



ACADEMIC YEAR 2014-2015



UNDERGRADUATE MEDICAL EDUCATION
DISTINCTION TRACKS PROGRAM
ANNUAL REPORT

UNDERGRADUATE MEDICAL EDUCATION, SCHOOL OF MEDICINE

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CHAIR, DISTINCTION TRACK ADVISING AND STEERING COMMITTEE

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INTRODUCTION

The Undergraduate Medical Education Distinction Tracks Program has made extensive progress during the 2014-2015 academic year. Shelley Gibson was named the centralized director of the program and has worked closely with Susan Sawning, Research Director of Undergraduate Medical Education, and Dr. Mary Carter, Assistant Professor, to increase research and scholarship relating to the tracks under the leadership of Dr. M. Ann Shaw, Senior Associate Dean for Medical Education.

Distinction Tracks Program Docket

Individual Track Directors (Also advisory members of Distinction Track Advising and Steering Committee)

Distinction in Business and Leadership (DIBL)

- Brad Sutton, 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)

- Charles M. Kodner, MD
- Pradip Patel, MD

Distinction in Research (DIR)

- Dale Schuschke, PhD
- Russell A. Prough, PhD

Distinction Track Advising and Steering Committee (DTASC) Members

DTASC meets quarterly to discuss issues pertinent to the Distinction Tracks and to share updates on individual tracks and research results.

- M. Ann Shaw, MD, MA, FACP (Chair)
- Robert C.G. Martin, MD, PhD
- Michael Ostapchuk, MD, MEd
- Susan Sawning, MSSW
- Shelley Gibson, MA
- Jacob Edwards, Class of 2015
- Toni Ganzel, MD, MBA, FACS
- Sam Miller, PhD, MEd
- John Roth, MD
- Mary Jo White
- Leland Woodmansee, CAE (GLMS)

Student Participants

The numbers below indicate M1 = Class of 2018, M2 = Class of 2017, M3 = Class of 2016, M4 = Class of 2015.

Table 1: Incoming and outgoing students

	<i>Accepted (M1)</i>	<i>Applied (M1)</i>	<i>Graduated (M4)</i>
<i>DIBL</i>	6	15	4
<i>DIGH</i>	6	14	4
<i>DIME</i>	6	7	0*
<i>DIR</i>	21	21	22
<i>Total</i>	39	57	30

Table 2: 2014-2015 students

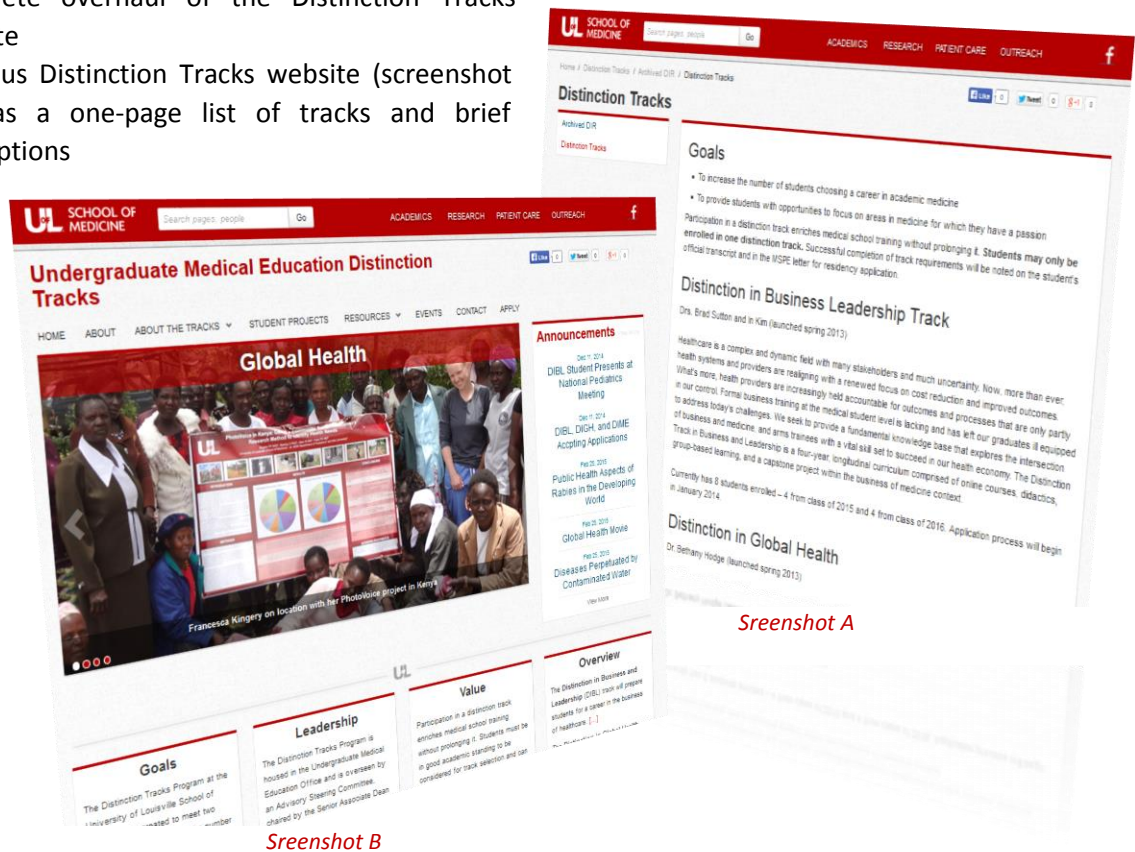
	<i>M1 (N=154)</i>	<i>M2 (N=164)</i>	<i>M3 (N=151)</i>	<i>M4 (N=145)</i>	<i>Total</i>
<i>DIBL</i>	6	5	4	5	20
<i>DIGH</i>	6	9	5	4	24
<i>DIME</i>	6	5	6	0*	18
<i>DIR</i>	21	31	39	22	113
<i>Total</i>	39	52	54	31	176

*Note: DIME's first graduating class will be 2016.

ORGANIZATIONAL ACHIEVEMENTS

The following achievements were implemented during Academic Year (AY) 2014-2015.

- Website
 - Complete overhaul of the Distinction Tracks website
 - Previous Distinction Tracks website (screenshot A) was a one-page list of tracks and brief descriptions



Screenshot A

Screenshot B

- The Distinction Tracks website is linked from the main School of Medicine page
- Distinction in Research Track had a separate page with more detail but not linked to the summary page
- The new website (screenshot B) is an in-depth resource to both prospective and current students; the finished website¹ will include:
 - Centralized application process
 - A collection of student resources (grant information, academic skill development information, etc.)
 - A secure location for administrative documents for the Distinction Track Advisory and Steering Committee
 - A listing of student projects
 - Descriptions of each track, standardized for ease in comparability
 - Information on track directors and mentors
 - Announcements to promote student achievements
 - An events calendar to promote Distinction Tracks events and functions, as well as skills development workshops
- The application process was centralized with online applications providing a comparable experience and standardizing the data collection aspect of applications.

¹ The current website is live and functional, additional information is currently being added to the following sections: student projects and resources sections and mentor information.

