

May 24, 2019

Dear Colleagues:

The Drake College of Pharmacy and Health Sciences would like to provide you with a summary of its scholarly activities for *CY 2018*. Highlights of the attached report include:

- 36 PEER-REVIEWED ARTICLES
- 40 PEER-REVIEWED PODIUM PRESENTATIONS
- 64 PEER-REVIEWED POSTERS
- 12 INVITED ARTICLES/COLUMNS
- 57 INVITED PODIUM PRESENTATIONS
- 24 INVITED POSTERS
- 7 BOOK CHAPTERS
- 96 UNDERGRADUATE/PROFESSIONAL STUDENT RESEARCH PROJECTS (MULTIPLE STUDENTS)
- 30 NEW GRANTS/CONTRACTS TOTALING **\$133,036 \***

\*Does not include multi-year funding with start dates prior to 2016.

This report does not include the many local, regional and national service accomplishments, practice advancements, or instructional work of the faculty.

Regards,  
Charles R. Phillips  
Associate Dean for Curriculum and Assessment

*Preparing today's learners to be tomorrow's health care leaders*

# CPHS SCHOLARSHIP SUMMARY

CALENDAR YEAR 2018

(COMPLETED WORK)

## PEER REVIEWED ARTICLES: (36<sup>1</sup>)

Allouch, S.; **Munusamy, S.** AMP-activated Protein Kinase as a Drug Target in Chronic Kidney Disease. Current drug targets 2018, 19, 709-720, doi:10.2174/1389450118666170601130947.

**Andreski, M.**, Myers, M, Gainer, K, Pudlo, A, "The Iowa New Practice Model: Advancing Technician Roles to Increase Pharmacists' Time to Provide Patient Care Services" Journal of the American Pharmacists Association. 2018 May - Jun;58(3):268-274

Bellottie GD, Kirwin J, Allen RA, Anksorus H, Bartelme K, **Bottenberg MM**, et al. Suggested pharmacy practice laboratory activities to align with pre-APPE domains in the doctor of pharmacy curriculum. Currents in Pharmacy Teaching and Learning. 2018 Sep;10(9):1303-1320.

Boelts B, Draker N, Bell EA. Codeine use in children for analgesia and cough relief: implications for the pharmacist. The Journal of the Iowa Pharmacy Association 2018;74:22-27

**Brady MP** & Weiss, W.M. Clinical diagnostic tests versus MRI diagnosis of anterior cruciate ligament tears. Journal of Sport Rehabilitation. 2018, 27(6): 596-600.

**Brady MP**, Weiss W.M., & Ficklin T. Vicon validation of Artificial ACL deficient knee. Athletic Training and Sports Health Care. 2018, 10(3): 125-130.

Brooks M, **Nelson M.** A Preliminary Model for Faculty Workload for a Highly Integrated Curriculum Delivered by Team-Based Learning. Curr Pharm Teach Learn. 2018;10:1321-1330.

Caligiuri FJ, **Ulrich EE**, Welter KJ. Pharmacy student knowledge, confidence and attitudes towards medical cannabis and curricular coverage. American Journal of Pharmacy Education. May 2018; 82 (5): 6296.

**Clarke C, Schott K, Arnold A.** Pharmacy Preceptors' Perceived Value of Virtual Experiential Quality Assurance Site Visits. American Journal of Pharmaceutical Education: 2018; 82 (4) Article 6438.

**Clarke C, Schott K, Arnold A.** Response to Further Research Needed for Virtual Quality Assurance Experiential Site Visits. American Journal of Pharmaceutical Education: 2018; 82 (7) Article 7294.

Countey H, Steinbronn C, Grady SE. Changing student attitudes and perceptions toward opioid use disorder. Ment Health Clin. 2018;8(5):222-6.

**Diehl B, Dy-Boarman E, Bottenberg MM, Mobley-Bukstein W.** Utilizing desirable difficulties for sterile compounding training in a skills-based laboratory course. Currents in Pharmacy Teaching and Learning. 2018 Apr;10(4):469-472.

**Dy-Boarman E, Bottenberg MM, Diehl B, Mobley-Bukstein W, Quaerna, B.** Lessons learned from an investigation exploring association between grit and student performance in a pharmacy skills laboratory course. Currents in Pharmacy Teaching and Learning. 2018 Nov;10(11):1443-1446.

**Dy-Boarman EA, Bryant GA,** Herring MS, Foster KY. Impact of debates on student perceptions and competency scores in the advanced pharmacy practice setting. Curr Pharm Teach Learn. 2018;10(1):66- 71.

**Dy-Boarman EA, Diehl B, Mobley-Bukstein W, Bottenberg MM, Bryant GA, Sauer H.** Comparison of faculty and student self-assessment scores of aseptic technique skills and the impact of video review on self-awareness for second-year pharmacy students. Curr Pharm Teach Learn. 2018;10(2):201-205.

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<sup>1</sup> **Student co-authors are underlined**

**Dy-Boarman EA**, Nisly SA, Costello TJ. It's no debate, debates are great. *Curr Pharm Teach Learn*. 2018;10(1):10-13.

**Huey, K.A.** (2018). Potential roles of vascular endothelial growth factor during skeletal muscle hypertrophy. *Exer. Sport Sci. Rev.* 46:195-202.

Janke KK, **Dy-Boarman E**, Von Hoff B. A Journey to Understand Enjoyment in Academic Writing. *Inov Pharm*. 2018;9(3):Article 9.

**Kassel LE**, Shine J, Nelson M, Jones L, Kassel C. "Adverse Effects Associated with Scopolamine Use in the Perioperative Patient, A Systematic Review". *AORN* 2018;108(3):287-95.

**Kassel LE**, Van Matre ET, Foster, C, Fish, DN, Kiser TK, Mueller S, Sherman D, MacLaren R, Neumann R. "A Randomized Pharmacokinetic and Pharmacodynamic Evaluation of Every 8-hour and 12-hour Dosing Strategies of Vancomycin and Cefepime in Neurocritically Ill Patients" *Pharmacotherapy* 2018; published ahead of print. DOI: 10.1002/phar.2156

Kieran L, **Haack S**. PRELOAD: A Rubric to Evaluate Course Syllabi for Quality Indicators of Community Engagement and Service-Learning Components. *Journal of Community Engagement in Higher Education* 2018; 10(2): 39-47.

**Kjos AL**, **Bryant GA**. Communication networks of medication management in an ambulatory care setting. *Res Social Adm Pharm*. 2018; [Epub, ahead of print]

Lacy MC, **Bryant, GA**, Herring MS, **Koenigsfeld CF**, **Lehman NP**, Smith HL. Implementation and evaluation of pharmacy-driven transition of care intervention for patients discharged from emergency department. *J Am Coll Clin Pharm* 2018;1-6. <https://doi.org/10.1002/jac5.1011>

**Lehman N**, **Koenigsfeld CF**, **Wall GF**, Renner C, Hahn D, Sheesley B, Veach L, Bjornson A. A collaborative program to increase adult pneumococcal vaccination rates among a high-risk patient population receiving care at urgent care clinics. *American Journal of Infection Control* 2018 Aug;46(8): 952-953. Published online: <https://doi.org/10.1016/j.ajic.2018.02.020>

Martin, Linda Gore, Terri L. Warholak, Ana L. Hincapie, Tyler Gallo\*, and **Andrea L. Kjos**. "Health Informatics Competencies for Pharmacists in Training." *American Journal of Pharmaceutical Education*. (Published online March 2018) [doi.org/10.5688/ajpe6512](https://doi.org/10.5688/ajpe6512)

McNamara K, Witry M, **Bryant G**, Herring M, **Koenigsfeld C**, **Lehman N**, Logeman C, Mormann M, Rueber A, Hoehns, J. A prospective, multi-center cohort study: investigating the ability of warfarin-treated patients to predict their INR. *Clin Res Cardiol* Published online July 24, 2018. <https://doi.org/10.1007/s00392-018-1345-9>

**Munusamy, S.**; Osman, A.; Riaz, S.; Ali, S.; Mraiche, F. The use of Socrative and Yammer online tools to promote interactive learning in pharmacy education. *Curr Pharm Teach Learn* 2019, 11, 76-80, doi:10.1016/j.cptl.2018.09.021. (Accepted September 2018)

O'Brien MS, Markovich KC, Selleseth D, DeVita AV, Sethna P, **Gentry BG**. In Vitro Evaluation of Current and Novel Antivirals in Combination against Human Cytomegalovirus. *Antiviral Research* 158: 255-263 (2018).

Sankaralingam, S.; Ahmed, A.; Rahman, M.; Eid, A.H.; **Munusamy, S**. Role of Methylglyoxal in Diabetic Cardiovascular and Kidney Diseases: Insights from Basic Science for Application into Clinical Practice. *Curr Pharm Des* 2018, 24, 3072-3083, doi:10.2174/1381612824666180903141832.

Taylor MA, Smith HL, **Wall GC**. Characteristics of patients claiming a fluoroquinolone allergy admitted to a large tertiary care hospital. *Int J Clin Pharm*. 2018 Mar 14. doi: 10.1007/s11096-018-0613-0

**Ulrich E**, **Grady S**, Vonderhaar J, Ruplin A. Proposed model for translational research at a teaching intensive college of pharmacy. *Res Social Adm Pharm*. 2018 Jul;14(7):673-677.

Vaidya B, Shukla SK, Kolluru S, Huen M, **Mulla N**, Mehra N, et al. Nintedanib-cyclodextrin complex to improve bio-activity and intestinal permeability. *Carbohydr Polym*. 2019 Jan 15;204:68-77.

**Wall GC, Muktar H, Effken C, Mahajan PB.** (2018) Addition of Allopurinol for altering Thiopurine metabolism to optimize therapy in patients with inflammatory bowel disease. *Pharmacotherapy* 38:259-270.

Williams EA, **Miesner AR**, Beckett EA, **Grady SE.** Pimping in pharmacy education: a survey and comparison of student and faculty views. *J Pharm Pract.* 2018 Jun;31(3):353-360.

Wren C, **Bell E**, Eiland LS. Ozenoxacin: a novel topical quinolone for impetigo. *The Annals of Pharmacotherapy* 2018;98:25-28

Zaman RU, **Mulla NS**, Braz Gomes K, D'Souza C, Murnane KS, D'Souza MJ. Nanoparticle formulations that allow for sustained delivery and brain targeting of the neuropeptide oxytocin. *Int J Pharm.* 2018 Sep 5;548(1):698–706.

#### **PEER REVIEWED PODIUM PRESENTATIONS: (40)**

Adcock K, Corbett A, Hofseth L, Islam M, Khasawneh F, **Maki E**, Plake K, Roberts S, Wong S. ALFP Debate “Deans should be pharmacists from within the same

Anderson, C., Hergenrath, K., **Johnston, S.P.**, Tansey, T., & Keegan, J. (March 2018). Social determinants of health: Addressing inequities through informed rehabilitation research and practice. 2018 National Council on Rehabilitation Counseling annual conference, Anaheim, CA.

Anna C. Burns, Hannah E. Sauer, John D. Williams, Marc G. Busch, Terry L. Bowlin, Brian G. Gentry. Metabolic Activation of MBX-2168 Involves Enzymatic Removal of a Butyl-Ether Moiety by Adenosine Deaminase-Like Protein 1. 31st Annual International Conference on Antiviral Research, Porto, Portugal (2018).

Bastianelli K, Boje K, Hughes J, Jefferson C, **Maki E**, Patel R, Roberts S, Robinson J,. Developing the Applicant Pipeline Microsessions. American Association of Colleges of Pharmacy interim Meeting, Long Beach, CA. February 2018.

**Bell C**, Spilman SK, Eastman DK, Sidwell RA, Sherrill JE, Pelaez CA. Do all head injured patients on antiplatelet drugs really need platelets? Podium presentation at the annual meeting of the Eastern Association for the Surgery of Trauma, Lake Buena Vista, FL. January 2018.

Caroline Jones, Lynn Kassel and Abebe Mengesha, Quantitative determination of epinephrine and its degradation products using high performance liquid chromatography. 15th Annual Drake University Conference on Undergraduate Research in the Sciences (DUCURS), April 12, 2018. Oral presentation

**Clarke C.** Ready for Remediation? American Association of Colleges of Pharmacy 2018 Institute on Experiential Education, Herndon, Virginia, May 8, 2018.

