

ACADEMIC YEAR 2018-2019



**Distinction Track Program**  
UNDERGRADUATE MEDICAL EDUCATION OFFICE  
UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE

The Distinction Track Program provides students the opportunity for academic exploration and scholarly productivity in an area of medicine for which they have a passion.

**Business & Leadership**

**Global Health**

**Medical Education**

**Research**

This program is designed to increase the number of students choosing careers in academic medicine.

**UNDERGRADUATE MEDICAL EDUCATION  
DISTINCTION TRACK PROGRAM  
ANNUAL REPORT**

UNDERGRADUATE MEDICAL EDUCATION, SCHOOL OF MEDICINE

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VICE DEAN FOR UNDERGRADUATE MEDICAL EDUCATION

CHAIR, DISTINCTION TRACK ADVISORY COMMITTEE

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## INTRODUCTION

The Undergraduate Medical Education Distinction Track (DT) Program began in 2010 with the Distinction in Research Track. The other three tracks – Business and Leadership, Global Health, and Medical Education – started in 2013. **Distinction in Research Track** prepares students for his/her role as a clinician-researcher and the methods of basic and translational research. **Distinction in Business and Leadership Track** provides a fundamental knowledge base that explores the intersection of business and medicine, and arms trainees with a vital skill set to succeed in our health economy. **Distinction in Global Health Track** introduces students to various perspectives of global health through the lenses of clinical, social, political, and epidemiological study. **Distinction in Medical Education Track** develops skills in multiple teaching modes pertinent to medical education, as well as skills in medical education research. Students are overwhelmingly positive about their distinction track experience and their faculty mentors. They feel the Distinction Track Program added substantially to their medical school experience.

## DISTINCTION TRACK PROGRAM

### *Distinction Track Advisory Committee (DTAC) Members*

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*DTAC meets quarterly to discuss issues pertinent to the DT Program and to share updates on individual track and research results.*

- M. Ann Shaw, MD, MA, FACP (Chair)
- Robert C.G. Martin, MD, PhD
- Susan Sawing, MSSW
- Anne Noe
- Mary Jo White, MEd
- Emily J. Noonan, PhD
- Emily Martin, DIR, Class of 2020
- Jamaal Richie, DIBL, Class of 2020
- David Thomas, DIGH, Class of 2020
- Charles Shofner, DIGH, Class of 2021
- Dylan Vish, DIME, Class of 2021

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**Individual Distinction Track Directors\***

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*\*Also members of Distinction Track Advisory Committee*

**Distinction in Business and Leadership (DIBL)**

- David Haustein, MD, MBA
- In K. Kim, MD, MBA

**Distinction in Global Health (DIGH)**

- Bethany Hodge, MD, MPH
- Mary Carter, MD, PhD

**Distinction in Medical Education (DIME)**

- Jennifer Bruckner-Collins, PhD
- Charles M. Kodner, MD
- Pradip Patel, MD

**Distinction in Research (DIR)**

- Dale Schuschke, PhD
- Russ Prough, PhD

## STUDENT PARTICIPANTS

### Class of 2019 (Graduated) (n =44) M4s

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**DIBL** (n=6): Samantha Edwards, Jordan Jones, Carlos Lynes, Brett Riedinger, Shelby Schweinhart, Natalie Spiller

**DIGH** (n=6): Randall Beaupre, Camila Calderon, John Deis, Rekha Gupta, Madison Kommor, Rina Perlin

**DIME** (n=7): Andrew Braun, Sabine Eid, Virginia Ferguson, J. Alexander Gross, Joe Nash, Madelyn Oliver, Tali Pomerantz

**DIR** (n=25): Logan Bond, Daniel Canby, Erika Chandler, Cynthia Duck, Wesley Field, Daniela Havens-Lastarria, Jamie Heimroth, Collin Henry, Christina Kapsalis, Corey Ketchem, Maryam Khan, Austin King, Stephen Manek, Grant McKenzie, Ian McKinley, Megan Mercer, Ross Micciche, Sahas Narain, James Newton, Brent Oxford, Will Risinger, Miranda Schmidt, Divyansh Sharma, Albert Shu, Scott Warner

### Class of 2020 (n=43) M3s

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**DIBL** (n=7): Mason English, Anne Ewing, Trevor Fain, Kevin Kwan, Justin Penny, Jamaal Richie, Crystal Valadon

**DIGH** (n=6) Barbara Ekeh, Emily Furnish, Cecily Kennedy, Collin Russell, David Thomas, Alison Woods

**DIME** (n=7): Destiny Duvall, La-Tisha Frazier, Faiha Hill, Shawn Jones, Jennifer Overfield, Lydia Prevost, Audrey Summers

**DIR** (n=23): Simra Ahmed, Ryan Bailer, William Burke, Joshua Carty, Andrew Donovan, Rain Dunaway, Jonathan Gardner, Christopher Greb, Paul Henley, Kevin John, Matthew Kelec, Robert Knear-Bell, Emily Martin, Devin McBride, Aaron McPheters, Corey Moran, Taylor Nguyen, Queeny Pan, Billy Powell, James Rossman, Vince Stephen, Alex Urevick, Kalen Wright

### Class of 2021 (n=51) M2s

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**DIBL** (n=7): John Dickens, Sara Gottesman, Adam Lehnig, Helen Lu, Rohit Nair, Jennifer Pehl, Austin VonAxelson

**DIGH** (n=4): Amanda Beering, Jenna Rogers, Charles Shofner, Preston Simmons

**DIME** (n=16): Esther Bak, Alex Cross, Michael Eizyk, Kara Fredlock, Victoria Hammond, Paige Hart, Kirsi Lancaster, David Malicote, Zach Martin, Mohammed Nuru, Erik Schuschke, Jacob Shpilberg, Jerome Soldo, Makayla Uebelhor, Dylan Vish, Jared Young

**DIR** (n=24): Christopher Anglin, Christopher Artner, Paul Bevins, Sara Biladeau, Campbell Bishop, Nicholas Bonomo, Joseph Castlen, Phillip Chuong, Laura Davis, Jenci Hawthorne, Michelle Holland, Jeremy Jones, Joseph Kitchen, Mitchell Mefford, Evan Meiman, Asim Mohiuddin, Jordan Perkins, Zachary Pulliam, Phillip Strothman, Colin Treager, Thomas Walsh, Stephen Winter, Mallory Zaino, Corey Ziemba

### Class of 2022 (n=57)

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**DIBL** (n=7): Anne Geller, Kevin Jacob, Bryce Marshall, Oladele Osisami, Kyle Rizenbergs, Morgan Robinson, Erik Seroogy

