Department of Pharmacy Practice School of Pharmacy North Dakota State University

Summary of Individual Faculty Research/Scholarship 2016-2017

Rebecca Brynjulson, PharmD, BCACP, CGP



Director, Introductory Pharmacy Practice Experiences
Assistant Professor of Practice

Sudro Hall 20B; (701) 231-7477; rebecca.brynjulson@ndsu.edu

Recent Publications

- Strand, M., Miller, D., & **Focken, R.** 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. 2016; 8*(1). Published online September 29, 2015. doi: http://dx.doi.org/10.1016/j.cptl.2015.09.013
- Eukel, H., Frenzel, J., Skoy, E., **Focken, R.**, & Fitz, A. An introductory pharmacy practice experience using simulated patient care activities in a pharmaceutical care laboratory environment. *Currents in Pharmacy Teaching and Learning.* 2014;6(5). doi: http://dx.doi.org/10.1016/j.cptl.2014.05.007

Research Funding:

Focken, R, Naughton, C, Oetken, H, Stromback, C. 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.

Current Projects / Collaborations

- Brynjulson, R., Petry, N. Evidence of Student Learning in Capstone Experiences in Pharmacy Curriculums: A Systematic Literature Review.
- Cernusca, D., Strand, M., Miller, D., and Brynjulson, R. Student Performance and Perceptions in a Case-Based Active Learning Technology-Rich Environment.

Research Keywords:

Introductory pharmacy practice experiences (IPPE); Experiential education; Public health; Problem solving; Capstone

Dan Cernusca, PhD



Assistant Professor of Practice & Instructional Designer

Sudro Hall 118P; (701) 231-7729; Dan.Cernusca@ndsu.edu

Recent Publications

- **Cernusca D,** Brown W. Task analysis—The forgotten step in designing active learning. 117th Annual Meeting of the American Association of Colleges of Pharmacy, Anaheim, CA July 23-27, *American Journal of Pharmaceutical Education*. 2016;80(5): ArticleS2: 86. **doi: 10.5688/ajpe805S2**
- **Cernusca D,** Brown W. Active Learning to Stimulate Knowledge Integration in a Large Pharmacy Course. *Proceedings of the 2015 AECT International Convention*, November 3-7, Indianapolis, IN, 2015, Vol. 1: 47-53.
- Hogan JP, **Cernusca D.** Millenials Perception of Using Clicker to Support an Active Learning Environment: An Early Adoption Perspective, *Computers in Education Journal*. 23(1):73-89.

Research Funding:

Center for Diagnostic and Therapeutic Strategies in Pancreatic Cancer (03/01/2016 – 02/28/2021)

Sponsor: NIH; Total award: \$9,721,617

Role: Assessment of the junior PI mentoring programs.

Current Projects / Collaborations

Student Performance and Perceptions in a Case-Based Active Learning Technology-Rich Environment (08/2016 – 08/2019)

Collaborators: Mark Strand, Donald Miller, Rebecca Brynjulson, NDSU

Transformative Learning Intervention to Promote Accrual to Cancer Clinical Trials (03/2016- 12/2016)

Collaborators: Geana Mugur, The Health Communication Research Shared Resource (HCRSR) of the KUCC

Research Keywords:

Continuing, Graduate, Pharmacy, Professional education.

Mark Dewey, PharmD, CGP, FASCP



Associate Professor of Practice Consultant Pharmacist/ Lake Region Healthcare & Consultant Pharmacist Inc.

Sudro Hall 118Q; (218) 736-8057 (LRH); Mark.Dewey@ndsu.edu

Recent Publications

- Friesner, D, Scott, D, **Dewey, M,** Johnson, T, Kessler, M. "What Types of Nursing Homes are More Likely to Adopt a Pharmacist's Medication Review Recommendations?. The Consultant Pharmacist. 2013;28(8):490-501.
- Scott, D, **Dewey, M**, Johnson, T, Kessler, M., Friesner, D. Preliminary Evaluation of Medication Therapy Management Services in Assisted Living Facilities in rural Minnesota. The Consultant Pharmacist. 2010;25(5):296-309.
- Maack, B., Miller. D., Johnson, T., **Dewey, M**. Economic Impact of a Pharmacy Resident in an Assisted Living Facility–Based Medication Therapy Management Program. Ann Pharmacother. 2008;42(11):1613-20.

