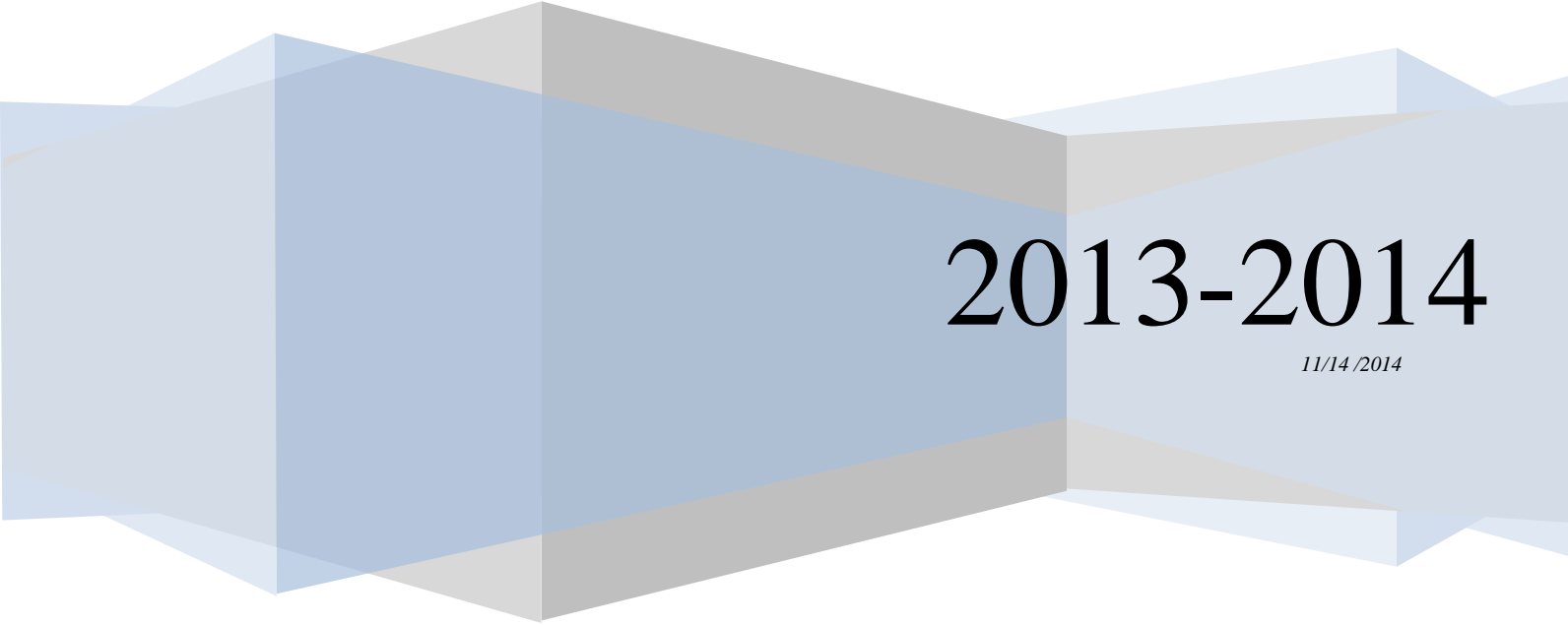


# GME Annual Report

*MSU-CHM Lansing Community*



2013-2014

*11/14/2014*

## TABLE OF CONTENTS

Introduction.....	2
Cardiology.....	4
Child/Adolescent Psychiatry.....	7
Endocrinology.....	14
General Adult Psychiatry.....	21
Hematology/Oncology.....	38
Infectious Disease.....	48
Integrated Residency in General Surgery.....	51
Internal Medicine.....	59
Interventional Cardiology.....	67
Neonatal-Perinatal Medicine.....	73
Pediatrics.....	79
PM&R.....	82
Surgical Critical Care.....	85
Vascular Surgery.....	87

**Michigan State University  
College of Human Medicine  
Graduate Medical Education—Lansing Community Campus  
Annual Report  
Academic Year 2013-14**

**Introduction**

The CHM Graduate Medical Education programs in the Lansing community have concluded the 2013-14 academic year with continued excellence in the provision of training for our future physicians. This report will highlight the activities of the GME office and the Graduate Medical Education Committee over the past academic year, with special attention to the significant accomplishments of our many programs, residents, fellows, and faculty.

**Graduate Medical Education Office**

With the transition to the New Accreditation System (NAS), the GME office is transitioning to a greater support and monitoring role, assisting programs in meeting milestone and other recording duties within the NAS. In addition, the NAS offers our office the opportunity to serve in a much more formative manner through the Special Review process. In this process, the GME office assists programs in identifying problems and seeking solutions (much in the way the former Internal Review process worked, but in a more focused manner). Our Cardiology Fellowship was our first program to be scheduled for a Special Review, with results to be reported in the 2014-15 Annual Report.

The GME office was pleased to assist the Mid-Michigan—Gratiot Family Medicine Residency as they began the process of initial accreditation this year. We are hopeful that the program will receive full accreditation in time to begin recruiting for the 2015-16 academic year.

**Graduate Medical Education Committee**

The Graduate Medical Education Committee met at each of its scheduled quarterly sessions. During each meeting, roundtable discussions were held with contributions from each program director. These discussions included the following areas:

- Resident supervision - Each of our program directors report at every meeting regarding supervision issues. Individual issues have been appropriately managed and no global concerns regarding appropriate supervision have been raised.

- Resident responsibilities— The GMEC monitors resident activities with respect to appropriate responsibility for patient care and peer education at its quarterly meetings.
- Resident evaluation—All programs have internal policies regarding evaluation of their trainees. All continue to use electronic means for recording regular evaluations (New Innovations or E-Value).
- Duty hour compliance—The GMEC continues to monitor duty hours violations among our programs. We expect that most reported incidents are handled at the program level and very few (if any) reach the GMEC as true violations.
- Resident participation in patient safety and quality of care education— The GMEC has recognized the important role of residents and fellows in carrying out the quality initiatives of our sponsoring and partner institutions. To that end, regular quality improvement topics are presented to the GMEC and the resident forum at each meeting. In this academic year, all incoming residents are expected to achieve certificate level of training (or equivalent) through the Institute for Healthcare Improvement.
- Resident compensation and benefits—Compensation and benefits were reviewed by GMEC members at the June, 2014, GMEC meeting. Compensation and benefits were found to be within the range of compensation packages offered at residency programs across the state, according to the most recent survey by MAME.

We continue to await our first Clinical Learning Environment Review (CLER). However, the GME office presented a very successful conference on the CLER process in January, 2014, in Midland. The components of the clinical learning environment expected by the ACGME are: patient safety, quality improvement, transitions of care, duty hours oversight and fatigue mitigation, supervision and professionalism. Presenters discussed their experience with institutional CLER visits and many conversations were held through the course of the day regarding how best to prepare our learning environment to meet the challenges of medical education.

**Highlights of each program are attached.**

Respectfully submitted,



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: 2013-2014**

**Program Name:** Cardiology Fellowship

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

**Graduating residents and destinations:**

1. Pavan Kotaru – Interventional Program at Borgess, Kalamazoo, MI
2. Marwan Dib - Interventional Program at Borgess, Kalamazoo, MI
3. Jagadeesh Kalavakunta - Interventional Program at Borgess, Kalamazoo, MI
4. Victor Hajjar – Private Practice – West Michigan Heart, Grand Rapids, MI
5. Keerthy Narisetty – Heart Failure Fellowship – Emory – Atlanta, GA

**Incoming residents and medical school attended:**

1. Ali Al Arab – Jordan University of Science and Technology, Jordan
2. Madhab Lamichhane – Manipal College of Medical Science, Nepal
3. Prem Srinivas Subramaniam – Kipauk Medical College, India
4. Fadi Alreefi – Taibah University, Saudi Arabia

**Faculty changes**

None

**Major accomplishments over previous year:**

1. The cardiology fellowship program graduated the 50th fellow since it was started in 1995. Graduates are now practicing all around the US and globally.
2. All four third year fellows took the ECHO Board and Nuclear Cardiology Board passed, with one excelling in the 99<sup>th</sup> percentile.
3. All fellows are in subspecialties in highly ranked programs.

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

**Peer Reviewed Manuscripts:**

Alsara O, Rayamajhi S, Ghanem F, Skaf E, Abela GS. Atypical initial presentation of primary cardiac pleomorphic sarcoma as a nagging back pain in a teenager *Tex Heart Inst J* 2013;40:339-342, 2013.

El-dakdouki MH, El-boubbou K, Kamat M, Huang R, Abela GS, Kiupel M, Zhu DC, Huang X. CD44 targeting magnetic glyconanoparticles for atherosclerotic plaque imaging *Pharm Res* DOI 10.1007/s11095-013-1021-8.

Raju, MG, Pachika A, Punnam SR, Gardiner JC, Shishehbor MH, Kapadia SR, Abela GS. Statin therapy in the reduction of cardiovascular events in patients undergoing intermediate-risk non-cardiac, non-vascular surgery *Clin Cardiol* 2013 May 13. doi: 10.1002/clc.22135.

Alsara O, Kalavakunta JK, Laird-Fick H, Abela GS. Isolated Left Main Coronary Artery Stenosis after Thoracic Radiation Therapy: To Operate or Not to Operate. *Case Reports in Medicine* Vol 2013 (2013), Article ID 834164.

Kim J, Laird-Fick HS, Alsara O, Gourineni V, Abela GS. Pericarditis in Takotsubo Cardiomyopathy: A Case Report and Review of the Literature. *Case Reports in Cardiology* Vol 2013 (2013), Article ID 917851.

### **Abstracts**

1. Janoudi A, Opreanu M, Parameswaran N, Nasiri M, Abela GS. Extracellular Cholesterol Crystals Induce an Inflammatory Response in Macrophages. *J Am Coll Card* 61:Suppl A17; 2013.
2. 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* 2014 (in press).
3. Raju M, Kalra A, Gardiner J, Janoudi A, **Abela GS**. Interaction between Cholesterol Crystals and Bacteria: Implications for Atherosclerosis. National Lipid Association Meeting (in press).

### **Book Chapters:**

1. Kalavakunta JK, Ahmado I, Abela OG, Abela GS. Myocardial infarction imaging. In: *Advances in Myocardial Infarction Management*. Ottervanger JP (Ed.). Future Medicine, London, UK. DOI: 10.2217/EBO.12.473 (2013).

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

1. Victor Hajjar, MD Cardiology fellow received the Best Fellow Poster Award during Resident's Research Day. "Vitamin D<sub>3</sub> may Impact Cardiovascular Events by Altering Cholesterol Crystallization"
2. Three fellows were recognized and appreciated by the nursing staff (4S) at Sparrow Hospital (Drs. Marwan Dib, Pavan Kotaru, Jags Kalavakunta)
3. Dr. George Abela was elected to 'Best Doctors in America' and 'America's Top Cardiologists' for the fourth year in a row.

**Challenges/opportunities for upcoming year:**

1. Coordinating activities with the DO fellowship program 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 Doppler/Echo readings for Carotid stenosis with CT angiography which is the gold standard. This will determine if our Doppler/Echo readings are equivalent.

**Medical Knowledge:** 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: 2013-2014**

**Program Name:** Child and Adolescent Psychiatry Residency

**Program Director:** Madhvi Phadtare Richards, MD

**Graduating residents and destinations:**

1. Annie Williams, DO – Henry Ford Health system, Detroit, MI
2. Karen Dobias, DO – Muskegon CMH, MI

**Incoming residents and medical school attended:**

1. Zachary Gleeson, COM, MSU
2. Katherine Krive, COM, MSU

**Faculty changes**

None

**Major accomplishments over previous year:**

1. Karen Dobias – Mini Grant winner through State Wide Campus system.
2. Involving child residents in research opportunities in Malawi and Uganda, Africa.
3. Presentations by faculty at the World Psychiatric Association, Regional Conference in Uganda, Africa on ADHD symptoms and disruptive behaviors seen in post cerebral malaria children.

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

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

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.

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



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

## **GRANTS for Michael Boivin, PhD**

### **Active**

R01 HD080467 (Cotton) 04/01/2014 – 03/31/2019  
NIH/NICHD \$3,747,020

*Latent reservoir characterization and correlations with neurocognitive functioning.*

We will correlate reservoir size with neurocognitive/neuroimaging outcome and thymic outflow in our CHER pediatric HIV study cohort. A new cohort of HIV-infected infants initiated on ART within the first week of life will also be studied. We will compare reservoir size in these infants with results from the CHER subjects, who were started at a median of 7 weeks of age. Role: Consultant

R21TW010004 (Tshala-Katumbay) 04/01/14 – 03/31/16  
Fogarty International Center/NINDS/NIH \$200,000

*Onchocerciasis-associated neurodevelopmental deficits: the hit squad*

The goal of this study is to elucidate the role of food (cyanogen) toxins in the pathogenesis of motor and cognitive disabilities associated onchocerciasis and treatment with ivermectin. Role: Consultant

2R01 NS055349 (John) 1/15/2014 - 12/31/2018  
NIH/NINDS \$2,710,531

*Neurodevelopmental outcomes in children with severe malaria*

The study's central hypothesis is that different types of severe malaria affect distinct pathogenic pathways leading to specific functional areas and levels of impairment. Role: Co-I

### **Completed**

R34MH084782 (Boivin) 03/01/2010-02/28/2014 No-Cost  
Extension  
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

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

### **Peer-Reviewed Journal Publications** (IF = impact factor of journal).

1. Bangirana P., Opoka R.O., **Boivin M.J.**, Idro R., Hodges J.S., Romero R.A., Shapiro E., & John C.C. (2014). Severe malaria anemia is associated with long-term neurocognitive impairment. *Clinical Infectious Disease*, 2014 Aug 1;59(3):336-44. doi: 10.1093/cid/ciu293. Epub 2014 Apr 24. PMID:24771329
2. Brahmabhatt, H., **Boivin, M.J.**, Ssempijja, V., Kigozi, G., Kagaayi, J., Serwadda, D., & Gray, R.H. (2014). Neurodevelopmental benefits of Anti-Retroviral Therapy in Ugandan children 0-6 Years of age with HIV. *Journal of the International AIDS Society*, in press.
3. **Boivin, M.J.**, Vokhiwa, M., Sikorskii, A., Magen, J.G., & N.A.V. Beare (2014). Cerebral malaria retinopathy predictors of persisting neurocognitive outcomes in Malawian children. *Pediatric Infectious Disease Journal*, August 2014, 33 (8):821-824. doi: 10.1097/INF.0000000000000296. (IF = 3.57).
4. 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. (2014). Biomarker-based association models for predicting cognition deficits in cassava cyanogenic poisoning. *Metabolic Brain Disease*, June 2014;29(2):359-66. doi: 10.1007/s11011-014-9492-9. Epub 2014 Feb 1. PMID:
5. Koura, G.K., **Boivin, M.J.**, Davidson, L.L., Ouédraogo, S., Zoumenou, R., Alao, M.J., Garcia, A., Massougbodji, A., Cot, M., & Bodeau-Livinec, F. (2013). Usefulness of child development assessments for low-resource settings in francophone Africa. *Journal of Developmental and Behavioral Pediatrics*, 34:486–493, 2013). (IF = 2.14).
6. **Boivin, M.J.**, Okitundu, D., Bumoko, G.M-M., Sombo, M-T., Mumba, D., Tylleskar, T., Page, C., Tamfum-Muyembe, J-J., & Tshala-Katumbay, D. (2013). Neuropsychological effects of konzo: a neuromotor disorder associated with cassava. *Pediatrics*, 131(4), e1231-e1239; published online March 25, 2013 (doi: 10.1542/peds.2012-3011). (IF = 5.44). Featured in the *New York Times* article “Cassava and mental deficits” by Donald G. McNeil, Jr.; 22-April-2013. Also featured in the

global health section article “Cognitive effects of konzo” by Mary Jane Friedrich; *JAMA*, May 15, 2013—Vol 309 (19); p. 1985.

7. Laughton, B., Cornell, M., **Boivin, M.J.**, & Van Rie, A. (2013). Neurodevelopment in perinatally HIV-infected children: a concern for adolescence. *Journal of International the International AIDS Society*, 2013, 16(1), 18603; <http://dx.doi.org/10.7448/IAS.16.1.18603>. (IF = 3.26).

8. **Boivin, M.J.**, Bangirana, P., Nakasujja, N., Page, C., Shohet, C., Givon, D., Bass, J., Opoka, R.O., & Klein, P. (2013). A year-long caregiver training program to improve neurocognition in preschool Ugandan children affected by HIV. *Journal of Developmental and Behavioral Pediatrics*, 34(4); 269-278; DOI: 10.1097/DBP.0b013e318285fba9. (IF = 2.14).

9. **Boivin, M.J.**, Bangirana, P., Nakasujja, N., Page, C., Shohet, C., Givon, D., Bass, J., Opoka, R.O., & Klein, P. (2013). A year-long caregiver training program to improve neurocognition in preschool Ugandan children with HIV. *Journal of Pediatrics*, Nov;163(5):1409-1416.e5. doi: 10.1016/j.jpeds.2013.06.055. Epub 2013 Aug 16. (IF = 4.15)

10. Bangirana P., Menk J., John C.C., **Boivin M.J.**, & Hodges J.S. (2013). The association between cognition and academic performance in Ugandan children surviving malaria with neurological involvement. *PLoS One*, 2013; 8(2):e55653. doi: 10.1371/journal.pone.0055653. Epub 2013 Feb 1 (IF = 5.68)

11. Postels, D.G., Chimalizeni, Y.F., Mallewa, M., **Boivin, M.J.**, & Seydel, K.B. (2013). Pediatric cerebral malaria: a scourge of Africa. *Future Neurology*, 8(1), 67–85. (IF = 2.46)

12. Tshala-Katumbay, D., Mumba, D., Okitundu, D., Kazadi, K., Banea, M., Tylleskar, T., **Boivin, M.J.**, & Tamfum-Muyembe, J-J. (2013) Cassava food toxins, konzo disease and neurodegeneration in sub-Saharan Africans. *Neurology*, 80, 949-951; DOI 10.1212/WNL.0b013e3182840b81. (IF = 8.31).

