PROFESSIONAL SUMMARY

I am an experienced and skilled leader, administrator, clinician, educator and researcher, committed to quality pharmacy education, research and patient-centered care grounded in sound evidence and attained through effective, inter-professional and multi-disciplinary teamwork, particularly in the areas of geriatrics, neurological and psychiatric disorders.

LEADERSHIP, TEACHING AND SUPERVISION PRIORITIES

- Apply sound analytical, organizational, and decision-making concepts to practical problem-solving.
- Be a valuable member of the team, especially when team leader.
- Ensure evidence drives performance improvement efforts.
- Make expectations clear.
- Participate while teaching and teach while leading.
- Communicate clearly, effectively and with sensitivity.
- Respect diversity and build health equity among diverse populations
- Pay attention to detail to maximize effectiveness and efficiency.
- Demonstrate expertise and develop mastery.
- Build community and a culture of positive change.
- Foster creativity and innovation.
- Maintain an environment open to criticism and innovation.
- Safeguard the worth of every individual.
- Utilize resources effectively.
- Work to ensure successful cooperative relationships and partnerships.
- Ensure priorities support strategic, accreditation and mission-driven goals.
- Utilize technology wisely to enhance program outcomes.

PROFESSIONAL EXPERIENCE

COLLEGE OF HEALTH, UNIVERSITY OF MONTANA, MISSOULA, MT

Dean, Skaggs School of Pharmacy (SSOP)

February 2020-present

Chief academic officer with leadership, strategic, administrative, and academic responsibility
for the School of Pharmacy and its programs (\$12-million annual budget): PharmD, PhD, and
PharmD dual-degree programs including personnel, financial, recruitment and marketing,
students and curricular matters.

• Major Accomplishments:

- O Led the School of Pharmacy through the changing learning environment of the COVID-19 pandemic by maintaining continuity of experiential/clinical and didactic curricular components and competency requirements for profession and graduate students to progress in the programs and graduate on time.
- Led strategic management to increase return-on-investment including structured faculty development in scholarship/research and teaching as well as learning and assessment.
- Led activities/procedures increasing capacity of the School in diversity, equity and inclusion and contributed to associated, targeted efforts within the School and across the College.
- Provided oversight and guidance to the retail pharmacy operated by the School of Pharmacy and efforts to provide quality COVID-19 vaccination services on the campus and for MT residents.
- Transitioned the School to a new budget model and functional autonomy from the College and aligned efforts with particular fiscal resources including instructional budget (general funds and program tuition), UM foundation accounts and unrestricted accounts, endowment funds, Research and SPABA accounts, and designated funds.
- Provided continued efforts to establish School of Pharmacy autonomy from the College of Health for fiscal, reporting and personnel management.
- o Restructured and optimized School of Pharmacy leadership to improve oversight, communication and interconnection of individual units.
- Improved accreditation ACPE 2016 Standards to maintain accreditation for full 8-year term and improved all aspects of operations and fiscal resources of the School of Pharmacy.
- o Implemented performance-based annual faculty, staff and administrator (chairs and directors) evaluations.
- o Guided curricular management and assessment including alignment of teaching assignments and both human and fiscal resources.
- o Advanced School-wide policy development and revisions to foster educational performance.
- o Promoted and managed strategic alignment/realignment of faculty, staff, and fundraising activities for School and College goal attainment.
- Developed and negotiated cooperative and practice site agreements, business affiliation agreements, and practice site payment negotiations, and innovated strategic marketing and student recruitment initiatives.

Dean, Skaggs School of Pharmacy (SSOP) (continued)

- Developed new strategic and action plans on recruitment and marketing which included creating the GrizRx Assurance program, establishing and raising scholarship funds for this new initiative, creating and initiating a new academic merit-driven program to attract out-of-state students.
- o Increased Pharm.D. enrollment by 15% and doubled non-resident student enrollment in Fall 2021.
- Established articulation agreements with three out-of-state higher education institutions and two in-state institutions as feeding programs for the PharmD program.
- o Initiated new activities to promote diversity, equity and inclusion in the School of Pharmacy and increase recruitment of students and faculty from underrepresented groups.
- Revised the School of Pharmacy External Advisory bylaws and updated the roles to rejuvenate collaboration between board members and School and strengthen our connections with local communities and regions.
- Developed a School of Pharmacy Newsletter for alumni and donors (3x annually) to foster engagement.
- Restructured and proposed a new program fee to ensure sufficient resources for quality improvement and delivery of quality PharmD education, among other things.
- O Worked with the Director of Academic Affairs and Assessments and the SSOP Curriculum and Assessment Committees to establish procedures for continuous assessment and quality assurance processes of PharmD curriculum delivery and integration and increasing communication and collaboration in the School.
- o Worked with the Chairs in the School of Pharmacy to ensure equitable workload allocation, strategic hiring process and the strategic allocation and use of resources in the School to support the high priority needs aligned with the strategic plan.
- Worked with the Chair of the Biomedical and Pharmaceutical Sciences to create processes and expectations for the graduate programs offered in the School to provide better support to students but also to identify possibilities for improvement and growth.
- Worked with the Chair of the Biomedical and Pharmaceutical Sciences to establish a new undergraduate degree, BS in Pharmaceutical Sciences (non-professional degree), that was launched in Fall 2021.
- o Provided support and mentorship to the Chairs in the School.
- Fostered partnerships across the College of Health and all six accredited health profession schools and created new partnerships to facilitate philanthropic gifts to the School and College.
- Worked diligently and collaboratively to support the establishment and launch of the Skaggs Institute for Health Innovation which will provide outreach and clinical services, including precision medicine, within tribal communities and rural regions of Montana.
- Created policies/procedures to increase inclusion and equity in the College: 360-degree chair evaluation process and instrument.
- Received an excellent review from the College and Provost after 12 months of service as
 Dean of the School of Pharmacy and Acting Dean of the College of Health.

Acting Dean, College of Health (CoH)

July 2020-October 2021

• Leadership, administrative and academic oversight of the College for a \$30-million annual budget from diverse accounts and funding sources, six health professions and fully accredited Schools (School of Pharmacy, School of Public and Community Health Sciences, School of Physical Therapy and Rehabilitation Science, School of Speech, Language and Hearing & Occupational Sciences, School of Social Work, and School of Integrative Physiology and Athletic Training) and UMHM/AHEC/IPE collaborative.

• Major Accomplishments:

- Led the School of Public and Community Health Sciences, School of Physical Therapy and Rehabilitation Science, School of Speech, Language and Hearing & Occupational Sciences, School of Social Work, and School of Integrative Physiology and Athletic Training through the changing learning environment of the COVID-19 pandemic by maintaining continuity of experiential/clinical and didactic curricular components and competency requirements for undergraduate, profession and graduate students to progress in the programs and graduate on time.
- Led activities/procedures increasing capacity of the College in diversity, equity and inclusion and contributed to associated, targeted efforts within the Schools and across the College.
- Transitioned the College to a new budget model and aligned efforts with particular fiscal resources including instructional budget (general funds and program tuition), UM foundation accounts and unrestricted accounts, endowment funds, Research and SPABA accounts, and designated funds.
- Restructured College Dean's Office and administrative support to better serve the College's strategic and operational needs.
- o Promoted and managed strategic alignment/realignment of faculty, staff, and fundraising activities for Schools/College goal attainment.
- O Worked with the University online/distant programing (UM Online) and the College of Health units/Schools to identify opportunities for new programming and program expansions for distance education. As an outcome, a new online MSW program was launched in Fall 2021 in collaboration with Wiley and additional staggered and expanded programs in the School for Speech, Language and Hearing an Occupational Sciences will be launched in Spring 2022.
- Provided support and mentorship to the Chairs in the College of Health, especially to those in earlier stages of their careers.
- o Completed space audit and allocated new space to growing programs in the College
- Fostered partnerships across the College of Health and all six accredited health profession schools and created new partnerships to facilitate philanthropic gifts to the School and College.
- Created policies/procedures to increase inclusion and equity in the College: 360-degree chair evaluation process and instrument, election/re-election procedure for Chairs in the CoH.
- Received an excellent review from the College and Provost after 12 months of service as Dean of the School of Pharmacy and Acting Dean of the College of Health.

Professor with Tenure

February 2020-present

- Teaching responsibilities for the therapeutic topics in management of neurological disorders.
- Scholarship productivity in the area of scholarship of teaching.
- Service to the university, college, school and profession.

COLLEGE OF HEALTH PROFESSIONS, SCHOOL OF PHARMACY, NORTH DAKOTA STATE UNIVERSITY, FARGO, ND

Professor with Tenure Associate Professor

July 2019-January 2020 July 2015-June 2019

- Development/Coordination of interprofessional education (IPE) simulation and interactions with University of North Dakota School of Medicine and Health Sciences in Grand Forks, ND.
- Course Coordinator and Instructor in the Pharm.D. curriculum dealing with pathophysiology, etiology, clinical manifestation, diagnostic, and management of neurological and psychiatric disorders, and pain management.
- Leadership in development of co-curriculum program structure, mapping disease state coverage within the curriculum, and creation of a new pharmacotherapy laboratory course designed to enhance clinical application and reasoning skills as part of the pharmacists' patient care process.
- Development and execution of IPE simulated activities and interactions with Pharm.D. students (NDSU) and medical students (UND).
- Co-PI, Northern Plains Pharmacists' CPE Study (five states)
- Development of training in dementia-related care for pharmacists in North Dakota.
- Community-based initiative in stroke/TIA recognition, prevention, and education in North Dakota.

Chair of the Pharmacy Practice Department

2015-2020

- Academic and leadership oversight of 28 full-time faculty, 2 part-time faculty, 2 PGY-1 residency programs, the Office of Experiential Education, and the Office of Continuing Pharmacy Education.
- Strategic planning
- Workload and teaching assignments
- Annual staff and faculty evaluations
- ACPE interim reports contribution and authorship on reports for select 2016 ACPE standards (Standards 4, 9, 10, 11 and 20)

NORTHWESTERN UNIVERSITY, FEINBERG SCHOOL OF MEDICINE, DEPARTMENT OF NEUROLOGY, CHICAGO, IL (concurrent appointment)

Adjunct Associate Professor of Neurology

2014-2018

- Neuropsychopharmacology education for neurology medical residents
- Speaker at Neurology Grand Rounds: Epilepsy.
- PI, Medication Errors in Hospitalized Parkinson Disease Patients.
- Research supervision/mentoring, 4th year neurology medical residents, fellow and undergraduate students: leadership for quality improvement initiatives associated with Inpatient management of Parkinson disease.
- Therapeutic updates for neurologists and epileptologists, and members of clinical epilepsy team.

COLLEGE OF PHARMACY, CHICAGO STATE UNIVERSITY, CHICAGO, IL

Associate Professor (Neurology and Psychiatry), Pharmacy Practice

2012-2015

- Clinical Course Coordinator and Instructor for clinical sections of the Pharm.D. curriculum dealing
 with management of neurological, psychiatric disorders, pain management, and neuropsychiatric
 issues in older adults.
- Specialist in neuropsychiatry and comprehensive management of epilepsy and epilepsy syndromes, headache disorders, and neurodegenerative disorders: amyotrophic lateral sclerosis, multiple sclerosis, dementia/neurocognitive disorders, primary parkinsonism and Huntington disease.
- Instructor in Disease and Medication Therapy Management (DMTM) II (interactive lectures and case studies in the area of neuropathic pain, geriatric psychiatry).
- Instructor in physical and patient assessment course and clinical conference sessions in internal medicine.
- Course Development/Instructor of specialty elective course/s in neurology and psychiatry for third-year pharmacy students: Management of Brain Degenerative Disorders.
- Mentor for new pharmacy faculty/educators in area of research teaching and service.
- PI, Health disparities in assessment of access to and prescribing in community dwelling Parkinson disease patients within NPF Centers of Excellence.
- Co-PI, Chicago Neurological Medication Availability Study.
- Co-PI, Northern Plains Cognitive Enhancer Access Study.
- Co-PI, Appalachian Rural Pharmacy Disparities Study.

