I

**Essentia Health - Fargo, ND - Transitions of Care, 3000 32nd Ave S, , , Fargo, ND, 58103**

**Knain, Kim, Pharm.D.**

Patient Care

**Essentia Health - International Falls, MN, 2501 Keenan Drive, , , International Falls, MN, 56649**

**Tomczak, Tara, Pharm.D.**

Rural

**Essentia Health - St. Mary's - Detroit Lakes, MN - Ambulatory Care, 1027 Washington Ave, , , Detroit Lakes, MN, 56501**

**Grimes, Alissa, Pharm. D., BCPS**

Ambulatory Care

**Essentia Health Medical Home - Moorhead, MN, 801 Belsly Blvd, , , Moorhead, MN, 56560**

**Hursman, Allison, Pharm D, BCGP**

Ambulatory Care

**Essentia Health St. Joseph's Medical Center - Brainerd, MN, 523 N. Third St, , , Brainerd, MN, 56401**

**Corcoran Bahl, Valerie, PharmD**

Acute Care

Institutional

**Fairview Mail Order Pharmacy Services-Mpls, MN, 711 Kasota Ave SE, , , Minneapolis, MN, 55414**

**Bergquist, Eric, Pharm. D.**

Mail Order Pharmacy

**Family HealthCare - Fargo, ND - Ambulatory Care - Maack, Brody Maack - Ambulatory Care, 301 NP Ave, , Fargo, ND, 58102**

**Maack, Brody, Pharm.D., BCACP**

Ambulatory Care

**Family HealthCare - Fargo, ND - Ambulatory Care - Slevin, 301 NP Ave, , , Fargo, ND, 58102**

**Slevin, Amber, Pharm. D., BCACP**

Ambulatory Care

**Family Healthcare - Fargo, ND Ambulatory Care - Iverson, 301 NP Ave, , , Fargo, ND, 58102**

**Iverson, Jennifer, R.Ph.**

Ambulatory Care

**Family HealthCare Pharmacy - Fargo, ND - Community - Miguel, 301 NP Ave, , , Fargo, ND, 58102**

**Buisancatevilla, Miguel, R.Ph.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Soper, Tonya, Pharm.D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Family Medicine Residency Pharmacy - Grand Forks, ND, 725 Hamline St, , , Grand Forks, ND, 58203**

**McGauvran, JoEllen, R.Ph.**

PHRM 455 Introductory Pharmacy Practice Experience II

**FirstLight Health System - Mora, MN, 301 South Highway 65, , , Mora, MN, 55051**



**Thompson, Brent, Pharm.D.**

Acute Care

Rural

**Flower Mound Herbal Pharmacy - Flower Mound, TX, 1001 Cross Timbers Rd #1170, , Flower Mound, TX, 75028**

**Song, Dennis, R.Ph.**

Community Advanced

**Forman Drug - Forman, ND, 330 Main St S, , Forman, ND, 58032**

**Schlecht, Nathan, R.Ph.**

Rural

**Gateway Pharmacy South - Bismark, ND, 835 S Washington St, , Bismarck, ND, 58504**

**Dodd, Shelby, Pharm. D.**

Community Advanced

**Genoa Healthcare - Roseville, MN - 3101 Old Hwy 8, 3101 Old Hwy 8 Ste 203B, , Roseville, MN, 55113**

**Jackman, Julie, Pharm. D., BCACP**

Psychiatry

**Genoa Healthcare - St. Paul, MN - 317 York Ave, 317 York Ave, , St. Paul, MN, 55130**

**Affeldt, Christina, Pharm.D.**

Psychiatry

**GuidePoint Pharmacy #108 - Nisswa, MN, 23962 Smiley Road, , Nisswa, MN, 56468**

**Piekarski, Rebecca, PharmD**

Rural

**Heritage Pharmacy - Bismarck, ND - Gateway Mall, 2700 State St, Suite F13, , Bismarck, ND, 58503**

**Hoechst, Luke, Pharm.D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**Heritage Pharmacy - Bismarck, ND - Mid Dakota Clinic, 401 N 9th St, Mid Dakota Clinic at 9th & Rosser, , Bismarck, ND, 58501**

**Kristensen, Andrew, Pharm.D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Hudson Hospital - Hudson, WI, 405 Stageline Rd, , Hudson, WI, 54016**

**Rippie, Stephanie, Pharm. D.**

Acute Care

**Hy-Vee Health Market Rx - Pine Island, MN, 111 County Road #11, PO Box 646, , Pine Island, MN, 55963**

**McDonough, Patrick, R.Ph.**

Rural

**Jamestown Regional Medical Center - Jamestown, ND, 2422 20th St SW, , Jamestown, ND, 58401**

**Ament, Brian, R.Ph.**

Institutional

PHRM 355 Introductory Pharmacy Practice Experience I

**Johns Hopkins All Children's Hospital - St. Petersburg, FL, 501 6th Ave, , St. Petersburg, FL, 33701**

**Litherland, Katie, Pharm. D.**

Institutional

**Lake Elmo Compounding Pharmacy - Lake Elmo, MN, 11240 Stillwater Blvd N., , Lake Elmo, MN, 55042**

**Rich, Nick, Pharm.D.**

Compounding - Non - Pt Care

Compounding - Pt Care

**Lake Region Healthcare Corporation - Fergus Falls, MN - Acute Care, 712 S. Cascade St., , Fergus Falls, MN, 56537**

**Dewey, Mark, Pharm.D., BCGP**

Acute Care

**Lake Region Healthcare Corporation - Geriatrics/Psychiatry-Consulting, 712 S. Cascade St. Fergus Falls, MN, 56537**

**Dewey, Mark, Pharm.D., BCGP**

Geriatrics

**Lake Region Healthcare Corporation - Fergus Falls, MN - Institutional, 712 S. Cascade St., , Fergus Falls, MN, 56537**

**Vigen, Kayla, Pharm. D.**

Institutional

PHRM 355 Introductory Pharmacy Practice Experience I

**Lakeview Hospital - Stillwater, MN, 927 W Churchill St, , Stillwater, MN, 55082**

**Appleseth, Cindy, Pharm.D.**

Acute Care

Institutional

**Langdon Community Drug - Langdon, ND, 706 3rd St, , Langdon, ND, 58249**

**Lutman, Lyle, Pharm.D.**

Rural

**Larsen Service Drug Inc - Watford City, ND, 244 N Main St, PO Box 550, , Watford City, ND, 58854**

**Linseth, Kelsey, Pharm D.**

Rural

**Lindstrom Thrifty White Pharmacy - Lindstrom, MN, 30699 Lincoln Road, , Lindstrom, MN, 55045**

**Lukkason, Mike, Pharm. D.**

Rural

**Linson Pharmacy (Community) - Fargo, ND, 3175 25th St S, , Fargo, ND, 58103**

**Bogenreif, Emily, Pharm. D.**

Community Advanced

**Linson Pharmacy (Management) - Fargo, ND, 3175 25th St S, , Fargo, ND, 58103**

**Boehning, Steve, R.Ph.**

Management

**Mattson Pharmacy - Roseau, MN, 111 Main Ave S, , Roseau, MN, 56751**

**Mattson, Dean, R.Ph.**

Rural

**Mayo Pharmacy - Bismarck, ND, 303 North 4th St., , Bismarck, ND, 58501**

**Martian, Kevin, RPh**

Community Advanced

Long Term Care

**MD Pharmacy (Inside Hornbacher's 13th Ave S) - Fargo, ND, 4101 13th Ave S, , Fargo, ND, 58103**

**Glessing, Michael, Pharm.D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**Medical Pharmacy Inc - Fargo, ND, 100 S 4th St, , Fargo, ND, 58103**

**Johnson, Jennifer, R.Ph.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Medical Pharmacy Moorhead - Moorhead, MN, 101 11th St S, , Moorhead, MN, 56560**

**Dill, Susan, Pharm. D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**Medical Pharmacy South - Fargo, ND, 4151 45th St S, , Fargo, ND, 58104**

**Kirschenmann, Lana, R.Ph.**

Community Advanced

**Meeker County Memorial Hospital - Litchfield, MN, 612 S. Sibley Ave, , Litchfield, MN, 55355**

**Duruji, Christian, RPh.**

Institutional

**Methodist Hospital - Minneapolis, MN - Institutional, 6500 Excelsior Blvd, , Minneapolis, MN, 55426**

**Mceiver, Karen, Pharm. D.**

PHRM 355 Introductory Pharmacy Practice Experience I

**Napoleon Drug - Napoleon, ND, 214 Main Ave, PO Box 10, , Napoleon, ND, 58561**

**Young, Charlotte, R.Ph.**

Rural

**ND Board of Pharmacy - Bismarck, ND, 1906 E Broadway Ave, PO Box 1354, , Bismarck, ND, 58502**

**Hardy, Mark, Pharm.D.**

Health Care Policy

**NDSU - Academic Leadership/Friesner - Fargo, ND, NDSU Dept 2660, 123E Sudro Hall, , Fargo, ND, 58108-6050**

**Friesner, Daniel, Ph.D.**

Academic

**NDSU - Academic/Miller - Fargo, ND, NDSU Dept. 2660, 118A Sudro Hall, P.O. Box 6050, , Fargo, ND, 58108-6050**

**Miller, Donald, Pharm.D.**

Academic

**NDSU - Concept Pharmacy - Fargo, ND, NDSU - Concept Pharmacy, NDSU Sudro Hall 118F, Fargo, ND, 58108**

**Eukel, Heidi, Pharm.D.**

Academic

**Skoy, Elizabeth, Pharm.D.**

Academic

**NDSU - Research/Jarajapu - Fargo, ND, Room 16A - NDSU Dept. 2660 , P.O. Box 6050, , Fargo, ND, 58105**

**Jarajapu, Yagna, MPharm, PhD, FAHA**

Research

**NDSU - Wellness Center Pharmacy - Fargo, ND, NDSU Wellness Center Pharmacy, Fargo, ND, 58108**

**Fitz, Alicia, Pharm.D.**

Community Advanced

**North Dakota State Hospital - Jamestown, ND, 2605 Circle Drive, , Jamestown, ND, 58401**

**Korstjens, Kim, Pharm. D., BCPP**

PHRM 355 Introductory Pharmacy Practice Experience I

Psychiatry

**North Memorial Hospital - Humphrey Cancer Clinic, 3435 West Broadway Suite 1135, , Robbinsdale, MN, 55422**

**Capouch, Tiffany, PharmD**

Oncology

**Northfield Pharmacy-Northfield, MN, 601 Water Str S, , Northfield, MN, 55057**

**Anderson, Rob, R.Ph.**

Community Advanced

**NuCara Pharmacy (formerly Foss Drug)- Valley City, ND, 234 Central Ave N, , Valley City, ND, 58072**

**Thompson, Angela, Pharm.D., PhD, BCGP**

PHRM 455 Introductory Pharmacy Practice Experience II

Rural

**NuCara Pharmacy 38 - Hawley, MN, 1106 Hobart St., PO Box 626, , Hawley, MN, 56549**

**Grani, Lynn, Pharm. D.**

Rural

**Olmsted Medical Center - Rochester, MN, 1650 4th St SE, , , Rochester, MN, 55901**

**Batterson, Emily, Pharm. D.**

Institutional

**Pelican Drug - Pelican Rapids, MN, 11 N Broadway, , , Pelican Rapids, MN, 56572**

**Perrin, Don, R. Ph.**

PHRM 455 Introductory Pharmacy Practice Experience II

Rural

**Perham Memorial Hospital - Perham, MN, 1000 Coney St. West, , , Perham, MN, 56573**

**Otterness, Dave, R.Ph.**

Institutional

PHRM 355 Introductory Pharmacy Practice Experience I

Rural

**Pharmacy Specialties - Sioux Falls, SD, 2333 W 57th St, #107, , , Sioux Falls, SD, 57106**

**Kraemer, Cheri, R.Ph.**

Compounding - Non - Pt Care

**PrimeWest Health - Alexandria, MN, 3905 Dakota Str, , , Alexandria, MN, 56308**

**Ehlert, Ann, PharmD**

Pharmacoeconomics

**Providence Kodiak Island Medical Center Pharmacy - Kodiak, AK, 1915 E Rezanof Dr, , , Kodiak, AK, 99615**

**Hurley, Stephanie, Pharm. D.**

Rural

**Rainy Lake Med Ctr - International Falls, MN, 1400 Hwy 71, , , International Falls, MN, 56649**

**Chezick, Katie, Pharm.D.**

Institutional

**Randall Pharmacy - Redfield, SD, 1010 1/2 W 1st St, , , Redfield, SD, 57469**

**Mack, Hugh, R.Ph.**

Rural

**Regions Hospital - St. Paul, MN - Infectious Disease, 640 Jackson St, , , St. Paul, MN, 55101**

**Ullman, Mary, Pharm. D.**

Infectious Disease

**Rite Aid Pharmacy - Eugene, OR - 57 W. 29th Ave, 57 W. 29th Ave, , , Eugene, OR, 97405**

**Thein, Alan, Pharm. D.**

Community Advanced

**RiverView Health - Crookston, MN, 323 S Minnesota St, , , Crookston, MN, 56716**

**Erickson, Brian, Pharm. D.**

Institutional

PHRM 355 Introductory Pharmacy Practice Experience I

**Safeway Pharmacy - Denver, CO - 6440 E Yale Ave, 6440 E Yale Ave, , , Denver, CO, 80222**

**Kennedy, Lisa, Pharm. D.**

Community Advanced

**Safeway Pharmacy - Honolulu, HI - 888 Kapahulu Ave, 888 Kapahulu Ave, , , Honolulu, HI, 96816**

**Isobe, Alanna, Pharm. D.**

Community Advanced

**Safeway Pharmacy - Polson, MT, 40774 Mt Highway 35, , , Polson, MT, 59860**

**Hendricks, Kacie, Pharm. D.**

Rural

**Sakakawea Medical Center - Hazen, ND - Institutional, 510 8th Ave NE, , , Hazen, ND, 58545**

**Kelsch, Alyssa, Pharm. D.**

Institutional

PHRM 355 Introductory Pharmacy Practice Experience I

Rural

**Samuelsons' Drug - Starbuck, MN, 118 West 5th St., , Starbuck, MN, 56381**

**Samuelson, Don, R.Ph.**

Rural

**Sanford Aberdeen Medical Center - Aberdeen, SD - Acute Care, 3015 3rd Ave SE, , Aberdeen, SD, 57401**

**Bartel, Billie, Pharm. D., BCCCP**

Acute Care

**Sanford Aberdeen Medical Center - Aberdeen, SD - Administration, 3015 3rd Ave NE, , Aberdeen, SD, 57401**

**Hansen, Ashley, Pharm.D., BCPS**

Administration

**Sanford Aberdeen Medical Center - Aberdeen, SD - Amb Care, 3015 3rd Ave SE, , Aberdeen, SD, 57401**

**Bartel, Billie, Pharm. D., BCCCP**

Ambulatory Care

**Sanford Aberdeen Medical Center - Aberdeen, SD - Institutional, 3015 3rd Ave SE, , Aberdeen, SD, 57401**

**Bartel, Billie, Pharm. D., BCCCP**

Institutional

**Sanford Health - Thief River Falls, MN - Institutional, 120 LaBree Ave S, , Thief River Falls, MN, 56701**

**Harlow, Donna, R.Ph., BCPS, BCGP**

PHRM 355 Introductory Pharmacy Practice Experience I

**Sanford Health - Bismarck, ND - Acute Care/Pediatrics, 300 N. 7th St., , Bismarck, ND, 58501**

**Van Ningen, Heather, PharmD, BCOP, BCPPS**

Acute Care

Pediatrics

**Sanford Health - Bismarck, ND - Institutional, 300 N. 7th St. , , Bismarck, ND, 58501**

**Carson, Michelle, PharmD**

Institutional

**Gapp, Britni, Pharm. D.**

PHRM 355 Introductory Pharmacy Practice Experience I

**Sanford Health Bemidji Medical Center - Bemidji, MN, 1300 Anne St NW, , Bemidji, MN, 56601**

**Folland, Erin, Pharm. D.**

Acute Care

Institutional

PHRM 355 Introductory Pharmacy Practice Experience I

**Jacobs, Sue, Pharm. D.**

PHRM 355 Introductory Pharmacy Practice Experience I

**Tingum, Sean, Pharm. D., BCOP**

Home Infusion

**Sanford Health Clinic Pharmacy - Bemidji, MN - Community, 1233 34th St NW, , Bemidji, MN, 56601**

**Bonik, Gretchen, Pharm.D.**

Community Advanced

**Johnson, Karen, PharmD**

Community Advanced

**Jones, Paula, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Sanford Health Internal Medicine Medical Home - Gugel-Bryant - (Southpointe) - 2400 32nd Ave S, Fargo, ND, 58103**

**Gugel-Bryant, Douglas, Pharm. D., BCPS**

Ambulatory Care

**Sanford Health Internal Medicine Medical Home - Petry - (Southpointe) - 2400 32nd Ave S, Fargo, ND, 58122**

**Petry, Natasha, Pharm. D. BCACP**

Ambulatory Care

**Sanford Health North - Fargo, ND - Broadway Ambulatory Care -, 737 N Broadway Drive, Sanford Clinic Fargo, ND, 58102**

**Petry, Natasha, Pharm. D. BCACP**

Ambulatory Care

**Sanford Health North - Fargo, ND - Home Infusion, 737 Broadway, , , Fargo, ND, 58122**

**Storandt, Chip, R.Ph.**

Home Infusion

**Sanford Health North - Fargo, ND - Institutional, 801 Broadway N., , , Fargo, ND, 58122**

**Jones, Justin, PharmD, BCCCP, BCPS**

Institutional

PHRM 355 Introductory Pharmacy Practice Experience I

**Sanford Health North - Fargo, ND - Patient Care, 801 Broadway Ave N, , , Fargo, ND, 58122**

**Richman, Whitney, Pharm. D.**

Patient Care

**Sanford Health North - Fargo, ND - Roger Maris Cancer Center, 820 4th St. N, , , Fargo, ND, 58122**

**Mohl, Jessina, Pharm. D. BCPS**

Ambulatory Care

**Mohs, Jocelyn, Pharm. D. BCOP**

Ambulatory Care

**Sanford Health South University (South Campus) - Fargo, ND - Dialysis, 2801 S. University Drive, , , Fargo, ND, 58103**

**Surma, Hannah, Pharm. D.**

Nephrology

**Sanford Health South University (South Campus) -- Institutional, 1720 S. University Drive, , , Fargo, ND, 58102**

**LeClair, Kristen, Pharm. D., BCPS**

Institutional

PHRM 355 Introductory Pharmacy Practice Experience I

**Sanford Health South University (South Campus) - Psychiatry, Sanford Health South, 1720 S. University Drive, , Fargo, ND, 58103**

**Werremeyer, Amy, Pharm.D., BCPP**

Psychiatry

**Sanford Medical Center - Hillsboro, ND, 12 3rd St SE, , , Hillsboro, ND, 58045**

**Berdal, Dara, PharmD**

Institutional

**Sanford Medical Center - Sioux Falls, SD - Anticoagulation, 1305 W 18th St, , , Sioux Falls, SD, 57105**

**Gulseth, Michael, Pharm.D., BCPS,**

Anticoagulation

**Sanford Medical Center Fargo (West Campus) - Acute Care - Kelsch, 5225 23rd Ave S, , Fargo, ND, 58104-4484**

**Kelsch, Michael, PharmD, BCPS**

Acute Care

**Sanford Medical Center Fargo (West Campus) - Acute Care - Non-Faculty, , 5225 23rd Ave S, , Fargo, ND, 58104**

**Johnk, Sydney, Pharm. D., BCPS**

Acute Care

**Monson, Elizabeth, Pharm. D.**

Acute Care

**Sanford Medical Center Fargo (West Campus) - - Critical Care, 801 Broadway Ave N , Fargo, ND, 58102**

**Jones, Breanna, Pharm.D., BCPS, BCCP**

Critical Care

**Sanford Medical Center Fargo (West Campus) - Infectious Disease, 5225 23rd Ave S , , Fargo, ND, 58104**

**Mork-Youness, Jeana, Pharm. D.**

Infectious Disease

**Perry, Emily, Pharm. D.**

Infectious Disease

**Sanford Medical Center Fargo (West Campus) - Informatics, Pharmacy Dept, 5225 23rd Ave S , , Fargo, ND, 58104**

**Forsberg, Preston, R.Ph.**

Informatics

**Sanford Medical Center Fargo (West Campus) - Fargo, ND - Institutional, 5225 23rd Ave S , , Fargo, ND, 58104**

**Galbreath, Katie, Pharm. D., BCPS**

Institutional

**Meyer, Anne, Pharm.D BCPPS BCPS**

Institutional

**Sanford Medical Center Fargo (West Campus) - Fargo, ND - Pediatrics, 5225 23rd Ave S , Fargo, ND, 58104**

**Muzzy Williamson, Julia, PharmD, CNSC, BCPPS**

Pediatrics

**Sanford Medical Center Fargo (West Campus) - Fargo, ND - Surgery, 5225 23rd Ave S , Fargo, ND, 58104**

**Chapin, Todd, Pharm.D., BCPS**

Surgery

**Schmitz's Economart Pharmacy - Spooner, WI, 700 S River St , , Spooner, WI, 54801**

**Tellefson, Angela, R.Ph.**

Rural

**Seip Drug - Bertha, MN, PO Box 157, 124 2nd Ave N , Bertha, MN, 56437**

**Anderson, Jenna, Pharm.D.**

Rural

**Seip Drug - New York Mills, MN, 99 Miller St, PO Box 98 , New York Mills, MN, 56567**

**Kroger, Mitch, RPh**

Rural

**Seip Drug - Park Rapids, MN - 101 4th St. E., 101 4th St. E. , , Park Rapids, MN, 56470**

**Grieger, April, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**SKripts Pharmacy - 750 23rd Ave E (Inside Costco), 750 23rd Ave E, West Fargo, ND, 58078**

**Kawulok, Steve, Pharm. D.**

Community Advanced

**Southpointe Pharmacy - Fargo, ND, 2400 S 32nd Ave , , Fargo, ND, 58103**

**Jacobson, Jeff, Pharm.D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**St. Aloisius Medical Center - Harvey, ND, 325 E Brewster St , , Harvey, ND, 58341**

**Bromley, Toni, R.Ph.**

PHRM 355 Introductory Pharmacy Practice Experience I

Rural

**St. Rose Dominican Hospital - Henderson, NV, 3001 St Rose Parkway , , Henderson, NV, 89012**

**Gonzalez, Elizabeth, R.Ph., BCPS**

Infectious Disease

**Tara's Thrifty White Pharmacy - Tara's Thrifty White Pharmacy, 610 Main Ave, , Oakes, ND, 58474**

**Schmitz, Tara, Pharm.D.**

Rural

**The Drug Store - Cameron, MO, 610 North Walnut, , , Cameron, MO, 64429**

**Erickson, J. Stephen, Pharm. D.**

Community Advanced

**The Medicine Shoppe - Fargo, ND - 2800 N Broadway, 2800 N Broadway, Fargo, ND, 58102**

**Hagen, LaNell, Pharm. D.**

Community Advanced

**The Medicine Shoppe - Fargo, ND - Management, 2800 N. Broadway Dr., , , Fargo, ND, 58102**

**Wilhelm, Ross, Pharm.D.**

Management

**The Medicine Shoppe - Fargo, ND, The Medicine Shoppe, 1605 S University Dr, , Fargo, ND, 58103**

**Krenz, Karl, Pharm. D.**

Community Advanced

**Wilhelm, Ross, Pharm.D.**

Community Advanced

**Thrifty White Drug - Linton, ND, 121 N Broadway, PO Box 60, , Linton, ND, 58552**

**Hulm, LeAnne, Pharm.D.**

Rural

**Thrifty White Pharmacy - 102 Division Ave, 102 Division Ave, PO Box 249, , Cavalier, ND, 58220**

**Heuchert, Janae, Pharm. D.**

Rural

**Thrifty White Pharmacy - Cold Spring, MN, 400 Main Street, , , Cold Spring, MN, 56320**

**Satterstrom, Andrea, Pharm. D.**

Rural

**Thrifty White Pharmacy - Fargo, ND - Ambulatory Care, 706 38th St. NW, , , Fargo, ND, 58102**

**Fiske, Andrew, Pharm. D.**

Ambulatory Care

**Thrifty White Pharmacy - Central Refill -Management, 706 38th St. NW, Unit F, , Fargo, ND, 58103**

**Schmidt, Tanya, Pharm.D.**

Management

**Thrifty White Pharmacy - 2475 32nd Ave S, 2475 32nd Ave. S. Ste 1, , , Grand Forks, ND, 58201**

**Semmens, Gary, R.Ph.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Thrifty White Pharmacy - Mandan, ND, 2600 Overlook Lane, , , Mandan, ND, 58554**

**Vander Vorste, Jamie, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Thrifty White Pharmacy - Marshall, MN, 321 W Main, , , Marshall, MN, 56258**

**Williams, Zach, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Thrifty White Pharmacy - Consulting, 6055 Nathan Lane North, Suite 200, , Plymouth, MN, 55442**

**Litsey, Joe, Pharm. D., BCGP**

Management

**Thrifty White Pharmacy -, 201 Horace Ave N, , , Thief River Falls, MN, 56701**



**LaSalle, Mike, R.Ph.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**Thrifty White Pharmacy - West Fargo, ND, 1100 13th Ave E , , West Fargo, ND, 58078**

**Nelson, Danielle, Pharm.D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Tri-County Hospital - Wadena, MN, 415 N Jefferson St , , Wadena, MN, 56482**

**Gagner, Lynn, Pharm. D.**

PHRM 355 Introductory Pharmacy Practice Experience I

**Trinity Hospital - Acute Care - Minot, ND, 1 Burdick Expressway West , , Minot, ND, 58701**

**Altringer, Terry, Pharm.D.**

Acute Care

**Trinity Hospital - Institutional - Minot, ND, 1 Burdick Expressway W , , Minot, ND, 58701**

**Moore, Charles, Pharm.D.**

Institutional

PHRM 355 Introductory Pharmacy Practice Experience I

**Seehafer, Carolyn, Pharm.D.**

PHRM 355 Introductory Pharmacy Practice Experience I

**Trumm Drug - Alexandria, MN, 600 Fillmore St, PO Box 397 , , Alexandria, MN, 56308**

**Finley, Aaron, PharmD**

Community Advanced

**Trumm, Mark, R.Ph.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Trumm Drug 11 Central Ave S - Elbow Lake, MN, 11 Central Ave S., , Elbow Lake, MN, 56531**

**Hanson, Kristy, R.Ph.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Trumm Drug Clinic Pharmacy - Alexandria, MN - 610 30th Ave W, 610 30th Ave W # 201, , Alexandria, MN, 56308**

**Fettig, Allan, Pharm. D.**

Community Advanced

**Turtle Lake Rexall Drug - Turtle Lake, ND, 218 Main St, PO Box 70, , Turtle Lake, ND, 58575**

**Ziebarth, Jamie, Pharm. D.**

Rural

**USPHS Indian Health Service - Belcourt, ND - Ambulatory Care, 1300 Hospital Loop, Box 160, , Belcourt, ND, 58316**

**Lannoye, Tyler, Pharm. D.**

Ambulatory Care

Rural

**USPHS Indian Health Service - Belcourt, ND - Institutional, 1300 Hospital Loop , , Belcourt, ND, 58316**

**Lannoye, Tyler, Pharm. D.**

Institutional

**USPHS Indian Health Service - Cass Lake, MN, 425 7th St NW , , Cass Lake, MN, 56633**

**Meyer, Jinny, Pharm.D. BCACP**

Ambulatory Care

PHRM 455 Introductory Pharmacy Practice Experience II

Rural

**USPHS Indian Health Service - Elbowoods Memorial Health Center, 1058 College Drive, , New Town, ND, 58763**

**Sorenson, Ramona, Pharm.D.**

Ambulatory Care

**USPHS Indian Health Service - Ft Totten, ND, 3883 74th Ave NE, PO Box 309, , Ft Totten, ND, 58335**

**Simon, Amy, Pharm.D.**

Ambulatory Care

**USPHS Indian Health Service - Phoenix, AZ, 4212 N 16th St, , , Phoenix, AZ, 85016**

**Petrulis, Abby, PharmD, MS**

Ambulatory Care

**USPHS Indian Health Service - Rapid City, SD, 3200 Canyon Lake Dr, , , Rapid City, SD, 57702**

**Kinyon, Jason, Pharm. D., BCPS**

Ambulatory Care

**USPHS Indian Health Service - White Earth, MN - Piehl, 40520 County Hwy 34, , , Ogema, MN, 56569**

**Piehl, Ashley, Pharm. D.**

Ambulatory Care

**USPHS Indian Health Service - Woodrow Wilson Keeble Memorial HCC -100 Lake Traverse Drive, Sisseton, SD, 57262**

**Rice, Holly, Pharm.D., BCACP**

Ambulatory Care

**Satlak, Joshua, PharmD**

Ambulatory Care

**VA Health Care System - Fargo, ND - Acute Care - Non-Faculty, 2101 N. Elm St., , , Fargo, ND, 58102**

**Berg-Gibbens, Erin, Pharm.D, BCPS**

Acute Care

**Schiele, Renae, Pharm. D., BCPS**

Acute Care

**VA Health Care System - Fargo, ND - Acute Care - Viets, 2101 N. Elm St., Sudro 118M, , Fargo, ND, 58102**

**Viets, Joan, PharmD, BCPS**

Acute Care

**VA Health Care System - Fargo, ND - Ambulatory Care, 2101 N. Elm St, , , Fargo, ND, 58102**

**Welch, Justin, Pharm. D.**

Ambulatory Care

**Williams, Cristin, Pharm.D., BCPS**

Ambulatory Care

**VA Health Care System - Fargo, ND - Institutional, 2101 N. Elm St., , , Fargo, ND, 58102**

**Becher, Nicholas, Pharm. D.**

Institutional

**Kopp, Jessica, Pharm. D.**

Institutional

**Magle, Megan, Pharm. D., BCPS**

Institutional

**VA Health Care System - Fargo, ND - Long Term Care, 2101 N. Elm St., , , Fargo, ND, ND, 58102**

**Dietz, Jessica, Pharm. D., BCPS**

Long Term Care

**VA Health Care System - Fargo, ND - Psychiatry, 2101 N. Elm St, 116A, , Fargo, ND, 58102**

**Backlund, Adam, Pharm. D., BCPS**

Psychiatry

**VA Health Care System - Fargo, ND - Rohrich, 2101 N. Elm St, , , Fargo, ND, 58102**

**Rohrich, Melissa, Pharm.D. BCPS**

PHRM 355 Introductory Pharmacy Practice Experience I

**VA Health Care System - Maplewood, MN, 1725 Legacy Parkway, Suite 100, , Maplewood, MN, 55109**

**Welch, Elizabeth, Pharm. D. BCACP**

Ambulatory Care

**VA Health Care System- Ambulatory Care, Pharmacy Dept. (119), 1 Veterans Drive, , Minneapolis, MN, 55417**

**Atwood, Melissa, PharmD,BCPS,BCACP**

Ambulatory Care

**Chezik, Lindsey, Pharm. D., BCACP**

Ambulatory Care

**Fernandes-Reese, Andyrose, Pharm. D., BCPS**

Ambulatory Care

**Jones, Elzie, Pharm.D.**

Ambulatory Care

**Marraffa, Rebecca, Pharm. D., BCPS**

Ambulatory Care

**Naidl, Todd, Pharm. D. BCPS**

Ambulatory Care

**VA Health Care System - Minneapolis, MN - Infectious Disease, One Veterans Drive, , , Minneapolis, MN, 55417**

**Geurkink, Eric, PharmD, MBA**

Infectious Disease

**VA Health Care System - Minneapolis, MN - Management, One Veterans Drive , , , Minneapolis, MN, 55417**

**Patnaude, Larry, Pharm.D**

Management

**Valley View Pharmacy - Bismarck, ND, 2425 Hillview Rd, , , Bismarck, ND, 58501**

**Balerud, Tammy, Pharm. D.**

Long Term Care

**Velva Drug - Velva, ND, PO Box 10, 16 N Main St, , Velva, ND, 58790**

**Krueger, Tracy, Pharm. D. BCPS**

Rural

**Vibra Hospital - Fargo, ND, 5225 23rd Ave S, , , Fargo, ND, 55104**

**Schultz, Robert, R.Ph.**

Acute Care

**Vizient at Sanford - Fargo, ND - Management - 501 4th St. N, 501 4th St N, , , Fargo, ND, 58102**

**Slinde, Mandy, Pharm. D.**

Management

**Walgreens Co. - Andover, MN - 2134 Bunker Lake Blvd NW, 2134 Bunker Lake Blvd NW, , , Andover, MN, 55304**

**Hansen, Beth, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Walgreens Co. - Arden Hills, MN - 3585 Lexington Ave. N - Vaccination, 3585 Lexington Ave. N., , , Arden Hills, MN, 55126**

