Dear Colleagues:

The Drake College of Pharmacy and Health Sciences would like to provide you with a summary of its scholarly activities for CY 2017. Highlights of the attached report include:

- 48 Peer-Reviewed Articles
- 24 Peer-Reviewed Podium Presentations
- 44 Peer-Reviewed Posters
- 15 Invited Articles/Columns
- 49 Invited Podium Presentations
- 21 Invited Posters
- 6/2 Book Chapters/Books
- 66 Undergraduate/Professional Student Research Projects
- 27 New Grants/Contracts totaling $125,974 *
  *Does not include multi-year funding with start dates prior to 2017.

All of the above items increased from 2016. This report does not include the many local, regional and national service accomplishments, practice advancements, or instructional work of the faculty. The faculty engaged in over 323,000 student contact hours in CY 2017.

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 2017**

**(COMPLETED WORK)**

**PEER REVIEWED ARTICLES:** (48^1)


Balakrishnan, G, Landeen C, Dy-Boarman EA, Wall GC. Outcomes associated with a multiplex PCR system on sputum specimens (FilmArray Respiratory Panel) in a large tertiary inpatient hospital population. Journal of Academic Hospital Medicine 2016; 8: http://medicine.missouri.edu/jahm/outcomes-multiplex-pcr-respiratory-sample-testing-hospital-inpatients/.


*denotes shared first authorship.


**Dy-Boarman E, Bryant GA. Herring MS. Impact of debates on student perceptions and competency scores in the advanced pharmacy practice setting. Curr Pharm Teach Learn. 2017; 29 Sept [epub ahead of print].**

**Dy-Boarman EA, Nisly SA, Costello TJ. It’s no debate, debates are great. Curr Pharm Teach Learn. 2017; 29 Sept [epub ahead of print].**

**Dy-Boarman EA, Nisly SA, Martin D. Use of a health screening and education event to change student attitudes towards the elderly. Curr Pharm Teach Learn. 2017;9(1):101-107.**


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[^1]: Student co-authors are underlined


Nelson M, Tweddell S. Leading Academic Change: Experiences of Academic Staff Implementing Team-Based Learning. Student Engagement in Higher Education Journal;2017:1(2)


Rovers J, Mages M. A drug supply model for ambulatory care in rural and remote Australia. BMC Health Serv Res. 2017;17:677.


PEER REVIEWED PODIUM PRESENTATIONS: (24)
Andreski M, An Initiative to Enable Pharmacists to Provide More Patient Care Services by Using Technician Verification of Prescription Filling: The Iowa New Practice Model. TED Style presentation at the 163nd Annual


Lehman, N. Guideline Update Series: Osteoporosis. Peer-reviewed continuing education webinar developed September 2017 Available at: http://ceimpact.com/Home/Index/Relicensure


Mulla N. Development and characterization of a nanoparticulate formulation for co-administration of cancer vaccine and adjuvants. Presented at International Conference and exhibition on Pharmaceutical Science and Pharmacognosy, Barcelona, Spain - November 2017

Mulla N. Adjuvanted allogeneic breast cancer vaccine: Maximizing cancer treatment by modulating the host immunity. Presented at World congress on Immunology, Immunity, Inflammation and immunotherapies- Atlanta, Georgia - November 2017


Munusamy S. Drugs and Depression. WHO Day: Let's Talk Depression; April 5, 2017; College of Health Sciences, Qatar University, Doha, Qatar

Munusamy S. Is Obesity a Risk Factor for Kidney Disease? The obesity epidemic: Discussing the global health crisis. (Webinar) EuroSciCon; April 19, 2017; London, UK

Munusamy S. Sankaralingam S, A Snap-shot of Drug Interactions. Continuing Professional Development; April 25, 2017; Qatar University, Doha, Qatar


Stelter N. Make Every Encounter Count: Motivational Interviewing for Pharmacists CEImpact CE Webinar (recorded) August 2017

PEER REVIEWED POSTERS: (44)


Bowen, S., Bruns, A., Jameson, A., McDonough, M., Nave, M., Prevo, C. What are the factors that influence occupational engagement for residents of long-term care facilities? Presented at: Iowa Occupational Therapy Association Annual Conference; October 7-8, 2017; Des Moines, Iowa.


Godwin, K and Huey, KA. AICAR Treatment Does Not Prevent Increases in Exercise Capacity or Muscle Heat Shock Protein 25 with Treadmill Training in Mice. Experimental Biology, April 22-26, 2017, Chicago, IL.


Huey, KA and Godwin, K. Interactive Activities to Learn How Our Muscles Work for 4th and 5th Graders, American Physiological Society Phun Week Poster Session, Experimental Biology April 22-26, 2017, Chicago, IL.


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. Poster #1246 Presented at IDSA 2017, San Diego, CA

Mages MD, Rovers, JP, Andreski M, Gray J. Effect of participation on a short term medical service trip on cultural competence in health care professional students. Abstract presented to 2017 ASHP Midyear Clinical Meeting, Orlando, FL. December 2017


Mobley-Bukstein W. Health Coaching Implementation to Improve Health Outcomes in Diabetes Management in a Federally Qualified Health Center; abstract submitted to AADE Annual Meeting Reviewers 2017; accepted as a poster and presented at the AADE Annual Meeting August 2017.

Mobley-Bukstein W. Getting in Touch with Diversity and Unconscious Bias Workshop; abstract submitted to AADE Annual Meeting Reviewers 2017; accepted as a poster and presented at the AADE Annual Meeting August 2017.


Munusamy S, Ravindran S, Al-Rawi S, Shaar S, Agouni A. Investigation of the Pro-Fibrotic Effects of Microparticles on Renal Proximal Tubular Cells In Vitro, College of Pharmacy Annual Research Forum; May 2017; Qatar University, Doha, Qatar.

