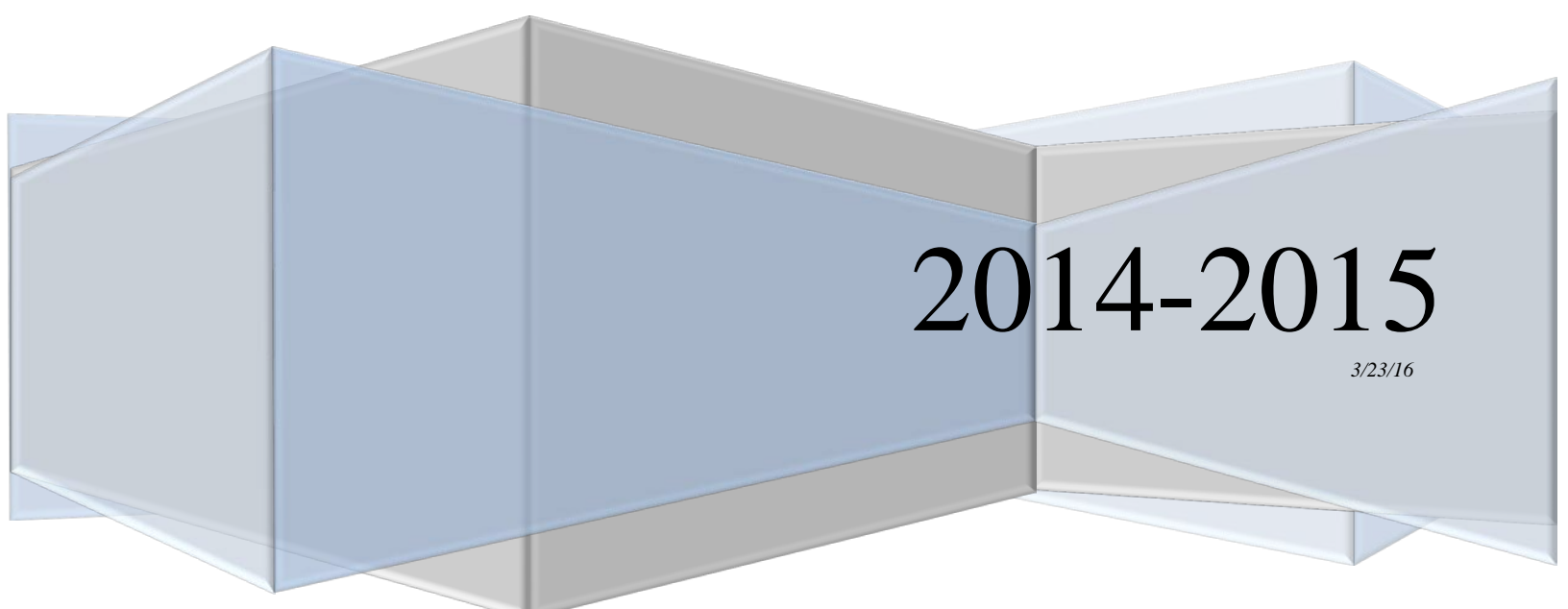


# **GME Annual Report**

*MSU-CHM Lansing Community*



**2014-2015**

*3/23/16*

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**Michigan State University  
College of Human Medicine  
Graduate Medical Education Division**

**Annual Report  
Academic Year 2014-15**

The Graduate Medical Education Division serves as the administrative “home” for the fifteen residency and fellowship programs sponsored by the College of Human Medicine. Within the functions of the division, the office monitors continued accreditation of our training programs with the Accreditation Council for Graduate Medical Education (ACGME). In this role, we ensure that appropriate support is available for our training programs to carry out their educational, research and patient care missions. At the same time, we ensure that our learners work within a safe and academically sound environment.

Among the accomplishments of the GME Office over the past academic year are the following:

1. Continued accreditation of each of our training programs.
2. Improvement in the quality of the working environment as an institution (see aggregate institutional data from the 2015 ACGME Annual Resident and Faculty Surveys below).
3. Assistance in the accreditation process for a new sponsored family medicine residency in Alma.
4. Completion of Special Reviews for the Cardiology Fellowship and Surgery Residency.
5. Subscription to the AMA Institute for the Practice of Medicine curriculum for each of our residents and fellows. Through use of the AMA-IPM modules, residents and fellows will have a standardized process to learn important patient safety and quality principles.

Because the College has no hospital, we are highly dependent upon developing and maintaining strong relationships with partner hospitals where our learners are located, particularly Sparrow Hospital in Lansing and McLaren Health System in Flint. We are fortunate that our partners share a common commitment to developing and maintaining strong training programs within their hospitals and communities. In addition, we partner with Graduate Medical Education, Inc., a consortium which assists in providing valuable personnel services to many of our programs. We have worked with GMEI to hold the Greater Lansing Research Day, a very successful forum where our medical students, residents and fellows can share their research efforts with the community.

Along with the significant successes, the division faces some challenges in the upcoming years. The memorandum of understanding between the ACGME and the American Osteopathic Association is moving toward full implementation by 2020. At that time, all programs will be accredited by a single entity, the ACGME. We will be working closely with our partners, particularly Sparrow, to develop and maintain single programs where duplication exists to assure that our learners continue to work in the most educationally productive environment possible. In addition, we are working with Sparrow to develop a funding system that makes sense for both institutions and the community.

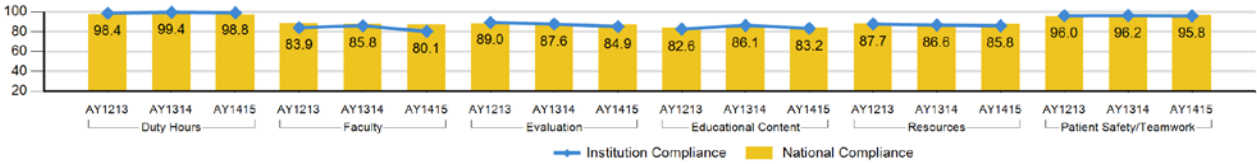


Figure 1: ACGME Resident Survey 2014-15 (aggregate sponsor data)

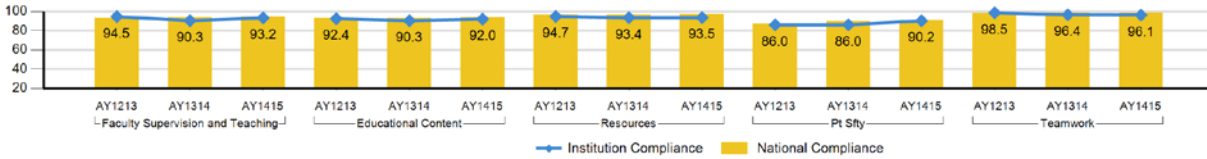


Figure 2: ACGME Faculty Survey 2014-15 (aggregate sponsor data)

### **Graduate Medical Education Office**

The GME Office continued in its role of monitoring and assisting our programs in meeting ACGME reporting standards for milestones and completion of resident/fellow and faculty annual surveys. In addition, the office provided support for two new training programs that applied for initial accreditation during the past academic year. Our new Family Medicine Residency located at MidMichigan Medical Center-Gratiot received initial accreditation and began recruiting this fall for the 2016-17 academic year. Our new Geriatric Psychiatry Fellowship also received initial accreditation and will begin recruiting soon for its first fellowship class.

### **Graduate Medical Education Committee**


The GMEC met quarterly during the past academic year. During each meeting, roundtable discussions were held with contributions from each program director, along with resident representatives. Included in the discussion were:

- Resident supervision—No global concerns regarding resident or fellow supervision were raised.
- Resident responsibilities—The GMEC monitors resident activities with respect to appropriate responsibility for patient care and peer education and found no areas of concern.
- Resident evaluation—With the transition to NAS, each program is responsible for appropriate recording of milestones within the ACGME’s WebADS system. All programs have met designated deadlines for such reporting.
- Duty hour compliance—All duty hour violations as recorded within New Innovations have been cleared by their appropriate programs.
- Resident participation in patient safety and quality of care education—Resident forums are held quarterly, during which a patient safety/quality of care presentation is made. The GMEC receives the same presentation at the quarterly GMEC meetings. In addition, each program has program-specific educational programs addressing this vital area of resident education.
- Resident compensation and benefits—The GME Office and GMEC monitor compensation packages in comparison with statewide data and continue to find that the package presented to our residents and fellows is consistent with those in our state and region.

Because of its relatively unique characteristic of having no teaching hospital, we were not part of the initial round of Clinical Learning Environment Reviews (CLER) performed by the ACGME. However, our programs and institution continue to be involved in providing feedback to our partner institutions within their CLER visits.

**Highlights of each program are attached.**

Respectfully submitted,

A handwritten signature in cursive script that reads "Randolph L. Pearson, MD".

Randolph L. Pearson, MD  
Assistant Dean for Graduate Medical Education  
MSU-CHM

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2014-2015**

**Program Name:** Cardiology Fellowship

**Program Director:** George S. Abela, MD, MSc, MBA, FACC, FNLA

**Major accomplishments over previous year:**

1. The cardiology fellowship program graduated the 53th fellow since it was started in 1995. Graduates are now practicing all around the US and globally.
2. All five third year fellows who graduated last year have passed the Cardiology Board Exams.
3. All 3 fellows who graduated this year are in interventional subspecialty in highly ranked programs.
  - a. Lahey Clinic in Burlington, MA
  - b. University of Texas (UTMB), Galveston, TX & Keiser Permanente, Los Angeles, CA
  - c. Borgess Heart Institute, Kalamazoo, MI

**Research publications/presentations (resident and faculty):**

*Peer Reviewed Publications:*

1. Vemula P, Kalavakunta J, **Abela GS**, Karve M. A Rare and Serious Unforeseen Complication of Cutting Balloon Angioplasty *Case Rep Cardiol* DOI:10.1155/2014/246784.
2. Vemula P, Abela OG, Narisetty K, Rhine D, **Abela GS**. Potassium Toxicity at Low Serum Potassium Levels with Refeeding Syndrome *Am J Cardiol* 115:147-149, 2015.
3. Nasiri M, Huang R, Janoudi A, Vanderberg A, Flegler C, Flegler S, **Abela GS**. Unraveling the Role of Cholesterol Crystals in Plaque Rupture by Altering the Method of Tissue Preparation *Microsc Res Tech* 78:969-974, 2015.
4. Aldasouqi S, **Abela GS**. A call to Eliminate the Fasting pre-requisite for Lipid Testing in Patients with Diabetes and Beyond. *Circulation* 131:e471, 2015.
5. Janoudi A, Shamoun FE, Kalavakunta JK, **Abela GS**. Cholesterol crystal induced arterial inflammation and destabilization of atherosclerotic plaque. *European Heart Journal* doi:10.1093/eurheartj/ehv653.

6. Reddy VY1, Exner DV, Cantillon DJ, Doshi R, Bunch TJ, Tomassoni GF, Friedman PA, Estes NA 3rd, Ip J, Niazi I, Plunkitt K, Banker R, Porterfield J, Ip JE, Dukkipati SR; LEADLESS II Study Investigators Percutaneous Implantation of an Entirely Intracardiac Leadless Pacemaker. *N Engl J Med*. 2015 Sep 17;373(12):1125-35. (Ip J, part of the LEADLESS II Study Investigators)
7. Gibson MC, Krucoff M, Fischell D, **Fischell TA**, Keenan D, Abueg C, Patel C, Holmes D. Rationale and design of the AngeLmed for Early Recognition and Treatment of STEMI trial: a randomized, prospective clinical investigation. [\*Am Heart J\*](#). 2014;168:168-74.
8. Ellis SG, Kereiakes DJ, Metzger DC, Caputo RP, Rizik DG, Teirstein PS, Litt MR, Kini A, Kabour A, Marx SO, Popma JJ, McGreevy R, Zhang Z, Simonton C, Stone GW; ABSORB III Investigators. [\*Everolimus-Eluting Bioresorbable Scaffolds for Coronary Artery Disease\*](#). *N Engl J Med*. 2015;373:1905-15. (Fischell TA, part of the ABSORB III Investigators)
9. **Fischell TA**, Fischell DR, Ghazarossian VE, Vega F, Ebner A. Next generation renal denervation: chemical "perivascular" renal denervation with alcohol using a novel drug infusion catheter. *Cardiovasc Revasc Med*. 2015;16:221-7
10. Kereiakes DJ, Yeh RW, Massaro JM, Driscoll-Shempp P, Cutlip DE, Steg PG, Gershlick AH, Darius H, Meredith IT, Ormiston J, Tanguay JF, Windecker S, Garratt KN, Kandzari DE, Lee DP, Simon DI, Iancu AC, Trebacz J, Mauri L; Dual Antiplatelet Therapy (DAPT) Study Investigators. [\*Antiplatelet therapy duration following bare metal or drug-eluting coronary stents: the dual antiplatelet therapy randomized clinical trial\*](#). *JAMA*. 2015;313:1113-21. (Cohn J listed as part of the DAPT study investigators)
11. Twelve or 30 months of dual antiplatelet therapy after drug-eluting stents. Mauri L, Kereiakes DJ, Yeh RW, Driscoll-Shempp P, Cutlip DE, Steg PG, Normand SL, Braunwald E, Wiviott SD, Cohen DJ, Holmes DR Jr, Krucoff MW, Hermiller J, Dauerman HL, Simon DI, Kandzari DE, Garratt KN, Lee DP, Pow TK, Ver Lee P, Rinaldi MJ, Massaro JM; DAPT Study Investigators. *N Engl J Med*. 2014;371:2155-66. (Cohn J listed as part of the DAPT study investigators)
12. [\*Alsara O, Kalavakunta JK, Hajjar V, Alsarrah A, Cho N, Dhar G\*](#). Surviving sudden cardiac death secondary to anomalous left coronary artery from the pulmonary artery: a case report and literature review. [\*Heart Lung\*](#) 2014;43:476-80.

#### Chapters:

1. Ahmado I, Abela O, Saffia A, Janoudi A, **Abela GS**. Lipid and Inflammation in Atherosclerosis. [\*Lipid Management: From Basics to Clinic\*](#); Hussain Y (Ed.). Springer Science, New York, NY, USA. p37-79, 2015.

2. Kalavakunta J, Hajjar MA, Subramaniym P, **Abela GS**. Landmarks Along the Application of Laser Energy for Cardiovascular Therapy. Topaz O (Ed.) (in press).

*Abstracts & Presentations:*

1. Kotaru P, Janoudi A, Huang R, **Abela GS**. Cholesterol Lowering with Simvastatin and Ezetimibe Inhibits Cholesterol Crystal Formation and Associated Inflammation. *J Am Coll Card* 63:A398; 2014.
2. Raju M, Kalra A, Gardiner J, Janoudi A, **Abela GS**. Interaction between Cholesterol Crystals and Bacteria: Implications for Atherosclerosis. *J Clin Lipidol* 8:A346; 2014.
3. Rao D, Bhavasr B, Hebdon F, Aldasouqi S, **Abela GS**, Gossain V. Course of Subclinical Hyperthyroidism in an Academic Center and Effect on Ventricular Function. ICE/Endo (Chicago, June 2-24) 2014.
4. Baig I, Janoudi A, Huang R, **Abela GS**. The Effect of Sirolimus on Cholesterol Crystal Volume Expansion: Implications for Plaque Stabilization. *Cardiology* (Basel, Switzerland) 2014.
5. Abrar SR, Nasiri J, Sayeed E, Huang R, **Abela GS**. The Direct Effects of Nifedipine on Cholesterol Crystallization and Vulnerable Plaque's. *J Am Coll Card* 65:A410; 2015.
6. Raju M, Kalra A, Gardiner J, Janoudi A, **Abela GS**. Cholesterol Crystals Interaction with Pseudomonas aeruginosa: Implications for Atherosclerosis. *J Clin Lipidol* 9:A179; 2015.

**Honors (resident and faculty):**

**Dr. Manjurath Raju**

- ACC MI 2<sup>nd</sup> prize poster presentation "Interaction with Pseudomonas aeruginosa: Implications for Atherosclerosis"
- GMEI 2<sup>nd</sup> prize Oral presentation "Interaction with Pseudomonas aeruginosa: Implications for Atherosclerosis"

**Dr. Fadi Alreefi**

- Best Teaching Award by the Internal Medicine Residency at MSU

**Dr. George Abela**

- Best Doctors in America 2014
- America's Top Cardiologists 2014
- Nominated, Antonio Gotto Award in Atherosclerosis Research
- Nominated, Distinguished Faculty Award, Michigan State University



**Challenges/opportunities for upcoming year:**

- Coordinating activities with the DO fellowship program, which is moving from McLaren to Sparrow Hospital.

**Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:**

**Patient Care:** Comparing vascular nuclear cardiology readings with coronary angiography which is the gold standard. This will determine if our nuclear cardiology readings are a well matched with angiography.

**Medical Knowledge:** We have now instituted an in training cardiovascular exam with ACC on a yearly basis to monitor fellow progress. Also, this is assessed during monthly and mid-year evaluations based on the various skill sets being taught during rotations.

**Practice-based Learning and Improvement:** This is assessed during monthly and mid-year evaluations based on the various activities during the rotations. This includes providing medical literature at meetings as well as during rounds to improve patient care.

**Interpersonal and Communications Skills:** Patient evaluation forms provide feedback on communication skills. Some of the questions are “The doctor listened to me; The doctor answered my questions fully.”

**Professionalism:** Patient evaluation forms provide feedback on professional skills. “The doctor respected and cared about me.”

**Systems-based Practices:** This is assessed during monthly and mid-year evaluations based on the various activities during the rotations. This is done by assessing when patients are being evaluated for coronary bypass surgery vs. percutaneous interventions as an example. Consultation and discussion with cardiac surgery and interventionalist are conducted by the fellow on the service.

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2014-2015**

**Program Name:** Child and Adolescent Psychiatry Fellowship  
**Program Director:** Madhvi Richards, MD

**Major accomplishments over previous year:**

1. Katherine Krive (fellow) – presentation at AACAP
2. Michael Boivin – Presentation at various international conferences in Africa re: Cognitive disorders and HIV/Cerebral malaria
3. Alyse Ley, DO - Fellow of the American College of Neuropsychiatrists (A.C.N.) Elected and approved by the ACN Board of Governors. AOA Annual Convention –ACN Awards Banquet. Prestigious Certificate and Medallion. October 18, 2015.

**Research publications/presentations (resident and faculty):**

**Mihael Boivin, PhD**

Bangirana P., Opoka R.O., **Boivin M.J.**, Idro R., Hodges J.S., Romero R.A., Shapiro E., & John C.C.: Severe malaria anemia is associated with long-term neurocognitive impairment. *Clinical Infectious Disease*, 1(59): 336-44, 2014.

**Boivin, M.J.**, Vokhiwa, M., Sikorskii, A., Magen, J.G., & N.A.V. Beare: Cerebral malaria retinopathy predictors of persisting neurocognitive outcomes in Malawian children. *Pediatric Infectious Disease Journal* 33(8): 821-824, 2014.

Bumoko, G. M., Sombo, M.T., Okitundu, L.D., Mumba, D.N., Kazadi, K.T., Tamfum-Muyembe, J.J., Lasarev, M., **Boivin, M.J.**, Banea, J.P., & Tshala-Katumbay, D.D.: Biomarker-based association models for predicting cognition deficits in cassava cyanogenic poisoning *Metabolic Brain Disease* 29(2): 359-66, 2014.