- 2015 Graduates
 - **30 students graduated with a certificate from the program:** 22 from Distinction in Research (DIR) and 4 each from Distinction in Global Health (DIGH) and Distinction in Business and Leadership (DIBL). Distinction in Medical Education (DIME) will have their first graduates in spring of 2016.
- Actively collecting data
 - Surveys for the Lunch & Learn, graduate surveys, term-end surveys, faculty surveys, and the application process are being used to collect data for future research.
- Lunch & Learn for 1st Year Medical Students
 - 82 students were in attendance.
 - AY 2014-2015 was the first of this annual event.
 - Track Directors presented their tracks then joined current students for a Q&A panel.
- New centralized application process
 - The online application process has standardized the basic way in which students apply to the tracks.
 - Student data is collected in a centralized database and passed on to Track Directors.
- Graduation cords
 - Each track has elected to present graduates with an honor cord to represent their track at graduation.
 - DIBL - Brown
 - DIGH - Royal Blue
 - DIME - Light Blue
 - DIR - Silver
- Mentor recognition
 - Mentors were recognized with a letter from Senior Associate Dean for Medical Education, Dr. Ann Shaw; these letters were copied to department chairs when applicable.
- Student projects
 - A cumulative database of student projects is actively being populated. These projects (listed in the following section of this report) will describe areas of interest among Distinction Tracks students, which mentors are working with which students, and will be posted on the website to promote current students as well as to inform prospective students.

PROGRAMATIC EVALUATION

The following evaluation efforts were implemented during Academic Year (AY) 2014-2015.

- Focus groups (with Class of 2015 graduates)
 - 2 focus groups on April 1 and April 2, 2015
 - Total of 9 students (6 DIR, 1 DIGH, 2 DIBL)
 - A summary of this session was presented at the June 2, 2015 Distinction Track Advising and Steering Committee meeting
- Exit survey (students)
 - A survey was required of all 30 graduating students in the Distinction Tracks Program
 - A summary of exit survey data was presented at the June 2, 2015 Distinction Track Advising and Steering Committee meeting
- Exit survey (faculty/mentors)
 - A survey was sent to all 27 mentors of graduating students (Results pending)

2015 Distinction Tracks Program Graduating Student Focus Group, Summary Report

Prepared by Susan Sawning

1. Students value the Distinction Tracks, were overwhelming positive about their Distinction Track experience, felt the Distinction Tracks add substantially to their medical school experience, and felt Distinction Tracks increase their competitiveness for residency.
2. Residency Interview - All students were asked about either their specific research project and/or the Distinction Tracks Program in their residency interview.
3. There is currently much variation between tracks in organization, expectations, and group cohesion activities (Note: We are coming up with strategies to address this).
4. Students desire more Skills Based Workshops (EndNote training, literature searching, grant writing, IRB, etc.).
5. Students desire more integration within tracks with a “students mentoring students” structure and also expressed desire for more interaction across years and across tracks.
6. Students desire more interaction with their track directors and desire to present their projects to a wider audience (students, mentors, faculty, staff, deans, etc.).
7. Students suggested moving the Lunch/Learn to the beginning of the 2nd semester to give them more time to get adjusted to medical school prior to deciding if they can take on the additional work of a Distinction Track.
8. New Track Suggestions – The following were suggested for new tracks:
 - Wellness - Integrative Medicine Nutrition/Exercise
 - Statistics/Informatics
 - Public Health

2015 Distinction Tracks Program Graduates Exit Survey Results, Summary Report

Prepared by Dr. Mary Carter

30 Respondents: 4 Business & Leadership; 4 Global Health; 0 Medical Education; 22 Research

Mean Rank Choice Matched: 2.7 ± 2.1 , $n = 29$ (Scale: 1st choice - 6th choice, scramble)

Mean Faculty Mentor Rating: 4.7 ± 0.2 , $n = 30$ (Likert Scale: 1 - 5)

STUDENT PRODUCTIVITY	Mean	SD	Min	Max
Poster presentations, student as co-author	2.0	1.7	0	5
Oral presentations, student as co-author	0.8	1.1	0	4
Manuscripts submitted , student as co-author	1.9	2.1	0	8
Manuscripts accepted for publication, student as co-author	1.1	1.6	0	6
Local/regional/national/international conferences attended	1.1	1.1	0	3

FACULTY TIME INVESTED	Mean	SD	Min	Max
Avg Hours/month spent with Faculty Mentor, 2nd year	5.2	6.7	0	30
Avg Hours/month spent with Faculty Mentor, 3rd year	4.1	3.8	1	20
Avg Hours/month spent with Faculty Mentor, 4th year	3.6	3.7	0	20

STUDENT TIME INVESTED	Mean	SD	Min	Max
Avg Hours per Month spent on Track Activities, 2nd year	15.2	29.1	0	160
Avg Hours per Month spent on Track Activities, 3rd year	14.4	15.6	2	80
Avg Hours per Month spent on Track Activities, 4th year	13.9	17.6	0	80

The following data are based on Likert Scale: 1 = Strongly Disagree; 3 = Neutral; 5 = Strongly Agree

Main PERKS of participating in the Distinction Tracks Program (Means)	
Spent a lot of time with faculty that I otherwise would not have spent	4.1
Learned a great deal about my area of study	4.0
My Track participation came up during Residency Interviews	4.0

Main NEGATIVES of participating in the Distinction Tracks Program (Means)	
Added workload over and above normal school work load	3.2
Added stress over and above normal school stress	3.1
Added time commitment to attend Track lectures or meetings	3.0

Level of Agreement	
In general, there were more positives than negatives	4.4
I'm glad I was accepted into the Track program.	4.5
If I knew as a first year what I know now, I still would have applied to the SAME Track	4.4

Principal Motives as First Years to Apply to the Distinction Tracks Program	
Chance to improve myself	4.5
Chance to publish	4.2
Interested in the area of study	4.2
Increased attractiveness to Residency Program Directors	4.2
Chance to work more closely with faculty	4.1
Increase my chances at matching to a competitive residency	4.1

STUDENT SCHOLARSHIP

Student names in **bold**. Mentor names in **red**.

	DIBL	DIGH	DIME	DIR	TOTAL
Manuscripts		1		56	57
Presentations	1	17		83	101

Manuscripts

Distinction in Global Health

1. Finak, G., McDavid A., De Rosa, S., Chattopadhyay, P., **Dominguez, M.**, Roederer, M. and Gottardo, R.. Mixture Models for Single-Cell Assays with Applications to Vaccine Studies. *Biostatistics*, 2014. 15(1): p. 87-101.