13. Joseph, J., Achim, C., **Boivin, M.**, Brew, B., Clifford, D., Colosi, D., Ellis, R., Heaton, R., Gallo-Diop, G., Grant, I., Kanmogne, G., Kumar, K., Letendre, S., Marcotte, T., Nath, A., Pardo, C., Paul, R., Pulliam, L., Robertson, K., Royal, W., Sacktor, N., Sithinamsuwan, P., Smith, D., Valcour, V., Wigdahl, B., Wood, C., & Rausch, D., (2013). Global NeuroAIDS Roundtable. *Journal of Neurovirology*, 2013 Feb;19(1):1-9. doi: 10.1007/s13365-012-0143-9. Epub 2013 Jan 26. (IF = 2.31).

P. Quinlan: Pediatric Psychopharmacology. Mott Children's Health Center and Michigan State University Child and Adolescent Psychiatry Update. April 24, 2013. Flint, MI.

P. Quinlan: Hurley Medical Center 2013 Pediatric Update on the Management and Psychopharmacology of Pediatric Psychiatric Conditions. May 1, 2013. Flint MI.

P. Quinlan: Hurley Medical Center 2014 Pediatric Update: ADHD. May 7, 2013. Flint MI.

P. Quinlan: Michigan State Police Forensic Art Unit 2014 Retreat: Interviewing Victims and Witnesses with Autism Spectrum Disorder. June 2, 2014. Roscommon, MI.

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

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

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

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

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

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.

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

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

**Honors (resident and faculty):**

Michael Boivin, PhD

May 21, 2014: Winner of best faculty research poster and co-presenter on runner-up research poster at the 1<sup>st</sup> annual research poster session of the Michigan State University College of Osteopathic Medicine Statewide Campus System (SCS) meeting, East Lansing, MI: May 21, 2014.

April 27, 2014: Selected as an MSU Global Innovations Fellow, 2014-15 Academic Year. Michigan State University Global Outreach Program, Office of the Provost.

September 26, 2013: Co-recipient of the Michigan State University – College of Osteopathic Medicine Faculty Humanism Award: Michigan State University, East Lansing, MI.

Jed Magen – April 2014: Second place in SCS Research Day, Faculty Poster

**Challenges/opportunities for upcoming year:**

1. Recruiting for upcoming years
2. Participation in Mid Michigan Research day
3. Expanding the Child and Adolescent Psychiatry Program to the Flint area
4. Expanding our telepsychiatry sites
5. Expanding more research opportunities in Malawi and Uganda

**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 evaluation 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: 2013-2014**

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

**Graduating residents and destinations:**

1. Deepthi Rao – private practice in Illinois

**Incoming residents (include medical school attended):**

1. 2014 incoming – Preethi Krishnan, MD – Kempegowda Institute of Medical Sciences, India
2. 2013 incoming - Nitika Malhotra, MD – Government Medical College, Amristar India

**Faculty Changes:**

Dr. Gossain will be starting his consulting year January 2015

**Major accomplishments over previous year:**

Smooth transition of the Diabetes Center from Sparrow to MSU.

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

**Matthew Hebdon, MD**

**Publications:**

1. Ansar S, Mian S, Roth S, **Hebdon GM**, Aldasouqi S, Gossain V. Safety of Insulin Glargine in Pregnancy. Journal of Diabetes and Metabolism 2013;4(2):1-4.
2. Hemati 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 February 2014.

**Abstracts**

1. Ansar S, Mian S, Roth S, **Hebdon GM**, Aldasouqi S, Gossain V. Safety of Insulin Glargine in Pregnancy. Presented at 2nd Annual MSU Conference on Women's Health Research, November 2013.

2. Rao D, Bhavsar B, **Hebdon G**, Aldasouqi S, Abela, Gossain V. Course of Subclinical Hyperthyroidism in an Academic Center and Effect on Ventricular Function. International Congress of Endocrinology/Endocrine Society Annual Meeting, Chicago, June 21-24, 2014
3. Malhotra N, Alnazawi R, **Hebdon GM**, Gossain V. Prevalence of osteoporosis preventive measures, treatment and monitoring in patients receiving glucocorticoids. MI Chapter AACE Meeting 2014; Traverse City, Michigan

### **Saleh Aldasouqi, MD – Key Faculty**

#### **Publications:**

1. Ansar S, Mian S, Roth S, Hebdon GM, **Aldasouqi S**, Gossain V. Safety of Insulin Glargine in Pregnancy. *Journal of Diabetes and Metabolism* 2013;4(2):1-4.
2. Hemati 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 February 2014.

#### **Abstracts:**

1. Ojha M, **Aldasouqi S**. Biochemically Thyrotoxic for a cause. A wake up call to early diagnosis of Thyroid resistance. Poster accepted at the Midwest Regional Meeting of the Society of General Internal Medicine, Chicago, September 12-13, 2013.
2. Ansar S, Mian S, Roth S, Hebdon GM, **Aldasouqi S**, Gossain V. Safety of Insulin Glargine in Pregnancy. Presented at 2nd Annual MSU Conference on Women's Health Research, November 2013.
3. 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.
4. 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.



5. Burns T, Rao D, Ojha M, **Aldasouqi S**. Rapidly progressive Cushing Disease due to Crooke Adenoma. ICE/Endo 2014; Chicago, Illinois. Poster presentation by Rao.
6. Tikaria R, Rao D, **Aldasouqi S**. Large thyroid nodules and FNA. ICE/Endo 2014; Chicago, Illinois. Poster presentation by Tikaria.

### **Ved Gossain, MD – Key Faculty and Division Chief**

#### **Publications**

1. **Gossain V**, Aldasouqi S. Diabetes Insipidus. In: Ferenchick G, Ebell MH, Lin K, eds. e-Essential Evidence 2012/updated 2013 1st ed. Hoboken, NJ: John Wiley and Sons. <http://essentialevidenceplus.com/content/eee0123>: 1-3.
2. Nelson P, **Gossain V**. Cushing's Syndrome. In: Ebell MH, Ferenchick G, Smith M, Barry H, Slawson D, Shaughnessy A, Forsch R, Li S, Wilkes M, Usatine R, eds. E-Essential Evidence <http://essentialevidenceplus.com/content/eee/121:1-8>.
3. Ansar S, Mian S, Roth S, Hebdon GM, Aldasouqi S, **Gossain V**. Safety of Insulin Glargine in Pregnancy. Journal of Diabetes and Metabolism 2013;4(2):1-4.
4. Hemati 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 February 2014.

#### **Abstracts**

1. Rao D, Bhavsar B, Kotaru P, Abela G, **Gossain V**. Course and management of subclinical hyperthyroidism in an academic center and effect on ventricular function. AACE 2013; Phoenix, Arizona.
2. Ansar S, Mian S, Roth S, Hebdon GM, Aldasouqi S, **Gossain V**. Safety of Insulin Glargine in Pregnancy. Presented at 2nd Annual MSU Conference on Women's Health Research, November 2013.
3. Rao D, Bhavsar B, Kotaru P, Abele G, **Gossain V**. Course and Management of Subclinical Hyperthyroidism in an Academic Center and Effect on Ventricular Function AACE 2013; Phoenix, Arizona.
4. Malhotra N, Alnazawi R, Hebdon GM, **Gossain V**. Prevalence of osteoporosis preventive measures, treatment and monitoring in patients receiving glucocorticoids. MI Chapter AACE Meeting 2014; Traverse City, Michigan

## **Grant**

NIH (N0006U) R01 #PA-11-250. “Genomics in the Clinic: Identity, Responsibility and Choice”. Hunt L (PI), Howard H (Co-PI), Gossain V (Consultant 1% time). Funded 9/1/13-8/31/16. Total Award: \$371,517.00

### **Sameer Ansar, MD – graduated June 2013**

1. **Ansar S**, Mian S, Roth S, Hebdon GM, Aldasouqi S, Gossain V. Safety of Insulin Glargine in Pregnancy. *Journal of Diabetes and Metabolism* 2013;4(2):1-4.
2. Hemati 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 February 2014.

### **Reem Alnazawi, MD – PGY 2**

#### **Abstract**

1. Malhotra N, Alnazawi R, Hebdon GM, Gossain V. Prevalence of osteoporosis preventive measures, treatment and monitoring in patients receiving glucocorticoids. MI Chapter AACE Meeting 2014; Traverse City, Michigan

### **Deepthi Rao, MD – PGY 2**

1. 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.
2. 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.
3. 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.
4. Tikaria R, Rao D, Aldasouqi S. Large thyroid nodules and FNA. ICE/Endo 2014; Chicago, Illinois. Poster presentation by Tikaria.

**Nitika Malhotra, MD – PGY 1**

1. **Malhotra N, Alnazawi R, Hebdon GM, Gossain V.** Prevalence of osteoporosis preventive measures, treatment and monitoring in patients receiving glucocorticoids. MI Chapter AACE Meeting 2014; Traverse City, Michigan.

**Honors (resident and faculty):**

Deepthi Rao awarded a 2014 Helmsley Charitable Trust Abstract Award in type 1 diabetes in conjunction with ICE/ENDO 2014 June meeting in Chicago. Abstract title: A Case of Continued Insulin-Independence 8 Years after Islet Cell Transplantation: A Promising Remedy for Type 1 Diabetes

**Challenges/opportunities for upcoming year:**

1. We will try to recruit additional fellow, sponsored by Saudi government.
2. We will no longer have access to Dr. Carella at MMP and will need to provide teaching of FNA's here at MSU.
3. Expand curriculum to include more thyroid ultrasound in anticipation of new requirements from ABIM/AACE.

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

**Endocrinology Site Visit – Competency Worksheet**

**○ Medical Knowledge**

<b>How Taught</b>	<b>How Assessed</b>
During patient care – 1:1 interactions with faculty	Monthly evaluations from attendings Semi annual reviews with PD
Required conferences (includes research conferences, journal club)	On going evaluation by faculty In training exam

○ **Patient Care**

<b>How Taught</b>	<b>How Assessed</b>
During patient care – 1:1 interactions with faculty. Includes thyroid biopsies with Drs. Aldasouqi, Carella and Hebdon	Ongoing evaluation 1:1 and more formally with monthly evaluations from attendings Procedure logs Review of notes Semi annual reviews with PD
Clinical conferences	Quality of participation

○ **Interpersonal and Communication Skills**

<b>How Taught</b>	<b>How Assessed</b>
During patient care – 1:1 interactions with faculty, patients/family.	Patient satisfaction surveys Multisource evals (nurses, clinic managers, patients and self-evaluation) Monthly evaluations from attendings Review of documentation Semi annual reviews with PD
Team function: diabetes clinic with NP, dieticians etc.; MSU clinic with MAs, nurse manager etc	Nurse evaluations Monthly evaluations from attendings Semi annual reviews with PD
Consultative role: in clinic and with hospital consults	Monthly evaluations from attendings Review of documentation
Medical records	Review of documentation Semi annual reviews with PD

○ **Professionalism**

<b>How Taught</b>	<b>How Assessed</b>
During patient care – 1:1 interactions with faculty. HIPPA compliance tutorial IRB tutorial for research	Patient satisfaction surveys Monthly evaluations from attendings Multisource evaluations Track documentation completion Certification in HIPPA compliance, IRB tutorial for research certification Compliance with admin requirements Semi annual reviews with PD

○ **Practice Based Learning and Improvement**

<b>How Taught</b>	<b>How Assessed</b>
<i>Self assessment; directed learning; incorporation of feedback into daily practice:</i> Performed and modeled during patient care	Monthly evaluations from attendings Semi annual reviews with PD
<i>Practice improvement:</i> Conferences, PI project(s)	Practice improvement modules and self-directed projects
<i>Evidence based medicine:</i> 1:1 discussion with attendings in conferences and during patient care	Journal club and application during patient care
<i>Information technology:</i> during patient care (EMR, hospital information systems); use of electronic library resources in patient care, conference	Use of EMR Use of electronic library sources in patient care, conference – part of monthly evaluation
<i>Education of others:</i> talks during endo conferences, talks with residents (including during rotation or conference series)	Feedback from faculty Teaching evaluations from residents (IM)

○ **Systems Based Practice**

<b>How Taught</b>	<b>How Assessed</b>
<i>Work effectively in various settings:</i> clinical experience at MSU, Sparrow, and MMP offices	Monthly evaluations from attendings Semi annual reviews with PD Nurse evaluation
<i>Coordinate patient care:</i> communication with referring physicians, ordering tests etc across settings, communicating with patients	Monthly evaluations from attendings Semi annual reviews with PD Nurse evaluations
<i>Cost awareness, risk-benefit analysis:</i> in context of patient care, conferences	Monthly evaluations from attendings Semi annual reviews with PD
Advocate for system improvements	
<i>Work in interprofessional teams:</i> ie clinic, diabetes clinic; role modeling and interactions	Monthly evaluations from attendings Semi annual reviews with PD Nurse evaluations s
<i>Identify and help fix system errors:</i> Discuss during clinical conferences (ie in context of specific patient); problems getting lab results on patients for follow up visits – work on coordinating with nurses in clinic	Monthly evaluations from attendings Semi annual reviews with PD

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year 2013-2014**

**Program Name:** General Adult Psychiatry Residency  
**Program Director:** Alyse Ley, D.O

**Graduating residents and destinations:**

Hanna Saad MD-Completed PGY III-Transfer to Wayne State University to complete Child Psychiatry Fellowship-July 1, 2014

Zachary Gleeson DO- promoted to PGY IV July 28, 2014 -started the Child Psychiatry Fellowship August 1, 2014

**Resident Evaluation/Promotion:**

**PGY IV**

Marie Beasley DO-scheduled to graduate September 25, 2014-maternity leave

Miko Rose DO-extended for family issue; schedule to graduate April 10, 2015

Daniel Cote' DO-extended due to family issues/part-time schedule; scheduled to graduate December 31, 2014

**PGY III**

Rebecca Brown DO- promoted to PGY IV July 2014

Ruth Baer DO- promoted to PGY IV September 2014-entered into the program in September 2012

Jamie Arnold DO- promoted to PGY IV September 2014-maternity leave

Junko Yasuda-Free DO- promoted to PGY IV October 2014-maternity leave

Zachary Gleeson DO- promoted to PGY IV July 28, 2014 -started the Child Psychiatry Fellowship August 1, 2014

**PGY II**

Erica Larsen DO - promoted to PGY III July 2014

Dora Hillman DO - promoted to PGY III July 2014

Jesse Guasco DO- promoted to PGY III July 2014

Nicholas Sandersfeld DO- promoted to PGY III July 2014

Sarah Burke DO- promoted to PGY III July 2014

**PGY I**

Daniel Dawis DO- promoted to PGY II July 2014

James Hartzler DO- promoted to PGY II July 2014

Samantha Kennedy DO- promoted to PGY II July 2014

Nicole Albrecht MD- promoted to PGY II July 2014

Deepti Mughal MD-resigned October 2014

**Incoming residents July 2014 (include medical school attended):**

Jon Minh-Ngyuen DO- Midwestern College of Osteopathic Medicine-Arizona

Lawrence Greenberg DO-Touro University College of Osteopathic Medicine-Nevada

Alycia Ernst MD-Michigan State University Department of Psychiatry

Vivek Vanaharam MD-Sri Ramachandra Medical College and Research Institute, India

Nana Achampong MD- Michigan State University Department of Psychiatry

Sarah Zyskowski DO-transfer into the PGY II class from Wayne State University-  
Department of Psychiatry

**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. Appointment of faculty member- Jose Herrera, MD to the St. Lawrence Adult Psychiatric Unit.
4. Expansion of elective rotations for resident in Malawi, Uganda, and Mexico
5. Two Residents completed one month rotation in Merida, Mexico
6. Collaboration with psychiatrists in Merida, Mexico on international learning series
7. APA SAMSHA Minority Fellowship
8. Professional Scientific Training Conference on Children's Social and Emotional Wellbeing- Amman, Jordan in conjunction with UNICEF and UNFPA and Jordan River Foundation
9. Integration of the Joy Initiative into the MSUCOM Curriculum: A Study of the Efficacy of Mindfulness and Joy-Focused Psychosocial Interventions on Wellness in Medical Students.
10. Collaboration with the Ingham County Mental Health Court and Community Mental Health-Forensic Rotation
11. Continued publication of the Muslim Mental Health Journal
12. Hosted the annual Muslim Mental Health Conference
13. Integrated Psychiatry/Family Medicine clinical experience
14. FM/IM/Psychiatry integrated quarterly conference

**Senior Research presentations June 2014.**

Hanna Saad MD-"Residents as Teachers: How Far Have We Come?"

Marie Beasley DO-"Barriers to Utilizing Long-acting Injectable Antipsychotic Medications"

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

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

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

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

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

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.

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

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

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

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.