Guy Bumoko, Kikandau Kambale, Marie-Therese Sombo, Daniel Okitundu, Jean-Claude Mwanza, **Michael Boivin**, Dieudonne Mumba Ngoyi, Jean-Jacques Muyembe Tamfum, Jean-Pierre Banea, Gerard R Boss, Desire Tshala-Katumbay.: Serum 8,12-iso-iPF2-VI isoprostane marker of oxidative damage and cognition deficits in children with konzo. *PLOS ONE*. 9(9): e107191, 2014.

Daniel Okitundu Luwa E-Andjafono, Guy Bumoko Makila-Mabe, Marie-Thérèse Sombo Safi Ayanne, Jackin Kambale Kikandau, Nicole Mashukano, Théodore Kazadi Kayembe Dieudonné

Mumba Ngoyi, **Michael Joseph Boivin**, Jean-Jacques Tamfum-Muyembe, Jean-Pierre Banea Mayambu, Désiré Tshala-Katumbay: Persistence des épidémies de konzo à Kahemba, République Démocratique du Congo: aspects phénoménologiques et socio-économiques *The Pan African Medical Journal*. 18:213: 11, 2014.

Burkey M, Murray S, Bangirana P, Familiar I, **Boivin M**, Bass J.: Executive function in Ugandan children with attention-deficit hyperactivity disorder. *Global Mental Health* 0: 0, 2014.

Heena Brahmhatt, **Michael Boivin**, Victor Ssempijja, Godfrey Kigozi, Joseph Kagaayi, David Serwadda, Ronald H. Gray: Neurodevelopmental Benefits of Anti-Retroviral Therapy in Ugandan Children 0-6 Years of Age with HIV *NIH Public Access* 67(3): 316-322, 2014.

Paul Bangirana, Robert O. Opoka, **Michael J. Boivin**, Richard Idro, James S. Hodges, Chandy C. John: Neurocognitive domains affected by cerebral malaria and severe malarial anemia in children. *Learning and Individual Differences* 2015: 7, 2015.

Keng-Yen Huang, Janet Nakigudde, Esther Calzada, **Michael J Boivin**, Gbenga Ogedegbe, Laurie Miller Brotman: Implementing an early childhood school-based mental health promotion intervention in low-resource Ugandan schools: study protocol for a cluster randomized controlled trial. *TRIALS* 15: 471, 2015.

Mireku, M.O., **Boivin, M.J.**, Davidson, L.L., Ouédraogo, S., Koura, G.K., Alao, M.J., Massougbdji, A. Cot, Michael Joseph Boivin Oct 01, 2015 17 of 34

Mireku, M.O., **Boivin, M.J.**, Davidson, L.L., Ouédraogo, S., Koura, G.K., Alao, M.J., Massougbdji, A. Cot, M., Bodeau-Livinec, F.: Impact of helminth infection during pregnancy on cognitive and motor functions of one-year-old children *PLOS Neglected Tropical Diseases* 00: 00, 2015.

Matthew D. Burkey, Sarah McIvor Murray, Paul Bangirana, Itziar Familiar, Robert O. Opoka, Noeline Nakasujja, **Michael Boivin**, Judith Bass: Executive function and attention-deficit/hyperactivity disorder in Ugandan children with perinatal HIV exposure. *Global Mental Health* 2, e4: 1-13, 2015.

Bumoko, G M-M; Okitundu, D L; Ngoyi, M D; Muyembe J-J T; Banea, J-P; **Boivin, M J**; Tshala-Katumbay, D: Lower serum levels of selenium, copper, and zinc are related to neuromotor impairments in children with knozo. *Journal of the Neurological Sciences JNS-13602*: 1-5, 2015.

Ruiseñor-Escudero, Horacio; Familiar, Itziar; Nakasujja, Noeline; Bangirana, Paul; Opoka, Robert; Giordani, Bruno; **Boivin, Michael**.: Immunological correlates of behavioral problems in school-aged children living with HIV in Kayunga, Uganda. *Global Mental Health* 2: e9, 2015.

Bruno Giordani, Bryan Novak, Alla Sikorskii, Paul Bangirana, Noeline Nakasujja, Brian M. Winn, **Michael J. Boivin**: Designing and evaluating Brain Powered Games for cognitive training and rehabilitation in at-risk African children. *Global Mental Health* 2: e6, 2015.

Paul Bangirana, Alla Sikorskii, Bruno Giordani, Noeline Nakasujja and **Michael J. Boivin**: Validation of the CogState battery for rapid neurocognitive assessment in Ugandan school age children. *Child and Adolescent Psychiatry and Mental Health* 9:38: 1-7, 2015.

Michael O. Mireku, Leslie L. Davidson, Ghislain K. Koura, Smaila Ouedraogo, **Michael J. Boivin**, Xu Xiong, Manfred M. K. Accrombessi, Achille Massougbodji, Michel Cot, Florence Bodeau-Livinec: Prenatal Hemoglobin Levels and Early Cognitive and Motor Functions of One-Year-Old Children *Pediatrics* 136: 1-10, 2015.

E-Andjafono DO, Makila-Mabe GB, Ayanne MT, Kikandau JK, Mashukano N, Kayembe TK, Ngoyi DM, **Boivin MJ**, Tamfum-Muyembe JJ, Mayambu JP, Tshala-Katumbay D: **Persistence of konzo epidemics in Kahemba, Democratic Republic of Congo: phenomenological and socio-economic aspects** *The West Africal Medical Journal* -: -, 2015.

**Michael J. Boivin**, Angelina M. Kakooza, Benjamin C. Warf, Leslie L. Davidson, Elena L. Grigorenko: Opportunities for research and intervention to reduce child neurodevelopmental disorders and disability in low- and middle-income countries *Nature* 0: 0, 2015.

Keng-Yen Huang, Janet Nakigudde, Esther Calzada, Michael J Boivin, Gbenga Ogedegbe and Laurie M. Brotman: A Cluster Randomized Controlled Trial of an Early Childhood School-Based Mental Health Promotion Intervention in Low-Resource Ugandan Schools: Study Protocol *Implementation Science*. (In Press)

Michael Osei Mireku, Michael J. Boivin, Leslie L. Davidson, Smaila Ouedraogo, Ghislain Kobto Koura, Maroufou Jules Alao, Achille Massougbodji, Michel Cot, Florence Bodeau-Livinec: Impact of Helminth Infection during Pregnancy on Child Cognitive and Motor Functions of One-Year-Old Children *PLOX Neglected Tropical Diseases*. (In Press)

Familiar I, Nakasujja N, Bass J, Sikorskii A, Murray S, Ruisenor-Escudero H, Bangirana P, Opoka R, **Boivin M.**: Caregiver's depressive symptoms and parent report of executive function among young children in Uganda. *Journal of Learning and Individual Differences*. (In Press)

Familiar I, Ruisenor-Escudero H, **Boivin M**: Use of BRIEF and CBCL in Ugandan children with HIV or history of severe malaria *Developmental & Behavioral Pediatrics*. (In Press)

Michael Mireku, Leslie Davidson, Kobto Koura, **Michael Boivin**, Xu Xiong, Manfred Accrombessi, Michel Cot, Florence Bodeau-Livinec: Prenatal Hemoglobin Levels and Early Cognitive and Motor Functions of One-Year-Old Children. *Pediatrics*. (In Press)

Burkey MD, McIvor-Murray S, Opoka R, **Boivin, M**, & Bass, J.: *Construct Validity of the ADHD Rating Scale-IV in HIV-Exposed Ugandan Children*, Translational Science 2014, Washington, DC, 2014.

Magen, J.G., Richards, M., Vokhiwa, M., & **Boivin, M.J.**: *Psychiatric screening and DSM-IV clinical diagnoses confirm attention and defiant behavior problems following cerebral malaria in some Malawian children*, World Psychiatric Association Africa Regional Conference, Kampala, UG, 2014.

Elizabeth E. Schut, Itziar Familiar, Sarah M. Murray, Judy K. Bass, **Michael J. Boivin**: *Caregiver emotional wellbeing, functionality, and home environment quality as they predict cognitive ability in younger Ugandan children with HIV and those exposed to HIV*, 14th Annual MSU/WSU Pediatric Research Day, Detroit, MI, 2015.

Elizabeth Schut, **Michael Boivin**: *Caregiver Emotional Wellbeing, Functionality, and Home Environment Quality As They Predict Cognitive Ability in Younger Ugandan Children with HIV and Those Exposed to HIV*, 2015 Pediatric Academic Societies Annual Meeting, San Diego, CA, 2015.

Itziar Familiar, Horacio Ruisenor-Escudero, **Michael Boivin**, Alla Sikorskii, Sarah Murray, Noeline Nakasujja, Robert Opoka, Judith Bass: *Effect of a year-long parenting program on caregivers mental health and child development: a randomized controlled trial in Uganda*, 7th International Conference on Birth Defects and Disabilities in the Developing World (ICBD2015), Tanzania, 2015.

**Michael Boivin**, Miriam Chernoff, Jane Lindsay, Bonnie Zimmer, Barbara Laughton, Celeste Joyce, Katie McCarthy, Pim Brouwers, Patrick Jean-Philippe, Rohan Hazra, Joan Coetzee, Avy Violari, Mark Cotton, Paul Palumbo: *Feasibility of neuropsychological assessments of HIV-infected children from the IMPAACT P1060 multi-site study in Africa, with HIV-uninfected controls*, 7th International Workshop on HIV Pediatrics, Vancouver, Canada, 2015.

**Michael Boivin**, Miriam Chernoff, Jane Lindsey, Bonnie Zimmer, Barbara Laughton, Celeste Joyce, Katie McCarthy, Pim Brouwers, Patrick Jean-Philippe, Sonia Lee, Joan Coetzee, Avy Violari, Mark Cotton, Paul Palumbo: *Initial findings from IMPAACT P1104s: a neuropsychological evaluation of HIV-infected and uninfected children in sub-Saharan Africa*, 7th International Workshop on HIV Pediatrics, Vancouver, CA, 2015.

. Paul Bangirana, **Michael J. Boivin**, Theodore Ruel, Jane Achan: *Long term effects of PI based ART versus NNRTI based ART on neuropsychological functioning in children*, 7th International Workshop on HIV Pediatrics, Vancouver, Canada, 2015.

Paul Bangirana, **Michael J. Boivin**, Theodore Ruel, Jane Achan : *Long term effect of PI based ART versus NNRTI based ART on neuropsychological functioning in children*, 7th SA AIDS Conference, Durban, 2015.

**Boivin, M.J.**, Giordani, B., Bangirana, P., Sikorskii, A., Nakasujja, N., Opoka, R., Novak, B., Winn, B.: *Computerized cognitive rehabilitation training can improve neuropsychological outcomes in rural school-age Ugandan children with HIV*, AIDS Impact Conference, Amsterdam, 2015.

Johathan Weiss, Ronak Chhaya, Victoria Seffren, Alla Sikorskii, Itziar Familiar, Horacio Ruisenor-Escudero, Noeline Nakasujja, Bruno Giordani, **Michael J. Boivin**: *Automated eye tracking technology improves the sensitivity of an early childhood vigilance test (ECVT) of attention in Ugandan children perinatally exposed to HIV*, AMA Research Symposium, Atlanta, GA, 2015.

Ronak Chhaya, Jonathan Weiss, Victoria Seffren, Alla Sikorskii, Itziar Familiar, Horacio Ruisenor-Escudero, Noeline Nakasujja, Bruno Giordani, **Michael Boivin**: *The use of eye-tracking technology in a modified Fagan test to assess neurocognitive development in rural Ugandan infants exposed to HIV*, AMA Research Symposium, Atlanta, GA, 2015.

Sarah Bliss, Nikita Jambulingam, Eric Spencer, Kelly Ketchum, Jorem Awadu, Alla Sikorskii, Noeline Nakasujja, Bruno Giordani, **Michael Boivin**, Judy Bass: *The relationship between caregiver emotional wellbeing and functionality, and developmental outcomes in preschool-age Ugandan children perinatally exposed to HIV*, American Academy of Developmental Medicine and Dentistry Global Summit on Innovations in Health and Intellectual Disability, Los Angeles, CA, 2015.

Itziar Familiar-Lopez, Horacio Ruisenor-Escudero, **Michael J. Boivin**, Noeline Nakasujja, Robert Opoka, Judith K. Bass: *Mental health of HIV + female caregivers in rural Uganda. Implications for research and programming*, American Society of Tropical Medicine and Hygiene, 64th Annual Meeting, Philadelphia, Pennsylvania, 2015.

**Michael J. Boivin**, Itziar Familiar, Sarah E. Murray, Elizabeth E. Schut, Robert O. Opoka, Paul Bangirana, Noeline Nakasujja, Judy K. Bass: *How caregiver emotional wellbeing, functionality, and quality of caregiving relate to neurocognitive performance in younger Ugandan children perinatally infected by and exposed to HIV*, Annual AIDS Impact Meeting, Amsterdam, Netherlands, 2015.

Elizabeth Schut, Itziar Familiar, Sarah M. Murray, Judy K. Bass, **Michael Boivin**: *Caregiver Emotional Wellbeing, Functionality, and Home Environment Quality As They Predict Cognitive Ability in Younger Ugandan Children with HIV and Those Exposed to HIV*, Flint Area Medical Education Annual Research Day, Flint, MI, 2015.

Elizabeth Schut, Itziar Familiar, Sarah M. Murray, Judy K. Bass, **Michael Boivin**: *Caregiver Emotional Wellbeing, Functionality, and Home Environment Quality As They Predict Cognitive Ability in Younger Ugandan Children with HIV and Those Exposed to HIV*, Flint Area Medical Education Annual Research Day, Flint, MI, 2015.

Elizabeth E. Schut, Itziar Familiar, Sarah M. Murray, Judy K. Bass, **Michael J. Boivin**: *Caregiver emotional wellbeing, functionality, and home environment quality as they predict cognitive ability in younger Ugandan children with HIV and those exposed to HIV*, IMPAACT, Washington DC, 2015.

Itziar Familiar, Horacio Ruisenor-Escudero, Judith Bass, Noeline Nakasujja, Robert Opoka, **Michael Boivin**: *Role of caregiver well-being in the assessment of cognition and behavior of children with HIV and those surviving malaria*, International Developmental Pediatrics (IDP) Congress, Istanbul, Turkey, 2015.

**Michael J. Boivin**, Pnina Klein, Judy K. Bass: *The Mediation Intervention for Sensitizing Caregivers (MISC) Model for Improving Quality of Caregiving, Caregiver Mental Health, Early Childhood Survival and Neurodevelopment*, International Developmental Pediatrics (IDP) Congress, Istanbul, Turkey, 2015.

Nikita Jambulingam, Sarah Bliss, Eric Spencer, Kelly Ketchum, **Michael Boivin**: *The relationship between caregiver emotional wellbeing and functionality, and developmental outcomes in preschool-age Ugandan children perinatally exposed to HIV*, National Annual Conference for the American Academy of Developmental Medicine and Disabilities (AADMD), Los Angeles, CA, 2015.

Itziar Familiar-Lopez, Sarah Murray, H. Ruisenor-Escudero, **M. Boivin**, Judith Bass: *Correlates of Depression and Anxiety in HIV-infected Caregivers in Rural Uganda*, Primary Care Mental Health: Innovation and Transdisciplinarity, Bucharest, 2015.

H. Ruisenor-Escudero, Itziar Familiar, Judith Bass, **Michael Boivin**: *Clinical and Immunological Correlates of Cognitive and Emotional Development In HIV Infected Children Living in Tororo, Uganda*, Primary Care Mental Health: Innovation and Transdisciplinarity, Bucharest, 2015.

### **Alyse Ley, DO**

“Creating Happiness: A training Module to Help Medical Students Develop Resilience and Mindfulness, a Twist on the Foundations of Viktor Frankl.” Alyse Ley, Miko Rose and Jed Magen. Association for Academic Psychiatry 2015 Annual Meeting. Hyatt Regency Riverwalk. San Antonio, Texas. September 19, 2015.

“An Overview of Child Psychiatry.” Teachers/Special Education Annual Meeting. Isabella/Gratiot Co. Regional Education School District. Ithaca, Michigan. August 31, 2015.

“Postpartum Depression and Anxiety.” The American College of Neuropsychiatrists (ACN)/The American College of Osteopathic Neurologists and Psychiatrists (ACONP)-2015 Annual Summer Meeting and Scientific Seminar. Park Place Hotel. Traverse City, Michigan. July 25, 2015.

“Pediatric Depression.” Michigan State University College of Osteopathic Medicine Pediatric Update 2015. East Lansing, Michigan. February 21, 2015.

Title: Eating Disorders in Triathletes.

Primary Investigator: Alyse Ley DO

Co-Investigators: Samantha Kennedy DO

Submitted: 1/30/2015

### **Jeanette Scheid, MD, PhD**

- 2015 Betty Simon Memorial Lecture University of Iowa Carver School of Medicine. “Respecting Uncertainty, Deepening Understanding, Sharing Decisions: Principles to Guide Work with Children and Families”
- 2015 MSU Department of Psychiatry Grand Rounds “Sisyphus Picks Up a Rubik’s Cube: Promoting Health and Mental Health in Child Welfare”
- 2015 Presentation for Michigan Federation for Children and Families Annual Leadership Conference “Promoting Health & Mental Health in Child Welfare: Goals, Practice and Partnership”

### **Brain Smith, MD**

- Summer 2015 Association of Directors of Medical Student Education in Psychiatry (ADMSEP) Annual Meeting, Stowe, Vermont (*Finding Meaning in the Honors Designation and Psychiatry Clinical Simulation Initiative Teaching Modules for Medical Students*)

### **Jed Magen, DO**

Psychiatry Departments Under Constrained Funding Mechanisms, or What is a Chair to Do? Submitted, Academic Psychiatry, August 2015

The Joy Initiative, Positive Psychology for Medical Students Submitted Academic Psychiatry September 2015

Boivin, M. Vokhiwa, M. Sikorskii, A. Magen J. Beare, N. Cerebral malaria predictors of persisting neurocognitive outcomes in Malawian children. Pediatr Infect Dis J (in press)

Graduate Medical Education Funding, American Association of Chairs of Departments of Psychiatry, Orlando, Florida, 2015

The “Joy” Initiative: Preventing Burnout in Medical Students. Association for Academic Psychiatry San Antonio, September, 2015

Muslim Mental Health Conferences: Working with Communities to Address Mental Health October 2015, Davos Switzerland

ACGME Accreditation for Osteopathic Residencies. Annual Osteopathic Medical Education Conference Orlando, Florida, October 2015



American Osteopathic College of Neurology and Psychiatry Honored Fellow Lecture Annual Osteopathic Medical Education Conference Orlando, Florida, October 2015

**Honors (resident and faculty)**

Alyse Ley, DO - Fellow of the American College of Neuropsychiatrists (A.C.N.) Elected and approved by the ACN Board of Governors. AOA Annual Convention –ACN Awards Banquet. Prestigious Certificate and Medallion. October 18, 2015.