Drettwan, J.A. Kjos “An Ethical Case Study of PBM Practices’ Impact on Providers.” Podium presentation at the 18th Biennial Midwest Social and Administrative Pharmacy Conference, Madison, WI, August 16, 2018. (Abstract in Innovations in Pharmacy, Oct. 2, 2018. Article 5. DOI: (Available at: <https://pubs.lib.umn.edu/index.php/innovations/article/view/1493>)

**Fischbach, J.** (October, 2018). Occupation based assessments in pediatric practice. IOTA Annual Conference. Waterloo, IA.

**Fischbach, J.** (October, 2018). Sensory processing disorder. IOTA Annual Conference. Waterloo, IA.

**Fischbach, J.** (September, 2018). Establishing strong practices in telehealth to meet educational needs of children. AOTA Children and Youth Specialty Conference. Milwaukee, WI.

**Fornoff, A. Pitlick, J.** “Incorporation of the Pharmacists' Patient Care Process Into Pharmacy Skills and Applications Lab.” AACP Annual Meeting Mini Session, Boston, Massachusetts. July 2018.

Frolek Clark, G., **Fischbach, J.**, Schmidt, E. K., Weaver, L. L., Reifenberg, G., Laverdure, P., & Beisbier, S. (September, 2018). Translating research into practice: Systematic review on occupational therapy for children and youth. AOTA Children and Youth Specialty Conference. Milwaukee, WI.

**Grady S.** "Chronic Care Management Part I: Mental Health, Cardiology, Endocrinology" Midwest Pharmacy Expo February 16, 2018

**Griffiths, Y.,** Bahle-Lampe, A., Lohman, H., & Rubin, W. (2018). Honoring the past and informing the next generation of occupational therapists. American Occupational Therapy Association 97th Annual Conference. Salt Lake City, UT. April 2018.

**Gutierrez, C.** (2018, June). Epi what? Let's talk about the science of public health. Oral presentation at the annual HOSA International Leadership Conference in Dallas, TX.

**Gutierrez, C., & Lancaster, H.** (2018, June). Global health partnerships: Lessons learned from a water sustainability project in rural Uganda engaging students, faculty, and the community. Oral presentation at the annual HOSA International Leadership Conference in Dallas, TX.

**Gutierrez, C., Wolff, B.,** and Turgeon-Drake, J. (2018). Using photovoice to facilitate dialogue about health disparities within communities. Presented at the SHAPE America Central District Conference 2018 in Sioux Falls, SD.

**Haack S,** Kieran L. Development of a Rubric to Evaluate Course Syllabi for Quality Indicators of Community Engagement and Service-Learning. 2018 International Association for Research on Service-Learning and Community Engagement Conference. New Orleans, LA. July 2018.

**Huey, KA.** Chair: Sex-dependent Muscle Physiology Thematic Poster Session, American College of Sports Medicine Meeting, Minneapolis, MN, May 30, 2018.

**Hurdelbrink, JR.** "The Relationship between Inter-Vivos Transfers and Subsequent Informal Care Provision." Accepted to be presented at the Eastern Economic Association Meetings, Boston, MA, Mar. 2 – 4, 2018 but unable to attend due to inclement weather.

**Lehman N.** A Collaborative Program Using Student Pharmacists to Increase Adult Vaccination Rates for a High-Risk Patient Population Receiving Care at Urgent Care Clinics Peer-reviewed PharmTalk session presented at 2018 APhA Annual Meeting March 2018, Nashville, TN.

Lieberman, D., Hunter, E., Frolek Clark, G., **Fischbach, J.,** Gronski, M., Doherty, M., Tanner, K., Bassi, M., Martin, K., Kingsley, K., Weaver, L. (April, 2018). (AOTA) Systematic Review on Occupational Therapy for Children and Youth (Age 0-5 Years). AOTA Annual Conference. Salt Lake City, UT.

**Meyer KS,** Duncan N. "Recipe for Success: Real World Strategies for Building Collaborative Practice Agreements." Podium presentation at the ASCP Annual Meeting, National Harbor, Maryland, November 2018.

**Miesner AR,** Grace EE, Pau AK, Liedtke MD, Rathbun RC. HIV Continuity, Part I: HIV Updates for the Inpatient Practitioner. Presented at: 2018 American College of Clinical Pharmacy Global Conference of Clinical Pharmacy. October 21, 2018; Seattle, WA.

**Mobley-Bukstein, WS.** "Nutrient Depletion: How to Answer Patient Questions" Midwest Pharmacy Expo, February 17, 2018.

**Mobley-Bukstein, WS.** "Diabetes Management and Food Insecurities" Global Health Consortium, Des Moines, IA November 9, 2018.

Nisly SA, Steuber TD, **Dy-Boarman EA,** Isaacs AN. Special Session: CreACTIVITY: Re-engaging learners through creative use of games and alternative learning strategies. Presented at: American Association of Colleges of Pharmacy Annual Meeting. July 2018; Boston, MA.

**Plutschack, D.** (June 21, 2018). Current best practices for treatment of lateral epicondylitis. Canadian Occupational Therapy Association Conference 2018. Vancouver, BC, Canada.

**Plutschack, D.** (October 5, 2018). Current best practices for treatment of lateral epicondylitis. Iowa Occupational Therapy Association Conference 2018. Waterloo, IA.

**Stelter N.** Conversations at the Counter: Empowering Patients to Make Change Happen. Presented at: CEImpact CE Webinar (live); February 2018.

**Stelter N.** Motivational Interviewing-A Step Beyond Patient Counseling. Presented at: McKesson ideaShare Conference; Las Vegas, NV; June 2018.

Thal, W., **Johnston, S P**, & Jessup, A. (August, 2018). Cultural Considerations in Mental Health Screenings in a Medically Underserved Community in Peru. 10th ICN NP/APN Conference. Rotterdam, Netherlands, August 26-29, 2018.

**Ulrich EE, Grady SA**, Vonderhaar JM. How to Establish an Interdisciplinary Translational Research at a Teaching-Intensive College of Pharmacy: Lessons learned. International Social Pharmacy Workshop. July 23-26, 2018. Leuven, Belgium.

**Ulrich EE, Hurdelbrink J, Welter KJ.** Determining student preferences of and required financial incentives to work in a rural and medically underserved area in NABP/AACP District 5. NABP/AACP District 5 Annual Meeting. August 1-4. Saskatoon, Saskatchewan, Canada.

**Urish, C.K** Intentional Relationship Model: Knowing Our Patients – 3 hour invited presentation – Louisiana State OT Conference October 2018 – New Orleans, LA

**Urish, C.K** Mindfulness & Zentangle – 6 hour invited presentation – Louisiana State OT Conference October, 2018 – New Orleans, LA

**Urish, C.K.** Grab your boogie board and make stress your friend - keynote presentation . AOTA/NBCOT Student Conclave, October, 2018 Atlantic City, NJ

Vollmer K, Anna Burns, Hannah Sauer, John Williams, Gloria Komazin-Meredith, Marc Busch, Terry Bowlin, and **Brian Gentry.** Enzymatic Removal of a Butyl-Ether Moiety by Adenosine Deaminase-Like Protein 1, a Necessary Step in the Mechanism of Action of MBX-2168. DMU Research Symposium, Des Moines University, Des Moines, IA (2018) (co-author).

**Wall GC, Miesner AR,** Caligiuri FJ. Gamechangers in Pharmacy: 2017. Presented at: 2018 Midwest Pharmacy Expo. February 18, 2018; Des Moines, IA.

#### **PEER REVIEWED POSTERS: (64)**

**Andreski M,** Myers M, Pudlo A, Gainer K. The Iowa New Practice Model: Expansion of an Initiative to Enable Pharmacists to Provide More Patient Care Services Poster presented at the 165nd Annual Meeting of the American Pharmacists Association, Nashville, TN, March 17, 2018.

**Brady MP, Gnacinski SL,** Weiss, WM (2018, March). Evaluating the ecological validity of a synthetic model knee to mimic varying degree of anterior cruciate ligament integrity. Mid-America Athletic Trainers Society, LaVista, NE.

**Brady MP,** Young T, Williamson G, Williamson B, **Gnacinski SL** (2018, March). Effects of MarcPro and NormaTec on acute perceptions of fatigue in female and male division I collegiate soccer players. Mid-American Athletic Trainers Society, LaVista, NE.

Burns A, Daly MW, **Kassel L.** Evaluation of outcomes in asthma patients switching from brand combination inhalers to generic fluticasone/salmeterol. Presented at American Society of Health-System Pharmacists (ASHP) Midyear Clinical Meeting (MCM). Anaheim, CA, December 2018.

Caroline Jones, Lynn Kassel and Abebe Mengesha, Epinephrine Drug Degradation in Auto-Injector Products. American College of Clinical Pharmacy (ACCP) Global Conference on Clinical Pharmacy, Oct. 20 – 23, 2018, Seattle, WA.

Caroline Jones, Lynn Kassel and Abebe Mengesha, Epinephrine Drug Degradation in Auto-Injector Products. Des Moines University (DMU) Research Symposium, Dec. 6, 2018, Des Moines, IA.

**Clarke C, Choi, D.** Evaluation of Interprofessional Activity in an Advanced Pharmacy Practice Experience Program. American Association of Colleges of Pharmacy 2018 Annual Meeting, Boston, Massachusetts, July 23, 2018.

**Clarke C, Derrick S.** Evaluation of an Interprofessional Poverty Simulation Experience. American Association of Colleges of Pharmacy 2018 Annual Meeting, Boston, Massachusetts, July 23, 2018

Cornell, D.J., **Gnacinski, S.L.**, & Ebersole, K.T. (2018, June). Longitudinal changes in dynamic balance ability among firefighter recruits: A multivariate perspective. Poster presented at the annual meeting for the American College of Sports Medicine, Minneapolis, MN, USA.

Do, Andre, and **Abebe Mengesha**, Fabrication of 3D Printed Suppositories for Individualized Drug Delivery: Evaluating Potential Polymers and Software, (abstract and poster) 130th Annual Meeting of the Iowa Academy of Sciences (IAS), April 20 – 21, 2018, Buena Vista University, Storm Lake, IA.

Do, Andre and **Abebe Mengesha**, Fabrication of 3D Printed Suppositories for Individualized Drug Delivery: Evaluating the Printability and Compatibility of Potential Polymers, (abstract and poster) 15th Annual Drake University Conference on Undergraduate Research in the Sciences (DUCURS), April 12, 2018.

**Eastman DK, Draker N**, Spilman SK, Tang K, Sidwell RA, Pelaez CA. Aspirin platelet reactivity testing to guide therapy for patients with traumatic intracranial hemorrhage. 2018 ACCP Global Conference on Clinical Pharmacy, Seattle, WA. October 20, 2018.

Enzmann M, Reiter D, **Grady S, Ulrich E**. Decreasing the stigma surrounding alcohol use disorder. College of Psychiatric & Neurologic Pharmacists Annual Meeting. April 22-25, 2018. Indianapolis, IN, USA.

**Fischbach, J.**, & Plutschack, K. (April, 2018). Establishing strong practices in telehealth to meet educational needs of children. AOTA Annual Conference. Salt Lake City, UT.

Frantz R, Pasha M, Agouni A, **Munusamy S**. Differential Antineoplastic Effects of Metformin Against Renal Cancer Cell lines. Poster presented at: Des Moines University Research Symposium; December 6, 2018; Des Moines, Iowa.

**Gnacinski, S.**, & Meyer, B. (2018, October). Evaluating item performance in a novel measure of perceived recovery: Applications of item response theory. Poster presented at the annual meeting of the Association for Applied Sport Psychology, Toronto, ON, CAN.

**Gnacinski, S.**, Seaberg, N., & **Brady, M.** (2018, October). Examining the effects of baseline fitness and recovery intervention on male collegiate soccer players' perceptions of performance readiness. Poster presented at the annual meeting of the Association for Applied Sport Psychology, Toronto, ON, CAN.

**Griffiths, Y. & Urish, C.** (2018). Incivility in the Workplace: Adult Bullying in Academia. AOTA Educational Summit. Louisville, KY. October 2018.

**Gutierrez, C. & Wolff, B.** (2018, May). Using Photovoice with Undergraduate Interprofessional Health Sciences Students to Facilitate Understanding of and Dialogue about Health Disparities within Rural Communities. Poster presented at the National Rural Health Association's Health Equity Conference in New Orleans, LA.