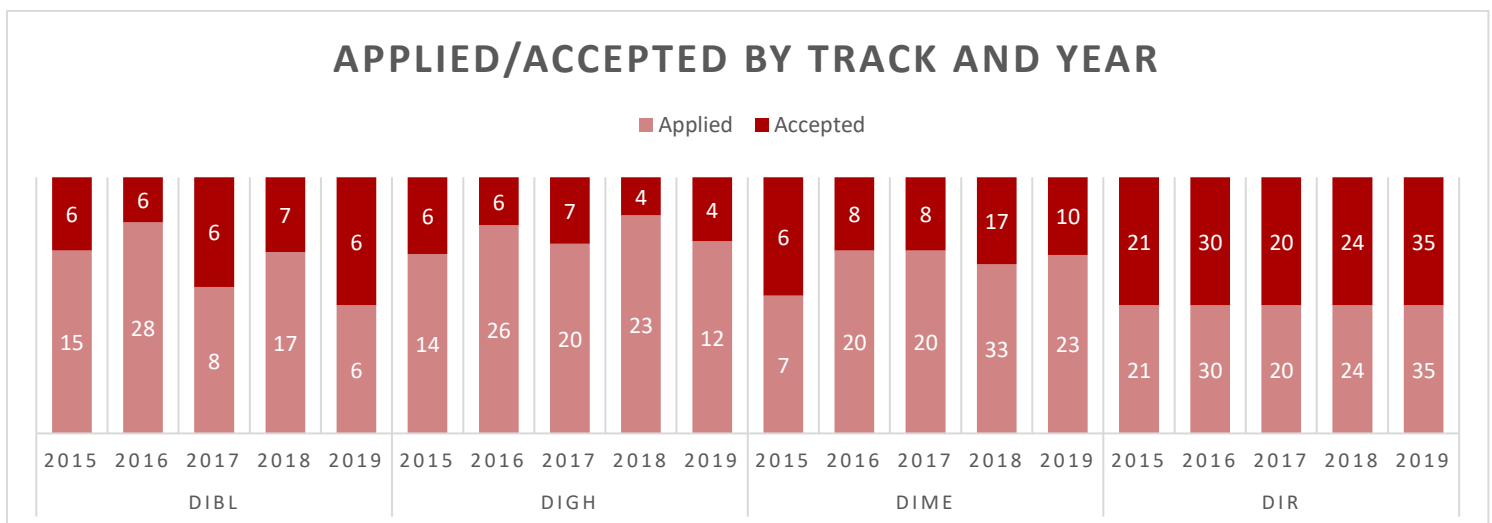
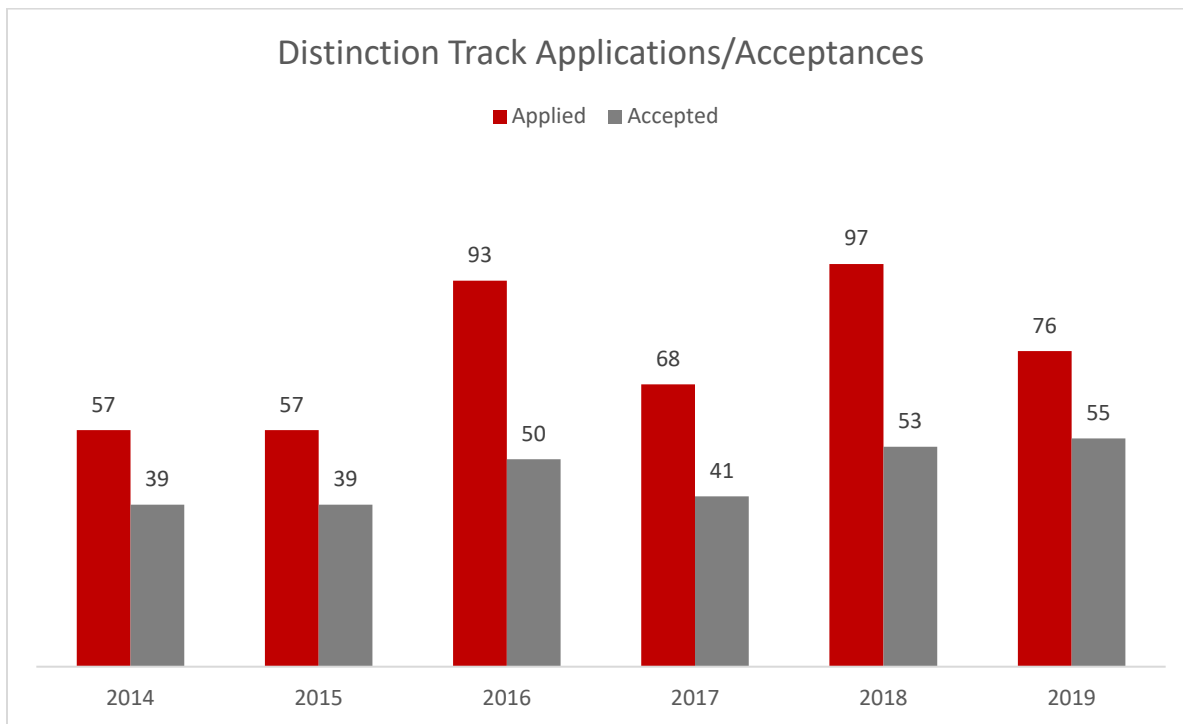
**DIGH** (n=4): Jordan Branch, Olivia Fields, Rachel Safeek, Elizabeth Smith

**DIME** (n=10): Jared Hall, Stephanie Hayden, Colby Loew, Ashley Merritt, Allison Muha, Connor Murray, Ashton Porter, Karen Reynolds, Colleen Sholtes, Ross Stanton

**DIR** (n=36): Abhishek Alur, Akhila Ankem, Obieda Atiyani, Brooke Barrow, Sam Bockhorst, Nicholas Brinkman, Alyssa Brown, James Burton, Steven Chapman, Phillip Chuong, Christopher Dillman, Lucas Dobson, Jessica Eskridge, Dylan

Goldsmith, Amy Grosword, Andrew Hey, Daniel Hodge, Hannah Jaggers, Luke Johnson, Alborz Kalantar, Phillip Lindsey, Rachael Lowney, John Mazzocco, Derek Menefee, Hayley Moss, Sarah Mudra, Ankur Patel, Ajay Patel, Gene Porter, Andre Rochet, Ahmed Saleh, Ayesha Singh, Harsh Tiwari, Robert Wendroth, Katherine Whitehouse, Ayana Wilson, Kara Zirnheld

**Applications and Accepted Students**



## Achievements

The following DT Program outcomes were achieved during AY 2018-19:

- 2019 Graduates
  - **44 students graduated with a certificate from a DT program:**  
6 from DIBL, 6 from DIGH, 7 from DIME, and 25 from DIR
- Research!Louisville
  - 37 DT students presented their posters in a section of the poster hall designated to the DT program.<sup>1</sup>



- DTAC meetings
  - DTAC met each semester in AY 2018-2019  
November 29, 2018, March 26, 2019
- Lunch and Learn for M1 Medical Students
  - 115 students were in attendance on January 7, 2019

<sup>1</sup> The number of DT students who participated in R!L is likely higher than the reported number (n=37). Occasionally DT students are not categorized as DT in the R!L abstract program because of abstract submission errors or other logistical issues.



## PROGRAMMATIC EVALUATION

The following DT Program evaluations have been completed for AY 2018-19:

### End of Year Evaluation Surveys<sup>2</sup>

M2s (n=52)	
Survey response rate	78% (n=40)
Asked to describe their level of agreement with the following statements regarding their participation in their DT:	
In general, there were more positives than negatives	90% Strongly agree or agree
I'm glad I was accepted into the Track program	93% Strongly agree or agree

M3s (n=44)	
Survey response rate	51% (n=22)
Asked to describe their level of agreement with the following statements regarding their participation in their DT:	
In general, there were more positives than negatives	91% Strongly agree or agree
I'm glad I was accepted into the Track program	93% Strongly agree or agree

M4s (n=52)	
Survey response rate	56% (n=29)
Asked to describe their level of agreement with the following statements regarding their participation in their DT:	
In general, there were more positives than negatives	90 % Strongly agree or agree
I'm glad I was accepted into the Track program	93 % Strongly agree or agree

A summary of these data will be shared at the September 24, 2019 DTAC meeting; full reports will be made available to DTAC members and DT Directors through CardBox.

- Note: we do not have data from mentor surveys this year. Staff transitions impacted the collection of mentor data and the survey was not sent at the appropriate time.
- Continued IRB approval was achieved for a Longitudinal DT Program Evaluation/Research Study.
  - To explore DT Program student outcomes in greater depth.
- To compare DT Program student outcomes (match results and scholarship) to non-DT student outcomes using MCAT, class rank, and Step scores as covariates.

<sup>2</sup> The number of survey recipients for each class may differ from the numbers noted in the Student Participants section above. Survey lists were finalized before the end of the school year, so a number of changes in student status (Withdrawal from DT, Withdrawal from SOM, graduation postponed for LOA, PhD/MBA work, etc.) impacted these counts.

## STUDENT AWARDS

The following DT students were recognized for their work in the DT Program:

**1st Place: Corey Ketchum (UofL)** Novel Drug combination in Leukemia Reduces AKT Activity and Enhances Cytotoxicity of Bcl-2 Inhibitor. **ACP Kentucky Chapter Scientific Meeting – Fall 2018**

**3rd Place: Stephen Winter (UofL)** Evaluation of Surface Modified Nanoparticle Transport and Metastatic Invasion Using a Novel Multicellular Tumor Spheroid Model. **ACP Kentucky Chapter Scientific Meeting – Fall 2018.**

**3rd Place: Dylan Vish** Do Peer Assisted Learning Strategies Influence Self Efficacy in Pre-clinical Medical Education; Mentor: Jennifer Brueckner-Collins, PhD. Ruth Greenberg Award for Excellence in Medical Education Research, **Research!Louisville—Fall 2018.**

## STUDENT SCHOLARSHIP

Student names in **bold**.