**Challenges/opportunities for upcoming year:**

- Recruiting for upcoming years
- Participation in Mid-Michigan Research day
- Expanding our tele-psychiatry sites
- Expanding more research opportunities in Malawi, Uganda, Jordan

**Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:**

- 1. Patient Care**
  - Chart reviews
  - Review of patient outcomes on inpatient unit
  - Rating form
  - Faculty evaluations on all rotations
- 2. Medical Knowledge**
  - Child PRITE Exam
  - Diagnostic assessments (mock boards)
  - Review of charts and records
  - Faculty evaluation
  - Resident Presentations
- 3. Practice-based Learning and Improvement**
  - Resident seminar presentations
  - Required written case presentations
  - Seminar discussions
  - Journal clubs
- 4. Interpersonal and Communications Skills**
  - Staff feedback
  - Survey of patient satisfaction
  - Direct observation
  - Faculty evaluations

**5. Professionalism**

- Faculty evaluations
- Direct observation
- Attendance sheets
- Patient satisfaction survey

**6. Systems-based Practice**

- Faculty evaluation
- Resident Q/A project in outpatient clinic

**7. AOA Competency Osteopathic Manipulative Medicine**

- Approximately 10 hours of seminar in collaboration with Henry Ford Department of Psychiatry Residency Program. (This is added because the Child Psychiatry Program is dually accredited.)

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2014-2015**

**Program Name:** Endocrinology, Diabetes, and Metabolism Fellowship  
**Program Director:** G. Matthew Hebdon, MD

**Major accomplishments over previous year:**

- See Research publications/presentations section.

**Research publications/presentations (resident and faculty):**

1. Akright J, Gammoh E, Aldasouqi S, Krishnan P. A case of adrenal crisis mimicking acute abdomen resulting from medical adherence: Balancing risk and benefit. Michigan Chapter Annual Scientific Meeting, ACP 2015; Williamsburg, MI. Oral presentation.
2. Shahar K, Aldasouqi S, Corser W, Krishnan P, Farhan B, Hsu A, Gruenebaum D. Interim Analysis of the FEEHD Survey: Fasting-Evoked En-Route Hypoglycemia in Diabetes. Michigan Chapter Annual Scientific Meeting, ACP 2015; Williamsburg, MI. Poster presentation.
3. Krishnan P, Aldasouqi S. Report of another case of a pyramidal lobe masquerading as a thyroid nodule. AACE 2015; Nashville, TN. Poster presentation by Krishnan.
4. Krishnan P, Aldasouqi S. A puzzling case of postural arrhythmia in the setting of hyperthyroidism posing a diagnostic challenge. AACE 2015; Nashville, TN. Poster presentation by Krishnan.
5. Krishnan P, Aldasouqi S. Testosterone over 2200: Real or fake? AACE 2015; Nashville, TN. Poster presentation by Krishnan.
6. Krishnan P, Gossain V. Hypercortisolism without clinical stigmata of Cushing's Syndrome: A possible variant of glucocorticoid resistance syndrome. AACE 2015; Nashville, TN. Poster presentation by Krishnan.
7. Aldasouqi S, Corser W, Bhatti F, Hsu A, Krishnan P, Gruenebaum D, Polverento M, Shahar K. Interim analysis of the FEEHD Survey: Fasting-evoked en-route hypoglycemia in diabetes. AACE 2015; Nashville, TN. Poster presentation by Krishnan.
8. Krishnan P, Kakumanu N. Ovarian hyperthecosis causing hyperandrogenism in a postmenopausal woman with normal imaging. Endocrine Society Meeting 2015; San Diego, CA. Poster presentation by Kakumanu.
9. Malhotra N, Rao D, Kakumanu N, Hebdon GM, Gossain VV. Crises Prevention Measures in Patients with Adrenal Insufficiency – Are They Being Followed? AACE 2015; Nashville, TN. Poster presentation by Gossain.

10. Rao D, Bhavsar B, Hebdon G, Aldasouqi S, Abela G, Gossain V. Course of subclinical hyperthyroidism in an academic center and effect on ventricular function. ICE/Endo 2014; Chicago, Illinois. Poster presentation by Rao.
11. Rao D, Aldasouqi S, Ojha M, Tikaria R, Burns T. A case of continued insulin-independence 8 years after islet cell transplantation: A promising remedy for type 1 diabetes. ICE/Endo 2014; Chicago, Illinois. Poster presentation by Rao.
12. Burns T, Rao D, Ojha M, Aldasouqi S. Rapidly progressive Cushing Disease due to Croke Adenoma. ICE/Endo 2014; Chicago, Illinois. Poster presentation by Rao.
13. Tikaria R, Rao D, Aldasouqi S. Large thyroid nodules and FNA. ICE/Endo 2014; Chicago, Illinois. Poster presentation by Tikaria.
14. Malhotra N, Alnazawi R, Gossain V, Gardiner J, Hebdon GM. Osteoporosis Preventive Measures in Patients Receiving Glucocorticoids – Are They Being Practiced? Oral presentation by Malhotra at Michigan AACE Annual Meeting 2014, Traverse City, MI. Also presented as poster presentation at AACE 2015; Nashville, TN by Gossain.
15. Malhotra N, Aldasouqi S, Kakumanu N. Hyperthyroxinemia after Parathyroidectomy for Tertiary Hyperparathyroidism. Poster presentation by Malhotra at ENDO 2015, San Diego, CA.
16. Ojha M, Hebdon GM, Aldasouqi S, Gossain VV. Normocalcemic Hyperparathyroidism: Prevalence and Natural History. Poster presented by Ojha at ENDO 2015, San Diego, CA.
17. Aldasouqi S, Grunberger G. The Traditions and Risks of Fasting for Lipid Profiles in Patients with Diabetes. *Postgraduate Medicine* 2014;126(6):10 pages – publication pending.
18. Hamati T, Aldasouqi S, Hebdon GM, Ansar S, Gossain V. A case report of unfolding Graves' disease which confirms the proposed pathogenesis of thyroid autoimmunity. *Endocrinology, Diabetes and Metabolism Case Reports*. Submitted Feb 2014.
19. Gossain V, Gardiner J, Rosenman K, Tang X. Prevalence of Diabetes and Other Cardiovascular Risk Factors Among US Autoworkers. *Journal of Endocrinology, Diabetes & Obesity*
20. MSMS 2014 Annual Scientific Meeting, Endocrinology/Diabetes Updates, October 2014; Troy, MI
  - a. G. Matthew Hebdon, MD, PhD. *Updates in Pharmacologic Treatment of Obesity*
  - b. Naveen Kakumanu, MD. *BLP-1 Agonists in Treatment of Diabetes Mellitus*
  - c. Saleh Aldasouqi, MD. *Interpretation of Thyroid Function Tests and Clinical Role of T3/T4 in Replacement*
  - d. Ved Gossain, MD, FACP, FACE, FRCP. *Osteoporosis Treatment: Who? What? When?*

**Honors (resident and faculty):**

- Dr. Saleh Aldosouqi became Division Chief

**Challenges/opportunities for upcoming year:**

- Incorporating two new fellows into existing program.

**Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:**

**Patient Care:**

- Reviewed by attending physician during rounds and clinic.

**Medical Knowledge:**

- Reviewed by attending physician during rounds and clinic

**Practice-based Learning and Improvement:**

- All fellows do QI which is part of their annual review.

**Interpersonal and Communications Skills:**

- Full 360°evaluation during annual review.

**Professionalism:**

- Full 360°evaluation during annual review.

**Systems-based Practices:**

- Covered by attendings with fellows a part of the improvement plans.

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year 2014-2015**

**Program Name:** General Adult Psychiatry Residency

**Program Director:** Alyse A Ley, D.O

**Major accomplishments over previous year:**

1. Continued expansion of telepsychiatry services throughout the state to underserved areas and incorporation of the residents into the telepsychiatry program
2. Continued compliance with ACGME rules, supervision requirements and hand off procedures.
3. Commendation from the ACGME and continued accreditation.
4. Appointment of faculty member- Miko Rose
5. Expansion of elective rotations for resident in Malawi, Uganda, Tokyo and Mexico
6. Collaboration with psychiatrists in Merida, Mexico on international learning series
7. Resident exchange with Merida
8. Collaboration with Jordanian Psychiatrists
9. APA SAMSHA Minority Fellowship-Nicole Albrecht MD
10. Nicole Albrecht MD-MPS Resident President
11. Daniel Dawis DO-MPS Resident President Elect
12. Continued publication of the Muslim Mental Health Journal
13. Hosted the annual Muslim Mental Health Conference
14. Integrated Psychiatry/Family Medicine clinical experience
15. FM/IM/Psychiatry integrated quarterly conference

**Senior Research presentations December 2014.**

Daniel Cote, DO – “The Effects of Mindfulness on Anxiety and Wellbeing in Medical Students”

Miko Rose, DO – “The Joy Initiative: Is it possible to make medical students happier?”

**Senior Research presentations June 2015.**

Rebecca Brown, DO – “Does ADHD occur at a higher rate in children post cerebral malaria versus controls? – A proposed study”

Attiya Kidwai, MD – “Describing Population of BIRCH and Evaluating Integrated Health Care: A cross-sectional evaluation of randomly selected chart reviews of patients enrolled at Birch Health Center from 2012-2014”

**Senior Research presentations August 2015.**

Jamie Arnold, DO – “SSRIs: Semi-Sinister or Relatively Innocuous in Pregnancy?”

Ruth Baer, DO – “Detecting Disordered Eating in the Athletic Population”

Junko Yasuda-Free, DO – “Benzodiazepine Use in Treatment of Depression”

**Research publications/presentations (resident and faculty):**

Al Aniskiewicz PhD-Invited lecturer, Warsaw Poland. University of Warsaw, Psychotherapy in Multiple Sclerosis.

Based Mental Health Promotion Intervention in Low-Resource Ugandan Schools: Study Protocol *Implementation Science*. (In Press)

Boivin, M. *Neurodevelopmental and neuropsychological benefits of rehabilitative interventions for Ugandan children affected by severe malaria and by HIV.*, University of Michigan, Hillman Scholars, January 2015, Ann Arbor, MI

Boivin, M. *Developmental, Neuropsychological and Physical Growth Outcomes Among HIV Exposed Uninfected Infants Who Are Exposed to Antiretroviral Drugs*, PROMISE Study Team Meeting, June 2015, Arlington Virginia.

Boivin, M. *P1104s state of the substudy address: realizing the vision*, International Maternal Pediatric Adolescent AIDS Clinical Trials Network (IMPAACT), June 2015, Arlington, VA.

Bumoko, G M-M; Okitundu, D L; Ngoyi, M D; Muyembe J-J T; Banea, J-P; Boivin, M J; Tshala-Katumbay, D: Lower serum levels of selenium, copper, and zinc are related to neuromotor impairments in children with kono. *Journal of the Neurological Sciences JNS*-13602: 1-5, 2015.

Bruno Giordani, Bryan Novak, Alla Sikorskii, Paul Bangirana, Noeline Nakasujja, Brian M. Winn, Michael J. Boivin: Designing and evaluating Brain Powered Games for cognitive training and rehabilitation in at-risk African children. *Global Mental Health* 2: e6, 2015.

Cohen, J.A., Scheid, J.M., Gerson R. Transforming trajectories for traumatized children. *Journal of the American Academy of Child & Adolescent Psychiatry* 53(1): 9-13. 2014.

A Comparison of Long-Acting Injectable Medications For Schizophrenia (ACLAIMS). Principal Investigator. Sponsor NIMH. 2011 to present.

Dwamena FC, Laird-Fick H, Freilich L, D’Mello D, Frey J, Dasari A, Grayson-Sneed K, Smith RC: Behavioral Health Problems in Medical Patients. *J Clin Outcomes Management*. 2014;21(11):497-505.

E-Andjafono DO, Makila-Mabe GB, Ayanne MT, Kikandau JK, Mashukano N, Kayembe TK, Ngoyi DM, Boivin MJ, Tamfum-Muyembe JJ, Mayambu JP, Tshala-Katumbay D: Persistence of kono epidemics in Kahemba, Democratic Republic of Congo: phenomenological and socio-economic aspects *The West African Medical Journal* -: -, 2015.

Title: Effect of Student Class Attendance in the First Two Years of Medical School on Preparedness and Transition to the Clinical Clerkships

Primary Investigator: Brian Smith MD      Co-Investigator: Alyse Ley DO

Submitted: 8/16/13

Faculty-Center for Rural Health at Michigan State University-Broadcast throughout state of Michigan to multiple sites

Familiar I, Nakasujja N, Bass J, Sikorskii A, Murray S, Ruisenor-Escudero H, Bangirana P, Opoka R, Boivin M.: Caregiver's depressive symptoms and parent report of executive function among young children in Uganda. *Journal of Learning and Individual Differences*. (In Press)

Familiar I, Ruisenor-Escudero H, Boivin M: Use of BRIEF and CBCL in Ugandan children with HIV or history of severe malaria *Developmental & Behavioral Pediatrics*. (In Press)

Gambhir S, Sandersfeld N, D'Mello D: A Case of Severe, Refractory Antipsychotic-Induced Orthostatic Hypotension. *Medical Student Research Journal* 2014;4(Fall):15-17.

Getzen H, Beasley M, D'Mello DA: Barriers faced by Psychiatrists in Utilizing Long-Acting Injectable Antipsychotics. *Annals of Clinical Psychiatry*. 2014.

“Graduate Medical Education Financing” Jed Magen, DO, MS, Madhvi Richards, MD and Alyse Ley, DO – Workshop on GME funding at AADPRT-National Conference. March 2011, 2012, 2014, 2015.

Keng-Yen Huang, Janet Nakigudde, Esther Calzada, Michael J Boivin, Gbenga Ogedegbe, Laurie Miller Brotman: Implementing an early childhood school-based mental health promotion intervention in low-resource Ugandan schools: study protocol for a cluster randomized controlled trial. *TRIALS* 15: 471, 2015.

Ley, A, “Childhood Depression” Michigan State University Department of Family Medicine Residency Program. Sparrow Hospital. East Lansing, Michigan. March 6, 2014.

Ley, A. “Creating Happiness: A training Module to Help Medical Students Develop Resilience and Mindfulness, a Twist on the Foundations of Viktor Frankl.” Alyse Ley, Miko Rose and Jed Magen. Association for Academic Psychiatry 2015 Annual Meeting. Hyatt Regency Riverwalk. San Antonio, Texas. September 19, 2015.

Ley, A, “Homicidal Ideation Presenting in an Outpatient Setting” Grand Rounds Presentation. MSU Department of Psychiatry. Michigan State University. East Lansing, Michigan. September 11, 2014.

Ley A, Title: The Joy Initiative: A Study of the Efficacy of Mindfulness and Joy-Focused Psychosocial Interventions on Wellness in Nursing and Medical Students  
Primary Investigator: Alyse Ley DO      Co- Investigators-Miko Rose DO, Dale D'Mello MD, Daniel Cote DO



Ley, A. "An Overview of Child Psychiatry." Teachers/Special Education Annual Meeting. Isabella/Gratiot Co. Regional Education School District. Ithaca, Michigan. August 31, 2015.

Ley, A. "Pediatric Depression." Michigan State University College of Osteopathic Medicine Pediatric Update 2015. East Lansing, Michigan. February 21, 2015.

Ley, A. "Postpartum Depression and Anxiety." The American College of Neuropsychiatrists (ACN)/The American College of Osteopathic Neurologists and Psychiatrists (ACONP)-2015 Annual Summer Meeting and Scientific Seminar. Park Place Hotel. Traverse City, Michigan. July 25, 2015.

Ley, A, "Understanding Suicide" Grand Rounds Presentation. MSU Department of Psychiatry. Michigan State University. East Lansing, Michigan. January 9, 2014.

Magen J, Boivin M, Richards M, Psychiatric Screening and DSM IV clinical diagnosis confirm attention and defiant behavior problems following cerebral malaria in Malawian children, State Wide Campus System Research Poster Day, College of Osteopathic Medicine, MSU, East Lansing, MI

Matthew D. Burkey, Sarah McIvor Murray, Paul Bangirana, Itziar Familiar, Robert O. Opoka, Noeline Nakasujja, Michael Boivin, Judith Bass: Executive function and attention-deficit/hyperactivity disorder in Ugandan children with perinatal HIV exposure. *Global Mental Health* 2, e4: 1-13, 2015.

Michael J. Boivin, Angelina M. Kakooza, Benjamin C. Warf, Leslie L. Davidson, Elena L. Grigorenko: Opportunities for research and intervention to reduce child neurodevelopmental disorders and disability in low- and middle-income countries *Nature* 0: 0, 2015.

Michael O. Mireku, Leslie L. Davidson, Ghislain K. Koura, Smaila Ouedraogo, Michael J. Boivin, Xu Xiong, Manfred M. K. Accrombessi, Achille Massougbdji, Michel Cot, Florence Bodeau-Livinec: Prenatal Hemoglobin Levels and Early Cognitive and Motor Functions of One-Year-Old Children *Pediatrics* 136: 1-10, 2015.

Michael Mireku, Leslie Davidson, Kobto Koura, Michael Boivin, Xu Xiong, Manfred Accrombessi, Michel Cot, Florence Bodeau-Livinec: Prenatal Hemoglobin Levels and Early Cognitive and Motor Functions of One-Year-Old Children. *Pediatrics*. (In Press)

Michael Osei Mireku, Michael J. Boivin, Leslie L. Davidson, Smaila Ouedraogo, Ghislain Kobto Koura, Maroufou Jules Alao, Achille Massougbdji, Michel Cot, Florence Bodeau-Livinec: Impact of Helminth Infection during Pregnancy on Child Cognitive and Motor Functions of One-Year-Old Children *PLOX Neglected Tropical Diseases*. (In Press)

Mireku, M.O., Boivin, M.J., Davidson, L.L., Ouédraogo, S., Koura, G.K., Alao, M.J., Massougbdji, A. Cot, M., Bodeau-Livinec, F.: Impact of helminth infection during pregnancy

on cognitive and motor functions of one-year-old children *PLOS Neglected Tropical Diseases* 00: 00, 2015.

Paul Bangirana, Alla Sikorskii, Bruno Giordani, Noeline Nakasujja and Michael J. Boivin: Validation of the CogState battery for rapid neurocognitive assessment in Ugandan school age children. *Child and Adolescent Psychiatry and Mental Health* 9:38: 1-7, 2015.

Paul Bangirana, Robert O. Opoka, Michael J. Boivin, Richard Idro, James S. Hodges, Chandy C. John: Neurocognitive domains affected by cerebral malaria and severe malarial anemia in children. *Learning and Individual Differences* 2015: 7, 2015.

Title: Perinatal Depression: Physician Attitudes on Screening and Educating Patients.  
Primary Investigator: Alyse Ley DO Co-Investigators-Nicole Albrecht MD, Daniel Dawis DO  
Submitted: 8/15/14

A Phase 2, Multicenter, Open-label Study to Assess the Safety and Tolerability of OPC-34712 as Adjunctive Therapy in Adult Patients with Major Depressive Disorder. Co-Investigator. Sponsor Otsuka. 2010 to present.

Prerost F, Sefcik D, Smith BD. Differential Diagnosis of Patients Presenting with Hallucinations. *Osteopathic Family Physician* 2014; 2:19-24.

Quinlan P, 2013-present, Data Safety Monitoring Board Member: Telemonitoring Enhanced Support for Depression Self-Management, NIH award 1R01MH096699-01A1 PI-James Aikens

Quinlan P, 2012-present, MSU Chair for National Institutes of Health's Introduction to the Principles and Practice of Clinical Research

Quinlan P, 2006-present, Research Training Director-Introduction to Psychiatry Research for Medical Students

Quinlan P, 2009-present, Standardization of Codebooks from the National Institute of Mental Health Clinical Trials Limited Access Datasets IRB# x09-592

RAISE - Early Treatment Program (ETP) - [RAISE (Recovery After an Initial Schizophrenia Episode)]Principal Investigator. Sponsor NIMH. 2010 to present.