**Gutierrez, C.**, Vogt, B., Memmott, J., & Giger, J. (2018, May). Designing Curriculum and Fostering Collaborations to Implement a Lay Patient Advocate Training in Tribal Communities. Poster presented at the National Rural Health Association's Health Equity Conference in New Orleans, LA.

Hagen NR, Sauer HE, Nguyen ML, Bowlin TL, **Gentry BG**, Pentostatin Antagonizes the Anti-Viral Activity of MBX-2168 by Inhibiting the Biosynthesis of Active Compound. Des Moines University Research Symposium (2018).

Hammond DA, **Kassel LE**, Bolesta S, Swanson J, Kane-Gill S, Skaar D, Haney J, Oyler D, Lakkad M, Bookstaver PB, Branan T, Chudow M, Devlin J, Fong J, Juang P, Kinney J, Kiser T, Peitz G, Pon T, Storjohann T. Accepted Abstract/Poster Presentation: "National Survey of Pharmacy Students' Opinions of Critical Care Pharmacists' Roles/Responsibilities". Platform Number: 997. Society of Critical Care Medicine Annual Congress. San Antonio, TX. January 2018.

Hess, C., **Gnacinski, S.**, & Meyer, B. (2018, October). A novel measure for assessment of recovery in athletes: An exploratory factor analysis (EFA). Poster presented at the annual meeting of the Association for Applied Sport Psychology, Toronto, ON, CAN.

**Huey, KA** and **Godwin, K**. Effects of Glutamine Supplementation on Overload-Induced Muscle Growth and Function in Mice Drake. Med. Sci. Sport Exer. 50(S5):805, 2018. Poster presented at the American College of Sports Medicine Meeting, May 29 - June 2, 2018; Minneapolis, MN

**Huey, KA**, **Jacoby, E.**, **Bischel, T.**, and **Godwin, K**. Sex-dependent Differences in Voluntary Exercise Volume and Cardiorespiratory Adaptation in Young and Aged Mice. Poster presented at the Integrative Physiology of Exercise Meeting, Sept. 5-8, 2018; San Diego, CA.

**Huey, KA**, **Moeller, B.** and **Godwin, K**. Effects of AICAR Treatment on Muscular, Cardiorespiratory and Hsp25 Adaptations to Treadmill vs. Running Wheel Exercise Training in Mice. FASEB J, 2018. Poster presented at Experimental Biology, April 21-25, 2018; San Diego, CA.

**Huey, KA**, Newman, N. and **Gnacinski, S**. Interactive Activities to Learn How Our Heart and Muscles Work for 4th and 5th Graders, Poster presented at Experimental Biology, American Physiological Society Phun Week Session, April 21-25, 2018; San Diego, CA.

**Jones C**, **Mengesha A**, **Kassel LE**. "Epinephrine Drug Degradation in Auto-Injector Products". ACCP 2018 Global Conference on Clinical Pharmacy. Seattle, WA. October 2018.

**Joseph J**, Daly MW, Wortman W, **Pitlick J**. Evaluation of outcomes in diabetic patients switching from brand dipeptidyl peptidase-4 inhibitors to generic alogliptin. ASHP MCM, December 2018.

**Karli Borcherding Gunn** Perceptions of Family Members, Patients and Providers on the Diagnosis of Diabetes; abstract submitted and accepted; presented March 17, 2018 at APhA Annual Meeting. (Wendy Mobley-Bukstein, mentor)

Lacy MC, **Bryant GA**, Herring MS, **Koenigsfeld CF**, **Lehman NP**, Smith HL. Implementation and Evaluation of a Pharmacy Driven Transitions of Care Program for Patients Discharged from the Emergency Department. Presented at Iowa Pharmacy Association Annual Meeting. Des Moines, IA, June 2018

**Leah Amundson**, **Tessa Heitkamp**, **Drake Reiter**, **Erica Gannon**, **Valerie Meyer**, **Kelli Jo Welter** An Evaluation of Student Pharmacist Wellness and Wellness Services Provided at a Private University; abstract submitted, accepted and presented on December 6, 2018 at Des Moines University Research Symposium, Des Moines, IA. (Wendy Mobley-Bukstein, mentor)

Lee JL, Lempicki KA, **Bryant GA**, Patel SM. 2018 Updates on the accomplishments and initiatives of the ACCP Ambulatory Care Practice and Research Network (PRN). American College of Clinical Pharmacy: Annual Meeting. October 2018; Seattle, WA.

Lee JL, Patel SM, **Bryant GA**, Lempicki KA. 2018 Updates on the accomplishments and initiatives of the ACCP Ambulatory Care Practice and Research Network (PRN) – Focus on member billing and reimbursement of clinical pharmacy services. American College of Clinical Pharmacy: Annual Meeting. October 2018; Seattle, WA.

**Lehman,N.**, **Koenigsfeld CF**, **Wall GC**, Renner, C, Hahn, KD, Sheesley, B, Bjornson A, Veach LA. A Collaborative Program Using Student Pharmacists to Increase Adult Vaccination Rates for a High-Risk Patient Population Receiving Care at Urgent Care Clinics. Presented at Iowa Pharmacy Association Annual Meeting. Des Moines, IA, June 2018.

**Lehman,N.**, **Koenigsfeld CF**, **Wall GC**, Renner, C, Hahn, KD, Sheesley, B, Bjornson A, Veach LA. A Collaborative Program Using Student Pharmacists to Increase Adult Vaccination Rates for a High-Risk Patient Population Receiving Care at Urgent Care Clinics. Presented at APhA Annual Meeting. Nashville, TN, March 2018

**Markovich KC**, **Gentry BG**, Combinations of Terminase Inhibitors Elicit a Synergistic Enhancement of Effect against Human Cytomegalovirus in vitro. 31st Annual International Conference on Antiviral Research (2018).

**Melcher N**, **Brady MP**, **Gnacinski S**, **Newman N** (2018, April). Evaluating the reliability of a synthetic knee model in athletic training education programs when teaching students the Lachman test. DUCURS, Des Moines, IA.

**Meyer KS**, **Mobley-Bukstein**. "Conversion of Insulin Glargine to Insulin Detemir in Older Adults." Poster presentation at the ASCP Annual Meeting, National Harbor, Maryland, November 2018.



**Mobley-Bukstein, W** Austin, S; A Process to Meet Quality Indicators and Generate Revenue using Pharmacy-Based Services; abstract submitted and accepted; presented March 17, 2018 at APhA Annual Meeting.

**Mobley-Bukstein, W**, Patel, S; Developing a Validated Tool for identifying patients who qualify for Medication Therapy Management Services; abstract submitted and accepted; presented March 17, 2018 at APhA Annual Meeting. (mentor)

**Munusamy S**, Frantz R, Pasha M, Agouni A. Differential Antineoplastic Effects of Metformin Against Kidney Cancer. Poster presented at: 23rd Annual Meeting of the Iowa Physiological Society; September 12, 2018; Des Moines, Iowa.

**Munusamy S**, Pasha M, Agouni A. Anti-neoplastic effects of metformin against renal clear cell carcinoma. Poster presented at: Experimental Biology Conference 2018; April 21-25, 2018; San Diego, California.

Nai, M., **Gnacinski, S.**, Wahl, C., & Meyer, B. (2018, October). Development and preliminary validation of a new recovery measure: Coach input. Poster presented at the annual meeting of the Association for Applied Sport Psychology, Toronto, ON, CAN.

Nai, M.M., **Gnacinski, S.L.**, Wahl, C.A., & Meyer, B.B. (2018, April). Subjective measures of training load response: Revisiting the relation between the POMS and the RESTQ-Sport. Poster presented at the annual meeting for the Midwestern Psychological Association, Chicago, IL, USA.

**Newman, N.D., & Gnacinski, S.L.** (2018, March). Differences in perceptions of conflict between secondary school athletic trainers and coaches. Poster presentation at the annual Mid America Athletic Training Association, La Vista, NE, USA. N. Seaberg, & B. Williamson = Drake Students

Purdy R, Sekula A, Hubble M, **Kassel LE**. Adherence to the 2018 Clostridioides difficile guideline updates in a community hospital setting. Student Poster. American Society of Health-Systems Pharmacy. Anaheim, CA. December 2018.

Resnick A, Leeson W, Alexander A, **Rovers J**. Natural Language Processing in Qualitative Public Health Research. Poster presented at: Des Moines University Research Symposium December 6, 2018, Des Moines, IA.

**Sacco J**, Craft Reich S, Ekena J, Mann S, Luethcke R, Trepanier LA. Polymorphisms in canine glutathione S-Transferase (GST) genes: Prevalence and functional relevance. Poster presented at the 22nd Meeting of the North American Section of the International Society for the Study of Xenobiotics, Montreal, Canada, July 15th-19th, 2018.

**Sacco J**, Mann S, Yablochkin A. Genetic polymorphisms in the canine glutathione S-transferase P1 (GSTP1) gene promoter. Poster presented at the Annual Meeting of the Society of Toxicology, San Antonio, TX, March 11th-15th, 2018.

**Schott K, Clarke C, Phillips, C.** Co-curricular Plan Development and Assessment. American Association of Colleges of Pharmacy 2018 Annual Meeting, Boston, Massachusetts, July 22, 2018.

**Schott K, Clarke C, Phillips, C.** Development of a Continuing Professional Development Course Series. American Association of Colleges of Pharmacy 2018 Annual Meeting, Boston, Massachusetts, July 22, 2018.

Stark N, **Ulrich E**. Medical Cannabis: Student Perceptions and Opinions on the Role of the Pharmacist. American Pharmacists Association Annual Conference. March 15-19, 2018. Nashville, TN, USA.

Stauffer R, **Pitlick JM**, Challen L. Impact of an electronic-based assessment of student pharmacist performance in a required therapeutics course. Pharmacotherapy. 2018; 38: e58.

**Stelter N, Mobley-Bukstein W, Bottenberg MM, Clarke C**, (Spyrka K, Barot C, Blum L, Gales K, Fipps K, Sheldon E.) Perceptions toward expansion of student pharmacist-delivered wellness services for university employees. American Pharmacists Association Annual Meeting. Nashville, TN. March 2018.

Sulkowski, B.A., Rohr, B.V., Kasra, J.F., Wrenn, C.C. Social behavior of the triple-transgenic mouse model of Alzheimer's disease. Alzheimer's Association International Conference, July 2018.

Sykuta A, Follett L, Welty T Laugerman M, Gidal BE, Privitera M, Berg M, Dworetzky B, Szaflarski J, Pollard J. Within-subject variability of lamotrigine bioavailability: analysis of Equigen study data. American Epilepsy Society. 2018 Abstract 1.330. December 2018, New Orleans.

Thal, W., **Johnston, S. P.**, & Jessup, A. (July, 2018). Cultural considerations in mental health screenings in a medically underserved community in Peru (accepted poster presentation). Sigma Theta Tau International 29th International Nursing Research Congress. Melbourne, Australia, July 19-23, 2018.

Thal, W., Opton, L., & **Johnston, S. P.** (July, 2018). Rural health in a developing nation (accepted poster presentation). International Rural Nursing Conference; Nashville. July 23-26, 2018.

Tori Adams, Trevor Bridge, Katie Serbin, Lauren Holmes, Jake Powers, Carolyn Zuegner Attitudes Toward Student Pharmacist-Delivered Wellness Services for University Employees; abstract submitted and accepted; presented March 17, 2018 at APhA Annual Meeting. (Wendy Mobley-Bukstein, mentor)

Wahl, C., **Gnacinski, S.**, Nai, M., & Meyer, B. (2018, October). Development and preliminary validation of a new measure of stress and recovery. Poster presented at the annual meeting of the Association for Applied Sport Psychology, Toronto, ON, CAN.

Wahl, C.A., **Gnacinski, S.L.**, Nai, M.M., & Meyer, B.B. (2018, April). Psychological predictors of perceived stress and recovery in sport. Poster presented at the annual meeting for the Midwestern Psychological Association, Chicago, IL, USA.

**Wall GC,** Sharma V, Schneider R, Taylor MJ, Kristi Adams, Gasperi Lindy and Joshua C. Lukenbill. Retrospective Evaluation of Pharmacist Assisted Total-Dose Iron Sucrose Protocol in Patients with Iron Deficiency” Presented at the American Society of Hematology Annual meeting, San Diego, CA

Williamson, A.C., LeBlanc, H.R., Gentry, B.G., Wrenn, C.C. Study of daily oral genistein on spatial and olfactory memory in wild-type and transgenic mice that model Alzheimer’s disease. Alzheimer’s Association International Conference, July 2018.