RUSH UNIVERSITY MEDICAL CENTER (RUMC), CHICAGO, IL. (concurrent appointment)

Clinical Pharmacy Specialist, Neurology (2013-2015);

- Provide inpatient and outpatient neurologic and psychiatric clinical services for the RUMC Epilepsy Center.
- Pharmacy clinical consult service for the RUMC General Neurology (inpatient/outpatient), Multiple Sclerosis, the Memory Clinic and multiple sclerosis specialty pharmacy services.
- Authored monographs and applications for inpatient formulary inclusion: Ampyra© (2014), Fycompa© (2014), Aptiom© (2015), & Amytal© (2015).
- Primary preceptor for hospital-based IPPEs & elective APPEs in advanced neuropsychiatry.
- Facilitate RUMC pharmacy PGY1 resident's discussion topics in neurology.
- Provide medication education for neurology practitioners (neurologist, epileptologists, neurology residents and fellows), nursing staff (RN, NP), and members of epilepsy support group.
- Capstone Research Mentor for fourth-year pharmacy students.
- Preceptor/Clinical Pharmacy Specialist at Rush University Medical Center (RUMC), Department of Neurology.

SCHOOL OF PHARMACY, MIDWAY COLLEGE, PAINTSVILLE, KY

Assistant Professor, Pharmacy Practice

2011-2012

- Bridging biomedical and pharmaceutical sciences with clinical sciences and application.
- Clinical Course Coordinator for neurological disorders, pain management, psychiatric disorders, addiction, basic nutrition, metabolic and endocrine disorders, kidney diseases, acid/base balance disorders, anemia, women's reproductive health, patient care delivery and patient safety.
- IPPD Case-Based Skills Lab 2 and 3.
- Coordinator/Trainer for Pharmacy-Based Immunization Delivery Program.
- Creator and Director of Women's Health Track.
- Co-chair of Department of Pharmacy Practice Curriculum Development Committee.
- Scientific lead for prescription drug abuse working group.
- Mentor for new pharmacy faculty/educators.

HEALTH SERVICES, VANDERBILT UNIVERSITY SCHOOL OF MEDICINE, NASHVILLE, TN (concurrent appointment)

Assistant Clinical Professor of Medicine, Clinical Pharmacy

2009-2013

- Clinical Pharmacist/Researcher on Harvard-Vanderbilt PILL-CVD Study and Geriatric Dashboard Study
- Founding Member, Medication Use that is Safe and Effective (MUSE) group
- Member, Geriatrics and Gerontology Interest group
- Instructor, CPE program for clinical pharmacists at Vanderbilt University Medical Center
- Consultant on animal models of Parkinson disease

COLLEGE OF PHARMACY, BELMONT UNIVERSITY, NASHVILLE, TN

Assistant Professor, Clinical Pharmacology

2007-2011

2009-2011

- Bridging biomedical and pharmaceutical sciences with clinical sciences, application and patient centered-care.
- Course Director/Instructor for Clinical and Pharmaceutical Science Courses (infectious diseases, neurological and psychiatric disorders, pharmacogenomics, clinical microbiology and immunology, medical gerontology and geriatrics, emerging and reemerging Infectious disease in the US, advanced care management for patient with Parkinson and Alzheimer disease).
- Coordinator/Trainer for Pharmacy-Based Immunization Delivery and Web-Based Immunization Training programs for pharmacy students and pharmacy preceptors.
- Faculty representative and group coordinator of External Advisory Board for Pharmacotherapy Curricular Concentration.
- Nominated for Belmont's Chaney Distinguished Professor Award.
- Founding Member, College of Health Sciences Interdisciplinary Simulation Committee.
- Member of Faculty Senate at Belmont University.
- Mentor for new and junior pharmacy faculty/educators in area of pharmacy teaching and learning.

VANDERBILT UNIVERSITY MEDICAL CENTER, NASHVILLE, TN (concurrent appointment)

Clinical Pharmacy Specialist, inpatient/outpatient geriatric services

- Precepting pharmacy students during their geriatric medicine services.
- Conducted comprehensive medication review and counseling.
- Participated on multi-disciplinary patient rounds team.
- Consult and drug information service.

KROGER PHARMACY, BRENTWOOD, TN

Pharmacist 2006–2007
Certified Pharmacy Immunizer 2007-2011

SCHOOL OF MEDICINE, VANDERBILT UNIVERSITY, NASHVILLE, TN

Medical Research Fellow (Department of Pharmacology)

2005-2006

• CNS research studies targeted at development of new therapeutic interventions for neurodegenerative and psychiatric disorders using various animal models. The primary focus was on development and pre-clinical testing and evaluation of agents acting on metabotropic glutamatergic receptors, mGluR 4, 5 and 8.

Medical Research Fellow (Department of Anesthesiology)

2004-2005

- Research in the field of Parkinson's disease and alpha-synucleinopathies using cell cultures, transgenic *C. elegans*. The main focus was identification of pathways and networks associated with vulnerability of dopaminergic neurons and screen for neuroprotective agents.
- Laboratory personnel, projects and supply management.
- Supervision of graduate and undergraduate students.
 - o Alisha Joy Russel (Ph.D. neuroscience rotation); 2004
 - o Brannon Verret (Ph.D. neuroscience rotation); 2005
 - o Cara Roxanne McManus (NSC 292); 2005
 - o David Lund (Ph.D. neuroscience rotation); 2004
 - o Jennifer Andersen (Princeton University, Summer Science Academy); 2005
 - Jennifer Edl (Ph.D. neuroscience rotation); 2004
 - o Jennifer Reiner (Ph.D. neuroscience rotation), 2005
 - Katherine Delisio (summer student); 005
 - o Katherine Lee Fallen (summer student); 2005
 - o Katrina A. Mattingly (Meharry Medical College, Summer COE grant); 2005
 - o Kristen Deboise (NSC 292); 2005
 - Michelle Fullard (NSC 292); 2004-2005
 - o Mika Garret May (graduate student); 2004-2005
 - Tiffany Feltman (summer student); 2004
 - o Veronica Nicole Patterson (work study); 2005
 - o William Paul Nobis (MD/Ph.D. neuroscience rotation); 2005

SANOFI-AVENTIS, VITRY SUR SEINE, FRANCE

Visiting Research Fellow

2001

• Neurogenomic research study with human and non-human primate brain tissue.

SCHOOL OF PHARMACY, UNIVERSITY OF EASTERN FINLAND, KUOPIO, FINLAND

Medical Researcher

2000-2004

- Neurogenomics and neuropharmacology research in the field of Parkinson's disease and dementias in collaboration with Merz Pharmaceuticals, LLC.
- Organizer and lecturer of various undergraduate and graduate level courses.

SCHOOL OF PHARMACY, CHARLES UNIVERSITY, CZECH REPUBLIC

Doctoral Clinical and Research Fellow

1999-2003

1st MEDICAL COLLEGE HOSPITAL PHARMACY, PRAGUE, CZECH REPUBLIC

Clinical Pharmacy Fellow, Psychiatry and Neurology

1999

• Inpatient and outpatient clinical services

EDUCATION / TRAINING

NORTHWESTERN UNIVERSITY, FEINBERG SCHOOL OF MEDICINE, PARKINSON'S DISEASE AND MOVEMENT DISORDERS CENTER, CHICAGO, IL

American Society of Consultant Pharmacists Pharmacotherapy Traineeship (2010)

VANDERBILT UNIVERSITY, SCHOOL OF MEDICINE, NASHVILLE, TN

Medical Research Fellow in Neuropsychopharmacology (2004-2006)

UNIVERSITY OF EASTERN FINLAND (formerly known as KUOPIO UNIVERSITY), SCHOOL OF PHARMACY, A.I. VIRTANEN INSTITUTE FOR MOLECULAR SCIENCES, KUOPIO, FINLAND

Doctor of Philosophy in Neuropharmacology (2004)

• Dissertation: "Genomic approaches to understand the effects of neuroprotective drugs and validity of nonhuman primate models of neurodegenerative diseases."

SCHOOL OF PHARMACY, CHARLES UNIVERSITY, HRADEC KRALOVE, CZECH REPUBLIC

Doctor of Philosophy in Pathological Neurobiochemistry and Xenobiochemistry (2003)

• Dissertation: "Caenorhabditis elegans, microarrays and expressed sequence tags in genomic neurobiochemistry."

Doctor of Pharmacy (2003)

Master of Science in Pharmacy (1999)

• Thesis: "Physiological regulation of tyrosine hydroxylase: influence by atipamezole."

CURRENT LICENSES / CERTIFICATIONS / TRAININGS

- 2018 Pain Management (American Society of Health-System Pharmacists)
- 2017 Pain Management (Arizona Pharmacy Association)
- 2017 Self-Study Training Workshop (Accreditation Council for Pharmacy Education)
- 2016 Mental Health First Aid USA Certificate (National Council For Behavioral Health)
- 2015 Chairs and Academic Administrators Management Program (Academy for Academic Leadership)
- 2014 Board Certified Psychiatric Pharmacist (BCPP) (recertified in 2020)
- 2014 Anticoagulation Therapy Management for Pharmacists (University of Florida College of Pharmacy)
- 2013 Physical Assessment for the Pharmacist Clinician (University of New Mexico College of Pharmacy)
- 2013 The Pharmacist & Patient-Centered Diabetes Care (APhA)
- 2012 Registered Pharmacist, Illinois
- 2012 American Heart Association (AHA) Basic Life Support (BLS) for Healthcare Providers
- 2012 Board Certified Geriatric Pharmacist (BCGP) (recertified in 2020)
- 2010 Immunization Training for Pharmacists, Immunizer and Trainer (Drug Store News)
- 2010 Parkinson's Disease Pharmacotherapy Traineeship (ASCP Foundation)
- 2008 Certified Immunization Trainer (APhA)
- 2008 Registered Pharmacist, Tennessee
- 2007 Certified Immunizer (APhA)

HONORS AND AWARDS

- 2021 The #1 article download in January 2021 for the Senior Care Pharmacist
 - The article entitled "Treatment Approach and Modalities for Management of Depression in Older Adults."
- 2019 Fellow of the American Society of Consultant Pharmacists (FASCP)
- 2018 Best Poster/Original Research Study (3rd place) American College of Clinical Pharmacy (ACCP) Virtual Poster Symposium
 - o The research paper entitled "Benefits of Structured Interactive Workshop in Alzheimer's and Parkinson's Disease as an Add-on to Didactic Lectures for Third-Year Pharmacy Students."
- 2018 The Clinical Teacher's annual I.M.P.A.C.T. Award (Improving Practitioners as Clinical Teachers)
 - o The article entitled "Collaborating on medication errors in nursing" was selected as the top downloaded paper with a significant contribution to the field.
- 2017 Best Poster/Original Research Study (3rd place) ACCP Virtual Poster Symposium
 - o The research paper entitled "Can Use of the Standard and Revised Winter-Tozer Formula Accurately Predict Free Phenytoin Concentrations in Non-Critically Ill Hospitalized Patients?"
- 2016 Apple Polisher, North Dakota State University
 - Program honors NDSU faculty, and staff who have made an exceptional impact on a student's college experience
- 2015 Teacher of the Year P3 class, Chicago State University College of Pharmacy
- 2015 The Most Enthusiastic Professor, Class 2015, Chicago State University College of Pharmacy
- 2014 Teacher of the Year P1 class, Chicago State University College of Pharmacy
- 2009 Nomination for Belmont's Chaney Distinguished Professor Award
- 2000 Aventis/Embassy of France ("Prix de Pharmacie 2000"), International research competition "Prize for Pharmacy", Certificate of Merit.

PROFESSIONAL MEMBERSHIPS

- American Association of Colleges of Pharmacy (AACP)
- American Pharmacists Association (APhA)
- College of Psychiatric and Neurologic Pharmacists (CPNP)
- American Society of Consultant Pharmacists (ASCP)
- The Rho Chi Delta Xi

TEACHING EXPERIENCE

Course Instructor, Therapeutics IV (PHAR 554), Lectures (12 hours) in Epilepsy/Seizure Disorders, Dementia and Alzheimer Disease, Parkinson Disease; development and grading of the individual homework assignment; and development of assessment items for exam 4, University of Montana Skaggs School of Pharmacy, Spring 2022.

Course Instructor, Therapeutics IV (PHAR 554), Lectures (10 hours) in Epilepsy/Seizure Disorders, Dementia and Alzheimer Disease, Parkinson Disease; development and grading of the individual homework assignment; and development of assessment items for exam 4, University of Montana Skaggs School of Pharmacy, Spring 2021.

Case Developer, Integrated Studies VI (PHAR 572), two complex clinical cases and detailed instructor key/manual (Epilepsy case and Parkinson disease case), University of Montana Skaggs School of Pharmacy, Spring 2021.