**West, Troy, Pharm. D.**

Special Projects

**Walgreens Co. - Blaine, MN - 4202 Pheasant Ridge Dr. NE, 4202 Pheasant Ridge Dr. NE, , , Blaine, MN, 55449**

**Dahlgren, Tyler, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Walgreens Co. - Colorado Springs, CO - 1855 Southgate Rd., 1855 Southgate Road, , , Colorado Springs, CO, 80906**

**McComb, Sean, Pharm. D.**

Community Advanced

**Walgreens Co. - Denver, CO - 801 16th St., 801 16th St., , , Denver, CO, 80202**

**Schauer, Nicole, Pharm. D.**

Community Advanced

**Walgreens Co. - Eagan, MN - 4220 Lexington Ave, 4220 Lexington Ave, , Eagan, MN, 55123**

**Steil, A.J., PharmD**

Community Advanced

**Walgreens Co. - Edina, MN - 6975 York Ave S, 6975 York Ave S, , Edina, MN, 55435**

**Penkivech, Dana, Pharm. D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**Walgreens Co. - Fergus Falls, MN, 326 West Lincoln Ave, , Fergus Falls, MN, 56537**

**Lange, Zach, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Walgreens Co. - Honolulu, HI - 1488 Kapiolani Blvd, 1488 Kapiolani Blvd, , Honolulu, HI, 96814**

**Kim, Taek, Pharm. D.**

Community Advanced

**Walgreens Co. - Honolulu, HI - 2919 Kapiolani Blvd, 2919 Kapiolani Blvd, , Honolulu, HI, 96826**

**Smith, Paul, Pharm. D.**

Community Advanced

**Walgreens Co. - La Crosse, WI - 900 West Ave S, 900 West Ave S, , La Crosse, WI, 54601**

**Hoffmann, Justin, Pharm. D.**

Community Advanced

**Walgreens Co. - Maple Grove, MN - 13611 Grove Dr. - Store 1916, 13611 Grove Drive, , Maple Grove, MN, 55311**

**Buechler, Jill, Pharm. D.**

Community Advanced

**Walgreens Co. - Mesa, AZ - 1142 W Guadalupe Rd, 1142 W Guadalupe Rd, , Mesa, AZ, 85210**

**Sprague, Beau, Pharm. D.**

Community Advanced

**Walgreens Co. - Moorhead, MN - 30th Ave, 700 30th Ave S, , Moorhead, MN, 56560**

**Richard, Justin, Pharm.D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**Walgreens Co. - Moorhead, MN - Main Ave, 900 Main Ave, , Moorhead, MN, 56560**

**Osebold, Matthew, Pharm. D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**Walgreens Co. - Navarre, FL - 8220 Navarre Pkwy, 8220 Navarre Pkwy, , Navarre, FL, 32566**

**Gade, Kenneth, Pharm. D.**

Community Advanced

**Walgreens Co. - Oakdale, MN - 985 Geneva Ave N, 985 Geneva Ave N, , Oakdale, MN, 55128**

**Ig-Izevbekhai, Dorothy, Pharm.D.**

Community Advanced

**Walgreens Co. - Park Rapids, MN, 101 N Main, , Park Rapids, MN, 56470**

**Rowe, Sarah, Pharm.D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Walgreens Co. - Plymouth, MN - 6025 Shenandoah Ln., N., 6025 Shenandoah Ln., N., , Plymouth, MN, 55446**

**Slovut, Debbie, Pharm.D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Walgreens Co. - Port Isabel, TX - 1673 TX-100, 1673 TX-100, , Port Isabel, TX, 78578**

**Awaraka, Osondu, PharmD**

Rural

**Walgreens Co. - Roseville, MN - Ambulatory Care, 3030 Centre Pointe Dr. N, ,Roseville, MN, 55113**

**Aytay, Michelle, R.Ph.**

Ambulatory Care

**Walgreens Co. - Management - Thuan Do, 3030 Centre Pointe Drive Suite 800, Roseville, MN, 55113**

**Do, Thuan, Pharm.D.**

Management

**Walgreens Co. - Ruidoso, NM - 138 Sudderth Dr, 138 Sudderth Dr, , , Ruidoso, NM, 88345**

**Schramm, Sheri, PharmD**

Community Advanced

**Walgreens Co. - Savage, MN - 8100 W County Rd 42, 8100 West County Road 42, , , Savage, MN, 55378**

**Matiak, Amy, Pharm. D.**

Community Advanced

**Walgreens Co. - Sioux Falls, SD - 4900 South Cliff Ave, 4900 South Cliff Ave, , , Sioux Falls, SD, 57108**

**Fickbohm, Mariah, Pharm. D.**

Community Advanced

**Walgreens Co. - St. Paul, MN - 1585 Randolph Ave. - Vaccination, 1585 Randolph Ave., , , St. Paul, MN, 55105**

**Hamm, Kristyn, Pharm. D.**

Special Projects

**Walgreens Co. - Waite Park, MN - 17 Division St., 17 Division St., , , Waite Park, MN, 56387**

**Brummer, Aaron, Pharm. D.**

PHRM 455 Introductory Pharmacy Practice Experience II

**Walgreens Co. - Willmar, MN - 1301 1st St. SW, 1301 1st St. SW, , , Willmar, MN, 56201**

**Loueng, Jane, Pharm. D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**Walgreens Co. - Woodbury, MN - 1965 Donegal Dr, 1965 Donegal Dr, , , Woodbury, MN, 55125**

**Shillings, Greg, Pharm.D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**Wall's Health Mart Pharmacy - Compounding, 4440 S. Washington St. #101-D, , , Grand Forks, ND, 58201**

**Maher, Bailey, PharmD**

Compounding - Pt Care

**Wall's Medicine Center - Grand Forks, ND, 708 S Washington, , , Grand Forks, ND, 58201**

**Varnson, Cody, Pharm. D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**Walmart Pharmacy - Cloquet, MN, 1308 Hwy 33 South , , , Cloquet, MN, 55720**

**Nelson, Kelly, Pharm. D.**

Community Advanced

**Walmart Pharmacy - Detroit Lakes, MN, 1583 Hwy 10 West, , , Detroit Lakes, MN, 56501**

**Osterman, Kristy, Pharm. D.**

Community Advanced

PHRM 455 Introductory Pharmacy Practice Experience II

**Walmart Pharmacy - Fergus Falls, MN, 3300 Hwy 210 W, , , Fergus Falls, MN, 56537**

**Ward, Scott, R.Ph.**

Community Advanced

**Walmart Pharmacy - Monticello, MN - 9320 Cedar St., 9320 Cedar St., , Monticello, MN, 55362**

**Krebs, Evan, Pharm. D.**

Community Advanced

**Watertown Pharmacy - Watertown, MN - 204 Lewis Ave. S, 204 Lewis Ave S., , Watertown, MN, 55388**

**Rosdahl, Rose, Pharm. D.**

Rural

**Westfields Hospital & Clinic - New Richmond, WI - 535 Hospital Rd, 535 Hospital Rd, , New Richmond, WI,**

**Trosen, Nicole, Pharm. D.**

Acute Care

Rural

**Winona Health - Winona, MN, 855 Mankato Ave, , Winona, MN, 55987**

**Bilicki, Drew, Pharm. D., R.Ph.**

PHRM 355 Introductory Pharmacy Practice Experience I

**Wishek Drug - Wishek, ND, 9 S Centennial, PO Box 217, , Wishek, ND, 58495**

**Aipperspach, Carla, R.Ph.**

Rural

## PPENDIX 20B

<u>Preceptor</u>	<u>Site</u>	<u>City,State</u>	<u>Rotation</u>	<u>Number of rotations precepted 2017-2020</u>
Nandita Bose, PhD	Biothera	Eagan, MN	research - elective	1
Amanda Brooks, PhD	NDSU	Fargo, ND	research - elective	5
Daniel Friesner, PhD	NDSU	Fargo, ND	research - elective	1
Yagna Jarajapu, Mpharm, PhD	NDSU	Fargo, ND	research - elective	2
Mike Schwab, BS	NDPHA	Bismarck, ND	health care policy - elective	4
Jagdish Singh, PhD	NDSU	Fargo, ND	research - elective	1

**Number and percentage of REQUIRED APPE's precepted by non-pharmacists**

**0, 0%**



# Experiential Site Description/Preceptor Application

**Pharmacy Name:** \_\_\_\_\_

Preceptor Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Email: \_\_\_\_\_

Degree (s): \_\_\_\_\_ Specialty Certifications: \_\_\_\_\_

Institution and year of degree: \_\_\_\_\_

Residency or fellowship: (Yes / No) Institution/year: \_\_\_\_\_

Have you been a pharmacy preceptor before? (Yes / No)

If Yes, approximately how many students have you precepted? \_\_\_\_\_

Pharmacist State License Number: \_\_\_\_\_

Preceptor License Number (If applicable): \_\_\_\_\_

Significant past work experience: \_\_\_\_\_

\_\_\_\_\_

Housing available: (Yes / No) If Yes, please explain and costs: \_\_\_\_\_

\_\_\_\_\_

## **Practice Setting and Information**

Type of practice setting: \_\_\_ Community \_\_\_ Hospital \_\_\_ Clinic \_\_\_ Other

Type(s) and description of pharmacy services provided: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Type of rotation: \_\_\_ IPPE \_\_\_ APPE



Typical patient population (ex. Gender, age, ethnicity, disease states):

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**Pharmacy Staff:**

- Number of pharmacists: \_\_\_\_\_
- Number of pharmacy technicians: \_\_\_\_\_
- Average prescriptions per day: \_\_\_\_\_
- Daily census (Hospital): \_\_\_\_\_

**Why do you wish to precept students?**

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Preferred method of contact: \_\_\_ Phone \_\_\_ Email \_\_\_ Mail \_\_\_ Fax

## APPENDIX 20D

### North Dakota State University College of Health Professions, School of Pharmacy Practice Facilities and Preceptor Quality Assurance

Provision of quality professional experiential education to student pharmacists requires ongoing oversight regarding the quality of preceptors for these experiences and the practice settings in which they practice. Standards No. 12 (Pre-Advanced Pharmacy Practice Experience, Pre-APPE Curriculum), No. 13 (Advanced Pharmacy Practice Experience, APPE Curriculum), No. 20 (Preceptors), and No. 22 (Practice Facilities), of the 2016 ACPE Accreditation Standards and Key Elements for the Professional Program in Pharmacy leading to a the Doctor of Pharmacy Degree, requires minimum components of this quality assurance process.

Preceptors practice in a wide variety of practice settings, provide these experiences to varying numbers of students and different educational institutions, and have a range of relationships with colleges/schools of pharmacy. A general quality assurance process compliant with current ACPE Standards, yet applicable to the diverse nature of the professional experience environment is proposed.

#### **Initiation of New Experience Site**

The Director of Experiential Outreach and Assessment or their designate will evaluate all new Introductory Pharmacy Practice Experience (IPPE) and Advanced Pharmacy Practice Experience (APPE) sites before being approved for experiential education. Whenever possible this will be done in person at the practice site after review of submitted materials. In cases where the site is not within driving distance, or for other reasons it is impractical to do in person, the Director or their designate will evaluate the site and the preceptor via email or telephone conversations after review of submitted materials. Evaluation will be completed in the same manner for all practice sites wishing to provide experiential education. Established criteria (see the attached Experiential Site and Preceptor Evaluation form) will be used to complete the process. This information will supplement the demographic and descriptive information the Experiential Office maintains on all practice sites and preceptors. The Experiential Education committee will give final approval of all new sites quarterly.

If a new experience site and preceptors are concurrently approved by another ACPE Accredited College/School of Pharmacy for the delivery of experiential education, that approval may be deemed as acceptable in meeting this requirement. Specific expectations of this institution would still need to be provided to the site.

Orientation topics in the approval process include but are not limited to the following:

- orientation to the educational institutions mission and goals as it applies to experiential education
- applicability of an available syllabus, or development of a site specific syllabus for the experience (experience goals, learning objectives, student activities, assessment and grading criteria)
- defined expectations of the site and preceptor in the education of the student pharmacist
  - curriculum requirements and integration
  - experience goals and objectives
  - assessment and feedback expectations of preceptors, students and the educational institution
- review of the expected types and volume of patients in the practice setting
- defined roles and responsibilities of the student pharmacist in the practice setting
- guidance on student supervision in the practice setting
- guidance on setting expectations with students, assessment strategies, provision of feedback and grading methodologies.

An abbreviated version of the process will be used if it is anticipated the site will be used on a limited basis.

If it is approved as a new site, a Site Agreement will be sent to the site for appropriate administrative signatures

#### **Initiation of a New Preceptor at Currently Approved Site**

AMEE site evaluation policy and procedures – updated Feb 2019

The Director of Experiential Outreach and Assessment or their designate will provide information on the recommended topics above after review of preceptor submitted materials. Performance will be monitored as described in Current Sites and Preceptors section.

Ongoing preceptor development is offered to all preceptors in multiple formats (live, recorded, webinar, and newsletter).

Preceptors are considered Adjunct Faculty with the NDSU School of Pharmacy and are not eligible for promotion.

### **Current Sites and Preceptors**

The Director or their designate will evaluate all experiential sites taking five or more students per year in person at least once every two years. Sites taking less than five students per year, and those not within driving distance may be evaluated via site visits, email or telephone conversations every three years. Sites may be evaluated more frequently if needed (e.g., poor student evaluations, change in preceptor at the site). This routine evaluation is to determine continued approval for completion of student pharmacist experiential education at the practice site.

The Director of Experiential Outreach and Assessment or their designate will evaluate the site and preceptor according to established criteria (see the attached Experiential Site and Preceptor Evaluation form). During the site visit, the student evaluations of the site and preceptor will be discussed. Roles and responsibilities of both the preceptor and the institution will be reviewed. The preceptor will be commended for areas in which the preceptor and/or site are meeting or exceeding expectations. Constructive feedback that addresses specific areas that need improvement will also be discussed with the preceptor. Working with the Director or their designate, the preceptor will develop an improvement plan, if necessary. Preceptor feedback regarding the School's experiential program will be solicited during the evaluation discussion.

A copy of the experiential site and preceptor evaluation form and student evaluations will be kept electronically in the electronic rotation management system for retrieval and review.

Experiential sites and/or preceptors not granted approval, or those granted conditional approval and not meeting those conditions will not be used/retained as a preceptor and/or training site for the program.

### **School of Pharmacy Assessment Committee and Experiential Education Committee:**

The School of Pharmacy Assessment Committee will provide oversight for the assessment of student learning and the Experiential Education Committee will provide oversight of the QA process for the experiential program.

**Quality Assurance Documentation  
Experiential Site and Preceptor Evaluation**

Name of Site: \_\_\_\_\_  
Preceptor/Contact Person: \_\_\_\_\_  
Address: \_\_\_\_\_

Type of Rotation: \_  
Title: \_\_\_\_\_  
Phone Number: \_\_\_\_  
E-Mail: \_\_\_\_\_

Site Information				
				Comments
Adequate patient volume and breadth for student learning	Y	N	NA	
The student has access to patient information	Y	N	NA	
The student has the opportunity to interact with other health professionals as is pertinent to the specific experience	Y	N	NA	
The student has access to a computer with Internet capabilities	Y	N	NA	
The student has access to appropriate drug and medical information resources	Y	N		
Adequate space for student involvement with pharmacy activities and interaction with pharmacists, other health professionals and patients	Y	N		
The site displays a professional image	Y	N		
The site administration support student involvement at the site	Y	N		
The staff (i.e., pharmacists and technicians) support student interactions and involvement	Y	N		
Patient centered care philosophy evident in practice activities	Y	N		
Activities, projects and assignments will fulfill learning objectives of the learning experience	Y	N		
Amount and quality of time with the student is appropriate	Y	N	NA	
Appropriate role-modeling by pharmacists is available to the student pharmacist	Y	N		
The student is evaluated by direct observation when appropriate (e.g., dispensing skills)	Y	N	NA	
Regular and consistent feedback is given to the student	Y	N	NA	
A written evaluation is completed and discussed with the student at the middle of the rotation	Y	N	NA	
A written evaluation is completed and discussed with the student at the end of the rotation	Y	N	NA	
Student expectations and responsibilities are clear and are expressed to the student at the beginning of the experience	Y	N	NA	

Student competencies evaluated by Preceptor during rotation: (check all that apply)

Domain 1: Foundational Knowledge

- Foundational Knowledge

Domain 2: Essentials for Practice and Care

- Patient Centered Care
- Medication Use Systems Management
- Health and Wellness
- Population-Based Care

Domain 3: Approach to Practice and Care

- Problem Solving
- Education
- Patient Advocacy
- Inter-professional Collaboration
- Cultural Sensitivity
- Communication

Domain 4: Personal and Professional Development

- Self-awareness
- Leadership
- Innovation and Entrepreneurship
- Professionalism

Other activities, projects, and assignments that are required of the student: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Preceptor Training Occurred:  No  Yes

Follow-up Required  No  Yes, in \_\_\_\_\_ months

Site Approved for Period \_\_\_\_\_

Experiential Outreach and Assessment Director \_\_\_\_\_ Date: \_\_\_\_\_

# Introductory & Advanced Pharmacy Practice Experiences (IPPE & APPE) Preceptor Handbook

			2019-2020

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Welcome to the North Dakota State University College of Health Professions, School of Pharmacy Introductory and Advanced Pharmacy Practice Experiences (IPPE & APPE).  
Introductory and Advanced Pharmacy Practice Experiences are designed to integrate, apply, reinforce, and advance the knowledge, skills, attitudes and values developed through the other components of the curriculum.

The focus of the introductory rotations (IPPE) is to familiarize students with the technical aspects of medication distribution within institutional and community pharmacy practice settings. Advanced pharmacy practice experiences (APPE) rotations during the final year of pharmacy school will build upon the knowledge base gained during the introductory experiences and will allow students to focus primarily on the advanced pharmacist roles involved in the oversight of medication distribution within an institutional pharmacy practice environment.

IPPE-I rotations consist of one three week rotation in an institutional setting for a total of 120 hours. IPPE-II rotations consist of one four week rotation in a community setting for a total of 160 hours.

APPE rotations consist of eight five-week rotations for a total of 200 hours per rotation. Five of the eight rotations are required rotations consisting of one each of community, institutional, inpatient general medicine (acute care), ambulatory care, and rural rotations. The required pharmacy practice experiences must include direct interaction with diverse patient populations in a variety of practice settings and involve collaboration with other health care professionals.

The additional three APPE rotations are considered “elective” rotations. Elective rotations are defined as any “required” rotation or any experience that will provide opportunities for students to develop professional skills and individual interests.

Most pharmacy practice experiences must be under the supervision of qualified pharmacist preceptors licensed in the United States.

Active preceptors are considered “Adjunct Faculty Members in the NDSU School of Pharmacy.”



### **Thank you for being a pharmacy preceptor for NDSU!**

We value our partnerships with pharmacists from around the region and the excellent education they provide to the next generation of pharmacists.

## EXPERIENTIAL EDUCATION CONTACT INFORMATION



**Rebecca Brynjulson, PharmD, BCACP, BCGP**

**IPPE Director**

**Assistant Professor of Practice**

Sudro Hall, 20B

Phone: 701-231-7477

Rebecca.Brynjulson@ndsu.edu

Main contact for: IPPE student questions, IPPE student issues



**Teri Udem, RPh**

**APPE Director**

Sudro Hall, 20C

Phone: 701-231-6578

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Main contact for: APPE student questions, APPE student issues



**Lisa M. Richter, PharmD, BCPS, BCCCP**

**Director Experiential Outreach & Assessment**

**Assistant Professor of Practice**

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Lisa.Richter.1@ndsu.edu

Main contact for: Preceptor development, site visits, new preceptor/site requests

## EXPERIENTIAL EDUCATION CONTACT INFORMATION (cont.)



**Mark Lofgren, MBA**

**E\*Value Coordinator**

Sudro Hall, Room 20

Phone: 701-231-7722

Mark.Lofgren@ndsu.edu

Main contact for: E\*value passwords, evaluations, troubleshooting, NDSU Career Fair/Interview Day



**Julie Brandon**

**Experiential Education Administrative Assistant:**

Sudro Hall, Room 20

Phone: 701-231-5576

Julie.Brandon@ndsu.edu

Main contact for: Site onboarding requirements (immunizations, background checks)

**Mailing Address:**

Pharmacy Practice NDSU Dept. 2660

P.O. Box 6050

Fargo, ND 58108-6050

Website: [https://www.ndsu.edu/pharmacy/pharmacy\\_experiential\\_education/](https://www.ndsu.edu/pharmacy/pharmacy_experiential_education/)

Experiential Office Fax: 701-231-7606

# North Dakota State University

## School of Pharmacy

### Mission

The School of Pharmacy educates the next generation of highly competent, caring, and ethical pharmacists and scientists through a high quality contemporary curriculum emphasizing innovative interprofessional education and research/scholarship which serves the needs of North Dakota, region, nation, and world.

We will accomplish this by:

- Fostering a culture that values competency, caring, ethics, inclusivity, and professionalism.
- Delivering an effective curriculum that prepares students to work in diverse settings and interprofessional teams.
- Collaborating with key partners and stakeholders to enhance teaching, research/scholarship, practice, professional experience, and service opportunities.
- Utilizing interprofessional approaches in teaching, research/scholarship, clinical practice and service efforts.
- Providing professional and interprofessional development opportunities for faculty, staff, students, alumni, pharmacists, and preceptors.
- Securing sufficient financial, physical, and human resources to engage in effective teaching, research, practice, and service.
- Continually improving the quality of education, and research/scholarship.
- Developing pharmacists and scientists to meet the health care needs of the state, region, nation, and world.

### Vision

The School of Pharmacy will be a nationally recognized leader in pharmacy education, research, and outreach which is known for its high quality and impact on improving human health.

Indicators that we are moving toward our Vision:

- Students and graduates are sought after as caring, competent, and ethical health professionals and researchers.
- Graduates have a high level of achievement as measured by licensure and certification exams and job placement.
- Faculty are recognized for best practices in teaching, curriculum improvement, and as leaders by discipline-related organizations.
- The School is nationally recognized for innovations in rural healthcare.
- Faculty and graduates discover and disseminate new knowledge as demonstrated by competitively funded research, high quality scholarly publications, and innovative product and practice development.
- Alumni are recognized for their consistent high level of achievement, leadership and involvement in professional organizations, and sustained contributions to their profession.
- Faculty have the resources of staff, time, space, and money to accomplish excellence in teaching, research, practice and service.
- Our impact will be local, national and global.

### Core Values

#### People

Our School promotes a diverse environment where students, faculty, and staff can achieve their maximum potential; where academic freedom is protected; where collegiality is practiced; where individuals and ideas are welcomed and respected; where students and learning are paramount; where inclusivity is desired; and where research and innovation are recognized and valued.

Serving the health care needs of the citizens of North Dakota is our primary goal through having quality people and programs that positively impact the advancement of health care through education, research, and practices in the state, region, nation, and world.

### **Quality**

Our School strives to be a center of excellence within the University, state, and nation which is committed to continuous quality improvement of its curriculum, programs, and people.

### **Professionalism and Ethics**

Our School values and promotes professionalism and ethics in all its people, programs, and endeavors including fostering an environment where students, faculty, and staff serve as role models in the profession and community by representing the highest standards of professional and ethical behavior. Honesty, integrity, and collegiality guide all interactions with students, faculty, staff, administration, peers, and the public.

### **Knowledge, Teaching, and Learning**

Our School is committed to the profession of pharmacy and to society for creating, communicating, and applying knowledge about the latest advances in health care within the discipline. It endeavors to provide an environment open to free exchange of ideas, where professionalism, innovation, scholarship, and learning can flourish.

### **Research and Scholarship**

Our School is committed to creating new knowledge; incorporating new discovery and innovation, teaching, integration, and application as integral and complementary components of research and scholarship.

### **Patient-Centered Care**

Our School believes that the primary purpose of the profession of pharmacy is to deliver patient- and population- centered research and care to improve the overall health and quality of life of patients.

### **Interprofessional Team Approach**

Our School recognizes and values an interprofessional team-based approach to patient care, education, and research where each discipline works collaboratively to attain greater knowledge, expertise, and outcomes than what they are capable of accomplishing individually.

*Final Draft 8.13.18*

### **Experiential Education within the NDSU Curriculum**

Within the NDSU Pharm.D. Curriculum, experiential education is provided through the following means:

1. Simulated and actual experiences in the Pharmaceutical Care lab & Pharmacotherapy lab during the curriculum.
2. Introductory Pharmacy Practice Experiences in Institutional Practice (IPPE I) and Community Practice (IPPEII).
3. Advanced Pharmacy Practice Experiences (APPE) in five required rotations (Institutional, Community Advanced, Ambulatory Care, Inpatient General Medicine, and Rural) and three elective rotations.

## NDSU School of Pharmacy Curriculum and Teaching Methods

<b>P1 First Year Professional</b>		
MICR 470	Basic Immunology	3
PSCI 367	Pharmaceutical Calculations	1
PSCI 368	Pharmaceutics I	3
PSCI 369	Pharmaceutics II	2
PSCI 410	Pharmaceutical Biotechnology	2
PSCI 411	Principles of Pharmacokinetics and Pharmacodynamics	3
PSCI 412	Chemotherapeutic/Infectious Disease Pharmacodynamics	3
PSCI 470	Pharmacokinetics	3
PHRM 340	Pathophysiology I	4
PHRM 341	Pathophysiology II	3
PHRM 350	Introduction to Pharmacy Practice	2
PHRM 351L	Pharmaceutical Care Laboratory I	2
PHRM 352	Introduction to Health Care Systems	2
PHRM 355	Introductory Pharmacy Practice Experience I: Introduction to Institutional Pharmacy Practice	3
PHRM 480	Drug Literature Evaluation	3
<b>P2 Second Year Professional</b>		
CHP 400	Interprofessional Health Care Practice	3
PSCI 413	Endocrine/Respiratory/GI Pharmacodynamics	3
PSCI 414	Cardiovascular Pharmacodynamics	3
PSCI 415	Neuropsychiatry Pharmacodynamics	3
PSCI 417	Pharmacogenomics	2
PHRM 450	Self-Care	3
PHRM 452L	Pharmaceutical Care Laboratory II	2
PHRM 455	Introductory Pharmacy Practice Experience II: Introduction to Community Based Patient Care	4
PHRM 532	Infectious Disease	3
PHRM 534	Rheumatology/Endocrinology/Gastrointestinal	3
PHRM 535	PTDI: Neoplastic Diseases	3
PHRM 538	PTDI: Cardiovascular and Pulmonary Diseases	4
PHRM 565	Pharmacy-Based Immunization Delivery	1
<b>P3 Third Year Professional</b>		
PSCI 417	Pharmacogenomics (P2 & P3 taking together fall 2017)	2
PHRM 475	Pharmacy Practice Management	3
PHRM 520	Special Populations	3
PHRM 536	Neurology & Psychiatry	3
PHRM 537	Renal Disease/Fluid and Electrolytes	2
PHRM 540	Public Health for Pharmacists	3
PHRM 545L	Pharmacotherapy Laboratory	1
PHRM 551L	Pharmaceutical Care Laboratory III	2
PHRM 552L	Pharmaceutical Care Laboratory IV/Introductory Pharmacy Practice Experience IV	2
PHRM 560	Specialty Care Topics	2
PHRM 570	Pharmacy Practice Improvement and Project Management	2
PHRM 572	Pharmacy Law and Ethics	3
PHRM 580	Pharmacotherapy Capstone	3
<b>P4 Fourth Year Professional</b>		
PHRM 581-589	Advanced Pharmacy Practice Experience (APPE)	40

NDSU School of Pharmacy teaching methods include case studies, experiential education, face-to-face lecture, interprofessional activities, IPPE simulation, large group discussion, skills demonstration, small group discussion, pre-recorded videos, lecture capture, and use of audience response systems.

**NDSU SCHOOL OF PHARMACY ABILITY BASED**  
**OUTCOMES AND SPECIFIC COMPETENCIES**

*Standards and Educational Outcomes*

***PharmD Educational Outcomes (ABOs) Ability-Based Outcomes***

The educational outcomes in this document are written to reflect competencies essential for an **entry-level** pharmacist in **any setting** to practice collaboratively as a member of an interprofessional team, provide patient-centered care, contribute to the health of diverse patient populations, demonstrate leadership, and effectively manage a complex work environment.

**Domain 1. Foundational Knowledge**

Students will be able to develop, integrate, and apply knowledge from the foundational sciences (biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences) to explain drug action, solve therapeutic problems, evaluate scientific literature, and advance population health and patient-centered care.

Specific Competencies

- 1.1 Integrate knowledge from foundational sciences to explain how specific drugs or drug classes work and evaluate their potential value in individuals and populations.
- 1.2 Apply knowledge in foundational sciences to solve therapeutic problems and advance patient centered care.
- 1.3 Critically analyze scientific literature related to drugs and disease to enhance clinical decision making.
- 1.4 Demonstrate an understanding of scientific research and discovery.
- 1.5 Identify and critically analyze emerging theories, information, and technologies that may impact patient-centered and population based care.

**Domain 2. Essentials for Practice and Care**

**2.1 Patient Centered Care**

Students will be able to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities).

Specific Competencies

- 2.1.1 Collect and interpret subjective and objective evidence related to patient medications, allergies/adverse reactions, and disease.
- 2.1.2 Prioritize patient health-related needs.
- 2.1.3 Formulate assessments and implement evidence based care plans and recommendations.
- 2.1.4 Monitor the patient and adjust care plan as needed.
- 2.1.5 Document patient care related activities.

**2.2 Medication Use Systems Management**

Students will be able to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety efficacy of medication use systems (i.e., procurement, storage, prescribing, transcription, dispensing, administration, monitoring, and documentation).

Specific Competencies

- 2.2.1 Identify, compare, and contrast the components of typical medication use systems in different pharmacy practice settings
- 2.2.2 Identify and utilize resources to optimize the safety and efficacy of medication use systems.
- 2.2.3 Manage medication use systems during patients' transitions of care.
- 2.2.4 Apply standards, guidelines, best practices, and established processes related to safe and effective medication use.
- 2.2.5 Utilize continuous quality improvement techniques in the medication use process.
- 2.2.6 Accurately select, prepare, and dispense medications (prescriptions, non-prescription, sterile, and non-sterile dosage forms).

**2.3 Health and Wellness**

Students will be able to design prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve health and wellness

Specific Competencies

- 2.3.1 Deliver systematic preventive care, using risk assessment, risk reduction, screening, education, and immunizations.
- 2.3.2 Provide prevention, intervention, and educational strategies for individuals and communities to improve health and

wellness.

2.3.3 Evaluate personal, social, economic, and environmental conditions to maximize health and wellness.

## **2.4 Population-Based Care**

Students will be able to describe how population-based care influences patient-centered care and the development of practice guidelines and evidence-based best practices.