Munusamy S, Pasha M, Alali F. Anti-neoplastic Effects of Metformin Against Renal Cell Carcinoma. Qatar University Annual Research Forum; May 2017; Doha, Qatar.

Munusamy S, Ravindran R, Pasha M, Agouni A. Microparticles as Potential Mediators of High Glucose-Induced Renal Cell Injury. 22nd Annual Meeting of the Iowa Physiological Society; September 30, 2017; Iowa City, IA

Mulla N. NeoCULTURETM: An Innovative High Throughput Screening-Focused Microfluidic Well Plate for 2D/3D Cell Culture. Poster presented at- AAPS 2017

Mulla N. NeoIMAâ€”A Nanoliter Error-free Microfluidic Well Plate for Immunoassay-based Application. Poster presented at- AAPS 2017


Seadler JL, Percival KM, Boelts BC, Maki ED. An Evaluation of Discharge Antimicrobial Documentation During Transitions of Care. ASHP-Midyear Clinical Meeting, Orlando, FL. December 2017


Welter K, Caligiuri F, Ulrich E. Assessing Pharmacy Student Knowledge, Confidence, and Attitudes of Medical Cannabis Therapy. Iowa Pharmacy Association Annual Meeting; June 16-17; Iowa City, Iowa.


BOOKS CHAPTERS: (6)


BOOKS: (2)

**NON-PEER REVIEWED ARTICLES: (6)**

Bell C, Spilman SK, Eastman DK, Sidwell RA, Sherrill JE, Pelaez CA. Do all head injured patients on antplatelet drugs really need platelets? Podium presentation at the Annual Meeting of the Iowa Committee on Trauma, Iowa City, IA. November 10, 2017.


**NON-PEER REVIEWED COLUMNS: (9)**

Bell E. Update on Probiotics - Infectious Diseases in Children, Pharmacology Consult. February 2017

Bell E. Head Lice: Resistance Trends and Clinical Implications - Infectious Diseases in Children, Pharmacology Consult. March 2017

Bell E. Pediatric Implications of the Opioid Crisis - Infectious Diseases in Children, Pharmacology Consult. May 2017

Bell E. Epinephrine Auto-Injectors: Life-saving and Expensive - Infectious Diseases in Children, Pharmacology Consult. June 2017

Bell E. Emergency Contraception: Pharmacotherapy Update - Infectious Diseases in Children, Pharmacology Consult. September 2017

Bell E. Why Your Child Needs Vaccines, Even If You May Not Know Someone with the Disease, The Conversation, online website: April19, 2017


Miesner AR. American College of Clinical Pharmacy Adult Medicine PRN Fall 2017 Newsletter Podcast Extra. Available at: https://soundcloud.com/andrew-miesner/2017-fall-newsletter-podcast-extra

**INVITED/NON-REVIEWED PODIUM PRESENTATIONS (49)**


Brady MP, Returning Preceptor Webinar. Drake University Health Sciences Experiential Education. August 2017.


Eastman DK. Extended Treatment of Venous Thromboembolism: Rivaroxaban or Aspirin (or Nothing?) CEI Log in to Learn. August 2017.


Gutierrez, C. (2017, October). Overview of health sciences at Drake. Panel Presentation at Central Campus Health Sciences College Overview Day in Des Moines, IA.


Gutierrez, C. (2017, April). Health sciences academic presentation at Drake University Admitted Student Day in Des Moines, IA.

Gutierrez, C. (2017, March). Health sciences academic presentation at Drake University Admitted Student Day in Des Moines, IA.

Gutierrez, C., Brady, M., & Fenner, S. (2017, February). Bachelor of Science in Health Sciences at Pharmacy and Health Sciences Day in Des Moines, IA.


Koenigsfeld C. Presented APhA Immunization Certificate program at Texas A&M in November 2018.

Koenigsfeld C. Presented APhA Diabetes Certificate program twice in October 2017.

Mahajan P. Biotechnology for Public Health at the Center for Social Medicine, Pravara Institute of Medical Sciences, Loni, Maharashtra, India, on January 18, 2017.

Mckinney R, Maki ED. Geriatric Pharmacology and De-Prescribing Overview National PACE Association Summer Conference, Omaha, NE. June 2017.


Mobley-Bukstein W. Vitamin Deficiencies in Diabetes American Diabetes Association Clinical Conference May 2017, Orlando, FL.

Munusamy S. Novel Therapeutic Approaches to Treat Diabetic Kidney Disease. Pharmacy and Health Sciences Day; November 19, 2017; Drake University, Des Moines, IA.

Nelson M. Team-Based Learning in Pharmacy Education: An Introductory Workshop. Workshop presentation to faculty members at Concordia University School of Pharmacy, Mequon, Wisconsin. May 2017.

Nelson M. "Introduction to Team-Based Learning." Workshop presentation to faculty members at Medical College of Wisconsin Pharmacy School, Milwaukee, Wisconsin. December 2017.


Percival KM. "Infectious Disease Pharmacists as a career". LKS Nu Chapter professional development session. Drake University, Des Moines, IA. April 2017.

Percival KM. "Careers in Academia-Clinical Faculty". CAPS III Course. Drake University. Des Moines, IA. Nov 2017.


INVITED/NON-REVIEWED POSTER (21)


Godwin, K and Kimberly Huey. Exercise capacity and muscular adaptations to treadmill training are not reduced by AICAR treatment in mice. Drake Undergraduate Research Symposium, April 13, 2017.