Research Funding:

- 2007- present Medication Therapy Management Program Grant through Lake Region Healthcare from Land of the Dancing Sky Agency on Aging
- 2013-2016 Minnesota Department of Human Services Community Service/Community Services Development Grants program for MTM via in-home or Telepharmacy presence at Lake Region Healthcare
- 2011 Lake Region Foundation Grant for Medication Therapy Management Services at the Transition of Care from LRH Foundation

Current Projects / Collaborations

- "Pharmacist Medication Review in a Long-Term Care Facility Transitional Care Unit". Jenna Pakala, Pharm.D., Dan Friesner, Ph.D., NDSU
- "Low Cost Information System Options for Monitoring Medication Therapy Management Programs in Rural Minnesota". Kent Bridgeman, Pharm.D. University of Minnesota
- "Outpatient Antimicrobial Stewardship in a Community Health-System". -" Margo Christopher, Pharm.D., Dan Friesner, Ph.D., NDSU

Research Keywords:

-Medication Therapy Management; Nursing Home; Assisted Living; Pharmacist; Cost-savings.

Heidi Eukel, PharmD



Associate Professor of Practice

Sudro Hall 118G; (701) 231-7602; heidi.eukel@ndsu.edu

Recent Publications

- Skoy E, Frenzel J, **Eukel H**, Werremeyer A, McDaniel B. Use of an Auditory Hallucination Simulation to Increase Student Pharmacist Empathy. American Journal of Pharmaceutical Education. Accepted for publication.
- Frenzel J, **Eukel H**, Neville M, Castillo S, Donohoe K, Jones M, Kirwin J, McMillan A, Starry M, Tigen J, Urteaga E. Essential Skills for Pharmacy graduates Reported by Advanced Pharmacy Practice Experience Preceptors. Currents in Pharmacy Teaching and Learning. 2015;7(5):700-704.
- Skoy E, **Eukel H**, Frenzel J, Schmitz T. Performance and Perceptions: Evaluation of Pharmacy Students' Consultation via Telepharmacy. Journal of Pharmacy Technology. January 12, 2015.

Research Funding:

Current Projects / Collaborations

- **Eukel H**, Frenzel J, Skoy E. Longitudinal Evaluation of Pharmacy Student Self-Assessment of Professionalism. Journal of the American Pharmacists Association. Under review.
- **Eukel H**, Frenzel J, Cernusca D. A Diabetes Mellitus Escape Room Design and Evaluation of an Educational Game. Manuscript in process.

Research Keywords:

Skills lab; Simulation; Teaching innovation; Pharmaceutical care laboratory

Jeanne Frenzel, PharmD, RPh



Associate Professor Pharmacist

Sudro Hall 118F; (701) 231-8546; Jeanne.Frenzel@ndsu.edu

Recent Publications

- **Frenzel JE**, Eukel H, Neville M, et al. Essential skills for pharmacy graduates reported by advanced pharmacy practice experience preceptors. Curr Pharm Teach Learn. 2015;7(5):700-704.
- Skoy E, Eukel H, **Frenzel JE**, Schmitz T. Performance and perceptions: evaluation of pharmacy students' consultation via telepharmacy. J Pharm Technol. 2015; 8755122514568123.
- Eukel HN, **Frenzel JE**, Skoy ET, Focken RL, Fitz AL. An Introductory Pharmacy Practice Experience Using Simulated Patient Care Activities in a Pharmaceutical Care Laboratory Environment. Curr Pharm Teach Learn. 2014;6(5):682-691.