### Specific Competencies

2.4.1 Assess the healthcare status and needs of a targeted patient population.

2.4.2 Develop and provide an evidence-based approach that considers the cost, care, access, and satisfaction needs of a targeted patient population.

2.4.3 Participate in population health management by evaluating and adjusting interventions to maximize health.

## **Domain 3. Approach to Practice and Care**

### **3.1 Problem Solving**

Students will be able to identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution while considering ethical, legal, and cultural dimensions.

#### Specific Competencies

3.1.1 Identify and define the primary problem.

3.1.2 Define goals and alternative goals.

3.1.3 Within the context of the problem, explore multiple solutions by organizing, prioritizing, and defending each possible solution.

3.1.4 Identify possible positive and negative outcomes by reviewing assumptions, inconsistencies, and unintended consequences.

3.1.5 Implement the most viable solution, including monitoring parameters, to measure intended and unintended consequences.

3.1.6 Reflect on the solution implemented and evaluate its effects to improve future performance.

### **3.2 Education**

Students will be able to educate all audiences (e.g., patients/caregivers, technicians and interns, pharmacy students, fellow pharmacists, other healthcare providers, legislators) by determining the most effective and enduring ways to impart information and assess learning.

#### Specific Competencies

3.2.1 Assess the need for pharmacist-delivered education.

3.2.2 Retrieve, analyze, and interpret the professional, lay, and scientific literature to effectively communicate information to a specific audience.

3.2.3 Select the most effective techniques/strategies to achieve learning objectives for education given to a specific audience.

3.2.4 Deliver the education to the intended audience.

3.2.5 Assess audience comprehension to ensure effective instruction/education was achieved.

### **3.3 Patient Advocacy**

Students will be able to represent the patients' best interests.

#### Specific Competencies

3.3.1 Empower patients to take responsibility for, and control of, their health.

3.3.2 Assist patients in obtaining the resources and care required in an efficient and cost-effective manner.

### **3.4 Interprofessional Collaboration**

Students will be able to actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and shared values to meet patient care needs.

#### Specific Competencies

3.4.1 Establish a climate of accountability, mutual respect, and shared values with members of the interprofessional team to meet patient and population care needs.

3.4.2 Incorporate the knowledge, skills, and abilities of each member of the interprofessional team to provide care that is safe, timely, efficient, effective, and equitable.

3.4.3 Communicate in a manner that values team based decision making and shows respect for contributions from other areas of expertise.

### **3.5 Cultural Sensitivity**

Students will be able to identify and appropriately adjust the content and delivery of pharmacy services based on the unique socio-cultural characteristics of the patient receiving care.



### Specific Competencies

- 3.5.1 Recognize the collective identity and norms of different cultures without overgeneralizing (i.e., recognize and avoid biases and stereotyping).
- 3.5.2 Demonstrate an attitude that is respectful of different cultures.
- 3.5.3 Assess a patient's health literacy and modify communication strategies to meet the patient's needs.
- 3.5.4 Appropriately incorporate patients' cultural beliefs and practices into patient care.

### **3.6 Communication**

Students will be able to effectively communicate using verbal, nonverbal, and written methods when interacting with individuals, groups, and organizations (ACPE 2016).

### Specific Competencies

- 3.6.1 Demonstrate effective interpersonal skills when interacting with others to establish rapport and build trusting relationships.
- 3.6.2 Actively listen and ask appropriate open and closed-ended questions to gather information.
- 3.6.3 Interview patients using an organized structure, specific questioning techniques (e.g., motivational interviewing), and medical terminology adapted for the audience.
- 3.6.4 Communicate assertively, persuasively, confidently, and clearly.
- 3.6.5 Use available technology and other media to assist with communication as appropriate.
- 3.6.6 Elicit feedback, validating understanding of communication.

## **Domain 4. Personal and Professional Development**

### **4.1 Self-Awareness**

Students will be able to examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth.

### Specific Competencies

- 4.1.1 Demonstrate motivation, attention, and interest (e.g. habits of mind) during learning and work-related activities.
- 4.1.2 Identify, create, implement, evaluate and modify plans for personal and professional development for the purpose of individual growth.
- 4.1.3 Demonstrate constructive coping strategies to manage stress and conflict.
- 4.1.4 Demonstrate flexibility and maturity in adjusting to change.
- 4.1.5 Recognize ambiguity is part of healthcare and respond by utilizing appropriate resources in dealing with uncertainty.
- 4.1.6 Demonstrate self-confidence when working with patients, families, and members of the healthcare team.

### **4.2 Leadership**

Students will be able to demonstrate responsibility for creating and achieving shared goals, regardless of position.

### Specific Competencies

- 4.2.1 Identify the history (e.g., successes and challenges) of a situation/organization before implementing changes.
- 4.2.2 Develop relationships, value diverse opinions, and understand individual strengths and weaknesses to promote teamwork.
- 4.2.3 Persuasively communicate goals to stakeholders to help build consensus.
- 4.2.4 Empower team members by actively listening, gathering input or feedback, and fostering collaboration.

### **4.3 Innovation & Entrepreneurship**

Students will be able to demonstrate responsibility for creating and achieving shared goals, regardless of position

### Specific Competencies

- 4.3.1 Demonstrate initiative and creative decision making when confronted with novel problems or challenges.
- 4.3.2 Develop new ideas and approaches to improve quality.

### **4.4 Professionalism**

Students will exhibit behaviors and values consistent with the trust given to the profession by patients, other healthcare providers, and society.

### Specific Competencies

- 4.4.1 Demonstrate empathy, compassion, integrity, and respect for others.
- 4.4.2 Demonstrate preparation, initiative, and accountability consistent with a commitment to excellence.
- 4.4.3 Demonstrate a commitment to legal and ethical principles pertaining to provision of patient centered care, including compliance with relevant laws, policies, and regulations.
- 4.4.4 Demonstrate mindfulness of the environment, recognizing that one's professionalism is constantly evaluated by others.
- 4.4.5 Actively participate in the profession and broader community.

Revised: 3/2010; 1/2011; 5/2012; 12/14, 2/15

## **Experiential Education Policies & Procedures**

North Dakota State University Department of Pharmacy Practice

Revised 10/25/18

### **[Experiential Policy and Procedure Manual](#)**

Preceptors are asked to immediately notify Teri Udem, APPE Director (701-231-6578, [Teri.Udem@ndsu.edu](mailto:Teri.Udem@ndsu.edu)) or Rebecca Brynjulson, IPPE Director (701-231-7477, [Rebecca.Brynjulson@ndsu.edu](mailto:Rebecca.Brynjulson@ndsu.edu)) of any problems with their student on rotation

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### **General University Policies**

NDSU is committed to following the General Policies detailed in the NDSU Bulletin relating to Student Behavior, Privacy of Student Records, Equal Opportunity, Sexual Assault, Sexual Harassment, Consensual Relationships, Use of Alcohol and Other Drugs, and Campus Security. If you have questions/concerns regarding these matters, contact the Associate Director for Student Rights and Responsibilities.

[https://www.ndsu.edu/policy/index\\_by\\_policy\\_number/](https://www.ndsu.edu/policy/index_by_policy_number/)

### **[NDSU Pharmacy Student Handbook](#)**

# EVALUATIONS

## Student Evaluations

A [Student Evaluation of the preceptor/site](#) must be completed for all rotations and registered on the E\*Value website, within one week following the completion of each rotation. It is recommended that this evaluation be discussed with the preceptor during the feedback session at the conclusion of the rotation. These comments and observations will provide the preceptor with invaluable feedback regarding his/her site, service, and individual performance as a preceptor.

**Preceptors have the ability to view anonymous student evaluations of the preceptor/site through E\*Value** once a preceptor has had at least three students provide an electronic evaluation for the preceptor through E\*Value. (see E\*Value section of preceptor's handbook for directions)

Preceptors, who have not yet received at least three evaluations, can request verbal feedback and/or suggestions for improvement from our office.

## Preceptor Evaluation

The "Preceptor Evaluation of Student Form", is to be completed by the preceptor. The preceptor is required to:

1. Provide the student with verbal, constructive feedback, midway and throughout the rotation.
2. Provide a written "Student Evaluation" and constructive feedback at mid-point (for APPE) and conclusion of the rotation
3. Post on the E\*Value website, "Student Evaluation" within two weeks following the completion of each rotation.

An electronic copy of the evaluations will be generated by E\*Value and emailed to preceptors at the mid-point of the rotation and one week prior to the completion of the practice experience.

\*\*Please notify [mark.lofgren@ndsu.edu](mailto:mark.lofgren@ndsu.edu) if you do not receive these notifications from E\*value as they sometimes go to junk mail.

## Grading:

The Grading System used to monitor academic performance for the Advanced Pharmacy Practice Experiences is:

**P (Pass):** Indicates that the student has successfully completed the work of the Advanced Pharmacy Practice Experiences

**F (Fail):** Indicates that student performance was unsatisfactory or that the student did not meet the expectations and/or complete the required work of the Advanced Pharmacy Practice Experience.

Students must complete and pass **ALL** course components to pass this course.

## Preceptor Evaluation of Students

- A. During any rotation, if a student puts patients, preceptors or the practice at risk, that student may be immediately dismissed from the rotation and given a failing grade for that rotation. Students will not receive credit for failed rotation hours. Preceptors are asked to immediately notify Teri Udem, APPE Director (701- 231-6578) or Rebecca Brynjulson, IPPE Director (701-231-7477) of any problems with their students or the rotation.
- B. Upon failure of an IPPE rotation, a student will receive a failing grade and the student will complete a remediation plan during the subsequent academic year that includes repeating the course for academic credit. The student will be required to successfully complete all IPPE hours prior to beginning APPE. A minimum of 300 IPPE hours must be **successfully** completed prior to APPE.
- C. Upon failure of an APPE rotation, a student will receive an incomplete grade and will be required to successfully complete a remediation plan that includes repeating the failed rotation type for APPE credit. Upon completion of the remediation plan, the student will be required to make up any rotation hours that were missed due to the remediation plan. All make up rotation hours will be completed at the end of the academic year, resulting in a delayed graduation. Remediation hours cannot be made up over the holiday break. A total of 1600 ACPE rotation hours, in the appropriate combination of required and elective rotations, must be **successfully** completed prior to

graduation.

- D. If a student requires remediation and does not successfully complete the remediation plan, College Policy 3.03, Right to Terminate Enrollment, will be considered.

### [APPE Remediation Policy](#)

IPPE-I (Institutional) Grading – see [Pharm 355 Syllabus](#)

IPPE –II (Community) Grading – see [Pharm 455 Syllabus](#)

### **Monitoring**

Evaluation of the experiential experiences will be conducted in the same manner as all other courses offered by the College of Pharmacy. Students will be required to complete an electronic evaluation of the site, the preceptor and the program at the end of their experiences. Students are informed to immediately notify the APPE/IPPE Director of any issues surrounding their preceptor or rotation. The APPE Director, IPPE Director and/or Director of Experiential Outreach and Assessment, or the School, will then follow up with preceptors and students on any identified problem areas.

Preceptors are required to complete one electronic evaluation at the mid-point and one electronic evaluation at the end of each student rotation. Preceptors are asked to immediately notify Teri Udem, APPE Director (701-231-6578) or Rebecca Brynjulson, IPPE Director (701-231-7477) of any problems with their students or the rotation

### **Academic Honesty Statement**

All work in this course must be completed in a manner consistent with [NDSU University Senate Policy, Section 335: Code of Academic Responsibility and Conduct](#). Violating this code will result in a penalty or penalties to be determined by the instructor depending on the seriousness and circumstances of the offense. The instructor may: (1) fail the student for the particular assignment or test; or (2) give the student a failing grade. Students are responsible for doing and submitting their own work. Such actions may include dismissal, which is a suspension from NDSU for a specific period of time, or expulsion from NDSU, which carries no expectation of return at a later date. Academic dishonesty, in any form, is inconsistent with an academic community that operates on the basis of honesty, integrity, and fair play. If questions arise, students are encouraged to consult with the instructor.

### **Academic and Professional Misconduct**

For further information on Academic or Professional Misconduct please see Student Academic and Conduct Standards Policy 3.01 in the [Pharmacy Student Handbook](#). Preceptors are asked to immediately notify Teri Udem, APPE Director (701-231-6578) or Rebecca Brynjulson, IPPE Director (701-231-7477) of any problems with their students on the rotation.

## PRECEPTOR RESPONSIBILITIES

The integration of classroom knowledge into professional performance is recognized as an essential activity in the achievement of professionalism. The following list emphasizes the serious responsibilities inherent in accepting the role of a preceptor:

- a. Understand the dimensions, responsibilities and tasks of pharmacy practice and identify those tasks which are performed in the preceptor's pharmacy.
- b. Assess the student's knowledge and level of experience before assigning learning experiences. From both educational and public safety standpoints, the student's duties should not exceed his/her educational level.
- c. Review the assessment of the student's entry level knowledge and experience with the student, pointing out strengths and weaknesses and assigning learning experiences to correct deficiencies.
- d. Set clear learning objectives for the student, based on the student's education and experience and upon the dimensions, responsibilities and tasks of pharmacy practice.
- e. Plan specific learning activities that will contribute to the mastery of each task and ensure time to practice the skill in the pharmacy.
- f. Thoroughly review such topics as patient confidentiality, security practices, professional demeanor, patient communication, communication with other health professionals, work schedules, lines of responsibility, relationships with the preceptor and other staff members, employee benefits, professional supervision, and the performance evaluation.
- g. Provide information and demonstrate appropriate practice performance.
- h. Serve as a learning resource and role model for the student while infusing new values and attitudes.
- i. Provide a broad scope of educational experiences. Special projects may be arranged, such as in-service training, design of record systems, and newsletter writing. Exchange visits to other pharmacies may provide exposure to alternative distribution, recordkeeping and control systems.
- j. Systematically rotate the student's responsibilities to provide a wide variety of experiences.
- k. Coordinate and share teaching and supervisory responsibilities with other pharmacists.
- l. Close and continuous supervision of the student's performance, appropriate for his/her educational level and experience, is required by all preceptors. However, the advanced student's learning is facilitated when some latitude in independent performance is permitted. Intermittent checks of performance and retrospective reviews may be appropriate for the advanced student who has acquired the judgment making ability required for practice.
- m. Provide positive corrective feedback during the learning process. Discuss pharmaceutical care plans and SOAP notes and answer any questions or refer to literature for evidence based practices.
- n. Evaluate and document the student's abilities during and at the completion of the Pharmacy Practice Experience. These evaluations may take the form of exit interviews, performance rating scales, review of student reports/care plans, and performance tests.
- o. Meet with representatives of the Board of Pharmacy or of the School of Pharmacy who are responsible for coordinating the Advanced Pharmacy Practice Experience Program.
- p. Encourage/model active participation in continuing education and lifelong learning.

## HOLIDAYS AND ROTATION CALENDAR

The Pharm.D fourth year will begin on **May 20, 2019 at 8:00 am** and will end on **April 24, 2020 at 5:00 pm**. The Experiential Year is comprised of eight rotations and is further segregated into required and elective rotations. The five 5 week required rotations include: ambulatory care, inpatient general medicine (acute care), community advanced practice, institutional/hospital advanced practice and rural health. The three elective rotations are also five weeks in length.

Students are expected to successfully complete 8 of the 9 available blocks.

### 2019-2020 Rotations Schedule

#### **APPE ROTATIONS**

Rot.# Course #	APPE 1 PHRM 581	APPE 2 PHRM 582	APPE 3 PHRM 583	APPE 4 PHRM 584	APPE 5 PHRM 585	APPE 6 PHRM 586	APPE 7 PHRM 587	APPE 8 PHRM 588	APPE 9 PHRM 589
<b>Begin</b>	5/20/19	6/24/19	7/29/19	9/3/19	10/7/19	11/12/19	1/13/20	2/18/20	3/23/20
<b>End</b>	6/21/19	7/26/19	8/30/19	10/4/19	11/8/19	12/20/19	2/14/20	3/20/20	4/24/20

#### **IPPE ROTATIONS**

Rot.# Course #	IPPE 1 PHRM 355	IPPE 1 PHRM 355	IPPE 1 PHRM 355	IPPE 2 PHRM 455	IPPE 2 PHRM 455
<b>Begin</b>	5/20/19	6/10/19	7/1/19	5/20/19	6/17/19
<b>End</b>	6/07/19	6/28/19	7/19/19	6/14/19	7/12/19

#### 2019/2020 NDSU University Holidays

All students are allowed time off during the following official 2019/2020 University holidays with the exception of Monday, April 13, 2020: **Spring Break is NOT considered time off for APPE rotations.**

Memorial Day	May 27, 2019*
Independence Day	July 4, 2019*
Labor Day	Sept. 2, 2019
Veteran's Day	Nov. 11, 2019
Thanksgiving Day	Nov. 28, 2019
Thanksgiving Friday	Nov. 29, 2019
Martin Luther King, Jr.	Jan. 20, 2020
Presidents' Day	Feb. 17, 2020
Holiday Recess	April 10, 2020

Please note that the APPE Holiday Break is: December 16, 2019 through January 10, 2020.

**\*IPPE Students must make up these hours (Memorial Day and Independence Day)**

#### IPPE Specific Policies:

- Students must make up any missed IPPE hours. Contact the IPPE Director if you are unable to make up any missed hours.
- \*\*Memorial Day or Fourth of July Holidays:** For those students who have IPPE scheduled during either **Memorial Day or the Fourth of July**, the following three options may be taken to make up the 8 hours of IPPE missed.
  - Continue IPPE as scheduled on Memorial Day or the Fourth of July, working an 8-hour day
  - Take Memorial Day or the Fourth of July off, make up eight hours on alternate dates (i.e. four 10-

hourdays, weekend, etc.)

- c. Complete an 8-hour project (completed in addition and outside of hours at the practice site) as outlined by your preceptor that contributes to the delivery of patient care at the practice site (i.e. patient education/handouts, research for formulary projects, continuing education program development for technician and/or nursing staff, etc.)

### **Inclement Weather Conditions**

Students in the Fargo-Moorhead area are not expected to report to Experiential Education sites if classes at North Dakota State University have been cancelled due to inclement weather conditions or weather conditions are such that a student could not travel safely to and from the practice site. Students located outside the F-M area shall follow the local public school policy, and in case of closure, shall contact their preceptor directly for instructions.

Students, who miss hours due to inclement weather, should work with their preceptors and the Experiential Office to make up lost time.

### **PRECEPTOR TRAINING**

We value our partnerships with pharmacists from around the region and the excellent education they provide to the next generation of pharmacists.

As a preceptor for the School of Pharmacy at NDSU, the following are provided to you once you have your first student scheduled and continue to be an active preceptor for us:

- NDSU Library Services  
Including access to the e-book: The Preceptor’s Handbook for Pharmacists, 3<sup>rd</sup> Ed.  
Contact [Mark.Lofgren@ndsu.edu](mailto:Mark.Lofgren@ndsu.edu) with any access issues
- The Collaborative Education Institute (CEI)- Access to online preceptor training and ACPE accredited continuing pharmacy education through
  - The Collaborative Education Institute (CEI), accessed through E\*Value Learning Modules (current CEI password: 18NDSU)
  - New preceptors are asked to complete the preceptor orientation modules prior to taking students

All Courses	Orientation	Journal Club	Rotation Experience	Teaching	Feedback/Communication	Role Modeling	Time Management						
Title								Date	Course Type	Duration	Rating	CE	Cost
Preceptor Orientation									On-Demand	1hr	★★★★★	✓	NO COST



E\*VALUE™ a medhub product North Dakota State University College of Pharmacy Program ID:4126

Home Users Schedules Evaluations Case Logs **Learning Modules** Reports Program Management

Coursework | **CEI**

Step 2

## CEI

### Collaborative Education Institute (CEI)

[CE Tracking Report](#)

[Completed CE Courses/Rotations](#)

[Connect to CEI Account](#)

Step 3

E\*VALUE™ a medhub product North Dakota State University College of Pharmacy Program ID:4126

Home Users Schedules Evaluations Case Logs **Learning Modules** Reports Program Management

Coursework | **CEI**

### Connect to CEI Account

Thank you for participating in CEI Preceptor Education.

The Collaborative Education Institute (CEI) provides preceptor development activities for a wide range of schools across the nation. The CEI website contains educational tools for preceptors to utilize in teaching student pharmacists and integrating them into their pharmacy practice. By completing these on-line activities you can obtain ACPE approved Continuing Pharmacy Education credits at no cost to you.

Click [here](#) to proceed to the CEI Preceptor Education Page.



Step 4

## [CEI Preceptor Pharmacist Subscription Instructions](#)

- Pharmacist's Letter
  - If You're New to Pharmacist's Letter: When you click on the link below, you'll be asked to log in with your personal CEID# or passcodes for Pharmacist's Letter/Preceptor Training & Resource Network. If you're new to the site, you can create your CEID# by following the link on the login page that says "I'm new to Pharmacist's Letter - sign me up for Preceptor CE and Resources!" There is no charge for this. [Pharmacist's Letter](#)
- From the Schoolhouse
  - Recorded presentations by NDSU Faculty and Staff available for ACPE continuing education (starting fall 2018)
  - Access in CEI (see instructions above)- Use passcode: NDSUSCHOOL for full recorded series (up to 6 hours CE/year)
- [Pharmacists' Patient Care Process \(PPCP\)](#) (New)

If you would like additional information on how to access preceptor resources, please contact [Lisa.Richter.1@ndsu.edu](mailto:Lisa.Richter.1@ndsu.edu) or (701) 231-5178.

## **KEY STEPS IN LEARNING**

The learning activities suggested for students can be summarized in five steps.

<b>Set Clear Learning Objectives</b>
<b>Determine the Achievement Level and Learning Needs of the Student</b>
<b>Plan Specific Learning Activities</b>
<b>Implement the Learning Plan</b>
<b>Evaluate and Feedback the Results</b>

✓ **Set Clear Learning Objectives**

Preceptors are responsible for supervising the learning of students who will practice in general practice locations and in various roles. The preceptor and the student should begin each rotation with a prepared set of learning objectives that represent a description of the knowledge, skills, and capabilities required to practice pharmacy in that setting. It is important that the student be exposed to the different roles and tasks. This may require arrangement of learning experiences outside of the preceptor's pharmacy

✓ **Determine the Achievement Level and Learning Needs of the Student**

Specifically ask the student what he/she knows, what they have experienced, and their expectations during the rotation you are supervising. Decide what knowledge, skills, and attitudes are deficient in the student's background and focus the learning on these deficiencies.

✓ **Plan Specific Learning Activities**

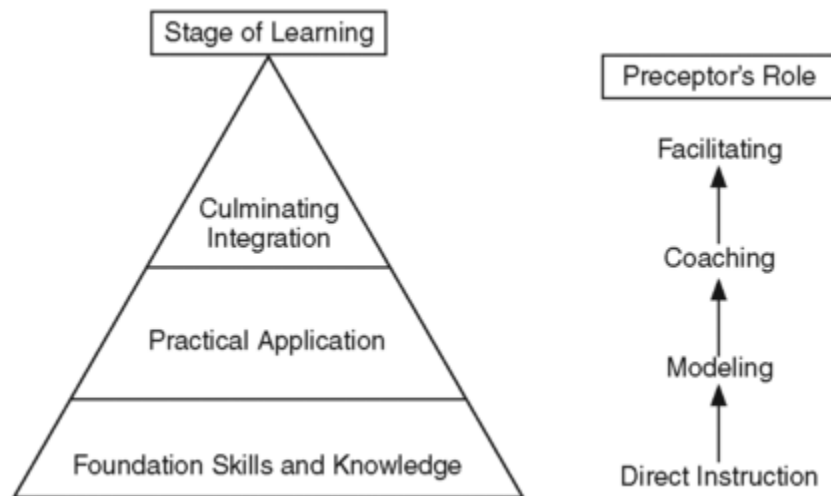
Decide on the experiences/learning activities that will be necessary to meet the learning objectives of both the student and the preceptor. Learning activities may include daily practice responsibilities, observation of selected tasks, working on assignments and special projects, reading journal articles or other references, attending meetings and seminars, discussions with the preceptor and other pharmacists, and evaluation of performance.

✓ **Implement the Learning Plan**

Develop a schedule of experiences/learning activities that are possible within your rotation site and during the rotation time frame. Arrange for special visits to other practice sites or with other health professionals. Determine the best time for the preceptor to meet with the student to offer advice and feedback.

✓ **Evaluate and Feedback the Results**

If possible, it is important to provide feedback when the behavior is observed. Provide corrective and supportive feedback as often as possible focusing on specific assignments or tasks performed.



◀Nimmo CM, Guerrero R, Greene SA, et al. Nimmo CM. Developing training materials and programs: facilitating learning in staff development. In: Nimmo CM, Guerrero R, Greene SA, et al., eds. *Staff development for pharmacy practice*. Bethesda, MD: American Society of Health-System Pharmacists; 2000:119–31.

### THE IMPORTANCE OF FEEDBACK

The student needs to know whether he/she is performing appropriately. Approval by the preceptor and appreciation from patients and other health professionals are factors which will encourage the student to repeat proper performance.

An awareness of satisfactory performance is as important as an awareness of deficiencies because a student needs to understand how to improve on a particular skill so that he/she can increase proficiency through practice in a future rotation.

In addition to feedback from the preceptor regarding performance, the preceptor should discuss/quiz the student regularly on assigned tasks. Correct responses contribute to positive reinforcement. Incorrect answers are not necessarily a sign of failure, but a signal to re-emphasize a particular task.

### Suggested Questions to initiate conversation and begin feedback for the Mid-rotation and/or Final Rotation Evaluations:

1. How would you rate your performance so far? How do you think your care plans are going?
2. What do you think of your .....?  
.... patient counseling?  
.... time management skills?
3. Why do you think that? Explain what you feel you are doing well... or not so well?
4. How could you improve?
5. What would you like to improve in the coming weeks?
6. Set specific objectives for the student or incorporate in objective setting along with the student.
7. Do you have enough time to work on projects/tasks here? Too much time?
8. What is your favorite activity for this rotation...of the day?
9. What is your least favorite activity? Why?
10. What is the most important task you are assigned?
11. What did you find helpful in learning/preparing for this rotation?
12. What would you like to see change in the future?
13. What would you say are the strengths and weaknesses of this rotation?
14. What skills have you learned that you plan to use in the future

## Seven Keys to Effective Feedback

### Feedback should be:

- Goal-Referenced
- Tangible and Transparent
- Actionable
- User-friendly
- Timely
- Ongoing
- Consistent

Portions of this manual have been extracted from the AACP/NABP manual, The Internship Experience, the Drake University Competency Statements developed with the support of SmithKline Corporation, the Community Practice Externship Manual of the University Of Minnesota College Of Pharmacy and Wiggins G. Educational Leadership 2012;70(1):11-16.

## E\*Value

## Information

### Viewing Educator Performance After 3 Required Student Rotations

**Step 1:** Click on “Reports” tab

**Step 2:** Click “Aggregate Educator Performance”






The screenshot displays the E\*Value web application interface. At the top left, the logo for E\*VALUE is shown, along with the text "a medhub product" and "North Dakota State University College of Pharmacy Program ID:4126". On the top right, there is a user profile icon labeled "Pharm.D." and a "Help" button. Below the header is a navigation menu with several tabs: "Home", "Schedules", "Evaluations", "Case Logs", "Learning Modules", and "Reports". The "Reports" tab is highlighted with a red box and labeled "Step 1". Below the navigation menu is a blue header bar with "Reports" and "Recently Viewed Reports" links. The main content area is titled "Reports" and contains a search bar and a "Filter By" dropdown menu set to "All". Below this are three columns of links under the headings "Evaluation Educator Reports", "Evaluation Site Reports", and "Scheduling Reports". The link "Aggregate Educator Performance" under "Evaluation Educator Reports" is highlighted with a red box and labeled "Step 2". Other links include "Aggregate Comments about Educators", "Completed Evaluations By Me", "My Performance by Course/Rotation", "Aggregate Site Performance", "Site Aggregate Comments", "Site Evaluation Scores by Question", and "Schedule Report".

**Step 3:** Set the **Start** and **End Dates** that correspond with when you had student rotations.

## Aggregate Educator Performance

Use this report to review a performance summary of yourself. You can also review performance over time.

Choose a time period of interest, one or all activities, and one or all sites.

**Filter Template:** {Select a Template}   
**Start Date:** 05/15/2013  **End Date:** 04/27/2018  **Step 3**   
**Date Type:** Request Date    
**Site Group:** {All Site Groups}   
**Site Filter:**  {Active Sites} **Filter**    
**Site:** {All Sites}   
**Course/Rotation Group:** {All Course/Rotation Groups}   
**Course/Rotation Filter:**  {Active Courses/Rotations} **Filter**    
**Course/Rotation:** {All Courses/Rotations}   
**Evaluation Type:**   
 {All Types}   
 Advisee Review of Advisor   
 Faculty Research & Scholarship Data Input   
 Faculty Service Data Input   
**Question Group:** {All Groups}   
**Question:** {All Questions}   
**User Groups:** {All Groups}   
**Last Name Filter:** **Filter/Refresh**   
**Educators:** **Preceptor, Joe**   
**Format Option:** HTML   
**Save Template** **Next ->** **Step 4**

**Step 4:** Click “Next”

**Step 5:** Click on any of the underlined options for different report views.

North Dakota State University  
College of Pharmacy

Analysis of Educator Performance

Subject:  
Time Period: 05/15/20 to 04/27/20  
Time Period Type: Request Date  
Report Date:

Expanded View To Educator Comments To Time Series

Click on any of these options for different report views

Question ID	Question	Zero Count	Applicable Answers	Mean	Scale	Std
1320933	The preceptor is interested in teaching this rotation.	0	36	4.56	1 to 5	0.56
1320934	The preceptor related to me as an individual.	0	36	4.47	1 to 5	0.56
1320935	The preceptor encouraged me to actively participate in discussions and problem-solving exercises.	0	36	4.61	1 to 5	0.55

## Viewing Information on Schedule/Student in E\*Value

**Step 1 and 2:** Click on Reports > Schedule Report

The screenshot shows the E\*VALUE interface for North Dakota State University College of Pharmacy. The top navigation bar includes Home, Schedules, Evaluations, Case Logs, Learning Modules, and Reports. The Reports button is highlighted with a red box and labeled "Step 1: Click Reports". Below the navigation bar, the Reports section is active, showing sub-sections: Learning Module Reports (with a link to View Completed Coursework), Time Tracking Reports Legacy (with a link to Compliance (Time Tracking 1.0)), and Scheduling Reports (with links to Schedule Availability and Schedule Report). The Schedule Report link is highlighted with a red box and labeled "Step 2: Click Schedule Report".

**Step 3:** Set the desired Start and End Dates

The screenshot shows the E\*VALUE Schedule Report form. The Filter Template is set to "{Select a Template}" and Curriculum is set to "(All Curricula)". The Start Date is set to 06/26/2017 and the End Date is set to 04/27/2018, both dates are highlighted with red boxes. A red callout box states: "Step 3: Set the dates as shown (Start date 6/26/2017 and End date: 4/27/2018)". The Show Participation Dates and Show Sessions options are set to Yes. The Format Option is set to HTML. The Next button is highlighted with a red box and labeled "Step 4: Click Next".

**Step 4:** Click **Next**. After a short time your schedule will generate. If you click on the student's name, it will open a pop-up window that includes a link to your student's email address.

It is the responsibility of the student to contact their preceptor two weeks prior to their practice experience.