Hoerres A and Mahajan P (2017) Understanding the Role of Matrix Metalloproteinase-2 and -9 in DNA repair at the DUCURS Research Conference, Drake University, Des Moines, IA on April 13, 2017 [First Award winning poster]


Munusamy S, Ravindran S, Al-Rawi S, Shaar S, Agouni A. Investigation of the Pro-Fibrotic Effects of Microparticles on Renal Proximal Tubular Cells In Vitro, College of Pharmacy Annual Research Forum; May 26, 2017; Qatar University, Doha, Qatar

Munusamy S, Abunada A, Elshami S, Agouni A. In Vitro Investigation of Autocrine Effects of Microparticles Shed by Renal Tubular Cells in Response to High Glucose Stress, College of Pharmacy Annual Research Forum; May 26, 2017; Qatar University, Doha, Qatar

Nadolny E, Wuebker MW. The Effects of Sensory Processing/Integration Disorder on Teenagers with Autism While Engaging in Driving, Iowa Occupational Therapy Conference, Des Moines, Iowa, October 7, 2017.


Wealther R, Donovan S, Cowan A, Johannsson C, Mahajan P, Bangal V (2017) Study of Incidence and Socio-Biological Factors Associated with Low Birth Weight Infants Born at Pravara Rural Hospital, Ahmednagar District of Maharashtra, India at the DUCURS Research Conference, Drake University, Des Moines, IA April 2017


TECHNICAL OR CONSULTANT REPORTS: (7)

Andreski, M Baseline Characteristics of the Iowa CPESN Pharmacies; Presented at the IPA Expo, CPESN Meeting, Des Moines, IA Feb 17, 2017

Andreski M, Doucette W, Pudlo A. Evaluating a Value-Based Pharmacy Program. Presented to the Wellmark Value Based Pharmacy Summit, Des Moines, IA on April 21, 2017
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 Phase III-IV Quarterly Report. Presented to Iowa Board of Pharmacy on Mar 8, 2017. Sponsored by Iowa Pharmacy Association.

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 Phase III-IV Quarterly Report. Presented to Iowa Board of Pharmacy on May 9, 2017. Sponsored by Iowa Pharmacy Association.

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 Phase III-IV Quarterly Report. Presented to Iowa Board of Pharmacy on Aug 30, 2017. Sponsored by Iowa Pharmacy Association.


**RESEARCH GRANTS AND CONTRACTS: (27 NEW)**

*Extramural (10)*

**Title:** Assessment of Readiness of Iowa Pharmacies to Provide ACA Supported Patient Care Initiatives  
**Sponsor:** Iowa Department of Public Health,  
**Start Date:** Jan 2017- June 2017  
**Direct Costs:** $2,000 allocation, no direct costs  
**Role:** M. Andreski, Research Consultant/ Co-investigator with Iowa Pharmacy Foundation

**Title:** Travel expenses attending the Pen to Paper writing conference in Rochester, NY.  
**Sponsor:** 2017-2018 Iowa Campus Compact Engaged Scholar Research Fellows program  
**Start Date:** 2017  
**Direct Costs:** $1056 to cover  
**Role:** Haack, S. (PI)

**Title:** Epigenetic effects of DNA damaging agents  
**Sponsor:** Iowa Space Grant Consortium, Iowa State University, Ames, Iowa;  
**Start Date:** August 2017- May 2018.  
**Direct Costs:** $7,000; $5,000 scholarship to student (PI); $2,000 project funds to faculty  
**Role:** P. Mahajan (Co-PI).

**Title:** Role of proteases in DNA repair  
**Sponsor:** Iowa Space Grant Consortium, Iowa State University, Ames, Iowa;  
**Start Date:** August 2017- May 2018.  
**Direct Costs:** $7,000; $5,000 scholarship to student (PI); $2,000 project funds to faculty  
**Role:** P. Mahajan (Co-PI).

**Title:** Regulation of methyltransferases in DNA repair  
**Sponsor:** Iowa Space Grant Consortium, Iowa State University, Ames, Iowa;  
**Start Date:** August 2017- May 2018.  
**Direct Costs:** $7,000; $5,000 scholarship to student (PI); $2,000 project funds to faculty  
**Role:** P. Mahajan (Co-PI).
Title: Introduction to Precision Medicine: An Experiential Course for Iowa’s STEM Teachers
Sponsor: Iowa Space Grant Consortium, Iowa State University, Ames, Iowa;
Start Date: August 2017- May 2018.
Direct Costs $10,000 direct costs
Role: Mahajan, P (PI)

Title: Development of nanoparticulate drug delivery tools using microfluidic devices
Sponsor: Neofluidic LLC
Start Date: 2017
Direct Costs: 5000.00
Role- N. Mulla, Co-investigator, Advisor

Title: Investigating the anticancer potential of metformin in renal cell carcinoma
Sponsor: The NASA-Iowa Space Research Consortium
Start date/completion date: 1/1/2018 to 6/21/2018
Direct Costs: $7,000
Role: S. Munusamy, Principal Investigator

Title: Employer’s Perceptions of Key Variables in New Practitioners’ Success When Entering the Pharmacy Workforce.
Sponsor: NABP/AACP District Five Individual Study Grant Proposal
Start Date: 2017
Direct Costs: $1363
Role: Kristin Janke (PI), Michael Nelson (Co-I), Eliza Dy-Boarman (Co-I), and Robert Bechtol (Co-I).