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



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

Boivin, M. Vokhiwa, M. Page, C. Magen, J. The correspondence validity of Malawian preschool developmental assessment and school-age neurocognitive performance in the longitudinal assessment of severe malaria. Ugandan Health Scientists' 14<sup>th</sup> Annual Scientific Conference May 30-31, 2013. Makerere University, Kampala Uganda

Boivin, M Vokhiwa, M Magen, J. The correspondence validity of Malawian preschool developmental assessment and school-age neurocognitive performance in the longitudinal assessment of severe malaria. The Lancet Volume 381, Page S18, 17 June 2013

Magen J, Aggression in Children and Adolescents. Mott Children's Health Center/Michigan State University Child and Adolescent Psychiatry Update, Flint Michigan April 24, 2013

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

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

Scheid J, 2013, "Mood Disorders in Children and Adolescents" for Pediatric Grand Rounds Sparrow Hospital

Scheid J, 2013, "Defiant and Antisocial Behavior in Children and Adolescents" for Pediatric Update, College of Osteopathic Medicine

Scheid J, 2013, "Treating youth with psychotropic medications" for Michigan Federation for Children and Families conference

Scheid J, 2013, "Eating Disorders" Rural Grand Rounds, MSU Psychiatry/Family  
Medicine Summer 2013

Scheid J, 2013, "DSM-5 Update: Changes Relevant to You" MIAAP Annual Meeting Fall  
2013

Scheid J, 2013, "Medications in Kids" MI Statewide Wraparound Conference

Magen J, Richards M & Ley A., (2013) A Proposal for the "Next Generation Psychiatry  
Residency": Responding to Challenges of the Future, *Journal of Academic Psychiatry*,  
37:6, 375

Richards M, October 2013, ADHD, Anxiety disorders and Depression in Children and  
Adolescents, The Professional Scientific Training Conference on Children's Social and  
Emotional Wellbeing, Amman, Jordan.

Richards M, August 2013 Teaching Residents and Medical Students with Telemedicine  
at Michigan State University, 1 Congreso Nacional de Telemedicina, Merida, Mexico

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

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

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.

RA1SE - Early Treatment Program (ETP) - [RA1SE (Recovery After an Initial  
Schizophrenia Episode)]Principial Investigator. Sponsor NIMH. 2010 to present.

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

## **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) 03/01/2013 – 02/30/2017  
NIH/NICHD \$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

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

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

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
- 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
- R21MH097115 (Huang) 5/01/2013-2/30/2015  
NIH/NICHD  
*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

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

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

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-PI

**Completed**

University of Michigan Global Reach Faculty-Mentored Structured Summer Overseas Projects for Medical Students. (Giordani, Boivin) 06/01/2010-8/31/2013  
UM Medical School Global Reach Program \$20,000/year for 3 Years

*Cognitive and family intervention trials (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-PI

Koura, G.K., **Boivin, M.J.**, Davidson, L.L., Ouédraogo, S., Zoumenou, R., Alao, M.J., Garcia, A., Massougboji, A., Cot, M., & Bodeau-Livinec, F. (2013). Usefulness of child development assessments for low-resource settings in francophone Africa. *Journal of Developmental and Behavioral Pediatrics*, 34:486–493, 2013). (IF = 2.14).

**Boivin, M.J.**, Okitundu, D., Bumoko, G.M-M., Sombo, M-T., Mumba, D., Tylleskar, T., Page, C., Tamfum-Muyembe, J-J., & Tshala-Katumbay, D. (2013). Neuropsychological effects of konzo: a neuromotor disorder associated with cassava. *Pediatrics*, 131(4), e1231-e1239; published online March 25, 2013 (doi: 10.1542/peds.2012-3011). (IF = 5.44). Featured in the *New York Times* article “Cassava and mental deficits” by Donald G. McNeil, Jr.; 22-April-2013. Also featured in the global health section article “Cognitive effects of konzo” by Mary Jane Friedrich; *JAMA*, May 15, 2013—Vol 309 (19); p. 1985.

Laughton, B., Cornell, M., **Boivin, M.J.**, & Van Rie, A. (2013). Neurodevelopment in perinatally HIV-infected children: a concern for adolescence. *Journal of International the International AIDS Society*, 2013, 16(1), 18603; <http://dx.doi.org/10.7448/IAS.16.1.18603>. (IF = 3.26).

**Boivin, M.J.**, Bangirana, P., Nakasujja, N., Page, C., Shohet, C., Givon, D., Bass, J., Opoka, R.O., & Klein, P. (2013). A year-long caregiver training program to improve neurocognition in preschool Ugandan children affected by HIV. *Journal of Developmental and Behavioral Pediatrics*, 34(4); 269-278; DOI: 10.1097/DBP.0b013e318285fba9. (IF = 2.14).

**Boivin, M.J.**, Bangirana, P., Nakasujja, N., Page, C., Shohet, C., Givon, D., Bass, J., Opoka, R.O., & Klein, P. (2013). A year-long caregiver training program to improve neurocognition in preschool Ugandan children with HIV. *Journal of Pediatrics*,

Nov;163(5):1409-1416.e5. doi: 10.1016/j.jpeds.2013.06.055. Epub 2013 Aug 16. (IF = 4.15)

Bangirana P., Menk J., John C.C., **Boivin M.J.**, & Hodges J.S. (2013). The association between cognition and academic performance in Ugandan children surviving malaria with neurological involvement. *PLoS One*, 2013; 8(2):e55653. doi: 10.1371/journal.pone.0055653. Epub 2013 Feb 1 (IF = 5.68)

Postels, D.G., Chimalizeni, Y.F., Mallewa, M., **Boivin, M.J.**, & Seydel, K.B. (2013). Pediatric cerebral malaria: a scourge of Africa. *Future Neurology*, 8(1), 67–85. (IF = 2.46)

Tshala-Katumbay, D., Mumba, D., Okitundu, D., Kazadi, K., Banea, M., Tylleskar, T., **Boivin, M.J.**, & Tamfum-Muyembe, J-J. (2013) Cassava food toxins, konzo disease and neurodegeneration in sub-Sahara Africans. *Neurology*, 80, 949-951; DOI 10.1212/WNL.0b013e3182840b81. (IF = 8.31).

Joseph, J., Achim, C., **Boivin, M.**, Brew, B., Clifford, D., Colosi, D., Ellis, R., Heaton, R., Gallo-Diop, G., Grant, I., Kanmogne, G., Kumar, K., Letendre, S., Marcotte, T., Nath, A., Pardo, C., Paul, R., Pulliam, L., Robertson, K., Royal, W., Sacktor, N., Sithinamsuwan, P., Smith, D., Valcour, V., Wigdahl, B., Wood, C., & Rausch, D., (2013). Global NeuroAIDS Roundtable. *Journal of Neurovirology*, 2013 Feb;19(1):1-9. doi: 10.1007/s13365-012-0143-9. Epub 2013 Jan 26. (IF = 2.31).

### **Book Publication**

1. **Boivin, M.J.** & Giordani, B. (2013). Boivin and B. Giordani (eds.) *Neuropsychology of Children in Africa: Perspectives on Risk and Resilience*. American Academy of Pediatric Neuropsychology (AAPdN) Specialty Topics in Pediatric Neuropsychology, DOI 10.1007/978-1-4614-6834-9\_1. New York, NY: Springer Science and Business Media Publications (ISBN 978-1-4614-6833-2; ISBN 978-1-4614-6834-9 eBook).

### **Book Chapters**

**Boivin, M.J.**, Wouters, H., & Giordani, B. (2013). Introduction: the neuropsychology of African children within a co-constructivist paradigm. In M.J. Boivin and B. Giordani (eds.) *Neuropsychology of Children in Africa: Perspectives on Risk and Resilience*. Specialty Topics in Pediatric Neuropsychology DOI 10.1007/978-1-4614-6834-9\_1. New York, NY: Springer Science and Business Media; pages 1-16.



Busman, R.A., Page, C., Oka, E., Giordani, B., & **Boivin, M.J.** (2013). Factors contributing to the psychosocial adjustment of Ugandan preschool children with HIV/AIDS. In M.J. Boivin and B. Giordani (eds.) *Neuropsychology of Children in Africa: Perspectives on Risk and Resilience*. Specialty Topics in Pediatric Neuropsychology DOI 10.1007/978-1-4614-6834-9\_1. New York, NY: Springer Science and Business Media; pages 95-116.

Busman, R.A., Oka, E., Giordani, B., & **Boivin, M.J.** (2013). Examining the psychosocial adjustment and school performance of Ugandan children with HIV/ AIDS. In M.J. Boivin and B. Giordani (eds.) *Neuropsychology of Children in Africa: Perspectives on Risk and Resilience*. Specialty Topics in Pediatric Neuropsychology DOI 10.1007/978-1-4614-6834-9\_1. New York, NY: Springer Science and Business Media; pages 117-138.

Lorencz, E.E., & **Boivin, M.J.** (2013). Screening for neurodisability in low-resource settings using the Ten Questions Questionnaire. In M.J. Boivin and B. Giordani (eds.) *Neuropsychology of Children in Africa: Perspectives on Risk and Resilience*. Specialty Topics in Pediatric Neuropsychology DOI 10.1007/978-1-4614-6834-9\_1. New York, NY: Springer Science and Business Media; pages 139-154.

Boveau-Livenec, F., Cot, M., Koura, G.K., & **Boivin, M.J.** (2013). Assessing the effects of maternal anemia on child development in Benin. In M.J. Boivin and B. Giordani (eds.) *Neuropsychology of Children in Africa: Perspectives on Risk and Resilience*. Specialty Topics in Pediatric Neuropsychology DOI 10.1007/978-1-4614-6834-9\_1. New York, NY: Springer Science and Business Media; pages 203-214.

Holding, P. & **Boivin, M.J.** (2013) The assessment of neuropsychological outcomes in pediatric severe malaria. In M.J. Boivin and B. Giordani (eds.) *Neuropsychology of Children in Africa: Perspectives on Risk and Resilience*. Specialty Topics in Pediatric Neuropsychology DOI 10.1007/978-1-4614-6834-9\_1. New York, NY: Springer Science and Business Media; pages 235-276.

Bangirana, P., **Boivin, M.J.**, & Giordani, B. (2013). Computerized cognitive rehabilitation therapy (CCRT) for African children: evidence for neuropsychological benefit and future directions. In M.J. Boivin and B. Giordani (eds.) *Neuropsychology of Children in Africa: Perspectives on Risk and Resilience*. Specialty Topics in Pediatric Neuropsychology DOI 10.1007/978-1-4614-6834-9\_1. New York, NY: Springer Science and Business Media; pages 277-298.

**Boivin, M.J.**, Dobias, K., & Giordani, B. (2013). Postscript: towards a universal brain/behavior omnibus in the neuropsychology of African children. In M.J. Boivin and B. Giordani (eds.) *Neuropsychology of Children in Africa: Perspectives on Risk and Resilience*. Specialty Topics in Pediatric Neuropsychology DOI 10.1007/978-1-4614-6834-9\_1. New York, NY: Springer Science and Business Media; pages 329-333.

**PLATFORM AND POSTER PRESENTATIONS AND PUBLISHED ABSTRACTS FOR LEARNED SOCIETIES AND ORGANIZATIONS**

1. **Boivin, M.J.** & Giordani, B. (2014, June 25). *The application of neuropsychology with children in Africa: assessing risk and resilience*. Invited workshop to the 12<sup>th</sup> annual meeting of the American Academy of Clinical Neuropsychology, New York, NY; September 25-28, 2013.
2. Brahmabhatt, H., Gray, R., **Boivin, M.**, Ssempijja, V., Matovu, I., Kigozi, G., Kagaayi, J., & Serwadda, D., (2013, September 12). *Prospective study assessing neurodevelopmental benefits of anti-retroviral therapy in Ugandan children 0-6 years of age with HIV*. Platform presentation at the 17<sup>th</sup> annual International Conference on AIDS and STIs in Africa; Cape Town, South Africa; December 7 – 11, 2013.
3. Bumoko, G.M., Okitundu, D., Sombo, M-T., Ngoyi, M., Tylleskar, TI, Page, C., Muyembe, J., **Boivin, M.**, Tshala-Katumbay, D. (2013, November 14). *Neuropsychological effects and biomarkers of konzo: a neuromotor disease associated with poorly processed cassava*. Poster presentation at the 62<sup>nd</sup> annual meeting of the American Society of Tropical Medicine and Hygiene; Washington, DC, November 13-17, 2013. This study was the recipient of the Elsevier Clinical Research Award, presented Nov. 13, 2013.
4. Bangirana, P., Opoka, R.O., Idro, R., Hodges, J., **Boivin, M.J.**, & John, C.C. (2013, November 17). *Severe malarial anemia is associated with longterm neurocognitive impairment*. Platform presentation at the 62<sup>nd</sup> annual meeting of the American Society of Tropical Medicine and Hygiene; Washington, DC, November 13-17, 2013.
5. **Boivin, M.J.** (2013, October 23). *Longitudinal developmental and neuropsychological assessments of HIV-infected children: evaluating ART and behavioral treatment strategies*. Invited Pediatrics Grand Rounds Presentation to the University of Makerere Medical School; Kampala, Uganda; October 23, 2013.
6. **Boivin, M.J.** (2013, October 3). *Longitudinal developmental and neuropsychological assessments of HIV-infected children: evaluating ART and behavioral treatment strategies*. Invited Pediatrics and Psychiatry Grand Rounds Presentation to the University of Zimbabwe Medical School; Harare, Zimbabwe, October 3, 2013.
7. **Boivin, M.J.** (2013, September 23). *Building capacity to make assessment possible in low-income countries*. Invited address to “Putting childhood disability on the map: a symposium cosponsored by Columbia University and UNICEF”, Columbia University, New York, New York; September 23, 2013.

8. **Boivin, M.J.** (2013, July 23). *How does infectious disease, quality of home environment and caregiving affect cognitive function in African children?* Invited presentation to the Save the Children symposium on cognitive testing; London Institute of Education, London, UK; July 23-24, 2013.
9. **Boivin, M.J. & Sikorskii, A.** (2013, July 23). Boivin, M.J. (2013, July 23). *The correspondence between early and middle childhood neurodevelopmental assessments in Malawian and Ugandan children.* Invited presentation to the “Save the Children” symposium on cognitive testing; London, UK; July 23-24, 2013.

**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. R34MH084782 (Boivin) 03/01/2010-02/28/2013  
 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
  
6. University of Michigan Global Reach Faculty-Mentored Structured Summer Overseas Projects for Medical Students. Giordani, Boivin (PIs) 6/01/2010-8/31/2013  
 \$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-PI
  
7. 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
  
8. 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. Miko Rose D.O.- APA/Substance Abuse and Mental Health Services Award Fellowship
2. Hanna Saad M.D.-MPS Resident President
3. Nicole Albrecht M.D. –MPS President Elect
4. Nicholas Sandersfeld D.O.-Lansing Research Day

5. Michael Boivin, PhD-May 21, 2014: Winner of best faculty research poster and co-presenter on runner-up research poster at the 1<sup>st</sup> annual research poster session of the Michigan State University College of Osteopathic Medicine Statewide Campus System (SCS) meeting, East Lansing, MI: May 21, 2014.
6. Michael Boivin, PhD-April 27, 2014: Selected as an MSU Global Innovations Fellow, 2014-15 Academic Year. Michigan State University Global Outreach Program, Office of the Provost.
7. Michael Boivin, PhD-September 26, 2013: Co-recipient of the Michigan State University – College of Osteopathic Medicine Faculty Humanism Award: Michigan State University, East Lansing, MI.
8. Jed Magen – April 2014: Second place in SCS Research Day, Faculty Poster

**Challenges/opportunities for upcoming year:**

1. Expand general residency international electives
2. 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**
  - 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 10 hours of seminar in collaboration -SCS

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2013-2014**

**Program Name:** Hematology/Oncology Fellowship

**Program Director:** Anas Al-Janadi, MD

**Graduating residents and destinations:**

1. Mohammad Omaira, MD – private practice, Western Michigan Cancer Center, Kalamazoo, MI

**Incoming residents and medical school attended:**

1. Joseph Kannarkatt, MD
  - a. Medical school: Jefferson Medical College of Thomas Jefferson University, Philadelphia, PA
  - b. Residency: York Hospital, York, PA
2. Omar Alkharabsheh, MD
  - a. Medical school: Jordan University of Science and Technology, Amman, Jordan
  - b. Residency: Hurley Medical Center/Michigan State University

**Faculty changes**

None

**Major accomplishments over previous year:**

Strengthened clinical partnership with McLaren Hospital

**Honors (resident and faculty):**

1. Kurniali PC, Gerlach AJ, Lim YP, Qiu J, Siemiontkowski S, Al-Janadi A. A Pilot Study to Evaluate the Levels of Inter-Alpha Inhibits Proteins (IAIPs) in metastatic Cancer Patients on Chemotherapy. Mid-Michigan Regional Research Day 2014, East Lansing, MI Abstract number: 33. **Second winner for fellow research category.**

- 2 Mohammed Shaik, Hemasri Tokala, Rama Modali, Terri Lehman, Borys Hrinchenko; Effect of exercise and dietary fish consumption on risk of recurrence in colon cancer: A multinational study. Mid-Michigan Regional Research Day. 2014, East Lansing, MI. First Place Fellow Best Clinical Research/Basic Science research Poster.

**Challenges/opportunities for upcoming year:**

1. Recruit 2 new faculty members.

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

**Anas Al-Janadi, MD**

**Publications:**

1. Kurniali PC, Kavuturu S, Caliman N, **Al-Janadi A**. Thyroid Metastases from Squamous Cell Carcinoma of Gallbladder. J Gastrointest Cancer 2013 Oct. 15.
2. Kurnaili PC, Hrinchenko B, **Al-Janadi A**. Management of Advanced and metastatic Colon Cancer in Elderly Patients. World J Gastroenterol 2014 Feb 28;20(8):1910-1922.

