Report of Research Accomplishments

2018

Beaumont Health
For more than 45 years, researchers at Beaumont have helped to bring new technologies, new treatments, and new medications into the practice of medicine, and have helped to move the standard of care forward to improve the safety and quality of medical care for patients locally, nationally, and internationally. The greatest reward from these achievements is the realization that patients’ lives are improved and enriched because of the outstanding research carried out by Beaumont physicians, scientists and staff.

Outstanding biomedical research is a major component of the excellent reputation of Beaumont Health as an academic health system. The Board of Directors at Beaumont made a commitment several decades ago to strengthen Beaumont as an academic institution through growth and support of graduate medical education, the hiring of full time physicians with a history of excellence in research, and committed support of ongoing research activities of key programs. This commitment has helped to forge the reputation of Beaumont Health as a leading academic health system, with recognition by U.S. News and World Report, a distinction which places Beaumont in the forefront of medicine in the U.S.

With Beaumont Health’s role as the health care affiliate with the Oakland University William Beaumont School of Medicine, our research activities, graduate medical education, and scholarly endeavors are even more important. Our Board of Directors and senior leadership have reaffirmed their commitment to this ongoing academic mission for Beaumont. Strong undergraduate medical education requires faculty committed to research and a broad, excellent program of graduate medical education. The ACGME (Accreditation Council on Graduate Medical Education) is steadily increasing the requirements for excellence in both faculty research achievement and resident/fellow research training in order to maintain full accreditation for residency and fellowship programs. The Board for Accrediting Level 1 Trauma Center status, presently achieved by Beaumont Royal Oak, now requires productivity of peer-reviewed publications in recognized journals by participating faculty. The LCME (Liaison Committee on Medical Education), the accrediting organization for medical schools in the U.S. and Canada, requires the presence of biomedical research activities that can provide basic, translational and population research opportunities for medical students. The OUWB medical school provides further impetus to enhance biomedical research at both Beaumont and Oakland University, to integrate research activities between the two institutions, and to initiate new programs, centers, and collaborative projects shared by both institutions. Beaumont and Oakland University already have several areas of long standing ongoing research collaboration.

Beaumont research is heavily oriented towards translational research, investigating new treatments, pharmaceuticals, medical devices, and scientific approaches aimed at enhancing the excellence and safety of patient care. Beaumont has a robust program of clinical research, numbering over 1,158 trials with over 10,363 registered research participants. Beaumont’s clinical services are superb, providing the standard upon which new and innovative research is built. The volume of patients served at Beaumont, combined with the excellence of clinical care, provides a striking opportunity to develop new treatments. Moving forward, Beaumont Health and OUWB will build upon existing research strengths in nationally recognized clinical and translational programs, including Cardiovascular Medicine, Radiation Oncology, Urology, Orthopaedics, OB/GYN, Ophthalmology, Emergency Medicine and many others, to establish a new emphasis in population/community health and learning health system initiatives that will focus on improving health and healthcare delivery for our patients and communities.

We are proud to present this Report of Research Accomplishments. It highlights the depth and breadth of Beaumont’s academic excellence, including our affiliation with OUWB. We extend our congratulations and appreciation to the many investigators who have contributed these extraordinary achievements.
Beaumont Health, serving southern Michigan and beyond, recognizes the inherent value of research as a major contributing factor to future improvements in health care delivery and the health of our local and global communities. The Beaumont Research Institute (RI), established by the Board of Trustees in 1966, strengthens Beaumont's ability to conduct medical research and to provide research training for allied health and medical staff and students in undergraduate and graduate medical education programs. Beaumont Health is a major teaching facility, with 79 accredited residency and fellowship programs involving 837 residents and 97 fellows, and 168 research staff.