Richards, M., February 2014, Psychiatric Screening and DSM IV clinical diagnosis confirm attention and defiant behavior problems following cerebral malaria in Malawian children, World Psychiatric Association Regional Meeting, Kampala, Uganda

Rose, M., Ley, A., Cote, D., D'Mello, D., Magen, J., Baer, R., "The Joy Initiative: A Pilot Study of Positive Psychiatry and Mindfulness on Levels of Life-Satisfaction and Wellness in Medical Students." Submitted, *Academic Psychiatry*, August 2015.

Ruiseñor-Escudero, Horacio; Familiar, Itziar; Nakasujja, Noeline; Bangirana, Paul; Opoka, Robert; Giordani, Bruno; Boivin, Michael.: Immunological correlates of behavioral problems in school aged children living with HIV in Kayunga, Uganda. *Global Mental Health* 2: e9, 2015.

Scheid J., 2013-2014, AACAP Advocacy and Collaboration Grant

Smith, B., and Ley A., “*The Importance of Faculty-Student Interaction in a Blended, Multi-Campus Medical School Course.*” *Academic Psychiatry: Educational Resource Column.* Submitted February 2014.

Smith BD. Looks Can Be Deceiving. *AAP Medical Student News* 2015;26:2.

Smith, B, Summer 2014, ADMSEP Annual Meeting, Keystone, Colorado (Workshop: *Using Small Groups to Address Medical Student Mental Health*)

Smith, B. Summer 2015, ADMSEP Annual Meeting, Stowe, Vermont. (Workshop: *Finding Meaning in the Honors Designation and Psychiatry Clinical Simulation Initiative Teaching Modules for Medical Students.*)

## **Boivin M - GRANTS**

### **Active**

RO1 HD073296 (Boivin, Fowler)  
NIH/NICHD

08/01/2012 – 07/30/2017  
\$2,396,524

*Developmental and Growth Outcomes for ARV Exposed HIV Uninfected African Children.*  
This study will be embedded within the NIH IMPAACT-sponsored PROMISE clinical trials on the pre- and post-natal use of different regimens of ARV to prevent mother-to-child transmission of HIV. We will evaluate the neurodevelopmental (12 and 24 months of age) and neuropsychological (60 months of age) effects of duration and type of exposure to ARV for children born to mothers in this clinical trial. This study will take place at the Uganda and Malawi PROMISE study sites, and will also evaluate neurological and hematological outcomes.  
Role: PI

3R01HD070723 (Boivin, Bass)  
NIH/NICHD

03/01/2013 – 02/30/2017  
\$823,339

*Type 3 Supplemental Grant: Enhancing Ugandan HIV-affected child development with caregiver training.*

We will evaluate the effectiveness of our caregiver training intervention within a randomized controlled trial (RCT) for both HIV-infected and affected Ugandan children in the household, in addition to the target child. This study emphasizes both developmental outcomes for the children, quality of caregiving at home, and psychosocial benefit outcomes for caregivers. Role: PI

R01HD070723 (Boivin, Bass)

08/01/11 – 07/31/16

NIH/NICHD \$2,304,641  
*Enhancing Ugandan HIV-affected child development with caregiver training.*  
 We will evaluate the effectiveness of our caregiver training intervention within a randomized controlled trial (RCT) for both HIV-infected and affected Ugandan children. This study emphasizes both developmental outcomes for the children, quality of caregiving at home, and psychosocial benefit outcomes for caregivers. Role: PI

D43TW009082 (John) 06/01/11 - 05/31/16  
 NIH/FIC \$207,856 (annual direct cost)  
*Research training in infection and neurodevelopment in Uganda.*  
 Training will include an emphasis on infection-related long-term morbidity, a diverse mix of trainees from multiple disciplines and at all levels, integrated core training that is required of all degree students, and development of mentorship capacity for Ugandan faculty as part of the training program. Role: Mentor

R01HD064416 (Boivin, Nakasujja) 04/01/2011-03/31/2016  
 NIH/NICHD \$2,554,870  
*Computerized cognitive rehabilitation in children after severe malaria.*  
 This study will evaluate the neuropsychological benefits of computerized cognitive rehabilitation therapy (CCRT) for Ugandan school children surviving severe malaria. Role: PI

R01ES019841 (Tshala-Katumbay) 04/01/2011-03/31/2016  
 NIH/NIEHS \$1,684,676  
*Toxicodietary and Genetic Determinants of Susceptibility to Neurodegeneration.*  
 This study will evaluate cassava toxins and the occurrence of a motor system disease, known as konzo, in the DR Congo with field assays to evaluate the pathogenic mechanisms of cassava neurotoxicity on human motor and cognitive abilities. Role: Co-I

R01HD074261 (Butler) 08/01/2012 – 06/30/2016  
 NIH/NICHD  
*Comparative Effectiveness of Pediatric HIV Disclosure Interventions in Uganda.*  
 The results of the proposed trial will provide much needed evidence as to the effectiveness of a holistic cognitive-behavioral intervention designed to support caregivers and their HIV-infected children through the process of disclosure, compared to counseling offered to caregivers as per standard practice. Importantly, the study will examine both short- and long-term effects of the intervention and disclosure, and will explore the association between child and caregiver cognitive ability and disclosure outcomes. Role: Consultant

R01HD071664 (van der Kouwe, Willem, Meintje, Laughton) 09/01/11-06/30/16  
 NIH/NICHD  
*Longitudinal Neuroimaging and Cognitive Study of HIV-Infected Children.*  
 MRI neuroimaging and neurodevelopmental assessment at 5, 7 and 9 years of 124 HIV infected South African children and 44 controls that have been followed since birth from the CHER clinical trial with early ART (40 weeks), ART at 90 weeks, and deferred ART (not till clinically needed). Role: Consultant

D43TW009608-01 (Taiwo) 7/01/2013-6/30/2018  
*D43 grant for a NeuroAIDS research training program at the University of Ibadan, Nigeria (UI)*  
This 5-year grant brings experts from University of Illinois, UNC, Northwestern, University of Chicago, Harvard, Michigan State University, and the University of Buffalo together to develop NeuroAIDS research excellence at UI. Role: Advisory Board Member

D43TW009609-01 (Taha) 9/01/2013-8/31/2018  
*Training in HIV-related Non-communicable Disease Complications in Malawi*  
To train Malawian scientists from diverse fields (physicians, nurses, technologists, basic scientists, epidemiologists, data analysts, etc.) to strengthen research capacity for better diagnosis and research, clinical management, and etiologic research in HIV-related NCD complications.  
Role: Mentor

University of Michigan Global Reach Faculty-Mentored Structured Summer Overseas Projects for Medical Students. (Giordani, Boivin) 06/01/2013-8/31/2016  
UM Medical School Global Reach Program \$20,000/year for 3 Years  
*Cognitive Rehabilitation with HIV positive Children in Uganda.*  
This project sponsors UM medical students each summer between their M1 and M2 years for an 8-week cognitive rehabilitation research program with Ugandan HIV school children. Role: Co-I

2R01NS055349 (John) 01/2014 – 12/2018  
NIH/NINDS \$2,710,531  
*Neurodevelopmental outcomes in children with severe malaria.*  
Role: Co-I

R21TW010004 (Tshala-Katumbay) 04/2014 – 03/2016  
Fogarty International Center/NINDS/NIH \$200,000  
*Onchocerciasis-associated neurodevelopmental deficits: the hit squad.*  
Role: Other

R01HD080467 (Cotton, Mark) 04/2014 – 03/2019  
NIH/NICHHD \$3,747,020  
*Latent reservoir characterization and correlations with neurocognitive functioning.*  
Role: Other

1R01HD081985-01A1 (Sharp, Carla) 09/2015 – 08/2018  
NIH \$296,736/year for three years  
*MISC-CBO: A community-based intervention for HIV affected children.*  
Role: Co-I

**Completed**  
13-CTSI-204 (Boivin, Winn) 11/01/2013-12/31/2014

Michigan State University Clinical Translational Science Institute (CTSI) \$25,000 (Psychiatry cost share)

*Pilot testing of Brain Powered Games for cognitive rehabilitation of Ugandan children with HIV*

This grant is to continue pilot testing of the neuropsychological benefits of Brain Powered Games computer package and obtain clinical lab results in Ugandan HIV children in Kayunga.

Role: PI

International AIDS Society CIPHER award (Bangirana) 05/01/2013-04/30/2015

Collaborative Initiative for Paediatric HIV Education and Research (CIPHER) Grant Programme \$128,000. *Does HIV subtype moderate ART effect on neurocognitive functioning in children?*

This project is to evaluate HIV-I subtype effects on neuropsychological function in Uganda children in Tororo. Role: Mentor

R21MH097115 (Huang)

5/01/2013-2/30/2015

NIH/NICHHD

*Disseminating a School Based Child Mental Health Prevention Program in Uganda.*

Four specific research questions will be studied: 1) what is the capacity of Ugandan public schools in delivering a health promotion program? 2) Is it feasible to have teachers to deliver the child program in such schools? 3) What are the potential barriers in implementing such a program in these schools? 4) What are the teachers' cultural beliefs, knowledge and skills in child development and key health issues? Role: Consultant

Canada Ministry of Health/Grand Challenges (Tumwine) 9/01/2012-8/31/2014

Grand Challenges Canada Saving Brains \$1,000,000

*Neuropsychological Assessment Battery for 5 to 7 yr old Rural African Children in Uganda and Burkina Faso.*

Exclusive breastfeeding (EBF) has been associated with better cognition in some developed countries. In this project scientists from Makerere University (Uganda) and Centre Muraz (Burkina Faso) will assess whether EBF promotion enhances human capital formation including cognitive function, mental and general health, among a cohort of 5-7 year old children.

Role: Consultant

12-DFI-COM (Boivin)

7/01/2012-6/30/2014

Michigan State University VPRGS Office

\$48,000 (COM cost share \$12,000)

*Neuropsychological benefits of cognitive training in school-age Ugandan HIV children.*

This is a preliminary study of the neurocognitive and psychosocial benefits of Brain Powered Games computer package in school-age children with HIV in Kayunga, Uganda. Role: PI

R34MH084782 (Boivin)

03/01/2010-02/28/2014

NIH/NIMH

\$571,163

*Neuropsychological Benefits of Cognitive Training in Ugandan HIV Children.*

This study will evaluate the neuropsychological benefits of computerized cognitive rehabilitation therapy (CCRT) for Ugandan school children with HIV. Role: PI

MSU Discretionary Funding Initiative (DFI) (Boivin)

09/01/2012 – 08/21/2014

Office of the Vice President for Research and Graduate Studies \$60,000  
*Neuropsychological Benefits of Cognitive Training in Ugandan and Kenyan HIV Children.*  
Development of mobile-network based cognitive rehabilitation programs (Brain Powered Games or BPG) for submission of an RO1 type 3 supplement submission for RO1HD064416 (PI: Boivin, Nakasujja). This study is entitled “Computerized Cognitive Rehabilitation in Children after Severe Malaria.” Role: PI

RO1NS055349 (John) 5/01/2008-3/30/2014  
NIH/NINDS \$2,660,830

*Pathogenesis of Cognitive/neurologic Deficits in Central Nervous System Malaria (Uganda).*  
This study investigates the association of immunologic factors with neurocognitive sequelae in Ugandan children with severe malaria. Role: Co-I

U01HD064698 (John) 10/01/2009 – 01/30/2014  
NIH/NICHD \$1,218,000

*Acute vs. Delayed Iron Therapy: Effect on Iron Status, Anemia and Cognition.*  
This project’s goal is to study the neurocognitive impact of early versus late iron supplement treatment for severe malaria anemia in Ugandan children. Role: Other Significant Contributor

UM1 AI068632 (Boivin) 06/01/2012 – 05/31/2015  
NIH/DAIDS \$480,300

*A Longitudinal Developmental and Neuropsychological Assessment of the P1060 Clinical Trial Cohorts and HIV-uninfected Controls*

I am serving as Protocol Chair for substudy P1104s, whereby children at seven of the P1060 clinical trial sites will be co-enrolled for a neuropsychological evaluation of the outcomes for the two principal treatment arms (Nevirapine and Kaletra) of IMPAACT-sponsored P1060 clinical trials. Both HIV-exposed (noninfected) and non-exposed reference groups will be recruited from the study sites.

Role: Protocol Chair

Collaborative Initiative for Paediatric HIV Education and Research (CIPHER) Grant Programme  
International AIDS Society \$128,000 (07/01/2013- 06/24/2015)

*Does HIV subtype moderate ART effect on neurocognitive functioning in children?*

Aim 1: To compare neurocognitive outcomes in children with subtype A and D who are on HAART. The *working hypothesis* here is that subtype A is more pathogenic in the brain than subtype D and this will manifest in lower neurocognitive scores in the subtype A group. Aim 2: To examine the moderating effect of HIV subtype on HAART’s ability to improve neurocognitive outcomes.

Role: Mentor

### **Federal and Other Research Grants:**

1. 196-212. R01HD070723 (Boivin, Bass) 08/01/11 – 07/31/16  
NIH/NICHD \$2,304,641

*Enhancing Ugandan HIV-affected child development with caregiver training.*

We will evaluate the effectiveness of our caregiver training intervention within a randomized controlled trial (RCT) for both HIV-infected and affected Ugandan children. This study emphasizes both developmental outcomes for the children, quality of caregiving at home, and psychosocial benefit outcomes for caregivers. Role: PI

2. D43TW00982 (John) 06/01/11 – 05/31/16  
NIH/FIC \$207,856 (annual direct cost)

*Research training in infection and neurodevelopment in Uganda.*

Training will include an emphasis on infection-related long-term morbidity, diverse mix of trainees from multiple disciplines and at all levels, integrated core training that is required of all degree students, and development of mentorship capacity for Ugandan faculty as part of the training program. Role: Mentor

3. R01HD064416 (Boivin, Nakasujja) 04/01/2011-03/31/2016  
NIH/NICHD \$2,554,870

*Computerized cognitive rehabilitation in children after severe malaria.*

This study will evaluate the neuropsychological benefits of computerized cognitive rehabilitation therapy (CCRT) for Ugandan school children surviving severe malaria. Role: PI

4. R01ES019841 (Tshala-Katumbay) 04/01/2011-03/31/2016  
NIH/NIEHS \$1,684,676

*Toxicodietary and genetic determinants of susceptibility to neurodegeneration.*

This study will evaluate cassava toxins and the occurrence of a motor system disease, known as konzo, in the DR Congo with field assays to evaluate the pathogenic mechanisms of cassava neurotoxicity on human motor and cognitive abilities. Role: Co-I

5. U01HD064698 (John) 10/01/2009 – 01/30/2014  
NIH/NICHD \$1,218,000

*Acute vs. delayed iron therapy: effect on iron status, anemia and cognition.*

This project's goal is to study the neurocognitive impact of early versus late iron supplement treatment for severe malaria anemia in Ugandan children. Role: Other Significant Contributor

6. RO1 HD073296 (Boivin, Fowler) 07/01/2012 – 06/30/2017



NIH/NICHD

\$566,817

*Developmental and Growth Outcomes for ARV Exposed HIV Uninfected African Children.*

This study will be embedded within the NIH IMPAACT-sponsored PROMISE clinical trials on the pre- and post-natal use of different regimens of ARV to prevent mother-to-child transmission of HIV. We will evaluate the neurodevelopmental (12 and 24 months of age) and neuropsychological (60 months of age) effects of duration and type of exposure to ARV for children born to mothers in this clinical trial. This study will take place at the Uganda and Malawi PROMISE study sites, and will also evaluate neurological and hematological outcomes. Role: PI

**Honors (resident and faculty):**

1. Nicole Albrecht M.D. –MPS President, AAAP-grant for conference, SAMHSA fellowship
2. Daniel Dawis DO-MPS- President Elect
3. Nicholas Sandersfeld D.O.-SHELF review for med students
4. Junko Yasuda Free DO- AAGP-conference grant
5. Jed Magen – April 2014: Second place in SCS Research Day, Faculty Poster
6. Alyse Ley DO, Dale D’Mello and Farha Abbasi MD-work mentioned in MSU Annual Report on Diversity and Inclusion
7. Jeanette Scheid MD- Betty Simon Memorial Lecture University of Iowa Carver School of Medicine

**Challenges/opportunities for upcoming year:**

1. Expanded general residency international electives-Malawi, Uganda, Japan, Mexico
2. NAS/Milestone implementation
3. Participation in Lansing Community Research Day
4. Recruiting for upcoming years:  
Given our unusual funding mechanisms and the fact that we participate in both the DO and MD match, we vary the numbers of first year residents we take each year and generally have 4-5 PGY-1’s in any given year. We have flexibility to take a second year resident if we have a qualified applicant. We also do not have resident driven services, so that we have maximum flexibility in terms of resident numbers.

**Briefly address at least one way your program addresses each of the ACGME Core Competencies:**

**1. Patient care**

- Chart reviews
- Review of patient outcomes on inpatient unit
- Rating form
- Faculty evaluation on all rotations
- Handoff Procedures

**2. Medical Knowledge**

- Clinical Skills Evaluation

PRITE Exam  
Board Review Series  
Required seminars and didactics

**3. Practice-based learning and improvement**

Resident seminar presentations  
Required written case presentations  
Seminar discussions  
Journal clubs

**4. Interpersonal and communications skills**

Staff feedback  
Survey of patient satisfaction  
Direct observation  
Faculty evaluations

**5. Professionalism**

Faculty evaluations  
Direct observation  
Attendance sheets  
Patient satisfaction survey

**6. Systems-based practice**

Faculty evaluation  
Resident Q/A project in outpatient clinic

**7. (AOA Competency) Osteopathic Manipulative Medicine**

Approximately 16 hours of seminar in collaboration –Statewide Campus System May 2015

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2014-2015**

**Program Name:** Hematology/Oncology  
**Program Director:** Anas Al Janadi, MD

**Major accomplishments over previous year:**

1. Maintaining a 100% pass rate for the board exam.
2. Fellows participated with abstract poster presentations at the American Society of Hematology (ASH) and the American Society of Clinical Oncology (ASCO) annual meeting.
3. Fellows are involved in basic hematology and cancer research in collaboration with various departments and faculty at Michigan State University.

**Honors (resident and faculty):**

1. Two fellows were awarded for their research presentation at the GMEI Lansing Research Day (1<sup>st</sup> and 2<sup>nd</sup> place awards).

**Challenges/opportunities for upcoming year:**

1. Faculty recruitment.
2. Partnership with MSU researchers at Grand Rapids campus
3. Extension of the fellowship to partner with Grand Rapids Medical Education Partners (GRMEP).

**Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:**

**Patient Care:**

- The program has intensive outpatient and inpatient training.
- Each fellow attends two ½ day continuity clinics per week throughout the three years of the program. Added to the community based clinics in Flint.
- All cases are discussed with faculty and evidence based management are always reviewed.

**Medical Knowledge:**

- The program offers to all fellows the in-training exam of Hematology as well as the in-training exam in and Oncology
- Also, the program offers paid subscription for Oncology Essentials For Fellows, This is a peer reviewed program administered
- Fellows also have access to the American Society of Hematology Self-Assessment program.