Distinction in Research

2. Roberts, C.S., **Adams, E.L.** The Classification of Open Fractures: Are We There Yet? *Injury*. 2013; 44(4); 403-5.
3. **Adams, E.L.**, Yoder, E.M., **Kasdan, M.L.** Giant Cell Tumor of the Tendon Sheath: Experience with 65 Cases. *Eplasty*. 2012; 12:e50.
4. Cordiale, A.J., Carreon, L.Y., **Adams, E.L.**, Bratcher, K.R., Glassman, S.D.. Clinical Outcomes Ten Years after Lumbar Fusion for Degenerative Spondylolisthesis. *Spine*. (Submitted).
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12. **Chen, E.X.**, Rhee, M.D., Nauta, H.. Case Report and Review: Normal Perfusion Pressure Breakthrough with Hemangioblastoma Resection. University of Louisville Department of Neurological Surgery. Submitted: Journal of Neurosurgery. 2014.
13. **Chen, E.X.**, Phillips, J.. Case Report and Review: A Case of Multiple Non-Tuberculosis Mycobacterium of Unknown Relevance in the CSF of a Patient with Refractory Partial Status Epilepticus. University of Louisville Department of Neurology. Submitted: Journal of Clinical Microbiology. 2014.
14. **Chen, E.X.**, Liu, W.. Case Report and Review Article: Contrast-Induced Encephalopathy in an Elderly Female with Renal Impairment. University of Louisville Department of Neurology. Submitted: JAMA Neurology. 2014.
15. **Chen, E.X.**, **Sutton, E.**, Dunn, K.B.. Review Article: Review of Enterocutaneous Fistula Management. University of Louisville Department of Surgery. Submitted: Academic Medicine. 2013.
16. **Chen, E.X.**, Khiel, N.. Case Report and Review: Eosinophilic Cystitis. University of Louisville Department of Urology. Submitted: Urology Gold Journal. 2013.
17. **Chen, E.X.**, Nazar, R.G., Rhee, M.S., Nauta, H.J.. Normal Perfusion Pressure Breakthrough with Hemangioblastoma Resection. Journal of Neurosurgery. December 2014.
18. Jones, V.M., **Chen, E.X.**, Raque, J.L., **Sutton, E.R.**. Using Surgical Bootcamp to Teach Core Entrustable Professional Activities for Entering Residency. Association of Academic Surgery. September 2014.
19. **Chen, E.X.**, **Sutton, E.R.**. Management Approaches for Enterocutaneous Fistulas. Medical Student Research Journal. February 2015.
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21. **Conrad, C.**, Ribble, A., Stivers, N., **Benton, R.L.**. Role of Endothelial miRNA in Microvascular Plasticity Following Spinal Cord Injury. 2015. Preparing for submission.
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23. **Edwards, J.**, Scoggins, C., McMasters, K., **Martin, R.**. Combined Pancreas and Liver Therapies: Resection and Ablation in Hepato-Pancreatico-Biliary Malignancies. Journal of Surgical Oncology. 2012.
24. Akiwande, O., Kim, D., **Edwards, J.**, Brown, R., Philips, P., Scoggins, C., **Martin, R.**. Transarterial Therapy for Unresectable Hepatocellular Carcinoma with Portal Vein Thrombosis: Radioembolization (90Y) Versus Doxorubicin Drug eluting bead (DEBDOX). Hepatology. 2014.
25. **Edwards, J.**, Philips, P., Scoggins, C.R., McMasters, K.M., **Martin, R.C.G.**. Postoperative Pancreatic Resection Nomogram Evaluation of Validity.
26. **Estephane, N.**, **Sowell, M.K.**. Review of Concussion in Children and Adolescents Following Sports-Related Injuries. Journal of the Kentucky Medical Association, 111, 208-212. 2013.
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28. **Gregory, E.** Comparison of the Incidence and Pathology of Adnexal Masses in Women Post-Hysterectomy with Hysterectomy Only, Hysterectomy Plus Salpingectomy, and Hysterectomy Plus Salpingoophorectomy. Submitted to mentor for review April 2015.
29. **Nyland, J.**, Wera, J., **Henzman, C.**, Miller, T., Jakob, R., Cabborn, D.N.M.. Preserving Knee Function Following Osteoarthritis Diagnosis: A Sustainability Theory and Social Ecology Clinical Commentary. University of Louisville, Department of Orthopedic Surgery, Louisville, KY. Physical Therapy in Sport. 2013.
30. Brand, E., **Nyland, J.**, **Henzman, C.**, McGinnis, M.. Arthritis Self-Efficacy Scale Scores in Knee Osteoarthritis: A Systematic Review and Meta-Analysis Comparing Arthritis Self-Management Education With or Without Exercise. University of Louisville, Department of Orthopedic Surgery, Louisville, KY. Journal of Orthopedic and Sports Physical Therapy. 2013.
31. Roberts, C.S., and **Hunter, A.M.**. Flying Blind in American Orthopaedic Surgery: The Urgent Need for an Educational Curriculum in Orthopaedic Surgery Residency Training. Injury, 45(3), 465-466. doi: 10.1016/j.injury.2013.12.007. 2014.
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51. **Sparks, B.B., Radmacher, P.G.**, Lewis, S.L., Serke, L.A., Adamkin, D.H.. Human Milk Analysis Contributes to Nutritional Management of Very Low Birth Weight Infants. *ICAN: Infant, Child, & Adolescent Nutrition*. 2014 Oct; 6(5): 295-300.
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57. **Wilcox, A.R.**, Neri, P.M., Volk, L.A., Newmark, L.P., Clark, E.H., Babb, L.J., Varugheese, M., Aronson, S.J., Rehm, H.L., Bates, D.W.. A Novel Clinician Interface to Improve Clinician Access to Up-To-Date Genetic Results. *J Am Med Inform Assoc*. 2013 Sep 7. doi: 10.1136/amiajnl-2013-001965.

Poster and Oral Presentations

Distinction in Business and Leadership

1. **Thai, A.** Cost Effectiveness of Implementation of Point of Care Ultrasound in a Pediatric Emergency Department. Oral presentation at the American Academy of Pediatrics National Conference. 2014.

Distinction in Global Health

2. Mittel, O., **Liewen, A.**, **Hodge, B.**, Bohnert, C.. Pediatric Medical Student Curriculum on Human Sex Trafficking. Poster presentation at the Midwest Regional Global Health Conference. 2015.
3. **Dawson, T.** I Was an Old T-shirt. Critical reflection at the Midwest Regional Global Health Conference; 2015.
4. Jones, A.J., **Dholakia, J.**, Snow, L.. Transgender Issues & Implications for Social Work. Oral presentation at the National Association of Social Workers, Kentucky Chapter Annual Conference. 2014.
5. **Nota, M.F.**, **Dholakia, J.**, Theriot, J.. Supporting Hispanic/Latino Families with CYSHCN through Community Collaboration and Engagement. Poster presentation at the Association of Maternal & Child Health Programs Annual Conference. 2015.
6. **Dholakia, J.**, Underwood, B., Eid, M., Steinbock, S.. Towards an LGBT-Affirming Clinic: Overview and Phase 1 Implementation. Poster presentation at the Society of Student-Run Free Clinics Annual Conference. 2015.
7. **Dholakia, J.**, Snow, L., Thai, J.. Trans Health Matters. Oral presentation and panel discussion at Take Root: Red State Perspective on Reproductive Justice 5th Annual Conference. 2015.
8. **Nota, M.F.**, **Dholakia, J.**, Theriot, J.. Supporting Hispanic/Latino Families with CYSHCN through Community Collaboration and Engagement. Poster presentation at the National Hispanic Medical Association 19th Annual Conference. 2015.
 - National Conference Award Winner. Category: Project, Research or Study That Is Innovative and Can Be Replicated In Hispanic Communities in a Cost Effective Manner.
9. Thai, J., **Dholakia, J.**, Snow, L.. Trans Health 101. Oral presentation at the Southern Girls' Convention. 2015.
10. **Dholakia, J.** What I Wish I Would Have Known. Panel participant at the Midwest Regional Global Health Conference. 2015.