**Book Chapter:**

1. Kurniali PC, **Al-Janadi A**. Cancer Therapy and Their Applications. In Dinesh Vyas (editor). Comprehensive Textbook of Surgery, 2<sup>nd</sup> Edition. ISBN: 9350250527, in press 2014.

**Abstract:**

1. Shaik, MS, Kurniali PC, Omaira M, Akkad, MW, **Al-Janadi A**, Hrinchenko B. Prevalence of Smoking in Cancer Survivors: National Health and Nutrition Examination Survey (NHANES) III Data Analysis. American Society of Clinical Oncology Annual Meeting June 2014, Chicago, IL. Abstract number 1575. J Clin Oncol 32:5s, 2014 (suppl; abstr 15750).

**Presentations:**

1. Pancreatic Cancer. Medicine Grand Rounds, November 19, 2013.
2. ASCO Update. July 11, 2014, MSU Hem/Onc Core Conference



**Poster:**

1. Kurniali PC, Gerlach JA, Lim YP, Qui J, Siemionthkowski, **Al-Janadi A.** A Pilot Study to Evaluate the Levels of Inter-alpha Inhibitor Proteins (IAPs) in Metastatic Cancer patients on Chemotherapy. Mid-Michigan Regional Research Day 2014, East Lansing, MI. Second winner for fellow research category.

**CLINICAL RESEARCH (Selected, ongoing projects)**

**Principal Investigator:** A Phase III Multi Center, Open Label, Randomized Study of Imatinib versus Nilotinib in Adult Patients with Newly Diagnosed Philadelphia Chromosome Positive CML in Chronic Phase

**Principal Investigator:** A Worldwide, Observational Registry collecting Longitudinal Data on the management of Chronic Myelogenous Leukemia (CML) patients (The WORLD Registry) in routine practice

**Principal Investigator:** A Phase II trial of twice weekly induction followed by once weekly IV velcade (bortezomib) with dexamethasone in patients with relapsed and/or refractory multiple myeloma following at least 1 prior treatment

**Principal Investigator:** Phase II Study of Combination Rituximab-Chop and Velcade Induction Therapy Followed by Velcade Maintenance Therapy for Newly Diagnosed Mantle Cell (SWOG S0601)

**Principal Investigator:** Observational study to assess the incidence of osteonecrosis of the jaw in cancer patients with bone metastasis who are starting on zoledronic acid treatment (SWOG S0702)

**Principal Investigator:** A Randomized Phase III Trial to Test the Strategy of Changing Therapy Versus Maintaining Therapy for Metastatic breast Cancer Patients Who Have Elevated Circulating Tumor Cell Levels at First Follow-Up Assessment (SWOG S0500)

**Principal Investigator:** Molecular Epidemiology Case-Series Study of Non-Small Cell Lung Cancer in Non Smoking Women and Men, Stage 1, 2, and 3, excluding malignant pleural effusion (SWOG 0424)

**Principal Investigator:** A Randomized, double-Blind, Multicenter Study of Denosumab Compared with Zoledronic Acid (Zometa) in the Treatment of Bone Metastases in Subjects with Advanced Cancer (Excluding Breast and Prostate Cancer ) Or Multiple Myeloma

**Principal Investigator:** Examination of PNH by Level Of CD59 on Red and White blood cells in bone marrow failure syndromes (EXPLORE)

**Principal Investigator:** (SWOG 0601). A Phase II Study of Combination Rituximab-CHOP and Velcade Induction Therapy Followed by Velcade Maintenance Therapy for Patients with Newly Diagnosed Mantle Cell Lymphoma

**Principal Investigator:** (SWOG 0515). A Phase II Trial of Standard Dose Cyclophosphamide, Doxorubicin, Vincristine, Prednisone (CHOP) and Rituximab Plus Bevacizumab for Advanced Stage Diffuse Large B-Cell NHL

**Principal Investigator:** A Multicenter, Randomized, Open-Label Study Comparing Three Alternative Dosing Regimens of Subcutaneous Azacitidine Plus Best Supportive Care for the Treatment of Myelodysplastic Syndromes.

**Kenneth A. Schwartz, MD**

**Publications:**

1. Kurniali, PC, Curry S, Brennan K, Velltri K, Shaik MS, **Schwartz KA**, McCormack E. Incidence of Hospital Acquired Anemia. Submitted to Journal of Hospital Medicine May 2014.
2. Chang HT, Olson LK, **Schwartz KA**. Ketolytic and Glycolytic Enzymatic Expression Profiles in Malignant Gliomas: Implication for Ketogenic Diet Therapy. Nutr Metab (Lond). 2013 July 5;10(1): 47.

**Abstracts:**

1. Schwartz K, Chang H, Nikolai M, Kurniali P, Olson K, Pernicone J, Sweeley C, Noel M. Treatment of Malignant Gliomas with an Energy Restricted ketogenic Diet: Case Report and Literature Summary. Society of Neuro Oncology, November 2013.
2. Kurniali PC, Curry S, Brennan K, Velltri K, **Schwartz KA**, McCormack E. Incidence of Hospital Acquired Anemia. American Society of Hematology 2013 Annual Meeting, New Orleans, LA. December 2013. Abstract number: 1700.
3. Schwartz KA. A Light Aggregometry Based Method to Measure the Percentage of An Individual's Platelets that are Inhibited by Aspirin. American Society of Hematology 55<sup>th</sup> Annual Meeting, New Orleans, LA, December 2013.
4. Kim D, Schwartz K. Recurrent Acute Coronary Syndrome During Exacerbations of Immune Thrombocytopenic Purpura: the Role of Platelets Micro-Particles. SGIM Annual Meeting, April 2014.

## **Deimante Tamkus, MD**

### **Grants:**

1. Dimitrov's Cancer Research Career Development Award, MSU  
Principal Investigator: Deimante Tamkus, MD  
Period of support: 35% salary support  
Total Direct Funding: \$25,000/year  
Project Title: Functional characterization and target validation of endothelin system in breast cancer cell lines and human breast cancer tissue
  
- 2.. NSABP  
Principal Investigator: Deimante Tamkus, MD  
Period of support: 2009-present  
Percent of effort: 10%
  
3. CD-ON-MEDI-573-1030 A phase 2 randomized study of MEDI-573 in combination with an aromatase inhibitor (A1) versus A1 alone in women with metastatic breast cancer:  
PI: Deimante Tamkus, MD  
Period of support: 2012-present

### **Clinical Trials:**

Source of Support: NSABP

PI: Deimante Tamkus, MD

NSABP FB-6: A Phase II Trial of four cycles of doxorubicin and cyclophosphamide followed by weekly paclitaxel given concurrently with pazopanib as neoadjuvant therapy followed by postoperative pazopanib for women with locally advanced breast cancer.

Source of Support: NSABP

PI: Deimante Tamkus, MD

NSABP B-43: A phase III clinical trial comparing trastuzumab given concurrently with radiation therapy and radiation therapy alone for women with Her 2 positive ductal carcinoma in situ resected by lumpectomy.

Source of Support: NSABP

PI: Deimante Tamkus, MD

NSABP B-47: A phase III trial of adjuvant therapy comparing chemotherapy alone to chemotherapy plus trastuzumab in women with node-positive or high risk node negative HER2 low invasive breast cancer

Source of Support: NSABP

PI: Deimante Tamkus, MD

NSABP B-49: A Phase III Clinical Trial Comparing the Combination of Docetaxel plus Cyclophosphamide to Anthracycline-Based Chemotherapy Regimens for Women with Node-Positive or High-Risk Node-Negative, HER2-Negative Breast Cancer

Source of Support: NSABP

PI: Deimante Tamkus, MD

NSABP Prevention Trial P-2: The study of tamoxifen and raloxifen (STAR) for the prevention of breast cancer

Source of Support: NSABP

PI: Deimante Tamkus, MD

NSABP Prevention trial P-5: Statin polyp prevention trial in patients with resected colon cancer

Source of Support: MedImmune

PI: Deimante Tamkus, MD

MEDI-573-1030 A Phase 2 Randomized Study of MEDI-573 in Combination with an Aromatase Inhibitor (AI) Versus AI Alone in Women with Metastatic Breast Cancer

Source of Support: Dimitrov Cancer Research Career Development Award

PI: Deimante Tamkus, MD

Translational Study: Identification of Predictive Biomarker for Therapeutic Response in Patients with Malignant Effusion

### **Borys Hrinchenko, MD**

#### **Publication:**

1. Kurniali, PC, **Hrinchenko B**, Al-Janadi A. management of Advanced and metastatic Colon Cancer in Elderly Patients. World J Gastroenterol. 2014 Feb 28;20(8):1910-1922. PMID: 2461658.

#### **Abstract:**

- 1 Shaik, MS, **Kurniali PC**, Omaira M, Akkad, MW, Al-Janadi A, Hrinchenko B. Prevalence of Smoking in Cancer Survivors: National Health and Nutrition Examination Survey (NHANES) III Data Analysis. American Society of Clinical Oncology Annual Meeting June 2014, Chicago, IL. Abstract number 1575. J Clin Oncol 32:5s, 2014 (suppl; abstr 15750.

#### **Poster Presentations:**

1. Shaik M, Tokala H, Modali R, Lehman T, **Hrinchenko B**. Effect of Exercise and Dietary Fish Consumption on Risk of Recurrence in Colon Cancer: A Multinational Study. ASOC Annual Meeting June 2014

## **FELLOWS:**

### **Hemasri Tokala, MD**

#### **Poster:**

1. Shaik M, **Tokala H**, Modali R, Lehman T, Hrinchenko B. Effect of Exercise and Dietary Fish Consumption on Risk of Recurrence in Colon Cancer: A Multinational Study. ASOC Annual Meeting June 2014.

#### **Publications**

1. Chang L, Frame D, Braun T, Gatza E, Hanauer DA, Zhao S, Magenau JM, Schultz K, **Tokala H**, Ferrara JL, Levine JE, Reddy P, Paczesny S, Choi SW. Engraftment syndrome after allogeneic hematopoietic cell transplantation predicts poor outcomes. *Biol Blood Marrow Transplant.* 2014 Sep;20(9):1407-17. doi: 10.1016/j.bbmt.2014.05.022. Epub 2014 Jun 2. PMID:24892262
2. Laird-Fick HS, Gardiner JC, **Tokala H**, Patel P, Wei S, Dimitrov NV. HER2 status in elderly women with breast cancer. *J Geriatr Oncol.* 2013 Oct;4(4):362-7. doi: 10.1016/j.jgo.2013.05.007. Epub 2013 Jul 17. PMID:24472480
3. Patel P, Rayamajhi S, **Tokala H**, Laird-Fick H. An unusual cause of altered mental status in elderly-acute cerebellitis: a case report and review. *Case Rep Med.* 2013;2013:653925. doi: 10.1155/2013/653925. Epub 2013 Dec 9. PMID:24382966
4. **Tokala H**, Polsani K, Kalavakunta JK. Gastric sarcoidosis: a rare clinical presentation. *Case Rep Gastrointest Med.* 2013;2013:260704. doi: 10.1155/2013/260704. Epub 2013 Dec 4. PMID:24368949

### **Peter Kurniali, MD**

#### **Publications:**

1. **Kurniali PC**, Kavuturu S, Caliman, Al-Janadi A. Thyroid Metastases from Squamous Cell Carcinoma of Gallbladder. *J Gastrointest Cancer* October 15, 2013.
2. **Kurniali PC**, Hrinchenko B, Al-Janadi A. Management of Locally Advanced and Metastatic Colon Cancer in Elderly Patients. *World J of Gastroenterol* 2014 Feb. 28;20(8):1910-22.

3. **Kurniali, PC**, Curry S, Brennan K, Velltri K, Shaik MS, Schwartz KAS, McCormack E. Incidence of Hospital Acquired Anemia. Submitted to Journal of Hospital Medicine May 2014.

#### **Book Chapter:**

1. **Kurniali PC**, Al-Janadi A. Cancer Therapy and Their applications. In Dinesh Vyas (editor), Comprehensive Textbook of Surgery, 2<sup>nd</sup> Edition. ISBN: 9350250527. In press 2014.

#### **Abstracts:**

1. Schwartz K, Chang H, Nikolai M, **Kurniali P**, Olson K, Pernicone J, Sweeley C, Noel M. Treatment of Malignant Gliomas with an Energy Restricted ketogenic Diet: Case Report and Literature Summary. Society of Neuro Oncology, November 2013.
2. **Kurniali PC**, Curry S, Brennan K, Velltri K, Schwartz KA, McCormack E. Incidence of Hospital Acquired Anemia. American Society of Hematology 2013 Annual Meeting, New Orleans, LA. December 2013. Abstract number: 1700.
3. **Kurniali PC**, Gerlach AJ, Lim YP, Qiu J, Siemiontkowski S, Al-Janadi A. A Pilot Study to Evaluate the Levels of Inter-Alpha Inhibitor Proteins (IAIPs) in metastatic Cancer Patients on Chemotherapy. Mid-Michigan Regional Research Day 2014, East Lansing, MI Abstract number:33. Second winner for fellow research category.
4. Shaik, MS, **Kurniali PC**, Omaira M, Akkad, MW, Al-Janadi A, Hrinchenko B. Prevalence of Smoking in Cancer Survivors: National Health and Nutrition Examination Survey (NHANES) III Data Analysis. American Society of Clinical Oncology Annual Meeting June 2014, Chicago, IL. Abstract number 1575. J Clin Oncol 32:5s, 2014 (suppl; abstr 15750).

#### **Mohamed Shaik, MD**

1. Kurniali, PC, Curry S, Brennan K, Velltri K, **Shaik MS**, Schwartz KAS, McCormack E. Incidence of Hospital Acquired Anemia. Submitted to Journal of Hospital Medicine May 2014.
2. **Shaik, MS**, Kurniali PC, Omaira M, Akkad, MW, Al-Janadi A, Hrinchenko B. Prevalence of Smoking in Cancer Survivors: National Health and Nutrition Examination Survey (NHANES) III Data Analysis. American Society of Clinical Oncology annual Meeting June 2014, Chicago, IL. Abstract number 1575. J Clin Oncol 32:5s, 2014 (suppl; abstr 15750).

3. **Shaik M**, Tokala H, Modali R, Lehman T, Hrinchenko B. Effect of Exercise and Dietary Fish Consumption on Risk of Recurrence in Colon Cancer: A Multinational Study. ASOC Annual Meeting June 2014.
4. **Shaik M**. Impact of Lymph Node Ratio on Survival in Advanced Head and Neck Cancer: National Cancer Database (NCDB). ASOC Annual Meeting June 2014.

#### **Mohammad Omaira, MD**

1. Shaik, MS, **Kurniali PC**, Omaira M, Akkad, MW, Al-Janadi A, Hrinchenko B. Prevalence of Smoking in Cancer Survivors: National Health and Nutrition Examination Survey (NHANES) III Data Analysis. American Society fo Clinical Oncology annual Meeting June 2014, Chicago, IL. Abstract number 1575. J Clin Oncol 32:5s, 2014 (suppl; abstr 15750).

#### **Mohamed Akkad, MD**

1. Shaik, MS, **Kurniali PC**, Omaira M, Akkad, MW, Al-Janadi A, Hrinchenko B. Prevalence of Smoking in Cancer Survivors: National Health and Nutrition Examination Survey (NHANES) III Data Analysis. American Society fo Clinical Oncology annual Meeting June 2014, Chicago, IL. Abstract number 1575. J Clin Oncol 32:5s, 2014 (suppl; abstr 15750).

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

#### **Patient Care:**

Fellows have their own continuity clinics 2 days per week, and also see patients in IRMC and Sparrow, both in consultation and as primary admitting service. They also spend time at the outpatient oncology practice in Flint.

#### **Medical Knowledge:**

Fellows participation in journal club twice a month, weekly core conference, weekly tumor boards, clinical case discussion monthly. They are offered ASH and ASCO in-training exam yearly during their training (PGY4-6) to measure the progress of their knowledge

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

Fellows see patients in the clinic, following their progress and setbacks; monthly clinic practice meetings; participation in QOPI, the Quality Oncology Practice Initiative, with the American Society of Clinical Oncology (ASCO).

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

Fellows participate in weekly meetings on oncology floor at IRMC for patient care planning; weekly tumor boards, periodic Schwartz rounds, which address issues of the caregivers of critically or terminally ill patients; interdisciplinary tumor boards and clinics.

### **Professionalism:**

Fellows are expected to discuss plans of care with an interdisciplinary team, consisting of nurses, other clinicians and social workers; they are expected to complete notes accurately and timely; They attend multidisciplinary tumor boards for breast and thoracic cancer; they attend periodically multidisciplinary breast cancer clinic.

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

Exposure to this competency occurs in the weekly inpatient rounds, as well as in clinic, with patients needing home care and other help to obtain their care. They are assisted by our oncology pharmacist, social workers, nurses and the faculty in this endeavor.



**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2013-2014**

**Program Name:** Infectious Disease Fellowship  
**Program Director:** Daniel Havlichek Jr. MD  
**Associate Program Director:** MaryAnn Tran, MD

**Graduating residents and destinations:**

1. Fadi Abu-Yasin, Detroit, Private Practice

**Incoming residents and medical school attended:**

1. Hanish Singh, MD, St Georges

**Faculty changes**

None

**Major accomplishments over previous year:**

1. Dr. Yasin presented his research at the state infectious disease society meeting

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

**Daniel Havlichek, MD**

Stein GE, Throckmorton JK, Scharmen AE, Weiss WJ, Prokal L, Smith CL, **Havlichek DH**. Tissue penetration and antimicrobial activity of standard and high dose trimethoprim/sulfadameothoxazole and linezolid in patients with diabetic foot infection. J antimicrob Chemother 2013, July 19.