### Manuscripts

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#### Distinction in Global Health

**Kommor, M.**, Hodge, B., Ciottone. (2019). Development and Implementation of a Disaster Medicine Certificate Series (DMCS) for Medical Students. *Prehospital and Disaster Medicine*. Special Report. <https://doi.org/10.1017/S1049023X19000165>

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#### Distinction in Medical Education

**Pomerantz, T.**, Bergin, A., Miller, K., Ziegler, C., Hoffman, J., Patel, P. (2019). A Problem-Based Learning Session on Pregnancy Options, Counseling, and Abortion Care. *MedEdPORTAL*.15:10816. [https://doi.org/10.15766/mep\\_2374-8265.10816](https://doi.org/10.15766/mep_2374-8265.10816)

**Hill, F.** (2018). What Cuba Can Teach the U.S. About Preventative Care. *Op-Med*. Published online August 22, 2018 <https://opmed.doximity.com/what-cuba-can-teach-us-about-preventative-care-a61ddab6e6bf>

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#### Distinction in Research

\*Galbraith, N., **Manek, S.**, Walker, S., **Bishop, C.**, Carter, J., Cahill, M., Gardner, S., Polk, H. Jr., Galandiuk, S. (2018). The Effect of IkK-16 on Lipopolysaccharide-induced Impaired Monocytes. *Immunobiology*. 223(4-5): 365-373.

\*Carter, J., O'Brien, S., Burton, J., **Oxford, B.**, Stephen, V., Hallion, J., **Bishop, C.**, Galbraith, N., Eichenberger, M., Sarojini, H., Hattab, E., Galandiuk, S. The microRNA-200 Family Acts as an

Oncogene in Colorectal Cancer by Inhibiting the Tumor Suppressor RASSF2. Submitted *PLOS ONE*, pending review.

**Bond, L.**, Wright, T., Bond, S. (2018). Rectal Injury Associated with Personal Watercraft Use. *Journal of Pediatric Surgery Case Reports*. 37:60-62.

Bond, L., Lee, T., O'Daniel, T. Necklift: A Volumetric Analysis. In Progress.

Cash, L., **Duck, C.**, Brinkman, C., Rebholz, W., Albert, C., Worthen, M., Jusufbegovic, M., Wilson, L., Bumpous, J.. (2018). Depressive Symptoms and Actigraphy-Measured Circadian Disruption Predict Head and Neck Cancer Survival. *Psycho-Oncology* - published online August 2018.

**Field, W.**, Rostas, J., Martin, RCG II. (2018). Quality of Life Assessment for Patients Undergoing Irreversible Electroporation (IRE) for Treatment of Locally Advanced Pancreatic Cancer (LAPC). *The American Journal of Surgery*-Submitted October 2018.

Caperell, K., Ghosal, S., **Havens-Lastarria, D.** Intramuscular Epinephrine as an Adjunctive Treatment for Severe Pediatric Asthma Exacerbation. (In preparation)

**Heimroth, J.**, Chen, E., Sutton, E. (2018). Management Approaches for Enterocutaneous Fistulas. *American Surgeon*. 84 (3): 326-333.

**Heimroth, J.**, Jones, V., Howard, J., Sutton, E.(2018). Utilizing Surgical Bootcamps to Teach Core Entrustable Professional Activities to Senior Medical Students. *American Surgeon*. 84 (6): 783-788.

Whited, W., **Henley, P.**, Schumer, E., Trivedi, J., van Berkel, V., Fox, M. (2018). Does Donor Age and Double Versus Single Lung Transplant Affect Survival of Young Recipients? *The Annals of Thoracic Surgery*. 105 (1): 235-241.

Alghamdi, A., Mohamed, H., Austin, J., **Henry, C.**, Massey, K., Sayied, S., Sledge, S., Williams, A., Borchman, D. (2018). Camel Milk and the Prevention of Glucose Cataract, an Organ Culture Study. *Journal of Nutritional Therapeutics*. 7, 31-39.

**Henry, C.**, Borchman, D. Meibum Composition with Age, Gender, Race, and Dry Eye; Insights from the Infrared CH Stretching Region. In progress.

**Ketchem, C.**, Kucera, A. Barve, Beverly, L. (2018). The Antiarrhythmic Drug, Amiodarone, Decreases AKT Activity and Sensitizes Human Acute Myeloid Leukemia Cells to Apoptosis by ABT-263. *American Journal of Medical Sciences*. 355(5): 488-496.

Parker, E., **Khan, M.**, Coldwell, D., Potts, M. (2018). Predictors of 90-day Mortality in Y90 Radioembolization for Hepatic Metastatic Disease. *Journal of Vascular and Interventional Radiology* 29 (4), S42.

O'Brien, S., Chen, R., **Manek, S.**, Stephen, V., Rajaei, A., Schmidt, M., Galandiuk, S. (2018). Does Pre-operative Opioid Use Predict Major Complications in Crohn's Patients Undergoing Elective Ileocolic Resection? *Journal of the American College of Surgeons* – Submitted in June 2018.

\*Galbraith, N., **Manek, S.**, Walker, S., **Bishop, C.**, Carter, J., Cahill, M., Gardner, S., Polk, H. Jr., Galandiuk, S. (2018). The Effect of IkK-16 on Lipopolysaccharide-induced Impaired Monocytes. *Immunobiology*. 223(4-5): 365-373.

Netz, U., Galbraith, N., O'Brien, S., Carter J, **Manek, S.**, Petras, R., Galandiuk, S. (2018). Long-Term Outcomes Following Ileal Pouch-anal Anastomosis in Patients with Indeterminate Colitis. *Surgery*. 163(3): 535-541.

O'Brien, S., Ekman, M., **Manek, S.**, Galandiuk, S. CRISPR-mediated Gene Editing for the Surgeon Scientist. In Progress.

**McKenzie, G.**, Callen, J., Haeberle, M. (2019). CK7 Negative Anaplastic Thyroid Carcinoma Presenting as Cutaneous Metastases to the Scalp. *Dermatology Online Journal*. Article in Press.

**McKenzie, G.**, Reedy, M., Kunz, M., Somani, A. (2019). Herpes Simplex Reactivation after Mohs Surgery in a Mucosal Advancement Flap Reconstruction. *Journal of Cutaneous Medicine & Surgery Case Reports* – Submitted January 2019.

**McKenzie, G.**, Brown, T., Haeberle, M. A Split-Scar Comparison of Running Simple Versus Running Locked Sutures for Closure of Skin Wounds. In progress.

Motameni, A., Hodge, R., **McKinley, W.**, Strollo, B., Georgel, J., Bennis, M., Miller, K., Harbrecht, B.. The Use of ABC Score in Activation of Massive Transfusion: The Yin and the Yang. *Journal of Trauma and Acute Care Surgery* (accepted for publication April 2018).

**McKinley, W.**, Strollo, B., Bozeman, M., Nash, N., Bennis, M., Bauer, E., Salonen, B., Bonnes, S., Mundi, M., Hurt, R., Miller, K.. The Frequency and Accuracy of Intra-Operative Surgeon Assessment of Bowel Length During Small Bowel Enterectomy. Submitted to *The American Journal of Surgery*.

Amirreza, T. Motameni, A., Pike, I., **McKinley, W.**, Denzik, K., Franklin, G., Bennis, M., Smith, J., Miller, K., Harbrecht, B. STOP THE BLEED: Is Mass Education the Best Approach? Submitted to Prehospital and Disaster Medicine.

Finney, F., **McPheters, A.**, Singer, N., Scott, J., Jepsen, K., Holmes, J., Talusan, P.(2018). Microvasculature of the Plantar Plate Using Nano-Computed Tomography, *Foot & Ankle International*, 40(4),457-464.

Bhutiani, N., **Mercer, M.**, Bachman, K., Heidrich, S., Martin, R., Scoggins, C., McMasters, K., Ajkay, N. (2018). Evaluating the Effect of Margin Consensus Guideline Publication on Operative Patterns and Financial Impact of Breast Cancer Operation. *Journal of the American College of Surgeons*. Jul; 227(1): 6-11.

Bhutiani, N., Quinn, S., Jones, J., **Mercer, M.**, Philips, P., McMasters, K., Scoggins, C., Martin, R.. (2018). The Impact of Enhanced Recovery Pathways on Cost of Care and Perioperative Outcomes in Patients Undergoing Gastroesophageal and Hepatopancreatobiliary Surgery. *Surgery*. Jul; Epub Ahead of Print.