Course Instructor, NAPLEX and MPJE Review APPE (PHAR 588), Lectures (8 hours) in Epilepsy/Seizure Disorders, Multiple Sclerosis, Parkinson Disease, Dementia and Alzheimer Disease, University of Montana Skaggs School of Pharmacy, April 2020.

Organizer and Facilitator of Pharmacists' Panel (9 different pharmacy practice sites practitioners) for P1 class (N=76) and non-pharmacist's pharmacy program faculty (N=10), NDSU School of Pharmacy, Fall 2019.

Course Coordinator/Instructor, Introduction to Pharmacy Practice (PHRM 350), NDSU School of Pharmacy, Fall 2019.

Course Instructor, Management of Neurologic and Psychiatric Disorders (PHRM 536), NDSU School of Pharmacy, Fall 2015, 2016, 2017, 2018, 2019.

Co-Creator/Coordinator/Facilitator, high-fidelity clinical simulation on unintentional opioid overdose in emergency department for second-year medical students from University of ND and third-year pharmacy students from NDSU, UND Simulation Center, Grand Forks, April 9, 2018, April 15, 2019.

Interdisciplinary discussion panelist for 2nd year medical students from University of North Dakota (UND) regarding opioid use and overdose, pain management and opioid use disorder, UND School of Medicine and Health Sciences, Grand Forks, ND, March 27, 2017; March 26; 2018; April 8, 2019.

Coordinator/Facilitator, "Interprofessional Interaction Day" second-year medical students from University of ND and third-year pharmacy students from NDSU, UND School of Medicine and Health Sciences, Grand Forks, April 8, 2019.

Course Coordinator/Instructor, Pathophysiology II (PHRM 341), Neurologic and Psychiatric Disorders, NDSU School of Pharmacy, Spring 2017, 2018, 2019.

Course Instructor, Pharmacotherapy Capstone (PHRM 580), Case- and team-based learning sessions on advanced cases of epilepsy and Parkinson disease, NDSU School of Pharmacy, Spring 2017, 2018, 2019.

Course Instructor of Neurology section, Pharmacotherapy Lab (PHRM 545L), NDSU School of Pharmacy, Fall 2018.

Instructor, ND Pharmacy-Based Immunization course (PHRM 565), immunization skill check for P2 Pharm.D. students (3 hours), NDSU School of Pharmacy, February 21, 2018; February 21, 2019.

Course Coordinator, Pharmacy Practice Improvement and Project Management (PHRM 570), NDSU School of Pharmacy, Spring 2018.

TEACHING EXPERIENCE (Continued)

Facilitator, high fidelity simulations on opioid overdose and debriefing sessions, instruction of second year medical students, UND School of Medicine and Health Sciences, Grand Forks, ND, April 5, 2017.

Instructor, ND Pharmacy-Based Immunization Delivery Program-Skill Check Section for P2 (PHRM 565) and P3 (PHRM 565) Pharm.D. students (4 hours), NDSU School of Pharmacy, February 16, 2017.

Preceptor, Advanced Professional Practice Experience (APPE) in academia/administration, NDSU School of Pharmacy, Fargo, ND, January-February 2017.

Course Coordinator/Instructor, Human Pathophysiology II (PHRM 341), Neurologic, Psychiatric, Cardiovascular, and Hematologic Disorders, NDSU School of Pharmacy, Spring 2016.

Course Instructor, Introduction to Clinical Pharmacology: Clinical Concepts and Applications in Pharmacokinetics, Pharmacodynamics and Pharmacogenomics (3 hours) in Advanced Nursing Pharmacology (NURS 831), NDSU School of Nursing, Nursing Doctorate Program, September 14, 2015.

Instructor, Psychopharmacology (4 hours), Northwestern University Feinberg School of Medicine, educational series for PGY2-PGY4 neurology residents, March 13 & 20, 2015.

Educational session for registered nurses on clinical pharmacology of antiepileptic drugs (3 hours), Rush University Medical Center (RUMC) Epilepsy Center, February 6, 2015

Course Instructor, lecture with problem-based learning: 1) Management of epilepsy in older adults; 2) Management of neuropsychiatric issues in older adults, 3) Management of neuropathic pain, Disease and Medication Therapy Management (DMTM), Chicago State University College of Pharmacy, Spring 2014, 2015.

Course Instructor/Lab Facilitator, Patient Assessment (3 cr.), Chicago State University College of Pharmacy, Spring 2014, 2015

Course Coordinator/Instructor, Management of Brain Degenerative Disorders (multiple sclerosis, amyotrophic lateral sclerosis, dementia/neurocognitive disorders, parkinsonism; & Huntington's disease (2 cr., elective course), Chicago State University College of Pharmacy, Spring 2013, 2014, 2015.

Course Coordinator/Instructor, Drug Action, Structure, and Therapeutics VI - CNS II and Acute Care (4 cr.), Chicago State University College of Pharmacy, Fall 2012, 2013, 2014.

Course Coordinator/Instructor, Drug Action, Structure, and Therapeutics V-Gastrointestinal, Immunological, and CNS I (4 cr.), Chicago State University College of Pharmacy, Fall 2012, 2013, 2014

Preceptor, Advanced Professional Practice Experience (APPE) in neuropsychiatry, RUMC Epilepsy Center, Chicago, IL, 2014-2015.

Preceptor, Research Advanced Professional Practice Experience (APPE) in neuropsychiatry, Chicago State University College of Pharmacy, Chicago, IL, 2014-2015.

Preceptor, Professional Practice-VI (IPPE 6), RUMC Epilepsy Center, Chicago, IL, 2014-2015.

Facilitator/Instructor in discussion topic titled "Management of Parkinson's Disease: Emphasis on Non-Motor Symptoms", RUMC PGY1 and PGY2 pharmacy residents and P4 pharmacy students, RUMC, July 18, 2014.

Course instructor, Medicine Case Conference, Advanced Pharmacy Practice Rotation (APPE) modules 6 and 7 in internal/general medicine, Chicago State University College of Pharmacy, Spring 2014.

Instructor, Basic Science: Psychopharmacology (4 hours), Northwestern University Feinberg School of Medicine, Educational series for neurology residents (PGY2-PGY4), January 10 & 17, 2014.

TEACHING EXPERIENCE (Continued)

Invited Lecturer, 2-hour session on active- and problem-solving learning in management of depression in patient with cardiovascular problems, Issues in Ambulatory Care (2 cr. Elective), Chicago State University College of Pharmacy, Fall 2014.

Instructor, Applied Patient Care (APC), APhA Pharmacy-Based Immunization Delivery Program-Skill Check Section, Chicago State University College of Pharmacy, September 10, 2013.

Course Instructor, Medicine Case Conference, Advanced Pharmacy Practice Rotation (APPE) modules 5, 6 and 7 in internal/general medicine, Chicago State University College of Pharmacy, Spring 2013.

Course Instructor/Cases Creator, Disease and Medication Therapy Management (DMTM) II course, Spring 2013.

Instructor of S.O.A.P. Note Workshop for P3 pharmacy students (2 hours), Chicago State University College of Pharmacy, November 2012.

Instructor, Applied Patient Care (APC), APhA Pharmacy-Based Immunization Delivery Program-Didactic Section: Vaccine Compensation, Marketing, Providing Vaccinations to Patients, Patients Making Decisions, Chicago State University College of Pharmacy, September 4, 2012.

Instructor, Applied Patient Care (APC), APhA Pharmacy-Based Immunization Delivery Program-Skill Check Section, Chicago State University College of Pharmacy, September 5, 2012.

Instructor, SNaPhA Pharmacy-Based Immunization Delivery Program, the 38th Annual Meeting of the Student National Pharmaceutical Association, certification of 30 national pharmacy students, Atlanta, July 27, 2011.

Lecturer, the series entitled "Bug and Drug: Update and Clinical Cases" (6 hours), Pathophysiology & Therapeutics IV: (PHM 6340), Belmont University College of Pharmacy, May 2-3, 2011.

Lecturer, the series entitled "Geriatric Pharmaceuticals", (5 hours) Belmont University School of Occupational Therapy, graduate program, March 23, 2011.

Director/Instructor, Advanced Care Management for Patients with Parkinson's and Alzheimer's Disease (PHM6990.10, elective, 2 cr.), Belmont University College of Pharmacy, Spring 2011.

Director/Instructor, Emerging Infectious Diseases (PHM6990.15, elective, 2 cr.), Belmont University College of Pharmacy, Spring 2011.

Director/Instructor, Microbiology and Immunology for Pharmacy (PHM6150, 3 cr.), Belmont University College of Pharmacy, Spring 2009, 2010, 2011.

Director/Instructor, Pharmacodynamics 2 -Pharmacological Basis of CNS Therapeutics (PHM6145, 3 cr.), Belmont University College of Pharmacy, Spring 2009, 2010, 2011.

Director/Instructor, Introduction to Medical Gerontology and Geriatrics (PHM6990.20, elective, 2 cr.), Belmont University College of Pharmacy, Spring 2010, Fall 2010.

Director/Instructor, Pharmacodynamics 3-Antibiotics and Chemotherapeutics (PHM6210, 3 cr.), Belmont University College of Pharmacy, Fall 2009, 2010.

Co-Director/Instructor, Pathophysiology & Therapeutics 1-CNS Disorders (PHM6215, 4 cr.), Belmont University College of Pharmacy, Fall 2009, 2010.

Director/Instructor, Biochemistry for Pharmacy (PHM6115, 4 cr.), Belmont University College of Pharmacy, Fall 2008, 2009, 2010.

TEACHING EXPERIENCE (Continued)

Instructor, Pharmacogenomic lecture series for Pharmacodynamics 1 (PHM6110, 3 cr.), Belmont University College of Pharmacy, November 2008, 2009, 2010.

Coordinator/Instructor, Web-Based Immunization Training for Pharmacists (P1 students and faculty/preceptors), Belmont University College of Pharmacy, August 24, 2010.

Coordinator/Instructor, Pharmacy-Based Immunization Delivery Training (P1 students), Belmont University College of Pharmacy, August 26, 2009.

Co-Instructor, Interprofessional high-fidelity clinical simulation scenarios for patient safety and medication errors, Leadership & Management course, Belmont University College of Pharmacy, November 200, February 2008, April 2008, November 2008.

Organizer/Guest Lecturer, Functional Genomics Course, Lecture on Microarray Technology in Comparative Genomics, University of Kuopio, Kuopio, Finland, April 22-29, 2003.

Organizer/Lecturer/Laboratory Instructor, Array Week 2003: Microarray Techniques and Applications" and Laboratory "Microarray Techniques and Applications", and lecture in Single nucleotide polymorphism (SNP) and DNA arrays for SNPs analysis, University of Kuopio, Kuopio, Finland, January 27-January 31, 2003.

Organizer/Guest Lecturer, Functional Genomics Course, Lectures in Comparative genomics and Expressed sequence tags (ESTs), University of Kuopio, Kuopio, Finland, April 25-May 7, 2002.

Director/Instructor, Chip Track Laboratory of the NorFA course "Array Week 2002: Microarray Techniques and Applications", University of Kuopio, Kuopio, Finland, January 27-February 1, 2002.