Syed R, **Havlichek D**, Stein, Smith C. utility of procalcitonin in elderly patients with COPD exacerbation. Immunology and Infectious Diseases epub, July 2014.

**MaryAnn Tran, MD**

Dhar S, Marchaim D, Kaye K, Chopra T, Tansek R, Yousuf A, Bhargava AT, Johnson L, Hingwe A, Zuckerman J, Bono B, Shuman E, Abell V, Prblete J, **Tran M**, Kulhanek G, Thyagarajan R, Herzke C, Perl T. Contact precautions: More is not necessarily better. Infeciton Contral and Hospital Epidemiology in press.

**Tran M**. Detection of Methicillin-resistant *Staphylococcus aureus* in respiratory specimens of critically ill patients: Comparison of Real-time polymerase chain reaction and culture. Poster/Abstract American Thoracic Society International Conference. May 2013

**Tran M.** Cold sores (nongenital herpes simplex infection). Medicine net, 2013.  
[http://www.onhealth.com/herpes\\_simplex\\_infections\\_non-genital/article.htm](http://www.onhealth.com/herpes_simplex_infections_non-genital/article.htm).

**Apoorv Kalra, MD**

Lambert JA, **Kalra A**, Dodge CT, John S, Sobel JD, Akins RA. Novel PCR-based methods enhance characterization of vaginal microbiota in a bacterial vaginosis patient before and after treatment. Appl Environ Microbiol 2013 July 79(13):418-5.

**Gary E. Stein, PharmD**

**Stein GE**, Throckmorton JK, Scharmen AE, Weiss WJ, Prokal L, Smith CL, Havlichek DH. Tissue penetration and antimicrobial activity of standard and high dose trimethoprim/sulfadameothoxazole and linezolid in patients with diabetic foot infection. J antimicrob Chemother 2013, July 19.

**Stein GE**, Should we use ceftriaxone to treat Staphylococcal osteoarticular infections? IDCP, May 2014, 130-131

Peyrani P...**Stein GE** et al. Higher clinical success in patients with VAP due to MRSA treated with linezolid compared to vancomycin. Critical Care. 2014

Stein GE, Smith, C, et al. Treatment of *Clostridium difficile* infection with tigecycline. IDCP 2014

Fellow:

**Razi Syed, MD – graduated June 2013**

**Syed R**, Havlichek D, Stein, Smith C. utility of procalcitonin in elderly patients with COPD exacerbation. Immunology and Infectious Diseases epub, July 2014.

**Honors (resident and faculty):**

1. Dr. Yasin honored as “Best Fellow of the Year” (GMEI) received for second time

**Challenges/opportunities for upcoming year:**

1. Clinical work load will increase with departure of Dr. Kulhanek. Will need to work to make sure education of fellows is not compromised.

**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 clinic.

**Medical Knowledge:** Medical knowledge is addressed through daily interactions with the fellow during patient presentations on rounds or 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 C. difficile infection 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, and by the mini OSCE. Fellows are 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, by lectures in the core conference series, and by the mini OSCE. Fellows are 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: 2013-2014**

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

**Program Director:** Michael K. McLeod

**Graduating residents and destinations:**

1. Rafael Ruggieri – Mary Rutan Hospital; Bellefontaine, OH – Staff Surgeon
2. Nicholas Harms – Pipestone County Medical Center; Pipestone, MN – Staff Surgeon
3. David Henry – MIS Fellowship; Pttsburgh, PA – Fellow
4. Darcy Shaw – Colorectal Fellowship; Creighton, Omaha, NE - Fellow

**Incoming residents and medical school attended:**

1. Abghari, Michelle – Wayne State University School of Medicine
2. Baugh, Aaron – University of Toledo College of Medicine and Life Sciences
3. Behr, Ian – Wayne State University School of Medicine
4. Hsu, Kun-Tai – Northwestern University Feinberg School of Medicine
5. Nebeker, Cody – Michigan State University college of Human Medicine
6. Ochoa-Frongia, Laura – University of Michigan School of Medicine
7. Rashid, Lewis – Wayne State University School of Medicine
8. Walsh, Patrick – Michigan State University college of Human Medicine

**Faculty changes**

1. Dr. James Mayle (Retired)
2. Dr. Roy Bergman (Retired)

**Major accomplishments over previous year:**

1. Outstanding Educator Award, Flint Campus – Michael Kia
2. Outstanding Educator Award, Lansing Campus – Robert Osmer
3. Highest Junior ABSITE – Shay Mansoor
4. Highest Senior ABSITE – Kaori Ito
5. Most Improved Junior – Yetnayet Zewge
6. Most Improved Senior – Mersadies Martin

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

1. Patterson KWC, Yang R, Zeng B, Song B, Wang S, Xi, N, Basson MD. Measurement of Cationic and Intracellular Modulation of Integrin Binding Affinity by AFM-Based Nanorobot. Biophysical Journal, Vol. 105, July 2013:40-47.
2. Anderson CI, Gupta RN, Larson JR, Abubars OI, Kwiecien AJ, Lake AD, Hozain AE, Taniuus A, O'Brien T, Basson MD. Impact of Objectively

- Assessing Surgeon' Teaching on Effective Perioperative Instructional Behaviors. *JAMA Surg.* 2013, August 14, doi: 10.1001/jamasurg.2013.2144.
3. Kariagina A, Xie J, Langohr IM, Opreanu RC, Basson MD, Haslam SZ. Progesterone Stimulates Proliferation and Promotes Cytoplasmic Localization of the Cell Cycle Inhibitor p27 in Steroid Receptor Positive Breast Cancers. *Hormones and Cancer*, Aug 2013, Vol 4, (4).
  4. Kariagina A, Xie J, Langohr IM, Opreanu RC, Basson MD, Haslam SZ. Progesterone Decreases Levels of the Adhesion Protein E-Cadherin and Promotes Invasiveness of Steroid Receptor Positive Breast Cancers. *Hormones and Cancer*, Aug 2013, Vol 4, (4).
  5. Shaw D, Gallardo G, Basson M. Post-colonoscopy appendicitis: A case report and systematic review. *World J Gastrointestinal Surg* 2013 October 27;5(10):259-263.
  6. Kovalenko PL, Yuan L, Sun K, Kunovska L, Seregin S, Amalfitano A, Basson M. Regulation of Epithelial Differentiation in Rat Intestine by Intraluminal Delivery of an Adenoviral Vector or Silencing RNA Coding for Schlafen 3. *Plos One*, Nov 2013, Vol 8, Issue 11, e79745.
  7. Ito H, Mo Q, Qin LX, Viale A, Maithel SK, Maker AV, Shia J, Kingham P, Allen P, Dematteo RP, Fong Y, Jarnagin WR, D'Angelica M. Gene expression profiles accurately predict outcome following liver resection in patients with metastatic colorectal cancer. *PLoS One*. 2013 Dec 10;8(12):e81680. doi: 10.1371/journal.pone.0081680.
  8. Schall MM, Anderson C, Kopari N, Davis AT, Stevens P, Haan P, Kepros JP, Mosher BD. "Results of a clinical practice algorithm for the management of thoracostomy tubes placed for traumatic mechanism." *Springerplus*.2013 Dec 1:642. Doi:10.1186/2193-1801-2-642.
  9. Vyas D, Heidi. L, Vyas A. Stool therapy may become a preferred treatment of recurrent *Clostridium Difficile*. *World Journal of Gastroenterology*; 19(29), August 2013.
  10. Joshi SS, Vyas AK, Vyas D, Kalla R. Reclassifying inflammatory bowel disease with capsule endoscopy in children. *J Pediatr (Rio J)*. 2013 Jul 12.
  11. Callahan C, Anderson CI, Clarkson JHW. Forearm Compartment Syndrome in a Patient on Hemodialysis Following Failure of an Arteriovenous Fistula. *Nephrology Nursing Journal*. Sep-Oct 2013 Vol. 40 (5).
  12. Saadeh Y, Leung T, Vyas A, Chaturvedi LS, Perumal O, Vyas D. Applications of nanomedicine in breast cancer detection, imaging, and therapy. *J Nanosci Nanotechnol*. 2014 Jan;14(1):913-23.
  13. Vyas D, Gieric Laput, Vyas AK. Chemotherapy induced inflammation may cause early metastasis. *Oncotarget and therapy* 2014: 7 1-9.

14. Vyas D, Wafa Abdullah. Robotic diligent and expeditious detorsion of gastric volvulus . Videoscopy-JLAST and part B January 2014, 24.
15. Saadeh Y, Vyas A, Vyas D. Breast cancer and theranostic nanoparticle, Journal of Nanoscience and Nanotechnology, Volume 14, Number 1, January 2014 , pp. 913-923(11).
16. Vyas D, Castro P, Saadeh Y, Gandhi S, Lopez N, Vyas A. Gastrointestinal diseases and theranostic Nanoparticle, Journal of Biomedical Nanotechnology, 2014 (in press).
17. Cemeroglu AP, Can A, Davis AT, Kleis L, Daniel MS, Rapp SM, Koehler TJ. Comparison of the Expectations of Caregivers and Children with Type 1 Diabetes Mellitus for Independence in Diabetes Care-Related Tasks. *Endocr Pract.* 2014 Jan 21:1-22. [Epub ahead of print] PMID: 24449680.
18. Wohns D, Muthusamy P, Davis AT, Khan M, Postma JK, Williams EE, Gile CM, Scotti DJ, Gregory D. Economic and operational implications of a standardized approach to hemodynamic support therapy using percutaneous cardiac assist devices. *Innovations (Phila).* 2014 Jan-Feb;9(1):38-42. doi: 10.1097/IMI.0000000000000047. PMID: 24562292.
19. Timek TA, Hooker RL, Collingwood R, Davis AT, Alguire CT, Willekes CL, Murphy ET, Heiser JC, Patzelt LH. Five-year real world outcomes of GeoForm ring implantation in patients with ischemic mitral regurgitation. *J Thorac Cardiovasc Surg.* 2014 Feb 21. pii: S0022-5223(14)00242-6. doi: 10.1016/j.jtcvs.2014.02.051. PMID: 24685379.
20. Rajasekaran S, Kruse K, Kovey K, Davis AT, Hassan NE, Ndika AN, Zuiderveen S, Birmingham J. 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.* 2014 Feb 26. PMID: 24583503.
21. Chapman AJ, Titus R, Ferenchick H, Davis A, Rodriguez C. Repeal of the Michigan helmet law: early clinical impacts. *Am J Surg.* 2014 Mar;207(3):352-6; discussion 355-6. doi: 10.1016/j.amjsurg.2013.12.001. Epub 2013 Dec 25. PMID: 24581760.
22. M. Martin, V. Prusick, J.P. Kepros, P. Schneider, P. Stevens, J. Werth, B.D. Mosher. Patterns of Antibiotic Use in Open Fractures. *Journal of Surgical Research* 2014, 186; 2:690.
23. Shi X, Sims MD, Hanna MM, Xie M, Gulick PG, Zheng YH, Basson MD, Zhang P. Neutropenia during HIV Infection: Adverse Consequences and Remedies. *Int Rev Immunol.* 2014 Mar 21. [Epub ahead of print] PMID: 24654626 [PubMed - as supplied by publisher].
24. Siggins RW, Molina PE, Zhang P, Bagby GJ, Nelson S, Dufour J, Walsh C, Welsh DA: Dysregulation of myelopoiesis by chronic alcohol administration

- during early SIV infection of rhesus macaques. *Alcoholism: Clinical and Experimental Research* (In press).
25. Siggins RW, Hossain F, Rehman T, Subramaniam V, Melvan JN, Zhang P, Welsh DA: Cigarette smoke alters the hematopoietic stem cell niche. *Medical Sciences* 2:37-50, 2014.
  26. Shahbaz M, Chotai P, Anderson C, Clarkson J. The Effect of Silver on the Reduction of Pin-Tract Infections in Patients Undergoing Hand Surgery: A Retrospective Comparison. *The Journal of Hand Surgery*. 6:1.2014.
  27. Dhakal M, Hardaway J, Guloglu F, Miller M, Hoeman C, Zaghouni A, Wan X, Rowland L, Cascio J, Sherman P, Zaghouni H. IL-13R $\alpha$ 1 is a surface marker for M2 macrophages influencing their differentiation and function. *Eur. J. Immunol*. 2014. 44: 842–855.
  28. Kovalenko PL, Basson MD. Schlafen 12 expression modulates prostate cancer cell differentiation. *J Surg Res*. In press.
  29. Ono H, Basson MD, Ito H. PTK6 promotes cancer migration and invasion in pancreatic cancer cells dependent on ERK signaling. *PLOS One*. In press.
  30. Basson MD. Asking questions and questioning answers. *JAMA Surgery* In press.
  31. 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.
  32. Vyas D, Hozain A. Clinical peer review in the United States: history, legal development and subsequent abuse. *World J Gastroenterology*. 2014;20(21): ? doi: 10.3748/wjg.v20.i21.0000

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

1. Martin M, Schall C, Mosher B, Haan P, Anderson C, Kopari N & Kravetz. Poster Presentation: Guidelines in the Management and Removal of Thoracostomy Tubes in Trauma. 99<sup>th</sup> Annual Clinical Congress, American College of Surgeons. October 6-10, 2013. Washington, DC.
2. Martin M & Fortin G. Poster Presentation: A Rare Case of Clostridium Septicum causing and Abdominal Aortic Endograft Leak in a Patient with Myelodysplastic Syndrome. 99<sup>th</sup> Annual Clinical Congress, American College of Surgeons. October 6-10, 2013. Washington, DC.
3. Martin M, Schall C, Mosher B, Haan P, Anderson C, Kopari N & Kravetz. Poster Presentation: Guidelines in the Management and Removal of Thoracostomy Tubes in Trauma. 99<sup>th</sup> Annual Clinical Congress, American College of Surgeons. October 6-10, 2013. Washington, DC.
4. Kaori Ito, Laura R. Lozier, Nicholas C. Shermetaro, Alexander J. Connaughton, Ryan M. Egnatuk, Yamaan S. Saadeh, Ahmed E. Hozain, Abdullah M. Wafa, Sara K. Mir, Adam Tanious, Michael S. Rozwadowski, Cheryl I Anderson, Marc D. Basson. Oral Presentation: Can serum lactate predict the outcome of patients who underwent

emergent exploratory laparotomy for acute abdomen? Regional meeting of the American College of Surgeons Trauma Committee, November 2013. Indiana.

5. Shahbaz, M, Chotai, P, Cristales M, Lanigan E, & Clarkson J. Poster Presentation: The Effect of Silver on Reduction of Pin-Tract Infections in Patient undergoing Hand Surgery: A Retrospective Comparison. Michigan State Medical Society Conference October 2013. Michigan
6. Bumpers H, Katkooi V, Chen D, Manne U. The role of Beta B2-crystallin in progression of colorectal and breast cancers in African Americans. Sixth AACR Conference on The Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved; December 6-9, 2013 (Abstract #C56)
7. 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.
8. 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.
9. 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.
10. 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.
11. Harvey Bumpers, MD, D.G. Janagama, U. Manne, M. Basson, V. Katkooi. 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.
12. 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.
13. 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.
14. 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.
15. 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.

16. 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.
17. 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
18. Shabahang M, Vyas D et al. Social Responsibility for Social Learner. Association Surgical Education Week. Chicago 2014.
19. 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.
20. 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.
21. 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.
22. 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.
23. 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.
24. 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.
25. 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.
26. 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.

27. 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.
28. 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)
29. 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
30. 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.
31. 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,

**Honors (resident and faculty):**

1. Sergio Bardaro - 2014 Best Doctors in America® list
2. Marc Basson - 2014 Best Doctors in America® list
3. Harvey Bumpers - 2014 Best Doctors in America® list
4. Karen Ching - 2014 Best Doctors in America® list
5. James Clarkson - 2014 Best Doctors in America® list
6. Michael Eigenberg - 2014 Best Doctors in America® list
7. Srinivas Kavuturu - 2014 Best Doctors in America® list
8. John Kepros - 2014 Best Doctors in America® list
9. Edward Lanigan - 2014 Best Doctors in America® list
10. Michael McLeod - 2014 Best Doctors in America® list
11. Benjamin Mosher - 2014 Best Doctors in America® list
12. Robert Osmer - 2014 Best Doctors in America® list
13. Janet Osuch - 2014 Best Doctors in America® list
14. Andrew Saxe - 2014 Best Doctors in America® list
15. Paul Schneider - 2014 Best Doctors in America® list
16. Dinesh Vyas - 2014 Best Doctors in America® list
17. Andrew Zwylghuizen - 2014 Best Doctors in America® list
18. Rafael Ruggieri – Lansing Outstanding Resident Teaching Award – CHM
19. Darren Perttu – Flint Campus Resident Teaching Award
20. Andrew Cho – Flint Campus Resident Teaching Award

**Challenges/opportunities for upcoming year:**

1. Anticipated budget cuts
2. No permanent place at all times for a Simulation Center

**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: SCORE

10:00am – 11:00am: Chief Lead Book Review

11:00am – 12:00pm: PD Meeting

12:00pm – 1:00pm: Comprehensive Breast Clinic

**Practice-based Learning and Improvement:**

Weekly Surgical Morbidity & Mortality conference

**Interpersonal and Communications Skills:**

Weekly meetings with Nurses/staff

**Professionalism:**

Program retreat with Drs. Wadland & Molidor

**Systems-based Practices:**

Invited Speakers:

Dusty DeHaven, MPA

Barbara McLean, MN, RN, CCRN, CCNS, NP-BC, FCCM

Charles L. Bosk, Ph.D.