Title: Determining Student Preferences of and Required Financial Incentives to Work in a Rural and Medically Underserved Area in NABP/AACP District Five.
Sponsor: NABP/AACP District 5
Start/completion date: June 2017-June 2018
Amount Awarded: $3,000
Role: E. Ulrich, (PI)

Intramural: (17)
Title: Enzymatic Conversion of MBX-2168-MP to Synguanol-MP by Adenosine Deaminase Like Protein-1, a Necessary Step in the Conversion of this Prodrug into an Active Antiviral Compound
Sponsor: Drake University College of Pharmacy and Health Sciences Harris Research Endowment
Start Date: Dec 2017
Direct Costs: 2,500
Role: B. Gentry, (PI)

Title: Measuring Outcomes of a Medication Adherence Intervention at a Mexican Hospital. Sponsor: Harris Research Endowment.
Start Date: December 2017
Direct Costs: $3950
Role: Haack, S. (PI)
Title: Tec de Monterrey Partnership Planning
Sponsor: Olson Global Service-Learning Fellow Grant.
Start Date: June 2017.
Direct Costs: $4345.
Role: Haack, S. (PI)

Title: American College of Sports Medicine Meeting Presentation
Sponsor: Jorndt Award
Start Date: January 2017-May 2017
Direct Costs: $750
Role: K. Huey, PI

Title: Muscular and Cardiorespiratory Adaptations to Concurrent Training in Mice
Sponsor: Drake University Research Grant
Start Date: July 2017-June 2018,
Direct Costs: $2,900
Role: K. Huey, PI

Title: Ronald Troyer Research Fellowship
Sponsor: Drake University
Start Date: July 2017-June 2018
Direct Costs: $5,000
Role: K. Huey, PI

Title: National Case Study Conference
Sponsor: Drake Faculty Development Grant
Start Date: September 2017
Direct Costs: $1,500
Role: K. Huey, PI

Title: Identification of Top Drug Information Assessment Within United States PharmD Curricula
Sponsor: CPHS Hartig Professional Development
Start Date: Nov. 2017
Direct Cost: $2500.
Role: Koenigsfeld C, Lehman N, Bottenberg MM. (Co-PIs)

Title: Preliminary Exploration: Clinical Doctorates in America
Sponsor: Harris Research Endowment, Drake University CPHS
Start date: Sept 2017- ongoing
Direct Costs: $360.00
Role: A. Kjos, Principal Investigator

Title: Genetic basis for soapy cilantro tester status of Drake University Students, Faculty and Staff
Sponsor: Kresge Foundation Funds, CPHS
Start Date: May-June 2017.
Direct Costs: $3,655
Role: Mahajan, P. (PI)

Title: Epinephrine Drug Degradation in Auto-Injector Products
Sponsor: CPHS, Harris Research Endowment
Start date: September 2017
Direct Costs: $2,436
Role: A. Mengesha, Lynn Kassel (Co-PIs)
Title: Funding to purchase a 3D printer with a semi-solid extrusion tool-head
Sponsor: Kresge fund
Start date: March 2017
Direct costs: $826.54
Role: A. Mengesha, (PI)

Title: Designing the ideal drug delivery system: Evaluating potential polymers for the development of 3D printed suppositories
Sponsor: Harris Research Endowment, CPHS
Start date/Completion date: Oct. 2017 to June 2018
Direct Costs: $930.00
Role: A. Mengesha, (PI)

Title: A Smartphone Application for Antimicrobial Stewardship.
Sponsor: Harris Research Endowment
Start Date: 11-1-2017
Direct Costs: $975
Role: A Miesner, (Mentor and Co-investigator)

Title: Harris Research Endowment:
Sponsor: CPHS Harris Research Endowment:
Start: 2017
Direct Costs: $2928.00
Role: N. Mulla (PI)

Title: Molecular and pharmacological studies of chronic kidney disease
Sponsor: Kresge Endowment Fund - College of Pharmacy & Health Sciences, Drake University
Start date/completion date: 8/14/2017 to 6/30/2020
Direct Costs: $10,000
Role: S. Munusamy, Principal Investigator

Title: Drake University’s presence in the Toledo District of Southern Belize: Maximizing our impact while minimizing our footprint.
Sponsor: Roland and Mary Nelson Institute for Diplomacy and International Affairs Pressing Issues Grant
Start Date: January 1, 2017 - December 31, 2018
Direct Costs: $30,000
Role: J. Rovers, Principal investigator
UNDERGRADUATE RESEARCH PROJECTS: (66 projects, multiple students)

Nicole Draker and Brandon Boelts
Mentor: E. Bell
Project title: Dangers of Codeine Use in Children for Analgesia and Cough Relief: Implications for the Pharmacist
Product(s): Article co-written by 2 P3 students and submitted to IPA journal

Anna Bruns, Alyssa Jameson, Molly McDonough, Madelyn Nave, Caleb Prevo - OT
Mentor: S. Bowen
Project title: What are the factors that influence occupational engagement of residents in long-term care
Product(s): Poster presentation (October 2017)

Molly Obermark (Pharmacy)
Mentor: G. Bryant

Hannah Sauer (Pharmacy)
Mentor: G. Bryant
Project title: Second-year pharmacy students’ self-reflection of aseptic technique skills and the impact of video review on metacognition and performance

Emily Nadolny, Derek Mehrl, Taylor Crane, Maddeline Eggleston, Kaylie Hills
Mentor: J. Fischbach
Project Title: Effectiveness of CIMT on improving UE function in children
Products: On-going

Regan Longtin, Natalie Stalsberg, Caroline McCleary, Michail Peterson, and Julie Girard
Mentor: J. Fischbach
Project Title: Effectiveness of primitive reflex integration on function in children:
Products: On-going

Gloria Frolek Clark, Morgan Buzzel, Kaile Damm, Stephanie Dizon, and Sarah Loffredo
Mentor: J. Fischbach
Project Title: Improving feeding and eating in children with food selectively:
Products: On-going

Abigail Whillock, Carrie Behrends, Rachel Robertson, and Danielle Retallick
Mentor: J. Fischbach
Project Title: Efficacy of the MFUN and GOAL assessments delivered via telehealth:
Products: On-going

Alex Maciejewski, Pharmacy
Mentor: A. Fornoff
Product(s): International Undergraduate Journal for Service-Learning, Leadership, and Social Justice. 6 (2) Spring 2017. First Drake student to have a publication in an International Service-Learning Journal.
Maxx Enzman (P3) & Drake Reiter (P2)

**Mentor: S. Grady**

Project title: Decreasing the stigma surrounding alcohol use disorder
Product(s): A universitywide symposium on alcohol in October 2017. They have recently submitted an abstract to present at a national meeting (CPNP April 2018).