- Weekly core conference and Journal Club are held throughout the year with presentation by faculty and fellows.

**Practice-based Learning and Improvement:**

- Weekly core conference presentation are prepared and delivered by fellows, which includes discussions of specific topics essential to their practice and a review of most up-to-date evidence.
- Fellows are directly observed and supervised during their interaction with patients during clinic and inpatient rounding and feedback is provided as necessary.

**Interpersonal and Communications Skills:**

- Fellows are directly observed and supervised during their interaction with patients during clinic and inpatient rounding and feedback is provided as necessary

**Professionalism:**

- Fellows are evaluated on this competencies area by faculty, clinic staff (includes clinical nursing and other support staff), evaluations are compiled through the milestone system and feedback is given to the fellows.
- Reading material is also provided by the program director to the fellows for review on this topic.

**Systems-based Practices:**

- Fellows attend a monthly providers meeting in the Breslin Cancer Center and feedback about their practice is provided by the clinic staff. Issues and appropriate solutions are identified and shared with the fellows in a direct manner.

**Research publications/presentations:**

**FACULTY SCHOLARLY ACTIVITY**

Faculty Member	PMID1	Conference Presentations	Other Presentations	Chapters Textbooks	Grant Leadership	Leadership or Peer-Review Role	Teaching Formal Courses
Al-Janadi, Anas		2	2	1	4	Y	Y
Arora, Madan		0	4	0	0	N	Y
Hrinczenko, Borys	25371077	2	2	0	4	N	Y
Tamkus, Deimante		3	2	0	6	N	Y

**RESIDENT SCHOLARLY ACTIVITY**

Resident	Year in Program	PMID1	PMID2	PMID3	Conference Presentations	Participated in Research	Teaching Presentations
Alkharabsheh, Omar	1				1	Y	Y
Kannarkatt, Joseph	1				1	Y	Y
Akkad, Mohamed	2				1	Y	Y
Shaik, Mohammed	2	25587440			1	Y	Y
Tokala, Hemasri	2				1	Y	Y
Kurniali, Peter	3	28506103	25587440	24616568	1	Y	Y
Omaira, Mohammad	3				1	Y	Y

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2014-2015**

**Program Name:** Infectious Diseases Residency Program

**Program Director:** Daniel Havlichek, MD

**Associate Program Director:** MaryAnn Tran, MD

**Major accomplishments over previous year:**

1. Continue 100% Board Pass Rate

**Research publications/presentations (resident and faculty):**

1. Syed R, Havlichek D, Stein, Smith C. Utility of procalcitonin in elderly patients with COPD exacerbation. Immunology and Infectious Diseases epub, July 2014. **Razi Syed, MD – graduated June 2013**
2. Mitra S<sup>1</sup>, Saeed U<sup>1</sup>, Havlichek DH<sup>1</sup>, Stein GE<sup>1</sup>. Profile of oritavancin and its potential in the treatment of acute bacterial skin structure infections.
3. Saravolatz LD<sup>1</sup>, Stein GE<sup>1</sup>.. Oritavancin: A Long-Half-Life Lipoglycopeptide. Clin Infect Dis. 2015 Aug 15;61(4):627-32. doi: 10.1093/cid/civ311
4. Stein GE, Yasin F, Smith C, Scharmen A, Havlichek D, Bill C. A pharmacokinetic/pharmacodynamic analysis of ceftaroline prophylaxis in patients with external ventricular drains. Surg Infect (Larchmt). 2015 Apr;16(2):169-73. doi: 10.1089/sur.2014.098. Epub 2015 Mar 31 **Dr Yasin MD-Graduated June 2014**
5. Mitra S, Stein G, Havlichek D. Immunogenicity of 13-valent conjugate pneumococcal vaccine (Prevnar 13) in patients 50 years or older with end stage renal disease on dialysis. IDSA national meeting, Philadelphia PA, October 2014. Poster 1103
6. All faculty and fellows present at the weekly ID conference
7. All faculty present at least once at Internal Medicine Grand rounds

**Honors (resident and faculty):**

1. Dr. Gary Stein received the Lifetime Appreciation Award from GMEI Internal Medicine Program

**Challenges/opportunities for upcoming year:**

1. Doctor Stein has become retired/part time (10%) and he led much of our fellow research activity. We will need to work on finding suitable research mentors for the fellows
2. There is a search for a new ID Division Chief

**Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:**

**Patient Care:** The Infectious Disease Fellowship continues to provide comprehensive patient care to the patients of Sparrow Hospital and the Region. Fellows see patients from all inpatient medical and surgical services at Sparrow, indigent persons with HIV thru the Ryan White Clinic at the Ingham County Health Department, and outpatients in the MSU General Infectious Diseases clinic.

**Medical Knowledge:** Medical knowledge is addressed through daily interactions with the fellow during patient presentations, on rounds, in the clinic, by the in-training exam which is administered through the IDSA, and through interactions during conferences which are often presented in a question/response format.

**Practice-based Learning and Improvement:** Fellows are involved in improving practice by lectures in the core conference series, projects monitoring *C. difficile* infection, hand washing and antibiotic stewardship. What is learned from each project is used to improve our patient practice.

**Interpersonal and Communications Skills:** : Interpersonal and communication skills are addressed through daily observation of interactions between the fellow and the patient and hospital/clinic staff on rounds or in the clinic, by lectures in the core conference series. Fellows are formally evaluated by clinic staff on this skill as well.

**Professionalism:** Professionalism is addressed through daily observation of interactions between the fellow and the patient and hospital/clinic staff on rounds or in the clinic, and by lectures in the core conference series. Fellows are formally evaluated by clinic staff on this skill as well

**Systems-based Practices:** Systems based practice is addressed through the rotations in Infection Prevention and Microbiology. In these rotations, fellows see how what they do as physicians impacts the larger enterprise. They also receive lectures in the core conference series regarding this topic.

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2014-2015**

**Program Name:** Integrated Residency in General Surgery

**Program Director:** Robert Osmer, MD

**Major accomplishments over previous year:**

1. Outstanding Educator Award, Flint Campus – Michael Kia, DO
2. Outstanding Educator Award, Lansing Campus – Robert Osmer, MD
3. Highest Junior ABSITE – Kun-Tai Hsu, MD
4. Highest Senior ABSITE – Darren Perttu, MD & Razvan Opreanu, MD
5. Most Improved Junior – Derek Ornelas, MD
6. Most Improved Senior – Darren Perttu, MD
7. Research Award – Mersadies Martin, MD
8. QI Award – PGY 3 Residents – John Hardaway, MD, Reginald Anunobi, MD, Andrew Cho, MD, & Derek Ornelas, MD
9. All 4 graduating chiefs passed ABS qualifying exam. Await results of Certifying exam.

**Research publications (resident and faculty):**

1. Saadeh Y, Leung T, Vyas A, Chaturvedi LS, Perumal O, Vyas D. (2014) Applications of nanomedicine in breast cancer detection, imaging, and therapy. *J Nanosci Nanotechnol.* 14(1):913-23.
2. Vyas D, Gieric Laput, Vyas AK. (2014) Chemotherapy induced inflammation may cause early metastasis. *Oncotarget and therapy.* 7:1-9.
3. Vyas D, Wafa Abdullah. Robotic diligent and expeditious detorsion of gastric volvulus. (2014) *Videoscopy-JLAST and part B:* 24.
4. Saadeh Y, Vyas A, Vyas D. (2014) Breast cancer and theranostic nanoparticle, *Journal of Nanoscience and Nanotechnology,* 14(1):913-923.
5. Vyas D, Castro P, Saadeh Y, Gandhi S, Lopez N, Vyas A. (2014) Gastrointestinal diseases and theranostic Nanoparticle, *Journal of Biomedical Nanotechnology.* (In press).
6. Cemeroglu AP, Can A, Davis AT, Kleis L, Daniel MS, Rapp SM, Koehler TJ. (2014) Comparison of the Expectations of Caregivers and Children with Type 1 Diabetes Mellitus for Independence in Diabetes Care-Related Tasks. *Endocr Pract.* 1-22. [Epub ahead of print] PMID: 24449680.
7. Wohns D, Muthusamy P, Davis AT, Khan M, Postma JK, Williams EE, Gile CM, Scotti DJ, Gregory D. (2014) Economic and operational implications of a standardized approach to hemodynamic support therapy using percutaneous cardiac assist devices. *Innovations.* 9(1):38-42.
8. Timek TA, Hooker RL, Collingwood R, Davis AT, Alguire CT, Willekes CL, Murphy ET, Heiser JC, Patzelt LH. (2014) Five-year real world outcomes of GeoForm ring



- implantation in patients with ischemic mitral regurgitation. *J Thorac Cardiovasc Surg.* 148(5): 1951-1956.
9. Rajasekaran S, Kruse K, Kovey K, Davis AT, Hassan NE, Ndika AN, Zuiderveen S, Birmingham J. (2014) Therapeutic Role of Anakinra, an Interleukin-1 Receptor Antagonist, in the Management of Secondary Hemophagocytic Lymphohistiocytosis/Sepsis/Multiple Organ Dysfunction/Macrophage Activating Syndrome in Critically Ill Children. *Pediatr Crit Care Med.* 15(5): 401-408.
  10. Chapman AJ, Titus R, Ferenchick H, Davis A, Rodriguez C. (2014) Repeal of the Michigan helmet law: early clinical impacts. *Am J Surg.* 207(3):352-355.
  11. Martin M, Prusick V, Kepros JP, Schneider P, Stevens P, Werth J, Mosher BD. (2014) Patterns of Antibiotic Use in Open Fractures. *Journal of Surgical Research.* 186(2):690.
  12. Shi X, Sims MD, Hanna MM, Xie M, Gulick PG, Zheng YH, Basson MD, Zhang P. (2014) Neutropenia during HIV Infection: Adverse Consequences and Remedies. *Int Rev Immunol.* 33(6): 511-536.
  13. Siggins RW, Molina PE, Zhang P, Bagby GJ, Nelson S, Dufour J, Walsh C, Welsh DA. (2014) Dysregulation of myelopoiesis by chronic alcohol administration during early SIV infection of rhesus macaques. *Alcoholism: Clinical and Experimental Research.* 38(7): 1993-2000. doi: 10.1111/acer.12433
  14. Siggins RW, Hossain F, Rehman T, Subramaniam V, Melvan JN, Zhang P, Welsh DA. (2014) Cigarette smoke alters the hematopoietic stem cell niche. *Medical Sciences* (2):37-50.
  15. Shahbaz M, Chotai P, Anderson C, Clarkson J. (2014) The Effect of Silver on the Reduction of Pin-Tract Infections in Patients Undergoing Hand Surgery: A Retrospective Comparison. *The Journal of Hand Surgery* (6):1.
  16. Dhakal M, Hardaway J, Guloglu F, Miller M, Hoeman C, Zaghoulani A, Wan X, Rowland L, Cascio J, Sherman P, Zaghoulani H. (2014) IL-13R $\alpha$ 1 is a surface marker for M2 macrophages influencing their differentiation and function. *Eur. J. Immunol.* 44: 842-855.
  17. Kovalenko PL, Basson MD. (2014) Schlafen 12 expression modulates prostate cancer cell differentiation. *J Surg Res.* 190(1): 177-84. doi: 10.1016/j.jss.2014.03.069.
  18. Ono H, Basson MD, Ito H. PTK6 promotes cancer migration and invasion in pancreatic cancer cells dependent on ERK signaling. *PLOS One.* 2014 May 1;9(5):e96060. doi: 10.1371/journal.pone.0096060. eCollection 2014
  19. Basson MD. The Role of the Investigative Surgeon: Asking questions and questioning answers. *JAMA Surgery.* 2014 Sep 3. doi: 10.1001/jamasurg.2014.724.
  20. Basson MD, Bumpers H. How to set up, staff and fund your basic science or translational research laboratory. In: Kibbe MR, Lemaire S (eds). *Success in Academic Surgery: Basic Science.* Springer. In press.
  21. Vyas D, Hozain A. (2014) Clinical peer review in the United States: history, legal development and subsequent abuse. *World J Gastroenterology.* 20(21). doi: 10.3748/wjg.v20.i21.0000

22. Shi X, Sims MD, Hanna MM, Xie M, Gulick PG, Zheng YH, Basson MD, Zhang P. (2014) Neutropenia during HIV infection: Adverse consequences and remedies. *International Reviews of Immunology*. 33(6):511-536.
23. Kovalenko PL, Basson MD. Schlafen 12 expression modulates prostate cancer cell differentiation. (2014) *J Surg Res* 190:177-184.
24. Ono H, Basson MD, Ito H. (2014) PTK6 promotes cancer migration and invasion in pancreatic cancer cells dependent on ERK signaling. *PLOS One*. 9(5):e96060. doi: 10.1371/journal.pone.0096060.
25. Basson MD. (2014) The role of the investigative surgeon: Asking questions and questioning answers. *JAMA Surgery* 149(11):1188-1190.
26. Sun Z, Yang R, Kovalenko P, Song B, Chen L, Walsh MF, Hao L, Basson MD, Xi N. In Vivo tumor interstitial fluid pressure measurement using static micro force sensor and mechanical tumor model. *IEEE Archives ASME International Conference on Advanced Intelligent Mechatronics*. Pages 587-592, 2014.
27. Shi X, Chang CC, Basson MD, Upham BL, Wei L, Zhang P. (2014) Alcohol disrupts human liver stem/progenitor cell proliferation and differentiation. *J Stem Cell Res Ther* 4:205. doi: 10.4172/2157-7633.1000205.
28. Chaturvedi L, Sun K, Walsh M, Kuhn LA, Basson MD. (2014) The P-loop region of Schlafen 3 acts within the cytosol to induce differentiation of human Caco-2 intestinal epithelial cells. *BBA Mol Cell Res* 1843(12):3029-3037.
29. Corey GR, Good S, Jiang H, Moeck G, Wikler M, Green S, Manos P, Keech R, Singh R, Heller B, Bubnova N, O'Riordan (2014) Single-dose Oritavancin compared to 7-10 days of vancomycin in the treatment of gram-positive acute bacterial skin and skin structure infections; the SOLO II non-inferiority study. *Clinical Infectious Diseases*. In press.
30. Bush TR, Leitkam S, Aurino M, Cooper A, Basson MD. A comparison of pressure mapping between two pressure reducing methods in the sacral region. *J Wound Ostomy and Continence Nursing*. In press.
31. Basson MD, Zeng B, Downey C, Siriveluprabhakara S, Tepe JJ. Increased extracellular pressure stimulates tumor proliferation by a mechanosensitive calcium channel and PKC- $\beta$ . *Molec Onc*. In press.
32. Bumpers HL, Janagama DG, Manne U, Basson MD, Katkoori V. Nanomagnetic levitation 3-D cultures of breast and colorectal cancers. *J Surg Res*. In press.
33. Walsh MF, Hermann R, Lee JH, Chaturvedi L, Basson MD. Schlafen 3 mediates the differentiating effects of Cdx2 in rat IEC-Cdx2L1 enterocytes. *J Invest Surg*. In press.
34. Basson MD, Bumpers H. (2014). How to set up, staff and fund your basic science or translational research laboratory. In: Kibbe MR, Lemaire S (eds). *Success in Academic Surgery: Basic Science*. Springer-Verlag. Chapter 1, p 1-17.
35. Bumpers H, Tadros T, Gabram-Mendola S, Rizzo M, Martin M, Zaremba N, Okoli J. (2014) Phyllodes Tumors in African American Women. *Am J Surg*.

### **Research Presentations (resident and faculty):**

1. M. Martin, V. Prusick, J.P. Kepros, P Schneider, P. Stevens, J. Werth, B.D. Mosher. Patterns of Antibiotic Use in Open Fractures. Presentation 9th Annual Academic Surgical Congress, February 4-6, 2014 San Diego, CA.
2. M. Saeed, S.M. Siddique, U. Khan, M. Swaroop. Perceptions Regarding Media Influences on Helmet Usage: A Cross- Sectional Survey of Female Pillions in Karachi, Pakistan. Presentation 9th Annual Academic Surgical Congress, February 4-6, 2014 San Diego, CA.
3. M. Martin, N. Zaremba, D. Anderson, A. Davis, S. Schafer, H. Bumpers. Sonoelastography and the Distinct Features of Breast Histology. Presentation 9th Annual Academic Surgical Congress, February 4-6, 2014 San Diego, CA.
4. Nicole Zaremba, M. Martin, D. Anderson, A. Davis, S. Schafer, H. Bumpers. Diagnostic Accuracy of Sonoelastography in the Diagnosis of Small and Large Breast Lesions. Presentation 9th Annual Academic Surgical Congress, February 4-6, 2014 San Diego, CA.
5. Harvey Bumpers, MD, D.G. Janagama, U. Manne, M. Basson, V. Katkoori. Development of Magnetic Levitation 3-D Cultures of Breast and Colon Cancer Cells using Carbon Encapsulated Cobalt Magnetic Nanoparticles. Presentation 9th Annual Academic Surgical Congress, February 4-6, 2014 San Diego, CA.
6. N.M. Lopez-Hisijos, P. Shaw, C. Lakshmishankar, D. Vyas. In-Vivo and In-Vitro Efficacy of Proteasome Inhibitors as Compared to Doxorubicin in Triple Negative Breast Cancer. Presentation 9th Annual Academic Surgical Congress, February 4-6, 2014 San Diego, CA.
7. H. Ono, M. Basson, H. Ito. PTK6 Enhances Caspase8 Activation and Increases Apoptosis with Gemcitabine Treatment in Pancreatic Cancer Cells. Presentation 9th Annual Academic Surgical Congress, February 4-6, 2014 San Diego, CA.
8. P.L. Kovalenko, M.D. Basson. Exogenous Schlafen 12 Expression in the Lncap Prostate Cancer Cell Line Modulates Cell Differentiation. Presentation 9th Annual Academic Surgical Congress, February 4-6, 2014 San Diego, CA.
9. K. Ito, Z. Simons, C. I. Anderson, H. Ito, M.K. Mosher, J.H. Clarkson, B. L. Wenig. Postoperative Extubation in Head and Neck Surgery Patients: Risk Factors for Failure and Proposal for Extubation Criteria. Presentation 9th Annual Academic Surgical Congress, February 4-6, 2014 San Diego, CA.
10. Nico Lopez, L. Chaturvedi, Shah P, Vyas D. In-vivo and in-vitro Efficacy of Proteasome Inhibitors as Compared to Doxorubicin in Triple Negative Breast Cancer. Annual Academic Surgical Congress - February 4-6, 2014, San Diego, CA.
11. Bumpers, H. Nef-M1, a CXCR4 Peptide Antagonist, Enhances Apoptosis and Inhibits Primary Tumor Growth and Metastasis in Breast Cancer. Academic Surgical Congress, San Diego, CA. SUS New Member Poster, February 5, 2014
12. Shabahang M, Vyas D et al. Social Responsibility for Social Learner. Association Surgical Education Week. Chicago 2014.
13. Arpita K Vyas, Vanessa Hoang, Mohankumar SM, Jiangjiang Bi, Dinesh Vyas, Richard Leach, Gregory D Fink. Glucagon Like Peptide-1 (GLP-1) modulates glucose homeostasis

and weight gain in a rat model of Polycystic Ovarian Syndrome without affecting left ventricular changes, Society of Gynaecology International, Florence, Rome, 2014.