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2013-2014**

**Program Name:** Internal Medicine Residency

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

**Graduating residents and destinations:**

1. Dareen Almanabri, MD. Rheumatology fellowship, George Washington University.
2. Osama Alsara, MD. Chief medical resident, Michigan State University.
3. Tyler An, DO. Hospitalist, Sparrow Hospital, Lansing for one year, then gastroenterology fellowship in Lansing.
4. Satish Chandolu, MD. Hospitalist, Sparrow Hospital, Lansing.
5. Anthia Dasari, MD. Hospitalist, Georgia.
6. Metin Dursun, MD. Chief medical resident, University of Nevada – Reno.
7. Joonseok Kim, MD. Cardiology fellowship, University of Cincinnati, Ohio.
8. Mamata Ojha, MD. Michigan State University Dept of Medicine, Lansing.
9. Waddah (Walter) Saba, DO. Hospitalist, St Joseph Mercy-Livingston, Howell, Michigan.
10. Ashish Tiwari, MD. Gastroenterology fellowship, Boston University, Massachusetts.
11. Srinivasa Vasireddi, MD. Hospitalist, Sparrow Hospital, Lansing.
12. Shanti Virupannavar, DO. Rheumatology fellowship, University of Illinois-Chicago.
13. Mrinal Yadava, MD. Cardiology fellowship, University of Oregon.
14. Ali Al Arab, MD. Cardiology fellowship, Michigan State University, Lansing.

**Incoming residents and medical school attended:**

1. Moayad Alabdulkarim, MBBS. King Saud University, Saudi Arabia. (PGY1 only, then will enter Physical Medicine and Rehabilitation program at MSU)
2. Kyunghee Burkit, DO. Michigan State University College of Osteopathic Medicine.
3. Brian Gronahl, DO. AT Still University.
4. Mohammad Faraz-Ul Haq. Aga Khan University, Pakistan.
5. Robert Hillman, DO. Michigan State University College of Osteopathic Medicine.
6. Atanas Iliev, DO. Lake Erie College of Medicine.
7. Amanjot Chahal, MBBS. Government Medical College, Patiala, India.
8. Sandra Mazzoni, DO. Michigan State University College of Osteopathic Medicine.
9. Matthew Merrill, DO. Arizona College of Osteopathic Medicine.

10. Turab Raza, MD. King Edward Medical College, Pakistan.
11. Anas Riehani, MD. Tishreen University, Syria.
12. Keren Shahar, MD. Ruth and Bruce Rappaport Faculty of Medicine, Technion Israel Institute of Technology, Israel.
13. Ranbir Singh, MD. Government Medical College Amritsar, India.
14. Olivia Wilcox, DO. AT Still University.

#### **Faculty changes**

1. Arashdeep Litt, MD joined key faculty, replacing Supratik Rayamajhi, MD.

#### **Major accomplishments over previous year:**

1. Outstanding graduate placement into competitive fellowships
2. Retention of graduates (80%) in Michigan who chose general medicine careers
3. Implementation of Complex Care Clinic and enhanced mental health care curriculum as part of Dr Robert Smith's HRSA grant. The Complex Care Clinic allows specially trained faculty to directly observe residents during their clinical evaluations of patients with mental health disorders and chronic pain. In addition, responsible use of opioid and other controlled substances is emphasized.

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

1. **Dane Gruenebaum** and colleagues received initial approval for their Sparrow Center for Innovation and Research Grant entitled "Text Messaging (SMS): An Added Intervention to Reduce AMI 30 Day Readmission Rates." (withdrawn after PI left institution)
2. **Suwen Kumar's** poster, "Cardiomyopathy With Multi-Organ Toxicity Due To 1,1-Difluoroethane," was accepted for the American Thoracic Society's international meeting Spring 2014.
3. **James Chang's** poster, "Intractable Hypoxia Out Of Proportion To His Radiographs In Castrate-Resistant Prostate Adenocarcinoma," was accepted for the American Thoracic Society's international meeting this spring.
4. **Dane Gruenebaum**, Ahmad Alsarrah, **Osama Alsara** and **Heather Laird-Fick** have had a case report, "Bleeding Complication of Triple Therapy of Rivaroxaban, Prasugrel, and Aspirin: Case Report and General Discussion," accepted to Case Reports in Cardiology.
5. **David Kim's** poster "Recurrent Acute Coronary Syndrome During Exacerbations Of Immune Thrombocytopenic Purpura: The role of platelet microparticles" will be presented at the Society for General Internal Medicine national meeting.
6. **David Kim and Julie Yam's** poster, "Fatal Cerebral Air Embolism As A Complication Of Esophagogastroduodenoscopy," will be presented at the Society for General Internal Medicine national meeting.
7. **David Kim's** poster, "Primary Lung Adenocarcinoma Presenting With Miliary Lung Metastases," was accepted for presentation at the American Thoracic Society International meeting.
8. **David Kim and Tejaswini Joginpally's** abstract, "Acinar Predominant Lung Adenocarcinoma presenting as Miliary Lung Metastases " was one of the top 10

- case vignettes submitted for the American College of Physician's national meeting, and will be presented as a podium talk.
9. **Metin Dursun's** poster, "An Atypical Presentation of Dress Syndrome in 22 years old Female," will be presented at the national American College of Physicians meeting.
  10. Fourteen residents had posters at Mid Michigan Annual Research Day here in Lansing: **Julie Akright, Osama Alsara, Abraham Alsherbini, Tyler An, Jinsoo Chang, Dane Gruenebaum, Michael Kehdi, David Kim, Suwen Kumar, Amit Mehta, Sumugdha Rayamajhi, Divya Sharma, Richa Tikaria, Julie Yam.**
  11. **Mrinal Yadava** had an oral presentation at Mid Michigan Annual Research Day.
  12. Oh SW, **Kim Joonseok**, Hwang SS, Yoon DH, Myung SK. "Antidepressant Use and Risk of Coronary Heart Disease: A Meta-Analysis of Observational Studies." *British Journal of Clinical Pharmacology*, 2014 Mar 20 Epub ahead of print .  
<http://www.ncbi.nlm.nih.gov/pubmed/24646010>
  13. **Kim Joonseok**, McEvoy JW, Nasir K, Budoff MJ, Blumenthal RS, Blaha MJ. "A Critical Review of high sensitivity C-Reactive Protein and Coronary Artery Calcium for the Guidance of Statin Allocation: A Head-to-Head Comparison of the JUPITER and St. Francis Heart Trials." *Circulation Cardiovascular Quality and Outcomes*, 2014 Mar 1 [Epub ahead of print]  
<http://www.ncbi.nlm.nih.gov/pubmed/24619319>
  14. **Heather Laird-Fick, Ashish Tiwari**, Santhosshi Narayanan, Ying Qin, Deepthi Vodnala and Manisha Bhutani. "A case of comorbid myxoma and chronic lymphocytic leukemia: not just a coincidence?" *Case Reports in Oncological Medicine*. vol. 2014, Article ID 142746, 4 pages, 2014.  
doi:10.1155/2014/142746.
  15. **Shanti Virupannavar**, Anthony Brandau, Carla Guggenheim and **Heather Laird-Fick**. "Possible association of etanercept, venous thrombosis, and induction of antiphospholipid syndrome." *Case Reports in Rheumatology*. Accepted for publication.
  16. Deepthi Rao, **Richa Tikaria, Mamata Ojha**, Saleh Aldasouqi. "A Case of Continued Insulin-Independence 8 Years after Islet Cell Transplantation: A Promising Remedy for Type 1 Diabetes." ICE/ENDO 2014 - Poster Presentation.
  17. **Mamata Ojha**, Saleh Aldasouqi. Rapidly progressive Cushing Disease due to Crooke Adenoma. ICE/Endo 2014; Chicago, Illinois. Poster presentation.
  18. **David Kim, Julie Yam, Tejaswini Joginpally**, Shilpa Kavuturu. Fatal cerebral air embolism as a complication of esophagogastroduodenoscopy. Society for General Internal Medicine national meeting 2014, poster.
  19. **David Kim**, Kenneth Schwartz. Recurrent acute coronary syndrome during exacerbations of immune thrombocytopenic purpura: The role of platelet microparticles. Society for General Internal Medicine national meeting 2014, poster.
  20. Shi X, Sims MD, Hanna MM, Xie M, **Gulick PG**, Zheng YH, Basson MD, Zhang P. Neutropenia during HIV Infection: Adverse Consequences and Remedies. *Int Rev Immunol*. 2014 Mar 21 [Epub ahead of print]

21. **Laird-Fick HS**, Gardiner JC, Tokala H, Patel P, Wei S, Dimitrov NV. HER2 status in elderly women with breast cancer. *J Geriatr Oncol.* 2013 Oct; 4(4): 362-7.
22. **Alsara O**, Alsarah A, Kalavakunta JK, **Laird-Fick H**, Abela GS. Isolated left main coronary artery stenosis after thoracic radiation therapy: to operate or not to operate. *Case Report Med.* 2013; 2013: 834164.
23. Patel P, Rayamajhi S, Tokala H, **Laird-Fick H**. An unusual case of altered mental status in elderly – acute cerebellitis: a case report and review. *Case Report Med.* 2013; 2013: 653925.
24. **Kim J, Yadava M, An IC**, Sayeed A, **Laird-Fick HS**, Gourineni V, Abela GS. Coagulopathy and Extremely Elevated PT/INR after Dabigatran Etxilate Use in a Patient with End-Stage Renal Disease. *Case Report Med.* 2013; 2013: 131395.
25. **Smith RC, Laird-Fick H**, D’Mello D, Dwamena FC, Romain A, Olson J, Kent K, Blackman K, Solomon D, Spoolstra M, Fortin AH 6<sup>th</sup>, Frey J, Ferenchick G, **Freilich L**, Meerschaert C, Frankel R. Addressing mental health issues in primary care: an initial curriculum for medical residents. *Patient Educ Couns.* 2014; 94(1): 33-42.
26. **Kim J, Laird-Fick HS, Alsara O**, Gourineni V, Abela GS. Pericarditis in taskotsubo cardiomyopathy: a case report and review of the literature. *Case Report Cardiol.* 2013; 2013: 917851.
27. Peyrani P, Wiemken TL, Kelley R, Zervos MJ, Kett DH, File TM Jr, **Stein GE**, Ford KD, Scerpella EG, Welch V, Ramirez JA; IMPACT-HAP Study Group. Higher clinical success in patients with ventilator-associated pneumonia due to methicillin-resistant *Staphylococcus aureus* treated with linezolid compared with vancomycin: results from the IMPACT-HAP study. *Crit Care.* 2014 Jun 10;18(3):R118.
28. **Stein GE**, Throckmorton JK, Scharmen AE, Weiss WJ, Prokai L, Smith CL, Havlichek DH. Tissue penetration and antimicrobial activity of standard- and high-dose trimethoprim/sulfamethoxazole and linezolid in patients with diabetic foot infection. *J Antimicrob Chemother.* 2013 Dec;68(12):2852-8.
29. **Ashish Tiwari** and **Walter Saba**. Partial Wave Spectroscopic Microscopy: A Novel Tool to Assess Perturbation in the Cellular Transcriptional Activity During Colon Carcinogenesis. Oral presentation. Fall 2013 Michigan regional American College of Physicians scientific meeting.
30. **Anthia Dasari**. Tuberculosis Verrucosa Cutis Misdiagnosed as Cellulitis. Poster. Fall 2013 Michigan regional American College of Physicians scientific meeting.
31. **Joonseok Kim**. Giant Atrial Myxoma Presenting as Acute Myocardial Infarction. Poster. Fall 2013 Michigan regional American College of Physicians scientific meeting.
32. **Amit Mehta**. Keeping K at high normal in Salicylate poisoning. Poster. Fall 2013 Michigan regional American College of Physicians scientific meeting.
33. **Justin Oneese**. Persistent abdominal pain in setting of pancreatitis, a case of acute portal vein thrombosis (PVT). Poster. Fall 2013 Michigan regional American College of Physicians scientific meeting.

34. **Srinivasa Vasireddi.** Culture negative endocarditis: delay in diagnosis. Fall 2013 Michigan regional American College of Physicians scientific meeting.
35. **Mrinal Yadava.** Transmural Upregulation of Apamin-Sensitive K Currents in Failing Human Ventricles. Poster. Fall 2013 Michigan regional American College of Physicians scientific meeting.
36. **Mrinal Yadava.** Tension pneumoperitoneum after bowel surgery in a patient with post-polio syndrome. Poster. Fall 2013 Michigan regional American College of Physicians scientific meeting.
37. **Woo (James) Chang.** Intractable hypoxia out of proportion to his radiographs in Castrate-Resistant Prostate Adenocarcinoma. Poster. Spring 2014 American College of Physicians Associates meeting.
38. **Amit Mehta.** Gastric Pneumatosis in a patient with diarrhea. Poster. Spring 2014 American College of Physicians Associates meeting.
39. **Madalina Opreanu.** Cholesterol Crystals Upregulate Inflammatory Genes in Macrophages. Poster. Spring 2014 American College of Physicians Associates meeting.
40. **Mrinal Yadava.** Transmural Heterogeneity of Apamin-Sensitive K Currents in Failing Human Ventricles. Poster. Spring 2014 American College of Physicians Associates meeting.
41. **Julie Yam.** Foreign Accent Syndrome in a Patient with Asperger's Syndrome. Poster. Spring 2014 American College of Physicians Associates meeting.
42. Van Herendael H, Zado ES, Haqqani H, Tschabrunn CM, Callans DJ, Frankel DS, Lin D, Garcia F, Hutchinson MD, Riley M, Bala R, Dixit S, **Yadava M**, Marchlinski FE. Catheter ablation of ventricular fibrillation: importance of left ventricular outflow tract and papillary muscle triggers. *Heart Rhythm.* 2014 Apr;11(4):566-73.
43. Roy HK, Damania DP, Delacruz M, Kunte DP, Subramanian H, Crawford SE, **Tiwari AK**, Wali RK, Backman V. Nano-architectural alterations in mucus layer fecal colonocytes in field carcinogenesis: potential for screening. *Cancer Prev Res (Phila).* 2013 Oct;6(10):1111-9.
44. **Tiwari AK**, Bierhals A, Wang JS. An uncommon cause of post-prandial nausea and vomiting. Superior mesenteric artery syndrome. *Gastroenterology.* 2013 Sep;145(3):520, 698.
45. **Alsara O**, Reeves RK, Pyfferoen MD, Trenary TL, Engen DJ, Vitse ML, Kessler SM, Kushwaha SS, Clavell AL, Thomas RJ, Lopez-Jimenez F, Park SJ, Perez-Terzic CM. Inpatient Rehabilitation Outcomes for Patients Receiving Left Ventricular Assist Device. *Am J Phys Med Rehabil.* 2014 Jun 4. [Epub ahead of print]
46. **Alsara O**, Rayamajhi S, Ghanem F, Skaf E, Abela GS. Primary cardiac pleomorphic sarcoma presenting as back pain in an 18-year-old man. *Tex Heart Inst J.* 2013;40(3):339-42.



**Honors (resident and faculty):**

1. James Chang was selected to receive one of three Resident Teacher of the Year Awards from CHM-Lansing's graduating Class of 2014.
2. Madalina Opreanu. First place Research Poster, American College of Physicians Associates Day, 2014.
3. Sparrow Outstanding Senior: David Kim
4. Sparrow Outstanding Junior: Michael Kehdi
5. Bernard H. Smookler Award: Tyler An
6. David Greenbaum Emerging Leader Award: Ashish Tiwari
7. Rose Award: Supratik Rayamajhi
8. Outstanding Resident in Cardiology: Madalina Opreanu
9. Outstanding Resident in Endocrinology: Tyler An
10. Outstanding Resident in Hematology/Oncology: David Kim
11. Outstanding Resident in Infectious Diseases: Tyler An
12. Outstanding Resident in Research: Ashish Tiwari and Mrinal Yadava
13. Sparrow Nursing Resident of the Year: Ujjwal Kumar
14. MSU Outstanding Junior Resident: Michael Kehdi
15. MSU Outstanding Senior Resident: Tyler An
16. Excellence in Teaching (University Faculty): Supratik Rayamajhi
17. Excellence in Teaching (Community Faculty): Mark Ensberg and Larry Rawsthorne
18. Research Teacher of the Year: Heather Laird-Fick
19. Outstanding Support Staff: Emily Anderson and Katie Gibson-Stofflet
20. Outstanding Clinical Support Staff: Trinh Tran
21. Outstanding Fellow in Teaching: Fadi Abu Yasin
22. Inpatient Nurse of the Year: Cori Wise
23. American College of Physicians Governors Award for Michigan: Heather Laird-Fick
24. College of Human Medicine Outstanding Clinician Award: Heather Laird-Fick

**Challenges/opportunities for upcoming year:**

1. The pulmonary group has stated they will not offer a standing pulmonary rotation due to changes in critical care coverage by residents. (We have established geographic caps which exclude the Neuro ICU as of 7/1/14.) In discussion with Drs. Glynn and Schroeder at Sparrow Hospital, they are supportive of sending current residents in need of a rotation out of system. We will need to establish a regularly offered rotation for the future, however, as this is a mandatory subspecialty offering under ACGME accreditation requirements.