Guest Lecturer, Lectures in *C. elegans* and Nonhuman primates and their use in biomedical research (5 h), Model Organisms in Biomedical Research Course, University of Kuopio, Kuopio, Finland, August 21-30, 2002

PROFESSIONAL SERVICE

WOLTERS KLUWER, LEXICOMP

Clinical Specialist/Consultant, Neurology/Psychiatry 2018-present

PHARMACY, EDITORIAL BOARD

Member 2018-present

BOARD OF PHARMACY SPECIALTIES (BPS)

Member, Psychiatric Pharmacy Specialty Council (re-elected in 2019) 2017-2022

PHARMACY OUALITY ALLIANCE (POA). MEASURE DEVELOPMENT TEAM (MDT)

Member, PQA MDT 12 (Inappropriate Duplicate Therapy) 2017-2018

AMERICAN SOCIETY OF CONSULTANT PHARMACISTS (ASCP) EDUCATION ADVISORY COUNCIL

Neuropsychiatry content reviewer for BCGP-webinars	2019-present
Member, Educational Affairs Committee (re-elected in 2019)	2017-present
Reviewer of PQA measures "Use of DMT in Relapsing Forms of MS"	January 2017
Member, Geriatric Pharmacy Educators Council	2012-2013
Alumna (Support/Instruction) in the PD Pharmacotherapy Traineeship	2012-present
Scientific Abstract Reviewer	2010-2013

PROFESSIONAL SERVICE (Continued)		
NORTH DAKOTA PARKINSON'S DISEASE SUPPORT GROUP		
Speaker	2016-present	
COMISSION IN CERTIFICATION IN GERIATRIC PHARMACY (CCGP)		
Member, CGP Examination Development Committee	2014-2016	
Item Writer, CGP examination	June 2013	
Reviewer, CGP Examination Preparatory Course (Hematology Section)	April 2013	
BRITISH JOURNAL OF CLINICAL PHARMACOLOGY		
Reviewer	2016-present	
RUSH GENERATIONS, RUSH UNIVERSITY		
Organizer/participant of the "Brown Bag" outreach program for older adults	February 2015	
THE AMERICAN ACADEMY OF NEUROLOGY (AAN), CONTINUUM: LI IN NEUROLOGY	FELONG LEARNING	
Member, Editorial Board Member (Pharmacotherapeutics)	2013-present	
COLLEGE OF PSYCHIATRIC AND NEUROLOGIC PHARMACISTS (CPNP)	<u>)</u>	
Program Committee (re-elected in 2019 and 2020)	2018-present	
Student Mentor, CPNP Connect Mentorship program	2017-present	
Reviewer, BCPP Review Prep. Course 2018-2019 (Neurocognitive Disorders)	December 2016	
Reviewer, BCPP Review Prep. Course 2016-2017 (Neurocognitive Disorders)	November 2015	
Manuscript Peer-Reviewer, Mental Health Clinician (MHC)	2013-present	
Abstract & Research/Practice Award Reviewer	2012-present	
AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY (AACP)		
Chair, Scholarship Ad-Hoc Committee, CPD Section	2019-2020	
House of Delegates: Administration Representative	2019-2020	
CPE Strategic Planning Committee	2014-2015	
Scientific Abstract Reviewer	2010-2011	
COF Faculty Affairs Committee	2010-2011	
House of Delegates: Faculty Representative	2010-2011	
DEPRESSION AND BIPOLAR SUPPORT ALLIANCE (DBSA) FOR GREATER CHICAGO AREA		
"Brown-bag" review session organizer for DBSA membership	March 2015	
Speaker at support group educational session	June 2013	
AMERICAN COLLEGE OF CLINICAL PHARMACY (ACCP)		

2020-2021

July 2018

2014-2015

May 2013

March 2017

Expert Reviewer for PSAP 2020 Chapter (Parkinson Disease)

Tester for PSAP 2018 Book 3 (Neurology/Psychiatry) Module 1

Tester for ACSAP 2017 Book 2 (Neurologic/Psychiatric Care)

Expert Reviewer for PSAP 2015 Book 2 (CNS/Pharmacy Practice).

Tester for piloted PSAP2013 Handbook (Special Populations Section)

PROFESSIONAL SERVICE (Continued)

NATIONAL ASSOCIATION	OF BOARDs OF PHARMACY	(NARP) CHICAGO II.
		(11/1D1), CITIC/100, IL

The Pharmacy Curriculum Outcomes Assessment (PCOA)/FPGEE item writer 2016-present

North American Pharmacist Licensure Examination (NAPLEX) item writer 2014 Foreign Pharmacy Graduate Equivalency Examination (FPGEE) item writer 2010

$\frac{\text{PHARMACY TECH TOPICS}^{\text{TM}}}{\text{PUBLISHED, ILLINOIS COUNCIL OF HEALTH-SYSTEM}}{\text{PHARMACISTS}}$

Reviewer of clinical module May 2013

EISAI Inc.

The Perampanel Pharmacy Advisory Board 2014-2015

ILLINOIS RURAL HEALTH ASSOCIATION (IRHA)

Member, Mental Health Committee 2013-2014

JONES & BARTLETT LEARNING

Textbook Reviewer 2013

LAW OFFICE OF BENTON, BENTON & LUEDEKE

Clinical Pharmacy/Clinical Neuropharmacology Consultant 2012-2013

GRUNDY COUNTY HEALTH DEPARTMENT (PUBLIC HEALTH EMERGENCY PROGRAM)

Pharmacist for Emergency Response Program 2012-2013

STUDENTS NATIONAL PHARMACEUTICAL ASSOCIATION (SNaPhA)

Immunization Trainer, 38th Annual SNaPhA Meeting, Atlanta, GA July 2011

PICTURE RX

Clinical Pharmacy/Clinical Pharmacology Consultant 2010-2012

LAW OFFICE OF ARNZEN, MOLLOY & STORM, P.S.

Clinical Pharmacy/Clinical Neuropharmacology Consultant 2009–2012

VANDERBILT UNIVERSITY MEDICAL CENTER

Member of Medication Use that is Safe and Effective (MUSE) Group 2009-2011

TENNESSEE POISON CENTER, VANDERBILT UNIVERSITY, NASHVILLE, TN

Community Advisory Board Member 2008–2011

NATIONAL PARKINSON'S DISEASE ASSOCIATION, MIDDLE TN CHAPTER, NASHVILLE, TN

Board Member 2005–2006

UNIVERSITY SERVICE

UNIVERSITY SERVICE	
UNIVERSITY OF MONTANA (UM), COLLEGE OF HEALTH/SCHOOL C	OF PHARMACY: 2020-pre
Clinical Lead and Advisor, Pharmacy, UM Neural Injury Center	2021-present
UM Space Management Committee (member)	2021-present
UM Dean's Group (member)	2020-present
UM Academic Officers Group (member)	2020-present
UM COVID-19 Instructional Program Group (member)	2020-present
Administrative Committee (Chair), College of Health	2020-present
Administrative Council (Chair), School of Pharmacy	2020-present
External Advisory Board (Dean), School of Pharmacy	2020-present
Marketing and Recruitment Committee (Ex-Officio), School of Pharmacy	2020-present
Student Leadership Group (Dean), School of Pharmacy	2020-present
NORTH DAKOTA STATE UNIVERSITY (NDSU), SCHOOL OF PHARMA	ACY (SOP): 2015-2020
DNP Thesis Committee for Liya Rodovskaya (School of Nursing)	2019-2020
• Improving the Diagnosis and Management of Benign Paroxysmal Vertigo in Run	al Healthcare Setting
Self-Study Curriculum Subcommittee	2018-January 2020
Self-Study Faculty and Staff Subcommittee	2018-January 2020
Self-Study Steering Committee	2018-January 2020
SOP Executive Council	2018-January 2020
SOP Leadership Council	2018-January 2020
SOP Co-Curriculum Task Force (Leader)	2018
SOP Pharmacotherapy Lab (new course/lab) Task Force (Leader)	2018
Residency (PGY1 NDSU/Lake Region Healthcare) Advisory Council	2016-January 2020
SOP Disease State Alignment and Coverage Task Force (Leader)	2016-2017
Concept Laboratory Task Force	2016
College of Health Professions Administrative Council	2015-January 2020
Curriculum Committee	2015-January 2020
Continuing Pharmacy Education (CPE) Committee	2015-January 2020
Academic/Co-curriculum advisor (P1-P4)	2015-January 2020
CHICAGO STATE UNIVERSITY (CSU), COLLEGE OF PHARMACY: 20	<u>12-2015</u>
Student's Grievance Committee (Chair)	2013-2015
Department Personnel Committee (DPC), Pharmacy Practice	2013-2015
DPC promotion sub-committee	2013
Program, Measurement, and Effectiveness (PME) ad hoc Committee for Pha	armacy Practice
Department	2012-2014
Search Committee for the Office of Experiential Education, Experiential Edu	
Specialist	2013
specialisi -	2013

2012-2015

Marketing and Development Committee (Co-chair)

UNIVERSITY SERVICE (Continued)

CTATALISTI I SERVICE (Continued)	
Faculty Search Committees	2012-2015
Continuing Pharmacy Educational Program Committee	2012-2013
Faculty and Staff Development Committee	2012-2013
Academic advisor (P1-P4)	2012-2015
MIDWAY COLLEGE SCHOOL OF PHARMACY (MCSOP): 2011-2012	
Midway College Faculty Curriculum Committee (Chair)	2011-2012
Social Event Committee (Chair)	2011-2012
Faculty Development Committee	2011-2012
Practice Standards Committee	2011-2012
Research Advisory Council	2011-2012
Substance Abuse and Misuse in Rural Area (SAMiRA) Group	2011-2012
Pharm.D. curriculum and specialty tracks development	2011-2012
Course coordinator of various clinical and integrated courses	2011-2012

BELMONT UNIVERSITY COLLEGE OF PHARMACY (BUCOP): 2007-2011

BELMONT UNIVERSITY COLLEGE OF PHARMACY (BUCOP): 2007-	<u>-2011</u>	
Immunizer and student's immunization advisor for "Flu Shot" clinics organized for BUCOP and Skyline Medical Center 2009-2011		
Pharmacy Faculty Representative, Faculty Senate	2010-2011	
BUCOP delegate, the AACP House of Delegates	2010-2011	
Faculty mentor for new clinical and pharmaceutical sciences faculty	2009-2011	
Coordinator/Instructor: Pharmacy-Based Immunization Delivery Training	2009-2011	
External Advisory Board for Pharmacotherapy Curricular Concentration	2010-2011	
Pharmacy Practice Faculty Search Committee	2010	
Pharmacy Manager Search Committee	2009	
Curricular Subcommittee, Pathophysiology/Pharmacotherapy Series	2009	
Design/maintenance, BUCOP professional website	2009	
BUCOP website management	2009-2010	
Designer of simulation suites for new BUCOP building	2009	
Department of Pharmacy Practice Search Committee	2008-2009	
Student's Affair Committee	2008-2010	
Curricular Committee	2008-2009	
College of Health Sciences Interdisciplinary Simulation Committee	2008-2011	
Technical Services and Resources Committee	2008-2011	
Academic advisor (11 Pharm.D. students)	2008-2011	
Admissions Committee	2008-2009	
Experiential Education Advisors Committee	2008-2009	
Department of Pharmaceutical Sciences Search Committee	2008-2010	

RESEARCH AND TEACHING FUNDING

PI and Coordinator of "Interprofessional Education between Pharmacy (North Dakota State University) and Medical (University of North Dakota) Learners"

• CHP funding (2019): \$3,520

Recipient, Research Development Travel Award

- Research and Creative Activity NDSU Travel Award (2017): \$1,416
- PI, "Targeted Education in Dementia Care for ND Pharmacists"
 - ND Board of Pharmacy (2017-2018): \$3,785.

PI, "Pharmacist-Led Community-Based Educational, Screening and Service Initiative for Stroke/TIA Risk Identification, Prevention and Care-Seeking in Eastern North Dakota".

• Dakota Medical Foundation (2017-2018): \$9,000

PI, "Caring For Our Aging Population: Assessment of CPE in Chronic Disease Management Among Community Pharmacists in the Upper Midwest.",

• NABP/AACP 2016 District V grant (2016-2017): \$3,000

PI, "Pharmacist-Led Community-Based Educational, Screening and Service Initiative for Stroke/TIA Risk Identification, Prevention and Care-Seeking in Fargo, North Dakota".

• NDSU CHP Clinical/Translational Research Seed Grant (2016-2017): \$2,500

Teaching enrichment funds for durable equipment from a competitive NDSU Provost's Office call

• NDSU Provost Office (2015-2016): \$52,857.60

Co-Principal Investigator, "Jazz and Health: A Targeted Health Promotion Strategy to Educate Underser ved Populations"

• NACDS Foundation, Community Health Fair Outreach (2012): \$1,000

Principal investigator (PI), "Exploring DA Neurodegeneration and Neuroprotection In *C. elegans* Models of Parkinson's Disease"

• National Parkinson Foundation International Research Grant (2005-2006): \$32,000

PEER-REVIEWED JOURNAL PUBLICATIONS

Marvanova M, Henkel PJ. Implementation of a Stroke Screening and Counselling Program in Community Pharmacies across North Dakota. [Manuscript in preparation]

Marvanova M, Henkel PJ. Implementation and Assessment of Dementia Workshop for North Dakota License Pharmacists. [Manuscript under review]

Marvanova M, Henkel PJ, Allen J. Implementation and Assessment of High-Fidelity Interprofessional Simulation between Pharmacy and Medical Students on Unintentional Opioid Overdose in Emergency Care Setting. [Manuscript under review]

Marvanova M, McGrane I. Treatment Approach and Modalities for Management of Depression in Older Adults. *Sr Care Pharm.* 2021, 36:11-21.