**Micciche, R.**, Trivedi, J., Settles, D., Flaherty, M., Grubb, K. Evaluating Quality of Life Metrics for Patients Undergoing Transcatheter Aortic Valve Replacement (TAVR).(2018). Poster presented at 2017 Eastern Cardiothoracic Surgical Society annual meeting. Published in: *Innovations: Technology and Techniques in Cardiothoracic and Vascular Surgery*. June.

**Newton, J.**, Bhandari, B., Vicario, S., Huecker, M. Degree of NT-proBNP Elevation in the CHF Patient Fails to Predict Active Comorbidity or ICU Admission. Submission in progress.

O'Brien, S., Carter, J., Burton, J., **Oxford, B.**, **Schmidt, M.**, Hallion, J., Galandiuk, S. (2018). The Role of the miR-200 Family in Epithelial-mesenchymal Transition in Colorectal Cancer: A Systematic Review. *International Journal of Cancer*. 142 (12): 2501-2511.

Khattar, N., Donovan, A., **Oxford, B.**, Adams, S., Altstadt, T.. Traumatic Ventral Cervical Spinal Cord Herniation: A Case Report. Submitted to *Cureus* December 2018.

\*Carter, J., O'Brien, S., Burton, J., **Oxford, B.**, Stephen, V., Hallion, J., **Bishop, C.**, Galbraith, N., Eichenberger, M., Sarojini, H., Hattab, E., Galandiuk, S. The microRNA-200 Family Acts as an Oncogene in Colorectal Cancer by Inhibiting the Tumor Suppressor RASSF2. Submitted *PLOS ONE*, pending review.

**Oxford, B.**, Ball, T., Alhourani, A., Williams, B.. Predictors of Thirty-day Patient Mortality and Length of Stay after Surgery for Subdural Hematoma. Submitted to *Neurotrauma* November 2018.

**Oxford, B.**, Khattar, N., Adams, S., Williams, B.. Posterior Reversible Encephalopathy Syndrome Associated with Cerebrospinal Fluid Leak. Submitted *Journal of Neurology, Neurosurgery, & Psychiatry*, pending review.

**Risinger, W.**, Wilkey, D., Li, M., Isaacs, S., Srivastava, S., Klein, J., Brier, M., Himmelfarb, J., Merchant, M. Lipidomic Analysis of Hemodialysis Patient LDL Samples Reveals Association with Patient Response to Erythropoiesis Stimulating Agents. Planning to submit the manuscript to: *Journal of the American Society of Nephrology (JASN)*.

Galandiuk, S., O'Brien, S., Chen, R., Stephen, V., Manek, S., Rajaei, A., **Schmidt, M.** Pre-Operative Opioid Use Predicts Major Complications in Crohn's Patients Undergoing Elective Ileocolic Resection. In progress. Submitted to ASCRS 2019 on 11/27/18.

Young, H., Rice, J., **Sharma, D.**, Martin, R. (2018). The Use of IRE in Multi-modality Treatment for Oligometastatic Pancreatic Cancer. *The American Journal of Surgery*. 216 (1):106-110.

Collis, P., Spears, J., **Shu, A.**, Greene, J. Quad Tendon versus Hamstring Tendon Autograft in Anterior Cruciate Ligament Reconstruction: Systematic Review and Meta-Analysis. (in preparation).

**Shu, A.**, Himschoot, K., Dimar, J., Carreon, L., Glassman, S., Malkani, A.L. Outcomes of Primary Total Hip Arthroplasty Lumbar Following Lumbar Spine Fusion, (in preparation).

## **Poster and Oral Presentations**

### **Distinction in Business and Leadership**

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**Lu, H.** Schechter, A., Kincaid, J., Birnbaum, L. (2018). Organohalogen Contamination of Vietnamese Female Electronic Waste Recyclers. Poster Session. Research!Louisville. Louisville, KY. October 2018.



**Richie, J., Kwan, K., Kim, I., Sutton, B. (2018).** Incorporating Business and Leadership Training into Medical School Education to Prepare Tomorrow's Doctors for the Continually Evolving Healthcare Enterprise. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Richie, J., Kwan, K. (2018).** Incorporating Business and Leadership Training into Medical School Education to Prepare Tomorrow's Doctors for the Continually Evolving Healthcare Enterprise. Session Presentation at the Southern Regional GSA/OSR AAMC Meeting. April 11-14, 2019. Louisville, KY.

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### Distinction in Global Health

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**Beering, A., Hodge, B. (2018).** Language discordance in Undergraduate Medical Education: A Review of the Literature. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Beaupre, R., Platt, M., Parker, B., Hoerter, J., Pomerantz, T., Calderon, C., Hodge, B. (2018).** Emergency Department usage and health literacy in Spanish-speaking patients. Poster Session. Research!Louisville. Louisville, KY. October 2018

**Deis, J., Cater, M., Patterson, B., Coorts, J., Propp, D., Hodge, B. (2018).** Service Trip Logistics in Tanzania: Correlation of Trip Logistics to Number of Patients Served. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Furnish, E., Carter, M. (2018).** Pediatric Refugee and Immigrant Food Access in Kentucky: An Exploratory Study. Poster Session. Research!Louisville. Louisville, KY. October 2018

**Rogers, J., Carter, M., Onyango, M. (2018).** Management of hypertension in humanitarian emergencies and crises: a policy analysis. Poster Session. Research!Louisville. Louisville, KY. October 2018.

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### Distinction in Medical Education

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**Ferguson, V., Brueckner-Collins, J., Kodner, C., McGee, S. (2018).** Evaluating the Need for and Effectiveness of an Addiction Medicine Curriculum for First Year Medical Students. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Harder, F., Alexander, J., Jiang, Y., Hill, F., Homra, S., Ledere, E., Krishnan, P. (2018).** A Profound AKI: ANCA Associated Vasculitis and Drug Induced Lupus Nephritis from Suspected Hydralazine Use. Oral Presentation. American College of Physicians. Louisville, KY; October 3, 2018.

**Martin, Z., Brueckner-Collins, J. (2018).** Instilling Camaraderie: The Student's Perception of the Facilitator's Role Within Problem Based Learning. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Oliver, M., Brueckner-Collins, J., Patterson, B. (2018).** Use of Evaluation Rubrics to Enhance Reciprocal Peer Teaching in the Medical School Gross Anatomy Course. Poster Session. Research!Louisville. Louisville, KY. October 2018.

Patel, P., **Pomerantz, T.**, Ketchum, C. (2019). Compassion Rounds: Using Patient Stories to Foster Medical Student Empathy and Resilience. Poster Session. Southern Regional GSA/OSR AAMC Meeting. April 11-14, 2019. Louisville, KY.

**Pomerantz, T.**, Patel, P., Miller, K.H., Ziegler, C., Hoffman, J., Bergin, A. (2018). Teaching Medical Students About Abortion Through Problem-Based Learning. Oral Presentation. American College of Obstetricians & Gynecologists National Conference. Austin, TX. April 2018.

**Shpilberg, J.**, Brueckner-Collins, J. (2018). Mindfulness Programs' Effect on Learning Outcomes in Medical Students: A Literature Review. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Shpilberg, J.**, Brueckner-Collins, J. (2019). Mindfulness Programs' Effect on Learning Outcomes in Medical and Dental Students: Preliminary Data. Poster Session. Human Anatomy & Physiology Society 2019 Southern Regional Meeting. March 30, 2019. Louisville KY.

**Summers, A.**, Brueckner-Collins, J. (2019). The Humanities Side of Anatomy Lab: Reflecting on and Creating Works of Art. Poster Presentation.. American Association of Clinical Anatomists and Human Anatomy & Physiology Society Southern Regional meeting. March 30, 2019. Louisville, KY.

**Uebelhor, M.**, **Shofner, C.**, Carter, M. (2018). Diagnoses and Referral Patterns of Two Nearby Cantons in Ecuador: A Retrospective Comparison. Poster Session. Research!Louisville. October 2018. Louisville, KY.

**Vish, D.**, Brueckner-Collins, J. (2018). Do Peer Assisted Learning Strategies Influence Self Efficacy in Pre-clinical Medical Education. Poster Session. Research!Louisville. October 2018. Louisville, KY.