Emily Anderson, AN; Hannah Lancaster, AS; Autumn Larsen, AS; Joe Sienkiewicz, BN

**Mentor: C. Gutierrez**

Project Title: Assessing, Collaborating, and Empowering to Improve Water Quality in Rural Uganda
Product: Presentation at 9th Annual Heartland Global Health Consortium Conference (October 2017)

Karli Kisch, BCMB; Hayley LeBlanc, BCMB; Megan Lindmark, Environmental Science; Augusta Weide, Business, 2015-2017

**Mentor: C. Gutierrez**

Project Title: Assessing, Collaborating, and Empowering to Improve Water Quality in Rural Uganda
Product: Presentation at the Nelson Institute Conference (April 2017)

Colby Crawford, HSCI, 2017

**Mentor: C. Gutierrez**

Project Title: Potential Barriers to Interprofessional Education
Product: HSCI Poster Session (May 2017)

Abigail Cowan, HSCI, 2017

**Mentor: C. Gutierrez**

Project Title: An Infographic on Antibiotic Resistant Gonorrhea at Polk County Health Department
Product: HSCI Poster Session (May 2017)

Sydney Kletter, HSCI, 2017

**Mentor: C. Gutierrez**

Project Title: Surveying the Safe Sex Knowledge and Practices of Drake Undergraduate Students
Product: HSCI Poster Session (May 2017)

Madison Maring, HSCI, 2017

**Mentor: C. Gutierrez**

Project Title: Healthy Vision: A Snapshot of Attitudes Toward Vision Screenings
Product: HSCI Poster Session (May 2017)

Reid Giovanine, HSCI, 2017

**Mentor: C. Gutierrez**

Project Title: Policies and Procedures in the Dietary Department in a Skilled Nursing Facility
Product: HSCI Poster Session (May 2017)

Elizabeth Nortman, HSCI, 2017

**Mentor: C. Gutierrez**

Project Title: Evaluating the Effectiveness of a National Diabetes Exercise Program
Product: HSCI Poster Session (May 2017)

Katherine North, HSCI, 2017

**Mentor: C. Gutierrez**

Project Title: Improving Patient Satisfaction in the Emergency Department
Product: HSCI Poster Session (May 2017)

Callie Brown, Mariah Peterson, Lindsay Schultz, and Emily Mock

**Mentor: K. Hove**

Project Title: Biofeedback Self-Regulation Study
Products: Students have started the beginning phases of this study which will continue through next year.
Kyle Godwin, HS
**Mentor: K. Huey**
Project Title: Exercise capacity and muscular adaptations to treadmill training are not reduced by AICAR treatment in mice

Allison Brask, PharmD; Kara Eid, PharmD; Kyle Godwin, HS;
**Mentor: K. Huey**
Project Title: A Comparison of Strength and Cardiorespiratory Adaptations to Running Wheel or Disc Exercise in Aged Mice
Product: DUCURS poster (April 2017)

Kyle Godwin, HS
**Mentor: K. Huey**
Project Title: Effects of Glutamine Supplementation on Overload-Induced Muscle Growth and Function in Mice
Product: DUCURS poster (April 2017), Iowa Space Grant Undergraduate Meeting (March 2017)

Cortni Rush, HS
**Mentor: K. Huey**
Project Title: Effects of Different Modes of Exercise on Muscle Strength in Males and Females
Product: DUCURS poster (April 2017), Capstone Presentation (May 2017)

Ellie Jacoby, HS; Taylor Bischel, HS
**Mentor: K. Huey**
Project Title: A Comparison of Strength and Cardiorespiratory Adaptations to Running Wheel or Disc Exercise
Product: DUCURS poster (April 2018)

Odessa Cody, HS
**Mentor: K. Huey**
Project Title: Effects of Statin Treatment on Muscle Growth in Mice with Hypercholesterolemia
Product: DUCURS (April 2018), Capstone Presentation (May 2018)

Stephanie Wensing, Pharmacy
**Mentor: L. Kassell**
Project title: Evaluation of Safety of the Insulin Drip Protocol for Patients with Hyperglycemia
Product(s): Poster at IPA Meeting, June 2017.

Michelle Thommi, Health Sciences; Hannah Mortland, Pharmacy
**Mentor: L. Kassell**
Project title: Evaluation of the Impact of Pre-Operative Joint Camp Attending on Post-Operative Complications in the Orthopedic Population
Product(s): Poster at the Health Sciences Capstone Posters Session, May 2017. A poster will be submitted to IPA and possibly converted into a manuscript for the orthopedic literature.

Delaney Walsh, Health Sciences
**Mentor: L. Kassell**
Project title: Pharmacist Involvement in Medication Assessment in the Pre-Operative Phase of Bariatric Surgery
Product(s): This project is in data analysis currently. A poster will be developed for the Health Sciences Capstone Posters session, and a manuscript will be drafted for submission to a bariatric journal.