**Funding**
Research Institute actual operations $36.9M

**External Sources of Research Funding**
- Commercial sponsors 31%
- Federal sponsors 22%
- Philanthropic sponsors 13%
- Intellectual Property 34%

**Types of Research at Beaumont Health**
Percentage of expenses
- Clinical Research 48%
- Pre-clinical Research 52%

**External Research Funding by Service Line**
- Radiation Oncology 25%
- Urology 8%
- Hematology/Oncology 7%
- Infectious Disease 7%
- Orthopedics 7%
- Emergency Medicine 6%
- Cardiology 4%
- OB/GYN 4%
- Other (Various, Admin/Inv. IP Share) 32%

**Clinical Research**
- 1,273 clinical studies
- 371 interventional studies
- 902 non-interventional studies
- 434 active principal investigators
- 5,021 registered research participants

**Educational Opportunities for Research Staff**
- 2-day orientation for new clinical research staff
- Animal use training
- On-line CITI human subjects protection training
- Online guidance/modules on initiating research
- Resident and Fellow Research Forum
- Seminar series and workshops

**Support Staff Available**
- Accounting / Contracting / Administrative
- Biostatistics/Informatics
- Commercialization Center
- Compliance Office
- Research Data Management and Computing
- Grant Development
- Human Resources
- Institutional Animal Care and Use Committee
- Institutional Biosafety Committee
- Institutional Review Board
- Outcomes Research Group
- Research Education

**Support for the Research Institute**
- AAALAC accredited animal facility
- AAHRPP accredited human research protection program
- Beaumont Research Coordinating Center for multicenter clinical trials
- BioBank/Erb Family Core Molecular Lab
- Flash CT scanner
- Fully equipped bench laboratories
- National Cancer Institute’s Community Oncology Research Program (NCORP)
- Partnership with OUWB School of Medicine
- Proton Beam
- PET-CT and Biotracer
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BEAUMONT HOSPITAL
Royal Oak, Troy, Grosse Pointe
ANESTHESIOLOGY AND PERIOPERATIVE MEDICINE

Peer-Reviewed Articles:


Book Chapter or Full Book Publications:


Abstracts with Associated Research Presentations:


Anesthesiology and Perioperative Medicine

Abstracts with Associated Research Presentations: continued


Anesthesiology and Perioperative Medicine

Abstracts with Associated Research Presentations: continued


Invited Research Presentations:


Invited Research Presentations: continued


Non Peer-Reviewed Research Publications:

**BIOBANK**

**Peer-Reviewed Articles:**


**Abstracts with Associated Research Presentations:**


BioBank

Invited Research Presentations:


CARDIOVASCULAR DISEASE

Peer-Reviewed Articles:


Cardiovascular Disease

**Peer-Reviewed Articles:** continued


Cardiovascular Disease

Peer-Reviewed Articles: continued


Hanson ID, Goldstein JA. Acute right ventricular failure: Diagnosis, management and basic principles of percutaneous mechanical circulatory support. Cardiac Interventions Today March/April 2018.

Cardiovascular Disease

**Peer-Reviewed Articles:** continued


Cardiovascular Disease

Peer-Reviewed Articles: continued


Cardiovascular Disease

**Peer-Reviewed Articles:** continued


**Book Chapter or Full Book Publications:**


Cardiovascular Disease

Book Chapter or Full Book Publications: continued


Abstracts with Associated Research Presentations:


Hendrickson K. Cardiac rehabilitation: A gateway to the Senior Olympics. American College of Sports Medicine Annual 65th Meeting and 9th World Congress on Exercise is Medicine, Minneapolis, MN, May 29-June 2, 2018.


Cardiovascular Disease

Abstracts with Associated Research Presentations: continued


Meraj PM, Hill J, Dixon SR, Schriieber T, Moses J, Schaefer A. Non-emergent percutaneous coronary intervention on an unprotected left main coronary artery supported with Impella heart pump in patients ineligible for surgical revascularization. JACC. 2018 Mar;71(11).


Invited Research Presentations:

Dixon SR. Mechanical support for high risk PCI: Clinical cases of success. American College of Cardiology (ACC), Orlando, FL March 10-12, 2018.

Dixon SR. Contrast reduction strategies in PCI. Blue Cross Blue Shield Blue Care Network Meeting, Novi, MI, April 21, 2018.

Dixon SR. How do we use IVUS for PCI guidance? Blue Cross Blue Shield Blue Care Network Meeting, Detroit, MI, October 27, 2018.

Franklin BA. Recent advances in preventive cardiology and lifestyle medicine. Clinical Obesity Medicine Conference, Center for Medical Weight Loss, Las Vegas, NV, January 20-21, 2018.
Cardiovascular Disease

Invited Research Presentations: continued


Franklin BA. Recent advances in preventive cardiology and lifestyle medicine. 21st Annual Beaumont Troy Medical Staff Symposium, Boyne Falls, MI, June 21-23, 2018.