2. With changes in the critical care coverage system, we have an opportunity to increase the educational quality and content of the experience, including building inter-professional teamwork experiences, quality improvement opportunities, etc.
3. We were able to obtain a wonderful work and teaching space for the residents for the final third of the academic year '13-'14. However, this will be eliminated January 1, 2015 as plans to renovate the first floor for a new cafeteria proceed. We have not yet identified a work space for the residents or for morning report and hand off rounds. Sparrow GME administration is aware and has placed requests on our behalf.
4. We have had two residents request transfers for the AY14-15, both for personal reasons. (Sumugdha Rayamajhi, MD will complete her PGY3 year at University of Colorado, where her husband is on faculty, and Ujjwal Kumar, MD is transferring to University of Alabama for PGY2 and 3.) We have a transfer coming in for his PGY2 and 3 years (Todd Wissner, DO), but will not be replacing Dr. Rayamajhi. This will impact our scheduling capabilities.
5. We have changed our inpatient general medicine experiences for AY14-15 to decrease the inpatient requirement by one block for our PGY1s and provide a better learning and patient care environment for rotating PGY1s. In the past we had four MSU teams with one senior and two juniors each, and a senior assigned to Hospitalist each block. Now we will have three MSU teams with a senior, a categorical PGY1, and either a second categorical or two rotating PGY1 residents. The Hospitalist rotation has been eliminated, and instead the fourth MSU team will have two senior residents who have greater responsibility and autonomy – a “practice ready” type experience. We will be monitoring the educational outcomes and satisfaction with this restructuring.
6. We will have two significant changes in our faculty/staff roster. Rajil Karnani will step down as associate program director in the fall, to be replaced by Nazia Khan, a new hire with expertise in hospital medicine and clinical research. Our program administrator, Emily Anderson, has also retired and will be replaced by Elese Bates, with prior experience as a program coordinator in med/peds and osteopathic internal medicine. These new additions will bring fresh insights into ways to continue to improve our program.
7. As of September 8, 2014, we do not have a contract or budget for the full academic year. While I do not anticipate major decreases in our funding levels, this remains of concern.
8. Two core faculty members (Laura Freilich and Heather Laird-Fick) have completed advanced training in interpersonal and communication skills through the American Academy on Communication in Healthcare, an MSU HRSA grant, and a Sparrow/Mayo faculty development program. Two residents (Dane Gruenebaum and David Kim) and another faculty member (Erin Sarzynski) have completed the latter as well. We are looking at ways to coach faculty and residents on patient centered communication, particularly in the hospital. We are still completing our action plan for this.

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

1. **Patient Care**: Direct observation of clinical skills using Mini-CEX forms.
2. **Medical Knowledge**: In Training Exam
3. **Practice-based Learning and Improvement**: Morbidity and Mortality reflective exercises, participation in presentations
4. **Interpersonal and Communications Skills**: Direct observation of clinical skills using Mini-CEX forms and patient satisfaction surveys.
5. **Professionalism**: Patient satisfaction surveys
6. **Systems-based Practice**: Clinic attending and clinic staff evaluations

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2013-2014**

**Program Name:** Interventional Cardiology Fellowship  
**Program Director:** Tim A. Fischell, M.D.

**Graduating residents and destinations:**

Poorna R. Karuparthi, MD  
Jefferson City Medical Group  
1241 W Stadium Blvd L100  
Jefferson City, MO 65109

Nitin Mahajan  
El Paso Cardiology Associates, P.A.  
4301 N. Mesa Suite 100  
El Paso, Texas 79902

Babatunde O. Komolafe  
South Eastern Cardiology Consultants  
2055 East South Blvd, Suite 403  
Montgomery, AL 36116

**Incoming residents and medical school attended:**

Pavan Kotaru, MD  
Michigan State University, Lansing, MI

Jag Kalavakunta, MD  
Michigan State University, Lansing, MI

Marwan Dib, MD  
Michigan State University, Lansing, MI

**Faculty changes**

Dr. Moualla is voluntarily resigning from Borgess Heart Center as of January 9, 2014.

**Major accomplishments over previous year:**

We have had a very successful academic year in 2013/2014. 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, as above.

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. We have had once change to our faculty, with the voluntary resignation of Dr. Soundos Moualla effective January 9, 2014. There have been no other 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.

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, 2014, and look forward to our ongoing affiliation with Michigan State University.

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

#### **Tim A. Fischell, MD**

##### *Invited lectures:*

February 26, 2013: Extravascular (Ablative Solutions). CRT 2013, Wash. DC.

February 26, 2013: Implantable Devices for ischemia and STEMI Detection: An update. CRT 2013, Wash. DC.

February 26, 2013: Optimal stenting for Aorto-Ostial Lesions. CRT 2013, Wash. DC.

August 29, 2013: Left Main and Ostial RCA stenting-Nailing the ostium. 2nd Interventional Treatment Strategies, Stockholm, Sweden.

August 29, 2013: Renal Denervation overview and update. 2nd Interventional Treatment Strategies, Stockholm, Sweden.

September 28, 2013: Future of renal denervation: New technologies and potential new indications. Bridging the Gap Symposium, Phoenix Heart.

September 28, 2013: Update: Implantable system for ischemia and MI detection and rapid intervention in coronary disease. Bridging the Gap Symposium, Phoenix Heart.

October 27, 2013: Ethanol injection for renal denervation (Ablative Solutions). TCT, San Francisco, CA.

October 29, 2013: Can we get transradial benefits through femoral artery access? The Arstasis Access System. TCT, San Francisco, CA.

Publications:

Gibson CM, Krucoff M, Fischell D, Fischell TA, Keenan D, Abueg C, Patel C, Holmes D. Rationale and Design of the ALERTS (Angelmed for Early Recognition and Treatment of STEMI) Trial: A Randomized, Prospective Clinical Investigation. Am Heart J 2013

Fischell TA, Vega F, Raju N, Johnson ET, Kent DJ, Ragland RR, Almany ST, Fischell DR, Ghazarossian VE. Ethanol-Mediated perivascular renal sympathetic Denervation preclinical validation of safety and efficacy in a porcine model. EuroIntervention 2013;9:140-147.

Book Chapters:

Fischell TA, Ghazarossian VE, Vega F. Endovascular, Ethanol-Mediated Renal Sympathetic Denervation; Sub-Acute and Chronic Evidence of Safety and Sustained Efficacy in a Swine Model. JACC TCT 2013

**Vishal Gupta, MD**

Research

2013            A single centre retrospective study to identify the role of thyroid hormone in pathogenesis of Takotsubo cardiomyopathy

2013            Study to determine epidemiology of Takotsubo cardiomyopathy in United States: Review of Nationwide Inpatient Sample data.

Teaching lectures

2013 Jul        TAVR Presentation, Three Rivers Grand Rounds

2013 April     TAVR Presentation, Borgess Medical Center

2013 Mar       PAD, Three Rivers Grand Rounds

Poster Presentations

1. Aggarwal S, Adu-Gyamfi KO, **Gupta V**. All that looks like “Brugada” is not “Brugada” – Case series of Brugada phenocopy caused by hyponatremia. Sep 2013

2. Aggarwal S, Papani R, **Gupta V**. Can thyroid "break" your heart? Role of thyroid in Takotsubo cardiomyopathy: A single center retrospective study. Sep 2013
3. Aggarwal S, Papani R, **Gupta V**. Epidemiology of Takot-subo cardiomyopathy in US: what does nationwide inpatient sample data say? Western Michigan University School of Medicine, Annual Research Day, April 2013, Kalamazoo. April 2013
4. Papani R, Aggarwal S, Kolla A, **Gupta V**. Thyroid Broke My Heart Twice! A Case Report of Recurrent Takotsubo Cardiomyopathy. ACP Michigan Meeting, Troy 2013
5. Aggarwal S, Kalavakunta J, **Gupta V**. Isolated right ventricular non-compaction with ST elevation in chest leads. ACP Michigan Meeting, Troy, 2013
6. Rangrass G, **Gupta V**. Milkers's Callus and the Effect of Friction on the Biological Structure of an Affiliated Body Part.. Southwest Michigan Regional ISEF on March 22, 2013
7. 39. Pigilam SK, Kalavakunta JK, Alsara O, Gupta V. *Spongiform Cardiomyopathy: A rare case with unique EKG changes.*
8. Presented at Mid-Michigan Research Day, Lansing, on 03/27/2014
9. 40. Aggarwal S, Kalavakunta JK, Gupta V. *Water Is Good For Health? Not In All Patients: A single center quality*
10. *improvement prospective study to identify impact of intensive patient education. Accepted for ACP national chapter at*
11. *Orlando April 2014*

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

Published abstracts:

1. Aggarwal S, Papani R, **Gupta V**. *Predictive role of thyroid in Takotsubo cardiomyopathy: A single center retrospective study* American Heart Association QCOR
2. Aggarwal S, **Gupta V**. *30-day Readmission Rates For Patients Discharged After Insertion, Revision, Replacement And Removal Of Cardiac Pacemaker Or Cardioverter/defibrillator: Analysis Of Nationwide Inpatient Sample Data* American Heart Association QCOR 2014
3. Aggarwal S, **Gupta V**. *Causes Of Readmission In Congestive Heart Failure Patients: Analysis Of 2,536,439 discharges* American Heart Association QCOR 2014
4. Aggarwal S, Attaway A, **Gupta V**. *Association Of Cardiovascular Disorder Requiring Intubation To In-hospital Mortality And Discharge Status Of The Patients: Analysis Of 17,128 Hospitalizations.* American Heart Association QCOR 2014

**Honors (resident and faculty):**

Tim A. Fischell, MD

2013 Best Doctor in America Award  
2014 Best Doctors in America Award  
2014 America's Top Cardiologists-Consumer's Research Council of America  
2014 Fischell building of medical biotechnology- Board of directors  
2014 Borgess Medical Center- Star Performer

Vishal Gupta, MD

2013 Award for Borgess Caring Hearts & Hands  
2014 Borgess Medical Center- Star Performer

**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. To date we have already received a record, 93 applications for our three training positions for the 2015/2016 academic year.

**Briefly indicate at least one way your program addresses each of the ACGME Core Competencies:****1. 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.



## **2. 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 their 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.

## **3. 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.

## **4. 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.

## **5. 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.

## **6. Systems-based practice**

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: 2013-2014**

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

**Program Director:** Ira H. Gewolb, M.D.

**Graduating fellow and destination:**

1. Chinyere (Chichi) Oarhe, M.D.  
Methodist Women's Hospital, Omaha, Nebraska

**Incoming fellows and medical school attended:**

1. Sanket Jani, M.D.  
SMT. NHL Medical School, India

**Faculty changes**

None

**Major accomplishments over previous year:**

1. Division has leadership role in Michigan-VON Collaborative QI Project (Dr. Karna)
2. Tarek Mohamed, M.D. (3<sup>rd</sup> year fellow) won the prestigious Marshall Klaus Research Award (PAS)
3. Dr. Mohamed also won a PAS travel award to present his findings at the annual PAS meeting.
4. Dr. Awonuga was named in charge of Pediatric Grand Rounds at Sparrow Hospital
5. Dr. Omar was elected to the Alpha Omega Alpha Honor Medical Society at MSU, November 2013
6. Dr. Gewolb was named an Associate Editor for, *Frontiers in Neonatology*, 2013-
7. Dr. Gewolb and Mr. Vice received a U.S. Patent (#8,568,336) (10/29/13) for their invention- "Non-Invasive Diagnosis of Gastroesophageal Reflux Using Very Low-Frequency Accelerometric Detection"
8. Gewolb & Vice also received patents from the United Kingdom and from Canada for their device.

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

**Abstracts/Scientific Presentations:**

**Kadrofske M, Patel M, Lockwood L, Abbas A, Kuipel M.** Serotonin regulates mucosal morphology and enterocyte migration in the mouse ileum. 17<sup>th</sup> Neurogastroenterology and Motility Society Scientific Meeting. September 20, 2013, Huntington Beach, CA. [poster]

- Kosuru K**, Nantais-Smith L, Monga R, Swain G, Lockwood L, **Kadrofske M**. Urinary biomarkers to diagnose necrotizing enterocolitis in preterm infants: a pilot case-control study. American Gastroenterological Association Annual Meetings as part of Digestive Disease Week, May 6, 2014, Chicago, IL. [poster]
- Patel M**, Abbas A, Lockwood L, **Kadrofske M**. Serotonin regulates mucosal growth and wound healing in the rat ileum. American Gastroenterological Association Annual Meetings as part of Digestive Disease Week, May 6, 2014, Chicago, IL. [poster]
- Chavez M**, Jakupovic J, Lockwood L, Akoto S and **Kadrofske M**. The role of serotonin in epithelial cell proliferation and apoptosis in the mouse ileum. Mid-Michigan Symposium for Undergraduate Research Experience (Mid-SURE), July 24, 2013, East Lansing, MI [oral and poster presentations by Chavez, M]
- Patel M**, Abbas A, Lockwood L, **Kadrofske M**. Serotonin regulates mucosal growth and wound healing in the rat ileum. 13<sup>th</sup> Annual Pediatric Research Day. March 19, 2014, E. Lansing, MI.
- Patel M**, Abbas A, Lockwood L, **Kadrofske M**. Serotonin regulates mucosal growth and wound healing in the rat ileum. 9th Annual Mid-Michigan Regional Research Day, March 27, 2014 *Awarded 1st Place Award as "Best Oral Presentation"*.
- Kosuru K**, Nantais-Smith L, Monga R, Swain G, Lockwood L, **Kadrofske M**. Urinary biomarkers to diagnose necrotizing enterocolitis in preterm infants: a pilot case-control study. 9th Annual Mid-Michigan Regional Research Day, March 27, 2014 *Awarded 3rd Place Award as "Best Poster by a Resident"*
- Nantais-Smith L**, Kosuru K, Monga R, Swain G, Lockwood L, **Kadrofske M**. Urine biomarkers to identify necrotizing enterocolitis in preterm infants: a pilot case-control study. Wayne State University College of Nursing Research Day, April 2, 2014 [poster].
- Mansour T**, **Angusamy S**, Schutte B and **Omar S**. Role of Hemoglobin and Thrombopoietin in postnatal change in platelet count in very low birth weight infants. 2014 Pediatric Academic Societies meeting.
- Angusamy S**, Mansour T, Bruckner J, LaPres J, Schutte B and **Omar S**. Reduced thymocyte development and proliferation in neonatal mice exposed to hyperoxia. 2014 Pediatric Academic Societies meeting.
- Panigrahi, P.**, Parida, S., Pradhan, L., Nanda, N., Satpathy, R., Chandel, D., Chaudhr7, R., Misra, P., Chen, H., Johnson, J.A., Morris, J.G., Paneth, N., and **Gewolb, I.H.**: Effectiveness of a *Lactobacillus plantarum* synbiotic therapy for preventing late onset sepsis in neonates. *Pediatr. Res.* 73:xxx, 2013. (presented at the Pediatric Academic Societies Meeting, Washington, DC, May, 2013)
- Oarhe, C.**, Dang, V., **Gewolb, I.H.**, Uhal, B.D.: Hyperoxia down-regulates angiotensin converting enzyme-2. (Presented (poster) at the American Thoracic Society Meeting, Philadelphia, PA, May, 2013; poster #A6124).

**Mohamed, T., Gewolb, I.H.,** Uhal, B.D.: Angiotensin converting enzyme-2 (ACE-2) is up-regulated in fetal lung cells exposed to hypoxia. *Pediatr. Res.* 75:xxx, 2014. (presented (poster) at the Pediatric Academic Societies Meeting, Vancouver, BC, May, 2014)

**Oarhe, C., Dang, V., Gewolb, I.H.,** and Uhal, B.D.: Hyperoxia down-regulates angiotensin converting enzyme-2. *Poster of Excellence award* at the 12th annual Michigan State University/Wayne State University Pediatric Research Day, March 2013.

### **Publications:**

Patel M, Chonat S, Olomu I, Arrington S, and **Kadrofske M.** Absent left common and left external iliac artery presenting in a neonate. *J Perinatol* 2013; 33 (5), 407-09. doi: 10.1038/jp.2012.132.

Bhattarai Y, Fernandes R, **Kadrofske MM,** Lockwood LR, Galligan JJ, Xu H. Western blot analysis of BK channel  $\beta$ 1-subunit expression should be interpreted cautiously when using commercially available antibodies. *Physiol Rep* 2014;2(10);e12189, doi:10.14814/phy2.12189.

Movsas, T.Z., Paneth, N.S., Rumbelha, W.K., Zyskowski, J.A., and **Gewolb, I.H.:** The effect of vaccination on serum aluminum and essential element levels in preterm infants. *J.A.M.A. Pediatrics* 167 (9): 870-872, 2013.