**Zach, M.**, Brueckner- Collins, J. (2018). Instilling Camaraderie: Student's Perception of the Facilitator's Role within Problem-Based Learning. Poster Session. Research!Louisville. October 9, 2018; Louisville, KY.

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### Distinction in Research

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**Anglin, C.**, Wise, J. (2018). The Cytotoxic and Genotoxic Effects of Prolonged Particulate Hexavalent Chromium Exposure on Human Epithelial Cells. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Artner, C.**, Ceresa, B. (2018). Identification of Novel c-Cbl Antagonists to Increase Corneal Epithelial Wound Healing. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Bevins, P.**, Redman, R., Strickley, J., Joh, J., Ghim, S., Jenson, A. (2018). Human Papillomavirus (HPV)-16 and -18 E7 Serology and its Correlation with the Clinical Response to the Treatment of Head and Neck Squamous Cell Carcinoma. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Bishop, C.**, Dailey, L., Stephen, V., O'Brien, S., Eichenberger, M., Galandiuk, S. (2018). Expression of Long Non-Coding RNA in Colon Adenocarcinoma and Matched Normal Adjacent Epithelium. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Bishop C**, O'Brien S, Dailey L, Stephen V, Eichenberger M, Hattab E, Galandiuk S. Expression of Long Non-Coding RNA in Colon Adenocarcinoma and Matched Normal Adjacent Epithelium. *Presented at Academic Surgical Congress 2019*

Carter JV, Netz U, **Bishop C**, Burton J, Feagins K, States V, Eichenberger MR, Rai S, Galandiuk S. Circulating Plasma MicroRNAs in Colorectal Neoplasia: A New Role in Assessing Response to Therapy. *Presented at Academic Surgical Congress 2017*

**Bonomo, N.**, Hurley, J., Wang, B., Dunlap, N., King, S. (2018). Characterizing the Inflammatory Response to Radiotherapy in Rat Mylohyoid Muscle. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**\*\*From WT Burke:** My UL faculty mentor is Dr. Peter Kaskan, but these projects were done with my mentor whom I worked with during 1st year summer; Dr. Edward Laws from Harvard/Brigham and Women's Hospital.

**Burke, W.T**, Penn, D., Repetti, C., Iuliano, S., Laws, E. (2018). Efficacy of Repeat Transsphenoidal Surgery for Recurrent Cushing's Disease Congress of Neurological Surgeons Poster Session. Annual Meeting. Huston, Texas. October 2018.

Penn, D., **Burke, W.**, Repetti, C., Barkhoudarian, G., Laws, E. (2018). Correlation between Prolactinoma Volume and Serum Prolactin Levels. Poster Session. Congress of Neurological Surgeons Annual Meeting. Huston, Texas. October 2018.

Penn, D., **Burke, W.**, Repetti, C., Barkhoudarian, G., Laws, E. (2018). Effect of Adenoma Maximum Diameter and Presence of Cyst on Serum Prolactin Levels. Poster Session. Congress of Neurological Surgeons Annual Meeting. Huston, Texas. October 2018.

**Chuong, P.**, Zheng, J., Hellman, J. (2018). Exercise Stimulates Resolution of Inflammation, in Part, through Macrophage-mediated Adrenergic Receptor  $\alpha_1$  Signaling. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Davis, L.**, Issacs, S., Barati, M. (2018). Comparison of Nrf2 Inducing Compounds on Renal Tubule Cell Responses Associated with Diabetes. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Duck, C.R.** (2018). Depressive Symptoms, Diurnal Salivary Cortisol, and the Role of Inflammation in Treatment Outcomes in Head and Neck Cancer. Presented at: 2018 Combined Otolaryngology Spring Meeting, American Head and Neck Society. National Harbor, Maryland, USA. April 2018.

**Duck, C.R.** (2019). Burden of Allergic Disease and Laryngopharyngeal Reflux in Dysphonia Patients. Presented at: 2019 Triological Society, Combined Sections Meeting. Coronado, CA. January 2019.



Batra, L., Barsoumian, H., Shrestha, P., **Hawthorne**, J., Bowen, W., Zhao, H., Egilmez, N., Gomez-Gutierrez, J., Malik, M., Shirwan, H., Yolcu, E. (2019). A Novel Agonist of CD137 Immune Checkpoint Stimulator Serves as a Cancer Immunoprevention Agent with Efficacy Against Various Tumor Types. American Association of Immunologists (AAI), IMMUNOLOGY 2019. May 9-13, San Diego, CA.

**Hawthorne, J.**, Shirwan, H., Batra, L., Shrestha, P., Yolcu, E. (2018). Assessing the Efficacy of the SA-4-1BBL Checkpoint Stimulator for Cancer Immunotherapy. Poster Session. Research!Louisville. Louisville, KY. October 2018.

Walling, S., **Heimroth, J.**, Sutton, E. (2018). Surgery on Sunday Louisville: Achieving the Quadruple Aim by Providing Free Surgery for the Uninsured. Podium presentation, Academic Surgical Congress. Jacksonville, FL, February 2018.

**Heimroth, J.**, Edwards, S., Matzke, J., Walling, S., Sutton, E. (2019). Impact of a Patient Navigator on a Free Surgery Program for the Uninsured. Podium presentation, Academic Surgical Congress. Houston, TX, February 2019.

**Holland, M.**, Martin, R., Bhutiani, N. (2018). A Prospective, Multi-institution Assessment of Irreversible Electroporation for Treatment of Locally Advanced Pancreatic Adenocarcinoma: Initial Outcomes from the AHPBA Pancreatic Registry. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**John, K.**, Khattar, N., Fortuny, E., Ding, D., James, R. (2018). Minimally Invasive Endoscopic Evacuation of Cerebellar Hemorrhage using the Apollo and Artemis Neuro Evacuation Systems: A Case Series. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Jones, J.**, Bardi, G., Hood, J. (2018). Macrophage Polarization Status Influences Macrophage Responsiveness to Lung Cancer Exosome-derived Nanocarriers. Poster Session. Research!Louisville. Louisville, KY. October 2018.

Hogg, M., Ragland, B., Matheson, P., **Kapsalis, C.**, Smith, J., Downard, C. (2018). Does Maternal Smoking Alter Gene Expression in Necrotizing Enterocolitis? Oral Presentation. 13<sup>th</sup> Annual Academic Surgical Congress, Jacksonville, FL. January 30 – February 1, 2018.

**Ketchem, C.**, Barve, A., Beverly, L. (2019). Novel Drug Combinations Sensitize Leukemia Cells to a Bcl-2 Inhibitor. American College of Physicians. Philadelphia, Pennsylvania. April, 2019.

**Ketchem, C.**, Kucera, C., Barve, A., Beverly, L. (2018). Novel Drug Combinations Sensitize Leukemia Cells to a Bcl-2 Inhibitor. Kentucky Chapter of the American College of Physicians Scientific Meeting. Louisville, Kentucky. October 2018.

**Ketchem, C.**, Kucera, C., Barve, A., Beverly, L. (2018). Novel Drug Combinations Sensitize Leukemia Cells to a Bcl-2 Inhibitor. Distinction in Research Reception. Louisville, Kentucky. January 2018.

**Ketchem, C.**, Kucera, C., Barve, A., Beverly, L. Novel drug combination in leukemia reduces AKT activity and enhances cytotoxicity of Bcl-2 inhibitor. Poster Session. Research!Louisville. Louisville, KY. October 2018.

Parker, E., **Khan, M.**, Coldwell, D., and Melissa Potts. (2018). Predictors of 90-day Mortality in Y90 Radioembolization for Hepatic Metastatic Disease. Oral presentation. Society of Interventional Radiology. Los Angeles, CA.2018.

**Khan, M.**, Coldwell, D., and Melissa Potts. (2019). Is a Chest Radiograph After Ultrasound-Guided Thoracentesis Performed by an Interventional Radiologist Really Necessary? Oral Presentation. Society of Interventional Radiology. Austin, TX. 2019.

**Kitchen, J.**, Voor, M., Zamora, R., Carlson, J., Polio, J. (2018). Biomechanical Stability of Single Versus Double plating of Distal Humerus Fractures in Osteoporotic Bone. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**McKinley, W.**, Strollo, B., Bozeman, M., Nash, N., Bennis, M., Bauer, E., Salonen, B., Bonnes, S., Mundi, M., Hurt, R., Miller, K. (2018). The Frequency and Accuracy of the Intraoperative Assessment of Extent of Enterectomy. Oral presentation. Academic Surgical Congress. Jacksonville, FL. February 2018.