Catherine DeFino, Pharmacy
**Mentor: L. Kassell**
Project title: Pharmacy Students' Expectations of Teaching Assistants
Product(s): In Progress
Caroline Jones, Pre-Pharmacy  
**Mentor: L. Kassell**  
Project title: Epinephrine Drug Degradation in Auto-Injector Products  
Product(s): This project is currently assessing the drug degradation of epinephrine, via HPLC. The goal is to have at least one poster from each section of this project as well as contribute to the literature for drug degradation.

Nicholas Bianchina (BCMB)  
**Mentor: A. Kjos**  
Project title: The Opioid Epidemic: A Case Study of Consumer Behavior in Medical Patients  
Product: Manuscript, Oral Presentation, Poster Presentation; Successful Attainment of University Honors

Paul Strey (HIST, LPS, ECON)  
**Mentor: A. Kjos**  
Title: Just a Symptom: Pharmacy Benefit Managers in an Era of Rising Drug Prices  
Product: Manuscript, Oral presentation, Poster Presentation-forthcoming in 2018 Honors

Marta Lemesh (HSCI)  
**Mentor: A. Kjos**  
Project Title: Literature Review of Contemporary Nursing Practice and Education in America  
Product: Literature review manuscript, in progress

Amy Kukacka- Pharm D candidate May 2018  
**Mentor: C. Koenigsfeld with Nic Lehman and Michelle Bottenberg**  
Project Title: Top Drug Information Assessment within United States Pharma Curricula  
Product: In progress

Catherine Defino- Pharm D candidate May 2018  
**Mentor: C. Koenigsfeld with Therapeutics faculty and teaching assistants**  
Project title: Pharmacy Students' Expectations of Teaching Assistants  
Product: In progress

Amanda Hoerres, PharmD (P2) student;  
**Mentor: P. Mahajan**  
Project title: 'Role of metalloproteases in DNA repair'  
Product: Poster presented at DUCURS [1st Prize]

Michael Ohman, Pharma (P2) student;  
**Mentor: P. Mahajan**  
Project title: 'Understanding role of DNA methylation and methyltransferases in DNA repair'  
Product: Poster presented at the NASA/ISGC Research Conference at Iowa State University, Ames, IA on March 16, 2017

Monika Makowiecki PharmD (P3) student;  
**Mentor: P. Mahajan**  
Project title: Pharmacogenomic analysis of CYP2C19 in Des Moines sub-population'  

Claire Steinbronn, PharmD (P3) student;  
**Mentor: P. Mahajan**  
Project title: Pharmacogenomic analysis of CY2D6 in Des Moines sub-population'  
Seadler JL, Boelt B
**Mentor: E. Maki**
Project Title: An evaluation of discharge antimicrobial documentation during transitions of care.
Product(s): Student Poster ASHP Midyear Clinical Meeting, Orlando, FL December 2017

Kyle Godwin
**Mentor: E. Maki**
Project Title: Hospitalized Patients’ Perspective on Shared Decision Making and Treatment Satisfaction
Product(s): Poster at Health Science Senior Poster Session

Andre Do (Pharm)
**Mentor: A. Mengesha**
Project title: Evaluating potential polymers and software in 3D printing of medicine.
Product(s): 2017 DUSCI Summer Fellowship; Poster and abstract at DMU Research Symposium (2017).

Caroline Jones (Pharm)
**Mentor: A. Mengesha**
Project title: Development and validation of HPLC method for determination of epinephrine and its degradation products in auto-injector products. (Dr. Lynn Kassel, Co-Mentor)

Jessica Satterfield, BS-HS (2017)
**Mentor: A. Miesner**
Project title: The Role for Education in Antimicrobial Stewardship: A Review.
Product(s): Health Sciences Poster; manuscript submitted to AJHP and rejected, currently re-drafting for another journal

Marta Lemesh; BS-HS
**Mentor: A. Miesner**
Project title: A Smartphone Application for Antimicrobial Stewardship
Product(s): in progress

Tori Adams, Katie Serbin, Trevor Bridge, Jake Powers, Lauren Holmes, Ryan Hannan
**Mentor: W. Mobley-Bukstein**
Project title: University Employee Perceptions of Student Pharmacist-Provided Influenza Immunizations: A Pilot Study
Product(s): APhA Annual Meeting Poster March 2017

Tori Adams, Alexa DeVita, Mackenzie Leal, Jake Powers, Kelley Nyugen
**Mentor: W. Mobley-Bukstein**
Project Title: Implementation of Student-Led Health Screenings Focused on Patient Follow-Up
Product: APhA Annual Meeting Poster March 2017

Safa Al-Rawi, Shaad Saar - BS Pharmacy Program
**Mentor: S. Munusamy**
Project title: Investigation of the pro-fibrotic effects of microparticles on renal proximal tubular cells
Product(s): Qatar University College of Pharmacy Research Day Poster (May 2017)

Sanjidha Akhtar - BS Pharmacy Program
**Mentor: S. Munusamy**
Project title: Effect of Methylglyoxal Scavengers on Methylglyoxal-Induced Impairment in Vitamin D Signaling in Renal Tubular Cells
Product(s): Qatar University College of Pharmacy Research Day Poster (May 2017)

Jessica Seadler (PharmD), Brandon Boelts (PharmD)
**Mentor: K. Percival**
Project title: Antibiotic prescribing patterns and medication reconciliation at hospital discharge
Product(s): Seadler JL*, Percival KM, Boelts BC, Maki ED. An Evaluation of Discharge Antimicrobial Documentation During Transitions of Care. ASHP-Midyear Clinical Meeting, Orlando, FL December 2017
Matt Kent, Pharmacy
**Mentor: C. Phillips**
Project Title: Literature review on stress in pharmacy students and faculty and other health care professionals
Product: Draft introduction for manuscript

Whitney Baker, Sydney Moor, Allison Kellen, Bre Walton, Kate Crane, Shannon Wyatt
**Mentor: D. Plutschack**
Project Title: The effectiveness of Kinesio Taping for pain and edema with distal radius and metacarpal fractures
Products: currently collecting data.