### Who do I contact for help?

You should contact Mark Lofgren, NDSU's E\*Value administrator, by phone at 701-231-7722, or email at [mark.lofgren@ndsu.edu](mailto:mark.lofgren@ndsu.edu) if you have problems, concerns or questions about:

- your password, evaluations, report-viewing privileges, general program issues

*Thank you for supporting, inspiring and training the pharmacy students at NDSU!*

Preview Form



## North Dakota State University College of Pharmacy

**Subject:**  
**Evaluator:**  
**Site:**  
**Period:**  
**Dates of Course/Rotation:**  
**Course/Rotation:** Acute Care  
**Form:** Student Evaluation of Preceptor

Use the following scale to indicate your agreement with the following statements

**5 = Strongly Agree**  
**4 = Agree**  
**3 = Neutral**  
**2 = Disagree**  
**1 = Strongly Disagree**  
**0 = N/A - Not applicable to the Rotation or Site**

The preceptor is interested in teaching this rotation. *(Question 1 of 27 - Mandatory)*

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

The preceptor related to me as an individual. *(Question 2 of 27 - Mandatory)*

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

The preceptor encouraged me to actively participate in discussions and problem-solving exercises. *(Question 3 of 27 - Mandatory)*

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

I had adequate patient or guardian contact on this rotation to meet the learning objectives. *(Question 4 of 27 - Mandatory)*

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

I had access to necessary patient information. *(Question 5 of 27 - Mandatory)*

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

I was encouraged to access and use resource materials. *(Question 6 of 27 - Mandatory)*

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**I had access to all necessary reference materials, either hard copy or via electronic means. (Question 7 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**The preceptor described their approach to thinking about therapeutic problems. (Question 8 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**The preceptor is readily available to answer questions and concerns. (Question 9 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**The preceptor provided good direction and feedback. (Question 10 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**The preceptor is knowledgeable in his/her response to questions regarding his/her approach to therapy. (Question 11 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**The preceptor evaluated me at the end of the rotation in a manner which was helpful to me (Question 12 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**The preceptor served as a role model for a pharmacist practicing in this practice setting. (Question 13 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**The rotation provided opportunities to interact with other health care professionals. (Question 14 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**The goals and objectives of the rotation were outlined and/or explained at the beginning of the rotation. (Question 15 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**Rotation activities were well organized and structured. (Question 16 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5



**This rotation provided an environment (physical and philosophical) that facilitated my learning. (Question 17 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**Others at the rotation site were receptive and willing to interact with me. (Question 18 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**My verbal communication skills were enhanced on this rotation. (Question 19 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**My written communication skills or documentation skills were enhanced on this rotation. (Question 20 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**My clinical skills were enhanced on this rotation. (Question 21 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**I was able to apply previously learned materials on this rotation. (Question 22 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**I believe this experience will help me be a better pharmacist. (Question 23 of 27 - Mandatory)**

N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4	5

**The preceptor discussed patient care and/or practice related issues with me an average of (Question 24 of 27 - Mandatory)**

Selection	Option
	> 4 hours per day
	> 3 to 4 hours per day
	> 2 to 3 hours per day
	> 1 to 2 hours per day
	0.5 to 1 hour per day
	< 0.5 hour per day

**Overall, how would you rate this practice experience? (Question 25 of 27 - Mandatory)**

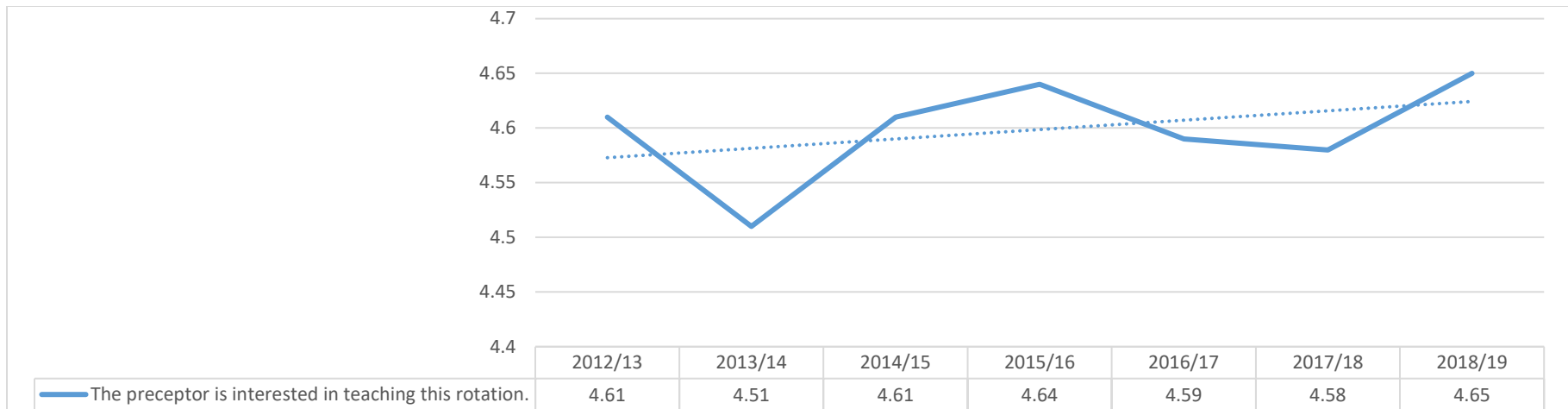
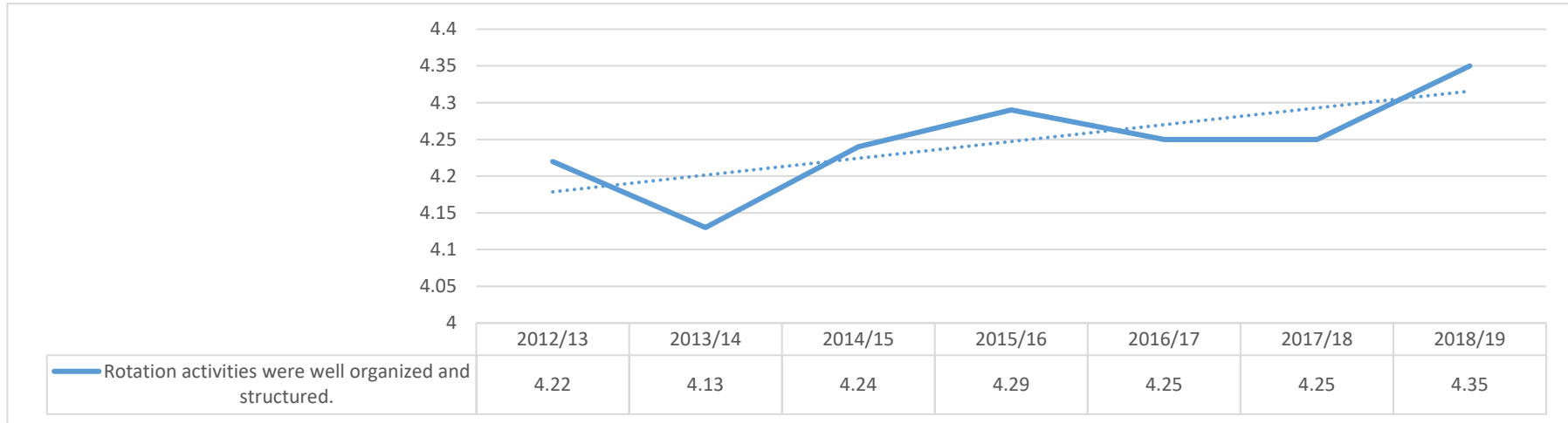
Poor	Fair	Good	Excellent
1	2	3	4

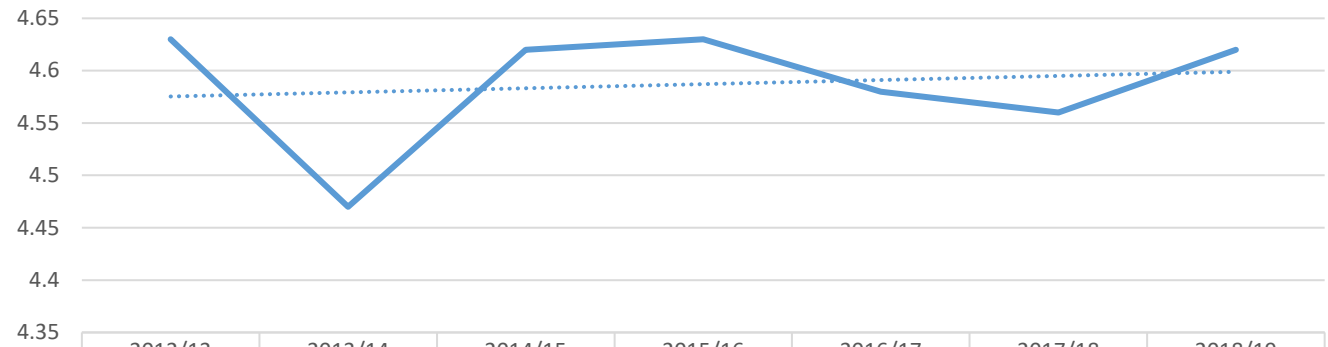
**Please elaborate and give examples** (Question 26 of 27)

**How might this practice experience be improved?** (Question 27 of 27)

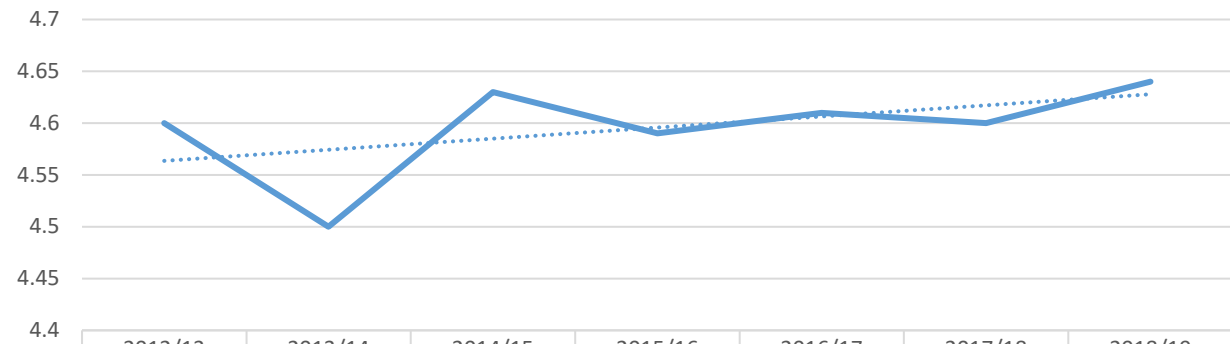
### Student Evaluation of Preceptors & Sites – APPE 2012-2019

- 0=N/A
- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Agree
- 5=Strongly Agree

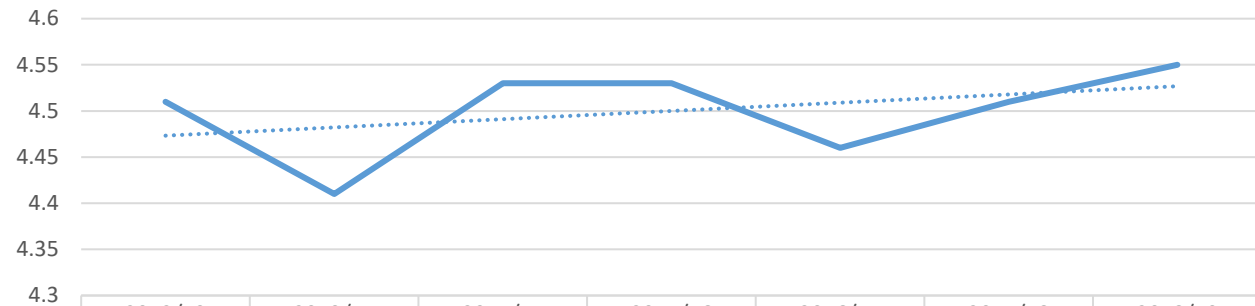




	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
— The preceptor related to me as an individual.	4.63	4.47	4.62	4.63	4.58	4.56	4.62



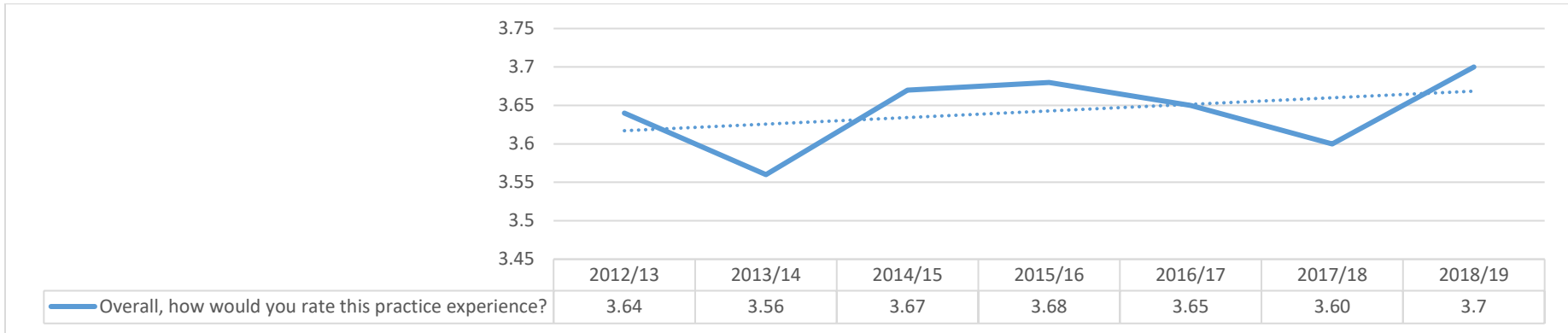
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
— The preceptor encouraged me to actively participate in discussions and problem-solving exercises.	4.6	4.5	4.63	4.59	4.61	4.60	4.64



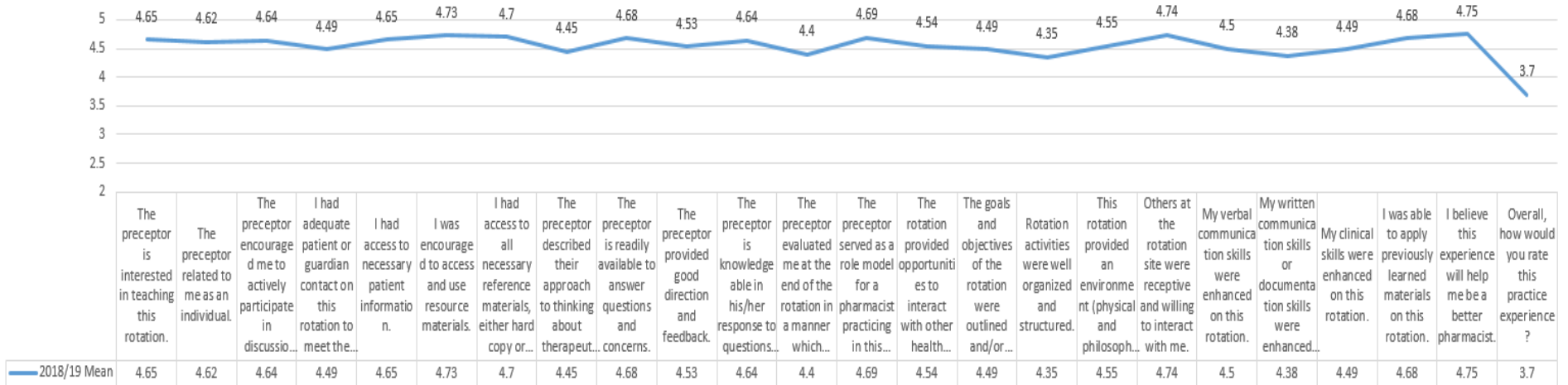
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
— This rotation provided an environment (physical and philosophical) that facilitated my learning.	4.51	4.41	4.53	4.53	4.46	4.51	4.55

For the question “Overall, how would you rate this practice experience?” (This question only)

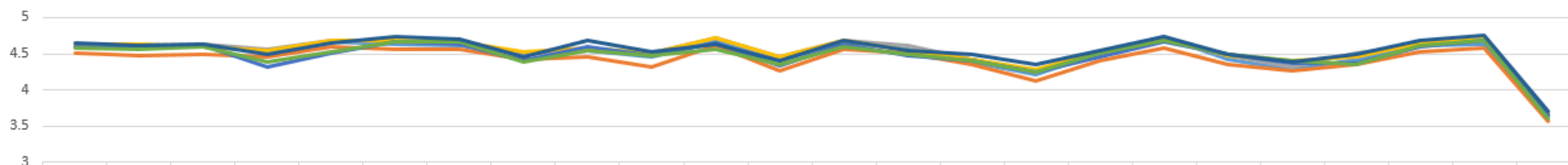
- 1=Poor
- 2=Fair
- 3=Good
- 4=Excellent



2018/19



### All Questions



	The preceptor is interested in teaching this rotation.	The preceptor related to me as an individual.	The preceptor encouraged me to actively participate in discussions and problem-solving exercises.	I had adequate patient or guardian contact on this rotation to meet the learning objectives.	I had access to necessary patient information.	I was encouraged to access and use resource materials.	I had access to all necessary reference materials, either hard copy or via electronic means.	The preceptor described their approach to thinking about therapeutic problems.	The preceptor is readily available to answer questions and concerns.	The preceptor provided good direction and feedback.	The preceptor is knowledgeable in his/her response to questions regarding his/her approach to therapy.	The preceptor evaluated me at the end of the rotation in a manner which was helpful to me.	The preceptor served as a role model for a pharmacist practicing in this practice setting.	The rotation provided opportunities to interact with other health care professionals.	The goals and objectives of the rotation were outlined and/or explained at the beginning of the rotation.	Rotation activities were well organized and structured.	This rotation provided an environment (physical and philosophical) that facilitated my learning.	Others at the rotation site were receptive and willing to interact with me.	My verbal communication skills were enhanced on this rotation.	My written communication skills or documentation skills were enhanced on this rotation.	My clinical skills were enhanced on this rotation.	I was able to apply previously learned materials on this rotation.	I believe this experience will help me be a better pharmacist.	Overall, how would you rate this practice experience?
2012/13 Mean	4.61	4.63	4.6	4.55	4.67	4.63	4.62	4.51	4.54	4.46	4.68	4.4	4.67	4.57	4.39	4.22	4.51	4.73	4.43	4.28	4.43	4.62	4.64	3.64
2013/14 Mean	4.51	4.47	4.5	4.46	4.59	4.56	4.56	4.42	4.45	4.32	4.61	4.27	4.56	4.51	4.35	4.13	4.41	4.58	4.35	4.27	4.35	4.53	4.58	3.56
2014/15 Mean	4.61	4.62	4.63	4.56	4.68	4.67	4.63	4.5	4.55	4.51	4.72	4.46	4.68	4.62	4.42	4.24	4.53	4.72	4.48	4.31	4.51	4.61	4.7	3.67
2015/16 Mean	4.64	4.63	4.59	4.55	4.69	4.69	4.67	4.52	4.58	4.51	4.72	4.46	4.68	4.55	4.42	4.29	4.53	4.71	4.48	4.4	4.46	4.65	4.71	3.68
2016/17 Mean	4.59	4.58	4.61	4.32	4.51	4.67	4.64	4.41	4.59	4.48	4.65	4.33	4.64	4.47	4.41	4.25	4.46	4.66	4.49	4.37	4.37	4.59	4.69	3.65
2017/18 Mean	4.58	4.56	4.60	4.39	4.52	4.66	4.67	4.38	4.54	4.48	4.56	4.36	4.60	4.49	4.40	4.25	4.51	4.68	4.49	4.41	4.35	4.61	4.68	3.60
2018/19 Mean	4.65	4.62	4.64	4.49	4.65	4.73	4.7	4.45	4.68	4.53	4.64	4.4	4.69	4.54	4.49	4.35	4.55	4.74	4.5	4.38	4.49	4.68	4.75	3.7

— 2012/13 Mean   
 — 2013/14 Mean   
 — 2014/15 Mean   
 — 2015/16 Mean   
 — 2016/17 Mean   
 — 2017/18 Mean   
 — 2018/19 Mean

# NDSU Preceptor Education

Lisa Richter, PharmD, BCPS, BCCCP

Director of Experiential Outreach and Assessment

Assistant Professor of Practice

North Dakota State University School of Pharmacy

# Objectives

- Discuss Entrustable Professional Activities (EPAs)
- Describe the grading process for EPAs
- Explain the Pharmacists' Patient Care Process (PPCP)
- Outline preceptor development opportunities
- Summarize School of Pharmacy updates
- Discuss Preceptor FAQ's -how to view preceptor evaluations in E\*value, inclement weather policy



# Entrustable Professional Activities (EPAs)

“Discrete, essential activities and tasks that all new pharmacy graduates must be able to perform.”

# Levels of Entrustment

Level	Description
Level 1	I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
Level 2	I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback. <b>IPPE minimum requirement</b>
Level 3	I trust the learner to complete this task. The learner requires limited correction or feedback. <b>APPE minimum requirement</b>
Level 4	I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed
Level 5	I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

# IPPE Community EPA Example

Level 1	I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
Level 2	I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
Level 3	I trust the learner to complete this task. The learner requires limited correction or feedback.
Level 4	I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed
Level 5	I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<b>Students should perform all tasks at a level of entrustment of 2. I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.</b>	<b>Does not meet Level 2 of entrustment (Level 1)</b>	<b>Meets this level of entrustment (Level 2)</b>	<b>Exceeds Level 2 of entrustment (Level 3, 4, or 5)</b>
Collect a medical history from a patient or caregiver.		X	
Collect a medication history from a patient or caregiver.			X
Discuss a patient's experience with medication.		X	
Assess a patient's signs and symptoms to determine whether the patient can be treated within the scope of practice or requires a referral			X
Evaluate an existing drug therapy regimen.	X		
Accurately select and prepare medications to fulfill a medication order		X	
Educate a patient regarding the appropriate use of a new medication, device to administer a medication, or self-monitoring test			X

# APPE Acute Care EPA Example

Level 1	I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
Level 2	I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
Level 3	I trust the learner to complete this task. The learner requires limited correction or feedback.
Level 4	I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed
Level 5	I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<b>Students should perform all tasks at a level of entrustment of 3. I trust the learner to complete this task. The learner requires limited correction or feedback.</b>	<b>Does not meet Level 3 of entrustment (Level 1 or 2)</b>	<b>Meets this level of entrustment (Level 3)</b>	<b>Exceeds Level 3 of entrustment (Level 4, or 5)</b>
Compile a prioritized and/or medication-related problem list for a patient.		X	
Evaluate an existing drug therapy regimen.		X	
Follow an evidence-based disease management protocol.		X	
Select monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.			X
Write a setting appropriate note that documents patient care activities.			X
Recommend modifications or adjustments to an existing medication therapy regimen based on patient response.		X	
Present a patient case to a colleague during a handoff or transition of care.			X

# All NDSU experiential evaluations

Professionalism	Yes	No
Student demonstrates preparation, initiative, and accountability consistent with a commitment to excellence.		
Student demonstrates motivation, attention, and interest during learning and work-related activities		

General Requirements	Yes	No
Did the student provide the preceptor with a case log report to view (20 case logs required/rotation) (APPE)		
Preceptor certifies student completed 200 rotation hours. (APPE)		

# All NDSU experiential evaluations

<b>Comments</b>	
Comments regarding student special projects:	
Areas where the student excelled:	
Areas where the student needs improvement:	

# IPPE - Remediation

Score	Result
<p data-bbox="156 439 852 539"><b>One</b> “Does not meet this level of entrustment” on EPAs</p> <p data-bbox="156 611 233 654">OR</p> <p data-bbox="156 725 716 825">“Needs Improvement” on professionalism questions</p>	<p data-bbox="977 439 1479 482">Pass, with remediation*</p>

# IPPE - Failure

Score	Result
<p><b>Two or more</b> “Does not meet this level of entrustment” on EPAs or “Needs Improvement” on professionalism questions</p> <p>OR</p> <p>“No” on professionalism questions</p> <p>OR</p> <p>“No” on required hours/objectives</p>	Fail



# APPE - Remediation

Score	Result
<b>One</b> “Does not meet this level of entrustment” on EPAs  OR  “No” on professionalism questions	Pass, with remediation*

\*Action plan shared with next two preceptors

# APPE - Failure

Score	Result
<p><b>Two or more</b> “Does not meet this level of entrustment” on EPAs</p> <p>OR</p> <p>Repeat of one “No” on professionalism questions OR “Does not meet this level of entrustment” from same question as previous evaluations</p>	Fail

# Preceptor handbook on homepage in E\*value

- Contains links to evaluations/remediation information

The screenshot shows the E\*Value homepage with a navigation bar at the top containing tabs for Home, Schedules, Evaluations, Case Logs, Learning Modules, Reports, and Portfolio. A red arrow points to the Home tab. Below the navigation bar is a sub-menu with 'Home Page' and 'Other Tasks'. The main content area is titled 'Welcome to E\*Value' and is divided into several sections:

- My Information:** A section with a lock icon and a message: 'If this or any other biographic information is incorrect or missing, you can [update this information](#).' Below this, it lists 'Email: [redacted]', 'Rank: Preceptor', and 'Roles: Preceptor, Alumni'.
- Urgent Tasks:** A section with a warning icon and the text 'No Urgent Tasks'.
- Tasks:** A section with a link to '[Initiate Ad hoc Evaluations](#)'.
- Preceptor Education / Preceptor Development:** A section containing several links: '[Free CE for NDSU Preceptors \(CEI\)](#)', '[Preceptor Education Program \(PEP\) for Health Professionals and Students](#)' (with a sub-note: 'This is a FREE online program for all health care professions. Modules include including sample learning activities and downloads.'), '[Adjunct Preceptor Access to NDSU Library Services Video Instructions](#)', '[NDSU Teaching Seminar Part 1 \(New\)](#)', '[NDSU Teaching Seminar Part 2 \(New\)](#)', '[2018 NDSU Pharmacy Preceptor Newsletter \(New\)](#)', and '[Preceptor Boot Camp \(New\)](#)' (with a sub-note: 'Watch in Slide Show Mode for Voiceover PowerPoint' and a link to '[NDSU\\_Pharmacy\\_Student\\_Curriculum.pptx](#)').
- Advanced Pharmacy Practice Experiences:** A section containing links: '[2019-2020 APPE/IPPE Preceptor Handbook \(New\)](#)', '[2019-2020 APPE Student Handbook \(New\)](#)', '2019-2020 APPE Syllabi', and '[2019-2020 Acute Care Advanced Syllabus \(New\)](#)'. A red arrow points to this section.
- Personal Calendar:** A calendar view for the week of June 9 to June 13, 2019.

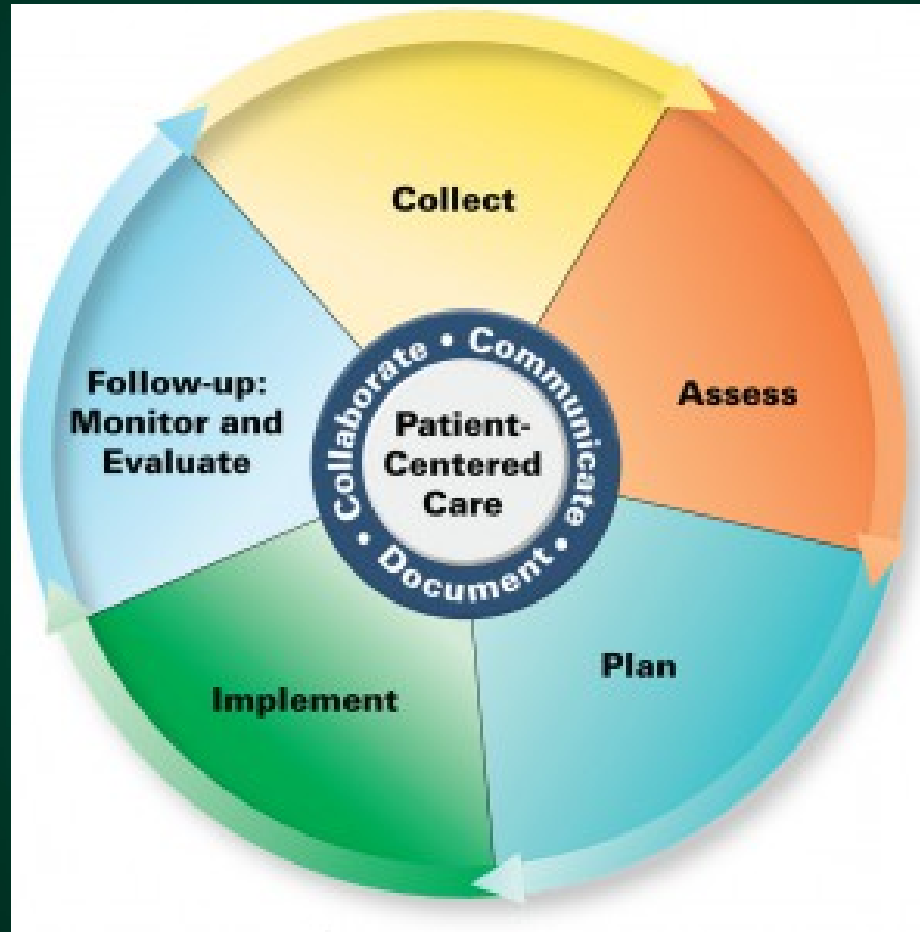
# Preceptor Feedback

Questions/comments about grading EPAs?

# Pharmacists' Patient Care Process



# Pharmacists' Patient Care Process



# Outline preceptor development opportunities

# Preceptor Development Opportunities/Resources:

From the Schoolhouse Series code: NDSUSCHOOL



## *An Overview of Complementary & Alternative Medicine*

- Don Miller, PharmD, FASHP
- **Friday, Oct. 4<sup>th</sup>, 2019 12-1pm**



## *Probiotics in Pediatrics: Helpful, harmful, or a waste of money?*

- Julia Muzzy Williamson, PharmD, BCPPS, CNSC
- **Friday, Nov. 15<sup>th</sup>, 2019 12-1pm**



## *Decreasing Medication Burden in the Elderly*

- Allison Hursman, PharmD, BCGP
- **Friday, Dec. 6<sup>th</sup>, 2019 12-1pm**



# Preceptor Development Opportunities/Resources

- Collaborative Education Institute (CEI)

North Dakota State University Subscription Code: **NDSU19**



From E\*Value  
Click on Learning Modules > CEI



Enter Access Code  
and Login to CEI account

# Preceptor Development Opportunities/Resources

- Summer & Winter NDSU Preceptor Newsletters
- Research/Teaching Seminars
- NDSU Library resources - mark.lofgren@ndsu.edu
- NDSU Preceptor Bootcamp - **NEW**

The screenshot shows the E\*Value web application interface. At the top, there is a navigation bar with buttons for Home, Users, Schedules, Evaluations, Case Logs, Learning Modules, Reports, Program Management, and Portfolio. Below this is a blue header with links for Home Page, E\*Value Announcements, and Other Tasks. The main content area is titled "Welcome to E\*Value" and is divided into three columns. The left column, "My Information", contains user details for lisa.richter.1@ndsu.edu. The middle column, "Urgent Tasks", shows "No Urgent Tasks" and a "Tasks" section with links for "Initiate Ad hoc Evaluations", "Initiate Ad hoc Coursework", and "Log New Case". The right column, "Preceptor Education / Preceptor Development", lists several resources, including "Free CE for NDSU Preceptors (CEI)", "Preceptor Education Program (PEP) for Health Professionals and Students", "Adjunct Preceptor Access to NDSU Library Services Video Instructions", "NDSU Teaching Seminar Part 1 (New)", "NDSU Teaching Seminar Part 2 (New)", "2018 NDSU Pharmacy Preceptor Newsletter (New)", and "Preceptor Boot Camp (New)". A red arrow points to the "Preceptor Boot Camp (New)" link.

# Continuous Quality Improvement

Topics you would like to see for preceptor development?

Preferred formats?

Preferred dates/times?