Research Funding:

- Frenzel J Development Foundation, North Dakota State University; 2016; Fargo, ND. \$1000.00
- Frenzel J. Provost's Travel Grant, North Dakota State University; 2015; Fargo, ND. \$1000.00
- Frenzel J. Development Foundation, North Dakota State University; 2012; Fargo, ND. \$2268.00
- Frenzel J. Development Foundation, North Dakota State University; 2011; Fargo, ND. \$939.84

Current Projects / Collaborations

Changing Pharmacy Students' Knowledge, Skills, and Attitudes about Medication Errors and Patient Safety (Frenzel, Skoy, Eukel)

Assessment of SOAP Notes in Colleges and Schools of Pharmacy American Journal of Pharmaceutical Education (AACP Lab Sig)

A Diabetes Mellitus Escape Room - Design and Evaluation of an Educational Game (Cernusca, Eukel, Frenzel, Skoy)

Longitudinal Evaluation of Pharmacy Student Self-Assessment of Professionalism (Eukel, Frenzel, Skoy, Faure)

Use of Auditory Hallucination Simulation to Increase Student Pharmacist Empathy for Patients with Mental Illness (Skoy, Eukel, Frenzel, Werremeyer, McDaniel)

Research Keywords:

Teaching; Laboratories; Students; Simulation Training

Michael Kelsch, PharmD, BCPS



Associate Professor of Practice & Vice Chair, Department of Pharmacy Practice

Sudro Hall 118N; (701) 231-6528; Michael.Kelsch@ndsu.edu

Recent Publications

- **Kelsch MP**, Sylvester RK. The Effect of Prerequisite Pharmacodynamics Course Timing on Student Performance in Pharmacotherapy Courses. American Journal of Pharmaceutical Education. 2016;80(6):Article 99.
- **Kelsch MP**, Friesner DL. The Health Sciences Reasoning Test in the Pharmacy Admissions Process. American Journal of Pharmaceutical Education. 2014;78(1):Article 9.
- Anderson CL, Albrecht JM, **Kelsch MP**, Hanson PJ. Chronic CA-MRSA in a Basketball Player with Hammer Toe Deformity. International Journal of Athletic Therapy & Training. 2014;19(1):15-19.

Research Funding:

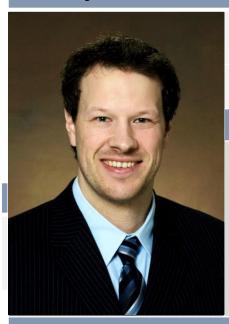
Current Projects / Collaborations

Pharmacist Managed Antibiotic Allergy Reconciliation in an Emergency Department; Kelsch MP, Trowbridge C, Leedahl D, Carson P; Sanford Medical Center, Fargo

Research Keywords:

Course Timing; Health Sciences Reasoning Test; Poster Presentations; Interrater Reliability; Interviews; Current Events; Peer Teaching; Chronic MRSA Infections

Brody Maack, PharmD, CTTS, BCACP



Assistant Professor of Practice/Ambulatory Care Clinical Pharmacist

Sudro Hall 118L; (701) 231-9781; brody.maack@ndsu.edu

Recent Publications

- Barnacle B, Strand M, Werremeyer A, **Maack B**, Petry N. Depression screening in diabetes care to improve outcomes: Are we meeting the challenge? Diabetes Educ. *In Press*.
- Werremeyer A, **Maack B**, Strand M, Barnacle M, Petry N. Disease Control Among Patients with Diabetes and Severe Depressive Symptoms. J Prim Care Community Health. 2016;7(2):130-134.
- Willborn R, Barnacle M, **Maack B**, Petry N, Werremeyer A, Strand M. Use of the 9-Item Patient Health Questionnaire for Depression Assessment in Primary Care Patients with Type-2 Diabetes. J Psychosoc Nurs Ment Health Serv. 2016;54(1):56-63.