Amirreza, T., Motameni, A.,Pike, I., **McKinley, W.**, Denzik, K., Franklin, G., Bennis, M., Smith, J., Miller, K., Harbrecht. B. (2018). STOP THE BLEED: Is Mass Education the Best Approach? Oral presentation. American College of Surgeons Clinical Congress. Boston, MA. October 2018.

Couch, S., **McKinley, W.**, Bennis, M., Motameni, A, Smith, J., Harbrecht, B., Miller, K. (2018). Time Spent at Outlying Hospitals Prior to Transfer is Not Associated with Poor Outcomes in Trauma Patients. Oral presentation.American College of Surgeons Clinical Congress. Boston, MA. October 2018.

**Meiman, E.**, Telang, S. (2018). 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 4 (PFKFB4) Inhibition in Lung Cancer. Poster Session. Research!Louisville. Louisville, KY. October 2018.

Brunderman, E., Bhutiani, N., **Mercer, M.**, Sanders, M., McMasters, K., Ajkay, N. (2018). Relationship Between Ductal Carcinoma In Situ Associated Calcifications, and Margin Status in Breast Conserving Surgery Poster Oral presentation. Society of Surgical Oncology 71st Annual Cancer Symposium. Chicago, IL. March 2018.

Couch, S., McKinley, , **Mercer, M.** , Motameni, A., Nash, N., Harbrecht, B.G, Bennis, M., Miller, K. (2018). Time Spent at Outlying Hospitals Prior to Transfer is Not Associated with Poor Outcomes in Trauma Patients Poster Oral presentation. American College of Surgeons Clinical Congress. Boston, MA.October 2018.

**Mercer, M.**, Bhutiani, N., Ajkay, N. (2018). Application of Evidence Based Professional Education Regarding Post-Operative Breast Cancer Management with Lymphatic Sequelae Poster Session. 19th Annual Meeting American Society of Breast Surgeons. Orlando, FL.May 2018.

Bhutiani, N., Quinn, S., **Mercer, M.**, Hong, Y., Stevenson, M., Egger, M., Philips, P., Martin II R., McMasters, K., Scoggins, C. (2018). Identifying Risk Factors for Development of Peri-operative Venous Thromboembolism in Patients with Gastrointestinal Malignancy. Oral Presentation .Southwestern Surgical Congress 70th Annual Meeting. Napa, CA.April 2018.

**Mohiuddin, A.,** Egilmez, N., Li, Q. (2018). Effects of Lung Microbiota on Lung Tumorigenesis. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Newton, J.,** Bhandari, B., Vicario, S., Huecker, M. (2018). Degree of NT-proBNP Elevation in the CHF Patient Fails to Predict Active Comorbidity or Hospital Admission. Poster session. 2018 American Academy of Emergency Medicine Conference. (AAEM18). San Diego, CA. 2018.

**Nguyen, T.,** Kaliappan, A., Allen, N., Hall, M., Schneider, G., Chesney, J., Wilkey, D., Kendrick, S., Merchant, M., Brock, G., Garbett, N. (2019). Application of Differential Scanning Calorimetry as a Potential Biomarker for Patients with Melanoma. Poster session. American Society of Clinical Oncology Annual Meeting. Chicago, IL. June 2019.

**Oxford, B.,** Ball, T., Alhourani, A., Williams, B. (2018). 30-day Postoperative Mortality of Patients Undergoing Subdural Hematoma Evacuation. Digital Poster at Congress of Neurological Surgeons. Houston, TX. 2018.

**Oxford, B.,** Donovan, A., Jones, J., Khattar, N., Sieg, E., Williams, B.. Model for Mortality Prediction in Traumatic Subdural Hematoma. Poster session. Research Louisville!, Louisville, KY. 2018.

Farooqui, A., Mills, K., **Oxford, B.,** Kalayil, G., Neamtu, D. (2018). Electroconvulsive Therapy for Treatment Resistant Bipolar Depression in a Geriatric Patient. Oral presentation. American College of Physicians Kentucky Chapter Meeting. Louisville, KY. 2018.

**Pulliam, Z.,** Zheng, Q., Bhutiani, N., Li, S., Pandit, H., Yu, Y., Li, Y., Martin, R. (2018). Electrochemotherapy Augments Pancreatic Ductal Adenocarcinoma Tumor Cell Killing by Inducing Apoptosis and Disrupting Cell Adhesion. Poster Session. Research!Louisville. Louisville, KY. October 2018.

**Risinger, W.,** Wilkey, D., Li, M., Isaacs, S., Srivastava, S., Klein, J., Brier, M., Himmelfarb, J., Merchant, M. (2019). Lipidomic Analysis of Hemodialysis Patient LDL Samples Reveals Association with Patient Response to Erythropoiesis Stimulating Agents. Will be submitted to American Society of Nephrology (ASN) 2019 Meeting.

**Schmidt, M.,** Loganathan, G., Ramakrishnan, V., Tweed, B., Narayanan, S., Dhanasekaran, M., Hughes, M., Hoying, J., Williams, S., Balamurugan, A. (2018). Bioengineered Human Pancreatic Islets for the Treatment of Type-I Diabetes: Stimulation of Intra-islet Endothelial Cells to Form Peri-islet Capillaries for Improving Islet Cell Survival and Function. Oral presentation. 2018 Academic Surgical Congress. Jacksonville, FL. January 2018.

**Divyansh, S.,** Hong, Y., Rice, J., Martin, R. (2018). The Use of IRE in Multi-modality Treatment for Oligometastatic Pancreatic Cancer. Oral presentation. ULSOM DIR Presentations. Louisville, KY. March 2018

**Shu, A.C.,** Himschoot, K., Dimar, J., Carreon, L., Glassman, S., Malkani, A.. (2018). Outcomes of Primary Total Hip Arthroplasty Following Lumbar Spine Fusion. American Academy of Orthopaedic Surgeons (AAOS) National Annual Meeting. New Orleans, LA. March 6, 2018.

- Shu, A.C.**, Burlen, J., Sharpe, T. (2018). DRESS to Impress: A Case Report of an Unanticipated Cause of Multi-Organ Failure. Kentucky Chapter of the American College of Physicians Scientific Meeting. Louisville, Kentucky, October 2018.
- Strothman, P.**, Friedland, R., Kaplan, H., Scott, P. (2018). Ocular Manifestations of Familial Frontotemporal Lobar Degeneration with Amyotrophic Lateral Sclerosis. Poster Session. Research!Louisville. Louisville, KY. October 2018.
- Treager, C.**, Harbrecht, B. (2018). Effects of Coconut water on RAW 264.7 Macrophage Activation. Poster Session. Research!Louisville. Louisville, KY. October 2018.
- Walsh, T.**, Riggs, D., Yeager, R., Lorkiewicz, P., DeJarnett, N., Conklin, D., O'Toole, T., Rai, S., Zhengzhi, X., Srivastava, S., Keith, R., DeFilippis, A., Liu, G., Bhatnagar, A. (2018). Greenness and Physical Activity: What Makes us Move? Poster Session. Research!Louisville. Louisville, KY. October 2018.
- Winter, S.**, Curry, K., Sims, L., Parupalli, S., Friboes, H., Steinbach-Rankin, J. (2018). Evaluation of Surface Modified Nanoparticle Transport and Metastatic Invasion Using a Novel Multicellular Ovarian Tumor Spheroid Model. Poster Session. Research!Louisville. Louisville, KY. October 2018.
- Wright, K., Kommor, M.**, Hodge, B. (2018). Disaster Medicine in Undergraduate Medical Education: A Review of the Literature. Poster Session. Research!Louisville. Louisville, KY. October 2018.
- Zaino, M.**, McNally, L., Hill, B. (2018). Myocardial Infarction Regulates Prolidase Activity and Promotes Insulin-mediated Collagen Remodeling in the Heart. Poster Session. Research!Louisville. Louisville, KY. October 2018.
- Ziemba, C.**, Anglin, C., Croom-Perez, T., Wise, S., Wise, J. (2018). Effects of Prolonged Hexavalent Chromium Exposure on Homologous DNA Recombination in Human Epithelial Cells Grown in Minimal Serum Media. Poster Session. Research!Louisville. Louisville, KY. October 2018.