Henkel PJ, **Marvanova M**. Pharmacists' Utilization of Information Sources Related to Community and Population Needs in the Upper Midwest and It's Association with Continuing Professional Education. *Pharmacy* 2019;7(3).

Henkel PJ, Marvanova M. Basic Disaster Preparedness of Rural Community Pharmacists in Five States *Disaster Med Public Health Prep.* 2019;2:1-6. doi: 10.1017/dmp.2019.57.

Werremeyer A, Skoy E, **Marvanova M**, Jarajapu Y, Brynjulson R, Wilhelm R, Eukel H. A Pharm.D. Program Curricular Approach to Addressing the Opioid Crisis. *Curr Pharm Teach Learn*. 2019 doi: 10.1016/j.cptl.2019.02.026

Marvanova M. Perampanel-Induced, New-Onset Food Aversion in a 29-Year-Old Female with Medically Refractory Frontal Lobe Epilepsy. *Ment Health Clin.* 2019;9(2):100-104.

Marvanova M, Henkel PJ. Continuing Pharmacy Education Practices in Geriatric Care Among Pharmacists in the Upper Midwest. *J Am Pharm Assoc.* 2019;59(3):361-368.

Marvanova M, Henkel PJ. Design, Implementation and Impact Assessment of the Community-based Stroke Education and Screening Program for Community-Dwelling Older Adults. *Sr Care Pharm.* 2019;34(2):127-142.

Marvanova M, Henkel PJ. Design, Implementation, and Evaluation of a Workshop in Management of Alzheimer's and Parkinson's Disease for the 3rd Year Pharmacy Students. *Curr Pharm Teach Learn*. 2018;10(8):1138-1148.

Marvanova M, Gramith K. Role of antidepressants in the treatment of adults with anorexia nervosa. *Ment Health Clin*. [Internet]. 2018;8(3):127-137.

Henkel PJ, **Marvanova M.** Maintaining Vitality: Pharmacists' Continuing Professional Education Decision-Making in the Upper Midwest. Special Issue entitled the Labor Market for Pharmacists. *Pharmacy* 2018; 6(1). pii: E14. doi: 10.3390/pharmacy6010014.

Henkel PJ, **Marvanova M.** Community Pharmacy-Based Health Services Disparities in Rural Communities. *J Rural Health* 2018;34:347-358.

Sunkaraneni S, Blum D, Ludwig E, Chudasama V, Fiedler-Kelly J, **Marvanova M**, Bainbridge J, Phillips L. Population Pharmacokinetic Evaluation and Missed Dose Simulations for Eslicarbazepine Acetate Monotherapy in Patients With Partial Onset Seizures. *Clin Pharmacol Drug Dev.* 2017;7(3):287-297.

Khan AM, Marvanova M. Prediction Accuracy of Winter-Tozer Equations to Estimate Free Phenytoin Concentrations in Non-Critically Ill Hospitalized Patients. *Consult Pharm.* 2017;32(8):461-467.

Marvanova M, Henkel PJ. Community Pharmacists' Knowledge Regarding Donepezil Adverse Effects and Self-Care Recommendations for Insomnia for Persons with AD. *Pharmacy* 2017;28;5(3).

PEER-REVIEWED JOURNAL PUBLICATIONS (Continued)

Marvanova M, Henkel PJ. Community Pharmacists' Knowledge of Alzheimer's Disease Care in Highand Low-Income Chicago. *J Am Pharm Assoc*. 2017;57(5):596-600.

Marvanova M, Henkel PJ. Collaborating on Medication Errors in Nursing. Clin Teacher 2017; 14:1-6.

Marvanova M. Introduction to Parkinson Disease (PD) and its Complications. *Ment Health Clin*. 2016;6(5):229-235.

Marvanova M. Drug-Induced Cognitive Impairment: Effect of Cardiovascular Agents. *Ment Health Clin.* 2016; 6(4):201-206.

Marvanova M. Current & Emerging Therapies & Strategies in the Management of Epilepsy. Peerreviewed CE module (0.3 CEU) for pharmacists and nurses, *Specialty Pharma Education Center (SPEC)*, published online on April 2016. Available at http://spec.learnercommunity.com/products/4063/current-emerging-therapies-strategies-in-the-management-of-epilepsy.

Marvanova M. Pharmacokinetics of Antiepileptic Drugs (AEDs). Ment Health Clin. 2016; 6(1):8-20.

Marvanova M. Treatment of Multiple Sclerosis (MS): A Case-Based Approach, Geriatric Pharmacy Review: Advanced Case Study. Peer-reviewed CGP-Recertification CE module (0.25 CEU), *American Association of Consultant Pharmacists*, published online on September 5, 2015. Available at http://learning.ascp.com/diweb/catalog/item/id/1316512/sid/27648833/q/q=multiple*20sclerosis&c=306

Peterson J, Kripalani S, Danciu I, Harrell D, **Marvanova M,** Rodriguez C, Powers J. Electronic Surveillance and Pharmacist Intervention for Vulnerable Hospitalized Geriatric Inpatients on High-Risk Medication Regimens. *J Am Geriatr Soc.* 2014;62(11):2148-2152.

Marvanova M. Antipsychotic Use in Patient with Dementia: Efficacy and Safety Concerns. *Ment Health Clin.* 2014;4(4):170-176.

Marvanova M. Managing Multiple Sclerosis and Its Symptoms. *Pharmacy Tech Topics*TM 2013; 18(4).

Marvanova M. Management of Second-Generation Antipsychotic-Induced Metabolic Side Effects. *Ment Health Clin.* 2013;3(3):154-161.

Johnson KA, Jones CK, Tantawy MN, Bubser M, **Marvanova M**, Baldwin RM, Conn PJ, Niswender CM. The metabotropic glutamate receptor 8 agonist (*S*)-3,4-DCPG reverses motor deficits in prolonged but not acute models of Parkinson's disease. *Neuropharmacology* 2013; 66:187-195.

Marvanova M., Roumie Ch., Eden S., Cawthon C., Schnipper J., Kripalani S. Health literacy and medication understanding among hospitalized adults. *J Hosp Med*. 2011;6(9):487.

Marvanova M., Roumie Ch., Eden S., Cawthon C., Schnipper J., Kripalani S. Health literacy and medication understanding among hospitalized patients. *J Hosp Med*. 2011;6(9):488-493.

Marvanova, M, Nichols C. Identification of neuroprotective compounds of *C. elegans* dopaminergic neurons against 6-OHDA. *J Mol Neurosci.* 2007;31(2):33-44.

Marvanova M, Lakso M, Wong G. Identification of Genes Regulated by Memantine and MK-801 in Adult Rat Brain by cDNA Microarray Analysis. *Neuropsychopharmacology* 2004;29(6):1070-1079.

Marvanova M. Genomic Approaches to Access the Effects of Neuroprotective Drugs and Validity of Nonhuman Primate Models in Neurodegenerative Diseases. Doctoral dissertation. 2003. *Kuopio University Publications* G. A.I. Virtanen Institute for Molecular Sciences 11. 104 p., append.

Marvanova M, Storvik M, Wong G. Microarray data analysis - applications for studies on gene expression in addiction and human/nonhuman primates. In: Kotila S Haataja J, Forsström P-L, Ignatius J, Jukka L, Laine MM, Runeberg N, Råback P, Savolainen V, eds. *CSC Report on Scientific Computing* 2001-2003, p. 151-154. [Espoo]: *CSC-Scientific Computing*, 2003

PEER-REVIEWED JOURNAL PUBLICATIONS (Continued)

Marvanova M, Wong G. Adenosine A2A receptor mRNA expression is increased in rat striatum and nucleus accumbens after memantine administration. *Brain Res Mol Brain Res*. 2003;120(2):193-196.

Marvanova M, Ménager J, Bezard E, Bontrop R, Pradier L, Wong G. Microarray analysis of nonhuman primates: validation of experimental models in neurological disorders. *FASEB J* 2003;17(8):929-931.

Törönen P, Storvik M, Lindén AM, Kontkanen O, **Marvanova M**, Lakso M, Castrén E, Wong G. Expression profiling to understand actions of NMDA/glutamate receptor antagonists in rat brain. *Neurochem Res.* 2002;27(10):1209-1220.

Marvanova M, Törönen P, Storvik M, Lakso M, Castrén E, Wong G. Synexpression analysis of ESTs in the rat brain reveals distinct patterns and potential drug targets. *Brain Res Mol Brain Res*. 2002; 104(2):176-183.

Marvanova M, Lakso M, Pirhonen J, Nawa H, Wong G, Castrén E. The neuroprotective agent memantine induces brain-derived neurotrophic factor (BDNF) and trkB receptor expression in rat brain. *Mol Cell Neurosci* 2001; 18(3):247-258.

NON-PEER-REVIEWED ARTICLES

Marvanova M. Parkinson Disease: New Pharmacologic Tools in the Management of Motor Fluctuations. The CPNP Perspective 2020, 7(5).

Marvanova M. The H1N1 "Swine" Flu: What is it? Can We Treat It? *Inquire* 2009;2(4).

Marvanova M. Pharmacogenetics: Potential Basic for Variable Patient Response to Selective Serotonin Reuptake Inhibitors (SSRIs). *Inquire* 2008;1(2).

PUBLISHED SCIENTIFIC PEER-REVIEWED CONFERENCE PAPERS AND ABSTRACTS

Marvanova M. Henkel PJ. Targeted Education in Dementia Care for North Dakota Pharmacists [Abstract]. *Sr Care Pharm.* 2019;34(8):548-579.

Witt J, Dewey M, Friesner D, **Marvanova M.** Medication Regimen Review on Discharge From Skilled Nursing Facility Stay to Independent Living. [Abstract]. *Sr Care Pharm.* 2019;34(8):548-579.

Marvanova M, Henkel PJ. Continuing Pharmacy Education (CPE) in Dementia-related Topics among Pharmacists in the Upper Midwest. [Abstract]. *Pharmacotherapy* 2019;38(6).

Thompson J, Dewey M, Friesner D, **Marvanova M.** Pharmacist Conducted Medication Regimen Review for Patients Returning to Independent Living Following Skilled Nursing Facility Stay. [Abstract]. *Consult Pharm.* 2018;1;33(10):572-608.

Marvanova M, Henkel PJ. Assessment of Continuing Education Decision-Making, Providers Selection, and Select Topic Credit Hours among Community Pharmacists in the Upper Midwest. [Abstract] *Consult Pharm.* 2018;1;33(10):572-608.

Marvanova M, Henkel PJ. Benefits of Structured Interactive Workshop in Alzheimer's and Parkinson Disease as an Add-on to Didactic Lectures for Pharmacy Third-Year Students. [Abstract]. *Pharmacotherapy* 2018;38(6).

Henkel PJ, **Marvanova M.** Continuing Professional Education Practices Related to Older Adults Among Community and Hospital/Clinic-based Pharmacists in the Upper Midwest. [Abstract]. *Pharmacotherapy* 2018;38(6).

Henkel PJ, **Marvanova M.** Continuing Professional Education Selection Criteria for Hospital and Clinic-based Pharmacists Practicing in the Upper Midwest. [Abstract]. *Pharmacotherapy* 2018;38(6).

Marvanova M, Henkel PJ. Differences in Blood Pressure Reading Assessments based on JNC8 and New 2017 Blood Pressure Guideline among Community-Dwelling Adults in Fargo, North Dakota. [Abstract]. *Pharmacotherapy* 2018;38(6).

Marvanova M, Henkel PJ. Continuing Professional Education Practices of Community and Hospital/Clinic Pharmacists in the Upper Midwest: Professional Specialization, Population-Driven Self Education, or Something Else? [Abstract]. *J Am Pharm Assoc.* 2018 (May/June issue 2018).

Marvanova M, Henkel PJ. Pharmacist-Led Community Stroke Education and Screening Program. [Abstract]. *J Am Pharm Assoc* 2018 (May/June issue 2018).

Marvanova M, Henkel PJ. Pharmacist-Led Community-Based Stroke Program to Identify Individuals in Need of Intervention to Decrease Stroke Risk. *Consult Pharm.* 2017;32(10).

Marvanova M, Henkel PJ. Impact of Pharmacist-Led Community-Based Stroke Education Program on Participants' Knowledge of Major Modifiable Stroke Risk Factors and Acute/Warning Signs of Stroke. *Consult Pharm.* 2017;32(10).

Marvanova M, Khan A. Can Use of the Standard and Revised Winter-Tozer Formula Accurately Predict Free Phenytoin Concentrations in Non-Critically Ill Hospitalized Patients? [Abstract]. *Pharmacotherapy* 2017;37(6).