Research Funding:

Grants obtained and administered at clinical practice site, Family HealthCare clinic:

- 2016-2017 ND Quits Cessation Expanded Grant: \$44,140
- 2016-2017 PartnerSHIP 4 Health Community Wellness Grant: \$4,000
- Baby & Me Tobacco Free (ND Department of Health) Grant: \$5,073

Current Projects / Collaborations

- Comprehensive Diabetes Program research project (at Family HealthCare): In collaboration with Drs. Mark Strand, Amy Werremeyer, Mykell Barnacle, Natasha Petry, Yeong Rhee and several NDSU student research assistants.
- Tobacco Systems Change (within ND chiropractic clinics): In collaboration with Drs. Kelly Buettner-Schmidt, Don Miller, Mary Larson, Megan Orr, Becky McDaniel and several NDSU student research assistants.

Research Keywords:

Diabetes; Depression; Medication therapy management

Marketa Marvanova, PharmD, PhD, CGP, BCPP



Chair & Associate Professor, Pharmacy Practice Department

Sudro Hall 118A; (701) 231-8079; marketa.marvanova@ndsu.edu

Recent Publications

- Marvanova M, Bainbridge J, Sunkaraneni S, Blum D, Phillips L, Chudasama V, Ludwig E, Fiedler-Kelly J. Dose resumption strategies following delayed/missed dose(s) of eslicarbazepine acetate (ESL) monotherapy, based on population pharmacokinetic-pharmacodynamic simulations of plasma and CSF eslicarbazepine concentrations. Epilepsy & Behavior. 2017
- Khan A, **Marvanova M**. Prediction Accuracy of Winter-Tozer Equations to Estimate Free Phenytoin Concentrations in Non-Critically III Hospitalized Patients. The Consultant Pharmacist. 2017.
- **Marvanova, M.** Drug-Induced Cognitive Impairment: Effect of Cardiovascular Agents. Mental Health Clinician. 2016;6(4):201–206.
- Marvanova, M. Introduction to Parkinson disease (PD) and its complications. Mental Health Clinician. 2016; 6(5): 229–235.
- Marvanova, M. Pharmacokinetics of Antiepileptic Drugs (AEDs). Mental Health Clinician. 2016;6(1): 8–20.

Research Funding:

- Marvanova, M. (PI), "Caring For Our Aging Population: Assessment of CPE in Chronic Disease Management Among Community Pharmacists in the Upper Midwest," Sponsored by NABP/AACP 2016 District V grant, \$3,000.00. (2016 2017).
- Marvanova, M. (PI), "Pharmacist-Led Community-Based Educational, Screening and Service Initiative for Stroke/TIA Risk Identification, Prevention and Care-Seeking in Fargo, North Dakota," Sponsored by NDSU College of Health Professions seed grant, North Dakota State University, \$2,500.00. (2016 2017).

Current Projects / Collaborations

- Assessment of CPE in the area of dementia and AD Management Among Community Pharmacists in the Upper Midwest
- Educational, Screening and Service Initiative for Stroke/TIA Risk Identification, Prevention and Care-Seeking in Fargo, ND
- Northern Plains Cognitive Enhancer Access Study

Research Keywords:

Epilepsy; Dementia; Alzheimer's disease; Pharmacists' knowledge; Parkinson's disease; Pharmacy education; Multiple sclerosis; Stroke

Donald R. Miller, PharmD, FASHP



Professor of Pharmacy Practice; Associate faculty in Public Health

Sudro Hall 118R; (701) 231-7941; Donald.Miller@ndsu.edu

Recent Publications

- Buettner-Schmidt K, **Miller DR**, Balasubramanian N. Electronic cigarette refill liquids: child-resistant packaging, nicotine content, and sales to minors. Journal of Pediatric Nursing. 2016;31:373-379.
- Strand M, Miller DR, Focken R. 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. 2016;8(1):1-6
- Loueng J, Fitz A, Maack B, **Miller DR**. Relation of two brief health literacy tools to correct prescription understanding, JAPhA. 2015;55:273-277.

Research Funding:

North Dakota Center for Tobacco Prevention and Control Policy. Chiropractic Practices: Tobacco Systems Change for Effective Cessation. Co-investigator (Kelly Buettner-Schmidt PI), \$281,669 (July 2016-June 2017).