#### **BOOK CHAPTERS: (7)**

**Bottenberg MM.** Gout. In: Sutton SS, Ed. Naplex Review 3rd Ed, New York, NY: McGraw-Hill; 2018:456.

**Griffiths, Y.,** Thinnis, A. & Byers-Connon, S. (2018) Chapter 4, Psychological Aspects of Aging in Occupational Therapy for Elders, (4th Ed), (Eds) Lohman, Byers-Connon, S., & Padilla, R., St. Louis, MO: Mosby-Yearbook, Inc.

Hemphill, B., & **Urish, C.K.** (2019). Assessments in Occupational Therapy Mental Health (3rd ed). Thorofare, NJ: Slack, Inc. Assessment in Occupational Therapy - Chapter 1

Hemphill, B., & **Urish, C.K.** (2019). Assessments in Occupational Therapy Mental Health (3rd ed). Thorofare, NJ: Slack, Inc. Evidence Based Practice and Assessment in Occupational Therapy - Chapter 2

**Johnston, S.P.,** & Hartley, M.T. (2018). Ethics and facilitating services for clients. In Case Management for the Health, Human, and Vocational Rehabilitation Services, K.B. Wilson, C.L. Acklin, S. Chao, Eds., pp. 124-137, Linn Creek, MO: Aspen Professional Services.

**Kassel LE,** Salvatore D. Reviewed by Winkler SR, Jen C. “CNS Hemorrhages”. Editor: **Grady S.** PSAP. September 2018.

**Koenigsfeld C, Eastman D, Fornoff A.** “Headache”. NAPLEX Review Guide. 3rd edition. New York, NY: McGraw-Hill; 2018: 452-459.

### **NON-PEER REVIEWED ARTICLES: (5)**

Bahle-Lampe, A., **Griffiths, Y.**, Lohman, H. & Rubin, W. (2018) Capturing narrative histories of the profession. *Occupational Therapy Practice*. January 22, 2018.

D'Arrigo T, **Bell EA**. Don't use oral benzocaine products for teething, FDA warns. *Pharmacy Today* 2018;24:24

D'Arrigo T, **Bell EA**. Probiotic *L. reuteri* may help infants with colic. *Pharmacy Today* 2018;24:34

**Gnacinski, S.L.**, **Challoner, M.**, & Brock, K. (2018). Integrated perspectives on tactical preparation: Adding mental skills training to physical fitness during police training scenarios. *TSAC Report*, 50, 4-8.

**Kjos, Andrea L.** "Pharmacists Contributions" at the 18th Midwest Social and Administrative Pharmacy Conference. Published Remarks, Special Issue in *Innovations in Pharmacy*, Oct. 2, 2018. DOI (Available at: <https://pubs.lib.umn.edu/index.php/innovations/article/view/1493>)

### **NON-PEER REVIEWED COLUMNS: (7)**

**Bell EA**. Clinical aspects of drug-induced QT prolongation. *Infectious Diseases in Children* 2018;31(8):18

**Bell EA**. Essential oil use in pediatrics – safe and effective? *Infectious Diseases in Children* 2018;31(8):21

**Bell EA**. Summertime fun and dangers? *Infectious Diseases in Children* 2018;31(6):14

**Bell EA**. Topical antibiotics for the ears. *Infectious Diseases in Children* 2018;31(4):12

**Clarke, C.** IPA Journal - President's Column

**Newman, N.** (February, 2018). When treating sports injuries does the West do it best? *The Conversation*. Retrieved from: <https://theconversation.com/when-treating-sports-injuries-does-the-west-do-it-best-90526>.

**Plutschack, D.** & Moore, S. (2018, June 18). Addressing Psychosocial Needs in the Vestibular Population. *OT Practice*, 23(11), 22-24.

### **INVITED/NON-PEER REVIEWED PODIUM PRESENTATIONS: (57)**

**Andreski M**, Doucette W, Pudlo A Evaluating a Value-Based Pharmacy Program- 1 year update. Presented to the Wellmark Value Based Pharmacy Summit, Des Moines, IA on August 30, 2018

**Daly MW**. Value-based services for population health management. Invited speaker at IA American Association of Diabetes Educators Learning Workshop, Drake University. Des Moines, IA. November 2018.

**Eastman DK, Wall GC**. Biostatistics and Trial Design: An Interactive Primer for Pharmacists. Midwest Pharmacy Expo 2018. Des Moines, IA, February 16, 2018.

**Fischbach, J.** (August, 2018) Sensory processing strategies for the classroom. Carroll Middle School. Carroll, IA.

**Fischbach, J.** (June, 2018). Oh, the places you'll go: Telehealth in OT. Indian Hills Occupational Therapy Assistant Program, Oskaloosa, IA, via On-line Lecture.

**Fischbach, J.** (March, 2018). Sensory Processing Disorder. Indian Hills Continuing Education event. Oskaloosa, IA.

**Fischbach, J.** (March, 2018). Cortical Visual Impairment and Intervention. Creighton Pediatric Resident Training. Omaha, NE via pre-recorded lecture.

**Fischbach, J.** (March, 2018). The CVI Range assessment and application to practice. Creighton Pediatric Resident Training. Omaha, NE via synchronous distance learning.

**Gnacinski, S.** (2018, March). The athletic trainers' role in managing student athletes' psychological response to injury: Strategies to promote patient mental health. Oral presentation delivered at the March ATC Meeting. Select Medical Physical Therapy. Des Moines, IA, USA.

**Gnacinski, S.L.** (2018, February). Studying the psychological construct of recovery in sport: Issues of theory, measurement, and application. Invited research presentation at the New York University (NYU) Motivation Laboratory (Directors: Gabriele Oettingen & Peter Gollwitzer). New York, NY, USA.

**Gnacinski, S.L., & Meyer, B.B.** (2018, June). Integrated approaches to sport injury rehabilitation. Oral presentation delivered at the Select Physical Therapy Sports Medicine Conference. Des Moines, IA, USA.

**Grady, S.** "Bipolar Disorder" February 8, 2018 Project ECHO Presenter to Primary Care Providers in the Primary Healthcare System

**Grady, S.** "Cognitive Disorders" April 26, 2018 Project ECHO Presenter to Primary Care Providers in the Primary Healthcare System

**Grady, S.** "Generalized Anxiety Disorder, Panic Disorder & Benzodiazepines" Primary Healthcare Clinic – presented to physicians and other staff Des Moines, Iowa June 21, 2018

**Grady, S.** "Insomnia" January 25, 2018 Project ECHO Presenter to Primary Care Providers in the Primary Healthcare System

**Grady, S.** "Personality Disorders" March 8, 2018 Project ECHO Presenter to Primary Care Providers in the Primary Healthcare System

**Grady, S.** "Substance Use Disorders" January 11, 2018. Project ECHO Presenter to Primary Care Providers in the Primary Healthcare System

**Griffiths, Y. & Urish, C.** (Apr. 2018). Not Playing Nice in the Sandbox: How Workplace Incivility Takes a Toll on Productivity, Self-Esteem and How to Not Let it Take a Toll on You! for OccupationalTherapy.Com continuing education.

**Gutierrez, C.** (2018, December). Opportunities in health careers and Drake health sciences presentation for HOSA students at Harlan High School in Harlan, IA.

**Gutierrez, C.** (2018, February). Road Trip to Drake HSCI Academic Presentation in Des Moines, IA.

**Gutierrez, C.** (2018, November). Health sciences overview at Drake University Health Professions Day in Des Moines, IA.

**Gutierrez, C.** (2018, April). Health Sciences Advisory Board Meeting in Des Moines, IA.

**Gutierrez, C.** (2018, December). Navigating health careers presentations at the OA-BCIG STEM Fair in Ida Grove, IA.

**Gutierrez, C.** (2018, February). Drake Health Sciences. Inter-professional Pathways to Accelerate into Health Care at National Alumni Scholarship Day in Des Moines, IA.

**Gutierrez, C.** (2018, March). Health sciences academic presentation at Drake University Admitted Student Day in Des Moines, IA.

**Gutierrez, C.** (2018, November). Health sciences advisory board meeting at Drake University in Des Moines, IA.

**Haack S.** La Función del Farmacéutico en el Equipo de Salud en EUA [The Role of the Pharmacists in the Healthcare Team in the US]. Centro Universitario de la Ciénega, Universidad de Guadalajara. Ocotlán, Mexico. April 25, 2018.

**Hove, K, Huber, C, Jansa, P & Jansa, R.** The Road Less Traveled: An Individual's Journey Through the Rehabilitation Continuum of Care. Invited speaker at 18th annual On With Life Brain Injury Conference. September 14, 2018: Ankeny, IA

**Hove, K.** Tips for Fall Prevention. Invited speaker at the Des Moines University Balance and Beyond Session. June 26th, 2018: Des Moines, IA.

**Kjos, Andrea L.** Faculty Discussant at the 18th Midwest Social and Administrative Pharmacy Conference, Madison, WI, August 16, 2018.

**Koenigsfeld C.** Presented APhA Diabetes Certificate program, 2018.

**Koenigsfeld C.** Presented APhA Diabetes Certificate program, 2018 (second presentation).

**Koenigsfeld C.** Presented APhA Immunization Certificate program, 2018.

**Mahajan, PB** 'Emerging Research Tools: A Convergence of Technologies' Invited Speaker at the Biomolecular Symposium at the AAPS Annual Meeting (PharmSci360), Nov. 6, 2018 Chicago, IL

**Mahajan, PB** 'Pharmacogenomics: An Evidence Based Approach to Precision Medicine' Invited Speaker at the Continuing Medical Education Seminar for the Polk County Medical Society; Sept. 27, 2018. Des Moines, IA

**Mulla, N.** Podium presentation- DUSCI research presentation on February 9th 2018. Enhancing the immunogenicity of cancer vaccines using adjuvants and unconventional delivery methods

**Newman, N, Brady, M, & Stewart, M.** (2018, April). If it's broke, we can fix it. STEM Day at the Ballpark, Des Moines, IA.

**Newman, N.** (2018, June). AT degree transition: Rapid fire pearls. Presented at: Iowa Athletic Trainers' Society Annual Symposium, Des Moines, IA.

**Newman, N.** (2018, June). The importance of social support following injury. Presented at: Select Physical Therapy Sports Medicine Conference, Des Moines, IA.

**Newman, N.** (2018, May). HF 2442 – Concussion bill implications. Presented at: Iowa Medical Society Sports Medicine Committee Meeting, Des Moines, IA.

**Newman, N.** (2018, October). Changes in the Athletic Training Profession. Presented at Des Moines Area Community College, Boone, IA.

**Newman, N.** (2018, September). Out that Hurts: Common Injuries and Treatments. Presented at Bulldogs United in Learning (BUILD) Session, Des Moines IA.

**Phillips CR.** Economic Evaluations in Healthcare: Evaluating the Quality of Studies. Grand Rounds, Iowa Methodist Medical Center, April 4, 2018 CPHS:

**Phillips CR.** New Faculty Orientation program: Evaluating student learning: The IDEA center evaluations-interpretation/faculty development of teaching

**Phillips CR.** New Faculty Orientation program: Promotion and Tenure Process: October 2018

**Pitlick JM, Fornoff A.** Incorporation of the pharmacist patient care process into pharmacy skills and application lab. CE presentation at American Association of Colleges of Pharmacy Annual Meeting, Boston, Massachusetts, July 24, 2018.

**Plutschack, D.** (February 13, 2018). Best practices for treating lateral epicondylitis. Indian Hills Community College Rural Health continuing education. Indian Hills Community College, Ottumwa, IA

**Plutschack, D.** (February 6, 2018). Invited speaker at Iowa Physical Therapy Association Southwest District continuing education. Incorporating psychosocial factors of vestibular rehab in practice. Des Moines University, Des Moines, IA

**Plutschack, D.** (November 13, 2018). Introduction to orthotic fabrication. Indian Hills Community College Rural Health continuing education. Indian Hills Community College, Ottumwa, IA.

**Rovers J, Mages M.** Some research from previous trips & working in the pharmacy, Invited presentation to Des Moines University, Global Health Elective. Des Moines University, Des Moines, IA. February 6, 2018.

**Rovers J.** Food and health in the Toledo District of Southern Belize. Invited presentation at Heartland Global Health Conference, Mercy College of Health Sciences, Des Moines, IA, November 9, 2018.

**Rovers, J.** Health policy in the United States. Invited presentation at Policy on Tap, Drake University Harkin Institute. Des Moines, IA. March 1, 2018.