Franklin BA. GPS for professional success: 10 behavior skills of highly successful people. 21st Annual Beaumont Troy Medical Staff Symposium, Boyne Falls, MI, June 21-23, 2018.

Franklin BA. Extreme exercise and cardiovascular health: Clarifying the risk-protection paradox. Medical Grand Rounds, Sinai-Grace Hospital, Detroit, Michigan, September 6, 2018.

Franklin BA. Recent advances in preventive cardiology and lifestyle medicine. Faculty of Medicine, University of Lisbon, Lisbon, Portugal, October 25-28, 2018.

Franklin BA. Cardiac rehabilitation and secondary prevention: Changing paradigms and perceptions. Faculty of Medicine, University of Lisbon, Lisbon, Portugal, October 25-28, 2018.


Cardiovascular Disease

**Invited Research Presentations:** continued

**Goldstein JA.** Radiation safety: Do’s and don’ts. Advanced Revascularization Chapter (ARCH) Percutaneous Cardiac and Peripheral Vascular Therapeutics Symposium, St. Louis, MO, April 12-13, 2018.


**Non Peer-Reviewed Research Publications:**


**Hanson ID.** Getting the flu can be deadly. State of the Heart, Fall 2018, Beaumont Hospital quarterly publication.


**Peer-Reviewed Articles:**


Abstracts with Associated Research Presentations:


*Esterle J, Marcantonio DR, Nall C. Calcium hydroxyapatite deposition disease: A multimodality review for the practicing radiologist and radiologist in training, with emphasis on clinical. Society of Skeletal Radiology Annual Meeting, Austin, TX, March 25-28, 2018.


Patel RR, Patel SR, Bartholomew B. Achondroplasia and Chiari 1 malformation with moderate to severe hydrocephalus. American Association of Physicians with Indian Origin (AAPI) Annual Convention, Greater Columbus, OH, July 4-8, 2018.


Diagnostic Radiology and Molecular Imaging

Abstracts with Associated Research Presentations: continued


Non Peer-Reviewed Publications:

EMERGENCY MEDICINE

Peer-Reviewed Articles:


Chu D, Xiao J, Shah P, Todd B. How common are cognitive errors in cases presented at emergency medicine resident morbidity and mortality conferences? Diagnosis (Berl). 2018 Sep 25;5(3):143-150.


Emergency Medicine

Peer-Reviewed Articles: continued


Abstracts with Associated Research Presentations:


Emergency Medicine

Abstracts with Associated Research Presentations: continued


Emergency Medicine

Abstracts with Associated Research Presentations: continued


Ozcan A, Levasseur K. Febrile infants without respiratory symptoms or sick contacts: Do we need chest radiographs or respiratory syncytial virus/influenza testing? Pediatric Academic Societies Meeting, Toronto, Canada, May 5-8, 2018.


Emergency Medicine

Abstracts with Associated Research Presentations: continued


Non Peer-Reviewed Research Publications:


Peer-Reviewed Articles:


**Yedavalli-Yellayi K, Ho A, Patalinghug E.** Update on osteoporosis. Prim Care, published online September 24, 2018.

Invited Research Presentations:


Graham T, Biggs W, Griesbach S, **Lick D,** Maier R. STFM residency accreditation toolkit support lab. 51st Annual Conference of the Society of Teachers of Family Medicine, Washington, DC, May 5-9, 2018.


**Gruber A.** Clinical application of the still technique. NMM/OMM Education Conference, Michigan State University College of Osteopathic Medicine, East Lansing, MI, June 1, 2018.
Family Medicine

Invited Research Presentations: continued


Lackman-Zeman L. Psychosocial factors at play when addressing SDOH. Oakland University Healthology Symposium, Auburn Hills, MI, April 17-18, 2018.


Family Medicine

Invited Research Presentations: continued


Lick D, Rosbolt J, Gruber A. Common joint injections in the ambulatory setting. Practical Update in Primary Care Medicine, Troy, MI, April 21, 2018.


Non Peer-Reviewed Publications:


Kowalkowski JD. Year-long faculty scholars program in integrative healthcare (~69 CME credits); September 2017-May 2018.

Mulhem E. What are the effects of using fractional exhaled nitric oxide (FeNO) levels to guide treatment for adults with asthma? Cochrane Clinical Answers, 2018.