Current Projects / Collaborations

Chiropractic Practices: Tobacco Systems Change for Effective Cessation. With Kelly Buettner-Schmidt (Nursing), Brody Maack (Pharmacy Practice), Mary Larsen (Human Nutrition & Exercise Science), Megan Orr (Statistics).

Research Keywords:

Tobacco use cessation; Public health; Health literacy; Pharmacy

Julia D. Muzzy Williamson, PharmD, CNSC



Assistant Professor of Pharmacy Practice & Pediatric Clinical Pharmacist-Sanford Health Fargo

Sudro Hall 118U; (701) 231-7501; julia.muzzy@ndsu.edu

Recent Publications

Parker W, Jang S, **Muzzy JD**, Cardone KE. Multidisciplinary views towards pharmacist-delivered MTM services in dialysis facilities. J Am Pharm Assoc. 2015;55(4)390-397.

Research Funding:

Current Projects / Collaborations

- Implementing New Guidelines Supporting Noninvasive Respiratory Management for the Premature Infants In The Delivery Room: A Quality Improvement Project. -Mohamed, Mohamed, MD, Kimberly Haug, APRN, CNP, Rebecca Lessard, APRN, CNP, Lisa Sandaker, RRT, Julia Muzzy, PharmD, Alison Becker, PA-C, MHS, William Bellas, DO-Sanford Health-Fargo, ND
- Pharmacy neonatal intensive care unit (NICU) discharge education program- Sydney Johnk PharmD, Carlina Grindeland PharmD BCPS-Sanford Health-Fargo, ND
- Pharmacist-Directed Dosing of Vancomycin in Neonates: A Pre/Post-Retrospective Quality Assessment- Elizabeth Olafson PharmD-Sanford Health-Fargo, ND

Research Keywords:

Pediatric nutrition; neonatal Intensive Care; Neonatal parenteral nutrition; intestinal failure associated liver disease; vitamin D supplementation

Lisa Narveson, PharmD



Assistant Professor of Practice & Oncology Pediatric Clinical Pharmacist-Sanford Health Fargo

Sudro Hall 118T; (701) 231-7502; lisa.narveson@ndsu.edu

Recent Publications

• Narveson L, Kathol E, Rockey M, Henry D, Grauer D, Neupane P. Evaluation of weekly paclitaxel, carboplatin, and cetuximab in head and neck cancer patients with incurable disease. *Medical Oncology*. 2016;33(10).

Current Projects

• Medication Use Evaluation of Rasburicase for Prophylaxis and Treatment in Inpatient and Outpatient Setting (Sanford Fargo/Roger Maris Cancer Center), Standardization of Pre-Medications for Chemotherapy (Sanford Fargo/Roger Maris Cancer Center), case report of potential rejection in organ transplant recipient who received PD-1 inhibitor for metastatic melanoma

Research Keywords:

Oncology; Hematology; Chemotherapy; Head and neck cancer

Cynthia A Naughton, PharmD, BCPS



Senior Associate Dean, College of Health Professions Associate Professor, Pharmacy Practice

Dean's Office, Sudro 123D; (701) 231-8487; cynthia.naughton@ndsu.edu

Recent Publications

- Naughton CA, Schweiger TA, Angelo LB, Bonner CL, Dhing CW, Farley JF. Expanding dress code requirements in the Doctor of Pharmacy program. Am J Pharm Educ. 2016;80(5) Article 74.
- **Naughton CA**, Friesner D. Correlation of P3 PCOA scores with future NAPLEX scores. Currents in Pharmacy Teaching and Learning. 2014;6:877-883.
- Naughton CA, Friesner D. Comparison of pharmacy students' perceived and actual knowledge using the pharmacy curricular outcomes assessment. Am J Pharm Educ. 2012;76(4): Article 63.