### DT PROGRAM STUDENT PROJECTS

The following is a list of DIBL, DIGH, DIME, and DIR longitudinal projects; students generally work on these projects over the length of their DT Program experience. Note that this list is not comprehensive. Students who submitted their project topic to UME in September 2019 are included. Students who graduated in 2019 are not included.

<b>Distinction in Business and Leadership</b>			
<b>Graduation</b>	<b>Student</b>	<b>Topic(s)</b>	<b>Primary mentor</b>
2020	Mason English	Development of a scribe curriculum for UofL	In Kim
2020	Anne Ewing	Provider satisfaction and burnout with implementation of Airis health communication app in an academic hospital	David Haustein
2021	Sara Gottesman	Ethics of concierge medicine	Kyle Brothers
2022	Kevin Jacob	Below the knee amputation outcomes between vascular and orthopedic surgery	In Kim
2021	Adam Lehnig	Cost analysis of melanoma ex cision surgery for the development of a bundled payment model	Michael Egger
2021	Helen Lu	Medication adverse reaction tracking application	In Kim
2021	Rohit Nair	Comparing medical practice marketing strategies in rural vs. urban populations	Bill Crump
2021	Jennifer Pehl	A financial analysis of downstream revenue generation from pediatric developmental patients	In Kim
2020	Jamaal Richie	Incorporating business and leadership training into medical school education to prepare tomorrow's doctors for the continually evolving healthcare enterprise	In Kim
2022	Kyle Rizenbergs	ACR criteria for appropriateness of imaging usage	Mohammed Ismail
2022	Morgan Robinson	Downstream revenue analysis of pediatric PM&R	David Haustein

<b>Distinction in Global Health</b>			
<b>Graduation</b>	<b>Student</b>	<b>Topic(s)</b>	<b>Primary mentor</b>
2021	Amanda Beering	Language discordance intervention project	Bethany Hodge
2022	Jordan Branch	The use of midwifery and doulas in the birthing process and how this may be a solution to the birth outcomes of minority mothers	
2022	Olivia Fields	BRS training in underserved areas	Dwayne Compton
2020	Emily Furnish	Diet of refugee and immigrant mothers in Louisville	Mary Carter
2021	Jenna Rogers	Tele-fetoechocardiography in rural areas to increase prenatal diagnosis of congenital heart disease in Kentucky	Brian Holland
2020	Collin Russell	Intestinal parasite burden and pre-departure treatment compliance in Kentucky refugee children: A descriptive study	Annie Rominger
2021	Charles Shofner	Diagnoses and referral patterns of two nearby cantons in Ecuador: A retrospective comparison	Mary Carter
2021	Preston Simmons	Lung cancer disease burden and survival versus socioeconomic status in Kentucky ; Impact of time in the United States on mental health in children of Latino immigrants at a primary care office; Presentation of a rare subtype of scabies during 10-day UofL service trip in Napo province, Ecuador: A case report	Mary Carter
2022	Elizabeth Smith	Cardinal street medicine program	Bethany Hodge
2020	David Thomas	Pallium India: A retrospective analysis and feasibility study of antimicrobial prescribing patterns in Kerala, India	Jyoti Vidwan
2020	Alison Woods	International pediatric surgery partnerships in sub-Saharan Africa: A literature review	Bethany Hodge



<b>Distinction in Medical Education</b>			
<b>Graduation</b>	<b>Student</b>	<b>Topic(s)</b>	<b>Primary mentor</b>
2021	Alex Cross	Infant mortality in the United States and other developed countries	Jennifer Brueckner-Collins
2021	Michael Eizyk	My brother's and sister's keeper: A case for peer support among M3 and M4 medical students	Pradip Patel
2020	La-Tisha Frazier	Implement a postpartum hemorrhage protocol at the university of Louisville	Sara Petruska
2022	Jared Hall	Evaluating the affects of different grading scales on medical student motivational profiles in the preclinical and clinical environments	Jennifer Brueckner-Collins
2021	Victoria Hammond	Training for hospital ethics committee members	Charles Kodner
2021	Paige Hart	Koru curriculum affecting sleep patterns and HR	Jennifer Brueckner-Collins
2022	Stephanie Hayden	Establishing an empathy curriculum in medical school	Jennifer Brueckner-Collins
2020	Faihza Hill	Norton Children's Hospital pediatric intensive care unit tracheitis antibiotic treatment analysis; Sexual health elective program	Charles Kodner
2022	Colby Loew	Training medical students as LGBT patient advocates	Jennifer Brueckner-Collins
2021	David Malicote	Preventing bias against patients with substance use disorder early in medical education	Charles Kodner
2021	Zach Martin	Evaluating the facilitator's role in group cohesiveness within a problem-based learning setting	Jennifer Brueckner-Collins
2022	Ashley Merritt	Initiating comprehensive sexual education for adolescent patients using empowerment-focused communication	Pradip Patel
2021	Kara Fredlock Morton	Plant-based diet perceptions in patients with chronic diseases as compared to medical students and residents	Pradip Patel

<b>Distinction in Medical Education, continued</b>			
<b>Graduation</b>	<b>Student</b>	<b>Topic(s)</b>	<b>Primary mentor</b>
2022	Allison Muha	Creating and evaluating the effectiveness of clinical case wrap up videos to be watched by students at the end of PBL sessions to help summarize and standardize PBL sessions	Jennifer Brueckner-Collins
2022	Connor Murray	Mindful study sessions	Jennifer Brueckner-Collins
2021	Mohammed Nuru	Our first patients: Reflecting on death and dying. A novel approach to integrating humanities into clinical anatomy curriculum using music & narrative medicine	Jennifer Brueckner-Collins
2020	Jennifer Overfield	The ABCs of disease: Ebooks as a tool for the education of pediatric patients with chronic diseases	Pradip Patel
2022	Ashton Porter	Medical students assisting in the education of young CF patients in transitioning from childhood to adulthood	Pradip Patel
2022	Karen Reynolds	From curiosity to publication: teaching medical students how to do research	Jennifer Brueckner-Collins
2021	Erik Schuschke	Procedural skills training via medical simulators	Charles Kodner
2021	Jacob Shpilberg	Mindfulness programs' effect on learning outcomes in medical and dental students	Jennifer Brueckner-Collins
2021	Jerome Soldo	Incorporating climate change into medical education; PrEP toolkit for Kentucky primary care providers	Jennifer Brueckner-Collins
2022	Ross Stanton	Assessment of the efficacy of a course to increase self-efficacy and competency in applying legal standards in the context of medical liability	Jennifer Brueckner-Collins
2020	Audrey Summers	The humanities side of anatomy lab: reflecting on and creating works of art	Jennifer Brueckner-Collins
2021	Makayla Uebelhor	Student wellness evaluation	Pradip Patel
2021	Dylan Vish	Peer education sessions	Jennifer Brueckner-Collins
2020	Alison Woods	International pediatric surgery partnerships in sub-saharan Africa: A literature review	Bethany Hodge



<b>Distinction in Research</b>			
<b>Graduation</b>	<b>Student</b>	<b>Topic(s)</b>	<b>Primary mentor</b>
2020	Simra Ahmed	Meibum compositional changes after plaque brachytherapy radiation	Douglas Borchman
2022	Abhishek Alur	Vitreous liquefaction	
2021	Christopher Anglin	Pending	Michael Voor
2022	Akhila Ankem	Long-term outcomes and quality-of-life after ventral hernia repair with strattice mesh	Farid Kehdy
2021	Christopher Artner	Identification of novel c-Cbl antagonists to increase corneal epithelial wound healing	Brian Ceresa
2022	Obieda Atiyani	Investigating the effect of ER stress on liver carbohydrate metabolism	Alan Cheng
2022	Brooke Barrow	Design and evaluation of a 3D printed multifunctional surgical device for space and Earth-based applications	George Pantalos
2021	Paul Bevins	Anti-HPV16 and 18 E7 titers: Their use as a biomarker for evaluation of head and neck squamous carcinoma	Joongho Joh
2021	Sara Biladeau	Updating risk stratification of surgical patients	Robert Martin
2021	Campbell Bishop	Substance use and models of rehabilitation for opioid use disorders and their effectiveness	Martin Huecker
2022	Sam Bockhorst	Personalized nanomedicine tailored to lung cancer metabolomic analysis	Hermann Frieboes
2021	Nicholas Bonomo	Opiate overdoses KY--Analysis of toxicology reports, KASPERr & hospital documents	Martin Huecker
2022	Nicholas Brinkman	Donor variability in monocyte subsets correlates to cytokine production	Thomas Mitchell
2022	James Burton	Colorectal cancer	Susan Galandiuk
2020	Joshua Carty	Development and application of sequential enrichment approach for ApoL1	Michael Merchant
2022	Nicholas Brinkman	Donor variability in monocyte subsets correlates to cytokine production	Thomas Mitchell
2022	James Burton	Colorectal cancer	Susan Galandiuk
2020	Joshua Carty	Development and application of sequential enrichment approach for ApoL1	Michael Merchant