11. **Kingery, F.**, Naanyu, V., Allen, W., Patel, P.. Photovoice in Kenya: Using a Community Based Participatory Research Method to Identify Health Needs. Poster presentation at the Midwest Regional Global Health Conference. 2015.
12. **Dieckmann, M.**, **Hodge, B.**. Novel use of a Medical Database Smart Phone Application Improves Clinical Learning Experience during a Global Health Rotation in Tena, Ecuador. Poster presentation at Research!Louisville. 2015.
13. **Dieckmann, M.**, **Hodge, B.**. Novel Use of a Medical Database Smart Phone Application Improves Clinical Learning Experience during a Global Health Rotation in Tena, Ecuador Poster presentation at the CUGH Global Health Conference. 2015.
14. **Dieckmann, M.**, **Hodge, B.**. Novel use of a Portable Medical Database Improves Medical Student Clinical Learning Experience during a Global Health Rotation in Tena, Ecuador Poster presentation at the Midwest Regional Global Health Conference. 2015.
15. Sharma, D., **Eid, R.**, Smock, W.. Podoconiosis - Geochemical Elephantiasis. Poster presentations at Research!Louisville. 2015.
16. **Eid, R.**, Knittle, E., Belknap, B., Carter, M.. Reducing the Burden of HIV in Highly Endemic Regions of Africa. Poster presentation at the Midwest Regional Global Health Conference. 2015.
17. **Eid, R.**, Sharma, D., Smock, W.. Podoconiosis: A Geochemical Elephantiasis. Poster presentation at the Midwest Regional Global Health Conference. 2015.
18. **Lake, M.**. Assessing the Three Delays in Maternal Health Care: A Comparison of Sierra Leone and Bangladesh in the MDG Era. Poster presentation at the Midwest Regional Global Health Conference. 2015.

Distinction in Research

19. Cordiale, A.J., Carreon, L.Y., **Adams, E.L.**, Bratcher, K.R., Glassman, S.D.. Clinical Outcomes Ten Years after Lumbar Fusion for Degenerative Spondylolisthesis. Presentation at IMAST. July 2014; Valencia, Spain.
20. Cordiale, A.J., Carreon, L.Y., **Adams, E.L.**, Bratcher, K.R., Glassman, S.D.. Clinical Outcomes Ten Years after Lumbar Fusion for Degenerative Spondylolisthesis. Presentation at NASS. November 2014; San Francisco, CA.
21. Cordiale, A.J., Carreon, L.Y., **Adams, E.L.**, Bratcher, K.R., Glassman, S.D.. Clinical Outcomes Ten Years after Lumbar Fusion for Degenerative Spondylolisthesis. Submitted to AAOS for Spring of 2015.
22. Malkani, A., Goel, A., **Adams, E.L.**. Outcomes of Revision Total Knee Arthroplasty in the Morbidly Obese Patient. Submitted to AAOS 2015.
23. Norheim, B., Glassman, S.D., **Adams, E.L.**, Hunter, A.M., Harbrecht, Dimar, Carreon. Utility of MRIs in Patients with Thoracolumbar Fractures. Submitted to NASS 2015.
24. **Casanova, M.F.**, El-Baz, A.S., Kamat, A.S., Dombroski, B.A., Khalifa, F., Elnakib, A., Soliman, A., **Allison-McNutt, A.**, Switala, A.E.. Focal Cortical Dysplasias in Autism Spectrum Disorders. Research!Louisville. 2012.
25. **Brock, D.**, Lacey, S., Kenowitz, J., Harvey, E., Roth, A., Nelson, C., and Holland, J.. The C.A.R.E. intervention: Preliminary Results, Fidelity and Patient Satisfaction. Memorial Sloan Kettering Cancer Center, New York, NY. August 2012.

26. **Brock, D.**, Leach, M., Al Shami, L., Kingery, F.. Ethical Issues in Prenatal Testing: Enhancing Informed Consent Through Policy, Medical Education and Community Outreach. Research Louisville!, University of Louisville. April 2012.
27. Anderson, R.J., Dunki-Jacobs, E., Callender, G.G., **Burnett, N.P.**, Scoggins, C.R., McMasters, K.M., **Martin, R.C. 2nd.** Clinical Evaluation of Somatostatin Use in Pancreatic Resections: Clinical Efficacy or Limited Benefit?. Oral presentation given at at: Central Surgical Association Annual Meeting 15-17 March 2013; Amelia Island, Florida.
28. **Burnett, N.P.**, Dunki-Jacobs, E.M., Callender, G.G., Anderson, R.J., Scoggins, C.R., McMasters, K.M., **Martin, R.C. 2nd.** Evaluation of Initial Staging and Treatment in Prognosis of Hepatocellular Carcinoma Patients. Poster session presented at: Society of Surgical Oncology 66th Annual Cancer Symposium, 6-9 March 2013; National Harbor, MD.
29. Anderson, R.J., Dunki-Jacobs, E., Callender, G.G., **Burnett, N.P.**, Scoggins, C.R., McMasters, K.M., **Martin, R.C. 2nd.** A Cost Analysis of Somatostatin Use in the Prevention of Pancreatic Fistula after Pancreatectomy. Poster session presented at: Society of Surgical Oncology 66th Annual Cancer Symposium, 6-9 March 2013; National Harbor, MD.
30. **Burnett, N.P.**, Dunki-Jacobs, E.M., Callender, G.G., Anderson, R.J., Scoggins, C.R., McMasters, K.M., **Martin, R.C. 2nd.** Evaluation of Alpha-Fetoprotein Staging System for Hepatocellular Carcinoma in Noncirrhotic Patients. Oral presentation given at: Southeastern Surgical Congress Annual Science Meeting, 9-12 February 2013; Jacksonville, FL.
31. **Burnett, N.P.**, Dunki-Jacobs, E.M., Callender, G.G., Anderson, R.J., Scoggins, C.R., McMasters, K.M., **Martin, R.C. 2nd.** Evaluation of Alpha-Fetoprotein Staging System for Hepatocellular Carcinoma in Noncirrhotic Patients. Poster session presented at: Research!Louisville, 18 Sept 2012; Louisville, KY.
32. Anderson, R.J., Dunki-Jacobs, E., Callender, G.G., **Burnett, N.P.**, Scoggins, C.R., McMasters, K.M., **Martin, R.C. 2nd.** Clinical Evaluation of Somatostatin Use in Pancreatic Resections: Clinical Efficacy or Limited Benefit?. Poster session presented at: Research!Louisville, 18 Sept 2012; Louisville, KY.
33. **Chen, E.** Expression of Abd-B like HOX Genes in Prostate Cancer Cell Lines. Research!Louisville. 2012.
34. **Chen, E.** Expression of Abd-B like HOX Genes in Prostate Cancer Cell Lines. Kentucky American College of Physicians Annual Poster Competition. 2012.
35. **Chen, E.** 10th Annual Academic Surgical Congress. Using Surgical Bootcamp to Teach Core Entrustable Professional Activities for Entering Residency.
36. **Clark, C.**, **Padmanabhan, P.**, Cross, K., Foster, M., Wintergerst, K.. Cardiac Index and Volume Status in Pediatric Diabetic Ketoacidosis. Poster session presented at: Research!Louisville. 2012.
37. **Conrad, C.M.**, Ribble, A.C., **Benton, R.L.** Role of Endothelial Mirnas in Microvascular Plasticity Following Spinal Cord Injury. Poster session presented at: American Medical Women's Association National Meeting, 13-16 March, 2014; Washington, DC.
38. **Conrad, C.M.**, Ribble, A.C., **Benton, R.L.** Role of Endothelial Mirnas in Acute Microvascular Plasticity Following Spinal Cord Injury. Poster session presented at: National Neurotrauma Society Annual Symposium, 4-7 August, 2013; Nashville, TN.