Marvanova M, Henkel PJ. Association of Terminal Pharmacy Degree on Community Pharmacists' Counseling on Common Adverse Effects of Donepezil in Predominantly Rural Areas of the U.S. [Abstract]. *J Pharm Pract*. 2017;6.

Marvanova M. Dose-dependent Perampanel-induced Food Aversion in a Young Female with Frontal Lobe Epilepsy: A Case Report. [Abstract]. *J Pharm Pract.* 2017;6.

PUBLISHED SCIENTIFIC PEER-REVIEWED CONFERENCE PAPERS AND ABSTRACTS (Continued)

Marvanova M, Khan A. Prediction Accuracy of Free Phenytoin Concentration in Older Non-Critically Ill Patients with Hypoalbuminemia or End Stage Renal Disease Using a Corrected Winter-Tozer Equations. [Abstract]. *Consult Pharm.* 2016;31(10):572.

Marvanova M, Kianirad Y. Risk for Medication Errors in Parkinson's Disease (PD) Patients during Hospitalization. [Abstract]. *Consult Pharm.* 2016;31(10):572.

Marvanova M, Henkel PJ. Ability of Community Pharmacists in Rural Areas across the U.S. to Provide Pharmacy-Related Care to Alzheimer's Disease. [Conference Paper]. *J Am Pharm Assoc*. 2016;56(3):217-348, e1-e141.

Marvanova M, Henkel PJ. Are Rural Community Pharmacies Effectively Serving Community Dwelling Elderly with Alzheimer's Disease in the U.S.? [Abstract]. *Am J Pharm Educ*. 2015;79(5).

Kianirad Y, **Marvanova M**. Medications Reconciliation in Hospitalized Parkinson's Disease Patients. [Abstract]. *Mov Disord*. 2015; 30 Suppl 1:249.

Marvanova M, Henkel PJ, Ondimu D, Meskelu H. Community Pharmacists and Alzheimer's Disease Pharmaceutical Care in Chicago. [Abstract]. *Am J Pharm Educ*. 2014;78(5).

Marvanova M, Henkel PJ, Nakitende B, Andriopoulos A. Graduate Pharmacy Education's Association with Improved Health Knowledge and Health Behavior among Students of African Descent. [Abstract]. *Am J Pharm Educ.* 2014;78(5).

Marvanova M, Peterson J, Kripalani S, Danciu I, Harrell D, Rodriguez C, Powers J. Design and Implementation of a High-Risk Medication Decision Support System for Hospitalized Geriatric Patients. *Pharmacotherapy* 2013;33(5):e50-e80.

Marvanova M., Peterson J., Kripalani S., Danciu I., Harrell D., Rodriguez C., Powers J. Potentially Inappropriate Medications Dashboard: Real-Time Surveillance for High-Risk Medication Prescribing and Management in Vulnerable Geriatric Inpatients. [Abstract]. *Am J Pharm Educ.* 2013;77(5).

Rodriguez C, Peterson J, Kripalani S, Danciu L, Harrell D, **Marvanova M**, Powers J. Surveillance and Pharmacist Intervention for Vulnerable Hospitalized Geriatric Patients on Highrisk Medication Regimens. [Abstract]. *J Hosp Med.* 2012;7 Suppl 2:209.

Marvanova M, Roumie CL, Eden S, Cawthon C, Schnipper JL, Kripalani S. Health Literacy and other Factors Associated with Patients' Understanding of their Pre-Admission Medication Regimen. [Abstract]. *Am J Pharm Educ*. 2010;74(5).

Marvanova M., Henkel PJ. The Role and Effectiveness of Virtual Laboratory Exercises as a Pharmaceutical Sciences Learning Tool. [Abstract]. *Am J Pharm Educ.* 2010;74(5).

Johnson KA, Jones CK, **Marvanova M**, Thompson AD, Tantawy MN, Baldwin RM, Conn PJ. (S)-3,4-DCPG has antiparkinsonian effects in chronic models of Parkinson's disease [Abstract]. *Neuropharmacology* 2008;55:585-638.

Marvanova M, Jones CK, Conn PJ. Study of gene expression and modulation of group III metabotropic glutamate receptors (mGluRs) in the basal ganglia of normal and parkinsonian rodents: Investigation of potential drug targets to treat Parkinson's disease. [Abstract]. *Mov Disord*. 2005;21(Suppl. 13):S52–S159.

Marvanova M, Nichols C, Wong G, Nass R. Pharmacogenetic analysis in a novel model of Parkinson's disease: Identification of genetic and chemical modulators of dopamine neuron degeneration in C. elegans. [Abstract]. *IDrugs* 2005;7(12):1070-1073.

PUBLISHED SCIENTIFIC PEER-REVIEWED CONFERENCE PAPERS AND ABSTRACTS (Continued)

Marvanova M, Lakso M, Wong G, Castrén E. Effect of Memantine on Brain-Derived Neurotrophic Factor (BDNF) Level in Adult Rat Brain. [Abstract]. *Park. Relat. Disord.* 2001;7(supplement).

Marvanova M, Lakso M, Wong G, Castrén E. Effect of Memantine on Brain-Derived Neurotrophic Factor (BDNF) Level in Adult Rat Brain. [Abstract]. *Eur J Pharm Sci.* 2001;13 Suppl 2:S1-48.

ORAL PRESENTATIONS

Clinical/Educational Presentations:

BCGP-recertification presentation (0.15 CEU) entitled "Differential Diagnosis of Parkinson's Disease", ASCP live online webinar, April 19, 2022 (scheduled/confirmed).

BCGP-recertification presentation (0.25 CEU) entitled "Psychiatric Disorders in Older Adults", ASCP Geriatric Pharmacist Boot Camp, San Antonio, TX, March 16, 2022 (scheduled/confirmed).

BCGP-recertification presentation (0.25 CEU) entitled "Neurological Disorders in Older Adults", ASCP Geriatric Pharmacist Boot Camp, San Antonio, TX, March 16, 2022 (scheduled/confirmed).

Presentation (0.15 CEU) entitled "New Pharmacologic Tools for Symptomatic Management of Parkinson's Disease Since 2018", Recent Drug Development CE program, University of Montana, Skaggs School of Pharmacy, Missoula, MT, March 6, 2022 (scheduled/confirmed).

Presentation entitled "Clinical Pharmacy Practice in the United States: The Role of Education, Training and Credentialing in the Development and Expansion of Clinical Pharmacy Services" as part of the session (1.5 hour) entitled "Clinical Pharmacy Methodology and Practical Application: Comparison of Three Countries (Czechia, Britain, and USA)" co-presented with Jan Hartinger (clinical pharmacy in the Czech Republic), and Karolina Russ (clinical pharmacy in Great Britain), 8th European Virtual Congress of Pharmacology, December 7, 2021.

Co-Chair of the session and discussion" Clinical Pharmacy Methodology, Education and Practical Application: comparison of three countries (Czech Republic, Great Britain, USA), 8th European Virtual Congress of Pharmacology, December 7, 2021.

BCGP-recertification presentation (0.15 CEU) entitled "Clinical Pearls in Management of Parkinson Disease: When to Start Treatment and What to Use", ASCP Annual Meeting & Exhibition, San Diego, CA, November 5, 2021.

BCGP-recertification presentation (0.15 CEU) entitled "Management of Reversible Cognitive Impairment", ASCP live online webinar, July 20, 2021.

Presentation (0.15 CEU) entitled "Update on Newly Approved Medications for Management of Motor Symptoms and Complications in Advanced Parkinson Disease", Montana Pharmacist Association Spring Seminar, MT, April 10, 2021.

BCGP-recertification presentation (0.25 CEU) entitled "Psychiatric Disorders in Older Adults", ASCP Geriatric Pharmacist Boot Camp, Online Synchronous Streaming, March 10, 2021.

BCGP-recertification presentation (0.25 CEU) entitled "Neurological Disorders in Older Adults", ASCP Geriatric Pharmacist Boot Camp, Online Synchronous Streaming, March 10, 2021.

BCGP-recertification presentation (0.15 CEU) entitled "The Quest for Better Management of Motor Fluctuations and Dyskinesia in Parkinson Disease", ASCP webinar, online asynchronous presentation, December 2, 2020.

Clinical/Educational Presentations (Continued)

Presentation entitled "How the Skaggs School of Pharmacy is preparing future pharmacists", Montana Pharmacist Patient Care Alliance Virtual Conference, Montana, November 13, 2020.

BCGP-recertification presentation (0.15 CEU) entitled "Management of Dementia with Lewy Bodies", ASCP webinar, online asynchronous presentation, June 22, 2020.

Presentation (0.1 CEU) entitled "Psychiatric and Behavioral Adverse Effects and Complications of Antiseizure Medications", College of Psychiatric and Neurologic Pharmacist (CPNP) Annual Conference, Pre-recorded lecture, April 16, 2020.

BCGP-recertification presentation (0.25 CEU) entitled "Psychiatric Disorders in Older Adults", ASCP Geriatric Pharmacist Boot Camp, Online Synchronous Streaming, March 19, 2020.

BCGP-recertification presentation (0.25 CEU) entitled "Neurological Disorders in Older Adults", ASCP Geriatric Pharmacist Boot Camp, Online Synchronous Streaming, March 19, 2020.

Presentation entitled "Update in Parkinson Disease: The Quest for better Management", CPNP webinar of the Geriatric Learning Community, online synchronous streaming, January 29, 2020.

BCGP-recertification presentation (0.15 CEU) entitled "What Geriatric Pharmacist Should Know About Antiepileptic Drugs?", ASCP Annual meeting, Grapevine, TX, November 7, 2019.

Presentation (0.1 CEU) entitled "Strategies for Management Treatment-Resistant Depression", Annual National Convention of National Pharmaceutical Association (NPhA), Houston, TX, July 26, 2019.

Marvanova M, Dorsey R, Kriebel-Gasparro A, online faculty panel module/discussion (0.1 CEU: CPE and CME) entitled "Diagnosing and Managing Parkinson Disease in Older Adults", MCM Education; Release date: May 31, 2019. The activity was supported by educational grants from Acorda and Neurocrine Biosciences, and was certified for CME/CE/CPE credit by the University of Cincinnati, GAPNA, and ASCP.

Presentation (0.1 CEU) entitled "Patient-Centered Care for Major Depression", ASCP Annual meeting, National Harbor, MD, November 4, 2018.

Workshop (0.5 CEU) entitled "Targeted Education in Dementia Care for Pharmacists", NDSU School of Nursing Sanford Health, Bismarck, ND, September 22, 2018.

Presentation entitled "Common Pitfalls: ACPE Accreditation Standards 2016", Kick off Self-Study workshop and retreat, NDSU School of Pharmacy, August 20, 2018.

Workshop (0.2 CEU) entitled "Patient-Centered Pain Management in Primary Care 101", Annual National Convention of National Pharmaceutical Association (NPhA), Charlotte NC, July 29, 2018.

Workshop (0.5 CEU) entitled "Targeted Education in Dementia Care for Pharmacists", NDSU School of Pharmacy, Fargo, ND, June 16, 2018.

Workshop (0.5 CEU) entitled "Targeted Education in Dementia Care for Pharmacists", NDSU School of Pharmacy, Fargo, ND, June 9, 2018.

Presentation (0.1 CEU) entitled "The Top 10: Clinical Pearls in Dementia Care and Counseling for Pharmacists", North Dakota Annual Pharmacy Convention of the North Dakota Pharmacists Association, Fargo, ND, April 24, 2018.

Presentation, "Business Card Rx". Phi Lambda Sigma Etiquette Dinner, NDSU School of Pharmacy, Fargo, ND, April 12, 2018.

Presentation (0.1 CEU) entitled "Cognitive Enhancers in the Treatment of Irreversible Dementias", ASCP Annual meeting, Kissimmee. FL, November 3, 2017.

Clinical/Educational Presentations (Continued)

Presentation entitled "Secondary Stroke Prevention: Why Do I Need to Take Medications?" Sanford Health Stroke Awareness Conference for Stroke Survivors "The Next Chapter: Helping Stroke Survivors to Move Forward", Fargo, ND, October 12, 2017.

Presentation (0.1 CEU) entitled "Opioid-induced Respiratory Depression (OIRD) and Naloxone Use", Annual National Convention of National Pharmaceutical Association (NPhA), Las Vegas, NV, July 31, 2017.