Mulhem E. For people with acute or chronic disease, how does prescribing by nurses and pharmacists rather than by clinicians affect outcomes? Cochrane Clinical Answers, 2018.
Family Medicine

Non Peer-Reviewed Publications: continued


Mulhem E. For people with respiratory infection, how do delayed compare with immediate or no antibiotic prescriptions? Cochrane Clinical Answers, 2018.

Mulhem E. What are the benefits and harms of “hospital at home” services for adults requiring acute care? Cochrane Clinical Answers, 2018.

Mulhem E. In healthy children, what are the benefits and harms of vaccines for preventing influenza? Cochrane Clinical Answers, 2018.

Mulhem E. What are the benefits and harms of hearing aids for adults with mild to moderate hearing loss? Cochrane Clinical Answers, 2018.


Mulhem E. For people with asthma, how does shared decision-making affect outcomes? Cochrane Clinical Answers, 2018.

Mulhem E. In healthy adults, what are the benefits and harms of vaccines for preventing influenza? Cochrane Clinical Answers, 2018.

Mulhem E. How do intramuscular and oral corticosteroids compare for improving outcomes in people with acute asthma following discharge from the emergency department? Cochrane Clinical Answers, 2018.

Shammami A. Overall health care and navigating the medical system when language is a barrier. John Oram Radio Show, July 2018.
SUBSPECIALTY DIVISIONS OF INTERNAL MEDICINE

ALLERGY and IMMUNOLOGY
GASTROENTEROLOGY and HEPATOLOGY
GENERAL INTERNAL MEDICINE
GERIATRICS
HEMATOLOGY / ONCOLOGY
INFECTIOUS DISEASES
NEPHROLOGY
NEUROLOGY
NUTRITION and PREVENTIVE MEDICINE
PUMONARY and CRITICAL CARE MEDICINE
ALLERGY and IMMUNOLOGY

Peer-Reviewed Articles:


Abstracts with Associated Research Presentations:


GASTROENTEROLOGY and HEPATOLOGY

Peer-Reviewed Articles:


Gastroenterology and Hepatology

Peer-Reviewed Articles: continued


Book Chapters or Full Book Publications:


Abstracts with Associated Research Presentations:


*Hakim S, Aneese AM, Edhi A, Shams C, Cannon ME, Cappell MS. Reduction in length of stay, hospital costs and hospital charges for all-cause ERCPs performed over the weekend over ERCPs that were postponed to the first available weekday. Digestive Disease Week of the American Gastroenterology Association, Washington, DC, June 2-5, 2018.

Peer-Reviewed Articles:


General Internal Medicine

Peer-Reviewed Articles: continued


Marijanovich N, Halalau A. Hemorrhagic tamponade as initial manifestation of systemic lupus with subsequent refractory and progressive lupus myocarditis resulting in cardiomyopathy and mitral regurgitation. Case Reports in Rheumatology, published online January 21, 2018.


General Internal Medicine

Peer-Reviewed Articles: continued


Abstracts with Associated Research Presentations:


General Internal Medicine

Abstracts with Associated Research Presentations: continued


*Fisher A. A retrospective study analyzing the appropriateness of initial treatment of *Clostridium difficile* in patients with active malignancy. 48th Annual Residents' and Fellows' Research Forum, Royal Oak, MI, May 22, 2018.


*Jayaschandran V. Asthma control and education (ACE): Use of an electronic teaching tool to improve skills, knowledge and self-efficacy for teaching of inhaled therapies. 48th Annual Residents’ and Fellows’ Research Forum, Royal Oak, MI, May 22, 2018.*
General Internal Medicine

Abstracts with Associated Research Presentations: continued


General Internal Medicine

Abstracts with Associated Research Presentations: continued


General Internal Medicine

Abstracts with Associated Research Presentations: continued

Peer-Reviewed Articles:


Abstracts with Associated Research Presentations:

Biedny S. Opportunities for antimicrobial stewardship in skilled nursing facilities. American Medical Director’s Association (AMDA), Grapevine, TX, March 21-24, 2018.


HEMATOLOGY / ONCOLOGY

Peer-Reviewed Articles:


Abstracts with Associated Research Presentations:


Poster Presentations

Hematology / Oncology

Abstracts with Associated Research Presentations: continued


Hematology / Oncology

Abstracts with Associated Research Presentations: continued


**INFECTIOUS DISEASES**

**Peer-Reviewed Articles:**


**Book Chapter or Full Book Publications:**


Infectious Diseases

Abstracts with Associated Research Presentations:


**Lauter CB**. A heart gone bananas: Allergy-induced coronary vasospasm due to banana (Kounis Syndrome). American Academy of Allergy, Asthma and Immunology (AAAAI)/World Allergy Organization (WAO), Orlando, FL March 2-5, 2018.