39. **Conrad, C.M.**, Ribble, A.C., Stivers, N.S., **Benton, R.L.**. Role of Endothelial Mirnas in Acute Microvascular Plasticity Following Spinal Cord Injury. Poster session presented at: Research!Louisville. 2012.
40. **Conrad, L.E.**, Jiang, G., Liu, Y., Kaplan, H.J., **Dean, D.C.**, Wang, W.. Granulocyte Colony Stimulation Factor Switches Müller Glia from a Gliosis Pathway to a Photoreceptor Progenitor Pathway in Vitro. Poster. Research!Louisville. September 2012.
41. Ozkok, A., Gupta, A., **Conrad, L.E.**, Nesmith, B.L.W., Schaal, S.. Association of Red Cell Distribution Width Values with Vision Potential in Retinal Vein Occlusion. Paper presented at: Association for Research in Vision and Ophthalmology Annual Meeting, May 2015; Denver, CO.
42. Ozkok, A., Gupta, A., **Conrad, L.E.**, Nesmith, B.L.W., Schaal, S.. Association of Red Cell Distribution Width Values with Vision Potential in Retinal Vein Occlusion. Presentation at Retina Society Meeting, Oct 2015; Paris, France.
43. Sigford, D., Hajrasouliha, A., Breaux, A., **Conrad, L.E.**, Schaal, S.. A Novel Normalized Reflection Scale Reveals Occult Optical Coherence Tomography Changed in Retinal Structures with Aging. Poster session presented at: Association for Research in Vision and Ophthalmology Annual Meeting, May 2015; Denver, CO.
44. **Edwards, J.**. Cortical Connections of the Mouse Lateral Posterior Nucleus. Research!Louisville September 2012.
45. **Estephane, N.**, Gordon, M.W., Li, Y.. *BCL6* Expression as a Prognostic Indicator in a Subset of DLBCL. Poster Presentation at Research!Louisville. September 2012.
46. **Estephane, N.**, **Sowell, M.**, Mutchnick, I., Bhola, R., Downing, E.. A Retrospective Chart Review of Pediatric Pseudotumor Cerebri: Clinical Characteristics, Etiology and Treatment. University of Louisville School of Medicine and the Departments of Pediatric Neurology, Norton Neuroscience Institute and Pediatric Neurosurgery, and Pediatric Ophthalmology Poster Presentation at Research!Louisville. September 2014.
47. **Estephane, N.**, **Sowell, M.**, Mutchnick, I., Bhola, R., Downing, E.. A Retrospective Chart Review of Pediatric Pseudotumor Cerebri: Clinical Characteristics, Etiology and Treatment. Poster presented at: the 57th Annual Scientific Meeting Drawing Upon Headache Research from the American Headache Society; 2015 June 18-21; Washington, DC.
48. **Gettelfinger, J.**, Nickel, C., Rebholz, W., Russ, E., Wilson, L., Sephton, S.E., Bumpous, J.M., **Cash, E.**. Depressive Symptoms Predict Poor Treatment Adherence and Response in Head and Neck Cancer. Oral presentation at the Kentucky Society of Otolaryngology Annual Meeting, Louisville, KY. August 2014.
49. Steitz, J., **Gettelfinger, J.**, **Cash, E.**, Chandran, S.. The Effect of Medialization Laryngoplasty on Aspiration in Patients with Unilateral True Vocal Cord Paralysis. Oral presentation at the Kentucky Society of Otolaryngology Annual Meeting, Louisville, KY. August 2014.
50. Steitz, J., **Gettelfinger, J.**, **Cash, E.**, Chandran, S.. The Effect of Medialization Laryngoplasty on Aspiration in Patients with Unilateral True Vocal Cord Paralysis. Poster presentation at Research!Louisville, Louisville, KY. September 2014.
51. **Cash, E.**, **Gettelfinger, J.**, Nickel, C., Rebholz, W., Russ, E., Wilson, L., Sephton, S.E., Bumpous, J.M.. Depressive Symptoms Predict Poor Treatment Adherence and Response in Head and Neck Cancer. Oral presentation at the International Federation of Head and Neck Oncologic Societies 5th World Congress and American Head and Neck Society Annual Meeting, New York, NY. July 2014.

52. **Cash, E.**, Rebholz, W., **Gettelfinger, J.**, Russ, E., Wilson, L., Bumpous, J.M., Sephton, S.E.. Depressive Symptoms Predict Poor Treatment Adherence and Response in Head and Neck Cancer. Poster presentation at the American Psychosomatic Society 72nd Annual Scientific Meeting, San Francisco, CA. March 2014.
53. **Gettelfinger, J.D.**, Le, H.T., Deleeuw, L.W., Chaires, J.B., Trent, J.O.. Off-Target Drug Effects: The Identification of Natural Products and FDA-Approved Cancer Drugs as G-Quadruplex DNA-Interacting Agents. Poster presented at Research!Louisville, Louisville, KY. September 2012. This work was supported by NIH/NCI Grant R25-CA134283.
54. **Gregory, E.**. Pregnancy Outcome in Opiate Addicts who experience Acute Withdrawal vs. Methadone Maintenance. Poster Presentation at Research!Louisville. September 2012.
55. **Henzman, C.**, Ong, K., Lau, E., Seligson, D., Roberts, C., Malkani, A.. Risk of Complications following Treatment of Intertrochanteric Hip Fractures with IM Nails 2014 and Plate Fixation in the Medicare Population. University of Louisville, Department of Orthopedic Surgery, Louisville, KY. American Academy of Orthopedic Surgeons 2015 Annual Meeting, Las Vegas N (Accepted).
56. Robinson, L., **Henzman, C.**, Seligson, D.. Schatzker's Lateral Tibial Plateau Fracture: 3 Types, 1 Treatment. University of Louisville, Department of Orthopedic Surgery, Louisville, KY. American Academy of Orthopedic Surgeons 2015 Annual Meeting, Las Vegas NV (Submitted).
57. Robinson, L., Seligson, D., **Henzman, C.**, Percutaneous Treatment of Acetabular Fractures. University of Louisville, Department of Orthopedic Surgery, Louisville, KY. European Society for Trauma and Emergency Surgery. Poster Presentation. 2014
58. **Nyland, J.**, Wera, J., Ghazi, C., **Henzman, C.**, Whaley, R., Caborn, D.N.M.. Influence of Meniscal Injury Partial Meniscectomy, or All-Inside Repair on Perceived Function following Allograft ACL Reconstruction. University of Louisville, Department of Orthopedic Surgery, Louisville, KY. Meniscal Transplant Study Group in New Orleans. 2014.
59. Wera, J., Ghazi, C., **Nyland, J.**, Mackinlay, K., **Henzman, C.**, Brand, J.. IKDC Knee Survey Use Following ACL Reconstruction: A 2005-2012 Systematic Review And World Region Comparison Analysis. University of Louisville, Department of Orthopedic Surgery, Louisville, KY. Arthroscopy: The Journal of Arthroscopic and Related Surgery. (Accepted) 2014.
60. **Nyland, J.**, Wera, J., Ghazi, C., **Henzman, C.**, Whaley, R., Caborn, D.N.M.. Influence of Meniscal Injury Partial Meniscectomy, or All-Inside Repair on Perceived Function following Allograft ACL Reconstruction. University of Louisville, Department of Orthopedic Surgery, Louisville, KY. ESSKA Congress Abstract, e-poster. 2013.
61. Salyers, E., Chelette, K., Carrico, C., Nichols, L., **Henzman, C.**, Sawaki, L.. Peripheral Nerve Stimulation Dose-Response Relationship in Chronic Stroke: Early Results from an Ongoing Trial. Poster presented at: 8th Annual CCTS Spring Conference, University of Kentucky Center for Clinical and Translational Science; Lexington, KY. 2013.
62. **Henzman, C.**, Kothari, S., Ismail, I., Bhimani, R., Collins, T., Cambon, A., Elmore, B., DeFilippis, A., Rai, S.N., Bolli, R.. Early Diagnosis of Atherothrombotic Myocardial Infarction. University of Louisville, Department of Cardiology Louisville, KY. Research!Louisville, Poster. 2012.
63. **Hunter, A.M.**, **Dragun, A.E.**. Rethinking the Harvard Scale of Breast Cosmesis: An Analysis of Patients Treated with Breast Conserving Therapy on a Phase II Clinical Trial. Poster presented at the Multidisciplinary Breast Cancer Symposium, San Francisco, CA. R25 NIH Cancer Education Program. August 2013.