# Summarize School of Pharmacy updates

# NDSU School of Pharmacy Brief Updates

- Accreditation 2020
- Direct Conditional Admission to Pharmacy Program


# NDSU School of Pharmacy Brief Updates

- School of Pharmacy Co-Curriculum Pilot

P2 Focus: Teams and Teamwork - "Team Ready" (ABOs 3.4 Interprofessional Collaboration, 4.1 Self-Awareness, 4.2 Leadership, 4.3 Innovation, 4.4 Professionalism)	
Fall Semester (Required Elements)	Spring Semester (Required Elements)
Attend Career Fair	Attend Public Health Poster presentations
NDSU Leadership on the Go: Gallop Strengths Finder	NDSU Leadership on the Go: Innovation and Creativity
NDSU Leadership on the Go: Strengths Based Teamwork	IP Team-Based Collaborative Care Simulation (CHP 400)
Attend One IPE Grand Rounds	Attend One IPE Grand Rounds
End of Semester Reflection (due 11/15)	End of Semester Reflection (due 4/15)
<b>ELECTIVES: Complete 2 electives from "TEAM READY" category (see pre-approved list) during P1 Summer through April 1.</b>	




# NDSU School of Pharmacy Updates

- EHR Go – simulated electronic health record




**Patient:** Jane Shriver  
General Hospital

**DOB:** 08/25/1943 76 yo F  
**Admit Date:** 09/05/2019 10:46

**MR#:** K34-9800    
 **Animal dander, Dust, Mold, Fall Risk, NKDA**

## Meds & Administration History

CATEGORY	DRUG DESCRIPTION	ORDER STATUS	FREQUENCY	ADMIN HISTORY
Scheduled Meds	Albuterol 0.21 MG/ML Inhalant Solution - Dose: 1 ML in 5 ML saline neb	Active	AS DIRECTED PRN	No administrations.
Scheduled Meds	Pneumococcal vaccine polyvalent 0.5 ML Injectable Solution - Dose: 0.5 ML	Active	ONCE	No administrations.
Scheduled Meds	Flu vaccine; Influenza A virus vaccine (H1N1)-like virus 50000000 MG/ML - Dose: 1 ML	Active	ONCE	No administrations.
Scheduled Meds	Sodium Chloride 0.9% (Normal saline) (NaCl) - Dose: 1000 ML	Active	NOW	No administrations.
Scheduled Meds	24 HR Nifedipine 30 MG Extended Release Oral Tablet [Adalat] - Dose: 30 MG	Active	DAILY	No administrations.
Scheduled Meds	60 ACTUAT tiotropium 0.0025 MG/ACTUAT Metered Dose Inhaler [Spiriva] - Dose: 2 puffs daily	Active	DAILY	09/05/2019 13:17 2 puffs Given via Inhalation (INH) by Matu Omondi, Respiratory Therapist
Scheduled Meds	Omeprazole 40 MG Delayed Release Oral Capsule [Prilosec] - Dose: 40 MG	Active	DAILY	No administrations.
Scheduled Meds	Acetaminophen 500 MG / Diphenhydramine Hydrochloride 25 MG Oral Tablet [Tylenol PM] - Dose: 1-2	Active	AS DIRECTED PRN	No administrations.

 ADMINISTER

# Sudro Hall Expansion Aldevron Tower





# Aldevron Tower NDPhA Concept Pharmacy



# Continuous Quality Improvement

Areas NDSU pharmacy students excel?

Gaps in NDSU pharmacy student  
knowledge?

# FAQ-How to view evaluations in E\*value

The screenshot displays the eValue web application interface. At the top left is the eValue logo, followed by the text "North Dakota State University College of Pharmacy Program ID:4126". A horizontal navigation bar contains buttons for "Home", "Schedules", "Evaluations", "Case Log", and "Reports". A red arrow points from the "Case Log" button to the "Reports" button. Below this bar is a blue header with "Reports" and "Recently Viewed Reports". The main content area is titled "Reports" and includes a search bar and a "Filter By" dropdown set to "All". Under the "Reports" section, there are two columns of links. The left column, titled "Evaluation Educator Reports", contains links for "Aggregate Comments about Educators", "Aggregate Educator Performance", "Completed Evaluations By Me", and "My Performance by Course/Rotation". The right column, titled "Scheduling Reports", contains a link for "Schedule Report". A red arrow points from the left edge of the image to the "Completed Evaluations By Me" link.

# FAQ-How to view evaluations in E\*value

North Dakota State University  
College of Pharmacy  
Program ID:4126

Home Schedules Evaluations Case Logs Learning Modules Reports

Reports | Recently Viewed Reports

### Aggregate Comments about Educators

**\*\*Must have start date far enough back to include 3 students\*\***

Filter Template: {Select a Template} ▾

Start Date: 07/23/2018 📅 End Date: 10/23/2018 📅

Date Type: Request Date ▾ ?

Site Group: {All Site Groups} ▾

Site Filter: [ ] {Active Sites} ▾ Filter ?

Site: {All Sites} ▾

Course/Rotation Group: {All Course/Rotation Groups} ▾

Course/Rotation Filter: [ ] {Active Courses/Rotations} ▾ Filter ?

Course/Rotation: {All Courses/Rotations} ▾

Evaluation Type: {All Types} ▾  
Advisee Review of Advisor  
Faculty Research & Scholarship Data Input  
Faculty Service Data Input

Question Group: {All Groups} ▾

Question: {All Questions} ▾

User Groups: {All Groups} ▾

Last Name Filter: Filter/Refresh

# FAQ-Inclement Weather Policy

- Students are excused for weather if in F/M and NDSU is cancelled
- If outside of F/M follow local public schools and contact preceptors directly if closed

***All hours missed due to inclement weather MUST be made up***

- Information located in preceptor handbook on E\*value homepage

# Availability for 2020-2021 is now open!

Nov. 22, 2019

- Deadline for preceptors to enter availability

Dec. 16, 2019

- Deadline for students to select choices

Jan. 2020

- Rotation schedule available to students & preceptors

May 26, 2020

- 2020-2021 Rotations begin!\*
- \*IPPE students must make up Memorial Day Hours (5/25/2020)

Experiential Education makes up 30% of  
pharmacy students' curriculum -

***Thank You Preceptors!***

**NDSU** NORTH DAKOTA  
STATE UNIVERSITY

# Claim CE Credit

How do I access this recorded activity?

1. Log on to Evaluate -> Learning Modules tab->CEI (on blue banner across top) >Connect to CEI account
2. Click on My Courses
3. Enter your access code in the field Enter Partner Code and click APPLY. The code for this CE series is: NDSUSCHOOL. If you have already entered this code in your profile, any new activities in this series will populate automatically when they become available.
4. Click CONFIRM at the bottom of the page and you will be registered.
5. The activity will now show in your profile. (NDSU Preceptor Education)

How do I submit my CPE?

1. Follow steps 1 & 2 above
2. Locate the activity title you wish to complete within your Profile and click on the Exam
3. Complete the Exam & Evaluation as prompted; click SUBMIT to send your information to CPE Monitor

- Questions? Contact team at CEI by calling 515.270.8118 or [team@CEImpact.com](mailto:team@CEImpact.com)



# NDSU PHARMACY PRECEPTOR NEWSLETTER

SUMMER 2019



(Left to Right)

## **Lisa Richter, PharmD, BCPS, BCCCP**

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## **Mark Lofgren, MBA**

Experiential Education and E\*Value Coordinator  
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 701.231.7722

## Entrustable Professional Activity (EPA) Evaluations

Happy summer! All of the snow piles have melted and we are finally on our way to some nicer weather.

Experiential education is excited to launch our new Entrustable Professional Activity (EPA) evaluations with the current rotation students. EPAs are discrete, essential activities and tasks that all new pharmacy graduates must be able to perform.<sup>1</sup>

The EPA statements will be the new questions on the evaluations. Specific EPAs were selected based on rotation type, meaning community rotation evaluations will have different EPAs than institutional rotations, etc.

Evaluations continue to include two professionalism questions and text boxes for projects, areas of strength and areas for improvement. Written comments are always appreciated by students and experiential education.

EPAs are rated on a level of entrustment instead of a subjective poor to superior scale.

Levels of entrustment are:

- Level 1: I trust the student with direct observation and instruction to complete the task.
- Level 2: I trust the student to complete the task with assistance. The student requires frequent correction/feedback.
- Level 3: I trust the student to complete the task. The student requires limited correction/feedback.
- Level 4: I trust the student to complete this task. The student is self-directed and seeks guidance as needed.
- Level 5: I trust the student has mastered the task and is able to teach others.

IPPE students are expected to be at least at a level 2 and APPE students are expected to be at least a level 3. This scale and expectations are laid out for you in the evaluation.

For APPE rotations, the midpoint evaluation auto populates in the final evaluation so you are reminded of previous scoring and able to quickly adjust as needed.

One of the best things about the new evaluations is they have considerably

*EPA Evaluations continued on next page*

## Included in this issue

New Evaluations – Entrustable Professional Activities (EPAs)

Practice Spotlight- Minneapolis VA –by Amanda Kuhn, NDSU Class of 2019

Preceptor FAQs –required assignments, NDSU curriculum

Preceptor Spotlight: Preceptors of the Year

Speed Journal Club – by Kassy Vettleson, NDSU Class of 2020

Residency Stats Overview

School of Pharmacy Updates – Co-Curriculum

Preceptor Development Opportunities: Pastries with Preceptors, From the Schoolhouse, CEI

Upcoming Events

Continuous Quality Improvement – Top Drugs

*EPA Evaluations continued*

fewer questions than the previous evaluations which we hope will make it a more efficient and valuable process for our preceptors and students.

If you haven't had a chance to see the new evaluations yet, links to all evaluations are located in the [Preceptor Handbook](#) on the homepage in E\*Value. I'd encourage you to look through them prior to your students starting on rotation if able. If you have any questions about the new evaluations please don't hesitate to contact us.

Thanks for all you do with NDSU students and enjoy your summer!

Sincerely,



Lisa Richter, PharmD, BCPS, BCCCP

Director of Experiential Outreach and Assessment/Asst Professor of Practice  
School of Pharmacy

<sup>1</sup>Haines ST, Pittenger AL, Stolte SK, et al. Core entrustable professional activities for new pharmacy graduates. Am J Pharm Educ. In press.

## NDSU Names Preceptors of the Year

NDSU's School of Pharmacy announced two awards to pharmacists who help educate students as they pursue their future careers.

Dean Mattson, owner of Mattson's Pharmacy in Roseau, Minnesota, was named Adjunct Preceptor of the Year and Julia Muzzy Williamson was named Faculty Preceptor of the Year for 2019.

NDSU fourth-year pharmacy students on clinical rotations nominate and choose the award recipients for Preceptor of the Year.

As Adjunct Preceptor of the Year, Dean Mattson is recognized for his willingness to share his expertise with future pharmacists and be engaged in their professional education. Mattson is a 1982 graduate of the NDSU School of Pharmacy and a member of the Kappa Psi Pharmaceutical Fraternity.



Dean Mattson, RPh

"Mattson Pharmacy is an independent pharmacy and as years go by, the experience that we offer students is

*POY continued on next page*

NDSU

SCHOOL OF PHARMACY

becoming more unique. We are very rural,” said Mattson. “I choose to be a preceptor to show students that they can have a great career in a small town.” He recommends being a preceptor to other professional pharmacists.

“You have a great sense of fulfillment watching students grow during their rotational experience,” said Mattson. “Many students are still deciding what path they will follow with their degree and I try to be an example of what rural retail pharmacy entails for a career choice. Truthfully, we learn as much from the students as they learn from us.”

In nominating Mattson, one student mentioned that he goes above and beyond for students, both as a hard-working pharmacist and as a preceptor. “He made each day enjoyable, which inspired me to work harder,” the student said. “We worked very well together on a lot of projects, but he also let me be an independent learner. He trusted my capabilities.”

Students also shared experiences in rotations with Julia Muzzy Williamson, assistant professor of practice and Faculty Preceptor of the Year.



Julia Muzzy  
Williamson, PharmD,  
BCPPS, CNSC

“Dr. Muzzy Williamson pushes me to be a better student and I don’t think I will ever be able to put into words what it has meant to me to have someone like her put her faith into me,” said the student.

Muzzy Williamson also inspires students to work on their own research projects to prepare for their future careers. Her areas of expertise and interest include pediatric/neonatal nutrition, neonatal intensive care, pediatric GI disorders, pediatric critical care and women’s health.

In addition to being an NDSU assistant professor of practice, Muzzy Williamson is a pediatric clinical pharmacist at Sanford Health. She received her doctor of pharmacy degree from the Albany College of Pharmacy.

“Whether they are full-time faculty or practicing pharmacists, they all play a vital role in preparing the next generation of pharmacists,” said Charles D. Peterson, dean of the School of Pharmacy and College of Health Professions at NDSU. “Preceptors offer pharmacy practice experiences for students to become practice ready pharmacists who are integral members of the healthcare team.”

## Congratulations to All the Preceptor of the Year Nominees!

Caroline Chang, VA Health Care System, Fargo, ND  
Andyrose Fernandes-Reese, VA Health Care System, Minneapolis, MN  
Brody Maack, NDSU/Family HealthCare, Fargo, ND  
Elizabeth Monson, Sanford Medical Center, Fargo, ND  
Grant Shaft, Walgreens, Roseville, MN

## School of Pharmacy Updates: Co-Curriculum

The School of Pharmacy piloted a new co-curriculum program this spring. “Co-curricular activities complement, augment, and/or advance learning that occurs within the formal professional didactic and experiential curriculum” (ACPE Standards 2016, Guidance 4b). This means there will be more emphasis on skills that are difficult to teach and evaluate in a traditional classroom setting, such as self-awareness and professionalism. Students will be required to complete required and elective experiences, write reflections, set goals and meet with their advisor each semester P1 through P3 year.

*Co-curriculum continued on next page*

If you work at a site that employs student interns you may be asked to sign a form saying the P2 or P3 student completed an internship at your site as an elective in the “team ready” or “practice ready” areas of focus. One of the goals of the co-curriculum program is to ensure our PharmD program is preparing well-rounded and well-prepared students for rotations.

An example of the P2 “team ready” required experiences are listed below.

P2 Focus: Teams and Teamwork - “Team Ready” (ABOs 3.4 Interprofessional Collaboration, 4.1 Self-Awareness, 4.2 Leadership, 4.3 Innovation, 4.4 Professionalism)	
Fall Semester (Required Elements)	Spring Semester (Required Elements)
Attend Career Fair	Attend Public Health Poster presentations
NDSU Leadership on the Go: Gallop Strengths Finder	NDSU Leadership on the Go: Innovation and Creativity
NDSU Leadership on the Go: Strengths Based Teamwork	IP Team-Based Collaborative Care Simulation (CHP 400)
Attend One IPE Grand Rounds	Attend One IPE Grand Rounds
End of Semester Reflection (due 11/15)	End of Semester Reflection (due 4/15)
<b>ELECTIVES: Complete 2 electives from “TEAM READY” category (see pre-approved list) during P1 Summer through April 15.</b>	

## Continuous Quality Improvement - Top Drugs

By Teri Udem, BS, RPh

I know I said this last year, but I cannot believe another class has graduated and another class has started APPE rotations! Where does the time go?!

As many of you know, when Lisa Richter is out doing site visits, she asks for feedback from preceptors on what students are doing well and what gaps they have in knowledge. Thank you for that feedback!

One of the curricular changes that has come from preceptor feedback is a change to the Top Drugs course, commonly referred to as the Top 200. The current list is actually 232 medications. This list is comprised of the Top 200 selling medications (according to SFI Medical Publishing.)

To this list, we have added top institutional medications that were identified by our external member of the Curriculum Committee and approved by the Curriculum Committee. Select examples of institutional medications on the list include: pressors (norepinephrine, epinephrine, phenylephrine) IV antibiotics (vancomycin, linezolid, piperacillin/tazobactam, cefazolin, ceftriaxone, cefepime), analgesics (hydromorphone, ketorolac, morphine), paralytics (succinylcholine, rocuronium) sedatives (propofol, dexmedetomidine, midazolam).

The P1 class will have Top Drugs included in the Introduction to Pharmacy Practice course during the fall semester (this will now be prior to institutional IPPE rotations, where as in the past two years it was during/after). P1s will be responsible to know brand name, generic name and major indication(s).

The P2 class will have a stand-alone Top Drugs course during the fall semester. P2s will be responsible to know P1 information plus dosing and mechanism of action.

The P3 class will have a stand-alone Top Drugs course during the fall semester. P3s will be responsible to know P2 information plus controlled drug schedule and black box warnings.

*CQI-Top Drugs continued on next page*

The students currently on rotations in 2019/2020 have had the following Top Drug content:

P1 class-Top 50, brand, generic and indication

P2 class-Top Drugs (200+ including additional institutional meds), brand, generic, indication

P3 class-P2 information plus mechanism of action

If you wish to view a complete current Top Drug List, please see the homepage in E\*Value.

Thank you SO much for your efforts on behalf of our students and program! Happy quizzing everyone!

## Practice Spotlight: Minneapolis VAHS

by Amanda Kuhn, NDSU 2019 Graduate

### **Me, My Meds, and I: A research opportunity at the Minnesota State Fair in partnership with the Minneapolis VAHS and University of Minnesota Driven to Discover**

While on my two ambulatory care rotations at the Minneapolis Veterans Affairs Medical Center, I was presented with the opportunity to help with a research project called “Me, My Meds, and I” at the Minnesota State Fair in partnership with the University of Minnesota Driven to Discover research facility. The goal of the research study was to understand prescription medication use behavior in the community, with a brief description of the study as follows: How do you take your prescription medications? Many people take medications, but everyone takes them differently. Come take our survey so we can learn more about how, when, and why you take your medications.



Amanda Kuhn, PharmD  
NDSU 2019 Graduate

With no previous research experience, I thought how excellent this opportunity would be to get my feet wet, especially being a residency track student having to complete a longitudinal research project in the future! I was able to gain direct experience working with study participants during the data collection phase of the research. Participation in the project increased my familiarity with survey research, data collection, and data analysis. While I realize not all pharmacy students are residency track or may be interested in research, I think providing as many extra opportunities as your facility/institution allows or has available will give the student a more well-rounded experience, and something to talk about in future interviews.

This experience is one I will never forget, and am extremely grateful for my preceptors asking about my interests and tailoring the experience to meet my future goals. Also, who would turn down a day spent at the state fair for rotations?!

## A Novel Approach to Standard Journal Clubs

By Kassy Vettleson, NDSU PharmD Candidate 2020

Journal clubs provide student pharmacists an opportunity to enhance their scientific literature evaluations skills. There are many variations of journal clubs that could last anywhere from 10 minutes up to an hour. Some institutions have many students and other professionals presenting journal clubs in a traditional format frequently. This takes up a lot of time and has been found to overwhelm students and lead to decreased learning and retention. Leibfried et al. sought to describe an alternative activity that combines abbreviated journal clubs with an elevator speech and speed dating, referred to as “speed journal clubs,” in hopes to correct this issue.

*Journal club continued next page*



Kassy Vetteson, NDSU  
PharmD Candidate 2020

For their study, APPE students and PGY1 pharmacy residents at the Valley Hospital in Ridgewood, NJ were utilized to implement this novel activity and observe the results. Prior to the speed journal club, participants presented the article to their preceptor to ensure they understood and appropriately evaluated the study.

Participants were then provided with an abbreviated outline to use for their presentation two weeks prior to the activity. A room was set up speed dating style where students sat on either side of a table and were allowed five minutes to present their journal to a partner followed by two minutes for discussion and questions before the other partner presented. One side of the table would then rotate until each participant presented four times. Preceptors and other pharmacy staff were allowed to sit in on any presentation as well. The sessions described in the article lasted about 90 minutes including set up, presentations, and debriefing.

Feedback was solicited from the presenters after their first speed journal club. Of the respondents, greater than 80% reported improvement in their ability to summarize and present pertinent information as well as improvement in their listening skills. Participants also noted that speed journal clubs were more interactive than traditional journal clubs and that new information was learned that is applicable to practice.

Overall, it was found that speed journal clubs offer many different benefits compared to traditional journal clubs. They allow students to focus on concisely summarizing articles in a time period comparable to interacting with another healthcare professional on rounds or in a telephone conversation. This style also permits many one-on-one interactions which could improve communication and active listening skills. Downfalls to this style are less exposure to journals, as they are only listening to four journals per session.

North Dakota State University requires students to complete an Advanced Pharmacy Practice Experience (APPE) in an Acute Care, Ambulatory Care, Advanced Community, Institutional, and Rural settings as well as three electives. Students must participate in at least one journal club during all Acute Care (including clinical electives – peds, onc, psych etc.), Ambulatory Care, and Institutional APPE rotations, as well as complete an article discussion during Non-Patient Care electives. Journal clubs, no matter the format, are great ways for students to stay updated on scientific literature and practice their evaluation and presentation skills.

## Preceptor Development Opportunities

### Pastries with Preceptors

8:30 a.m.-9:30 a.m., Thursday, September 12th

Fargodome - Lower Level

Please join us in a thank you event for NDSU pharmacy preceptors prior to the Career Fair.

#### Event includes:

- Updates in experiential education and the School of Pharmacy
- Opportunity to provide feedback and/or ask questions about the new EPA evaluations
- Opportunity to provide input
- Networking with other preceptors

We hope you can join us!

[Registration for Pastries with Preceptors](#)



*Note: you do not need to be attending the Career Fair to attend this event. All pharmacy preceptors are welcome!*

## From the Schoolhouse CPE Series

Check out any of these recordings from NDSU faculty for one hour of free CE!  
Current recordings include:

- Pediatrics and IV Lipid Emulsions: Exploring Novelty
- Update on Osteoporosis
- Drug Induced Liver Injury
- Update on Diabetes
- Transitions of Care
- NDSU Preceptor Development

How do I access this recorded activity?

1. Log on to [www.CEImpact.com](http://www.CEImpact.com)
2. Click on My Profile
3. Enter your access code in the field Enter Partner Code and click APPLY. The code for this CE series is: **NDSUSCHOOL**. If you have already entered this code in your profile, any new activities in this series will populate automatically when they become available.
4. Click CONFIRM at the bottom of the page and you will be registered.
5. The activity will now show in your profile.

How do I submit my CPE?

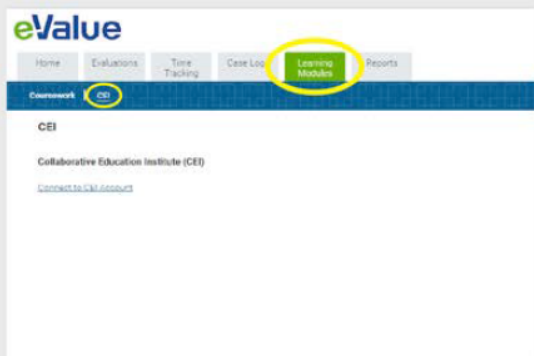
1. Logon to [www.CEImpact.com](http://www.CEImpact.com)
2. Click on My Profile
3. Locate the activity title you wish to complete within your Profile and click on the Exam
4. Complete the Exam & Evaluation as prompted; click SUBMIT to send your information to CPE Monitor

Questions? Contact team at CEI by calling 515.270.8118 or [team@CEImpact.com](mailto:team@CEImpact.com).

## CEImpact Pharmacy Education

**\*\*Please note the NEW password for CEI\*\***

North Dakota State University Subscription Code: **NDSU19**



From E\*Value  
Click on Learning Modules > CEI



Enter Access Code  
and Login to CEI account

*CEImpact continued on next page*

**Click on the Preceptor Catalog. Courses available to you will be listed as FREE. Sort courses by Categories or with the Preceptor Course Finder.**

**As a BONUS, you have access to the Pharmacist Catalog - required relicensure courses in patient safety, law, immunization and drug therapy with additional new courses released monthly.**

## Preceptor FAQs – Required Assignments, NDSU Curriculum

Need a refresher of what assignments are required for your specific type of APPE rotation?

- Consult the preceptor handbook on the home page in E\*Value or this [quick link](#)

Wondering what classes students take prior to institutional IPPE rotations, community IPPE rotations or what year they take infectious disease?

- Check out the new NDSU Pharmacy Student Curriculum voice over PowerPoint that walks you through this info (~15 minutes) located on home page in E\*Value

**Home** | Users | Schedules | Evaluations | Case Logs | Learning Modules | Reports | Program Management | Portfolio

Home Page | E\*Value Announcements | Other Tasks

Welcome to E\*Value

**My Information**

If this or any other biographic information is incorrect or missing, you can [update this information](#).

**Email:** lisa.richter.1@ndsu.edu  
**Rank:** Faculty  
**Roles:** E\*Value Coordinator  
 Preceptor  
 Faculty  
 E\*Value Program Director  
 Advisor  
 Course Director  
 Evaluation Editor  
 Quality Site Evaluator (E\*Value Admins only)  
 F\*Value Experiential Coordinator

**Urgent Tasks**

No Urgent Tasks

**Tasks**

[Initiate Ad hoc Evaluations](#)  
[Initiate Ad hoc Coursework](#)  
[Log New Case](#)

**Preceptor Education / Preceptor Development**

[Free CE for NDSU Preceptors \(CEI\)](#)  
[Preceptor Education Program \(PEP\) for Health Professionals and Students](#)  
 This is a FREE online program for all health care professions. Modules include additional preceptor resources including sample learning activities and downloads.

[Adjunct Preceptor Access to NDSU Library Services Video Instructions](#)  
[NDSU Teaching Seminar Part 1 \(New\)](#)  
[NDSU Teaching Seminar Part 2 \(New\)](#)  
[2018 NDSU Pharmacy Preceptor Newsletter \(New\)](#)  
[Preceptor Boot Camp \(New\)](#)  
 Watch in Slide Show Mode for Voiceover PowerPoint  
[NDSU\\_Pharmacy\\_Student\\_Curriculum.pptx](#)



## 2019 Upcoming Events

### NDSU Research Seminar (great review for BPS Certification exams)

Noon, Thursday, August 15  
NDSU or remotely via computer  
(watch email for connection details)

### NDSU Teaching Seminar

8:00 am, Friday, August 16  
NDSU or remotely via computer  
(watch email for connection details)

### IPPE/APPE 2020-2021 rotation availability open to preceptors

Late summer 2019  
Watch for an email from:  
mark.lofgren@ndsu.edu

### [College of Health Professions Career Fair & Scholarship Program](#)

Thursday, September 12  
FargoDome

### Pastries with Preceptors

Thursday, September 12  
FargoDome  
[Register](#)

### Pharmacy Residency Fair & Interview Day

Friday, September 13  
FargoDome

### NDSU White Coat Ceremony

10:00 am, Saturday, September 14  
NDSU Festival Concert Hall

### Advance Leadership Workshop 2.0

9:00 am - 3:30 pm, Saturday, September 28  
NDSU

### [NDSHP Summit and Expo](#)

Thursday, October 24  
Radisson Hotel, Fargo, ND

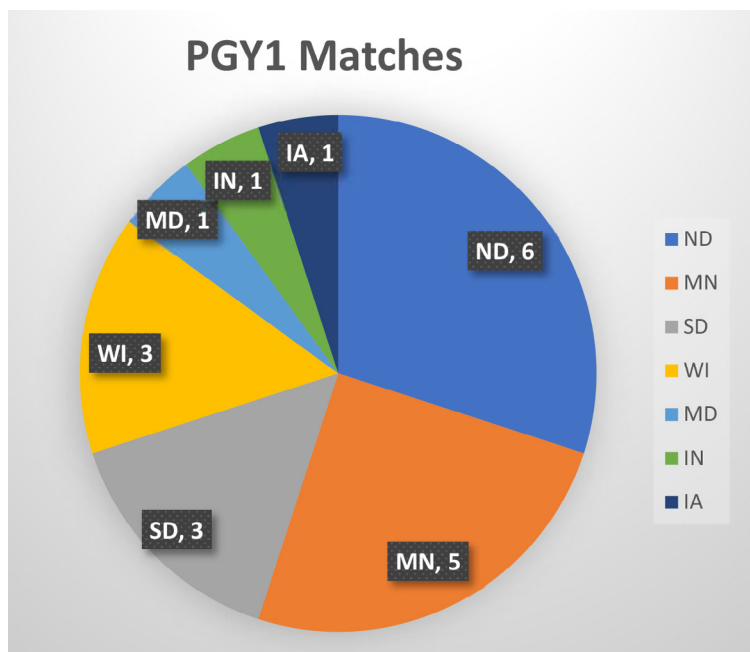
## Aldevron Tower Update

The Sudro Hall expansion project is on schedule. Classes will be held in Aldevron Tower in the spring 2020 semester. A formal dedication ceremony will be scheduled for later in spring of 2020. The six-story addition will accommodate collaborative learning, expand the college's research capabilities and help meet the region's growing need for health care professionals.

*NDSU does not discriminate in its programs and activities on the basis of age, color, gender expression/identity, genetic information, marital status, national origin, participation in lawful off-campus activity, physical or mental disability, pregnancy, public assistance status, race, religion, sex, sexual orientation, spousal relationship to current employee, or veteran status, as applicable. Direct inquiries to: Vice Provost, Title IX/ADA Coordinator, Old Main 201, 701-231-7708, ndsu.eoaa@ndsu.edu.*

## Residency Stats Overview

Congratulations to the twenty pharmacy graduates who will be completing a PGY1 residency during the 2019-2020 cycle! We also would like to extend our thanks to the many dedicated preceptors who helped prepare them, reviewed CVs, wrote PhORCAS recommendations and encouraged them in their journey! Additionally, we are excited to report two 2018 NDSU graduates early committed or matched with PGY2 oncology programs in SD & MN!



# New Entrustable Professional Activity (EPA) Pharmacy Student Evaluations

Lisa Richter, PharmD, BCPS, BCCCP

Director of Experiential Outreach and Assessment

Assistant Professor of Practice

North Dakota State University School of Pharmacy



# Objectives

- Discuss Entrustable Professional Activities (EPAs)
- Describe the new NDSU pharmacy student evaluations
- Describe the grading process for EPAs
- Identify EPA resources



# Discuss Entrustable Professional Activities (EPAs)



# Entrustable Professional Activities (EPAs)

“Discrete, essential activities and tasks that all new pharmacy graduates must be able to perform.”