**Rovers, J.** Scholarly Voices - From Writing to Speaking. Invited presentation at English Department, Drake University, Des Moines, IA November 30, 2018.

**Sacco JC.** Genetic variation in canine glutathione-S-transferases. Invited Speaker for the Toxicology Program at Iowa State University, Mar 27, 2018: Ames IA. Sacco JC (Mann S). Single nucleotide polymorphisms and microsatellites in the canine GSTP1 gene promoter

**Ulrich, Erin, Jonathan Hurdelbrink, Jason Perepelkin and Kelli Welter.** "Financial Incentive Required for Pharmacy Students to Practice Post-Graduation in Different Practice and Geographic Settings." Presented at the Drake University CBPA Brown Bag Seminar, Nov. 2, 2018.

Viesselman C, **Bottenberg MM**, Ronnebaum J, Fiala M, Bush K. "Interprofessional Education Collaborative: Creating IPE Opportunities Across Institutions." IATS Conference, West Des Moines, IA, June 2018.

**Wrenn C, Haack S.** Opioid Crisis. Bulldogs United in Learning Drake. Des Moines, IA. October 23, 2018.

## INVITED/NON-PEER REVIEWED POSTERS: (24)

Bohn M, Kara Metowski, Vik Sharma, Jake Stockdale, **Pramod Mahajan** and S.N. Mahajan 'A Retrospective Analysis of Socio-Epidemiological Factors of Poisoning Cases at Pravara Rural Hospital' DUCURS 2018 April 12, 2018 Drake University, Des Moines IA

Caslow S, Hopton O, Kassel LE, Hubble M. The Safety of a Nurse-Driven Electrolyte Replacement Protocol in a Community Hospital Setting. Poster 73G. DMU Research Symposium. Des Moines, IA. December 2018.

Cody O and **Kimberly Huey**. Effects of Statin Treatment on Muscle Growth in a Mouse Model of Hypercholesterolemia. Poster session, Drake Undergraduate Research Symposium, April 12, 2018. Won Best Poster Award

Conroy Z, Kenzie Temperly, and **Kimberly Huey**. Effect of Statins on Muscular and Cardiorespiratory Adaptations to Treadmill Training in Hypercholesterolemic Mice. Poster session, Des Moines University Research Symposium, December 6, 2018.

Draker N, Ronald Torry. The clinical role of placenta growth factor and sFlt-1 in ischemic heart disease and heart failure: a systematic review. Presented at Conference on Undergraduate Research in the Sciences, Drake University, April 12, 2018.

Frisch, H., Gnacinski, S. (mentor), Williamson, B., Young, T., & **Brady, M.** (2018, April). Examining the effects of gender and academic class on DI collegiate soccer players' perceptions of training load. Poster presentation delivered at The 15th annual Drake University Conference on Undergraduate Research in the Sciences (DUCURS). Des Moines, IA, USA.

Ginn, B., Brady, M., Williamson, B., Gnacinski, S., Frisch, H., Seaberg, N., & Williamson, G. (2018, April). Examining the relationship between collegiate athletes' perceptions of training load and subsequent soccer readiness during pre-season. Poster presentation delivered at The 15th annual Drake University Conference on Undergraduate Research in the Sciences (DUCURS). Des Moines, IA, USA.

Golbach A, Amanda Hoerres and **Dr. Pramod Mahajan**, 'Studies on Signal Transduction In DNA Double Strand Break' ISGC Annual Meeting 2018 University of Northern Iowa, Cedar Falls IA April 9, 2018. (Bronze Award)

Hoerres A and **Pramod Mahajan** 'Role of Metalloproteases in DNA Repair' ISGC Annual Meeting 2018. University of Northern Iowa, Cedar Falls IA April 9, 2018. (Silver Award)

Hoerres A, Allison Golbach, Michael Ohman and **Pramod Mahajan** 'SoapyCilantro® Project: A Progress Report' DUCURS 2018 April 12, 2018 Drake University, Des Moines IA

Jacoby E, Taylor Bischel, and **Kimberly Huey**. Differences in Voluntary Exercise Volume, Cardiorespiratory Fitness, and Muscle Function in Aged Male and Female Mice. Poster session, Drake Undergraduate Research Symposium, April 12, 2018.

Jones C, Kassel LE, Mengesha A. Epinephrine Drug Degradation in Auto-Injector Products. Poster #72G. DMU Research Symposium. Des Moines, IA. December 2018.

**Kassel LE, Mengesha A,** (Jones C). AACP School Posters. "Epinephrine Drug Degradation in Auto-injector Products". AACP Annual Meeting. Boston, MA. July 2018.

Lemesh M, Miesner AR. A Smartphone Application for Antimicrobial Stewardship: A Pilot Study. Poster session, Iowa Pharmacy Association Annual Meeting. June 8, 2018; Des Moines, IA.

Melcher, N.J., Brady, M.P., Newman, N., & Gnacinski, S. (2018, April). Evaluating the reliability of a synthetic knee model in athletic training education programs when teaching students the Lachman Test. Poster presentation delivered at The 15th annual Drake University Conference on Undergraduate Research in the Sciences (DUCURS). Des Moines, IA, USA.

Michael Ohman, Amanda Hoerres and **Pramod Mahajan** 'Understanding role of DNA methylation and methyltransferases in DNA repair, ISGC Annual Meeting 2018, University of Northern Iowa, Cedar Falls IA April 9, 2018. (Gold Award)

Odenthal A, Ryan Merideth, **Pramod Mahajan** and Ravindra Karle 'Retrospective Study of Triple Negative Breast Cancer Incidence at Pravara Rural Hospital Loni, India' at DUCURS 2018, April 12, 2018 Drake University, Des Moines IA

**Pitlick JM, (Gales, K).** Evaluation of prescribing patterns of basal insulin as back-up for insulin pump users. American Society of Health-System Pharmacists Midyear Clinical Meeting and Exhibition, Anaheim, California; December 2 – 6, 2018.

**Stelter N, Mobley-Bukstein W, Bottenberg MM, Meyer V, Welter K, Amundson L, Heitkamp T, Reiter D, Gannon E, Vollmer N, Spyrcak K.** Perceptions Toward Expansion of Student Pharmacist-Delivered Medication Management Services for University Employees. Presented at the Des Moines University Research Symposium in Des Moines, IA, Nov 2018.

Tang K, **Eastman DK**, Spilman SK, Pelaez CA. Platelet reactivity testing guided platelet transfusion in blunt trauma patients. Poster presentation at Council of Osteopathic Student Government Presidents, Fort Lauderdale, FL. January 12, 2018.

**Temperly K, Zachary Conroy, and Kimberly Huey.** Effect of Statins on Muscular and Cardiorespiratory Adaptations to Treadmill Training in Hypercholesterolemic Mice. Poster session, Iowa Physiological Society Meeting, September 15, 2018.

**Tierney M Grisolano, Ellie J Jacoby, Pramod Mahajan, Anita Munde, and Ravindra Karle** 'Clinico-pathological and demographic profile of oral cancer at Pravara Rural Hospital in Loni, India' DUCURS 2018 April 12, 2018 Drake University, Des Moines IA

**Walsh D, Kassel LE,** Smolik M, Daly M. Health Sciences Capstone Poster. "Medication Assessment in the Pre-Operative Phase of Bariatric Surgery". Health Sciences Capstone Posters. Des Moines, IA. May 2018

**Williamson, B., Brady, M., Frisch, H., Ginn, B.,** Williamson, G., Young, T., & **Gnacinski, S.** (2018, April). Prior injuries, stress, and perceived soreness effect on the presence of a knee injury in a female, DI fall sport athlete. Poster presentation delivered at The 15th annual Drake University Conference on Undergraduate Research in the Sciences (DUCURS). Des Moines, IA, USA.

#### **TECHNICAL OR CONSULTANT REPORTS: (11)**

**Andreski, M,** "A Revised Pharmacy Pilot or Demonstration Research Project for a New Practice Model for Community Pharmacy: A Demonstration Project to Study the Effects of Implementing Tech-Check-Tech Programs in Community Practice to Engage Community Pharmacists in Clinical Pharmacy Services in Iowa" Final Report. Presented to Iowa Board of Pharmacy on March 14, 2018. Sponsored by Iowa Pharmacy Association.

**Dy-Boarman E,** Janke K. What does it take to become a successful academic writer? Pulses. Currents in Pharmacy Teaching and Learning Scholarly Blog. October 25, 2018. Available: <https://cptlpulses.com/2018/10/25/successfulwriter/>.

**Gutierrez, C. & Wall, G.** Evidence Based Health Care Revised Proposal. December 2018.

**Gutierrez, C. & Wall, G.** Evidence Based Health Care Proposal. October 2018.

**Mahajan, P.** Continuing Education Course 'Precision Medicine for Iowa's STEM Teachers'. accredited by the Heartland Area education Agency.

**Rovers J.** A men's health needs assessment in the Toledo District of Southern Belize. Report to Belizean stakeholders, January 1, 2018.

**Ulrich E.** Iowa Board of Pharmacy Rural Practice Incentive Report and Proposed Interventions. January 2019.

**Ulrich E.** Manitoba Board of Pharmacy Rural Practice Incentive Report and Proposed Interventions. December 2018.

**Ulrich E.** North Dakota Board of Pharmacy Rural Practice Incentive Report and Proposed Interventions. December 2018.

**Ulrich E.** Saskatchewan Board of Pharmacy Rural Practice Incentive Report and Proposed Interventions. December 2018.

**Ulrich E.** South Dakota Board of Pharmacy Rural Practice Incentive Report and Proposed Interventions. December 2018.

## JOURNAL REVIEWING ACTIVITIES: (53 journals)

AAPS PharmSciTech: **Mengesha**  
American Journal of Health-System Pharmacy: **Lehman, Wall**  
American Journal of Infection Control: **Lehman**  
American Journal of Managed Care, **Wall**  
American Journal of Pharmaceutical Education, **Bottenberg, Clarke, Dy-Boarman, Grady**  
American Journal of Physiology-Heart and Circulatory Physiology, **Torry**  
American Journal of Physiology, **Huey**  
Annals of Asthma Allergy and Immunology, **Wall**  
Annals of Pharmacotherapy, **Bell, Dy-Boarman, Miesner, Wall, Welty**  
Antimicrobial Agents and Chemotherapy: **Gentry**  
Antiviral Research: **Gentry**  
Biomedicine and Pharmacotherapy, **Munusamy**  
Bioorganic and Medicinal Chemistry, **Munusamy**  
Chemotherapy, **Wall**  
Current Pharmaceutical Biotechnology, **Munusamy**  
Currents in Pharmacy Teaching and Learning, **Bottenberg, Bryant, Dy-Boarman, Kassel, Miesner, Mobley-Bukstein, Munusamy, Nelson, Phillips**  
Drug Design and Discovery, **Munusamy**  
Drug Design, Development and Therapy, **Munusamy**  
Epilepsia, **Welty**  
Epilepsy and Behavior, **Welty**  
Epilepsy Research, **Welty**  
Exercise and Sport Science Reviews, **Huey**  
Experimental Physiology, **Huey**  
Infection and Drug Resistance, **Munusamy**  
INNOVATIONS in Pharmacy: **Bryant, Dy-Boarman, Nelson**  
International Health, **Rovers**  
International Journal of Nephrology and Renovascular Disease, **Munusamy**  
International Journal of Pharmaceutics, **Mulla**  
International Journal of Pharmacy Practice, **Wall**  
Iowa Pharmacy Association Journal, **Butler**  
Jones & Bartlett Learning , **Gnacinski**  
Journal of American Pharmacist Association, **Koenigsfeld, Ulrich**  
Journal of Applied Physiology, **Huey**  
Journal of Athletic Training: **Newman**  
Journal of Pediatric Pharmacology and Therapeutics, **Bell**  
Journal of Pharmacy Practice, **Koenigsfeld, Miesner, Mobley-Bukstein**  
Journal of Strength and Conditioning Research, **Gnacinski**  
Journal of Veterinary and Internal Medicine, **Sacco.**  
Measurement in Physical Education and Exercise Science, **Gnacinski**  
Medical Sciences, **Rovers**  
Medicine Science Sport and Exercise, **Huey**  
Nutrition and cancer: **Mengesha**  
Occupational Therapy in Health Care, **Griffiths**  
Occupational Therapy in Mental Health Journal, **Urish**  
Open Journal of Occupational Therapy, **Griffiths**  
Personalized Medicine, **Mahajan**  
Pharmacotherapy, **Wall**  
Pharmacy Times, **Bryant**  
PLoS One, **Mahajan, Munusamy, Rovers (academic editor), Sacco**  
Recent Reviews in Clinical Trials, **Mahajan**  
Research in Social and Administrative Pharmacy, **Andreski, Haack, Ulrich**  
Scientific Reports, **Munusamy**  
WORK: A Journal of Prevention, Assessment, and Rehabilitation, **Gnacinski**