64. Holtgrave, M., **Hunter, A.M.**, Nasraty, F.. Medals4Mettle: Student Wellness and Community Outreach for the Race Against Cancer. Poster presented at the Southern Group on Student Affairs, and Organization of Student Representatives Join Regional Conference, Savannah, GA. April 2013.
65. Nasraty, F., Nesemeier, R., **Hunter, A.M.**. Longitudinal Standardized Patient Program in Preclinical Curriculum. Poster presented at the American Association of Medical Colleges National Conference, San Francisco, CA. November 2012.
66. **Hunter, A.M.**, **Dragun, A.E.**. Assessing the Harvard Scale of Breast Cosmesis: An Analysis of Patients Treated with Breast Conserving Therapy on a Phase II Clinical Trial. Poster presented at the James Brown Cancer Center Symposium and Research!Louisville, Louisville, KY. R25 NIH Cancer Education Program. September 2014.
67. **Hunter, A.M.**, Pampati, R., Nasraty, F.. The New Age of Peer-to-Peer Professionalism: The Honor and Professionalism Advocacy Council and Early Concern Notes at the University of Louisville School of Medicine. Poster to be presented at the Group on Diversity & Inclusion, Group on Student Affairs, and the Organization of Student Representatives National Meeting, San Diego, CA.
68. Trivedi, J.R., **Ising, M.S.**, Cheng, A., Lenneman, A., Birks, E., **Slaughter, M.S.**. Heart Transplant Survival Base on Recipient and Donor Risk Scoring: A UNOS Database Analysis. Presented at the International Society for Heart and Lung Transplant 35th international meeting. Nice, France April 15-18, 2015.
69. Schumer, E.M., **Ising, M.S.**, Trivedi, J.R., **Slaughter, M.S.**, Cheng, A.. Survival in Patients with Continuous-Flow Left Ventricular Assist Devices on the Waiting List and Marginal Donor Heart Transplantation Recipients: A UNOS Database Analysis. Southern Thoracic Surgical Association (STSA) 61st Annual Meeting. Tucson, Arizona November 5-8, 2014.
70. Rodefeld, M.D., Giridharan, G.A., **Ising, M.S.**, Koenig, S.C., Sobieski, M.A., Frankel, S.. Fontan Circulatory Support: A Decision Algorithm For Systemic Vs. Cavopulmonary Assist. American Association for Thoracic Surgery's 92nd Annual Meeting. San Francisco, California, April 28 – May 2, 2012.
71. **Ising, M.S.**, Sobieski, M.A., Giridharan, G.A., Koenig, S.C., **Slaughter, M.S.**. Miniaturization of Mechanical Circulatory Support Systems. 19th Congress of the International Society of Rotary Blood Pumps. Louisville, Kentucky, September 8-10, 2011.
72. **Ising, M.S.**, Sobieski, M.A., Giridharan, G.A., Koenig, S.C., **Slaughter, M.S.**. Hemodynamic Responses to Continuous Flow LVAD Speed Modulation in Computer Simulation and in-vitro Mock Loop Studies. 19th Congress of the International Society of Rotary Blood Pumps. Louisville, Kentucky, September 8-10, 2011.
73. Sobieski, M.A., **Ising M**, Giridharanm G.A., Koenig, S.C., **Slaughter, M.S.**. Comparison of Blood Trauma Between CentriMag and RotaFlow Centrifugal Blood Pumps: in Vitro Study. 19th Congress of International Society of Rotary Pumps. , Louisville, Kentucky, September 8-10, 2011.
74. **Ising, M.S.**, Koenig, S.C., Sobieski, M.A., **Slaughter, M.S.**, Giridharan, G.A.. Flow Modulation Algorithms for Intra-Aortic Blood Pumps to Reduce Coronary Steal. 2011 Biomedical Engineering Society Annual Meeting. Hartford, Connecticut, October 12-15, 2011.
75. **Ising, M.S.**, Rodefeld, M.D., Koenig, S.C., Sobieski, M.A., Chen, J., Frankel, S.H., Giridharan, G.A.. Computer Simulation And Mock Circulation Models Of Fontan Circulation For Testing Ventricular Cavopulmonary Assist Devices. 57th Annual ASAIO Conference. Washington DC, June 10-12, 2011.

76. **Ising, M.S., Slaughter, M.S.**, Birks, E., Sobieski, M.A., Sherwood, L., Hawes, M., Stewart, R., Bolt, W., Koenig, S.. Pre-Clinical GLP Study of Impella 2.5 (Abiomed, Danvers, MA) for 5-Days Left Ventricular (LV) Support. 57th Annual ASAIO Conference. Washington DC, June 10-12, 2011.
77. **Ising, M.S.**, Warren, S.P., **Slaughter, M.S.**, Koenig, S.C., Sobieski, M.A., Giridharan, G.A.. Delivering Physiologic Pulse Pressures with Continuous Flow Ventricular Assist Devices. 56th Annual ASAIO Conference. Baltimore, Maryland, May 27-29, 2010.
78. Sobieski, M.A., Giridharan, G.A., **Ising, M.S., Slaughter, M.S.**, Koenig, S.C.. Methodology Of Hemolysis Testing Of Mechanical Circulatory Support Devices. 56th Annual ASAIO Conference. Baltimore, Maryland, May 27-29, 2010.
79. **Ising, M.S., Slaughter, M.S.**, Tamez, D., O'Driscoll, G., Voskoboynikov, N., Bartoli, C.R., Koenig, S.C., Giridharan, G.A.. Reappearance of a Normal Circadian Rhythm After Ventricular Assist Device Implantation. Gordon Research Conference: Assisted Circulation. Waterville Valley, New Hampshire, September 6-11, 2009.
80. **Ising, M.S.**, Giridharan, G.A., **Slaughter, M.S.**, Sobieski, M.A., Koenig, S.C.. Hemodynamic Responses to Pulsatile and Continuous Flow LVAD in an Ischemic Cardiac Dysfunction Calf. 55th Annual ASAIO Conference. Dallas, Texas, May 28-30, 2009.
81. **Nickel, C.**, Barati, M., Brier, M., Merchant, M.. Developing Quantitative Assays for Serum and Plasma Peptide Biomarkers of Erythropoiesis Stimulation Agents. Poster presented at: Research!Louisville Conference; Louisville, KY 2012.
82. Kingery, F., Duncan, D., Kenney, K., Maggard, M., Mason, T., Metry, R., **Nickel, C.**, Schadler, B., Smock, W.. Evaluation of Common Diagnoses and Healthcare Needs of a Subregion of the Northwest Rift Valley Providence of Kenya, presented at the Regional Global Health Conference, Lexington, KY , October 2012.
83. Cash, E., Gettelfinger, J., **Nickel, C.**, Rebholz, W., Russ, E., Wilson, L., Sephton, S., Bumpous, J.. Depressive Symptoms Predict Poor Treatment Adherence and Response in Head and Neck Cancer. Oral Presentation presented at: International Federation of Head and Neck Oncologic Societies 5th World Congress and American Head and Neck Society Annual Meeting; New York, NY 2014.
84. **Caperell, K., Pettigrew, J.**, Gerugthy, A., Stevenson, M.. Can Pediatric Emergency Medicine Physicians Predict the Disposition of Children With Asthma Exacerbation At the Time of Presentation? Poster presentation at Pediatric Academic Societies, San Diego, CA. April 28, 2015.
85. **Pettigrew, J., Caperell, K.**.. Route of Administration Specific Placebo Response Meta-Analysis for Acute Treatment of Migraine. Poster presentation at the American College of Emergency Physicians Research Forum, Seattle, WA. October 15, 2013.
86. Gerugthy, A., **Pettigrew, J., Caperell, K.**, Stevenson, M.. Provider Prediction of Disposition for Children with an Acute Asthma Exacerbation Presenting to the Pediatric Emergency Department. Poster presentation at Research!Louisville, Louisville, KY. September 24, 2013.
87. **Pettigrew, J., Caperell, K.**, Stevenson, M.. Provider Prediction of Disposition for Children with an Acute Asthma Exacerbation Presenting to the Pediatric Emergency Department. Poster presentation at Research!Louisville, Louisville, KY. September 18, 2012.
88. Duncan, M.J., Congleton, M.R., **Rogers, T.H.**, Lewis, K.L.. Neural Mechanisms Mediating Circadian Phase Resetting by Activation of 5-HT₇ Receptors in the Dorsal Raphe: Role of GABAergic and Glutamatergic Neurotransmission. Society for Research on Biological Rhythms. Destin, FL. May 22, 2010.