# Entrustable Professional Activities (EPAs)

**Level 1: I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.**

**Level 2: I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.**

**Level 3: I trust the learner to complete this task. The learner requires limited correction or feedback.**

**Level 4: I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.**

**Level 5: I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.**



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# Entrustable Professional Activities (EPAs)

**Level 1: I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.**

IPPE

**Level 2: I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.**

APPE

**Level 3: I trust the learner to complete this task. The learner requires limited correction or feedback.**

**Level 4: I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.**

**Level 5: I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.**



Describe the new NDSU pharmacy student evaluations



# IPPE Community EPA Example

IPPE P2 Evaluation: The Pharmacy Student is evaluated on the following levels of entrustment:

**Level 1:** I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.

**Level 2:** *I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.*

**Level 3:** I trust the learner to complete this task. The learner requires limited correction or feedback.

**Level 4:** I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.

**Level 5:** I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

(Question 1 of 7 - Mandatory)

The student should perform all tasks at a level of entrustment of 2. <i>I trust the learner to complete this task. The learner requires frequent correction or feedback.</i>	Does not meet Level 2 of entrustment (Level 1)	Meets this level of entrustment (Level 2)	Exceeds Level 2 of entrustment (Level 3, 4, or 5)
Collect a medical history from a patient or caregiver.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collect a medication history from a patient or caregiver.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discuss a patient's experience with medication.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assess a patient's signs and symptoms to determine whether the patient can be treated within the scope of practice or requires a referral.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluate an existing drug therapy regimen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accurately select and prepare medications to fulfill a medication order.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educate a patient regarding the appropriate use of a new medication, device to administer a medication, or self-monitoring test.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist a patient with behavior change (e.g., use shared decision making and motivational strategies)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicate a patient's medication-related problem(s) to another health professional.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use setting appropriate communication skills when interacting with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Report adverse drug events and medication errors to stakeholders (internal or external).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retrieve and analyze scientific literature to answer a drug information question.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



# APPE Acute Care EPA Example

Acute Care Final Evaluation: The Pharmacy Student is evaluated on the following levels of entrustment:

**Level 1:** I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.

**Level 2:** I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.

**Level 3:** *I trust the learner to complete this task. The learner requires limited correction or feedback.*

**Level 4:** I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.

**Level 5:** I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

(Question 1 of 8 - Mandatory)

The student should perform all tasks at a level of entrustment of 3. <i>I trust the learner to complete this task. The learner requires limited correction or feedback.</i>	Does not meet Level 3 of entrustment (Level 1 or 2)	Meets this level of entrustment (Level 3)	Exceeds Level 3 of entrustment (Level 4 or 5)
Compile a prioritized and/or medication-related problem list for a patient.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluate an existing drug therapy regimen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Follow an evidence-based disease management protocol.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Select monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write a setting appropriate note that documents patient care activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recommend modifications or adjustments to an existing medication therapy regimen based on patient response.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Present a patient case to a colleague during a handoff or transition of care.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contribute medication-related expertise to the team's work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use setting appropriate communication skills when interacting with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lead a discussion regarding a recently published research manuscript and its application to patient care.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retrieve and analyze scientific literature to answer a drug related question.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



# All APPE evaluations

## Professionalism/NDSU Requirements

Student demonstrates preparation, initiative, and accountability consistent with a commitment to excellence. (Question 2 of 8 - Mandatory)

Yes	No
<input type="radio"/>	<input type="radio"/>

Student demonstrates motivation, attention, and interest during learning and work-related activities. (Question 3 of 8 - Mandatory)

Yes	No
<input type="radio"/>	<input type="radio"/>

Did the student provide preceptor with a case log report to view? (20 case logs required/rotation) (Question 4 of 8 - Mandatory)

Yes  No

Preceptor certifies student completed 200 rotation hours (including time off noted above). (Question 5 of 8 - Mandatory)

Yes  No



# All APPE evaluations

## Comments

Comments regarding student special projects:

Please describe areas where the student excelled:

Please describe areas where the student needs improvement:



Describe the grading process for EPAs



# IPPE - Remediation

Score	Result
<b>One</b> “Does not meet this level of entrustment” on EPAs  OR  “Needs Improvement” on professionalism questions	Pass, with remediation





# IPPE - Failure

Score	Result
<b>Two or more</b> “Does not meet this level of entrustment” on EPAs or “Needs Improvement” on professionalism questions  OR  “No” on professionalism questions  OR  “No” on required hours/objectives	Fail



# APPE - Remediation

Score	Result
<b>One</b> “Does not meet this level of entrustment” on EPAs  OR  “No” on professionalism questions	Pass, with remediation*

\*Action plan shared with next two preceptors



# APPE - Failure

Score	Result
<p><b>Two or more</b> “Does not meet this level of entrustment” on EPAs or “No” on professionalism questions</p> <p>OR</p> <p>Repeat of <b>one</b> “No” OR “Does not meet this level of entrustment” from same question as previous evaluations</p>	Fail

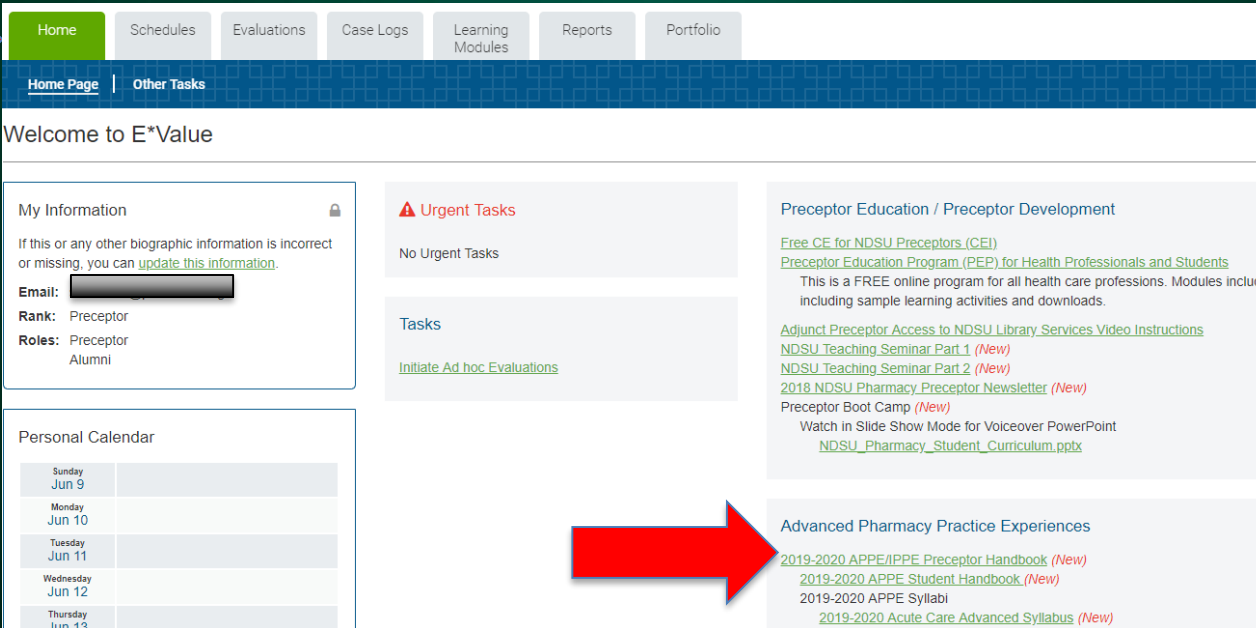


# Identify EPA resources



# Where can I find all of this information?

- Updated preceptor handbook
  - Homepage in E\*Value
  - Contains links to evaluations/remediation information



The screenshot shows the E\*Value system homepage. A red arrow points to the 'Home' tab in the top navigation bar. Below the navigation bar, the page is titled 'Welcome to E\*Value'. On the left, there is a 'My Information' section with fields for Email, Rank (Preceptor), and Roles (Preceptor, Alumni). Below that is a 'Personal Calendar' for June 9-13. In the center, there is an 'Urgent Tasks' section showing 'No Urgent Tasks' and a 'Tasks' section with a link to 'Initiate Ad hoc Evaluations'. On the right, there is a 'Preceptor Education / Preceptor Development' section with several links, including 'Free CE for NDSU Preceptors (CEI)', 'Preceptor Education Program (PEP) for Health Professionals and Students', 'Adjunct Preceptor Access to NDSU Library Services Video Instructions', 'NDSU Teaching Seminar Part 1 (New)', 'NDSU Teaching Seminar Part 2 (New)', '2018 NDSU Pharmacy Preceptor Newsletter (New)', and 'Preceptor Boot Camp (New)'. Below this is an 'Advanced Pharmacy Practice Experiences' section with links to '2019-2020 APPE/IPPE Preceptor Handbook (New)', '2019-2020 APPE Student Handbook (New)', '2019-2020 APPE Syllabi', and '2019-2020 Acute Care Advanced Syllabus (New)'. A second red arrow points to the '2019-2020 APPE/IPPE Preceptor Handbook (New)' link.

NDSU



# Free CEImpact Resources

- EPA additional information

Entrepreneurship in Pharmacy Education	On-Demand	1hr	★★★★★ ✓	NO COST
Entrustable Professional Activities for Experiential Education	On-Demand	1hr	★★★★★ ✓	NO COST
Fostering Interprofessional Educational Opportunities for Your Students	On-Demand	1hr	★★★★★ ✓	NO COST
Generational Shift: Why We Should Modify our Instructional Strategies for the Next Generation of Pharmacists	On-Demand	1hr	★★★★★ ✓	NO COST
Giving Effective Feedback: Beyond "Great Job"	On-Demand	30min	★★★★★ ✓	NO COST
What is this Wheel? Incorporating the Pharmacists' Patient Care Process into Experiential Rotations	On-Demand	1hr	★★★★★ ✓	NO COST



# Experiential Education contact information



**Rebecca Brynjulson, PharmD, BCACP  
IPPE Director/  
Asst. Professor of Practice**

Phone: 701-231-7477  
Rebecca.Brynjulson@ndsu.edu

*Main contact for: IPPE student questions, IPPE student issues*



**Teri Udem, RPh  
APPE Director**

Phone: 701-231-6578  
Teri.Udem@ndsu.edu

*Main contact for: APPE student questions, APPE student issues*



**Lisa Richter, PharmD, BCPS, BCCCP  
Director Experiential Outreach & Assessment/  
Asst. Professor of Practice**

Phone: 701-231-5178  
Lisa.Richter.1@ndsu.edu

*Main contact for: Preceptor development, site visits, new preceptor/site requests*



**Mark Lofgren, MBA  
E\*Value Coordinator**

Phone: 701-231-7722  
Mark.Lofgren@ndsu.edu

*Main contact for: E\*Value - passwords, troubleshooting, NDSU Career Fair/Interview Day*



**Julie Brandon  
Experiential Education Academic Assistant**

Phone: 701-231-5576  
Julie.Brandon@ndsu.edu

*Main contact for: Site onboarding requirements (immunizations, background checks)*



Thank You Preceptors!

**NDSU** NORTH DAKOTA  
STATE UNIVERSITY





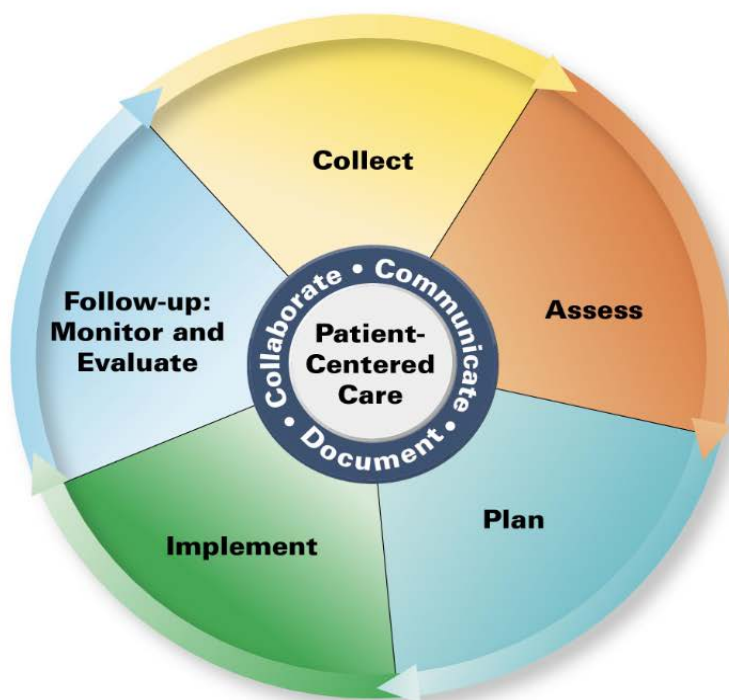
# Pharmacists' Patient Care Process Student Teaching Assignment

## Joint Commission of Pharmacy Practitioners (JCPP)



**JCPP Vision:** Patients achieve optimal health and medication outcomes with pharmacists as essential and accountable providers within patient-centered, team-based healthcare.

### Pharmacists' Patient Care Process



Source: [http://www.pharmacist.com/sites/default/files/JCPP\\_Pharmacists\\_Patient\\_Care\\_Process.pdf](http://www.pharmacist.com/sites/default/files/JCPP_Pharmacists_Patient_Care_Process.pdf)

**Pharmacists' Patient Care Process**  
Pharmacists use a patient-centered approach in collaboration with other providers on the health care team to optimize patient health and medication outcomes.

**Using principles of evidence-based practice, pharmacists:**

**Collect**  
The pharmacist assures the collection of the necessary subjective and objective information about the patient in order to understand the relevant medical/medication history and clinical status of the patient.

**Assess**  
The pharmacist assesses the information collected and analyzes the clinical effects of the patient's therapy in the context of the patient's overall health goals in order to identify and prioritize problems and achieve optimal care.

**Plan**  
The pharmacist develops an individualized patient-centered care plan, in collaboration with other health care professionals and the patient or caregiver that is evidence-based and cost-effective.

**Implement**  
The pharmacist implements the care plan in collaboration with other health care professionals and the patient or caregiver.

**Follow-up: Monitor and Evaluate**  
The pharmacist monitors and evaluates the effectiveness of the care plan and modifies the plan in collaboration with other health care professionals and the patient or caregiver as needed.

For More Information: [Patient Care Process Document](#)

Student Name \_\_\_\_\_ Rotation Site \_\_\_\_\_

Preceptor Name \_\_\_\_\_ Date \_\_\_\_\_

I attest that the student has discussed with me the Pharmacists' Patient Care Process.

Preceptor Signature \_\_\_\_\_

### **Suggested Teaching Points PPCP (in addition to handout provided)**

- Joint Commission of Pharmacy Practitioners (11 different national pharmacy organizations )
  - Strategic plan - Consistent patient care process -> supports provider status activities
  - Purpose: To stimulate consistency, predictability, and measurability in pharmacists' delivery of services
- PPCP
  - You have been taught this process in school (examples: writing SOAP notes P2 year, pharmacotherapy lab & capstone P3 year)
  - Applies to variety of services provided by pharmacists (regardless of practice setting)
  - Components:
    - Establishment of patient-pharmacist relationship
    - Engagement and effective communication with patient, family, caregivers
    - Continually collaborate, document, and communicate with physicians and other health care providers
    - Process enhanced by interoperable information technology systems that facilitate effective and efficient communication
- Application Examples: Service/setting
  - Comprehensive medication review and follow-up
  - IV to oral anticoagulant dosing
  - Medication reconciliation during a care transition
  - Diabetes management
  - Immunization
- Helpful for preceptors to remember to explain collect & assess steps as they first work up patients with the student as it may be easy for them to naturally move quickly to plan based on experience

**APPENDIX 20L**

North Dakota State University  
School of Pharmacy

**Student Evaluation by Preceptor / Institutional Introductory Pharmacy Practice Experience**

Student:	Preceptor:
Site:	Rotation Number:
Final Evaluation Date:	

- Level 1:** I trust the learner with direct observation and instruction to complete this task or the learner was not able to demonstrate this task despite being given the opportunity.
- Level 2:** I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
- Level 3:** I trust the learner to complete this task. The learner requires limited correction or feedback.
- Level 4:** I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
- Level 5:** I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<i>The student should perform all tasks at a level of entrustment of 2. I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.</i>	Does not meet this level of entrustment	Meets this level of entrustment	Exceeds this level of entrustment
1. Use health records to determine a patient’s health-related needs relevant to setting of care and the purpose of the encounter			
2. Write a setting appropriate note that documents patient care activities			
3. Accurately perform pharmacy calculations			
4. Accurately select and prepare medications to fulfill a medication order			
5. Explain to a patient, caregiver, or professional colleague each team member’s role and responsibilities			
6. Use setting appropriate communication skills when interacting with others			
7. Retrieve and analyze scientific literature to answer a drug information question			

8. Student demonstrates preparation, initiative, and accountability with a commitment to excellence	<b>No</b>	<b>Needs Improvement</b>	<b>Yes</b>
9. Student demonstrates motivation, attention, and interest during learning and work-related activities	<b>No</b>	<b>Needs Improvement</b>	<b>Yes</b>
10. Preceptor certifies student completed 120 IPPE I rotation hours.	<b>No</b>		<b>Yes</b>
11. Did the student arrive at the rotation having established rotation objectives?	<b>No</b>		<b>Yes</b>
12. Did the preceptor approve the two patient SOAP notes uploaded into E*Value?	<b>No</b>		<b>Yes</b>

Comments regarding areas where the student excelled:

Comments regarding areas where the student needs improvement:

Grading Criteria Using this Evaluation

All student performance during supervised introductory pharmacy practice experiences will be evaluated preceptors using a standard PHRM 355 evaluation based upon entrustable professional activities (EPA's), the programmatic ABO's and course requirements.

Score achieved on the PHRM 355 Preceptor Evaluation of Student	Resulting Grade on Preceptor Evaluation of Student
Questions 1-9: "Meets or exceeds level of entrustment" and "Yes" <b>AND</b> Questions 10-12: Yes	Pass
Questions 1-9: One response of "Does not meet this level of entrustment" or "Needs Improvement" <b>AND</b> Questions 10-12: Yes	Pass, with remediation*
Questions 1-9: Two or more responses of "Does not meet this level of entrustment" or "Needs Improvement" <b>OR</b> Question 8 & 9: One or more response of "No" <b>OR</b> Questions 10-12: One or more response of "No"	Fail

\*Students who score a "Needs Improvement" on Questions 8 or 9 would be given a standard assignment to be completed in addition to other course requirements. Other remediation plans will be determined by the Director of IPPE and the student.

**APPENDIX 20M**

North Dakota State University  
School of Pharmacy

**Student Evaluation by Preceptor / Community Introductory Pharmacy Practice Experience**

Student:	Preceptor:
Site:	Rotation Number:
Final Evaluation Date:	

<b>Level 1:</b> I trust the learner with direct observation and instruction to complete this task or the learner was not able to demonstrate this task despite being given the opportunity.
<b>Level 2:</b> I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
<b>Level 3:</b> I trust the learner to complete this task. The learner requires limited correction or feedback.
<b>Level 4:</b> I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
<b>Level 5:</b> I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<i>The student should perform all tasks at a level of entrustment of 2. I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.</i>	<b>Does not meet this level of entrustment</b>	<b>Meets this level of entrustment</b>	<b>Exceeds this level of entrustment</b>
1. Collect a medical history from a patient or caregiver			
2. Collect a medication history from a patient or caregiver			
3. Discuss a patient's experience with medication			
4. Assess a patient's signs and symptoms to determine whether the patient can be treated within the scope of practice or requires a referral			
5. Evaluate an existing drug therapy regimen			
6. Accurately select and prepare medications to fulfill a medication order			
7. Educate a patient regarding the appropriate use of a new medication, device to administer a medication, or self-monitoring test			
8. Assist a patient with behavior change (e.g., use shared decision making and motivational strategies)			
9. Communicate a patient's medication-related problem(s) to another health professional			
10. Use setting appropriate communication skills when interacting with others			
11. Report adverse drug events and medication errors to stakeholders (internal or external)			
12. Retrieve and analyze scientific literature to answer a drug information question			

13. Student demonstrates preparation, initiative, and accountability with a commitment to excellence	No	Needs Improvement	Yes
14. Student demonstrates motivation, attention, and interest during learning and work-related activities	No	Needs Improvement	Yes
15. Preceptor certifies student completed 160 IPPE II rotation hours.	No		Yes
16. Did the student arrive at the rotation having established rotation objectives?	No		Yes
17. Did the student provide preceptor with a weekly case log report to view?	No		Yes

Comments regarding areas where the student excelled:
Comments regarding areas where the student needs improvement:

#### Grading Criteria Using this Evaluation

All student performance during supervised introductory pharmacy practice experiences will be evaluated preceptors using a standard PHRM 455 evaluation based upon entrustable professional activities (EPA's), the programmatic ABO's and course requirements.

Score achieved on the PHRM 455 Preceptor Evaluation of Student	Resulting Grade on Preceptor Evaluation of Student
Questions 1-14: "Meets or exceeds level of entrustment" and "Yes" <b>AND</b> Questions 15-17: Yes	Pass
Questions 1-14: One response of "Does not meet this level of entrustment" or "Needs Improvement" <b>AND</b> Questions 15-17: Yes	Pass, with remediation*
Questions 1-14: Two or more responses of "Does not meet this level of entrustment" or "Needs Improvement" <b>OR</b> Question 13 & 14: One or more response of "No" <b>OR</b> Questions 15-17: One or more response of "No"	Fail

North Dakota State University  
School of Pharmacy

\*Students who score a “Needs Improvement” on Questions 13 or 14 will be given a standard assignment to be completed in addition to other course requirements. If remediation on these questions was also required in PHRM 355, the student would not pass PHRM 455. Other remediation plans will be determined by the Director of IPPE and the student.

**APPENDIX 20N**

**Student Evaluation by Preceptor-Mid-Term / Acute Care Advanced Pharmacy Practice Experience**

Student:	Preceptor:
Site:	Rotation Number:
Mid-Evaluation Date:	Final Evaluation Date:

<b>Level 1:</b> I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
<b>Level 2:</b> I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
<b>Level 3:</b> <i>I trust the learner to complete this task. The learner requires limited correction or feedback.</i>
<b>Level 4:</b> I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
<b>Level 5:</b> I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<i>The student should perform all tasks at a level of entrustment of 3.</i> I trust the learner to complete this task. The learner requires limited correction or feedback.	<b>Does not meet this level of entrustment (Level 1 or 2)</b>	<b>Meets this level of entrustment (Level 3)</b>	<b>Exceeds this level of entrustment (Level 4 or 5)</b>
Compile a prioritized and/or medication-related problem list for a patient.			
Evaluate an existing drug therapy regimen.			
Follow an evidence-based disease management protocol.			
Select monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.			
Write a setting appropriate note that documents patient care activities.			
Recommend modifications or adjustments to an existing medication therapy regimen based on patient response.			
Present a patient case to a colleague during a handoff or transition of care.			
Contribute medication-related expertise to the team's work.			
Use setting appropriate communication skills when interacting with others.			
Lead a discussion regarding a recently published research manuscript and its application to patient care.			
Retrieve and analyze scientific literature to answer a drug related question.			
Student demonstrates preparation, initiative, and accountability consistent with a commitment to excellence.	Yes		No
Student demonstrates motivation, attention, and interest during learning and work-related activities.	Yes		No
Did the student provide preceptor with a case log report to view? (20 case logs required/rotation)	Yes	No	
Preceptor certifies student completed 200 rotation hours.	Yes	No	
During the rotation, did the student use personal days? (If yes, please enter number of days used.)			
During the rotation, did the student use professional days? (If yes, please enter number of days used.)			



Comments regarding student special projects:
Please describe areas where the student excelled:
Please describe areas where the student needs improvement:

Student Evaluation by Preceptor-Final / Acute Care Advanced Pharmacy Practice Experience

Student:	Preceptor:
Site:	Rotation Number:
Mid-Evaluation Date:	Final Evaluation Date:

<b>Level 1:</b> I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
<b>Level 2:</b> I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
<b>Level 3:</b> <i>I trust the learner to complete this task. The learner requires limited correction or feedback.</i>
<b>Level 4:</b> I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
<b>Level 5:</b> I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<i>The student should perform all tasks at a level of entrustment of 3.</i> I trust the learner to complete this task. The learner requires limited correction or feedback.	Does not meet this level of entrustment (Level 1 or 2)	Meets this level of entrustment (Level 3)	Exceeds this level of entrustment (Level 4 or 5)
Compile a prioritized and/or medication-related problem list for a patient.			
Evaluate an existing drug therapy regimen.			
Follow an evidence-based disease management protocol.			
Select monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.			
Write a setting appropriate note that documents patient care activities.			
Recommend modifications or adjustments to an existing medication therapy regimen based on patient response.			
Present a patient case to a colleague during a handoff or transition of care.			
Contribute medication-related expertise to the team's work.			
Use setting appropriate communication skills when interacting with others.			
Lead a discussion regarding a recently published research manuscript and its application to patient care.			
Retrieve and analyze scientific literature to answer a drug related question.			
Student demonstrates preparation, initiative, and accountability consistent with a commitment to excellence.	Yes		No
Student demonstrates motivation, attention, and interest during learning and work-related activities.	Yes		No
Did the student provide preceptor with a case log report to view? (20 case logs required/rotation)	Yes	No	
Preceptor certifies student completed 200 rotation hours.	Yes	No	
During the rotation, did the student use personal days? (If yes, please enter number of days used.)			
During the rotation, did the student use professional days? (If yes, please enter number of days used.)			

Comments regarding student special projects:
Please describe areas where the student excelled:
Please describe areas where the student needs improvement:

Student Evaluation by Preceptor-Mid-Term / Ambulatory Care Advanced Pharmacy Practice Experience

Student:	Preceptor:
Site:	Rotation Number:
Mid-Evaluation Date:	Final Evaluation Date:

<b>Level 1:</b> I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
<b>Level 2:</b> I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
<b>Level 3:</b> <i>I trust the learner to complete this task. The learner requires limited correction or feedback.</i>
<b>Level 4:</b> I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
<b>Level 5:</b> I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<i>The student should perform all tasks at a level of entrustment of 3.</i> I trust the learner to complete this task. The learner requires limited correction or feedback.	Does not meet this level of entrustment (Level 1 or 2)	Meets this level of entrustment (Level 3)	Exceeds this level of entrustment (Level 4 or 5)
Collect a medication history from a patient or caregiver.			
Assess a patient's signs and symptoms to determine whether the patient can be treated within the scope of practice or requires a referral.			
Perform a comprehensive medication review (CMR) for a patient.			
Follow an evidence-based disease management protocol.			
Develop a treatment plan with a patient.			
Manage drug interactions.			
Select monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.			
Assist a patient with behavior change (e.g., use shared decision making and motivational strategies).			
Evaluate the selected monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.			
Write a note that documents the findings, recommendations, and plan from a patient encounter.			
Contribute medication-related expertise to the team's work.			
Use setting appropriate communication skills when interacting with others.			
Determine whether a patient is eligible for and has received CDC-recommended immunizations.			
Lead a discussion regarding a recently published research manuscript and its application to patient care.			
Retrieve and analyze scientific literature to answer a drug related question.			
Student demonstrates preparation, initiative, and accountability with a commitment to excellence.	Yes	Needs Improvement	No
Student demonstrates motivation, attention, and interest during learning and work-related activities.	Yes	Needs Improvement	No

Comments regarding special projects:
Comments regarding areas where the student excelled:
Comments regarding areas where the student needs improvement:

Student Evaluation by Preceptor-Final/ Ambulatory Care Advanced Pharmacy Practice Experience

Student:	Preceptor:
Site:	Rotation Number:
Mid-Evaluation Date:	Final Evaluation Date:

<b>Level 1:</b> I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
<b>Level 2:</b> I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
<b>Level 3:</b> <i>I trust the learner to complete this task. The learner requires limited correction or feedback.</i>
<b>Level 4:</b> I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
<b>Level 5:</b> I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<i>The student should perform all tasks at a level of entrustment of 3.</i> I trust the learner to complete this task. The learner requires limited correction or feedback.	Does not meet this level of entrustment (Level 1 or 2)	Meets this level of entrustment (Level 3)	Exceeds this level of entrustment (Level 4 or 5)
Collect a medication history from a patient or caregiver.			
Assess a patient's signs and symptoms to determine whether the patient can be treated within the scope of practice or requires a referral.			
Perform a comprehensive medication review (CMR) for a patient.			
Follow an evidence-based disease management protocol.			
Develop a treatment plan with a patient.			
Manage drug interactions.			
Select monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.			
Assist a patient with behavior change (e.g., use shared decision making and motivational strategies).			
Evaluate the selected monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.			
Write a note that documents the findings, recommendations, and plan from a patient encounter.			
Contribute medication-related expertise to the team's work.			
Use setting appropriate communication skills when interacting with others.			
Determine whether a patient is eligible for and has received CDC-recommended immunizations.			
Lead a discussion regarding a recently published research manuscript and its application to patient care.			
Retrieve and analyze scientific literature to answer a drug related question.			
Student demonstrates preparation, initiative, and accountability with a commitment to excellence.	Yes		No
Student demonstrates motivation, attention, and interest during learning and work-related activities.	Yes		No

Did the student provide preceptor with a case log report to view? (20 case logs/rotation required)	<b>Yes</b>	<b>No</b>
Preceptor certifies student completed 200 rotation hours.	<b>Yes</b>	<b>No</b>
During the rotation, did the student use personal days? (If yes, please enter number of days used.)		
During the rotation, did the student use professional days? (If yes, please enter number of days used.)		

Comments regarding special projects:
Please describe areas where the student excelled:
Please describe areas where the student needs improvement:

Student Evaluation by Preceptor-Mid-Term / Community Advanced Pharmacy Practice Experience

Student:	Preceptor:
Site:	Rotation Number:
Mid-Evaluation Date:	Final Evaluation Date:

<b>Level 1:</b> I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
<b>Level 2:</b> I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
<b>Level 3:</b> <i>I trust the learner to complete this task. The learner requires limited correction or feedback.</i>
<b>Level 4:</b> I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
<b>Level 5:</b> I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<i>The student should perform all tasks at a level of entrustment of 3.</i> I trust the learner to complete this task. The learner requires limited correction or feedback.	Does not meet this level of entrustment (Level 1 or 2)	Meets this level of entrustment (Level 3)	Exceeds this level of entrustment (Level 4 or 5)
Evaluate an existing drug therapy regimen.			
Educate a patient regarding the appropriate use of a new medication, device to administer a medication, or self-monitoring test.			
Assist a patient with behavior change (e.g., use shared decision making and motivational strategies).			
Communicate a patient's medication-related problem(s) to another health professional.			
Use setting appropriate communication skills when interacting with others.			
Assist in the identification of underlying system-associated causes of errors.			
Report adverse drug events and medication errors to stakeholders.			
Retrieve and analyze scientific literature to make answer a drug related question.			
Accurately select, prepare, and dispense medications.			
Determine if a medication is contraindicated for a patient.			
Identify and manage drug interactions.			
Student demonstrates preparation, initiative, and accountability with a commitment to excellence.	Yes	Needs Improvement	No
Student demonstrates motivation, attention, and interest during learning and work-related activities.	Yes	Needs Improvement	No

Comments regarding special projects:
Please describe areas where the student excelled:



Please describe areas where the student needs improvement:

Student Evaluation by Preceptor-Final / Community Advanced Pharmacy Practice Experience

Student:	Preceptor:
Site:	Rotation Number:
Mid-Evaluation Date:	Final Evaluation Date:

<b>Level 1:</b> I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
<b>Level 2:</b> I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
<b>Level 3:</b> <i>I trust the learner to complete this task. The learner requires limited correction or feedback.</i>
<b>Level 4:</b> I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
<b>Level 5:</b> I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<i>The student should perform all tasks at a level of entrustment of 3.</i> I trust the learner to complete this task. The learner requires limited correction or feedback.	Does not meet this level of entrustment (Level 1 or 2)	Meets this level of entrustment (Level 3)	Exceeds this level of entrustment (Level 4 or 5)
Evaluate an existing drug therapy regimen.			
Educate a patient regarding the appropriate use of a new medication, device to administer a medication, or self-monitoring test.			
Assist a patient with behavior change (e.g., use shared decision making and motivational strategies).			
Communicate a patient's medication-related problem(s) to another health professional.			
Use setting appropriate communication skills when interacting with others.			
Assist in the identification of underlying system-associated causes of errors.			
Report adverse drug events and medication errors to stakeholders.			
Retrieve and analyze scientific literature to answer a drug related question.			
Accurately select, prepare, and dispense medications.			
Determine if a medication is contraindicated for a patient.			
Identify and manage drug interactions.			
Student demonstrates preparation, initiative, and accountability with a commitment to excellence.	Yes		No
Student demonstrates motivation, attention, and interest during learning and work-related activities.	Yes		No
Did student provide preceptor with a case log report to view? (20 case logs required/rotation)	Yes		No
Preceptor certifies student completed 200 rotation hours.	Yes		No
During the rotation, did the student use personal days? If (yes, please enter number of days used.)			
During the rotation, did the student use professional days? (If yes, please enter number of days used.)			