Research Funding:

- \$1500 Advance FORWARD Leadership Development Grant, ACE North Dakota Regional Leadership Forum, (2013) (PI)
- \$1000 "Public Health Impact of Community-based Cardiovascular Risk Screenings" (Co-PI) National Association of Chain Drug Stores Foundation Million Hearts 2013 Heart to Heart Community Health Fair Grant
- \$4500 NDSU, Faculty Senate Committee, Instructional Development Grant "Interprofessional Education" (2013) (Co-PI)

Current Projects / Collaborations

- Delivering pharmacy education in a study abroad experience (with David Scott, Dan Friesner, Kelly Haugen)
- Impact of interprofessional education on achievement of core competencies for interprofessional collaborative practice.

Research Keywords:

Interprofessional education, pharmacy education, curricular design and assessment, leadership, chronic disease management, patient-centered care

Lawrence A. Patnaude Jr., PharmD



Assistant Professor of Practice
Director, Experiential Outreach and Assessment
Director, Continuing Pharmacy Education

Sudro Hall 20A; (701) 231-5178; Lawrence.Patnaude@ndsu.edu

Recent Publications

None

Research Funding:

None

Current Projects / Collaborations

- Pharmacy Preceptor Continuing Education Programs and the Impact on Pharmacy Student Learning
- Longitudinal Learning Student Perspectives on the Integration of Clinical Case Studies and Continuous Quality Improvement Concepts Dr. Natasha Petry (PHRM 580 Pharmacotherapy Capstone and PHRM 570 Pharmacy Practice Improvement and Project Management)

Research Keywords:

Experiential education; Assessment; Pharmacy preceptors; Longitudinal learning

Natasha Petry, PharmD, BCACP



Assistant Professor of Practice, Pharmacy Practice Department, NDSU Medical Home Clinical Pharmacist, Outpatient Internal Medicine, Sanford Health

Sudro Hall 20D; (701) 231-6554; Natasha.Petry@ndsu.edu

Recent Publications

- Barnacle M, Strand MA, Werremeyer A, Maack B, Petry N. Depression screening in diabetes care to improve outcomes: Are we meeting the challenge? The Diabetes Educator. August 2016. doi:10.1177/0145721716662917.
- Werremeyer A, Maack B, Strand MA, Barnacle M, Petry N. Disease control among patients with diabetes and severe depressive symptoms. Journal of Primary Care & Community Health. 2016;7(2):130–134.
 doi:10.1177/2150131915627423.
- Willborn RJ, Barnacle M, Maack B, **Petry N**, Werremeyer A, Strand MA. Use of the 9-Item patient health questionnaire for depression assessment in primary care patients with type 2 diabetes. Journal of Psychosocial Nursing and Mental Health Services. 2015;54(1):56–63. doi:10.3928/02793695-20151109-01.

Research Funding:

Researcher: Integrated/Individualized/Intelligent Rx (PI: JC Denny); Implementing Genomics in Practice (IGNITE Network) National Institutes of Health 1U01HG007253 for \$3,704,516.00 (2013-2018)

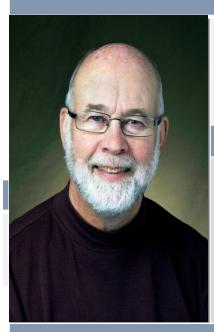
Current Projects / Collaborations

- Comprehensive Diabetes and Depression Program; NDSU Collaborators: Mark Strand, Brody Maack, Amy Werremeyer, Mykell Barnacle
- Precision Medicine Integrated Individualized Intelligent Prescribing (I3P): Collaborators at Sanford Health
- Implementing Genomics in Practice (IGNITE Network): CYP2C19 and Clopidogrel Outcomes: Collaborators at Sanford Health, Vanderbilt University, University of Florida

Research Keywords:

Pharmacogenomics; Precision medicine; Diabetes mellitus; Depression; Primary health care

David M. Scott, BPharm, MPH, PhD



Professor, Department of Pharmacy Practice and Public Health

Sudro Hall 118K; (701) 231-5867; david.scott@ndsu.edu

Recent Publications

- **Scott DM**: Ambulatory Care. In: McCarthy RL, Schafermeyer KW, Plake KS (editors). Chapter 9, Introduction to Health Care Delivery: A Primer for Pharmacists, 6th edition, Jones and Bartlett Publishers, Sudbury, MA, 2017.
- Scott DM. Health Care Delivery System in the United States. (Canadian Journal of Hospital Pharmacy (CJHP), 2016:69(4):306-315.
- **Scott DM**, Friesner DL, Rathke A., Doherty-Johnson S. Medication Error Reporting In Rural Critical Access Hospitals In The North Dakota Telepharmacy Project. J Health-Systems Pharm. 2014:7(1):58-67.