<b>Distinction in Research, continued</b>			
<b>Graduation</b>	<b>Student</b>	<b>Topic(s)</b>	<b>Primary mentor</b>
2021	Joseph Castlen	Clinical, biochemical, and pathological characterization of functional and non-functional pituitary corticotroph lesions	Sara Watson
2022	Steven Chapman	Streptococcus gordonii antagonizes porphyromonas gordonii-induced OLFM4 in epithelial cells	Richard Lamont
2021	Phillip Chuong	Roles of specialized pro-resolvin mediators on inflammatory processes	Jason Hellman
2021	Laura Davis	Comparison of Nrf2 inducing compounds on renal tubule cell responses associated with diabetes	Michelle Barati
2022	Christopher Dillman	Activity of cancer-selective metal complexes	Paula Bates
2022	Lucas Dobson	Impact of neutrophil and lymphocyte ratio on left ventricular assist device outcomes	Mark Slaughter
2020	Andrew Donovan	Predictive models for acute subdural hematomas	Emily Sieg
2020	Rain Dunaway	Regulation of epidermal growth factor receptor by ubiquitin1	Levi Beverly
2022	Jessica Eskridge	Markers of renal proximal tubule epithelial cell de-differentiation are regulated by two nrf2 inducers	
2022	Dylan Goldsmith	Intrathecal vs oral baclofen in patients with CP	Philip May
2020	Christopher Greb	Cardiovascular risk factors in hemophilia	Rohit Kumar
2022	Amy Groswald	Early diabetic kidney disease: effects of cell confluency on renal tubular cells and it's response to high glucose	Michael Merchant
2021	Jenci Hawthorne	Assessing the efficacy of the SA-4-1BBL checkpoint stimulator as a cancer immunotherapy	Haval Shirwan
2022	Andrew Hey	Potential of alisertib by cabozantinib in glioblastoma cells	Norman Lehman

<b>Distinction in Research, continued</b>			
<b>Graduation</b>	<b>Student</b>	<b>Topic(s)</b>	<b>Primary mentor</b>
2022	Daniel Hodge	The effects of arylamine N-acetyltransferase 1 on tumor immune response	David Hein
2022	Hannah Jagers	The effects of whole life, low dose cadmium exposure on mouse lung histology and DNA damage repair	Tayler Croom-Perez
2020	Kevin John	Verbal fluency disruption in deep brain stimulation within parkinson's disease patients	Jospeh Neimat
2022	Luke Johnson	Short chain fatty acids reduce inflammatory cytokine production in human retinal astrocytes	Hui Shao
2021	Jeremy Jones	Differential polarization of macrophages using lung cancer-derived and normal human plasma-derived extracellular vesicles	Joshua Hood
2022	Alborz Kalantar	Ubiquitin 1 and ubiquitin 2 role in lung adenocarcinoma formation and metastasis	Levi Beverly
2020	Matthew Kelecyc	Systematic review and meta analysis of serum biomarkers for hepatocellular carcinoma; Clinical effect on international normalized ratio follow hepato-pancreatico-biliary resection; Clinical outcome of thyroid atypia of undetermined significance and role of molecular genotyping	Robert Martin
2020	Robert Knear-Bell	mTOR induced carcinogenesis of in vitro arsenic exposed keratinocytes	Christopher States
2022	Phillip Lindsey	Impact of glucose concentration of perfusate on perioperative outcomes in patients undergoing cytoreductive surgery and hyperthermic intraperitoneal chemotherapy	Michael Egger
2022	Rachel Lowney	Hypothermia in severely injured trauma patients admitted to an urban trauma center	Keith Miller
2022	John Mazzocco	Impact of cadmium exposure on autism spectrum disorder pathogenesis	Gregory Barnes
2020	Devin McBride	Quantitative system pharmacology model of metabolic bone disorder and vascular calcification in chronic kidney disease	Adam Gaweda
2020	Aaron McPheters	Using machine learning to analyze acute subdural hematomas	Emily Sieg
2021	Evan Meiman	Role of PFKFB4 in cancer-cell glycolysis	Sucheta Telang
2021	Asim Mohiuddin	Know it to draw it: Retrieving anatomy knowledge through drawing	Jennifer Brueckner-Collins

<b>Distinction in Research, continued</b>			
<b>Graduation</b>	<b>Student</b>	<b>Topic(s)</b>	<b>Primary mentor</b>
2022	Hayley Moss	Hepatic arterial variant anatomy and predisposition to hepatocellular carcinoma	Melissa Potts
2022	Sarah Mudra	State-wide analysis of cancers pre- and post-ACA reform & Medicaid expansion	Beth Riley
2020	Taylor Nguyen	Development of novel diagnostic methodologies for diagnosis and monitoring in melanoma	Nicola Garbett
2020	Queeny Pan	Does mitral regurgitation improve after transcatheter aortic valve replacement?; Do geographical, socioeconomic, and individual patient factors influence access to heart transplant?; Role of implantable cardioverter defibrillator in end-stage heart failure patients listed for transplant in the continuous flow left ventricular assist device era	Jaimin Trivedi
2022	Ankur Patel	ZEB mRNA expression is affected by long non-coding RNA ZFAS1	Susan Galandiuk
2021	Jordan Perkins	LDL lipidome and erythropoiesis stimulating agent response in hemodialysis patients	Martin Huecker
2022	Gene Porter	Pending	
2021	Zachary Pulliam	The effects of IRE and chemotherapy on locally advanced pancreatic ductal adenocarcinoma	Robert Martin
2022	Andre Rochet	Colorectal cancer	Susan Galandiuk
2020	James Rossman	Mechanisms of chromate induced carcinogenesis	John Wise
2022	Ahmed Saleh	Age-related white and gray matter changes in DTI amongst C57BL/6 mice	
2022	Ayesha Singh	Flow cytometric evaluation of platelet-monocyte aggregate stability over time: methodological implications of sample handling and processing	Andrew DePhillippis
2020	Vince Stephen	Changes in MiR-200 family and RASSF2 expression in colorectal cancer and normal adjacent epithelium	Susan Galandiuk
2022	Harsh Tiwari	Vibration induced rejection of vascularized composite allotransplantation (vca) in rats	Amanda LeBlanc

<b>Distinction in Research, continued</b>			
<b>Graduation</b>	<b>Student</b>	<b>Topic(s)</b>	<b>Primary mentor</b>
2021	Colin Treager	Effect of laparoscopic distal pancreatectomy on time to adjuvant chemotherapy in patients with pancreatic cancer	Robert Martin
2022	Robert Wendroth	Does increased exposure to volatile organic compounds affect vascular function?	Rachel Keith
2021	Michelle Holland Walhgren	Assessment of irreversible electroporation for treatment of locally advanced pancreatic adenocarcinoma: initial outcomes from the AHPBA Pancreatic Registry; Opioid-free perioperative management protocol	Robert Martin
2022	Katherine Whitehouse	Cardiovascular effects of electronic cigarettes	Daniel Conklin
2022	Ayana Wilson	Hepatic arterial variant anatomy and predisposition to hepatocellular carcinoma	Melissa Potts
2021	Stephen Winter	Evaluation of surface modified nanoparticle transport and metastatic invasion using a novel multicellular ovarian tumor spheroid model	Steinbach-Rankins
2021	Corey Ziemba	Use of repeat head CT scans for patients on anticoagulation therapy in the setting of head trauma	Martin Huecker
2022	Kara Zirnheld	The role of dietary fat in alcoholic liver disease	Irina Kirpich