CGP-recertification Presentation (0.1 CEU) entitled "Psychiatric Complications of Idiopathic Parkinson's Disease: Management of Psychosis and Impulse Control Disorders", ASCP Annual meeting, Dallas, TX, November 16, 2016.

Presentation and workshop entitled "Me, You and Accreditation: Coding Assessment Questions using Blooms Taxonomy", NDSU School of Pharmacy retreat, Fargo, ND, August 18, 2016.

Presentation (0.1 CEU) entitled "Use of Antiepileptic Drugs (AEDs) for Non-epileptic CNS Conditions", Annual National Convention of National Pharmaceutical Association (NPhA), Atlanta, GA, July 31, 2016.

Presentation (0.1 CEU) entitled "Management of Relapsing-Remitting Multiple Sclerosis", Annual National Convention of National Pharmaceutical Association (NPhA), Atlanta, GA, August 1, 2016.

Key Address entitled "Life-long Learning as Duty, Responsibility and Passion", The Rho Chi society new member induction ceremony, NDSU Memorial Union, March 22, 2016.

Presentation (0.1 CEU) entitled" Dementia with Lewy Bodies: What Is It and How Is it Clinically Managed", Annual NPhA, Orlando, FL, July 26, 2015.

Key note speech entitled" Medications: The Tip of the Recovery Iceberg: What Should I Know about Psychotropic Medications?", Depression and Bipolar Support Alliance (DBSA) of Greater Chicago Area Education Symposium, Evanston Hospital, Evanston, IL, May 2, 2015.

Seminar entitled "Carbamazepine, Oxcarbazepine, Eslicarbazepine Acetate: What Do They Share? How Do They Differ?" Northwestern University, Department of Neurology, the Epilepsy Center, February 17, 2015.

Education seminar for nursing staff, entitled "Antiepileptic Medications: Pharmacology, Monitoring and Patient/Family Education", RUMC Epilepsy Clinic, February 6, 2015.

Presentation (0.1 CEU) entitled" The Other Face of Parkinson's Disease: Management of Non-Motor Symptoms", Annual NPhA, Arlington, VA, July 21, 2014.

Education session entitled "Psychotropic Medications: What Do I need to Know?", Depression and Bipolar Support Alliance-Greater Chicago Area, Chicago, June 9, 2014.

Clinical training for neurology practitioners entitled "Clinical Update on Aptiom (Eslicarbazepine Acetate)", Rush University Medical Center, Epilepsy Center, May 13, 2014

Education session entitled "Seizure Triggers: Emphasis on Medications and Nutraceuticals", Patient Epilepsy Support Group, Rush University Medical Center, Epilepsy Center, June 4, 2014.

Education session entitled "Brand Name and Generic Medications in Epilepsy: What You Should Need to Know", Patient Epilepsy Support Group, Rush University Medical Center, Epilepsy Center, May 6, 2014.

Clinical training for neurology practitioners entitled "Clinical Update on Fycompa (Perampanel)", Rush University Medical Center, Epilepsy Center, January 7, 2014.

Presentation (0.1 CEU) entitled "A Clinical Primer on Antidepressants: SSRIs, SNRIs and Bupropion", IRHA Annual Educational Conference, Effingham, IL, August 22-23, 2013.

Clinical/Educational Presentations (Continued)

Presentation (0.1 CEU) entitled "Clinical Pharmacology of Second-Generation Antipsychotics (SGAs)", IRHA Annual Educational Conference, Effingham, IL, August 22-23, 2013.

Presentation (0.1 CEU) entitled" Antipsychotic Drug Use in Dementia: Issues and Practice", Annual NPhA, New Orleans, July 29, 2013.

Presentation (0.1 CEU) entitled "Antipsychotic Use in Older Adults", Annual Midwest Regional ASCP Conference, Chicago, IL, July 21, 2012.

Seminar entitled "Incorporating Women's Health into Pharmacy Curriculum", Faculty Development Series, Midway College School of Pharmacy, October 13, 2011.

Presentation (0.1 CEU) entitled "Clinical Issues and Challenges in Treatment of Advanced Stage of Parkinson's Disease: Inpatient Care "Therapeutic Exchange Series for Clinical Pharmacists", Vanderbilt University Medical Center, February 17, 2011.

Research Presentations:

Presentation entitled "Advancing ND Pharmacy Profession through Grants", NDSU School of Pharmacy Advisory Board meeting, NDSU Memorial Union, April 19, 2018

Presentation entitled "Assessment of CPE in Chronic Disease Management among Community Pharmacists in the Upper Midwest", the Annual Meeting of NABP/AACP District Five, West Des Moines, Iowa, August 5, 2017.

APhA-APRS ESAS Podium Session entitled "Ability of Community Pharmacists in Rural Areas across the U.S. to Provide Pharmacy-Related Care to Alzheimer's Disease", American Pharmacists Association (APhA) Annual Meeting and Exposition, Baltimore, MD, March 4, 2016.

Presentation entitled "Qualitative Analysis of Medication Understanding: Analysis of Most Common Incidences in Medications for Cardiovascular Disorders and Comorbidities", Vanderbilt University, Center for Health Services Research February 2010.

Presentation for P1 Pharm.D. students entitled "C. *elegans* in Neuropharmacology", Belmont University College of Pharmacy, Nashville, TN, May 2009.

Presentation entitled "Study of Group III Metabotropic Glutamate Receptors (mGluRs) in the Basal Ganglia of Rodent Animal Models of Parkinson's Disease", Vanderbilt University, Department of Pharmacology, Nashville, TN, June, 2006.

Seminar entitled "Study of Group III Metabotropic Glutamate Receptors (mGluRs) in the Striatum (CPu) of Healthy and Parkinsonian Rodents: Investigation of Potential Drug Targets to Treat Parkinson's Disease", Vanderbilt University, Department of Pharmacology, Nashville, TN, November, 2005.

Presentation entitled "A *C. elegans* Model of Parkinson's Disease: Identification and Evaluation of Molecules and Pathways that Protect against DA Neuron Degeneration", Vanderbilt University, Department of Anesthesiology, Nashville, TN, May, 2005.

Presentation entitled "Pharmacogenetic Analysis in a Novel Model of Parkinson's Disease: Identification of Genetic and Chemical Modulators of Dopamine Neuron Degeneration in *C. elegans*", West Chester University of Pennsylvania, Department of Biology, West Chester, PA, February 2005.

Presentation entitled "Exploring DA Neurodegeneration in C. elegans: Generation of Novel Models of

Parkinson's Disease", University of the Sciences in Philadelphia, Department of Biology, Philadelphia, PA, February 2005.

Research Presentations (Continued):

Presentation entitled: "Exploring the Role of Alpha-synuclein, Parkin, and the Dopamine Transporter in DA Neuron Degeneration in C. elegans Models of Parkinson's Disease", the West Coast Worm Meeting Santa Barbara, CA, August 21- 24, 2004.

Presentation entitled "C. elegans as an Animal Models to Study Parkinson's Disease", Vanderbilt University, Department of Anesthesiology, Nashville, TN, June, 2004.

Presentation entitled "DNA Microarray Technology in Neurobiology", the Institute of Entomology of Academy of Sciences, Ceske Budejovice, Czech Republic, May 12, 2003.

Presentation entitled "Microarray Analysis of Nonhuman Primates: Validation of Experimental Models in Neurological Disorders", the 8th Annual A.I. Virtanen Institute Post-Graduate Symposium Hotel Tahkovuori, Nilsiä, Finland, March 17-18, 2003.

Presentation entitled "Affymetrix Microarrays as a Platform for Cross-Species Gene Expression", Molecular Biology Seminar, University of Kuopio, Finland, November 11, 2003.

Presentation entitled "Function Genomics and Bioinformatics Tools to Investigate Genes Involved in Effect of Non-competitive NMDA Receptor Antagonists", the International practical course, "APEX on

DNA Microarrays: Applications in SNP Analysis, Mutation Detection and DNA Resequencing" Tartu, Estonia, August 26-September 1, 2002.

Presentation entitled "Comparative Genomic Analysis of Nonhuman Primates: Validation of Experimental Models in Neurological Disorders", the International Summer School "From Genome to Life", Cargése, Corsica, July 15-27, 2002.

Presentation entitled "Synexpression Analysis of ESTs in the Rat Brain Reveals Distinct Patterns and Potential Drug Targets", the International Summer School "From Genome to Life", Cargése, Corsica, July 15-27, 2002.

Presentation entitled "Synexpression Analysis of ESTs in the Rat Brain Reveals Potential Drug Targets", the 7th Annual A.I. Virtanen Institute Post-Graduate Symposium Hotel Tahkovuori, Nilsiä, Finland, February 12-13, 2002.

Presentation entitled "Qualitative Analysis Presentation entitled "Involvement of BDNF and TrkB Receptor Isoforms in the Pharmacological Actions of Memantine", the 6th Annual A.I. Virtanen Institute Post-Graduate Symposium. Nilsiä, Finland, February 22, 2001.

PEER-REVIEWED SCIENTIFIC POSTER PRESENTATIONS

Witts J, Dewey M, Friesner D, **Marvanova M.** Medication Regimen Review on Discharge from Skilled Nursing Facility Stay to Independent Living. Annual ASCP Meeting and Exhibition, Grapevine, TX, November 9, 2019.

Marvanova M, Henkel PJ. Targeted Education in Dementia Care for North Dakota Pharmacists. Annual ASCP Meeting and Exhibition, Grapevine, TX, November 9, 2019.

Marvanova M, Henkel PJ. Continuing Pharmacy Education (CPE) in Dementia-related Topics among Pharmacists in the Upper Midwest. ACCP Virtual Poster Symposium, May 28, 2019.

Marvanova M, Thompson J, Dewey M, Friesner D. Pharmacist Conducted Medication Regimen Review for Patients Returning to Independent Living Following Skilled Nursing Facility Stay. Annual ASCP Meeting and Exhibition, the Gaylord National Harbor in National Harbor, MD, November 1-4, 2018.

Marvanova M, Henkel PJ. Assessment of Continuing Education Decision-Making, Providers Selection, and Select Topic Credit Hours among Community Pharmacists in the Upper Midwest. Annual ASCP Meeting and Exhibition, the Gaylord National Harbor in National Harbor, MD, November 1-4, 2018.

Marvanova M, Henkel PJ. Benefits of Structured Interactive Workshop in Alzheimer's and Parkinson Disease as an Add-on to Didactic Lectures for Pharmacy Third-Year Students. Encore poster presentation, ACCP Global Conference on Clinical Pharmacy, Seattle, WA, October 20-23, 2018.

Marvanova M, Henkel PJ. Benefits of Structured Interactive Workshop in Alzheimer's and Parkinson Disease as an Add-on to Didactic Lectures for Pharmacy Third-Year Students. 2018 Virtual Poster Symposium (3rd place of best original research). ACCP Virtual Poster Symposium, May 24, 2018.

Henkel PJ., **Marvanova M.** Continuing Professional Education Practices Related to Older Adults Among Community and Hospital/Clinic-based Pharmacists in the Upper Midwest. 2018 ACCP Virtual Poster Symposium, May 24, 2018.

Henkel PJ, **Marvanova M.** Continuing Professional Education Selection Criteria for Hospital and Clinic-based Pharmacists Practicing in the Upper Midwest. ACCP Virtual Poster Symposium, May 23, 2018.

Marvanova M, Henkel PJ. Differences in Blood Pressure Reading Assessments based on JNC8 and New 2017 Blood Pressure Guideline among Community-Dwelling Adults in Fargo, North Dakota. ACCP Virtual Poster Symposium, May 23, 2018.

Marvanova M, Henkel PJ. Continuing Professional Education Practices of Community and Hospital/Clinic Pharmacists in the Upper Midwest: Professional Specialization, Population-Driven Self-Education, or Something Else? American Pharmacists Association (APhA) Annual Meeting and Exposition, Nashville, TN, March 17, 2018.

Marvanova M, Henkel PJ. Pharmacist-Led Community Stroke Education and Screening Program. American Pharmacists Association (APhA) Annual Meeting and Exposition, Nashville, TN, March 17, 2018.

Marvanova M, Henkel PJ. Impact of Pharmacist-Led Community-Based Stroke Education Program on Participants' Knowledge of Major Modifiable Stroke Risk Factors and Acute/Warning Signs of Stroke. ASCP Annual Meeting and Exhibition, Kissimmee, FL, November 2-5, 2017.

Marvanova M, Henkel PJ. Pharmacist-Led Community-Based Stroke Program to Identify Individuals in Need of Intervention to Decrease Stroke Risk. ASCP Annual Meeting and Exhibition, Kissimmee, FL, November 2-5, 2017.