Name: Skylar Davis (Des Moines High School Student- junior)
**Mentor: C. Redman**
Project Title: Natural Trap Cave Fossils: From Ground to Collection

Michelle Mages P4
**Mentor: J. Rovers**
Project title: A drug supply model for ambulatory care in rural and remote Australia.
Product(s): BMC Health Serv Res. 2017;17:677

Michelle Mages P4
**Mentor: J. Rovers**
Project title: Effect of participation on a short term medical service trip on cultural competence in health care professional students.
Product(s): Abstract presented to 2017 ASHP Midyear Clinical Meeting, Orlando, FL. December 2017

Adam Resnick (SO Data Analytics) Will Leeson (SR Data Analytics)
**Mentor: J. Rovers**
Project title: Comparing machine learning versus traditional qualitative methods on transcripts for men's health project
Product: Project is still underway

Anastasia Yablochkin PharmD; Claire Steinbronn PharmD
**Mentor: J. Sacco**
Project Title: Genetic Variation and Comparative Genomics of the Canine TMF-1 Regulated Protein (TRNP1) Gene.
Product: DUCURS Poster (April 2017)

Anastasia Yablochkin PharmD; Sarah Mann BA (BCMB)
**Mentor: J. Sacco**
Project Title: Single nucleotide polymorphisms and microsatellites in the canine GSTP1 promoter.
Product: Central States Chapter of the Society of Toxicology (September 2017). Winning poster in the undergraduate student category.

Sarah Mann BA (BCMB)
**Mentor: J. Sacco**
Project Title: Prevalence of genetic polymorphisms in the GSTP1 promoter in dogs.
Product: DUCURS Poster (April 2017); ISGC Poster (March 2017) Award winner

Bald E, Martin N, Adams T, Bridge T, Hannan R, Holmes L, Powers J, Serbin K. (all pharmacy students)
**Mentor: N. Stelter**
Project Title: University employee perceptions of student pharmacist-provided influenza immunizations.
Student representatives (12) from Phi Delta Chi

**Mentor: R. Torry**

Project title: Developing patient education drug flyers for Unity Point Health Cardiopulmonary Rehabilitation Labs
Product(s): Developed educational material for common classes of cardiovascular (14) and pulmonary medications. Used as informational and teaching purposes by staff in the Clinical Cardiopulmonary Rehabilitation Labs at Lutheran Hospital downtown and Methodist West Clinic in WDSM. Drs Lynn Kassell (pulmonary) and Erik Maki (CV) helped coordinate and oversee the clinical accuracy of the flyers.

Alyssa Sykuta  
**Mentor: T. Welty**

Project Title: Intrapatient Variability in the Equigen Trial
Product: Project is ongoing

Alyson Williamson; Hayley LeBlanc  
**Mentor: C. Wrenn**

Project title: Study of Daily Genistein Ingestion on Spatial Memory and Olfaction in Triple Transgenic Alzheimer's Mice
Product: American Society of Experimental Therapeutics Poster, Iowa State Neuroscience Day Poster, DMU Research Day Poster, DUCURS Poster

Alyson Williamson, Josephine Montgomery; Hayley LeBlanc  
**Mentor: C. Wrenn**

Project title: Sociability and social recognition in B6/129 hybrid mice: A pilot study
Product: Iowa State Neuroscience Day Poster

John Kasra, Ben Rohr, Brittany Sulkowski  
**Mentor: C. Wrenn**

Project title: Sociability and social recognition in 3xTg-AD mice
Product: No product in 2017
JOURNAL REVIEWING ACTIVITIES: (49 journals)

American Journal of Health-System Pharmacy, M. Andreski, G. Wall
American Journal of Pharmacy Education, A. Miesner, E. Dy-Boarman, M. Bottenberg
American Journal of Physiology, K. Huey
Annals of Allergy, Asthma, and Immunology, G. Wall
Annals of Pharmacotherapy, A. Miesner, E. Bell, E. Dy-Boarman, T. Welty
Antimicrobial Agents and Chemotherapy, B. Gentry
Antiviral Research, B. Gentry
British Medical Journal Open, J. Rovers
Canadian Journal of Pharmacy and Pharmacology, S. Munusamy
Cellular Biochemistry and Biophysics, S. Munusamy
Clinical and Experimental Allergy, G. Wall
Current Drug Targets, S. Munusamy
Currents in Pharmacy Teaching and Learning, M. Bottenberg, S. Grady, A. Kjos, A. Miesner, W. Mobley-Bukstein, M. Nelson, J. Rovers
Drug Design, Development, and Therapy, N. Lehman, S. Munusamy
Epilepsia, T Welty
Epilepsy and Behavior, T Welty
Ergonomics, S. Gnacinski
European Journal of Sport Science, M. Brady
Exercise and Sport Science Reviews, K. Huey
Experimental Physiology, K. Huey
Frontiers in Physiology, K. Huey (editor)
Health Education, C. Gutierrez
Innovations in Pharmacy, E. Dy-Boarman, M Nelson
International Health, J. Rovers
International Journal of Pharmaceutical Compounding, A. Mengesha
International Journal of Clinical Practice, G. Wall
International Journal of Pharmacy Practice, G. Wall
International Journal of Nanomedicine, S. Munusamy
Journal of the American Pharmacist Association, M. Andreski, C Clarke, A. Kjos, C. Koenigsfeld, W. Mobley-Bukstein
Journal of Applied Physiology, K. Huey
Journal of Pediatric Pharmacology and Therapeutics, E. Bell
Journal of Pharmaceutical Sciences (J. Pham. Sci) A. Mengesha
Journal of Pharmacy Practice, A. Miesner, N. Lehman, K. Percieval,
Journal of Sport Rehabilitation, M Brady
Journal of Strength and Conditioning Research, S Gnacinski
Neuropharmacology, C. Wrenn
Nutrition and Cancer: An International Journal, A. Mengesha
Open Journal of Occupational Therapy, Y. Griffiths
Pedigogy in Health Promotion, C. Gutierrez
Pharmacotheraphy, G. Wall,
Pharmacotherapy Principles and Practice Chapter, K. Percival
Pharmacy Times, K. Koenigsfeld
PLOS One, J. Rovers, C. Wrenn
Psychology of Sport and Exercise, S. Gnacinski
Research in Social & Administrative Pharmacy, A. Kjos, E. Ulrich
Scientific Reports, S. Munusamy
Team-Based Learning Collaborative module reviewer, E Bell
Therapeutics and Clinical Risk Management, G. Bryant
U.S. Pharmacist, L. Kassel
REVIEWERS FOR PODIUM or POSTER SESSIONS:

AACP Annual Meeting Abstract Reviewer, E. Bell, M. Bottenberg, S. Haack, A. Mengesha, C. Phillips
ACCPR Annual Meeting, T. Welty
APhA Annual Meeting Contributed Papers Reviewer, N. Lehman
APhA Annual Meeting Poster Judge, N. Lehman,
APhA Annual Meeting Abstract Reviewer, N. Lehman, C. Clarke, W. Mobley-Bukstein, N Stelter,
ASCP Annual Meeting Poster Reviewer, K. Meyer
Am Society for Microbiology Conference for Undergraduate Educators poster reviewer, B. Gentry
Assoc. for Applied Sport Psycholgy Annual Conference, S. Gnacinski
DUCURS Poster Judge, R. Torry
International Conference for Antiviral Research, Poster and podium reviewer, B. Gentry
International Social Pharmacy Workshop, E. Ulrich
Iowa Physiological Society Annual meeting Presentation grader, R. Torry
Iowa Physiological Society Annual meeting Abstract grader, R. Torry

REVIEWERS FOR GRANTS/AWARDS:

AACP New Investigator Award, G. Bryant, S. Munusamy
APhA Foundation Incentive Grants, C. Clarke
Iowa Science Foundation (ISF), Grants, A. Mengesha
Undergraduate Iowa Space Grant Awards, K. Huey
University Research Grant, Am Univ of Beirut College of Medicine, S. Munusamy
CURRENT PROFESSIONAL MEMBERSHIPS: (72 organizations)

Academy of Certified Brain Injury Specialists
Adult Medicine PRN
Allen's Cognitive Network
American Association for Advancement of Science
American Association of Biochemistry and Molecular Biology
American Association of Colleges of Pharmacy (AACP)
American Association of Diabetes Educators
American Association of Pharmaceutical Scientists (AAPS)
American College of Clinical Pharmacy (ACCP)
American College of Sports Medicine
American Economic Association (AEA)
American Epilepsy Society
American Heart Association
American Institute on the History of Pharmacy (AIHP)
American Interprofessional Health Collaborative
American Occupational Therapy Association (AOTA)
American Pharmacists Association (APhA)
American Psychological Association
American Physiological Society
American Society for Microbiology
American Society for Pharmacology and Experimental Therapeutics
American Society of Consultant Pharmacists (ASCP)
American Society of Hand Therapists
American Society of Health Economists
American Society of Health Systems Pharmacists (ASHP)
American Society of Human Genetics
American Society of Microbiology
American Sociological Association (ASA)
Association for Applied Sport Psychology (AASP)
Board of Pharmaceutical Specialties (BPS)
Christian Pharmacists Fellowship International
College of Psychiatric and Neurologic Pharmacists
Eastern Economic Association
Electronic Health Information Advisory Council
HOSA International Organization
International League Against Epilepsy
International Society for Animal Genetics (ISAG)
International Society for Antiviral Research
International Society for the Study of Xenobiotics (ISSX)
Iowa Athletic Trainers’ Association
Iowa Academy of Science (IAS)
Iowa HOSA
Iowa Occupational Therapy Association (IOTA)
Iowa Pharmacy Association (IPA)
Iowa Physiological Society
Iowa Public Health Association
Iowa Rural Health Association
Kappa Psi Professional Pharmacy Fraternity
Lambda Kappa Sigma
Midwest Chapter of the American College of Sports Medicine (MWACSM)
Midwest Economic Association
National Athletic Trainers’ Association
National Academy of Sports Medicine (NASM)
National Strength and Conditioning Association (NSCA)
Nebraska Occupational Therapy Association (NOTA)
Pediatric Pharmacy Advocacy Group (PPAG)
Phi Delta Chi Professional Pharmacy Fraternity
Phi Lambda Sigma National Leadership Society
Rehabilitation Engineering and Assistive Technology Society of North America
Rho Chi Pharmaceutical Honor Society
Society of Critical Care Medicine (SCCM)
Society of Environmental Toxicology and Chemistry (SETAC)
Society for Healthcare Epidemiology of America (SHEA)
Society for Neuroscience
Society of Infectious Diseases Pharmacists
Society of Public Health Education
Society of Toxicology (SOT)
STAR Research Center
Team-Based Learning Collaborative
Vestibular Disorders Association
World Federation of Occupational Therapy
Young Professionals Connection