#### REVIEWERS FOR PODIUM or POSTER SESSIONS: (19 individuals)

AACP Annual Meeting, **BOTTENBERG, CLARKE, DY-BOARMAN, HAACK, PHILLIPS**  
ACCP 2018 Global Conference on Clinical Pharmacy, **MIESNER**  
ACCP 2018 Virtual Poster Symposium Abstract Reviewer, **MIESNER**  
ACCP 2018 Virtual Poster Symposium Poster Judge, **KASSEL, MIESNER**  
American Occupational Therapy Association poster/short course/platform presentation reviews, **URISH**  
American Society for Microbiology, Council for Undergraduate Educators, posters, **GENTRY**  
American Society of Health-System Pharmacy Midyear Clinical Meeting, Posters, **DALY**  
Annual Meeting of Iowa Physiological Society, 2018 Posters. **MUNUSAMY, TORRY**  
APhA abstracts, **ANDRESKI, CLARKE, LEHMAN**  
APhA Annual Meeting Poster Judge, **CLARKE, LEHMAN**  
ASCP Annual Meeting, **MEYER**  
Association for Applied Sport Psychology Annual Conference – **GNACINSKI**  
Central States Chapter of the Society of Toxicology Annual Meeting, podium, **SACCO**  
Des Moines University Research Symposium posters, **BOTTENBERG, KASSEL, MULLA, MUNUSAMY, TORRY**  
Des Moines University Research Symposium, graduate student competition 2018 Grader, **TORRY**  
DUCURS Abstract and poster grader, **TORRY**  
DUCURS Oral presentations judge, **SACCO, TORRY**  
Health Sciences Senior Capstone Posters, Drake University **TORRY**  
International Association for Research on Service-Learning and Community Engagement Conference, Posters, **HAACK**  
International Conference on Antiviral Research, poster & podium, **GENTRY**  
Midwest Chapter of American College of Sports Medicine Conference – Podium and Posters, **GNACINSKI**  
Midwest Social and Administrative Pharmacy Conference abstracts reviewed, **ANDRESKI**  
SLDS Posters, PHS Day, **PHILLIPS**

#### REVIEWERS FOR GRANTS/AWARDS: (7 individuals)

AACP New Investigator Award (NIA), **BRYANT, MUNUSAMY**  
ACCP Student, Resident, and Fellow Travel Award Reviewer, **BRYANT**  
APhA Foundation Incentive Grants, **CLARKE**  
Iowa Space Grant Consortium, Merit Scholarship and Research Grant, **KASSEL, SACCO**  
Netherlands Organization for Scientific Research, Innovational Research Incentives Scheme (Veni) Grant, **SACCO**  
Research Grant National Athletic Training Association Foundation, **GNACINSKI**  
Undergraduate Iowa Space Grant Awards, **HUEY**

## RESEARCH GRANTS AND CONTRACTS: (30 NEW)

### *EXTRAMURAL: (9 grants totaling \$79,711)*

Title: Metabolic Activation of the Prodrug MBX-2168 in Herpes-Virus Infected Cells and Inhibition by Pentostatin.

Sponsor: Microbiotix, Inc.

Start date/completion date: March 2018-August 2019

Direct costs: \$13,525 Role:

Role: Principle Investigator. **Gentry**

Title: Metabolic Activation of MBX-2168 by Adenosine Deaminase Like Protein-1.

Sponsor: NASA Iowa Space Grant Consortium Undergraduate Research Fellowship

Start date/completion date: August 2018-May 2019

Direct costs: \$9,000

Role: Mentor (student scholarship) **Gentry**

Title: Effects of Vitamin D Supplementation on Overload-Induced Muscle Growth and Function in Mice

Sponsor: Iowa Space Grant Undergraduate Research Fellowship

Start date/completion date: August 2018-May 2019

Direct Costs: \$7000 (\$5,000 to student, \$2,000 to faculty mentor)

Role: Mentor for Kenzie Temperly, **Huey**

Title: Effects of Angiotensin II Receptor Blockade on Overload-Induced Muscle Growth and Function in Mice

Sponsor: Iowa Space Grant Collaborative Grant

Start date/completion date: December 2018-June 2019

Direct Costs: \$17,926

Role: Co-PI, **Huey**

Title: Effect of Statins on Muscular and Cardiorespiratory Adaptations to Treadmill Training in Hypercholesterolemia Mice

Sponsor: American Physiological Society Undergraduate STRIDE Summer Research Fellowship

Start date/completion date: June-August 2018

Direct Costs: \$5300 (\$4,000 to student, \$1,300 for student travel to Experimental Biology)

Role: Faculty sponsor for Kenzie Temperly, **Huey**

Title: Epinephrine Drug Degradation in Auto-Injector Products Student: Caroline Jones<sup>^</sup>

Sponsor: Iowa Space Grant Consortium 2018-2019 Undergraduate Scholarship Merit Program

Start date/completion date: AY 2018-2019

Direct costs: \$5,000

Role: Mentor, **Kassel**

Title: Development and usability of a 'SoapyCilantro' companion kit for STEM educators.

Sponsor: Iowa Space Grant Consortium

Start/Completion dates: Aug. 2018-July 2019.

Direct costs: \$10,000

Role: Co-Principal Investigator **Mahajan, Ulrich**, (Principal Investigator)

Title: Design and evaluation of monoolein-monostearin lipid-based triggerable drug delivery systems in a simulated physiological environment.

Sponsor: Iowa Science Foundation (ISF)

Start date/completion date: July 2018 – June 2019

Direct cost: \$4,960.00

Role: PI **Mengsha**

Title: Investigating the anticancer potential of metformin in renal cell carcinoma

Sponsor: The NASA-Iowa Space Research Consortium (2017-2018 Early Career Investigator Research Program)

Start date/completion date: 1/1/2018 to 6/21/2018

Direct Costs: \$7,000

Role: Principal Investigator, **Munusamy**

*Internal (21 grants totaling \$53,325.37):*

Title: The Use of Aging-Simulation Devices to Increase Empathy in College Students

Sponsor: Drake University Faculty Development Grant

Start Date/Completion Date: 3/1/2018 ongoing

Direct Costs: \$2,660

Role: Principal Investigator, **Bowen**

Title: Factors that Lead to Excellence and Productivity in the Scholarship of Teaching and Learning

Sponsor: Drake University Harris Research Endowment

Start date/completion date: 3/1/18-present

Direct costs: \$1350

Role: PI, **Dy-Boarman**

Title: Efficacy of Pediatric Assessments via Telehealth Administration

Sponsor: Drake University, College of Pharmacy and Health Sciences, Occupational Therapy Doctorate Department Harris Grant

Start date/Completion Date: October 2018 to Ongoing

Direct Costs: \$1765

Role: Principal Investigator, **Fischbach**

Title: Summer Teaching and Learning Institute at Colorado State University

Sponsor: Drake University Faculty Development and Enrichment Grant

Start Date/Completion Date: Awarded in 2018

Direct Costs: \$1500

Principal Investigator, **Fischbach**

Title: Improving Rational Therapeutic Decision Making for Patients with Antibiotic Resistant Infections – a Threshold Study

Sponsor: Drake University College of Pharmacy and Health Sciences Harris Research Endowment

Start date/completion date: Aug 2018-May 2019

Direct costs: \$1,283.82

Role: Co-PI. **Gentry**

Title: Determining the Spectrum of Activity for some 2'-Deoxyribosylindole Nucleoside Analogs

Sponsor: Drake University College of Pharmacy and Health Sciences Harris Research Endowment

Start date/completion date: Aug 2018-May 2019

Direct costs: \$670.00

Role: PI. **Gentry**

Title: Award will support attendance at the 2018 International Association for Research on Service Learning and Community Engagement Conference

Sponsor: Drake University Faculty Development and Enrichment Grant

Start date/completion date: July 2018

Direct Costs: \$1403

Role: **Haack**

Title: Reliability Testing of a Rubric to Assess Course Syllabi for Elements of Community Engagement and Service Learning

Sponsor: Drake International Global Service Learning Grant

Start date/completion date: April - June 2018

Direct costs: \$1800

Role: PI, **Haack**

Title: Top 200 Drugs

Sponsor: Hartig Faculty Development Award

Start date: 2018

Direct Costs: \$2500

Role: Co-Investigator, **Koenigsfeld**

Title: Exploring Complementary Approaches to Combat Global Non-Communicable Disease Burden.

Sponsor: Drake International and the Nelson Institute  
Start date/completion date: 7-1-2018 to 7-1-2020  
Direct Costs: \$20,000  
Role: Collaborating Investigator, **Mahajan, Mobley-Bukstein, Ross and Stelter**

Title: Funding to attend the 2018 Teaching Professors Annual Conference, in Atlanta GA. June 01 – 03, 2018.  
Sponsor: Jorndt Faculty Development Fund  
Start date: May 2018  
Direct cost: \$736.00  
Role: PI **Mengesha**

Title- Development and characterization of nanoparticulate dosage form to deliver anti-cancer drug- carmustine across the blood brain barrier.  
Sponsor- Harris Research funds (Drake University)  
Amount 975.00  
Role- Principal Investigator , **Mulla**

Title- Development and characterization of adjuvanted nanoparticulate breast cancer vaccine;  
Sponsor- Drake CPHS;  
Amount- 2928.00;  
Role- Principle investigator, **Mulla**

Title: Investigating the Protective Effects of Metformin in Diabetic Kidney Disease  
Sponsor: Harris Research Endowment - College of Pharmacy & Health Sciences, Drake University  
Start date/completion date: 7/3/2018 to 6/30/2019  
Direct Costs: \$2,856  
Role: Principal Investigator **Munusamy**

Title: Effects of Low-Level Laser Therapy on Injuries  
Sponsor: Drake University Research Grant  
Start/Completion Grant: 7-1-2018 to 6-30-2019  
Direct Costs: \$1000  
Role: PI, **Newman**

Title: Opioid use and The Comfort Scale in an occupational health center  
Sponsor: Harris Research Endowment Grant-  
Start date: October 2018-August 2019  
Direct Costs: \$400 funded by the Drake University College of Pharmacy and Health Sciences  
Role: Primary investigator: **David Plutschack**, Co-investigators: **Christine Urish, Erin Ulrich**

Title: Development and field testing of a novel Glutathione S-transferase P1 enzyme assay in dogs  
Sponsor: Drake University  
Start/Completion Date: 7-1-2018 to 6-30-2019  
Direct Costs: \$3,000  
Role: PI, **Sacco**

Title: Kidney expression of sFlt-1 during renal dysfunction  
Sponsor: Harris Endowment Research Grant, CPHS  
Start/Completion Date: 10/18-10/19  
Direct Costs: \$4,019  
Principal Investigator; **Torry, Shankar Munusamy** (collaborator)

Title: Panel Presenter and Drake Representative at AACP Interim Meeting Research Symposium  
Sponsor: Drake Faculty Development and Enrichment Grant  
Start date/completion date: 05.29.18-02.25.19  
Amount Awarded: \$1,110.00  
Role: Principal Investigator, **Ulrich**

Title: Developing a Social Support Index for Older Americans' Health Outcomes: Phase II  
Sponsor: Harris Research Endowment  
Start date/completion date: 01.22.18-08.30.18  
Direct Costs: \$600  
Role: Principal Investigator, **Ulrich**

Title: How to Establish Interdisciplinary Translational Research at a Teaching-Intensive College of Pharmacy: Lessons learned  
Sponsor: Drake International Grant  
Start date/completion date: 05.21.18-08.01.18  
Direct Costs: \$769.55  
Role: Principal Investigator, **Ulrich**

## UNDERGRADUATE RESEARCH PROJECTS: (96 projects, multiple students)

Leah Amundson, Erica Gannon, Drake Reiter, Valerie Meyer, Kelli Welter, Tessa Heitkamp, Kasia Spyрка, Nick Vollmer, Ben Modrell, Erin Engbring (all pharmacy)  
Project Title: University Employee Interest in and Perceptions Toward Pharmacist Faculty and Student Pharmacist-Delivered Medication Management Services.  
Products: APhA Annual Meeting poster in March 2019