Comments regarding special projects:

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Please describe areas where the student excelled:

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Please describe areas where the student needs improvement:

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Student Evaluation by Preceptor- **Mid-Term / Institutional** Advanced Pharmacy Practice Experience

Student:	Preceptor:
Site:	Rotation Number:
Mid-Evaluation Date:	Final Evaluation Date:

- Level 1:** I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
- Level 2:** I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
- Level 3:** *I trust the learner to complete this task. The learner requires limited correction or feedback.*
- Level 4:** I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
- Level 5:** I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<i>The student should perform all tasks at a level of entrustment of 3.</i> I trust the learner to complete this task. The learner requires limited correction or feedback.	Does not meet this level of entrustment (Level 1 or 2)	Meets this level of entrustment (Level 3)	Exceeds this level of entrustment (Level 4 or 5)
Collect a medication history from a patient or caregiver.			
Use health records to determine a patient's health-related needs relevant to setting of care and the purpose of the encounter.			
Determine the appropriate time interval(s) to collect monitoring data.			
Create a patient-specific education plan.			
Write a setting appropriate note that documents patient care activities.			
Communicate a patient's medication-related problem(s) to another health professional.			
Use setting appropriate communication skills when interacting with others.			
Report adverse drug events and medication errors to stakeholders.			
Retrieve and analyze scientific literature to answer a drug information question.			
Lead a discussion regarding a recently published research manuscript and its application patient care.			
Accurately select, prepare, and dispense medications.			
Student demonstrates preparation, initiative, and accountability with a commitment to excellence.	Yes	Needs Improvement	No
Student demonstrates motivation, attention, and interest during learning and work-related activities.	Yes	Needs Improvement	No

Comments regarding special projects:

Please describe areas where the student excelled:
Please describe areas where the student needs improvement:

Student Evaluation by Preceptor **Final / Institutional** Advanced Pharmacy Practice Experience

Student:	Preceptor:
Site:	Rotation Number:
Mid-Evaluation Date:	Final Evaluation Date:

<b>Level 1:</b> I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
<b>Level 2:</b> I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
<b>Level 3:</b> <i>I trust the learner to complete this task. The learner requires limited correction or feedback.</i>
<b>Level 4:</b> I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
<b>Level 5:</b> I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<i>The student should perform all tasks at a level of entrustment of 3.</i> I trust the learner to complete this task. The learner requires limited correction or feedback.	Does not meet this level of entrustment (Level 1 or 2)	Meets this level of entrustment (Level 3)	Exceeds this level of entrustment (Level 4 or 5)
Collect a medication history from a patient or caregiver.			
Use health records to determine a patient's health-related needs relevant to setting of care and the purpose of the encounter.			
Determine the appropriate time interval(s) to collect monitoring data.			
Create a patient-specific education plan.			
Write a setting appropriate note that documents patient care activities.			
Communicate a patient's medication-related problem(s) to another health professional.			
Use setting appropriate communication skills when interacting with others.			
Report adverse drug events and medication errors to stakeholders.			
Retrieve and analyze scientific literature to answer a drug information question.			
Lead a discussion regarding a recently published research manuscript and its application patient care.			
Accurately select, prepare, and dispense medications.			
Student demonstrates preparation, initiative, and accountability with a commitment to excellence.	Yes		No
Student demonstrates motivation, attention, and interest during learning and work-related activities.	Yes		No
Did the student provide preceptor with a case log report to view? (20 case logs/rotation required)	Yes		No
Preceptor certifies student completed 200 rotation hours.	Yes		No
During the rotation, did the student use personal days? If (yes, please enter number of days used.)			
During the rotation, did the student use professional days? (If yes, please enter number of days used.)			

Comments regarding special projects:
Comments regarding areas where the student excelled:
Comments regarding areas where the student needs improvement:

**Student Evaluation by Preceptor-Mid-Term/ Non-Patient Care Elective Advanced Pharmacy Practice Experience**

Student:	Preceptor:
Site:	Rotation Number:
Mid-Evaluation Date:	Final Evaluation Date:

- Level 1:** I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
- Level 2:** I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
- Level 3:** *I trust the learner to complete this task. The learner requires limited correction or feedback.*
- Level 4:** I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
- Level 5:** I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

The student should perform all tasks at a level of entrustment of 3. I trust the learner to complete this task. The learner requires limited correction or feedback.	Does not meet this level of entrustment (Level 1 or 2)	Meets this level of entrustment (Level 3)	Exceeds this level of entrustment (Level 4 or 5)	Did not have opportunity to demonstrate
Student applies knowledge to solve problems.				
Within the context of the problem, the student explores multiple solutions by organizing, prioritizing and defining each possible solution				
Student implements the most viable solution to measure intended and unintended consequences.				
Contribute expertise to the team's work.				
Use setting appropriate communication skills when interacting with others.				
Retrieve and analyze literature to answer a question.				
Student demonstrates effective interpersonal skills when interacting with others to establish rapport and build trusting relationships.				
Discuss a recently published research manuscript and its application to practice.				
Student demonstrates preparation, initiative, and accountability consistent with a commitment to excellence.	Yes	Needs Improvement	No	
Student demonstrates motivation, attention, and interest during learning and work-related activities.	Yes	Needs Improvement	No	

Comments regarding student special projects:

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Please describe areas where the student excelled:

Please describe areas where the student needs improvement:

**Student Evaluation by Preceptor-Final/ Non-Patient Care Elective Advanced Pharmacy Practice Experience**

Student:	Preceptor:
Site:	Rotation Number:
Mid-Evaluation Date:	Final Evaluation Date:

- Level 1:** I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
- Level 2:** I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
- Level 3:** *I trust the learner to complete this task. The learner requires limited correction or feedback.*
- Level 4:** I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
- Level 5:** I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<i>The student should perform all tasks at a level of entrustment of 3.</i> I trust the learner to complete this task. The learner requires limited correction or feedback.	<b>Does not meet this level of entrustment (Level 1 or 2)</b>	<b>Meets this level of entrustment (Level 3)</b>	<b>Exceeds this level of entrustment (Level 4 or 5)</b>	<b>Did not have opportunity to demonstrate</b>
Student applies knowledge to solve problems.				
Within the context of the problem, the student explores multiple solutions by organizing, prioritizing and defining each possible solution				
Student implements the most viable solution to measure intended and unintended consequences.				
Contribute expertise to the team's work.				
Use setting appropriate communication skills when interacting with others.				
Retrieve and analyze literature to answer a question.				
Student demonstrates effective interpersonal skills when interacting with others to establish rapport and build trusting relationships.				
Discuss a recently published research manuscript and its application to practice.				
Student demonstrates preparation, initiative, and accountability consistent with a commitment to excellence.	Yes			No
Student demonstrates motivation, attention, and interest during learning and work-related activities.	Yes			No
Preceptor certifies student completed 200 rotation hours.	Yes			No
During the rotation, did the student use personal days? (If yes, please enter number of days used.)				
During the rotation, did the student use professional days? (If yes, please enter number of days used.)				

Comments regarding student special projects:
Please describe areas where the student excelled:
Please describe areas where the student needs improvement:

**Student Evaluation by Preceptor-Mid-Term/ Patient Care Elective Advanced Pharmacy Practice Experience**

Student:	Preceptor:
Site:	Rotation Number:
Mid-Evaluation Date:	Final Evaluation Date:

- Level 1:** I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
- Level 2:** I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
- Level 3:** *I trust the learner to complete this task. The learner requires limited correction or feedback.*
- Level 4:** I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
- Level 5:** I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

The student should perform all tasks at a level of entrustment of 3. I trust the learner to complete this task. The learner requires limited correction or feedback.	Does not meet this level of entrustment (Level 1 or 2)	Meets this level of entrustment (Level 3)	Exceeds this level of entrustment (Level 4 or 5)
Compile a prioritized and/or medication-related problem list for a patient.			
Evaluate an existing drug therapy regimen.			
Follow an evidence-based disease management protocol.			
Select monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.			
Write a setting appropriate note that documents patient care activities.			
Recommend modifications or adjustments to an existing medication therapy regimen based on patient response.			
Present a patient case to a colleague during a handoff or transition of care.			
Contribute medication-related expertise to the team's work.			
Use setting appropriate communication skills when interacting with others.			
Lead a discussion regarding a recently published research manuscript and its application to patient care.			
Retrieve and analyze scientific literature to answer a drug information question.			
Student demonstrates preparation, initiative, and accountability consistent with a commitment to excellence.	Yes	Needs Improvement	No
Student demonstrates motivation, attention, and interest during learning and work-related activities.	Yes	Needs Improvement	No

Comments regarding student special projects:

Please describe areas where the student excelled:
Please describe areas where the student needs improvement:

**Student Evaluation by Preceptor-Final/ Patient Care Elective Advanced Pharmacy Practice Experience**

Student:	Preceptor:
Site:	Rotation Number:
Mid-Evaluation Date:	Final Evaluation Date:

<b>Level 1:</b> I trust the learner with direct observation and instruction to complete this task or the learner did not demonstrate this task.
<b>Level 2:</b> I trust the learner to complete this task with assistance. The learner requires frequent correction or feedback.
<b>Level 3:</b> <i>I trust the learner to complete this task. The learner requires limited correction or feedback.</i>
<b>Level 4:</b> I trust the learner to complete this task. The learner is self-directed and seeks guidance as needed.
<b>Level 5:</b> I trust that the learner has mastered the ability to complete this task. The learner is able to teach and give meaningful feedback to other learners.

<i>The student should perform all tasks at a level of entrustment of 3.</i> I trust the learner to complete this task. The learner requires limited correction or feedback.	<b>Does not meet this level of entrustment (Level 1 or 2)</b>	<b>Meets this level of entrustment (Level 3)</b>	<b>Exceeds this level of entrustment (Level 4 or 5)</b>
Compile a prioritized and/or medication-related problem list for a patient.			
Evaluate an existing drug therapy regimen.			
Follow an evidence-based disease management protocol.			
Select monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.			
Write a setting appropriate note that documents patient care activities.			
Recommend modifications or adjustments to an existing medication therapy regimen based on patient response.			
Present a patient case to a colleague during a handoff or transition of care.			
Contribute medication-related expertise to the team's work.			
Use setting appropriate communication skills when interacting with others.			
Lead a discussion regarding a recently published research manuscript and its application to patient care.			
Retrieve and analyze scientific literature to answer a drug information question.			
Student demonstrates preparation, initiative, and accountability consistent with a commitment to excellence.	Yes		No
Student demonstrates motivation, attention, and interest during learning and work-related activities.	Yes		No
Did the student provide preceptor case log report to view? (20 case logs/rotation required)	Yes		No
Preceptor certifies student completed 200 rotation hours.	Yes		No
During the rotation, did the student use personal days? (If yes, please enter number of days used.)			
During the rotation, did the student use professional days? (If yes, please enter number of days used.)			

Comments regarding student special projects:
Please describe areas where the student excelled:
Please describe areas where the student needs improvement:

**REBECCA L. (FOCKEN) BRYNJULSON, PHARMD, BCGP, BCACP**

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**WORK ADDRESS**

North Dakota State University  
 College of Pharmacy, Nursing and Allied Sciences  
 20B Sudro Hall  
 Telephone: (701) 231-7477  
 Email: rebecca.brynjulson@ndsu.edu

**PHARMACIST LICENSURE**

Minnesota: 118057-6 (Active In-State Licensure)  
 North Dakota: 4984 (Active In-State Licensure)

**BOARD CERTIFICATIONS**

Board Certified Ambulatory Care Pharmacist (BCACP) Credential No. 6130127, Expires 12-31-2020  
 Board of Pharmacy Specialties

Board Certified Geriatric Pharmacist (BCGP) Credential No. 99107712, Expires 12-31-2025  
 Board of Pharmacy Specialties

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**EDUCATION**

North Dakota State University College of Pharmacy Fargo, ND 2002 – 2004  
 Doctor of Pharmacy (Pharm.D.) with Honors

North Dakota State University College of Pharmacy Fargo, ND 2000 – 2002  
 Bachelor of Science (B.S) with Honors, Pharmaceutical Sciences  
 Chemistry Minor

Bemidji State University Bemidji, MN 1996 – 2000  
 Bachelor of Science (B.S.) with Honors, Biology  
 Chemistry Minor

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**RESIDENCY TRAINING**

ASHP Accredited Pharmaceutical Care Residency Paynesville, MN July 2004 – June 2005

**University of Minnesota Pharmaceutical Care Residency with Rural Pharmacy Practice Emphasis**

Paynesville Area Health Care System/University of Minnesota College of Pharmacy

Site Preceptor: Todd Lemke, Pharm.D. CDE

Residency Program Director: Todd Sorenson, Pharm.D.

**RESIDENCY ACTIVITIES****Ambulatory Care Services:**

Collaborative practice agreements with health system physicians to provide pharmaceutical care services to patients in the following areas:

- **Diabetes:** Provided diabetes education and management to outpatients as part of the Paynesville Area Diabetes Education Program, which was formally recognized by the American Diabetes Association as meeting National Standards of excellence in diabetes education.
- **Anticoagulation:** Managed anticoagulation regimens and educated outpatients in the anticoagulation clinic.
- **General Disease State Management:** Provided medication education and management to outpatients referred by primary care providers including disease-state management for dyslipidemia, asthma, hypertension, and smoking cessation.



**Ambulatory Care Residency Projects:**

- **Asthma:** Initial phase development of asthma disease-state management and treatment pathway for use by providers within the Paynesville Area Health Care System. Initial development of collaborative practice agreement with health system physicians to provide asthma education and disease state management.
- **Smoking Cessation:** Collaborated with clinical pharmacists within the health system to improve and advance smoking cessation services provided by pharmacists.
- **Diabetes:** Collaborated with providers within the health system in the initiation and management of a diabetes support group.

**Hospital Consulting**

Monitored inpatients and offered treatment recommendations to providers when appropriate. Provided inpatient diabetes management, anticoagulation monitoring, pharmacokinetic consults, TPN calculation/monitoring, chart review, and medication reconciliation.

**Nursing Home Consulting**

Provided diabetes monitoring, anticoagulation monitoring, and on-demand consulting as requested by health system physicians and geriatric nurse practitioner.

**Staffing Duties**

Dispensed medications to hospital and long-term care facilities. Provided on-call clinical and distributive services every third week/weekend rotation for clinic, hospital, and area long-term care facilities.

**Drug Information**

Provided informal drug information services to the clinic, hospital, and long-term care facility staff.

**P&T Committee**

Served as Pharmacy and Therapeutics Committee secretary.

**Journal Club/Case Presentations/In-services**

Coordinated physician education in the form of journal clubs on rotating basis with other clinical pharmacists within the Paynesville Area Health Care System. Coordinated Pharm.D. and pharmacy student education in the form of in-services and case presentations every third month on a rotating basis with other clinical pharmacists. Residency experience also included formal journal club presentation and case presentations with University of Minnesota residents and preceptors.

**Informal Teaching**

Assisted in creating and facilitating practice based learning activities for Pharm.D. Candidates from the University of Minnesota.

**Formal Teaching Experience**

Pharmaceutical Care Learning Center, University of Minnesota

- Small Group Discussion Leader (Journal Club, Anticoagulation), Spring 2005
- Assessor, Heart Failure Patient Interview, Spring 2005

Lecturer, University of Minnesota

- Non-Prescription Medications: Insomnia (1 hour), Spring 2005
- Pharmaceutical Care Lab Lecture: Heart Failure (1 hour), Spring 2005

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**ADVANCED TRAINING**

Gateways-ND, NSF-funded STEM Professional Development Fargo, ND January 2017-2019  
North Dakota State University, Cohort 2

North Dakota State University Fargo, ND 2008-present  
Adult and Occupational Education Ph.D. Coursework

- Coursework completed includes the following: Issues in Education, Diversity and Educational Policy, Statistics in Educational Research, Qualitative Research Methods and Program Evaluation, Case Based Educational Research and Statistics, Quantitative and Survey Research, Computer Data Management and Decision Making, Program Evaluation Research, Planning and Conducting Needs Assessments, Adult Learning, Assessment Techniques for Educational Institutions, Instructional Methods for Adult Learners, Institutional Quality Control, Foundations of Occupational & Adult Education, Organization and Administration of Higher Education, Current Issues in Pharmacy Education I & II, Curriculum Design in Contemporary Pharmacy Education, and Community Based Education.

Diabetes Care Certificate NDSU College of Pharmacy, Nursing and Allied Sciences North Dakota Pharmacists Association	Fargo, ND	May 2008
Gallipot “The Art of Compounding” Training	Minneapolis, MN	September 2007
American Lung Association Asthma Educator Certification Course	Minneapolis, MN	October 2004

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## PHARMACY RELATED WORK EXPERIENCE

**North Dakota State University** Fargo, ND July 2007- present  
**College of Health Professions, School of Pharmacy**  
 (Previously known as College of Pharmacy, Nursing, and Allied Sciences; name changed in 2015)

- **Director, Introductory Pharmacy Practice Experiences (2009-present); Coordinator, Introductory Pharmacy Practice Experiences (2007-2009)**  
*Experiential Education title was changed due to reorganization of experiential education office, however, this change did not represent a change in responsibility for IPPE as outlined below.*
  - Designed, developed, and implemented introductory pharmacy practice experiences in institutional pharmacy practice, community pharmacy practice, and ambulatory care/public health practice settings.
  - Provide ongoing assessment, management of people and resources, coordination, and continuous quality improvement of introductory experiential education at North Dakota State University in collaboration with other experiential education team members.
    - Responsible for oversight of approximately 170 student practice experiences annually.
  - Ongoing development of community partnerships with institutional and community pharmacy practice sites, including preceptor development and curriculum revisions for introductory experiences in these practice settings.
  - Development of community partnerships with and precepting of geriatric ambulatory care/public health outreach introductory pharmacy practice experiences in independent and assisted living facilities.
    - This was a longitudinal IPPE that focused on students working with geriatric residents to evaluate cardiovascular risk, evaluate medication adherence, provide resident specific recommendations for health screenings/immunizations, and provide individualized patient education on numerous topics (vaccinations, medication adherence, hypertension, Ask Me 3®, and Medication Use Safety Training (MUST®) for geriatric patients). As part of this experience, students learned about health literacy, reviewed journal articles participated in monthly journal clubs, and provided blood pressure screenings for residents. This program was discontinued in 2016.
  - Involvement in initial design and implementation of programmatic rotation management system functionality (E\*Value) in addition and ongoing collaboration to optimize functionality and user experiences for students, faculty, and preceptors.
  - Currently serve as course coordinator for IPPE I (Phrm 355) and IPPE II (Phrm 455)

- **Assistant Professor of Practice, Department of Pharmacy Practice (2014-present); Assistant Professor, Department of Pharmacy Practice (2007-2014)**
  - **Lecturer/ Instructor**
    - **Pharmacotherapy Capstone (Phrm 580)**  
(Spring 2014-present)
      - Co-designed, developed and implemented a new pharmacotherapy capstone course in the PharmD Curriculum which was taught for the first time in spring 2014. Course includes integrated patient cases and interactive application based instructional periods focusing on clinical problem solving/clinical reasoning in preparation for Advanced Pharmacy Practice Experiences (APPEs).
      - Pharmacotherapy topics my instructional periods cover as a primary focus include both acute and chronic patient care recommendations for the following types of disorders: cardiovascular disorders, respiratory disorders, renal disorders, endocrine disorders, bone and joint disorders, and infectious diseases (sepsis/critical care).
      - Serve as faculty mentor for pharmacy practice residents from local health systems annually in the development of and delivery of teaching materials for two lectures within this course.
    - **Pathophysiology (Phrm 340)**  
(Fall 2017-present)
      - Topics include: anemia, dermatology, pulmonology, and HEENT
    - **Public Health for Pharmacists (Phrm 540)**  
(Fall 2017-present)
      - Topics include: preventive care services, emergency preparedness
    - **Special Populations (Phrm 558/Pharm560)**  
(Spring 2011-2017, 2019)
      - Topic includes evidence-based pharmacotherapy for anemia.
    - **Advanced Pharmacology (Nurs 732) for Doctor of Nursing Practice Students**  
(Spring 2008-2014)
      - Topic includes evidence-based pharmacotherapy for hematopoietic disorders.  
(Spring 2015)
        - Topic includes evidence-based pharmacotherapy for hematology.
    - **Cardiovascular and Pulmonary Diseases Pharmacotherapy (Phrm 538)**  
(Fall 2011-2013)
      - Topics include evidence-based pharmacotherapy for the following: cardiovascular risk, hypertension, hyperlipidemia, venous thromboembolism, stroke, and peripheral arterial disease.  
(Fall 2008-2010)
        - Topics included evidence-based pharmacotherapy for venous thromboembolism, stroke, and peripheral arterial disease.
    - **Pharmaceutical Care Laboratory/Introductory Pharmacy Practice Experience IV (PHRM 552L)**  
(Spring 2011-2013)
      - Discussion Leader, Medication Therapy Management (MTM) Project (2011)
      - Preceptor, Medication Therapy Management (MTM) Project (2012)
    - **Nutrition and Gastrointestinal Diseases Pharmacotherapy (Phrm 558)**  
(Spring 2008-2010)
      - Topic included evidence-based pharmacotherapy for anemia.
    - **Pharmaceutical Care Laboratory (Phrm 351L, 451L, 551L, and 552L)**  
(Fall 2007-Spring 2008, PRN)
      - Skills-based laboratory curriculum/rubric development, student instruction, and assessment of student learning.
  - **Committee Membership**
    - Current Department/College Committee Membership: Pharmacy Program Curriculum Committee, Pharmacy Program Experiential Education Committee, and Pharmacy Program Scholarship Committee.
    - Current University Committee Membership: NDSU Assessment Committee

- Previous Committee Membership: Pharmacy Program Assessment Committee, Pharmacy Program Professionalism Task Force, NDSU EXPLORE Committee, University Leadership Minor/Certificate Committee (member and chair).
- **Mentoring/Precepting**
  - Mentor, third year pharmacy student public health poster presentations (2008-2013, 2015-present).
  - Preceptor (2009, 2013) for third year pharmacy students attending the National Association of Boards of Pharmacy (NABP) meeting to present public health posters.
  - Research Mentor (2012-2013) for third year pharmacy students interested in gaining experience in pharmacy research
  - Mentor, third year IPPE public health outreach experiences including geriatric ambulatory care experiences (2010-2013, 2015-2016).
- **Advising**
  - Academic Advisor for professional pharmacy students
- **Miscellaneous**
  - AACP Annual Meeting Elected Faculty Delegate (2011, 2012)
  - AACP Experiential Education Workshop, Scholarship Track (2010)
  - AACP Curricular Change Summit, Faculty Participant (2009)
  - AACP Experiential Education Workshop (2008)

**American Association of Colleges of Pharmacy (AACP)**      Alexandria, VA      Aug. 2014-Dec. 2014

- **Donald C. Brodie Scholar-in-Residence**
  - Sabbatical leave from North Dakota State University College of Pharmacy, Nursing and Allied Sciences.
  - The purpose of this sabbatical leave was to immerse myself in the literature related to my dissertation topic and begin my work on my doctoral dissertation.
  - The overarching topic my doctoral dissertation will be on problem solving in pharmacy education. I am especially interested in the development and assessment of problem solving/clinical reasoning in pharmacy students as they progress throughout the curriculum and throughout experiential education.

**St. Louis College of Pharmacy**      St. Louis, MO      Aug. 2005- June 2007

- **Ambulatory Care Clinical Pharmacist, Primary Care Service Line  
John Cochran Veteran's Affairs Medical Center, St. Louis, MO**
  - **St. Louis University Medical School Resident Interdisciplinary Primary Care Clinic, 5N PRIME Pharmacotherapy Clinic** (August 2005-June 2007)
    - Attending pharmacist in interdisciplinary medical education clinic.
    - Interdisciplinary disease-state management including prescriptive authority to modify medication regimens to optimize patient outcomes. The following primary disease states were managed: hypertension, diabetes, hyperlipidemia, and heart failure. Patients were also seen for tobacco dependence and general medication therapy management.
      - Co-management of 5N PRIME Anticoagulation Clinic patients (approximately 130), with pharmacy residents.
      - On-demand consultation in afternoons as requested by resident/attending providers.
      - Attending Pharmacotherapy Lecturer (St. Louis University Medical Residents/Medical Students), August 2006-June 2007, twice monthly
  - **Women's Pharmacotherapy Clinic** (September 2006-June 2007)
    - Initiated interdisciplinary disease-state management including prescriptive authority to modify medication regimens to optimize patient outcomes as part of the women's clinic. The following primary disease states were managed: hypertension, diabetes, hyperlipidemia, and heart failure. Patients were also seen for tobacco dependence and general medication therapy management.
  - **Primary Care Anticoagulation Clinic, Orange Clinic** (August 2005-June 2007)
    - Co-managed Anticoagulation Clinic and patients (approximately 470 patients).
  - **Diabetes Specialty Clinic** (June 2006- September 2006)

- Helped to develop and implement comprehensive interdisciplinary disease-state management including prescriptive authority to modify medication regimens to optimize patient outcomes.
  - Worked collaboratively with nursing CDE to optimize patient outcomes.
- **Primary Care Pharmacotherapy Clinic, Orange Clinic** (August 2005-September 2006)
  - Interdisciplinary disease-state management including prescriptive authority to modify medication regimens to optimize patient outcomes. The following primary disease states were managed: hypertension, diabetes, hyperlipidemia, and heart failure. Patients were also seen for tobacco dependence and general medication therapy management.
- **Pharmacy Practice Resident Preceptor**  
(August 2005-June 2007)
  - ASHP PGY-1 Pharmacy Practice Residency Primary Care Rotation Primary Preceptor (July 2006-June 2007)
    - Three Pharmacy Practice Residents (PGY-1), two 5-week rotations/resident
  - ASHP PGY-1 Pharmacy Practice Residency Longitudinal Anticoagulation Experience (July 2006-June 2007)
    - Three Pharmacy Practice Residents (PGY-1), 12 month longitudinal rotation
  - ASHP Primary Care Specialty Resident Co-Preceptor (August 2005-June 2006)
    - Two Primary Care Residents
- **Assistant Professor of Pharmacy Practice**
  - **Lecturer/Instructor**
    - Therapeutics I, II and III (Spring 2006-Fall 2006)
      - Topics include evidence-based pharmacotherapy for peptic ulcer disease, gastroesophageal reflux disease, and headache disorders.
  - **Discussion Group Leader**
    - Pathophysiology (Spring 2006-Spring 2007)
      - Lead case discussions on topics including COPD, HTN, anemia, DM, renal Failure, VTE, CHD, thyroid disorders, SLE, CHF, arrhythmias, stroke, liver disease, oncology, and infectious disease.
  - **Preceptor**
    - Advanced Pharmacy Practice Experience, Ambulatory Care Rotation
      - 5 week rotations, 2 students per rotation.
    - Ambulatory Care Introductory Pharmacy Practice Experience
      - 4 week rotations, 4 hours per week, 2 students per rotation.
  - **Faculty Mentor for Pharmacy Practice Residents and Pharmacy Students**
    - Evidence Based Cardiovascular Medicine Course (August 2005-February 2006)
      - Co-mentored four pharmacy practice residents (PGY-1) in development of course materials (handouts, cases, exam questions, etc.) for hypertension module.
    - Pharmacy Practice Seminar (Spring 2006)
      - Provided Business Plan Development feedback for student designed pharmaceutical care projects.
  - **Committee Membership**
    - St. Louis College of Pharmacy
      - Advanced Education/Degrees Committee (August 2006-June 2007)
    - Pharmacy Practice Division
      - Faculty Success Committee (August 2005-June 2007)

Paynesville Area Health Care System

Paynesville, MN July 2005

- **Staff/Clinical Pharmacist**
  - Continued working into the month beyond residency end date to assist with new pharmacy resident transition/training.

**Paynesville Area Health Care System**

Paynesville, MN July 2004-June 2005

- **Pharmaceutical Care Resident**
  - Please see description under residency training.

**Snyder's Drug Stores, Inc.**

Park Rapids, MN May 2002-January 2003

- **Pharmacy Intern**
  - Processed and dispensed prescriptions.
  - Counseled patients on prescription and OTC medications.

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**PROFESSIONAL ACTIVITIES**

**PROFESSIONAL SERVICE, NATIONAL**

American Association of Colleges of Pharmacy (AACP) Geriatric SIG Scholarship Committee, Member: September 2017-present.

American Association of Colleges of Pharmacy (AACP) Public Health SIG Assessment Committee, Member: November 2015- present, Chair: July 2018 to present.

American Association of Colleges of Pharmacy (AACP) Section of Teachers of Pharmacy Practice Faculty Development Committee, September 2014-2016

American Association of Colleges of Pharmacy (AACP) Experiential Education Section Health and Wellness Committee, September 2014-2016.

American Association of Colleges of Pharmacy (AACP) Representative to the Accreditation Council for Pharmacy Education (ACPE) Task Force on Experiential Education, January 2015- present (last meeting June 2015).

American Association of Colleges of Pharmacy (AACP), Section of Experiential Education, New Investigator Application Reviewer, September-October, 2015.

American College of Clinical Pharmacy Ambulatory Care (ACCP) PRN Research and Scholarship Committee, October 2013- October 2014.

American Association of Colleges of Pharmacy (AACP) Experiential Education Section Abstract Committee, September 2013-September 2014.

American Pharmacists Association, North Dakota Delegate to the House of Representatives, Los Angeles, CA. February 2013.

American Pharmacists Association, Poster Judge, Los Angeles, CA. February 2013.

**PROFESSIONAL SERVICE, STATE/REGIONAL**

North Dakota Pharmacists Association District 8 Representative to the Board of Directors. Spring 2014-Spring 2017.

North Dakota Pharmacists Association District 8 President. Fargo, ND. Winter 2012- Spring 2017.

North Dakota Pharmacists Association State Convention Chair, 2014 State Convention. Fargo, ND. Fall 2011-Spring 2014.

North Dakota Pharmacists Association District 8 Vice President. Fargo, ND. Summer 2010- Winter 2012.

## PROFESSIONAL SERVICE, LOCAL

North Dakota State University School of Pharmacy, Faculty Secretary. Fargo, ND. January 2018- present.

North Dakota State University College of Health Professions, Faculty Secretary. Fargo, ND. April 2017-April 2019.

North Dakota State University, EXPLORE Committee (Office of Research and Creative Activity committee focused on undergraduate research and scholarly activity). May 2015- May 2017.

North Dakota State University College of Pharmacy, Nursing, and Allied Sciences, Faculty Secretary. Fargo, ND. September 2008-December 2012.

Washington University Medical Center, Institutional Review Board Committee Member for New Clinical Research, Pharmacy Specialist. St. Louis, Missouri. December 2005-June 2007.

## PEER REVIEWER, REFERREED PUBLICATIONS

American Journal of Health-System Pharmacy (AJHP), 2015- present

American Journal of Pharmaceutical Education (AJPE), 2009-present

Hospital Pharmacy, 2013- present

Currents in Pharmacy Teaching and Learning, 2013- present

## PROFESSIONAL PHARMACY AFFILIATIONS

American Association of Colleges of Pharmacy (AACP)

American Society of Health Systems Pharmacists (ASHP)

American Society of Consultant Pharmacists (ASCP)

Rho Chi Pharmacy Honor Society

Phi Lambda Sigma Leadership Society

---

## SCHOLARLY ACTIVITIES

### REFEREED PUBLICATIONS

Werremeyer A., Skoy E., Marvanova M., Jarajapu Y., **Brynjulson R.**, Wilhelm R., Eukel H. (2019). A PharmD program curricular approach to addressing the opioid crisis. *Currents in Pharmacy Teaching and Learning*, 11(6). doi: 10.1016/j.cptl.2019.02.026

Strand, M., Miller, D., & **Focken, R.** (2016). Assessing public health knowledge and perceptions of pharmacy students before and after completion of didactic and experiential public health coursework. *Currents in Pharmacy Teaching and Learning*, 8(1). doi: 10.1016/j.cptl.2015.09.013

Eukel, H., Frenzel, J., Skoy, E., **Focken, R.**, & Fitz, A. (2014). An introductory pharmacy practice experience using simulated patient care activities in a pharmaceutical care laboratory environment. *Currents in Pharmacy Teaching and Learning*, 6(5). doi: 10.1016/j.cptl.2014.05.007

### REFEREED POSTER PRESENTATIONS/PUBLISHED ABSTRACTS

Richter, L., Frenzel, J., **Brynjulson, R.**, Udem, T. "Relationship between pharmacy student academic resilience and pharmacy school grade point average." 2019 American College of Clinical Pharmacy Virtual Poster Session, May 28-29, 2019. Poster abstract published in *Journal of the American College of Clinical Pharmacy* 2019; 2(5), page 572-600. doi: <https://doi.org/10.1002/jac5.1154>

Connor, S., Beliard, R., **Brynjulson, R.**, Covvey, J., Golchin, N., Jonkman, L., Kahaleh, A., Kauffman, Y., Klein-Fedyshin, M., Park, S., & Ryan, M. "Coordination and Development of a Collaborative Effort to Assess Global Health

Curricula.” American Association of Colleges of Pharmacy, July 21-25, 2018. Boston, MA. Poster abstract published in the American Journal of Pharmaceutical Education 2018; 82(5) Article 7158, page 538-539.