89. **Rogers, T.H.**, Franklin, K.M., Duncan, M.J.. Effects of Aging and Fluoxetine Treatment on BDNF mRNA Expression in the Hippocampus and Dentate Gyrus. Bluegrass Chapter of the Society for Neuroscience. Lexington, KY. March 31, 2011.
90. **Rogers, T.H.**, Ghazi, C.A., Matheson, P.J., Downard, C.D., Garrison, R.N., **Smith, J.W.**. The Effect of Direct Peritoneal Resuscitation on the Hepatic Inflammatory Cascade. KY Chapter of the American College of Surgeons. Louisville, KY. November 2, 2012.
91. **Rogers, T.H.**, Matheson, P.J., Downard, C.D., Garrison, R.N., **Smith, J.W.**. Direct Peritoneal Resuscitation Prevents Cytoplasmic HMGB1 After Hemorrhagic Shock. Academic Surgical Congress. New Orleans, LA. February 6, 2013.
92. **Radmacher, P.G.**, **Sparks, B.B.**, Lewis, S., Serke, L., Northam, T., Adamkin, D.H.. Analyzing Human Milk during Fortification with Calorically Dense Formula. Pediatric Academic Societies (PAS) Annual Meeting. Washington, DC. May 2013.
93. **Sparks, B.B.**, **Radmacher, P.G.**, Lewis, S., Serke, L., Northam, T., Adamkin, D.H.. Real Time Human Milk Analysis Contributes to More Comprehensive Nutritional Management. Southern Regional Meeting for Southern Societies of Pediatric Research. New Orleans, LA. February 2013.
94. **Sparks, B.B.**, **Radmacher, P.G.**, Lewis, S., Serke, L., Adamkin, D.H.. Human Milk Fortification for VLBW infants. Research!Louisville. Louisville, KY. September 2012.
95. **Stephen, E.T.**, Quillo, A.R., Lewis, K.E., Harden, F.L., Bumpous, J.M., Flynn, M.B., Callender, G.G.. Operative Failure Rate And Documentation of Family History in Young Patients Undergoing Focused Parathyroidectomy for Primary Hyperparathyroidism. Southwestern Surgical Congress, Santa Barbara, CA March 2013.
96. **Stephen, E.T.**, Quillo, A.R., Lewis, K.E., Harden, F.L., Bumpous, J.M., Flynn, M.B., Goldstein, R.E., Callender, G.G.. The Effect of Age on Rate of Operative Failure in Patients with Primary Hyperparathyroidism Undergoing Focused Parathyroidectomy. Poster Presentation at Research!Louisville. September 2012.
97. **Ward, W.L.**, Isaacs, S.M., Merchant, M.L., **Barati, M.**. Minichromosome Maintenance Protein 3 is Induced in Renal Tubules of Diabetic Mice. Research!Louisville 2012.
98. **Ward, W.L.**, Isaacs, S.M., Merchant, M.L., **Barati, M.**. Minichromosome Maintenance Protein 3 is Induced in Renal Tubules of Diabetic Mice. Local ACP conference 2013.
99. **Ward, W.L.**, Isaacs, S.M., Merchant, M.L., **Barati, M.**. Minichromosome Maintenance Protein 3 is Induced in Renal Tubules of Diabetic Mice. National ACP conference 2014.
100. **Wilcox, A.R.**, **Bozulic, L.**, **Ildstad, S.**. Factors Affecting Stem Cell Engraftment and Chimerism: Donor and Recipient Characteristics. Poster presented at Research!Louisville; 2013.
101. **Wilcox, A.R.**, Neri, P.M., Volk, L., Newmark, L., Clark, E., Babb, E., Varugheese, M., Aronson, S., Rehm, H., Bates, D.. A Novel Clinician Interface to Improve Access to Up-to-date Genetic Results. Poster presented at: AMIA Annual Symposium; 2013 Nov 16-20: Washington, DC.

STUDENT PROJECTS

Student names in **bold**. Mentor names in **red**.

Distinction in Business and Leadership

Class of 2015

1. Consulting For Sage Growth Partners. Bringing Medical Devices to Market. Evaluating and Advising On Prospective Markets and FDA Approval Process for Cardiovascular Devices. **Mickey Ising**, MEng, **Brad Sutton MD**, MBA.
2. Cost Effectiveness Analysis of Robotic Surgery for Gynecologic Surgeries. **Dan Kmetz** (PI), **Brad Sutton, MD, MBA**, Cheung Kim, MD, Sharmila Makhija, MD, MBA, Dan Metzinger, MD, **In K. Kim, MD, MBA** (SI).
3. Comparison of Relative Value Units (RVUs) to Gross Charges as a Metric of Faculty Clinical Productivity. **Mohi Quayyum** (PI), **Brad Sutton, MD, MBA**, Cheung Kim, MD, Sharmila Makhija, MD, MBA, Josh Hardy, MD, Dan Metzinger, MD, **In K. Kim MD, MBA** (SI).
4. Screening for Colon Cancer Project (WIP). **Nikhil Borkhetaria**, Erica Sutton, MD Whitney Jones, MD, **Brad Sutton, MD, MBA**.
5. Integration of Business of Medicine into a Medical School Curriculum. **Don Herdt** (PI), **Brad Sutton, MD, MBA** (SI).