Research Funding:

Mark Strand, Principal Investigator, Teri Undem, Gabby Anderson, David Scott. Pharmacist's Delivery of Public Health Services Survey. District V NABP/AACP \$3,000 grant, May 1, 2015- June 30, 2016.

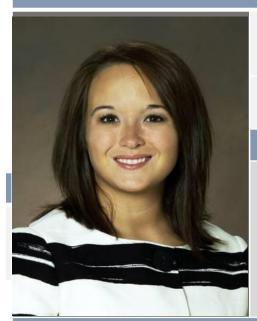
Current Projects / Collaborations

- List the Project Title(s), Collaborators & Institutional Affiliations here
- Study Abroad Ireland and London assessment
- Public health services assessment project
- ExamSoft assessment of health care delivery systems course

Research Keywords:

Patient-centered care; Pharmaceutical care; Pharmacy education; Public health; Rural health

Elizabeth Skoy, PharmD, RPh



Associate Professor of Practice

Sudro Hall 118E, (701) 231-5669, elizabeth.skoy@ndsu.edu

Recent Publications

- **Skoy E,** Frenzel J, Eukel H, Werremeyer A, McDaniel B. Use of an Auditory Hallucination Simulation to Increase Student Pharmacist Empathy. American Journal of Pharmaceutical Education. Accepted for publicationWerremeyer A, Aalgaard-Kelly G, **Skoy E.** Living with My Medication: Using Photovoice to explore patients' experiences with mental health medication. *The Mental Health Clinician*. 2016;6(3):142-153.
- **Skoy E**, Eukel H, Frenzel J, Schmitz T. Performance and Perceptions: Evaluation of Pharmacy Students' Consultation via Telepharmacy. Journal of Pharmacy Technology. 2015.

Research Funding:

- Skoy E, Werremeyer A, Strand M, Kirkwood M. My Reality: Humanizing Mental Illness through Stories and Images. North Dakota State University Impact Grant. September 2016. \$12,000
- Skoy E, Werremeyer A, Aalgaard Kelly G. Examining Mental Illness in College students at North Dakota State University with Photovoice. College of Pharmacy, Nursing, and Allied Sciences Clinical/Translational Grant RFP. November, 2014. \$2500

Current Projects / Collaborations

- The Use of Photovoice to Document the Reality of Living with Mental Illness (Werremeyer, Aalgaard-Kelly)
- Longitudinal Evaluation of Pharmacy Student Self-Assessment of Professionalism (Eukel, Frenzel, Skoy, Faure)
- Use of Auditory Hallucination Simulation to Increase Student Pharmacist Empathy (Eukel, Frenzel, Werremeyer, McDaniel)
- Use of a Poverty Simulation to evaluate health care professional students on attitudes towards the poor. (Goplen, Eukel, Frenzel)

Research Keywords:

Simulation; Empathy; Teaching innovation; Pharmaceutical care laboratory; Photovoice

Mark A. Strand, PhD, CPH



Professor, Pharmacy Practice

Sudro Hall 118S; 701-231-7497; mark.strand@ndsu.edu

Recent Publications

- **Strand MA**, Tellers J, Patterson A, Ross A, and Palombi L. The achievement of public health services in pharmacy practice: A literature review. Research in Social and Administrative Pharmacy. 2015;12(2):247-256.
- Barnacle M, Strand MA, Werremeyer A, Maack B, and Petry N. Depression screening in diabetes care to improve outcomes: Are we meeting the challenge? The Diabetes Educator. 2016;42(5).
- **Strand MA**, Abrons JP, Bullock KC, Conry JM, Covvey JR, DiPietro Mager NA, Goad JA, Golchin N, Patel RV, and Truong HA. Challenges and opportunities for integrating public health into pharmacy curricula. American Journal of Pharmaceutical Education. 2016;80(5):113.