### **Comments:**

**Gewolb,I.H.:** Comment. *Obstet. Anesth. Dig.* 33: 46-47, 2013.

**Gewolb,I.H.:** Comment. *Obstet. Anesth. Dig.* 34: xxx, 2014. (in press)

### **Invited Presentations:**

**Awonuga MT,** Simulation Based Training in Neonatal Medicine: Society of Michigan Neonatologists Annual Conference, Brighton Michigan – 09/2013

**Awonuga MT,** Congenital Adrenal Hyperplasia: Pediatric Grand Rounds, Lagos State University Teaching Hospital, Ikeja, Lagos, Nigeria – 05/31/13

**Gewolb IH:** 3rd Annual NOMAS Meeting- Featured Speaker, Las Vegas, NV, October 2013

“Respiration: The necessary component for successful infant feeding”  
“Methods of diagnosing gastroesophageal reflux in infants: A new accelerometric technique”

**Gewolb, I.H.** Sparrow Hospital- Pediatric Grand Rounds: “What “Op” with ROP?”- August, 2013

**Gewolb, I.H.:** 27<sup>th</sup> Annual Gravens Conference on the Physical & Developmental Environment of the High Risk Infant, Clearwater Beach, FL, February, 2014  
“Respiration: The necessary component for successful infant feeding”  
“Methods of diagnosing gastroesophageal reflux in infants: A new accelerometric technique”

**Kadrofske, M:** Hillsdale College Department of Chemistry Seminar, Hillsdale, MI.  
“Role of Serotonin in Enterocyte Migration and Intestinal Wound Healing: Key Concepts in the Pathogenesis of Necrotizing Enterocolitis” May 3, 2011.

**Karna, P:** Smija Pmani, Megha Patel, Padmani Karna; Factor influencing discharge of VLBW Infants from NICU. Pediatric Academic Society meeting (PAS). May 2013.

**Karna P.** for MI VON Collaborative; MI State Quality Collaborative - Voluntary Initiative. Annual TIPQC Meeting in Franklin, Tennessee. March 2012

**Karna P.** MI VON Collaborative Initiative - Southeastern Michigan Association of Neonatal Nurses (SMANN). April 17<sup>th</sup> 2013.

**Karna P.** for MI VON Collaborative; MI State Quality Collaborative Neonatal Abstinence Syndrome Journey. Annual conference of Vermont Oxford Network Oct 2013.

**Karna P.,** Rodewald M, Renfro J, Jacob A, Wood J, Schwan A, Jones N: Measuring Accuracy of the Finnegan Neonatal Abstinence Scoring System. Quality Congress meeting of VON, Chicago. Oct 2013

### **Grants:**

**Gewolb I:** 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”  
\$60,954 (1/1/2014-12/31/2014)

Co-Investigator (P.Panigrahi, P.I.)

NIH- 4% salary support

“Use of probiotics for the prevention of sepsis in Indian children in a rural setting”

(3/1/07-2/28/14)

**Kadrofske, M.**

**2013-Mentor-** American Academy of Pediatrics Resident Research Grant: “Serotonin Regulation of Enterocyte Migration, Wound Healing and Inflammation in the Rat Intestine.” Awarded to Dr. Monalisa Patel, Resident Physician. Total award = \$3000.

**Karna P:** 2014 - MI VON Quality Collaborative (SOMN), Michigan Department of Community Health (Medicaid / MDCH) For NAS care at MI NICUs - \$90,000  
2012 – 2014 MI VON Quality Collaborative (SOMN). MI Department of Community Health (Kellogg Foundation)- \$80,000  
2010 – Present – MDCH for MI VON Quality Collaborative. \$ 10,000 / year  
2011 – Present – MDCH for MI VON Quality Collaborative - 25% salary support.

**Honors (fellows and faculty):**

1. Tarek Mohamed, M.D. (3<sup>rd</sup> year fellow) won the prestigious Marshall Klaus Research Award (PAS)
2. Dr. Mohamed also won a PAS travel award to present his findings at the annual PAS meeting.
3. Dr. Awonuga was named in charge of Pediatric Grand Rounds at Sparrow Hospital
4. Dr. Gewolb was named to the Editorial Board of *Frontiers in Pediatrics*, 2013
5. Dr. Karna is Chair of the Michigan-VON Quality Collaborative Initiative since 2011 Division has leadership role in Michigan-VON Collaborative QI Project (Dr. Karna)
6. Dr. Omar was elected to the Alpha Omega Alpha Honor Medical Society at MSU, November 2013
7. Dr. Gewolb was named an Associate Editor for, *Frontiers in Neonatology*, 2013-
8. Dr. Gewolb and Mr. Vice received a U.S. Patent (#8,568,336) (10/29/13) for their invention- “Non-Invasive Diagnosis of Gastroesophageal Reflux Using Very Low-Frequency Accelerometric Detection.” Gewolb & Vice also received patents from the United Kingdom and from Canada for their device.

**Challenges/opportunities for upcoming year:**

1. Continued need for more for Pediatric subspecialists at Sparrow/MSU
2. Continued need for Pediatric Radiology, Pathology, Surgery at Sparrow/MSU

3. Need to begin planning for renovation/expansion of NICU
4. Need to expand fellowship to 5- approval obtained; financial support in limbo.
5. Need for appropriate complement of NNP/PA's in NICU

**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: 2013-2014**

**Program Name:** Pediatric Residency

**Program Director:** Ashweena Gonuguntla, MD

**Graduating residents and destinations:**

1. Melissa Caraballo – Jackson Hospital, FL
2. Tracy Chapman – Pediatric Hospitalist, FL
3. Saif Fatteh – Private Practice, MI
4. Krishnamraju Kosuru – Gastro Fellowship, NY
5. Monalisa Patel – Neonatology Fellowship, CA
6. Sarah Servinsky – Private Practice, MI
7. Ryuma Tanaka – Hem/Onc Fellowship, TX
8. Farouq Thabet – Pediatric Neurologist, IO

**Incoming residents and medical school attended:**

1. Matthew Carter, DO – Rocky Vista Univ. College of Osteopathic Medicine, CO
2. Julie Creighton, DO – Lake Erie College of Osteopathic Medicine, PA
3. Ala Elayyan – Jordan University of Science and Technology, Jordan
4. Mohamed Farhat – American University of Beirut, Lebanon
5. Ira Holla – Maulana Azad Medical College, Uni. Of Delhi, India
6. Stephaie Jarnagin, DO – Kirksville College of Osteopathic Medicine, MO
7. Rebecca Justin, DO – Lincoln Memorial University, COM, TN
8. Zil-E-Huma Sheikh – Akad Medical, Poland



### Research publications/presentations (Faculty):

Faculty Member	PMID1	PMID2	PMID3	PMID4	Conference Presentations	Other Presentations	Chapters Textbooks	Grant Leadership	Leadership or Peer-Review Role	Teaching Formal Courses
Gonuguntla, Ashweena					0	3	0	0	Y	Y
Barry, Colleen					1	1	0	0	Y	Y
Christensen, Rachel					0	0	0	0	N	Y
Gera, Renuka					1	2	0	3	Y	Y
Gewolb, Ira					2	2	0	2	Y	Y
Guertin, Stephen					1	1	0	0	Y	Y
Hennessey, Lawrence					0	0	0	0	N	Y
Kadrofske, Mark					8	1	0	2	Y	Y
Karna, Padmani					1	1	0	2	N	Y
Kulkarni, Roshni	22427748	24227821	24246297	24616187	9	11	2	9	Y	Y
Naz, Fareeha	24095574				0	0	0	0	N	Y
Omar, Said					3	2	0	0	Y	Y
Raghib, Timur					0	0	0	0	N	Y
Rosenberg, Melissa					0	0	0	0	N	Y
Sharangpani, Aditi					0	0	0	0	N	Y
Sigal, Yakov					1	0	0	0	N	Y
Stiffler, Michael					1		0	0	N	Y
Stone, David					0	0	0	0	N	Y
Sudhanthar, Sathyan					3	1	0	0	N	Y
Vyas, Arpitha	24730308				3	2	0	1	N	Y
Worthington, Ruth					0	0	0	0	N	Y

**Research publications/presentations (Residents):**

<b>Resident</b>	<b>Year in Program</b>	<b>PMID1</b>	<b>PMID2</b>	<b>PMID3</b>	<b>Conference Presentations</b>	<b>Chapters Textbooks</b>	<b>Participated in Research</b>	<b>Teaching Presentations</b>
Alhamad, Mo'ath	1				0	0	Y	Y
Avula, Sravani	1				0	0	Y	Y
Jakubowski, Erin	1				0	0	N	Y
Kojima, Katsuaki	1	24877680	24815577	24315545	2	0	Y	Y
Richardson, Nastassia	1				0	0	N	Y
Sharpe-Kamer, Krystel	1				0	0	N	Y
Thompson, Christopher	1				0	0	Y	Y
Torgeson, Amanda	1				0	0	N	Y
Abdi, Abdul	2				2	0	Y	Y
AlHamad, Dania	2				0	0	Y	Y
Fox, Erin	2				0	0	Y	Y
Leisure-Martins, Aimee	2				0	0	Y	Y
Mullin, Sabina	2				0	0	Y	Y
Murphy, Lee	2				0	0	Y	Y
Panchangam, Srinivas Krishna Cha	2				1	0	Y	Y
Pence, Ashley	2				0	0	Y	Y
Caraballo, Melissa	3				1	0	Y	Y
Chapman, Tracy	3				1	0	Y	Y
Fatteh, Saif	3				1	0	Y	Y
Kosuru, Krishnamraju	3				2	0	Y	Y
Patel, Monalisa	3				3	0	Y	Y
Servinsky, Sarah	3	23583058			1	0	Y	Y
Tanaka, Ryuma	3				3	0	Y	Y
Thabet, Farouq	3	23583058	24095574	23683541	2	0	Y	Y

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2013-2014**

**Program Name:** Physical Medicine and Rehabilitation

**Program Director:** Michael Andary, MD

**Graduating residents and destinations:**

1. Melissa Andric, DO Private Practice Oakland Physical Medicine Allen Park, MI
2. Rani Gebara, DO MSU Dept of PM&R
3. Mathew Saffarian, DO Electrodiagnostic and Interventional Pain Medicine 2014  
2015 with MSU Dept. of PM&R non accredited Fellowship  
MSU Sports Medicine Accredited Fellowship 2015-2016

**Incoming residents and medical school attended:**

1. Andrew Cooper, DO
2. Meagan Smith, DO MSU-COM
3. Michael Verde, MD St. Georges Grenada

**Faculty changes**

1. Rani Gebara, DO has joined the MSU Dept. of PM&R

**Major accomplishments over previous year:**

1. Acceptance of a 10<sup>th</sup> resident to start as a PG2 in 2015.insert info
2. Completed our first Clinical Competency Committee meeting.
3. Completed our first Program Evaluation Committee meeting.
4. Implemented our monthly video residency meeting.

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

1. Schlinger, M, Andary MT, Sylvain J. Massage and Manual Medicine Chapter 48 in  
Running Medicine 2<sup>nd</sup> Edition Wilder, MD, 2014 Healthy Learning ISBN: 978-1-60679-  
304-6
2. Condie N, Saffarian M, McCausland K, Austin E, Sylvain J, Andary M.  
Comparison of Four Different Techniques of the Superficial Fibular Sensory  
Nerve. Muscle and Nerve October (48):4 652. 2013. Also presented at Lansing  
Research Day
3. Hallgren RC, Rowan JJ, Bai P, Pierce SJ, Shafer-Crane GA, Prokop LL.  
Activation of rectus capitis posterior major muscles during voluntary retraction  
of the head in asymptomatic subjects. J Manipulative Physiol Ther. 2014 Jul-  
Aug;37(6):433-40. PMID: 25108753.

**Honors (resident and faculty):**

1. Larry Prokop named as Distinguished Fellow Award from the American Osteopathic Congress of Physical Medicine and Rehabilitation.

**Challenges/opportunities for upcoming year:**

1. Complete planning to increase the number of rehab beds at Sparrow to 40.
2. Obtain funding for an 11 or 12 residency slot.

**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:** We have had two opportunities for residents to participate in root cause analysis “projects”. Some of the resident quality improvement projects are related to improving team systems through inpatient rehabilitation at Sparrow Hospital.

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2013-2014**

**Program Name:** MSU Surgical Critical Care Fellowship

**Program Director:** Benjamin Mosher, MD

**Graduating residents and destinations:**

1. Dave Giammar, MD – Columbus, Ohio

**Incoming residents and medical school attended:**

1. Ronald Hyde, DO – MSU COM

**Faculty changes**

1. Chet Morrison, MD left 11/2013, program director
2. Lynn Munoz, MD added 8/2014, new faculty member

**Major accomplishments over previous year:**

1. Chief of Staff elect – John P. Kepros

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

1. Presentations:
  - a. Postoperative Extubation in Head and Neck Surgery Patients: Risk Factors for Failure and Proposal for Extubation Criteria. Kaori Ito presented at the MCACS 61st Annual Meeting. May 13-15, 2014
  - b. Patterns of Antibiotic Use in Open Fractures. Mersadies Martin presented at the 9<sup>th</sup> Annual Academic Surgical Congress. February 6, 2014
  - c. Postoperative Extubation in Head and Neck Surgery Patients: Risk Factors for Failure and Proposal for Extubation Criteria. Kaori Ito presented at the 9<sup>th</sup> Annual Academic Surgical Congress. February 6, 2014
  - d. Guidelines in the Management and Removal of Thoracostomy Tubes in Trauma Patients: Establishment of a Clinical Practice Algorithm. Mersadies Martin presented at the 100<sup>th</sup> ACS Clinical Congress. October 8, 2013
2. Abstracts:
  - a. K Ito, Z Simmons, CI Anderson, H Ito, **BD Mosher**, JH Clarkson, BL Wenig. Postoperative Extubation in Head and Neck Surgery Patients: Risk Factors for Failure and Proposal for Extubation Criteria. *J Surg Res.* 186(2): 687. (Feb 2014)
  - b. M Martin, V Prusick, Graham C, Gohil K, Anderson C, **Mosher B**, Kepros J. Patterns of Antibiotic Use in Open Fractures. *J Surg Res.* 186(2): 690. (Feb 2014)

3. Peer Review Journal articles:

- a. Mersadies Martin, Cory T Schall, Cheryl Anderson, Nicole Kopari, Alan T Davis, Penny Stevens, Pam Haan, John P Kepros and **Benjamin D Mosher**. Results of a clinical practice algorithm for the management of thoracostomy tubes placed for traumatic mechanism. *SpringerPlus* 2013 **2**:642. (doi:10.1186/2193-1801-2-642)

**Honors (resident and faculty):**

1. Sparrow Hall of Fame Physician – Benjamin D. Mosher, MD

**Challenges/opportunities for upcoming year:**

1. Adding another new faculty member 12/2014
2. Interact with the new Pulmonary Critical Care Fellowship fellow
3. ABS SCC certificate offered to emergency medicine trained physicians

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

**Patient Care:**

Review of notes/plans when residents not present, graduated responsibility for directing rounds

**Medical Knowledge:**

In service training exam provided by SCCM – The Multidisciplinary Critical Care Knowledge Assessment Program (MCKAP)

**Practice-based Learning and Improvement:**

Member of the multidisciplinary trauma QI committee and program for Sparrow trauma services, also attends medical staff critical care committee meetings

**Interpersonal and Communications Skills:**

Evaluations by staff, nursing staff

**Professionalism:**

Biannual evaluations including off-service rotations with other hospital services

**Systems-based Practices:**

Discuss interactions/coordination of care with other services daily rounds

**College of Human Medicine  
Michigan State University  
Lansing Community Residency/Fellowship Annual Report  
Academic Year: 2013-2014**

**Program Name:** Michigan Vascular Center Vascular Fellowship

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

**Graduating residents and destinations:**

None (New Program 2013)

**Incoming residents and medical school attended:**

1. Bara'a Zuhaili, M.D. (Damascus Univ. School of Medicine)

**Faculty changes**

1. Russell W. Becker, D.O. (Moved to Florida)

**Major accomplishments over previous year:**

1. The McLaren Foundation purchased a state-of-the-art Endovascular Simulator, the Mentice VIST® -C for the Vascular Fellowship program. First year Fellows completed a 16 week Endovascular Simulator Training Course conducted by Mark Mattos, M.D., Clinical Professor of Surgery and Education Planner for the Wayne State University Department of Surgery.

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

1. Sarhan M, Cavanagh SL, Molnar RG. Stent Fractures and Restenosis Rates After Carotid Artery Stenting. Oral Presentation. 16<sup>th</sup> Annual MSU/ FAME Community Research Forum, April 2, 2014, Flint, MI
2. Cavanagh SL, Kinning WK, Molnar, RG. Citrobacter Koseri: A Rare Cause of Mycotic Aneurysm With Rupture. Poster Presentation: 16<sup>th</sup> Annual MSU/FAME Community Research Forum; April 2, 2014, Flint, MI

**Honors (resident and faculty):**

N/A

**Challenges/opportunities for upcoming year:**

1. Recruit 2 additional Fellows to fill our open positions for 2015.
2. Implement new Milestones for Vascular Surgery, now required 2014.



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

**Patient Care:**

Fellows round with a Faculty Member to enhance learning

Fellows spend one half day per week at the Michigan Vascular Center out-patient clinic seeing both new and established patients with a faculty member.

**Medical Knowledge:**

Thursday morning Diagnostic Review & Case Management Conference. Faculty and fellows discuss patient plans for all patient interventions for the upcoming week.

Vascular Medicine, Science & Therapeutics Conference (Monthly)

**Practice-based Learning and Improvement:**

Participation in Michigan Vascular Center's Quality Improvement Meetings

**Interpersonal and Communications Skills:**

Fellows run the vascular service at McLaren Flint, teaching & supervising residents.

Fellows take turns presenting patient cases at the weekly Diagnostic Review & Case Management Conference.

Assessments are made by faculty, evaluation of General Surgery Residents, staff as well as patient surveys.

**Professionalism:**

Program Director advises at quarterly Fellow meetings.

Evaluated quarterly by faculty on Rotation evaluations.

**Systems-based Practices:**

VSITE Conference (Monthly) prepares Fellows to take the Board Exam. Question discussion incorporates education about the cost of procedures in making choices.