Class of 2016

1. Cost-Utility Analysis of Stereotactic Body Radiotherapy versus Transarterial Chemoembolization for Hepatocellular Carcinoma: An Economic Evaluation of the Current Standard of Care. **Christian A. Linares**, Alexander D. Steiner, Kristin Nosova, Eric G. Davis, Neal E. Dunlap, In K. Kim MD, MBA, **Brad Sutton, MD, MBA** (SI).
2. Cost Analysis of Contralateral Mastectomy for Unilateral Breast Cancer. **Bobby Keskey** (PI), Chuck Scoggins, MD, MBA, Brad Sutton, MD, MBA, Guy Brock PhD, **In K. Kim MD, MBA** (SI).
3. Cost Effectiveness Analysis of Bedside Ultrasound Implementation in the Pediatric ED. **Alex Thai** (PI), Adam Sivitz, MD, Alyssa Abo, MD, Joanna Cohen, MD, David Kessler, MD, Brad Sutton, MD, MBA, Dave McLario, MD, Fred Warkentine, MD, Keith Cross, MD, MSc, MS, Sidney Baxendale, PhD, **In K. Kim MD, MBA** (SI).
4. Consulting for Sage Growth Partners. Defining Patient Portals, Researching Population Health Vendors, Competitive Analysis, and Research Patient Engagement. **Katelyn Williams**, Chris DeMarco, **Brad Sutton, MD, MBA**.

Class of 2017

1. Economic Viability of Regional Refugee Clinic. **Sarah Tariq**, **Brad Sutton, MD, MBA** (PI).
2. Effectiveness of Bariatric Surgery Referrals to Centers of Excellence. **Ashley Lee**, Bob Johnson MD, Laura Happe, PharmD, MPH, **Brad Sutton, MD, MBA** (SI).
3. Cost Effectiveness Analysis of Point of Care Ultrasound Implementation in the Pediatric ICU. **Nathan Wiedemann** (PI), Alex Thai, Russ Horowitz, MD, Leah Zena, MD, Michael Ruppe, MD, **Brad Sutton, MD, MBA**, Dave McLario, MD, Fred Warkentine, MD, Keith Cross, MD, MSc, MS, Ben Foster, PhD, **In K. Kim MD, MBA** (SI).

4. Cost Effectiveness Analysis of Implementation 4DX in an Academic Pediatric Development Office. **Travis Spaulding** (PI), Alex Thai, Scott Tomchek, PhD, **Brad Sutton, MD, MBA**, **In K. Kim MD, MBA** (SI).

Distinction in Global Health

Class of 2015

1. Medical Student Instruction in Global Human Trafficking (M-SIGHT): a Pilot Study of a New Online eLearning Module **Amanda Liewen**, MS4, Olivia Mittel, MD, MS, Carrie Bohnert, MPA, **Bethany Hodge, MD**, MPH, Mary Carter, MD, PhD, and Tania Condurache, MD, MSc.
2. Childhood Obesity in Minority Populations and Urban Community Intervention **Jamila Williams**, MS4, Veronnie F. Jones, MD, PhD, MSPH.
3. Reproductive Health and Legal Rights: Gauging Adolescents' Knowledge in Louisville, Kentucky. **Eileen Rife**, **Niloufar Ehsani**, Kyle Brothers, MD, **Navjot K. Vidwan, MD**.

Class of 2016

1. Assessing the Effects of Safe Water and Hygiene Education on the Community Health and Health Literacy of Communities in the Amazon Basin of Ecuador. **Tim Dawson**, David Taylor, Samantha Sutkamp, Sean Maloney, BS, Anne Banks, PhD, **Stephen Wheeler, MD**.
2. Demographics, Drinking Water Sources and Sanitation Practices of 5 Communities in the Napo Province of Ecuador. **Tim Dawson**, David Taylor, Samantha Sutkamp, Sean Maloney, BS, Anne Banks, PhD, **Stephen Wheeler, MD**.
3. Una Mano Amiga: Assessing Care Perceptions and Coordination for Hispanic Immigrant Families with Special Needs Children. **Jhalak Dholakia**, **Fernanda Nota, MD**.
4. Need Heart Transplant, Will Travel: The Landscape of Medical Tourism in 2015. **Maria Dominguez**, **Claudia Espinosa, MD MSc**.
5. Healthcare for the Undocumented Immigrant after the Enactment of the Affordable Care Act. **Kathriena Greenwell**, William J. Crump, MD.
6. Photovoice in Kenya: Using a Community Based Participatory Research Method to Identify Health Needs. **Francesca Kingery**, Violet Naanyu-Ayah, PhD, William Allen, MD, and Pradip Patel, MD.

Class of 2017

1. Use of a Mobile Decision Support Software Tool vs Other Information Sources by Pre-clinical Medical Students in a Low-resource Setting. **Marlowe Dieckmann**, **Bethany Hodge MD MPH**, Michael Keibler.
2. The International Operating Room: Models of Surgery in Low Income Countries. **Jessica Eaton**, **Zaria Murrell, MD**.

3. CTC Mdabulo: A Retrospective Analysis of Pre-Existing Quality Evaluation Survey Data of HIV Medication Adherence in a Highly Endemic District of Rural Tanzania. **Ryan Eid**, Emily M. Knittle, Benjamin Belknap, Mary Carter MD PhD.
4. Born in Africa: A Descriptive Expose of Birthing Practices in Mufindi, Tanzania. **Mackenzie Flynn**, Mary Carter MD PhD.
5. Health Literacy and Emergency Department Usage. **Tyler Haffler**, **Mary Carter MD PhD**.
6. Global Utilitarianism: A Different Way of Looking at the Same Information. **Ryan Kaufman**, **Kyle Brothers, MD**, Jack Furlong, PhD.
7. Assessing the Three Delays in Maternal Health Care: A Comparison of Sierra Leone and Bangladesh in the MDG Era. **MeNore G. Lake**, **Navjyot K. Vidwan, MD**.
8. Perspectives and Values in Maternal-Fetal Healthcare in Accra, Ghana. **Allison Lyle**, **Dan Stewart, MD**.
9. Barriers to Provision of Oral Contraceptives to Indian Women: Measuring Provider Attitudes. **Courtney Spensley, MA**, **Carol Brees, MD**.

Distinction in Medical Education

Class of 2016

1. The Impact of Integrative Teaching on Retention of Human Embryology Material at the University of Louisville. **Rachel Bartsch**, Jennifer Brueckner-Collins, PhD, **Rodica Turcu, MD**.
2. Access to Digital Technology among Hispanic Families Coming To Urban Pediatric Primary Care Clinics. **Sarah Couch**, Jennifer Thompson, Fernanda Nota, **Pradip Patel, MD**, Gil Liu, MD.
3. EMS management Curriculum for Emergency Medicine Residents. **Catherine Anne Hayes**, **Charles Kodner, MD**.
4. LGBT and Core Curriculum Content for Student-Run Clinics. **Celia Johns**, **Charles Kodner, MD**.
5. Ethical Considerations for Students in Overseas Service Learning Experiences. **Celia Johns**, **Charles Kodner, MD**.
6. Use of a Live Lecture Broadcast System with Integrated Audience Response System in Clinical Education of Medical Students. **Jimmy Jones**, **Pradip Patel, MD**, Mona Taylor, MD, and Craig Ziegler, PhD.

Class of 2017

1. Active Learning: A Human Embryology Question Bank and Practice Exam Constructed By First Year Medical Students. **Diane Carden**, **Rodica Turcu, MD**.
2. Survey of the Referencing Habits of Third Year Medical Students Before and After Exposure to a Novel Pediatric Decision Support Software Mobile Application (PEMSoft™). **Elayna Dush**, Marlowe Diekmann, Bethany Hodge, MD.
3. Tutoring Via Clinical Cases in MS2 Pharmacology. **Kim Staudt**, **Charles Kodner, MD**.
4. A Replicable Model for Online, Case-Based Learning in Medical Anatomy and Physical Exam Education. **Sam Walling**, **Pradip Patel, MD**, Jennifer Brueckner, MD, Craig Ziegler, PhD.