Research Funding:

- Comprehensive Diabetes and Depression Program (CDDP) Intervention Model, Bush Foundation, \$10,000, 2016-18.
- Pharmacist's Delivery of Public Health Services Survey, NABP, \$3000, 2015-17.
- Development of Metabolic Syndrome in Middle-aged Persons in China, Evergreen Foundation, \$1280, 2016.
- Pathway to Health (PATH): A Lifestyle Intervention to Prevent Diabetes in High-risk Chinese Women, International Diabetes Federation, \$65,000, 2013-15.
- Quantifying and qualifying effects of road dust created by energy development travel on roads abated with techniques to control road dust, NDSU Office of Research and Creativity Activity, \$59,580, 2014-16.

Current Projects / Collaborations

- CDDP, Family HealthCare, Fargo, ND
- Dust impacts on respiratory health, Department of Soil Science, NDSU.
- Pathway to Health, University of Texas at San Antonio

Research Keywords:

Epidemiology; Chronic disease; Diabetes; Public health; Global health

Teri Undem, BPharm



Director, Advanced Pharmacy Practice Experiences Lecturer, Pharmacy Practice

Sudro Hall 20C; (701) 231-6578; teri.undem@ndsu.edu

Recent Publications

Scott D, Strand MA, **Undem T**, Anderson, G, Clarens, A, and Liu XY. Assessment of Pharmacists' Delivery of Public Health Services in Rural and Urban Areas in Iowa and North Dakota. *Pharmacy Practice*. 2016;14(4):836-846.

Research Funding:

2014-2015 District V Competitive Grant \$3000 "Assessing Pharmacists Contribution to Public Health". (Research Team member)

Current Projects / Collaborations

UND Rural Health IPE Initiative

Research Keywords:

Public health; Essential public health services; Patient-centered care; Pharmaceutical care

Amy Werremeyer, PharmD, BCPP



Associate Professor of Practice & Psychiatric Clinical Pharmacist-Sanford Health Fargo

Sudro Hall 118H; (701) 231-7603; amy.werremeyer@ndsu.edu

Recent Publications

- **Werrremeyer A**, Aalgaard-Kelly G, Skoy E. Living with My Medication: Using Photovoice to explore patients' experiences with mental health medication. *The Mental Health Clinician*. 2016;6(3):142-153.
- **Werremeyer A**, Strand M, Maack B, Barnacle M, Petry N. Disease Control Among Patients with Diabetes and Severe Depressive Symptoms. *J Prim Care Community Health*. 2016;7(2):130-34.
- Willborn R, Barnacle M, Maack B, **Werremeyer A**, Strand MA. Utilization of the 9-Item Patient Health Questionnaire for Depression Assessment in Type-2 Diabetic Primary Care Patients. *J Psychosoc Nurs Ment Health Serv*. 2016;54(1):56-63.

Research Funding:

- Skoy E, Werremeyer A, Strand M, Kirkwood M. My Reality: Humanizing Mental Illness through Stories and Images. North Dakota State University Impact Grant. September 2016. \$12,000
- Skoy E, Werremeyer A, Aalgaard Kelly G. Examining Mental Illness in College students at North Dakota State University with Photovoice. College of Pharmacy, Nursing, and Allied Sciences Clinical/Translational Grant RFP. November, 2014. \$2,500

Current Projects / Collaborations

- Impact of Patient Medication Education Groups (PMEGs) on psychiatry inpatients' outcomes
- "Living with my Medication" a Photovoice intervention study
- Impacts and treatment of co-morbid diabetes and depression

Research Keywords:

Patient education as topic/methods; Patient medication knowledge; Medication adherence; Pharmacy service, Hospital/organization & administration Major depressive disorder; Diabetes mellitus type 2