Jessica Berej, Pharmacy  
Project title: Insulin dose adjustment following bariatric surgery, a review of available literature  
Product(s): Submitted to Obesity Surgery (OBSU) October 2018

Taylor Bischel, HSCI  
Project title: Differences in Voluntary Exercise Volume, Cardiorespiratory Fitness, and Muscle Function in Aged Male and Female Mice  
Product(s): DUCURS (April 2018)

Boelts B, Draker N  
Project title: Codeine use in children  
Product(s): Boelts B, Draker N, Bell E. Codeine use in children for analgesia and cough relief: implications for the pharmacist. The Journal of the Iowa Pharmacy Association 2018; 74: 22-27

Morgan Bohn (Biology), Kara Metowski (Pharmacy), Vik Sharma (NeuroScience), Jake Stockade (BCMB),  
Project title: 'A Retrospective Analysis of Socio-Epidemiological Factors of Poisoning Cases at Pravara Rural Hospital'  
Product(s): DUCURS 2018 April 12, 2018 Drake University, Des Moines IA

Karli Borcharding Gunn, P3/P4 Student  
Project title: Perceptions of Family Members, Patients and Providers on the Diagnosis of Diabetes  
Product(s): Poster at APhA 2018, Podium Presentation at AADE 2018

Laura Brady, Lizeette Cruz, Keli Zemke, Haylee Huedepohl and Corrine Frei: OTD  
Project title: Efficacy of the Beery VMI and Print Tool delivered via telehealth (with Dr. Rachel Allen-McHugh)  
Product(s): Initiating project

Anna Burns, Pharmacy  
Project title: Evaluation of outcomes in asthma patients switching from brand combination inhalers to generic fluticasone/salmeterol.  
Product(s): Student Poster. American Society of Health-Systems Pharmacy. Anaheim, CA. December 2018.

Morgan Buzzel, Kaile Damm, Stephanie Dizon, and Sarah Loffredo: OTD  
Project title: Improving feeding and eating in children with food selectively (with Gloria Frolek Clark)  
Product(s): Data gathering

Sydney Carlstrom, HSCI  
Project title: Teach-back Method Informational Course to Improve Understanding and Use of the Method in Health Center Staff  
Product: Drake HSCI Senior Poster Session

Scott Caslow and Olivia Hopton, Pharmacy  
Project title: The Safety of a Nurse-Driven Electrolyte Replacement Protocol in a Community Hospital Setting.  
Product(s): Poster 73G. DMU Research Symposium. Des Moines, IA. December 2018.

MacKenzie Challoner Major: Pharmacy  
Project Title: Integrated perspectives on tactical preparation: Adding mental skills training to physical fitness during police training scenarios  
Products: Publication of a peer-reviewed article in the TSAC Report

Odessa Cody, HSCI  
Project title: Effects of Statin Treatment on Muscle Growth in a Mouse Model of Hypercholesterolemia.  
Product(s): DUCURS (April 2018)

Zachary Conroy, BCMB  
Project title: Effect of Statins on Muscular and Cardiorespiratory Adaptations to Treadmill Training in Hypercholesterolemia Mice  
Product(s): DMU Research Symposium (December 2018)

Kacie Deavers (HS 2017-2018)  
Project title: "Retention Strategy Implementation Based on Satisfaction Survey Results and Employee Input"  
Product(s): Spring 2018 Capstone Projects

Andre Do (PharmD)  
Project title: Designing the Ideal Drug Delivery System: Evaluating Potential Polymers and Software in 3D Printing  
Products: DUCURS poster (April 2018); 130th Annual Meeting of the Iowa Academy of Sciences (IAS), poster (April 2018);

Nicole Draker, Pharmacy  
Project title: The Clinical Role of Placenta Growth Factor and sFlt-1 In Ischemic Heart Disease and Heart Failure.  
Product(s): DUCURS poster, 2018; Manuscript submitted to Biomarkers in Medicine, December 2018.

Maxx Enzmann (pharmacy) and Drake Reiter (pharmacy)

Project title: Decreasing the stigma surrounding alcohol use disorder.

Product: Poster Winner at College of Psychiatric & Neurologic Pharmacists Annual Meeting. April 22-25, 2018. Indianapolis, IN, USA.

Ronald Frantz (PharmD)

Project title: Investigating the anticancer potential of metformin in renal cell carcinoma

Product(s): 1 podium – Iowa Physiological Society (September 12, 2018) 2 posters – Iowa Physiological Society (September 12, 2018); DMU Annual Research Symposium (December 6, 2018)

Ronald Frantz (PharmD)

Project title: Investigating the Protective Effects of Metformin in Diabetic Kidney Disease

Product(s): None – Studies are ongoing

Lauren Folde, Emily Hawkins, Elizabeth Reveille, Renee Socarras

Project title: Examining Workplace Incivility in the occupational therapy academic setting

Product(s): This mixed methods study focuses on academic colleagues in occupational therapy educational setting.

Hannah Frisch Major: Health Sciences

Project title: Examining the effects of gender and academic class on DI collegiate soccer players' perceptions of training load

Products: Poster presentation delivered at the 15th annual (2018) Drake University Conference on Undergraduate Research in the Sciences (DUCURS). Des Moines, IA, USA.

Molly Froehle (HS 2017-2018)

Project title: "Smoking and Sudden Unexpected Infant Death – Iowa State Medical Examiner's Office"

Product(s): Spring 2018 Capstone Projects

Angelica Gacek, Jessica Hickman, Jessi Jacobs, Rachel Rose, Whitney Valasek,

Project title: A Historical Inquiry of the Occupational Therapy Doctorate at Drake University

Product(s): One important emphasis is tracking the development of the Drake brand of clinical doctorate in occupational therapy

Angelica Gacek, Health Sciences

Project title: A case study magnifying the importance of diversity training within a non-profit organization compared to the central Iowa community.

Product(s): Capstone Poster Presentation (April 2018)

Kee Gales, Pharmacy

Project title: Evaluation of prescribing patterns of basal insulin as back-up insulin pump users

Product(s): American Society of Health-System Pharmacist poster (December 2018)

Brooks Ginn Major: Health Sciences

Project title: Examining the relationship between collegiate athletes' perceptions of training load and subsequent soccer readiness during pre-season

Products: Poster presentation delivered at the 15th annual (2018) Drake University Conference on Undergraduate Research in the Sciences (DUCURS). Des Moines, IA, USA.

Kayla Giuliano - Health Sciences

Project title: The effectiveness of the dorsaVi athletic movement index and a single leg hop test in assessing return to sport in anterior cruciate ligament reconstruction patients.

Product(s): Drake HS Poster Presentation Day

Allison Golbach (Pharmacy),

Project title: 'Studies on Signal Transduction In DNA Double Strand Break'

Product(s): ISGC Annual Meeting 2018 University of Northern Iowa, Cedar Falls IA April 9, 2018. (Bronze Award)

Kaitlyn Goss, Sarah Gronau, Regan Odegard, Lacie Sleezer and Paige Wooldridge- OTD students (class of 2021)

Project title: Benefits of a Support Group via Telehealth for Individuals with Acquired Brain Injuries

Product(s): In beginning stages of research-student research is in progress at present

Tierney M Grisolano (BCMB), Ellie J Jacoby (HSci),

Project title: 'Clinico-pathological and demographic profile of oral cancer at Pravara Rural Hospital in Loni, India'

Product(s): DUCURS 2018 April 12, 2018 Drake University, Des Moines IA

Katie Hadsall, Health Sciences

Project title: Predicting consistent decreases in the amount of insulin a patient uses after bariatric surgery

Product(s): Ongoing project

Natalie Hagen, BCMB Senior

Project title: Pentostatin Antagonizes the Anti-Viral Activity of MBX-2168 by Inhibiting the Biosynthesis of Active Compound

Products: 2018 DMU Research Symposium Poster (Dec 2018)

Jan Hendrickson, HSCI

Project title: The Effect of Mainstream Living's Transitional Age Youth Program on Youth-Aged Individuals with Mental Illness

Product: Drake HSCI Senior Poster Session

Amanda Hoerres(Pharmacy)

Project title: 'Role of Metalloproteases in DNA Repair'

Product(s): ISGC Annual Meeting 2018. University of Northern Iowa, Cedar Falls IA April 9, 2018. (Silver Award)

Amanda Hoerres (Pharmacy), Allison Golbach (Pharmacy), Michael Ohman (Pharmacy)

Project title: 'Soapy Cilantro® Project: A Progress Report'

Product(s): DUCURS 2018 April 12, 2018 Drake University, Des Moines IA

Jessi Jacobs, HSCI

Project title: Assessing Education on the Seven Dimensions of Wellness in a Chiropractic Setting

Product: Drake HSCI Senior Poster Session

Ellie Jacoby, HSCI

Project title: Differences in Voluntary Exercise Volume, Cardiorespiratory Fitness, and Muscle Function in Aged Male and Female Mice.

Product(s): DUCURS (April 2018)

Janna Johnson (OTD) Chelsea Steffaes (OTD) Baylee Stoll (OTD) Brooke Krogman (OTD) Ewa Pawelko (OTD)

Project title: A Comparison of the Influences of Tobacco Products Among Public, Private, and Community College Students

Product(s): Literature Review (Preparation for Spring 2019 IRB submission)

Caroline Jones (PharmD)

Project title: Epinephrine Drug Degradation in Auto-Injector Products

Products: DUCURS Oral presentation (April 2018); DMU Research Symposium poster (Dec. 2018); ACCP Global Conference on Clinical Pharmacy, poster (Oct. 2018); DUSCI Summer Research Fellow (2018); AACP poster (July 2018).

John Kasra, Neuroscience

Project title: Social Behavior of the triple-transgenic mouse model of Alzheimer's disease

Product(s): DUCURS poster (April 2018); Alzheimer's Association International Conference poster (July 2018) Rohr, Sulkowski, and Kasra were all involved in the same project. They were co-authors on the poster.

Allyssa Kowallis, HSCI Project

Project title: Obesity Prevention Project: Creating a healthy lifestyle intervention for school-aged children in Polk County, IA

Product: Drake HSCI Senior Poster Session

Hannah Lancaster, AS

Project title: Assessing, Collaborating, and Empowering to Improve Water Quality in Rural Uganda

Product: DUCURS, HOSA International Conference, & Accepted for Poster Presentation at the 2019 Unite for Sight Global Health Conference, Accepted for Poster Presentation at the 2019 Undergraduate Global Health and Public Health Education Summit

Autumn Larsen, AS

Project title: Assessing, Collaborating, and Empowering to Improve Water Quality in Rural Uganda

Product(s):

Marta Lemesh, HSCI

Project title: A Smartphone Application for Antimicrobial Stewardship: A Pilot Study

Product: Drake HSCI Senior Poster Session; Poster presentation at the Iowa Pharmacy Association Annual Meeting. June 8, 2018; Des Moines, IA.

Regan Longtin, Natalie Stalsberg, Caroline McCleary, Michail Peterson, and Julie Girard: OTD

Project title: Effectiveness of primitive reflex integration on function in children

Product(s): Presentation on-campus, manuscript ready for publication

Michelle Mages 2018 Pharmacy Graduate

Project title: Cost Effectiveness of Short-term Medical Service Trips

Product(s): Manuscript submitted to BMC Health Services Research

Sarah Mann BA (BCMB)

Project title: Prevalence of genetic polymorphisms in the GSTP1 promoter in dogs.

Product(s): DUCURS Poster (April 2018)

Kylie Markovich, P4 Project

Project title: Combinations of Terminase Inhibitors Elicit a Synergistic Enhancement of Effect against Human Cytomegalovirus in vitro

Products: 31st ICAR Poster (June 2018), Peer-Reviewed Journal Article

Mitch Materna, Health Sciences

Project title: Impact of chiropractic care and physical therapy on cost of treating low back pain.

Product(s): Capstone Poster Presentation (April 2018)



Noah Melcher (HS 2017-2018)

Project title: "Implementation of a Two-step Clostridium difficile Testing Algorithm"

Product(s): Spring 2018 Capstone Projects

Noah Melcher - Health Sciences

Project title: Evaluating the reliability of a synthetic knee model in athletic training education programs when teaching students the Lachman test.