**Focken, R.,** & Petry, N. “Development of a Pharmacotherapy Capstone Course to Further Develop Problem Solving and Clinical Reasoning Skills.” Department of Pharmacy Practice, College of Pharmacy, Nursing and Allied Sciences, North Dakota State University, Fargo, ND. American Association of Colleges of Pharmacy, July 26-30, 2014. Grapevine, TX.

**Focken, R.,** Naughton, C., Oetken, H., & Stromback, C. “Public health impact of community-based cardiovascular risk screenings conducted by pharmacy students at North Dakota State University” Department of Pharmacy Practice, College of Pharmacy, Nursing and Allied Sciences, North Dakota State University, Fargo, ND. American Society of Health Systems Pharmacists Summer Meeting, June 1-5, 2013. Minneapolis, MN.

**Focken, R.** “Development of Introductory Pharmacy Practice Experiences Utilizing Evidence Based Methods of Adult Learning” Department of Pharmacy Practice, College of Pharmacy, Nursing and Allied Sciences, North Dakota State University, Fargo, ND. American Association of Colleges of Pharmacy, July 15-18, 2012. Kissimmee, Florida. Poster abstract published in the American Journal of Pharmaceutical Education 2012; 76 (5) Article 99, page 27.

**Focken, R.** “Development of an Institutional Introductory Pharmacy Practice Experience Assessment Plan” Department of Pharmacy Practice, College of Pharmacy, Nursing and Allied Sciences, North Dakota State University, Fargo, ND. American Association of Colleges of Pharmacy, July 15-18, 2012. Kissimmee, Florida. Poster abstract published in the American Journal of Pharmaceutical Education 2012; 76 (5) Article 99, page 27-28.

Frenzel J., & **Focken R.** “Verbal And Non-Verbal Communication Assessment of Student Self- Care Recommendations” Department of Pharmacy Practice, College of Pharmacy, Nursing, and Allied Sciences, North Dakota State University, Fargo, North Dakota. Nonprescription Medicines Academy, September 24 – 26, 2009. Cincinnati, Ohio.

**Focken R,** & Roden W. “Using Portfolios to Evaluate and Improve Student Learning in Experiential Education” Department of Pharmacy Practice, College of Pharmacy, Nursing, and Allied Sciences, North Dakota State University, Fargo, North Dakota. American Association of Colleges of Pharmacy, July 18-22, 2009. Boston, Massachusetts. Poster abstract published in the American Journal of Pharmaceutical Education 2009; 73 (4) Article 57, page 141.

Frenzel, J, & **Focken R.** “Assessment of First Year Pharmacy Student Compounded Sterile Product Preparations” Department of Pharmacy Practice, College of Pharmacy, Nursing, and Allied Sciences, North Dakota State University, Fargo, North Dakota. American Association of Colleges of Pharmacy, July 20-23, 2008. Chicago, Illinois. Poster abstract published in the American Journal of Pharmaceutical Education 2008; 72 (3) Article 72, page 33.

**Focken, R,** & Frenzel, J. “Assessment of Prescription Dispensing and Patient Consultation in a First Year Pharmacy Practice Skills Laboratory” Department of Pharmacy Practice, College of Pharmacy, Nursing, and Allied Sciences, North Dakota State University, Fargo, North Dakota. American Association of Colleges of Pharmacy, July 20-23, 2008. Chicago, Illinois. Poster abstract published in the American Journal of Pharmaceutical Education 2008; 72 (3) Article 72, page 33.

## **EVALUATION/TECHNICAL REPORTS**

**Focken, R,** Johnson, S., Reid, M. M., & Thoennes, K. Education Doctoral Program Annual Meeting Evaluation Report for North Dakota State University Education Doctoral Program, December 2011.

## **NON-REFEREED PUBLICATIONS**

**Focken R.** Baraclude®. *The Curbside Consult, Updates in Pharmacotherapy provided by the University of Minnesota Pharmaceutical Care Residency Program* 2005; 3:2.

**Focken R.** C-Reactive Protein: Defining the Role of Testing in Cardiovascular Disease. *The Curbside Consult, Updates in Pharmacotherapy provided by the University of Minnesota Pharmaceutical Care Residency Program* 2005; 3:1.



**Focken R.** Early Intensive vs. Delayed Conservative Simvastatin Strategy. *The Curbside Consult, Updates in Pharmacotherapy provided by the University of Minnesota Pharmaceutical Care Residency Program* 2004; 2:4.

**Focken R.** Home Menopause Tests. *The Curbside Consult, Updates in Pharmacotherapy provided by the University of Minnesota Pharmaceutical Care Residency Program* 2004; 2:3.

**Focken R.** Low Dose Hormone Therapy. *The Curbside Consult, Updates in Pharmacotherapy provided by the University of Minnesota Pharmaceutical Care Residency Program* 2004; 2:3.

**Focken R.** A Glimpse of the Past- 25 years ago. *NoDak Pharmacy* 2003; 16:12.

**Focken R.** A Glimpse of the Past- 50 years ago. *NoDak Pharmacy* 2003; 16:11.

**Focken R.** A Glimpse of the Past- 100 years ago. *NoDak Pharmacy* 2003;16:9.

### INVITED NATIONAL/REGIONAL MEETING PRESENTATIONS

**Brynjulson, R.** “Management of Programmatic and Experiential Education Site Requirements in Offices of Experiential Education.” Roundtable Presentation, American Association of Colleges of Pharmacy Annual Meeting, July 15-19, 2017. Nashville, TN.

**Focken, R.** “Experiential Education as a Practical Strategy for Developing Leadership Skills in Pharmacy Learners.” As part of a special interest session titled, “Leadership Development, Practically Speaking: A Focus on Active Learning Strategies in Leadership Instruction.” American Association of Colleges of Pharmacy Annual Meeting, July 26-30, 2014. Grapevine, TX.

**Focken, R.** “Clinical Reasoning Skills in Experiential Education Coursework.” Roundtable Presentation, American Association of Colleges of Pharmacy Annual Meeting, July 26-30, 2014. Grapevine, TX.

**Focken, R.** “Using E\*Value to Schedule and Assess Student Learning in Groups.” E\*Value User Conference. October 10-11, 2013, Minneapolis, MN.

Frenzel J, Eukel H, Skoy E, Fitz A, **Focken R.** “Integration of Introductory Pharmacy Practice Experiences (IPPE) into a Pharmaceutical Care Laboratory Course” American Association of Colleges of Pharmacy Laboratory Special Interest Group (Lab SIG), special session presented by Eukel H and Frenzel J, American Association of Colleges of Pharmacy, July 17, 2012. Kissimmee, FL.

**Focken, R.** “Assessment in IPPE: Moving Beyond the Preceptor Evaluation.” Roundtable Presentation, American Association of Colleges of Pharmacy, July 15-18, 2012, Kissimmee, FL.

**Focken, R.** “Introductory Pharmacy Practice Experience.” National Association of Boards of Pharmacy/American Association of Colleges of Pharmacy District V Meeting, Fargo, ND. August 2008.

### INVITED LOCAL PRESENTATIONS

Werremeyer, A., **Brynjulson, R.**, Petry, N. “Co-Teaching: How to Plan, Deliver and Create Student Assessments as Co-Teachers.” Gateways ND NSF. Fargo, ND. August 2019

Werremeyer, A., **Brynjulson, R.**, Petry, N. “Co-Teaching: How to Plan, Deliver and Create Student Assessments as Co-Teachers.” Gateways ND NSF. Fargo, ND. August 2018

**Brynjulson, R.** “Updates in Experiential Education and Preceptor Training.” North Dakota Pharmacists Association Annual Convention. Fargo, ND. April 2018.

**Brynjulson, R.** “Student Involvement in Practice Sites.” NDSHP Networking Session Sanford Health Videoconference. West Fargo, ND. November 2017.

Frenzel J, Eukel H, **Brynjulson R**. Medication misadventures. From the Schoolhouse: Continuing education presented at: North Dakota State University. Fargo, ND. May 2017.

**Brynjulson, R**. “Experiential Teaching Strategies Brown Bag.” North Dakota State University. Fargo, ND. March 2017.

Frenzel, J., Eukel, H., and **Focken, R**. “Medication Misadventures” North Dakota Pharmacists Association Annual Convention. Bismarck, ND. April 2016.

**Focken, R**. “Anticoagulation.” North Dakota State University College of Pharmacy, Nursing and Allied Sciences Homecoming Seminar. Fargo, ND. October 2015.

**Focken, R**. “Introductory Pharmacy Practice Experiences.” North Dakota State University College of Pharmacy, Nursing and Allied Sciences Accreditation Retreat. Fargo, ND. January 2012.

Anderson, N., Anicha, C., Erie, B., **Focken, R**., Johnson, S., Reid, M. M., Thoennes, K., & Williams, C. “Why are we here? Is this a gathering, a conference, or what? What could it be?” Education Doctoral Program Fall Conference, Fargo, ND. October 2011.

**Focken, R**, & Roden, W. “Preceptor Pearls.” North Dakota Pharmacist’s Association Annual Convention, Grand Forks, ND. June 2011.

**Focken, R**, & Roden, W. “Precepting Pharmacy Learners.” Veteran’s Affairs Medical Center. Fargo, ND. June 2011.

**Focken, R**, Naughton, C., & Roden, W. “Experiential Learning Styles.” Bismarck, ND. June 2010.

**Focken, R**, & Roden, W. “Preceptor Pearls-Technology and Resources.” North Dakota Pharmacists Association Annual Convention. Minot, ND. April 2010.

Roden, W., & **Focken, R**. “Preceptor Pearls-Best Practices.” North Dakota Pharmacists Association Annual Convention. Minot, ND. April 2010.

Roden, W., & **Focken, R**. “Preceptor Training.” North Dakota Pharmacists Association MidWinter Seminar. Fargo, ND. January, 2009.

**Focken, R**. “C-Reactive Protein: An Update.” University of Minnesota Advanced Pharmacy Practice Experience Preceptor Training. ACPE Accredited CE Presentation, University of Minnesota College of Pharmacy, St. Cloud, MN. April 2005.

**Focken, R**. “Hyperosmolar Hyperglycemic State. Inpatient Diagnosis and Treatment and Outpatient follow-up post Hospitalization: A Case Review.” ACPE Accredited CE Presentation, University of Minnesota College of Pharmacy. Minneapolis, MN. October 2004.

## **OTHER PRESENTATIONS**

Scott, D., Friesner, D., & **Focken R**. “Survey Design Panel Discussion” North Dakota State University Department of Pharmacy Practice Research Seminar, Fargo, ND. March 2013.

**Focken, R**. “PxDx.” North Dakota State University Department of Pharmacy Practice Research Seminar, Fargo, ND. March 2011.

**Focken, R**. “Anticoagulation in Primary Care.” St. Louis University Medical School Students/Primary Care Residents, John Cochran VA Medical Center. August 2006-June 2007, monthly presentation.

**Focken, R**. “New Medications in Primary Care Update.” St. Louis University Medical School Students/Primary Care Residents, John Cochran VA Medical Center, August 2006-June 2007, monthly presentation.

**Focken, R.** "Vitamin E and Cardiovascular Risk." Physician Provider In-service, Paynesville Area HealthCare System. Paynesville, MN. March 2005.

### **GRANTS RECEIVED**

National Association of Community Drug Stores (NACDS) Foundation Million Hearts Grant, \$1000.00, for the project titled "*Public Health Impact of community-based cardiovascular risk screenings conducted by pharmacy students.*" January 2013.

North Dakota State University Department of Pharmacy Practice Seed Grant in the amount of \$2615.00 for the project titled "*Student Engagement in Institutional Introductory Pharmacy Practice Experiences: Preceptor and Student Perceptions*" February 2009.

North Dakota State University Development Foundation Grant, \$1195.00, to purchase a Blood Pressure Training Arm for the North Dakota State University Concept Pharmacy. January 2008.

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### **HONORS AND AWARDS**

Facts and Comparison's Excellence in Clinical Communication Award

2004

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### **REFERENCES**

Available upon request.

# Lisa M. Richter, PharmD, BCPS, BCCCP

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3823 Reserve Dr. E. West Fargo, ND 58078 | 402-669-2628 | lisarichter1316@gmail.com

## Professional Summary

Innovative, enthusiastic pharmacist with over thirteen years of diverse clinical practice experience including seven years as a PGY1 Residency Program Director. Excels in program management, leadership, relationship building, accreditation and communication.

## Professional Experience

### **DIRECTOR OF EXPERIENTIAL OUTREACH AND ASSESSMENT & ASSISTANT PROFESSOR OF PRACTICE | NORTH DAKOTA STATE UNIVERSITY (NDSU) FARGO, ND | 4/2018 TO PRESENT**

- Conduct site visit assessments for quality assurance and preceptor education and outreach
- Write and edit biannual preceptor newsletter
- Developed new evaluation tools using Entrustable Professional Activities (EPAs) with colleagues
- Course coordinator and teach in Pharmacy 570: Performance Improvement and Project Management
- Teach multiple lectures in Pharmacy 560: Special Topics and Pharmacy 580: Capstone
- Completing Gateways ND (A National Science Foundation funded instructional faculty and staff development program)

### **INPATIENT PHARMACIST (PRN) | SANFORD HEALTH FARGO, ND | 4/2018 TO PRESENT**

- Staff a variety of inpatient evening shifts

### **ANTIMICROBIAL STEWARDSHIP PHARMACIST | SANFORD HEALTH FARGO, ND | 6/2017 TO 4/2018**

- Met with adult and pediatric infectious disease physicians daily to recommend interventions on antimicrobial stewardship program (ASP) patients
- Precepted pharmacy residents on auto intervention algorithms for COPD, CAP, SBP and *C. diff*
- Chosen for pharmacy patient transfer team for move to new medical center
- Trained all Sanford Fargo APPE students on initial day of clinical/EPIC training (12-15 students per rotation)
- Staffed shifts in critical care, internal medicine, central pharmacy and reviewed order sets in addition to ASP

### **PHARMACY PGY1 RESIDENCY PROGRAM DIRECTOR | SANFORD HEALTH FARGO, ND | 7/2011 TO 4/2018**

- Successfully completed two ASHP onsite and one midterm reaccreditation survey
- Expanded the program to include two non-traditional residents
- Assisted in initiation of PGY2 critical care residency program
- Provided expert guidance to area residency program directors as NDSHP Residency Networking Meeting series facilitator
- Provided oversight and management of Residency Advisory Committee

- Hosted ASHP Visiting Leaders Program, 2013
- Developed and implemented application and interview rubrics
- Established pharmacy grand rounds for ACPE continuing education
- Conducted preceptor needs assessment and development opportunities
- Created residency orientation manual
- Updated policies and procedures
- Assisted in strategic planning of NDSHP/ASHP Residency Program Design and Conduct Workshop
- Created Residency Preceptor of the Year Award
- Streamlined evaluations
- Implemented annual resident newsletter
- Directed and supervised the work of pharmacy residents
- Scrutinized exit interview suggestions for improvements to the residency program

**CLINICAL PHARMACIST – ACUTE CARE | SANFORD HEALTH  
FARGO, ND | 11/2010 TO 6/2017**

- Co-Precepted four pharmacy residents and approximately sixteen NDSU APPE students per year
- Collaborated with physicians to provide patient specific recommendations and interventions on internal medicine rounds
- Reviewed order sets for clinical and technical issues
- Provided new pharmacist clinical training
- Conducted patient education on warfarin, opioids and other medications
- Served on committees including: Pharmacy Practice Model Initiative (PPMI) Committee, Pharmacist Orientation Committee, Order sets Team and Residency Advisory Committee (chair)

**CLINICAL PHARMACIST | WALGREENS INFUSION & RESPIRATORY SERVICES  
OMAHA, NE | 2/2008 TO 10/2010**

- Provided new pharmacist clinical training
- Designed and implemented Employee Health and Wellness Program for all NE offices
- Improved backorder process
- Created the policy for dispensing other NE office patients
- Coordinated patient care with patient, nurses, physicians and dieticians
- Started office wide recycling program resulting in reduction in office expenditures

**CLINICAL PHARMACIST | NEBRASKA MEDICINE  
OMAHA, NE | 7/2007 TO 4/2008**

- Conducted daily medication profile review and medication reconciliation
- Evaluated and dispensed prescribed medications
- Presented topic discussions to pharmacy students on rotation

**PGY1 PHARMACY RESIDENT | NEBRASKA MEDICINE  
OMAHA, NE | 7/2006 TO 6/2007**

- Residency rotations in internal medicine, infectious disease, oncology, drug information, neonatal intensive care, adult critical care, adult liver transplant and emergency medicine
- Actively participated in multi-disciplinary patient rounds
- Chosen as Residency Advisory Committee Liaison by peers

**Education**

**DOCTOR OF PHARMACY | NDSU  
FARGO, ND | MAY 2006**

- NDSU Rhodes Scholar Nominee, 2005

**BACHELOR OF SCIENCE | NDSU  
FARGO, ND | MAY 2004**

- Major: Pharmaceutical Sciences, Graduated Summa Cum Laude
- NDSU Student Athlete of the Week - 2003, 2004
- Academic All-North Central Conference Women's Track & Field/Cross-Country Honorable Mention – 2003, 2004
- Selected for summer internship in Boston, MA from nation-wide CVS college campus interviews – 2003

**SUMMER STUDY ABROAD | UNIVERSITY OF GRANADA  
GRANADA, SPAIN | JUNE 2004**

- Intensive Spanish language and culture classes
- Cultural immersion during four-week host family stay

**Awards**

- NDSU Phi Lambda Sigma Alumni of the Year Award, 2017-2018
- North Dakota Society of Health-System Pharmacists, Pharmacist of the Year, 2015

**Certifications**

- Board Certified Critical Care Pharmacist (BCCCP), 2017-current
- Board Certified Pharmacotherapy Specialist (BCPS), 2009-current
- United Way of Cass-Clay 35 Under 35 Women's Leadership Program, completed 2018
- NDSU Pharmacy Teaching Certificate, completed 2012
- Advanced Cardiac Life Support (ACLS), 2011-2017
- CITI training, 2011-current
- Spanish for Medical Professionals Certificate, (Metropolitan Community College, Omaha, NE), completed 2010

## Licenses

- Licensed Pharmacist, Minnesota, 2011-current
- Licensed Pharmacist, North Dakota, 2010-current
- Licensed Pharmacist, Nebraska, 2006-current

## Professional Affiliations

- American Association of Colleges of Pharmacy, 2018-current  
Preceptor Development Task Force, member
- American College of Clinical Pharmacy, 2018-current  
Member
- American Society of Health-System Pharmacists, 2011-current  
Residency Program Clinician Surveyor training completed  
Women in Pharmacy Leadership Fun Run/Walk organizer, Midyear Meeting 2017  
Women in Pharmacy Leadership Networking Table Moderator, Midyear Meeting 2016  
National Council Member, Education and Workforce Development, 2012-2013  
Poster Mentor, ASHP Midyear, 2012-2017
- North Dakota Women in Higher Education Network, 2018-2019  
Board Member
- North Dakota Pharmacists Association, 2012-current  
Planning Committee Member, State Meeting, 2012-2014, 2017-2018  
District 8 Representative, 2012-2013
- North Dakota Society of Health-System Pharmacists, 2013-current  
Past President -2019, President-2018, President-Elect 2017  
ND Delegate to ASHP Summer Meeting, 2018  
Speaker, NDSHP Summit & Expo Residency Programs Update, 2017  
Member, Awards Committee, 2016-2017  
Liaison, Residency Program Design & Conduct Workshop, 2016  
Meeting Facilitator, Residency Program Networking Meetings, 2015-2018  
NDSHP Summit and Expo Planning Committee, 2017-current  
Advance Leadership Workshop Planning Committee, 2018-current
- Midwest Pharmacy Residency Conference  
Judge and/or Moderator, Residency Research Projects, 2012-2017

## Presentations

“Preceptor Development Escape Room” with Jeanne Frenzel, PharmD, PhD  
NDPhA District 8 Meeting  
Fargo, ND 2019

“Preceptor Development Escape Room” with Jeanne Frenzel, PharmD, PhD  
ACPE Continuing Education for Pharmacists ND State Pharmacy Convention  
Bismarck, ND 2019

“Women in Pharmacy Leadership” with Mike Powell, MS, FASHP  
ACPE Continuing Education for Pharmacists/Technicians ND State Pharmacy Convention  
Fargo, ND, 2018

“Anti-Infective and Anti-Inflammatory Agents”  
Respiratory Care 496  
Sanford Medical Center Fargo  
Fargo, ND, 2011-2018

"Gastro-Intestinal Infections"  
Pharmacy 532: Infectious Disease  
North Dakota State University  
Fargo, ND, 2012-2015

“Preliminary Phase of a Pharmacist-Initiated Step-Down Protocol for Antimicrobials”  
Infectious Diseases Society of America Annual Meeting  
San Diego, CA, 2007

“Folic Acid for the Prevention of Cardiovascular Disease”  
ACPE Continuing Education for Pharmacists Pharmacy Grand Rounds  
Nebraska Medicine  
Omaha, NE, 2007

“Celecoxib for the Prevention of Colorectal Polyps”  
ACPE Continuing Education for Pharmacists Pharmacy Grand Rounds  
Nebraska Medicine  
Omaha, NE, 2007

“Multiple Sclerosis”  
ACPE Continuing Education for Pharmacists Pharmacy Grand Rounds  
Nebraska Medicine  
Omaha, NE, 2007

“South Africa: A Case Presentation and Personal Experience”  
North Dakota State University  
Fargo, ND, 2005



## Publications

- McGurran MA, **Richter LM**, Leedahl ND, Leedahl DD. Impact of a comprehensive COPD therapeutic interchange program on 30-day readmission rates in hospitalized patients. *PT*. 2019 Apr;44(4):185-191.
- Grindeland CJ, Mauriello CT, Leedahl DD, **Richter LM**, Meyer AC. Association between updated guideline-based palivizumab administration and RSV hospitalizations: a retrospective cohort study. *Pediatr Infect Dis J*. 2016 July; 35(7): 728-32.
- Jones JM, **Richter LM**, Alonto A, Leedahl DD. Desensitization to ceftaroline in a patient with multiple medication hypersensitivity reactions. *Am J Health Syst Pharm*. 2015 Feb 1;72(3):198-202.
- Hermsen ED, Shull SS, **Richter LM**, Fang Q, Rupp ME. Failure of a pharmacist- initialed antimicrobial step-down protocol to impact physician prescribing behavior or patient outcomes: A quasi-experimental, cross-over study. *Journal of Hospital Administration*. 2013 April: 2(4).

## Abstracts

- **Richter LM**, Hursman A, Tupper E. Assessment of the impact of a leadership development workshop on perceived leadership ability. Poster accepted for presentation at the 2019 American Association of Colleges of Pharmacy Annual Meeting. Chicago, IL.
- **Richter LM**, Frenzel J, Brynjulson R, Udem T. Relationship between pharmacy student academic resilience and pharmacy school grade point average. Poster accepted for presentation at the 2019 American College of Clinical Pharmacy Virtual Poster Symposium.
- McGurran M, **Richter L**, Leedahl N. Evaluation of the impact of an automatic therapeutic formulary substitution of chronic obstructive pulmonary disease (COPD) inhalers through an approved therapeutic substitution process. Poster accepted for presentation at the 2017 American Society of Health-Systems Pharmacists Annual Midyear Meeting. Orlando, FL.
- **Richter L**, Olek A, Loy M. Impact of residency program design and conduct workshop on regional residency programs. Poster accepted for presentation at the 2017 American Society of Health-Systems Pharmacists Annual Midyear Meeting. Orlando, FL.
- **Richter L**, Nagel L. Impact of residency program director maternity leave on pharmacy residents. Poster presentation at the 2016 American Society of Health- Systems Pharmacists Annual Midyear Meeting. Las Vegas, NV.
- **Richter L**, Leedahl D. Implementation of a nontraditional pharmacy residency at a 583 bed, nonprofit community teaching hospital. Poster presentation at the 2015 American Society of Health-Systems Pharmacists Annual Midyear Meeting. New Orleans, LA.

- Nagel L, Wilson J, **Richter L**, Hoy C, Breidenbach, J. Initiation of ASHP Pharmacy Practice Model Initiative (PPMI) changes in a community teaching hospital. Poster presentation at the 2014 American Society of Health-System Pharmacists Annual Midyear Meeting. Anaheim, CA.
- Phan Q, **Richter L**. Impact of targeted medication alert optimization on adverse drug events at a community teaching hospital. Poster presentation at the 2014 American Society of Health-System Pharmacists Annual Midyear Meeting. Anaheim, CA.
- **Richter, LM**. Results of a post-interview survey of postgraduate year one (PGY1) residency candidates at a community teaching hospital. Poster presentation at the 2013 American Society of Health-System Pharmacists Annual Midyear Meeting. Orlando, FL.
- Gohdes BL, Wilson J, **Richter LM**. Utilization of a pharmacist in a patient-centered medical home model and its impact on quality scores in disease management of diabetic patients in the ambulatory care setting. Poster presentation at the 2012 American Society of Health-System Pharmacists Annual Midyear Meeting. Las Vegas, NV.

## Community Service

- Mentor, BIO Girls, 2013-current (club for elementary school girls focusing on physical fitness and self-esteem)
- Volunteer, United Way School Supply Drive, 2012, 2017, 2018
- Volunteer, NDSU Guatemala Medical Mission Packing Event, 2013
- Corporate Cup Committee Member, American Lung Association, 2009-2010

**Teri Ann Udem**2525 117<sup>th</sup> Ave SE, Valley City, ND 58072 701-845-6276 tand3j@yahoo.com**Objective**

To obtain a position with the NDSU College of Pharmacy, Nursing and Allied Sciences

**Experience****Director, Advanced Pharmacy Practice Experience (Faculty Appointment)**

2013-Present, North Dakota State University, Fargo, ND

- Coordinate and oversee Advanced Pharmacy Practice Experience (APPE) Rotations.
  - 40 Credits, fourth year students
  - Educate third year students on APPE expectations/assignments
  - Oversee rotation match system for 680 rotations per year
  - Collaborate with key stakeholders and colleagues to develop quality rotation sites.
  - Meet and maintain ACPE Experiential Accreditation Standards
  - Continuously develop innovative Experiential Experiences for 4<sup>th</sup> year pharmacy students
  - Develop, implement and follow through on APPE student remediation plans.
  - Supervise experiential administrative staff
  - Coordinate budgetary expenditures with school Budget Manager
- Provide education in didactic curriculum as assigned.
- Introductory Pharmacy Practice Experience Poster Mentor
- Assist in the maintenance and operation of the E\*value electronic database rotation management system
- Provide orientation to new preceptors and assist with periodic training to all preceptors
- Experiential Education Committee-Chair
- Leadership Council
- Accreditation Self-Study: Experiential Education Co-Chair (accreditation visit 2020)
- ND Opportunities Night Facilitator
- Scholarship Committee
- Student Academic Progression Committee
- Admissions Committee
- College Awards Committee
- EPA Task Force
- Search Committee member as assigned
- Real Life Mentor
- Student Academic Advisor
- Educate 4<sup>th</sup> year students and facilitate their licensure process
- Assessment Committee-2013-2015
- Concept Pharmacy Task Force-2013-2015

**Staff Pharmacist**

2006-2013, North Dakota State Hospital, Jamestown, ND

- Standard Pharmacy Practice
- Precept/Train students while on rotation
- Implemented intervention tracking and recording
- Policy creation and implementation
- Designed and implemented Orientation to Pharmacy Forms and Procedures for new nursing staff
- Inventory Management (received bonus 2012)
- Provide telepharmacy services
- Supervising pharmacist for unit-dosed packaging system
- Supervising pharmacist for product content and usage of the After Hours Night Cabinet

**Relief Pharmacist, Entrepreneur**

2000-2006, Many pharmacies

- Standard Pharmacy Practice
- Successful interaction with multiple personalities in a wide variety of settings

Teri Udem

2525 117<sup>th</sup> Ave SE, Valley City, ND 58072

Staff Pharmacist

1998-2006, Foss Drug Company, Valley City, ND

- Standard Pharmacy Practice
- Precept/Train students while on rotation
- Long term care experience with prescription filling and third party billing
- Received yearly performance bonuses

Pharmacist

1997, Central Avenue Pharmacy, Valley City,

- Standard pharmacy practice
- Precept/Train students while on rotation

Pharmacist-In-Charge

1997-1998, Barrow Drug Company, Coquille, OR

- Standard Pharmacy Practice
- Staff management
- Manage pharmacy inventory
- Purchasing and merchandizing-pharmacy and large front end

Pharmacist, Pharmacist-In-Charge, Pharmacy District Manager

1992-1997, Rite-Aid Drugstore (formerly Payless Drugstore), Coos Bay/North Bend, OR

- Standard Pharmacy Practice
- Precept/Train students while on rotation
- Technician Training (prior to college programs)
- Staff recruitment and development
- Staff scheduling
- Conflict resolution
- Budgetary control

**Education**

North Dakota State University, Fargo, ND

2016-current (expected completion 2019)

- Masters in Educational Leadership (M.S), Blended Track (K-12/Higher Ed)

University of Kansas School of Pharmacy, Lawrence, KS

1988-1992

- Bachelor of Science-Pharmacy

William Jewell College, Liberty, MO

1986-1988

- Pre-Pharmacy

**Interests**

Meeting new people, learning new things, student development and various outdoor activities

**References**

References attached

**Certifications & Memberships & Awards**

Immunization Certified 2014

American Association of Colleges of Pharmacy

ND Pharmacists Association

ND Society of Health Systems Pharmacists

Rho Chi

Apple Polisher Award 15-16

Teri Undem

2525 117<sup>th</sup> Ave SE, Valley City, ND 58072

## Scholarship

District V Competitive Grand Recipient: Pharmacists Contributions to Public Health-significant contributor  
Telepharmacy Sustainability Project-minimal contributor  
American Journal of Pharmaceutical Education Reviewer 2014-present  
American Association of Colleges of Pharmacy Abstract Reviewer 2017

32<sup>nd</sup> Annual Dakota Conference on Rural and Public Health, (June 2017), Interprofessional Student Community-based Learning Experience (ISCLE), Johnson, E, Udem, T. (CME)

## Publications

Strand, MA, Udem, T, Anderson, G, Clarens, A, Liu, XY, and Scott, D. (Oct 29-Nov 2, 2016) Comparative analysis of public health service delivery in North Dakota, Iowa and Manitoba: A National Association of Boards of Pharmacy and American Association of College of Pharmacy District V Survey. Oral poster presentation at the 144<sup>th</sup> Annual Meeting and Exposition of the APHA, Denver, CO.

Scott, DM, Strand M, Udem T, Anderson G, Clarens A, Liu X. (Nov 22, 2016) Assessment of pharmacists' delivery of public health services in rural and urban areas in Iowa and North Dakota, *Journal of pharmacy practice*, 2016, 14(4): 836-846.

Strand M, Scott DM, Udem T, Anderson G, Clarens, A and Liu X. (May 2017) Pharmacist Contributions to the Ten Essential Services of Public Health in Three NABP Pharmacy Regions, *Journal of the American pharmacists association*, 57 (3), pp. 395-401, doi: <http://dx.doi.org/10.1016/j.japh.2017.02.021>

Scott, DM, Friesner, DL, Udem, TA, Anderson, G, Sem, K, Peterson, CD. (May 2017) Perceived sustainability of community telepharmacy in North Dakota, *Journal of the American Pharmacists Association*, 57 (3), pp. 362-368, doi: <http://dx.doi.org/10.1016/j.japh.2017.02.005>

### Projects in Process

Grit and Resilience-manuscript in process

New Pharmacist Employability Traits-survey participant recruitment in process