14. N. Khogali, P. Haan, C. Anderson, R. Gupta, C. Moon, D. Henry, A. Cho, S. Kavuturu. A Randomized Controlled Trial: Laparoscopic Training in Novice Medical Students. Presentation 9th Annual Mid-Michigan Regional Research Day, March 27, 2014 Lansing, MI.
15. N. Harms, R. Sayal, M. Kia. Incisional Hernia Rate Following Laparo-Endoscopic Single-Site Surgery (LESS) for Acute Appendicitis, a Retrospective Review of a Single Surgeon Case Series. POSTER at 9th Annual Mid-Michigan Regional Research Day, March 27, 2014 Lansing, MI.
16. R. Kseri, K. Ito, J. Wummel, C. Hesano, C. Anderson, H. Ito. Treatment of Colorectal Cancer in the Rural Community Hospital Setting: Compatibility to Standard Care, Risk Factors to Deviate from Standard. POSTER at 9th Annual Mid-Michigan Regional Research Day, March 27, 2014 Lansing, MI.
17. K. Ito, C. Anderson, H. Ito, R. Osmer, M. Basson. An Attempt to Assess Possible Preventable Mortalities following Emergency Laparotomy for Acute Abdomen by Using ACS NSQIP Surgical Risk Calculator. POSTER at 9th Annual Mid-Michigan Regional Research Day, March 27, 2014 Lansing, MI.
18. M. Martin, N. Zaremba, D. Anderson, A. Davis, S. Schafer, H. Bumpers. Breast Tumor Elasticity: Using Sonoelastography to Evaluate Racial Differences. POSTER at 9th Annual Mid-Michigan Regional Research Day, March 27, 2014 Lansing, MI.
19. Ono H, Basson M, Ito H. PTK6 Increases Apoptosis with Gemcitabine Treatment in Pancreatic Cancer Cells by enhancing DNA Damage. Digestive Disease Week. Chicago, IL, 2014.
20. Ono H, Basson M, Ito H. PTK6 Increases Apoptosis with Gemcitabine Treatment in Pancreatic Cancer Cells by enhancing DNA Damage. Pancreas Club. Lombard, IL, 2014.
21. Ito K, Shaw D, Hardaway J, Kseri R, Hesano C, Wummel J, Haan P, Anderson C, Ito H. Treatment of Colorectal Cancer in the Rural Community Hospital Setting: Compatibility to Standard Care, Risk factors to Deviate from the Standard. Digestive Disease Week. Chicago, IL, 2014.
22. Venkat R. Katkoori, Marc D. Basson, Upender Manne, Harvey L. Bumpers. Nef-M1, a Peptide Antagonist of CXCR4, Inhibits Tumor Angiogenesis by Attenuating AKT and Mitogen-Activated Protein Kinase Signaling in Colon Cancer. American Association for Cancer Research, San Diego, CA. April 7, 2014 (Abstract # 1027)
23. Zaremba N, Martin M, Anderson D, Davis A, Schafer S, Bumpers H. Factors Affecting the Accuracy of Sonoelastography: Age and Tumor Size. American Society of Breast Surgeons, Las Vegas, NV. May 2, 2014
24. Kaori Ito, Shaw DD, Hardaway J, R. Kseri, J. Wummel, C. Hesano, Haan P, Anderson CI, Ito H Poster presentation: Treatment of Colorectal Cancer in the Rural Community Hospital Setting: Compatibility to Standard Care, Risk Factors to Deviate from Standard. 54th Annual Meeting of the Society of Surgery for Alimentary Tract, May 5, 2014 Chicago, IL.

25. Kaori Ito, Simons Z, Anderson CI, Ito H, Mosher BD, Clarkson JH, Wenig BL. Oral Presentation: Postoperative Extubation in Head and Neck Surgery Patients: Risk Factors for Failure and Proposal for Extubation Criteria. 63th Annual Resident Surgeons Competition/the 61th Annual Meeting of Michigan Chapter American College of Surgeons, May 14, 2014 Petoskey, MI.
26. Ching K, Rice DM, Gambhir S, Woo E. Poster presentation: Residual Cancer Found on Re-Excision for Close and Positive Margins After Breast Conservation for Early Stage Breast Cancer: A Single Institution Review. ASCO 2014 Breast Cancer Symposium, Sept 2-6, 2014, San Francisco, CA.
27. Kavuturu S, Khogali N. Presentation: Laparoscopic Simulation in Reverse and Side Alignment Does Not Improve Task Performance in Forward Alignment: A Randomized Controlled Trial. Minimally Invasive Surgery Week 2014. SLS Annual Meeting and Endo Expo, Sept 10-13, 2014. Las Vegas, NV.

**Honors (resident and faculty):**

1. Andrew Zwyzhuizen - 2014 Best Doctors in America® list
2. Lansing Outstanding Teaching Award – Dahlia Rice, MD
3. Nicole Zarembo – AOA November 4, 2015

**Challenges/opportunities for upcoming year:**

1. Anticipated budget cuts
2. Shortage of General Surgery Faculty
3. No permanent place at all times for a Simulation Center
4. Creation of Clinical Competency Committee (CCC) and Program Evaluation Committee (PEC)

**Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:**

**Patient Care:**

- Weekly Pre-Operative Management Conference

**Medical Knowledge:** Protected time for residents Thursdays 7am – 1pm

- 7:00am – 8:00am: M&Ms
- 8:00am – 9:00am: Grand Rounds (1<sup>st</sup> & 3<sup>rd</sup> week),  
Pre-Operative Conference (2<sup>nd</sup> & 4<sup>th</sup> week)
- 9:00am – 10:00am: This Week in SCORE
- 10:00am – 11:00am: The Pass Machine Video Lecture
- 11:00am – 12:00pm: Virtual Surgical Patient Discussion
- 12:00pm – 1:00pm: Comprehensive Breast Clinic, Tumor Board

**Practice-based Learning and Improvement:**

- Weekly Surgical Morbidity & Mortality conference
- New CCC will review all residents bi-annually and determine competency of residents
- New PEC will review program annually and implement changes for improvement

**Interpersonal and Communications Skills:**

- Weekly meetings with Nursing/staff

**Professionalism:**

- Program retreat with Todd Bradley from MSU Human Resources

**Systems-based Practices:**

- Invited Speakers:
  - Samithamby Jeyaseelan, D.V.M, Ph.D
  - Donald Fry, M.D.
  - Alfred Ayala, M.D.
  - Michael Sarr, M.D.
  - Ken Wilson, M.D.
  - Hector Wong, M.D.
  - Greg Giant

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2014-2015**

**Program Name:** Internal Medicine Residency Program

**Program Director:** Heather Laird-Fick, MD, MPH

**Major accomplishments over previous year:**

1. Outstanding graduate placement into competitive fellowships
2. Retention of a graduate within the local community who chose general medicine career
3. Continuation of Complex Care Clinic and enhanced mental health care curriculum as part of Dr. Robert Smith's HRSA grant
4. Program joined Right Care Rounds run the by the Lown Institute
5. Program joined Sparrow Hospital High Value Project and started pilot project to reduce futile care
6. We were able to get back pulmonary rotation for IM residents at Sparrow Hospital

**Research publications/presentations (resident and faculty):**

1. **Tariq Alrasheed**, was co-author on the oral presentation "Varying intubation position and immobilization methods to assess cervical spine movement during endotracheal intubation in a pediatric airway manikin," based on his work at UAM as a clinical scholar, at **American Academy of Pediatrics national meeting** in San Diego October 2014
2. **Alsara O, Kalavakunta JK, Hajjar V**, Alsarrah A, Cho N, Dhar G. Surviving sudden cardiac death secondary to anomalous left coronary artery from the pulmonary artery: A case report and literature review. *Heart Lung*. 2014 Sep-Oct;43(5):476-80. doi: 10.1016/j.hrtlng.2014.06.048. Epub 2014 Jul 8. PMID: 25012636
3. **Michael Kehdi: Akright,J., Chennamaneni, V.** "The Case of the Missing Dissection" (Poster) Presented at The American College of Physicians Michigan Chapter Annual Scientific Meeting, Oct. 17, 2014 in Gaylord, Mi.
4. **Michael Kehdi: Chang, I., Sharma, D., Rayamajhi, S.,** "A Dizzy Case of Vertigo" (Poster) Presented at The American College of Physicians Michigan Chapter Annual Scientific Meeting, Oct. 17, 2014 in Gaylord, Mi.
5. **Alsara O**, Perez-Terzic C, Squires RW, Dandamudi S, Miranda WR, Park SJ, Thomas RJ. Is exercise training safe and beneficial in patients receiving left ventricular assist device therapy? *J Cardiopulm Rehabil Prev*. 2014 Jul-Aug;34(4):233-40
6. Largo TW, **Rosenman KD**. Surveillance of work-related amputations in Michigan using multiple data sources: results for 2006-2012. *Occup Environ Med*. 2015 Mar;72(3):171-6. doi: 10.1136/oemed-2014-102335. Epub 2014 Nov 12. PMID: 25391831
7. Largo TW, **Rosenman KD**. Surveillance of work-related amputations in Michigan using multiple data sources: results for 2006-2012. *Occup Environ Med*. 2015 Mar;72(3):171-6. doi: 10.1136/oemed-2014-102335. Epub 2014 Nov 12. PMID: 25391831

8. **Millerick-May ML**, Schrauben S, Reilly MJ, **Rosenman KD**. Silicosis and chronic renal disease. *Am J Ind Med.* 2015 Jul;58(7):730-6. doi: 10.1002/ajim.22465. Epub 2015 May 4. PMID: 25940153
9. **Rosenman KD**, **Millerick-May M**, Reilly MJ, Flattery J, Weinberg J, Harrison R, Lumia M, Stephens AC, Borjan M. Swimming facilities and work-related asthma. *J Asthma.* 2015 Feb;52(1):52-8. doi: 10.3109/02770903.2014.950428. Epub 2014 Aug 26. PMID: 25158052
10. **Kumar S**, Heitner S. “Coexistence of Bicuspid Aortic Valve and Hypertrophic Cardiomyopathy” (Poster). 15<sup>th</sup> Annual International Symposium on Congenital Heart Disease, St. Petersburg, FL. 02/2015
11. **Suwen Kumar**, Yadava M, Mikilieni S. “Reversal of Renal function after Transcatheter Aortic Valve Replacement” (Oral presentation. *Interventional Cardiology 2015: 30th Annual International Symposium, Snowmass Village, CO.* 03/2015
12. Quinn MM, Henneberger PK; National Institute for Occupational Safety and Health (NIOSH), National Occupational Research Agenda (NORA) Cleaning and Disinfecting in Healthcare Working Group, Braun B, Delclos GL, Fagan K, Huang V, Knaack JL, Kusek L, Lee SJ, Le Moual N, Maher KA, McCrone SH, Mitchell AH, Pechter E, **Rosenman K**, Schulster L, Stephens AC, Wilburn S, Zock JP. Cleaning and disinfecting environmental surfaces in health care: Toward an integrated framework for infection and occupational illness prevention. *Am J Infect Control.* 2015 May 1;43(5):424-34. doi: 10.1016/j.ajic.2015.01.029. Epub 2015 Mar 16.
13. **Rosenman K**. Occupational diseases in individuals exposed to metal working fluids. *Curr Opin Allergy Clin Immunol.* 2015 Apr;15(2):131-6. PMID: 25564768
14. **Dianne Wagner** (faculty): Price DW, **Wagner DP**, Krane NK, Rougas SC, Lowitt NR, Offodile RS, Easdown LJ, Andrews MA, Kodner CM, Lypson M, Barnes BE. What are the implications of implementation science for medical education? *Med Educ Online.* 2015 Apr 23;20:27003. doi: 10.3402/meo.v20.27003. eCollection 2015. PMID: 25911282
15. **Dianne Wagner** (faculty): Gold J, DeMuth R, Mavis B, **Wagner D**. Progress testing 2.0: clinical skills meets necessary science. *Med Educ Online.* 2015 May 5;20:27769. doi: 10.3402/meo.v20.27769. eCollection 2015. PMID: 25948045
16. **Michael Zaroukian** (faculty): Payne TH, Corley S, Cullen TA, Gandhi TK, Harrington L, Kuperman GJ, Mattison JE, McCallie DP, McDonald CJ, Tang PC, Tierney WM, Weaver C, Weir CR, **Zaroukian MH**. Report of the AMIA EHR-2020 Task Force on the status and future direction of EHRs. *J Am Med Inform Assoc.* 2015 Sep;22(5):1102-10. doi: 10.1093/jamia/ocv066. Epub 2015 May 28. No abstract available. PMID: 26024883
17. **Ian Chang** (chief resident) and Drs Guggenheim and **Laird-Fick** (faculty): **Chang I**, **Guggenheim C**, **Laird-Fick H**. A Case of Diverticular Perforation in a Young Patient with Rheumatoid Arthritis on Methotrexate. *Case Rep Med.* 2015;2015:617268. doi: 10.1155/2015/617268. Epub 2015 Apr 29. PMID: 26064129
18. **Suwen Kumar**, Yadava M, Mikilieni S. “Reversal of Renal function after Transcatheter Aortic Valve Replacement” (Oral presentation. *Interventional Cardiology 2015: 30th Annual International Symposium, Snowmass Village, CO.* 03/2015
19. **Olisa Achike**: Alani,F., **Rallabandi, S. Laird-Fick, H**. “Myocardial Ischemia Secondary to Left Internal Mammary Artery (LIMA) Branch Steal Phenomenon” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.



20. **Olisa Achike:** Lamichhane, M., Karve, M. and **Laird-Fick, H.** “Myocardial Infarction in a Patient with Atrial fibrillation (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
21. **Olisa Achike: Kaur, A. Chahal, G.** “Myocardial Infarction with Normal Coronary Arteries, an Unusual Presentation in a 28-year-old. (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
22. **Olisa Achike:** Alreefi, F., Lamichhane, M., **Laird-Fick, H.,** Abela, G. “Aortic Intramural Hematoma: Challenge to Management in Settings of Suspected Impending Rupture” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
23. **Olisa Achike: Kaur,A., Chahal, G.** “Pneumocystis Carinii Pneumonia(PCP) Non-Hodgkin Lymphoma (NHL) and Rituximab: What’s the connection?” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
24. **Julie Akright: Chahal, G., Iliev, A., Riehani, A.,** “Isolated Mitral Valve Aneurysm in Infective Endocarditis” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
25. **Sammar Alsunaid:** “Catastrophic Antiphospholipid Syndrome Is a Challenging Therapeutic Dilemma Without Clear Effective Solutions” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
26. **Ian Chang:** Gautam,B.,Chang,E., **Chang, J.,Throckmorton,A.** “A Case of Tacrolimus Associated Pericardial Effusion” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
27. **Jinsoo Chang: Rayamajhi,S., Alsherbani, A.** “Rapid Progression of Cranial Nerve Dysfunction: A Case of Metastatic Recurrence of Gallbladder Cancer Presenting as Leptomeningeal Carcinomatosis” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
28. **Dane Gruenebaum: Iliev,A.,** “Drug eruption or Debilitating SJS” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
29. **Atanas Iliev: Akright, J., Gruenebaum, D., Yam, J.,** “Rare Cause of Endocarditis” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
30. **Amanjot Kaur: Chilman,M., Chahal, G.,** “Gastrointestinal Symptoms Masking Non-typical Salmonella Bacteremia” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
31. **Amanjot Kaur: Achike, O., Chahal,G.,** “Elizabethkingia Meningosepticum Causing Tracheobronchitis: What are the Odds?” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
32. **Amanjot Kaur: Tokala, H., Al-Janadi,A.,** “Hodgkin Lymphoma with Brain Lesions: Infection vs. Metastasis” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
33. **Michael Kehdi: Akright,J., Havlichek, D.,** “Abitrophia Endocarditis Presenting as Dysarthria” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.

34. **Suwen Kumar:** Farrehi, P., Ebner, B., Bragg-Gresham, J., Day, S., “Risk Stratification for Obstructive Sleep Apnea in Hypertrophic Cardiomyopathy” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
35. **Amit Mehta: Alsunaid, S., Al-Janadi, A., Alsherbini, A.,** “Left Flank Pain Presenting as Gonadal and Renal Vein Thrombosis in a 24-year-old Female” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
36. **Suhasini Rallabandi:** Gupta, S., **Achike, O., Laird-Fick, H.,** “SLE Presenting as Hemorrhagic Pericarditis and Cardiac Tamponade” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
37. **Suhasini Rallabandi: Kehdi, M., Laird-Fick, H.,** “Rare Presentation Involving Bicytopenia in a Patient with EBV” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
38. **Ashley Throckmorton:** Gautam, B., “Acute Renal Infarction: A Rare Sequela of Atrial Fibrillation” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
39. **Julie Yam: Iliev, A., Burkitt, K., Khan, N.,** “Splenic Hematoma After Colonoscopy” (Poster) presented at the 10<sup>th</sup> Annual Mid-Michigan Research Day, April 23, 2015.
40. **Nazia Khan : Khan NN, Nabeel M, Nan B, Ghali JK.** Chloride Depletion Alkalosis as a Predictor of Inhospital Mortality in Patients with Decompensated Heart Failure. *Cardiology.* 2015;131(3):151-9. doi: 10.1159/000377669. Epub 2015 May 6.
41. **Michael Kehdi: Akright, J., Havlichek, D.** “Back pain as presentation for deep vein thrombosis due to inferior vena cava agenesis” (Poster) Presented at American College of Physicians Michigan Chapter, Residents Day May 22, 2015 in Troy, MI
42. **Suwen Kumar:** Ebner B, Bragg-Gresham JL, Farrehi P, Day SM. “Positive Airway Pressure affects Cardiac Remodeling in Hypertrophic Cardiomyopathy patients with Obstructive Sleep Apnea” (Oral presentation); American College of Physicians (ACP) National Meeting 2015, Boston, MA. 05/2015.

**Honors (resident and faculty):**

1. Olisa Achike was selected to receive one of three Resident Teacher of the Year Awards from CHM-Lansing's graduating Class of 2015.
2. Sparrow Outstanding Senior: Divya Sharma
3. Sparrow Outstanding Junior: Turab Raza
4. Bernard H. Smookler Award: Ashley Throckmorton
5. David Greenbaum Emerging Leader Award: Osama Alsara
6. Rose Award: Heather Laird-Fick
7. Outstanding Resident in Cardiology: Michael Kehdi
8. Outstanding Resident in Endocrinology: David Kim
9. Outstanding Resident in Hematology/Oncology: Jinsoo Chang

10. Outstanding Resident in Infectious Diseases: David Kim
11. Outstanding Resident in Research: David Kim
12. Sparrow Nursing Resident of the Year: Mindy Mccomb
13. MSU Outstanding Junior Resident: Keren Shahar
14. MSU Outstanding Senior Resident: Dane Gruenebaum
15. Excellence in Teaching (University Faculty): Supratik Rayamajhi
16. Excellence in Teaching (Community Faculty): Lawrence Hennessey
17. Research Teacher of the Year: Heather Laird-Fick
18. Outstanding Support Staff: Katie Gibson-Stofflet
19. Outstanding Clinical Support Staff: Heather Spotts
20. Outstanding Fellow in Teaching: Peter Kurniali
21. Inpatient Nurse of the Year: Cori Wise

**Challenges/opportunities for upcoming year:**

1. We were able to obtain a conference room at 7W for our morning report sessions. Sparrow GME administration has promised designated space for residents with new construction in works.
2. As per our residents' request, we reinstated hospitalist rotation for 3rd years as they get varied IM experience under the hospitalists. We also added peri-operative medicine rotation for DO interns. We will be monitoring the educational outcomes and satisfaction with this restructuring.
3. Budget and funding is an area of concern going forward as we keep hearing about IME cuts.
4. We will be doing our in-depth ACGME self-study this academic year and will be participating in ACGME pilot site-visit as well.

**Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:**

**Patient Care:**

- Direct observation of clinical skills using Mini-CEX forms

**Medical Knowledge:**

- In-training Exam

**Practice-based Learning and Improvement:**

- Morbidity and Mortality reflective exercises, participation in presentations

**Interpersonal and Communications Skills:**

- Direct observation of clinical skills using Mini-CEX forms and patient satisfaction surveys

**Professionalism:**

- Patient satisfaction surveys

**Systems-based Practice:**

- Nursing case-manager and clinic staff evaluations

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2014-2015**

**Program Name:** Interventional Cardiology Fellowship Program

**Program Director:** Tim A. Fischell, MD

**Major accomplishments over previous year:**

We have had a very successful academic year in 2014/2015. We have just graduated three outstanding interventional cardiology fellows from the program. The fellows have shown tremendous improvement and excellent skill sets at the end of their training year. We expect all three fellows to sit for the interventional cardiology (ABIM) exams in the coming year, and to pass the board exam without difficulty, as per our prior experience with our fellows. All three of the fellows have obtained excellent positions in their respective locations.

In addition to continuing our high volume interventional cardiology-training program during the last year we have continued our alliance with rotations in peripheral vascular intervention in Grand Rapids, at Metro Hospital, with Dr. Jihad Mustapha. This rotation first began at the end of the 2010 academic year and will continue to be offered to enhance our fellows' peripheral vascular interventional training in the coming year. There have been no significant changes with our faculty in the last 12 months with continued excellent participation of: Dr. Vishal Gupta; Dr. Robert LaPenna; Dr. Steven Peck; Dr. William LaPenna; Dr Kamath; and myself.

Finally, we have continued our tradition of academic work with publications during the past academic and several additional publications in preparation. We have responded to queries following our successful ACGME site visit in May 2010. We have been re-accredited with a 5-year review period as of 4/5/11. We are scheduled for a self-study date of approximately 1/1/2016.

In summary, we have had a very successful year in fellowship training and continued success of our prior fellows. We added three new faculty members in the prior year (Drs. Mustapha, Kamath and Saltiel) as well as a successful navigation thru our ACGME review and re-accreditation. We have a talented group of interventional cardiology fellows that started July 1, 2015, and look forward to our ongoing affiliation with Michigan State University.

**Research publications/presentations (resident and faculty):**

**Tim A. Fischell, MD- Program Director**

Clinical Research:

2014 Principal Investigator ARISTOCRAT Trial, Sponsor Arstasis

Grants:

Boston Scientific Fellowship Grant Program  
Amount: \$25,000  
Date: June 2014

Invited Lectures:

February 17, 2014 : Chemical Renal Denervation: Next Generation Technology, CRT Meetings, Washington, D.C.

February 27, 2014: Perivascular Renal Denervation: An Update, TRENDS meeting, Frankfurt, Germany.

May 22, 2014: Basic Science of Chemical Renal Denervation using Ethanol

October 20, 2014; The Status of Renal Denervation: Next Generation Technology, Stockholm, Sweden.

February 24, 2014: Chemical Renal Denervation: Peregrine System, CRT meeting, Washington, D.C.

February 28 2015: Chemical Renal Denervation: An Update, TRENDS/RHC meeting, Berlin, Germany.

June 16, 2015: Implantable Ischemia and STEMI Detection: State of the Art, C3 Meetings, Orlando, FL.

Patent:

Carotid Sheath with entry and Tracking Rapid Exchange Dilators and Method of Use. Co-inventor with Robert Fischell. Issued 6/10/14 US Patent 8,747,428 B2

Publications:

121. Fischell DR, **Fischell TA**, Ghazarossian VE. Peregrine System<sup>TM</sup> infusion catheter for perivascular renal denervation. (in press) *Journal of Medical Devices* 2015.

122. **Fischell TA**, Fischell DR, Ghazarossian VE, Vega F, Ebner A. Next generation renal denervation: chemical “perivascular” renal denervation with alcohol using a

novel drug infusion catheter (in press). *Cardiovascular Revascularization Medicine*, 2015; 16:221-227.

Book Chapters:

**Fischell TA**, Vega F, Ghazarossian VE. Perivascular renal denervation (PVRD™): Chemical renal denervation with micro-doses of ethanol using the peregrine™ renal denervation device. Textbook editor Richard Heuser, M.D., to be published 2014.

Published Abstracts:

1. **Fischell TA**, Ghazarossian VE, Vega F, Ebner A. Next generation renal denervation: chemical “perivascular” renal denervation with alcohol using a novel drug infusion catheter. CRT 2/15 Innovation Award Oral Presentation (1st Place), Washington, D.C.
2. **Fischell TA**, Ghazarossian VE, Vega F, Ebner A. Next generation renal denervation: chemical “perivascular” renal denervation with alcohol using a novel drug infusion catheter. EuroPCR meetings, 5/2015 (in press).
3. K Yahagi, H Mori, SC Bertog, **TA Fischell**, VE Ghazarossian, F Vega, Frank D. Kolodgie, Michael Joner, Renu Virmani, Elena Ladich. Histopathologic comparison of safety and efficacy between ethanol-mediated perivascular renal denervation and radiofrequency ablation in porcine renal arteries at three months. EuroPCR; May, 2015 (in press).
4. **TA Fischell**, Félix Vega, N Raju, E Ladich, K Yahagi, R Virmani, D Kent, VE Ghazarossian. Alcohol-mediated perivascular renal denervation; preclinical evaluations to expand treatment parameters and evaluate region of treatment. EuroPCR; May, 2015 (in press).

**Vishal Gupta, MD- Associate Director**

Awards:

- 2014 Exceptional Performer Award, Borgess Medical Center  
2014 Caring Hands Award, Borgess Medical Center

Grant:

- 2014 \$15k Boston Scientific Fellowship Grant Program

Research:

- 2014-Present Principal Investigator, Virtual TAVR Simulation and 3D Model reconstruction  
2014-Present Principal Investigator, Water and Salt intake and LA size  
2014- present Sub investigator, AstraZeneca THEMIS D513BC00001: Ticagrelor 90 mg twice daily on the Incidence of Cardiovascular Death, Myocardial Infarction or Stroke in Patients with Type 2 Diabetes Mellitus [THEMIS – effect of Ticagrelor on Health outcomes in diabetes Mellitus patients Intervention Study].

- 2013-Present Principal Investigator, Escape MI Trail
- 2012-2014 Principal Investigator, Takeda TAK-875\_306, Phase 3 Study to Evaluate Cardiovascular Outcomes of TAK-875, 50 mg in Addition to Standard of Care in Subjects With Type 2 Diabetes and With Cardiovascular Disease or Multiple Risk Factors for Cardiovascular Events Rare Events.
- 2011-present Subinvestigator, Abbott Vascular Protocol 10-392 ABSORB III: A Clinical Evaluation of Absorb™ BVS, the Everolimus Eluting Bioresorbable Vascular Scaffold in the Treatment of Subjects with de novo Native Coronary Artery Lesions.
- 2011- present Subinvestigator, AstraZeneca EUCLID D5135C00001: Phase IIIb Study to Compare Ticagrelor With Clopidogrel Treatment on the Risk of Cardiovascular Death, Myocardial Infarction and Ischemic Stroke in Patients With Established Peripheral Artery Disease (EUCLID Examining Use of ticagrelor In paD).
- 2011- present Subinvestigator, Sanofi Aventis Protocol EFC 11319, Cardiovascular Outcomes During Treatment With Lixisenatide in Type 2 Diabetic Patients After an Acute Coronary Syndrome.
- 2011 Principle Investigator, CANTOS, Subcutaneous Canakinumab in prevention of recurrent

Invited Lectures:

- 2014 Nov Borgess Vascular Symposium, Borgess Medical Center, Kalamazoo, MI
- 2014 Sep TAVR and Structural Heart Disease, Annual TAVR Celebration
- 2014 Feb TAVR, Three Rivers Grand Rounds

Publications:

1. Kalavakunta JK, Paulus B, Lapenna W, Gupta V. *An unusual cause of transient ischemic attack in a patient with pacemaker*. Case Reports in Cardiology. Volume 2014 (2014), Article ID 265759, 3 pages. doi:10.1155/2014/265759
2. Kalavakunta JK, Gangula S, Gupta V. *Ulcerated In-Stent Restenosis: A case report*. Case Reports in Cardiology. Feb 2014, Volume 2014 (2014), Article ID 893143, 3 pages. doi:10.1155/2014/893143

Publications Under Review:

1. Salt Project
2. ESACPE MI
3. Takasubo Cardiomyopathy
4. Tobacco Article
5. Milk Project



### **Challenges/opportunities for upcoming year:**

We continue to have some challenges with regard to clinical volumes for training purposes in peripheral vascular disease. We continue to strive to provide comprehensive training in peripheral vascular disease and in structural heart disease intervention. For this reason we have expanded the clinical experiences for the fellows with our continued collaboration with Dr. Mustapha at Metro Hospital in Grand Rapids, MI. We are hoping to continue to expand our faculty base to also address volume and diversity of training for our fellows. The addition of Dr. Frank Saltiel to the Heart Center practice has been helpful. Drs. Gupta and Saltiel have now started an active TAVR (percutaneous aortic valve replacement) program to allow exposure of the fellows to state-of-the-art structural heart intervention. This should provide a great, cutting edge clinical opportunity for our fellows.

Despite the national trend of decreasing coronary interventional volumes, we continue to have excellent volume, with each of the recent fellow graduates participating in >500 coronary interventions. This makes our program still a high volume and sought after program.

### **Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:**

#### **Patient Care:**

We have continued to evolve and refine our patient care responsibilities during our fellowship. We have improved our continuity of care initiatives by rotating and assigning each fellow to a different faculty member's outpatient clinic so that they may see patient's preprocedural, during the procedure and for post procedural follow-up. This program has been amended such that each of the fellows rotates with each of three different faculty for four month rotations. We believe that this will enhance their patient care learning experience.

#### **Medical Knowledge:**

We believe that our journal club provides one of our best teaching opportunities. These are held for approximately two hours on a monthly basis. At least two, and as many as four current interventional cardiology scientific papers are reviewed and discussed in depth with regard there content, scientific validity, statistics, etc. We believe that this detailed and critical review of scientific literature on an ongoing basis will help enhance the ability of our fellows to critique scientific literature as they move forward in their career.

#### **Practice-based Learning and Improvement:**

The fellows will have chart review by the program director in the next several months as part of an ABIM initiative with regard to board certification. This chart review and interview and feedback process will "close the loop" for each of the fellow's practice-based learning.

**Interpersonal and Communications Skills:**

Each of the fellows is reviewed on at least a quarterly basis with regard to their communication skills and their interpersonal skills and communications skills with staff, patients and faculty. The fellows also are engaged in public speaking in their role as case presenters at both the weekly clinical (cath, angio, surgical) conferences every Friday, as well as the morbidity mortality conferences.

**Professionalism:**

As above, the fellows are monitored and evaluated on a regular basis with regard to their professionalism. There is a clear-cut chain of command and reporting process in the event of any disruption and deviation from professional behavior in the clinic, cath lab or in the research area.

**Systems-based Practices:**

The interventional cardiology fellows are integrated every year into at least one significant systems-based practice evaluation program. In the past year the fellows were actively involved in the BMC<sup>2</sup> data based monitoring for success rates in the treatment of aorto-ostial lesions. This has resulted in a manuscript that is in the process of submission. In addition, the fellows were involved in the review of access site complications in the Borgess cardiac catheterization laboratory. This has given a further awareness and appreciation and active participation in a systems-based practice initiative.

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2014-2015**

**Program Name:** Neonatal-Perinatal Medicine Fellowship Program

**Program Director:** Ira H. Gewolb, MD

**Major accomplishments over previous year:**

1. Dr. Gewolb - Co-Principal Investigator  
Targeted Support Grant for Technology Development  
Michigan State University  
“Enhancement and Commercialization of an Innovative Non-Invasive  
Methodology for Diagnosing Gastroesophageal Reflux”  
9/1/2014-8/31/2015
2. Dr. Gewolb - Principal Investigator  
The Michigan Initiative for Innovation and Entrepreneurship (MIIE) Technology  
Commercialization Fund  
“Enhancement and Commercialization of an Innovative Non-Invasive  
Methodology for Diagnosing Gastroesophageal Reflux”  
1/1/2014-12/31/2014
3. Dr. Gewolb & Mr. Vice- Canadian Patent #: 2,729,840 (8/18/14) -  
“Non-Invasive Diagnosis of Gastroesophageal Reflux Using Very Low-  
Frequency Accelerometric Detection”
4. Dr. Mohmed - hired as Assistant Professor of Pediatrics
5. Dr. Gundamraj - hired as part-time Assistant Professor of Pediatrics

**Research publications/presentations (resident and faculty):**

**Papers:**

1. **Oarhe CI**, Dang V, Dang M, Nguyen H, Gopallawa I, **Gewolb IH**, Uhal BD. Hyperoxia Downregulates Angiotensin Converting Enzyme-2 (ACE-2) in Human Fetal Lung Fibroblasts. *Pediatr Res.* 77:656-662, 2015 PMID: 25665060
2. Movsas, TZ, Spitzer, AR, and **Gewolb, IH**: Trisomy 21 and Risk of Retinopathy of Prematurity. *Pediatrics.* 2015 Jul 20. pii: peds.2015-0623. [Epub ahead of print] PMID: 26195540

**Abstracts:**

1. **Awonuga, MT, Fattah, S, Wei, S., Awonuga, AO, Gewolb, IH, and Netzloff, M:** A Case Study of an Unreported Large Microdeletion of Chromosome 2q32.3q34 in a Newborn Infant. *Pediatr. Res.* 77:xxx, 2015.

**Honors (resident and faculty):**

1. **Mohamed, T., Gewolb, I.H., Uhal, B.D.:** Angiotensin converting enzyme-2 (ACE-2) is up-regulated in fetal lung cells exposed to hypoxia. **Marshall Klaus Research Grant, 2014**
2. **Schlicher, S.:** **Support Staff of the Year Award, 2015.** Department of Pediatrics.

**Challenges/opportunities for upcoming year:**

1. Inadequate NICU coverage.
2. Inability to get funding for 5<sup>th</sup> fellow (already approved by ACGME 4 years ago)
3. Lack of sufficient pediatric subspecialists and surgeons

**Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:**

**Patient Care:** Manages 35 bed Neonatal ICU with 600 admissions/yr. Runs outpatient Developmental Assessment Clinic with 250 visits/yr.

**Medical Knowledge:** Educational experiences includes Research Speakers, Journal Clubs, M & M/Case Management Conferences, Statistics Course, Physiology Course, etc. in rotation.

**Practice-based Learning and Improvement:** Ongoing QI projects as part of Michigan-VON initiative; introduction by library staff to web based learning; daily use of electronic medical record (Epic)

**Interpersonal and Communications Skills:** Supervision during Prenatal and Neonatal consultations with families; experience as “fellow-attending” during final year.

**Professionalism:** IRB offerings; 360 degree evaluations by faculty, nursing staff.

**Systems-based Practices:** Joint conferences with Ob-Gyn to review M & M cases, ad hoc involvement in multicenter trials, periodic attendance at Root Cause Analyses

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2014-2015**

**Program Name:** Pediatrics Residency Program

**Program Director:** Mike Stiffler, MD

**Major accomplishments over previous year:**

1. IPASS – All peds residents worked on it for QI
2. 9 of 10 pass boards 2014 (2015 boards back in December)
3. Of 8 graduates – 4 fellowships - Cardio, Endo, PICU, Radiology, 4 pediatricians – one locally
4. Smooth transition to GMEI

**FACULTY SCHOLARLY ACTIVITY**

Faculty Member	PMID1	PMID2	Conference Presentations.	Other Presentations	Chapters Textbooks	Grant Leadership	Leadership or Peer-Review Role	Teaching Formal Courses
Stiffler, Michael			0	1	0	0	N	Y
Bitar, Anas			0	1	0	0	N	Y
Christensen, Rachel			0	0	0	0	N	Y
Gera, Renuka			0	0	0	1	N	Y
Gewolb, Ira	26195540	25665060	2	0	0	2	Y	Y
Guertin, Stephen			0	1	0	0	Y	Y
Kadrofske, Mark	25633402	25355855	1	1	0	0	Y	Y
Karna, Padmani			5	1	0	4	Y	Y
Naz, Fareeha			1	0	0	0	N	Y
Omar, Said			8	4	0	1	Y	Y
Raghib, Timur			1	0	0	0	N	Y
Rosenberg, Melissa			0	0	0	0	N	Y

Faculty Member	PMID1	PMID2	Conference Presentations.	Other Presentations	Chapters Textbooks	Grant Leadership	Leadership or Peer-Review Role	Teaching Formal Courses
Schein, Rebecca			0	1	0	0	N	Y
Sharangpani, Aditi			0	0	0	0	N	Y
Sigal, Yakov			1	0	0	0	N	Y
Stone, David			0	1	0	0	N	Y
Sudhanthar, Sathyan			2	1	0	0	N	Y
Vyas, Arpitha	26217080	26010091	2	4	1	1	Y	Y

### **RESIDENT SCHOLARLY ACTIVITY**

Resident	Year in Program	PMID1	Conference Presentations	Chapters Textbooks	Participated in Research	Teaching Presentations
Carter, Matthew	1		0	0	Y	Y
Creighton, Julie	1		0	0	Y	Y
Elayyan, Ala	1		0	0	Y	Y
Farhat, Mohamed Hani	1		0	0	Y	Y
Holla, Ira	1		0	0	Y	Y
Jarnagin, Stephanie	1		0	0	Y	Y
Justin, Rebecca	1		0	0	Y	Y
Sheikh, Zil-E-Huma	1		0	0	Y	Y
Alhamad, Mo'ath	2		0	0	Y	Y
Avula, Sravani	2		1	0	Y	Y
Jakubowski, Erin	2		0	0	Y	Y
Kojima,	2	25341594	1	0	Y	Y

Resident	Year in Program	PMID1	Conference Presentations	Chapters Textbooks	Participated in Research	Teaching Presentations
Katsuaki						
Richardson, Nastassia	2		0	0	Y	Y
Sharpe-Kamer, Krystel	2		0	0	Y	Y
Thompson, Christopher	2		0	0	Y	Y
Torgeson, Amanda	2		0	0	Y	Y
Abdi, Abdul	3		2	0	Y	Y
Al-Hamad, Dania	3		0	0	Y	Y
Fox, Erin	3		1	0	Y	Y
Leisure-Martins, Aimee	3		1	0	Y	Y
Mullin, Sabina	3	26025341	1	0	Y	Y
Murphy, Lee	3		1	0	Y	Y
Panchangam, Srinivas Krishna Cha	3		1	0	Y	Y
Pence, Ashley	3		1	0	Y	Y

**Honors (resident and faculty):**

1. Awards chosen by pediatric faculty - Pt Advocacy of yr – Leisure-Martin, Learner of yr – Avula, Professionalism– Bommel, intern of yr – Carter,
2. Awards decided on by the pediatric residents as a group – Ryszewski teaching award –Hemker, Patterson advocacy award – Sigal, Helfer teaching award – Martin, Veldman teaching award – Napolova, special Appreciation - Barry
3. Resident Teacher of year (given by CHM medical students – Panchangam

**Challenges/opportunities for upcoming year:**

1. Continually updating goals and objectives
2. Improving board scores
3. Faculty participation

**Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:**

**Patient Care:**

- OSCE at the learning center 1 x yr

**Medical Knowledge:**

- ½ day Thursday didactics every wk.