Product(s): DUCURS poster (April, 2018)

Melissa Miller (HS 2017-2018)

Project title: "Evaluating the Ability of the Malnutrition Screening Tool in Different Patient Populations"

Product(s): Spring 2018 Capstone Projects

Ryan Mockus (HS 2017-2018)

Project title: "Effectiveness of Implementing a New Safety Feature on Preexisting Equipment"

Product(s): Spring 2018 Capstone Projects

Anthony Mooney, HSCI

Project title: Which Midwestern jurisdiction is most effective in compensation of shoulder injuries in worker's compensation?

Product(s):

Edward Mueller, Pharmacy - P3

Project title: Assessing Subject Awareness of Recent Changes to Hypertension Goals.

Product(s): Data collection phase, planned abstract for DUCURS, 2019.

Emily Nadolny, Derek Mehrl, Taylor Crane, Madeline Eggleston, Kaylie Hills: OTD

Project title: Effectiveness of CIMT on improving UE function in children

Product(s): Presentation on-campus, manuscript ready for publication

Brittany Niles, Health Sciences

Project title: Impact of active ROM restrictions on recovery following an arthroscopic rotator cuff tendon repair.

Product(s): Capstone Poster Presentation (April 2018)

Allison Odenthal (Neuroscience), Ryan Meredith (BCMB)

Project title: 'Retrospective Study of Triple Negative Breast Cancer Incidence at Pravara Rural Hospital Loni, India' at

Product(s): DUCURS 2018, April 12, 2018 Drake University, Des Moines IA

Offerman, E. (spring 2018).

Project title: Short-term rehabilitation of total shoulder arthroplasty versus reverse shoulder arthroplasty.

Product(s): Capstone Poster Presentation (April 2018)

Michael Ohman, (Pharmacy)

Project title: 'Understanding role of DNA methylation and methyltransferases in DNA repair,

Product(s): ISGC Annual Meeting 2018, University of Northern Iowa, Cedar Falls IA April 9, 2018. (Gold Award)

Elise Olsen - Health Sciences

Project title: A systematic review of ACL graft failure rates: A comparison of age, physical activity level, and graft type.

Product(s): Drake HS Poster Presentation Day

Caitlyn Owens BS Biomedical Sciences (University of Iowa)

Project title: Development and field testing of a novel Glutathione S-transferase P1 enzyme assay in dogs

Product(s): None (expected April 2019)

Alex Peake

Project title: Impact of Art Therapy on the Quality of Life of Cancer Survivors using the QLQ-C30

Product(s):

Crystal Peterson (HS 2017-2018)

Project title: "The Long-Term Care Facility Application Process for a Baldrige Gold Quality Award"

Product(s): Spring 2018 Capstone Projects

Rachel Purdy and Allison Sekula, Pharmacy

Project title: Adherence to the 2018 Clostridioides difficile guideline updates in a community hospital setting.

Product(s): Student Poster. American Society of Health-Systems Pharmacy. Anaheim, CA. December 2018.

Peter Read, Health Sciences

Project title: Analysis of attendance in a group fitness course and participant perceptions of benefits gained.

Product(s): Capstone Poster Presentation (April 2018)

Drake Reiter, P3

Project title: Men's Health Needs Assessment in the Toledo District of Southern Belize

Product(s): Manuscript in development

Adam Resnick, William Leeson. A&S Data Analytics

Project title: Natural Language Processing in Qualitative Public Health

Product(s): Research Poster at DMU Annual Research Symposium, Manuscript in Development for Submission

Sadie Robb (HS 2017-2018)

Project title: "Effectiveness of Land-Manual Therapy and Aquatic Therapy on Low Back Pain"

Product(s): Spring 2018 Capstone Projects

Ben Rohr HSCI

Project title: Social Behavior of the triple-transgenic mouse model of Alzheimer's disease

Product: Drake HSCI Senior Poster Session, DUCURS poster (April 2018); Alzheimer's Association International Conference poster (July 2018)

Hannah Sauer (Pharmacy)

Project title: Comparison of faculty and student self- assessment scores of aseptic technique skills and the impact of video review on self-awareness for second-year pharmacy students.

Product(s): Dy-Boarman E, Diehl B, Mobley-Bukstein W, Bottenberg M, Bryant G, Sauer H. Comparison of faculty and student self- assessment scores of aseptic technique skills and the impact of video review on self-awareness for second-year pharmacy students. Curr Pharm Teach Learn. 2018;10(2):201-205.

Lindsey Schulz, Callie Brown, Emily Mock, Mariah Peterson- OTD students (class of 2020)

Project title: Heart Rate Variability and Biofeedback Self-Regulation

Product(s): Study Poster (May 2019)

Nate Seaberg Major: Health Sciences

Project title: Examining the effects of baseline fitness and recovery intervention on male collegiate soccer players' perceptions of performance readiness

Products: Poster presented at the annual meeting (2018) of the Association for Applied Sport

Richie Serena, Jessica Reynolds, Katelyn Smith, Myranda Gelhaus, and Cheyanne Laux: OTD

Project title: Long-term effect of occupational therapy for feeding and eating in children with food selectivity (with Dr. Gloria Frolek Clark)

Product(s): Data gathering

Carolyn Sherrick, HSCI

Project title: Regression Analysis: Trends of Long-Acting, Reversible Contraception Use for Women in the United States

Product: Presentation for Planned Parenthood

Joe Sienkiewicz, BN

Project title: Assessing, Collaborating, and Empowering to Improve Water Quality in Rural Uganda

Product(s):

Emma Smith, HSCI

Project title: Project: Patient's perspectives on shared decision making and diabetes treatment and satisfaction in the hospital

Product: Drake HSCI Senior Poster Session

Brittany Sulkowski, PharmD

Project title: Social Behavior of the triple-transgenic mouse model of Alzheimer's disease

Product(s): DUCURS poster (April 2018); Alzheimer's Association International Conference poster (July 2018)

Alyssa Sykuta, Pharmacy

Project title: Within-subject variability of lamotrigine bioavailability: analysis of Equigen study data.

Product(s): Poster at American Epilepsy Society Annual meeting (December 2018)

Kenzie Temperly, HSCI

Project title: Effect of Statins on Muscular and Cardiorespiratory Adaptations to Treadmill Training in Hypercholesterolemia Mice

Product(s): Iowa Physiological Society poster (September 2018), planned for Experimental Biology 2019 and DUCURS 2019

Kenzie Temperly, HSCI

Project title: Effects of Vitamin D Supplementation on Overload-Induced Muscle Growth and Function in Mice

Product(s): planned poster presentations at Iowa Space Grant meeting and DUCURS 2019

Aly Tisthammer - Health Sciences

Project title: The association between Big Five Factors of Personality and post-concussion assessment scores.

Product(s): Drake HS Poster Presentation Day

Tyler Tolasko, Health Sciences

Project title: Frequency of alternative treatments for low back pain in a physical therapy clinic.

Product(s): Capstone Poster Presentation (April 2018)

Carmen Vargas - Health Sciences

Project title: Best practices in transitions from pediatric to adult care in children with special health care needs.

Product(s): Drake HS Poster Presentation Day

Kathryn Vollmer, P2

Project Title: Enzymatic Removal of a Butyl-Ether Moiety by Adenosine Deaminase-Like Protein 1, a Necessary Step in the Mechanism of Action of MBX-2168  
Products: 2018 DMU Research Symposium Podium (Dec 2018)

Tyler Voss. Health Sciences

Project title: Literature review on the effect of muscle energy technique on hamstring flexibility.  
Product(s): Capstone Poster Presentation (April 2018)

Katie Walbrun - Health Sciences

Project title: A comparison of STAR curriculum measures / outcomes of students who attend the ChildServe Autism Day Health Program full days versus half days.  
Product(s): Drake HS Poster Presentation Day

Delaney Walsh, Health Sciences

Project title: Medication Assessment in the Pre-Operative Phase of Bariatric Surgery  
Product(s): Health Sciences Capstone Posters. Des Moines, IA. May 2018 Manuscript in progress

Lauren Wazio - Health Sciences

Project title: Correlation of neck range of motion, neck pain, and headaches between males and females.  
Product(s): Drake HS Poster Presentation Day

Abigail Whillock, Carrie Behrends, Rachel Robertson, and Danielle Retallick: OTD

Project title: Efficacy of the MFUN and GOAL assessments delivered via telehealth (with Dr. Rachel Allen-McHugh)  
Product(s): Data gathering

Hannah Wilder - Health Sciences

Project title: Comparison of AMI testing between two ACL-R patients after rehabilitation.  
Product(s): Drake HS Poster Presentation Day

Ben Williamson, BS-Health Sciences Candidate, MPH candidate

Project title: Survey of Antibiogram Methodologies  
Product(s): Methods accepted to 2019 Governor's Conference on Public Health

Ben Williamson Major: Health Sciences

Project Title: Prior injuries, stress, and perceived soreness effect on the presence of a knee injury in a female, DI fall sport athlete  
Products: Poster presentation delivered at the 15th annual (2018) Drake University Conference on Undergraduate Research in the Sciences (DUCURS). Des Moines, IA, USA.

Faith Wilson, HSCI

Project title: Methodology for Studying Social Behavior in the Laboratory Mouse  
Product(s):

Yeo Katie (Pharmacy)

Project title: Development and characterization of nanoparticulate dosage form to deliver anti-cancer drug- carmustine across the blood brain barrier.  
Product(s): Poster at the Des Moines University Research Symposium (December 2018)

## **CURRENT PROFESSIONAL MEMBERSHIPS: (72 organizations)**

Allen Cognitive Network

ALS Association

American Association for Advancement of Science (AAAS)

American Association of Colleges of Pharmacy (AAP)

American Association of Diabetes Educators (AADE)

American Association of Human Genetics

American Association of Pharmaceutical Scientists (AAPS)

American College of Clinical Pharmacy (ACCP)

American College of Sports Medicine (ACSM),

American Counseling Association (ACA)

American Economic Association (AEA)

American Epilepsy Society

American Heart Association (AHA)

American Institute of the History of Pharmacy

American Interprofessional Health Collaborative

American Occupational Therapy Association (AOTA)

American Pharmacist Association (APhA)

American Physiological Society  
American Psychological Association (APA),  
American Public Health Association (APHA)  
American Society for Biochemistry and Molecular Biology  
American Society for Microbiology  
American Society for Pharmacology and Experimental Therapeutics  
American Society of Consultant Pharmacists (ASCP)  
American Society of Hand Therapists (ASHT)  
American Society of Health System Pharmacists (ASHP)  
Association for Applied Sport Psychology (AASP),  
Association of Biochemistry Educators  
College of Psychiatric and Neurologic Pharmacists  
Council on Basic Cardiovascular Science  
Eastern Economic Association (EEA)  
HOSA: Future Health Professionals  
International League Against Epilepsy  
International Society for Antiviral Research  
International Society for the Study of Xenobiotics  
Iowa Academy of Science (IAS)  
Iowa Athletic Trainers' Society  
Iowa Occupational Therapy Association (IOTA)  
Iowa Pharmacy Association (IPA)  
Iowa Physiological Society  
Iowa Public Health Association  
Iowa Rural Health Association,  
Kappa Psi Pharmacy Fraternity  
Mid-American Athletic Trainers' Association  
Midwest Chapter of the American College of Sports Medicine (MWACSM),  
Midwestern Economic Association (MEA)  
National Athletic Trainers' Association  
National Rehabilitation Association (NRA)  
National Rural Health Association  
National Strength and Conditioning Association (NSCA)  
Nebraska Occupational Therapy Association  
New Zealand Occupational Therapy Association - Member  
OT Leaders and Legacy Society  
Patient Medication Education Group (PMEG) community  
Pediatric Pharmacy Advocacy Group (PPAG)  
Phi Delta Chi Pharmacy Fraternity  
Phi Lambda Sigma National Leadership Society  
Professional Self-Assessment Program (SAP)  
Rehabilitation Counselors and Educators Association (RCEA)  
Rho Chi Pharmaceutical Honor Society,  
SHAPE America: Society of Health and Physical Educators  
Society for Environmental Toxicology and Chemistry  
Society for Neuroscience  
Society of Critical Care Medicine (SCCM)  
Society of Infectious Disease Pharmacists (SIDP)  
Society of Public Health Educators (SOPHE)  
Society of Toxicology  
Southern Economic Association (SEA)  
State of Iowa Electronic Health Information Advisory Council  
Team-Based Learning Collaborative  
Vestibular Disorders Association (VEDA)  
World Federation of Occupational Therapists (WFOT)