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

- 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](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.

Research Keywords:

Introductory pharmacy practice experiences (IPPE); Experiential education; Public health; Problem solving; Capstone
Research Interests:
Provide a two or three sentence summary of key research interests here.

Dan Cernusca, PhD
Assistant Professor of Practice & Instructional Designer
Sudro Hall 118P; (701) 231-7729; Dan.Cernusca@ndsu.edu

Recent Publications


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


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.


Research Funding:

Current Projects /Collaborations


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


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


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


### 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
Research Interests:
Provide a two or three sentence summary of key research interests here.

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

Research Funding:


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


Research Funding:


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


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
**Research Interests:**

Provide a two or three sentence summary of key research interests here.

**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


### 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


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


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


Research Funding:


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 publication


Research Funding:


• 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


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.
- 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

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
Research Interests:

Provide a two or three sentence summary of key research interests here.

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


Research Funding:

• 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