**Practice-based Learning and Improvement:**

- ILP – residents update in pedialink 2x/yr

**Interpersonal and Communications Skills:**

- IPASS

**Professionalism:**

- Advocacy projects, mini CEX, Written professionalism Curriculum

**Systems-based Practices:**

- SBP 4/wk rotation and Gen peds 4/wk rotation



**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2014-2015**

**Program Name:** Physical Medicine and Rehabilitation.

**Program Director:** Michael Andary, MD

**Major accomplishments over previous year:**

1. Increase in resident number from 9-10
2. Increase in number of PMR inpatient beds from 24 to 30
3. Successfully completed the first year under the competencies

**Research publications/presentations (resident and faculty in bold):**

1. **Slesinski MJ**, Austin EA, **Andary MT**. Prevalence of fibrillation potentials in the deltoid muscle following influenza vaccination. Lansing Research Day April 2015, State Wide Campus System Research Day. May 20, 2015. Also Muscle and Nerve October 2015 S120
2. **Nicholson J**, **Gebara R**, Dyme Z, **Andary MT**. Acute Mercury Intoxication in an Adolescent Male: a Case Report Muscle and Nerve October 2015 S101 also Lansing Research Day April 2015.
3. **Hakopian D** **Saffarian M** **Andary MT** Hornbach E Acute Compressive Ulnar Neuropathy at Guyon's Canal Following Carpal Tunnel Release. Muscle and Nerve October 2015 page S69 also Lansing Research Day April 2015.
4. Kvalsund M, **Tegtmeier J**, Hornbach E, **Andary MT**. Electrical Needle Stimulation for Localization in Rare Median Mononeuropathy of the Forearm. Muscle and Nerve October 2015 page S26

**FACULTY SCHOLARLY ACTIVITY**

Faculty Member	Conference Presentations	Other Presentations	Chapters Textbooks	Grant Leadership	Leadership or Peer-Review Role	Teaching Formal Courses
Andary, Michael	8	2	0	1	Y	Y
Gebara, Rani	1	2	0	1	Y	Y
Kuldanek, Andrea	0	1	0	0	N	N

Faculty Member	Conference Presentations	Other Presentations	Chapters Textbooks	Grant Leadership	Leadership or Peer-Review Role	Teaching Formal Courses
Prokop, Lawrence	0	3	0	0	Y	Y
Sylvain, James	0	2	0	1	Y	Y
Wyatt, Rebecca	0	2	0	0	N	Y

### **RESIDENT SCHOLARLY ACTIVITY**

Resident	Year in Program	Conference Presentations	Chapters Textbooks	Participated in Research	Teaching Presentations
Cooper, Andrew	1	2	1	Y	Y
Smith, Meagan	1	2	1	Y	Y
Verde, Michael	1	2	1	Y	Y
Hakopian, David	2	2	0	Y	Y
Nicholson, Josuha	2	3	1	Y	Y
Parrington, Ingrid	2	2	1	Y	Y
Bai, Peng	3	1	0	Y	Y
Slesinski, Michael	3	3	1	Y	Y
Tegtmeier, John	3	2	0	Y	Y

### **Honors (resident and faculty):**

- Michael Andary Distinguished Physician of the Year from the American Association of Neuromuscular and Electrodiagnostic Medicine October 2014.

**Challenges/opportunities for upcoming year:**

- Increase number of residents to 12
- Handle transition to adding internship to our residency.
- Cover the increased beds at Sparrow and maintain education.

**Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:**

**Patient Care:** Progressive responsibility is developed and achieved by several mechanisms including:

- Gradually increased responsibility with inpatient rehabilitation service, team conference management, and decision making on the inpatient ward and outpatient clinics.
- Supervision of junior residents and medical students during the senior rotation on the inpatient rehabilitation ward
- Gradually increased responsibility in residency continuity clinic
- Increasing responsibility in EMG consultations and testing (initially doing histories and physicals, then nerve conduction studies on the arm, then nerve conduction studies on the leg, then needle EMG
- Senior residents and Chief Residents are responsible for and participate in scheduling of didactics, rotations and leave times.
- Faculty encourage and allow increasing responsibility on consults and outpatient services as they have acquired the knowledge and skills for that practice area

**Medical Knowledge:**

- Lectures and AAPMR and AANEM self-assessment examinations.

**Practice-based Learning and Improvement:**

- We use a portfolio to monitor resident accomplishments, goals. Specifically there is documentation of articles read, and a brief description of how this was used in patient care.
- All residents are participating in quality improvement.

**Interpersonal and Communications Skills:** Residents and attendings jointly attend, coordinate and document team and family conferences.

- Initially residents observe and provide medical and functional information. As their experience increases, they move towards leading team and family conferences.
- Goals and objectives for the conferences, with feedback about team dynamics, including communication skills, are reviewed with the attending physician on a regular basis.
- Residents initially primarily observe, then as abilities warrant, participate and eventually lead outpatient team or family conferences.

- Residents receive counseling, role modeling, and feedback from other team members including social work, nursing, and other therapies.
- The outpatient team conferences are attended and directed by attending physicians and primarily observed by residents.

**Professionalism:** This should be done on a regular and daily basis.

- Residents talk to each other about issues of coverage, patient transfers, and patient care. The ancillary staff in the clinics are encouraged and required to give the Program Directors formal written (email) feedback on resident professionalism and communication skills.
- This competency is reviewed in the monthly evaluations and in the semi-annual reviews with the Program Director(s).

**Systems-based Practices:**

- Some of the resident quality improvement projects are related to improving team systems through inpatient rehabilitation at Sparrow Hospital.
- We made significant changes in team conferences on the rehab floor.

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2014-2015**

**Program Name:** Surgical Critical Care Fellowship

**Program Director:** Benjamin Mosher, MD

**Major accomplishments over previous year:**

- Approved tract by ABS for EM physicians to complete SCC fellowship
- Accepted first fellow in above program

**Research publications/presentations (resident and faculty):**

- Faculty (Dr Munoz) - presentations at annual meeting for EAST and 44th annual meeting SCCM

**FACULTY SCHOLARLY ACTIVITY**

Faculty Member	PMID1	Conference Presentations	Other Presentations	Chapters Textbooks	Grant Leadership	Leadership or Peer-Review Role	Teaching Formal Courses
Mosher, Benjamin		1	3	0	0	Y	Y
Armstrong, John		0	2	0	0	N	N
Guertin, Stephen		2	2	0	0	N	Y
Kepros, John	26366537	4	4	0	0	Y	Y
Munoz, Lynn		2	2	0	0	N	Y
Pahwa, Rajit		0	2	0	0	N	Y

**RESIDENT SCHOLARLY ACTIVITY**

Resident	Year in Program	Conference Presentations	Chapters Textbooks	Participated in Research	Teaching Presentations
Hyde, Ronald	1	0	0	Y	Y

**Honors (resident and faculty):**

- Faculty (Dr Kepros) - chief of staff elect

**Challenges/opportunities for upcoming year:**

- Integrate advanced practitioners into service (opportunity)

**Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:**

**Patient Care:**

- High focus of our service, integrated multi-disc rounds, 'electronic rounds' with fellows focusing on evidence based medicine, and understanding medical problems of each patient.

**Medical Knowledge:**

- MCKKAP exam scheduled for fellow march 2016.

**Practice-based Learning and Improvement:**

- 360 fellow evaluations

**Interpersonal and Communications Skills:**

- Social event with floor prior to start of the year, lecture on nurse-physician communication with low fidelity scenarios, educational sessions for nurses throughout the year.

**Professionalism:**

- 360 fellow evaluations

**Systems-based Practices:**

- Case reviews on patient outcomes for case submission to ABS for examination.

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2014-2015**

**Program Name:** Vascular Surgery Fellowship Program

**Program Director:** Carlo A. Dall'Olmo, M.D.

**Major accomplishments over previous year:**

1. Graduated first two Vascular Fellows: Sherry L. Cavanagh, M.D. & Mohammad Sarhan, M.D. Both have passed with written vascular surgery board exam.
2. Addition of Associate Program Director: Mark A. Mattos, M.D. (05-01-15)
3. The RPVI (Registered Physician in Vascular Interpretation) is now required for Vascular Fellows by the American Board of Surgery. We have added and RPVI Noninvasive Vascular Laboratory Assessment and Imaging conference lead by our lead technologist and lab manager, Joanne Drago, LPN, RVT, FSVU

**Research publications/presentations (resident and faculty):**

**FELLOWS**

1. Carotid Disease: Progression and Treatment, Oral Presentation, Michigan Academy of Physician Assistants (MAPA), 2014 Fall CME Conference, Traverse City, MI, October 11, 2014
2. Sarhan, M, Cavanagh, SL, Molnar, RG; Stent Fractures and Restenosis Rates Following Carotid Artery Stenting. Abstract accepted for presentation at Plenary Scientific Session of Midwestern Vascular 38<sup>th</sup> Annual Meeting, Sept. 2014. Oral Presentation by Baraa Zuhaili, M.D.
3. Sarhan, M., Kinning, W., Molnar, R.; Acute Thrombosis of Abdominal Aortic Aneurysm. Poster Presentation: 17<sup>th</sup> Annual MSU/FAME Community Research Forum; May 6, 2015; Second Place Award, Best Case Poster for Residents/Fellows
4. Zuhaili, B., Malhotra, N., Molnar, R.; Aorta and Renal Artery Endarterectomy with Bovine Patch Arterioplasty for Intermittent Claudication via Retroperitoneal Approach. Oral Presentation by B. Zuhaili: International Aortic Summit (IAS) Aruba, Feb. 11, 2015
5. Zuhaili, B., Malhotra, N., Molnar, R.; Aorta and Renal Artery Endarterectomy with Bovine Patch Arterioplasty for Intermittent Claudication via Retroperitoneal Approach. Oral Presentation: 17<sup>th</sup> Annual MSU/FAME Community Research Forum; May 6, 2015

## FACULTY

1. Dall’Olmo, CA. “Endograft Salvage of Hemodialysis Access Pseudoaneurysms”— Power Point Presentation, 39<sup>th</sup> Annual Northwestern Vascular Symposium, Chicago, IL, December 11, 2014
2. Dall’Olmo, CA. “Harnessing Technological Innovation in the Learning Environment – A Mandate for Change” – Power Point Presentation, Vascular Simulator Meeting; Mentice Inc. US Annual User Meeting, Chicago, IL Oct. 2, 2014
3. Mattos, MA.: Section Editor. Dua, A., Desai, SS, Holcomb JB, Burgess AR, Freischlag JA (eds): Clinical Review of Vascular Trauma. Berlin-Heidelberg, Germany, Springer-Verlag, 2014. <http://www.amazon.com/Clinical-Review-Vascular-Trauma-Anahita-ebook/dp/B00FUV0C2A/>
4. Mattos, M.A., Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA)- Required Open and Endovascular Skills. Presented to Wayne State University Department of Surgery, Senior/Chief Residents. July 31, 2014, Detroit, Michigan.
5. Mattos, MA, Required Endovascular and Open Vascular Skills for Resuscitative Endovascular Balloon Occlusion of the Aorta (REOS-REBOA). Presented at the 2<sup>nd</sup> Annual User Meeting, Mentice, Inc., October 2, 2014, Evanston, Illinois.
6. Mattos, MA, Basic Educational Theory & Curriculum Design Concepts. Mentice 2014 Train the Trainer Workshop, Building Blocks and Practical Aspects of Integrating Simulation and Skills Training into Training Programs, October 3, 2014, Evanston, Illinois.
7. Mattos, MA, What are Critical Needs of My Simulation Training and Skills Program. Mentice 2014 Train the Trainer Workshop, Building Blocks and Practical Aspects of Integrating Simulation and Skills Training into Training Programs, October 3, 2014, Evanston, Illinois
8. Mattos, MA, How Do I Integrate My Simulation and Skills Training Program into the Clinical Work Week? Mentice 2014 Train the Trainer Workshop, Building Blocks and Practical Aspects of Integrating Simulation and Skills Training into Training Programs, October 3, 2014, Evanston, Illinois.
9. Mattos, MA, How Do I Overcome the Roadblocks to Building My Simulation and Skills Training Program. Mentice 2014 Train the Trainer Workshop, Building Blocks and Practical Aspects of Integrating Simulation and Skills Training into Training Programs, October 3, 2014, Evanston, Illinois.
10. Mattos, MA, Understanding Your Options For Using Performance Assessment Instruments. Mentice 2014 Train the Trainer Workshop, Building Blocks and Practical Aspects of Integrating Simulation and Skills Training into Training Programs, October 3, 2014, Evanston, Illinois.
11. Mattos, MA, Deciding When and How to Intervene – The Trainers Dilemma. Mentice 2014 Train the Trainer Workshop, Building Blocks and Practical Aspects of Integrating



Simulation and Skills Training into Training Programs, October 3, 2014, Evanston, Illinois.

12. Carotid Disease: Progression and Treatment, Oral Presentation, Michigan Academy of Physician Assistants (MAPA), 2014 Fall CME Conference, Traverse City, MI, October 11, 2014
13. Mattos, MA, Required Endovascular and Open Vascular Skills for Resuscitative Endovascular Balloon Occlusion of the Aorta (REOS-REBOA). Presented at Required Skills for REBOA Course, Detroit Trauma Symposium, November 5, 2014, Detroit, Michigan
14. Mattos, MA, Integrating Surgical Skills Training and Assessment into Medical School, Residency, and Fellowship Training Curricula – How to Build a Better Medical Student, Resident and Fellow. Grand Rounds, Division of Vascular Surgery, Department of Surgery, University of Alabama at Birmingham, December 11, 2014, Birmingham, Alabama
15. Mattos, MA, Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA) for Traumatic Non-compressible Hemorrhagic Shock. NorthShore University HealthSystem, March 4, 2015, Evanston, Illinois
16. Mattos, M.A.: Introducing an Open Vascular Surgery Skills and Simulation Assessment Program: Testing Models, Assessment Tools, Performance, Error Analysis, and Training Recommendations. Presented at the 2015 Association of Program Directors in Vascular Surgery (APDVS) Meeting. April 17, 2015, Rosemont, Illinois.
17. Mattos, M.A.: Re-entry Pathways into the Practice of Vascular Surgery: Challenges, Considerations, and Solutions for Providing Clinical Training Experiences for Clinically Inactive Board Certified Vascular Surgeons. Presented at the 2015 Association of Program Directors in Vascular Surgery (APDVS) Meeting. April 17, 2015, Rosemont, Illinois.
18. Mohammad, F., Kabbani, L., Taylor, A., Cuff, R., Rectenwald, J., Matthews, TC., Jordan, WD., Sheahan, M., Brown, O.W., **Mattos, M.A.:** Novel Vascular Surgery Skills Training Model Accurately Differentiates Level of Vascular Surgical Skills (Forceps Handling, Needle Driving and Knot Tying) in Residents, Fellows and Faculty. Presented at the 62<sup>nd</sup> Annual Meeting and 64<sup>th</sup> Annual Resident Surgeons Competition, Michigan Chapter of The American College of Surgeons, May 15, 2015, Grand Rapids, Michigan.

**Honors (resident and faculty):**

1. Mohammad Sarhan, M.D. (Fellow) – 2<sup>nd</sup> Place Best Resident Poster Case Presentation, MSU Flint Area (FAME) Research Competition 05-06-15
2. Robert G. Molnar, M.D. (Faculty) MSU/FAME Community Research Forum Faculty Investigator Research Award 05-06-15

**Challenges/opportunities for upcoming year:**

1. Mark Mattos, M.D., Assoc. PD Vascular Fellowship, to implement Open Vascular Skills Simulation Training program for both Vascular Fellows and MSU General Surgery Residents
2. Robert Molnar, Assoc. PD, General Surgery, would like to begin having all GS Residents who rotate on the vascular service, to attend Fellow conferences and endovascular simulation training
3. Need to improve Faculty development
4. Need to increase Faculty scholarly activity

**Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:****Patient Care:**

A Diagnostic Review and Case Management Conference is held every Thursday morning from 7am-8am. During this conference, the vascular fellows present patient cases for faculty discussion on procedures for the upcoming week. In preparation for the conference, the presenters review the medical literature and evaluate various management strategies. Preparation begins with standard textbook review and is supplemented with a literature search via computer access to electronic medical data sources. Review of scientific studies, practice guidelines, and the ability to appraise the results of these studies are stressed during the open forum discussion

**Medical Knowledge:**

Fellows participate in a semi-monthly Vascular Surgery In Training Exam (VSITE) preparation conference. Topics for a 12-15 month period are distributed to fellows at the beginning of the academic year. Fellows are expected to review and assigned topics prior to attending the VSITE review session.

During the conference, Fellows complete a twenty question examination which is immediately followed by a detailed review of all question with an in-depth, faculty-led question and answer discussion. Questions are selected based on the Society for Vascular Surgery, VESAP III study questions. After a thorough discussion, Fellows receive immediate formative feedback and use identified knowledge deficits to stimulate further reading and study plans.

**Practice-based Learning and Improvement:**

Fellows currently participate in the Michigan Vascular Center's PVI Quality Initiative in association with Michigan Blue Cross and Blue shield.

During the 2015-2016 academic year, fellows will be tracking longitudinal outcomes for five index major vascular cases on which they have participated. Post-operative surgical outcomes will be reviewed at 3, 6, 12, and 18 months. A spreadsheet will be used to document index follow-up parameters. Critical outcome measures will be recorded, analyzed and reported according to practice standards established by the Society for Vascular Surgery.

### **Interpersonal and Communications Skills:**

During outpatient office clinic at Michigan Vascular Center, the fellows engage in the constant practice of direct engagement and interpersonal communication with patients, their families, office personnel, and faculty. This interaction is directly observed and serves as a multisource evaluation of the fellows interpersonal and communication skills. Faculty discussions with fellows occur on a regular basis to compliment, improve upon or critique behaviors noted in the outpatient office setting.

### **Professionalism:**

The faculty at Michigan Vascular Center practice medicine with strong ethics, high morals, and sound values. The faculty convey these principles to the fellows by example on rounds, in the clinic, and in the operating room. The fellows are asked to emulate these core principles and furthermore, as asked to provide similar ethical behavior, and thus serve as role models for the junior members of the team.

Fellows are assessed at conferences to appropriate dress, promptness, attention to assigned tasks and ability to receive and respond to constructive criticism. All conference evaluations address this competency.

### **Systems-based Practices:**

The fellows participate in two Morbidity and Mortality conferences each month, one internal and one external. This provides the fellows with the opportunity to evaluate and understand how the healthcare system works for a single specialty vascular surgical practice as well as for a large multispecialty healthcare institution (McLaren Hospital). The advantages, disadvantages and resource utilization for both entities is recognized as it relates to the care of vascular patients. Fellows are asked to constantly remain aware of the limitations of both institutions as it relates to the cost-effective care of patients. Specifically, instruction is provided to the fellow to help them identify the optimal resource pathways for effective care in both the inpatient and outpatient settings.