Marvanova M. Khan A. Can Use of the Standard and Revised Winter-Tozer Formula Accurately Predict Free Phenytoin Concentrations in Non-Critically Ill Hospitalized Patients? Encore Poster Presentation, ACCP Annual Meeting, Phoenix, AZ, October 10, 2017.

PEER-REVIEWED SCIENTIFIC POSTER PRESENTATIONS (Continued)

Marvanova M, Khan A. Can Use of the Standard and Revised Winter-Tozer Formula Accurately Predict Free Phenytoin Concentrations in Non-Critically Ill Hospitalized Patients? ACCP Virtual Poster Symposium (3rd place of best original research), May 17, 2017.

Marvanova M, Henkel PJ. Association of Terminal Pharmacy Degree on Community Pharmacists' Counseling on Common Adverse Effects of Donepezil in Predominantly Rural Areas of the U.S. College of Psychiatric and Neurologic Pharmacists (CPNP) conference, Phoenix, AZ, April 24, 2017.

Marvanova M. Dose-dependent Perampanel-induced Food Aversion in a Young Female with Frontal Lobe Epilepsy: A Case Report. College of Psychiatric and Neurologic Pharmacists (CPNP) conference, Phoenix, AZ, April 24, 2017.

Marvanova M, Khan A. Prediction Accuracy of Free Phenytoin Concentration in Older Non-Critically Ill Patients with Hypoalbuminemia or End Stage Renal Disease Using a Corrected Winter-Tozer Equation. ASCP Annual Meeting and Exhibition at the Hilton Anatole in Dallas, November 5, 2016.

Marvanova M, Kianirad Y. Risk for Medication Errors in Parkinson's Disease (PD) Patients during Hospitalization. Annual Meeting and Exhibition at the Hilton Anatole in Dallas, November 5, 2016.

Marvanova M, Henkel PJ. Rural Community Pharmacies/Pharmacists Responsiveness to Elderly Needs. Annual Rural Health Conference, Minneapolis, MN, May 10-11, 2016.

Marvanova M, Henkel PJ. Population and Community Pharmacist/Pharmacy Services in Rural Regions. Annual Rural Health Conference, Minneapolis, MN, May 10-11, 2016.

Henkel PJ, **Marvanova M**. Disaster/Continuity Preparedness of Rural Community Pharmacies. Annual Rural Health Conference, Minneapolis, MN, May 10-11, 2016.

Marvanova M, Henkel PJ. Are Rural Community Pharmacies Effectively Serving Community Dwelling Elderly with Alzheimer's Disease in the U.S.? AACP Annual Meeting, National Harbor, MD, July 11-15, 2015.

Kianirad Y, **Marvanova M.** Medications Reconciliation in Hospitalized Parkinson's Patients. International Congress of Parkinson's Disease and Movement Disorders (MDS), San Diego, CA June 14-18, 2015.

Marvanova M, Henkel PJ. Prescribing Rates of Dopamine Agonists as Monotherapy or Anticholinergics among Community-Dwelling Persons with Parkinson's Disease (PD) across the United States. College of Psychiatric and Neurologic Pharmacists (CPNP) conference, Tampa, FL, April 19-22, 2015.

Marvanova M, Henkel PJ. Ability of Community Pharmacists in Rural Areas across the US to Provide Pharmacy Care for Persons with Alzheimer's Disease and Dementia. College of Psychiatric and Neurologic Pharmacists (CPNP) conference, Tampa, FL, April 19-22, 2015.

Kim S, Henkel PJ, **Marvanova M**. Examining the Ability of Independent Pharmacies to Provide Quality Care for Alzheimer's Disease and Dementia Patients in West Virginia. American Society for Health Systems Pharmacists (ASHP) Midyear Meeting, Anaheim, CA, December 7-11, 2014.

Raja N, Henkel PJ, **Marvanova M**. Comparison between Independent and Chain Community Pharmacies/Pharmacists Ability to Provide Care, Services and Medications for Persons with Alzheimer's Disease and Dementia in a Rural Area. American Society for Health Systems Pharmacists (ASHP) Midyear Meeting, Anaheim, CA, December 7-11, 2014.

Marvanova M, Henkel PJ, Nakitende B, Andriopoulos A. Graduate Pharmacy Education's Association with Improved Health Knowledge and Health Behavior among Students of African Descent. AACP Annual Meeting, Grapevine, TX, July 27-28, 2014.

PEER-REVIEWED SCIENTIFIC POSTER PRESENTATIONS (Continued)

Marvanova M, Henkel PJ, Ondimu D, Meskelu H. Community Pharmacists and Alzheimer's Disease Pharmaceutical Care in Chicago. AACP Annual Meeting, Grapevine, TX, July 27-28, 2014.

Henkel PJ, Marvanova M. County-Level Social Determinants and Rural-Urban Community Pharmacy Access. Integrated Public Health and Medical Preparedness Summit & IPHA Annual Meeting, Schaumburg, IL, July 8-10, 2014.

Henkel PJ, **Marvanova M**. Disaster Implications of Urban Community-Retail Pharmacy Medication Access Disparities. Integrated Public Health and Medical Preparedness Summit & IPHA Annual Meeting, Schaumburg, IL, July 8-10, 2014.

Marvanova M, Henkel PJ, Ondimu D, Meskelu H. Disparities in the Availability of Cognitive Enhancers for the Treatment of Alzheimer's Disease in Low- Compared to High-Income Areas of Chicago. College of Psychiatric and Neurologic Pharmacists (CPNP) conference, Phoenix, AZ, April 27-30, 2014.

Marvanova M, Henkel PJ, Ondimu D, Meskelu H. Association between Pharmacy Education and Dementia Care. College of Psychiatric and Neurologic Pharmacists (CPNP) conference, Phoenix, AZ, April 27-30, 2014.

Ondimu D, Meskelu H, Henkel PJ, **Marvanova M.** Disparities in Dementia Care Access in Chicago Community Pharmacies. Health Disparities Conference, New Orleans, March 10-12, 2014.

Andriopoulos A, Nakitende B, Henkel PJ, Marvanova M. Identification of Modifiable Risk Factors and Associated Stroke Risk-Related Health Behaviors Among Pharmacy Students. American Society of Health System Pharmacists (ASHP) Midyear conference, Orlando, FL, December 10, 2013.

Marvanova M, Peterson J, Kripalani S, Danciu I, Harrell D, Rodriguez C, Powers J. Potentially Inappropriate Medications Dashboard: Real-Time Surveillance for High-Risk Medication Prescribing and Management in Vulnerable Geriatric InpatientsAACP meeting, Chicago, July 14-17, 2013.

Marvanova M, Peterson J, Kripalani S, Danciu I, Harrell D, Rodriguez C, Powers J. Design and Implementation of a High-Risk Medication Decision Support System for Hospitalized Geriatric Patients. ACCP Virtual Poster Symposium, May 21-22, 2013.

Rodriguez C, Peterson J, Kripalani S, Danciu I, Harrell D, **Marvanova M**, Powers J. Surveillance and Pharmacist Intervention for Vulnerable Hospitalized Geriatric Patients on Highrisk Medication Regimens. Hospital Medicine 2012, San Diego, April 1-4, 2012.

Marvanova M, Roumie CL, Eden S, Cawthon C, Schnipper JL, Kripalani S. Health Literacy and other Factors Associated with Patients' Understanding of their Pre-Admission Medication Regimen. The 111th AACP meeting, Seattle, July 10-14, 2010.

Marvanova M, Henkel PJ. The Role and Effectiveness of Virtual Laboratory Exercises as a Pharmaceutical Sciences Learning Tool. AACP meeting, Seattle, July 10-14, 2010.

Kripalani S, **Marvanova M**, Roumie CL, Eden S, Cawthon C, Schnipper JL. Factors Associated with Patients' Understanding of their Pre-Admission Medication Regimen. SGIM 33rd Annual Meeting, Minneapolis, April 28-May 1, 2010.

Kripalani S, Marvanova M, Roumie CL, Eden S, Cawthon C, Schnipper JL. Factors Associated with Patients' Understanding of their Pre-Admission Medication Regimen. Society of Hospital Medicine (SHM) meeting, Washington DC, April 8-11, 2010.

Johnson KA, Jones CK, **Marvanova M**, Thompson AD, Tantawy MN, Baldwin RM, Conn PJ. (S)-3,4-DCPG has antiparkinsonian effects in chronic models of Parkinson's disease. The 6th Meeting on Metabotropic Glutamate Receptors, Taormina, Italy, 2008.

PEER-REVIEWED SCIENTIFIC POSTER PRESENTATIONS (Continued)

Marvanova M, Turner CH, Henkel PJ. Missions and Public Health Intersect as a School of Pharmacy Reflects Its University. AACP annual meeting, Chicago, July 19-23, 2008.

Marvanova M, Jones CK, Conn PJ. Study of gene expression and modulation of group III metabotropic glutamate receptors (mGluRs) in the basal ganglia of normal and parkinsonian rodents: Investigation of potential drug targets to treat Parkinson s disease. World Parkinson Congress, Washington, DC, April 22-26, 2006.

Marvanova M, Calligaro D, Van Tol H, Nobis B, Ryan T, Wong G, Nass R. A C. elegans model for Parkinsons disease: Identification of genes and molecules involved in dopamine neuron degeneration and protection. International *C. elegans* meeting, Los Angeles, June 25-29, 2005.

Marvanova M, Calligaro D, Ryan T, Fullard M, Wong G, Nass R. A C. elegans model for Parkinson's disase: Identification of genes and molecules involved in dopamine neuron degeneration and protection. Annual Meeting of Neuroscience, Washington, DC, Nov. 12-16, 2005.

Marvanova M, Ding T, Fullard M, Nass R. Incorporating toxicogenomics to evaluate environmental neurotoxins: dopamine neuron cell death in C. elegans models of human manganism and amyotrophic lateral sclerosis/parkinsonism dementia complex. International *C. elegans* meeting, Los Angeles, June 25-29, 2005.

Marvanova M, Calligaro D, Van Tol H, Nobis B, Ryan T, Wong G, Nass R. A C. elegans model for Parkinson's disease: Identification of genes and molecules involved in dopamine neuron degeneration and protection. International *C. elegans* meeting, Los Angeles, June 25-29, 2005.

Marvanova M, Nichols C, Wong G, Nass R. Pharmacogenetic analysis in a novel model of Parkinson's disease: Identification of genetic and chemical modulators of dopamine neuron degeneration in C. elegans. The 34th Annual Meeting of Neuroscience, San Diego, October 23-28, 2004.

Marvanova M, Fullard M, Nass R. Heavy metals and a pesticide confer DA neuron cell death and amplify the neurodegeneration in *C. elegans* models for Parkinson's disease. West Coast Worm Meeting, Santa Barbara, CA, August 21-24, 2004.

Marvanova M, Nichols C, Garrett M, Nass R. Identification of novel compounds that protect DA neurons against 6-OHDA induced cell death. West Coast Worm Meeting, Santa Barbara, CA, August 21-24, 2004.

Marvanova M, Lakso M, Wong G. Expression profiling of memantine and MK-801 in adult rat brain by cDNA microarray technology. The 1st European Conference of Functional Genomics and Disease, Prague, Czech Republic, May 14-17, 2003.

Marvanova M, Ménager J, Bezard E, Bontrop RE, Pradier L, Wong G. Microarray analysis of nonhuman primates: validation of experimental models in neurological disorders. The 1st European Conference of Functional Genomics and Disease, Prague, Czech Republic, May 14-17, 2003.

Marvanova M, Lakso M, Wong G, Castrén E. Effect of Memantine on Brain-Derived Neurotrophic Factor (BDNF) Level in Adult Rat Brain. The 14th International Congress on Parkinson's Disease, Helsinki, Finland, July 28–31, 2001.

Marvanova M, Lakso M, Wong G, Castrén E. Effect of Memantine on Brain-Derived Neurotrophic Factor (BDNF) Level in Adult Rat Brain. XVI Helsinki University Congress of Drug Research, Helsinki, Finland, June 7-8, 2001.

Marvanova M, Lakso M, Wong G, Castrén E. Effect of Memantine on Brain-Derived Neurotrophic Factor (BDNF) Level in Adult Rat Brain. The 3rd Nordic-Baltic Symposium on Molecular Pharmacology of 7TM Receptors, Turku, Finland, August 24-26, 2000.