Mopuru H, **Powell K, Sims MD**. Evaluation of a rapid highly multiplexed molecular diagnostic lower respiratory panel for clinical impact and antibiotic stewardship. American Society for Microbiology (ASM) Microbe, Atlanta, GA, June 7-10, 2018.


Riederer K, Witherell R, **Fishbain JT**. Rapid antimicrobial susceptibility testing (AST) via laser light scattering technology for gram negative organisms from screen positive urine. American Society for Microbiology (ASM) Microbe, Atlanta, GA, June 6-11, 2018.


Szela J, Venkatappa N, **Sims MD**. Risk and timing of clostridium difficile infection relapse after antibiotic exposure. Infectious Disease Society of America ID Week, San Francisco, CA, October 3-7, 2018.
Infectious Diseases

Invited Research Presentations:


Pereira Rodrigues O, Sims MD. Outcome based study of carbapenem use relative to ESBLs (OBSCURE). Michigan Infectious Diseases Society Annual Scientific Meeting Royal Oak, MI, March 17, 2018.

**Peer-Reviewed Articles:**


**Book Chapter or Full Book Publications:**


**Abstracts with Associated Research Presentations:**

**Peer-Reviewed Articles:**

Fortunato J, Wasserman JA, **Menkes DL.** Placebo analgesia as nocebo reduction. AJOB Neuroscience. 2018;9:198-199.

Klaver AC, Coffey MP, Aasly JO, **Loeffler DA.** CSF lamp2 concentrations are decreased in female Parkinson's disease patients with LRRK2 mutations. Brain Res. 2018;1683:12-16.


**Abstracts with Associated Research Presentations:**

Simon A, **Menkes DL.** Cyclophosphamide as a rescue agent in myasthenic crisis. American Association of Electrodiagnostic Medicine, Washington, DC, October 10-13, 2018.
Peer-Reviewed Articles:


Abstracts with Associated Research Presentations:


Peer-Reviewed Articles:


Book Chapter or Full Book Publications:


Abstracts with Associated Research Presentations:

Cheah C, Jayaschandran V, *Christensen P, Nair GB, Halalau A. Asthma control and education (ACE): Use of an electronic teaching tool to improve resident skills, knowledge and self-efficacy for teaching of inhaled therapies. Medical Education Week, Oakland University William Beaumont School of Medicine, Royal Oak, MI, May 14-18, 2018.


Abstracts with Associated Research Presentations: (continued)


Iftikhar H, Nair GB, Zhang C. Multiple calcified pulmonary nodules: It need not be what the eye doesn't see. American College of Chest Physicians Annual Meeting, San Antonio, TX, October 6-10, 2018.


Pulmonary and Critical Care Medicine

Invited Research Presentations:


Dalal B. Sleep disordered breathing and heart failure: What does the future hold? Joint International Conference (JIC) Oration award plenary lecture. Care Institute of Medical Science Conference, Ahmedabad, India, January 5-7, 2018.

Dalal B. Pulmonary embolism: Acute and chronic management. Joint International Conference (JIC) Oration award plenary lecture. Care Institute of Medical Science Conference, Ahmedabad, India, January 5-7, 2018.


Dalal B. No mortality benefit of supplement oxygen in acute MI: Bye, bye to oxygen! Joint International Conference (JIC) Oration award plenary lecture. Care Institute of Medical Science Conference, Ahmedabad, India, January 5-7, 2018.

Dalal B. Acid base disorders, case based approach. Joint International Conference (JIC) Oration award plenary lecture. Care Institute of Medical Science Conference, Ahmedabad, India, January 5-7, 2018.

Dalal B. Chest imaging for medicine residents and practitioners. Joint International Conference (JIC) Oration award plenary lecture. Care Institute of Medical Science Conference, Ahmedabad, India, January 5-7, 2018.

Dalal B. Sleep apnea is heart disease. Michigan Association of Physicians of India (MAPI), Marriott, Troy, MI, March 2018.


Invited Research Presentations: continued


Peer-Reviewed Articles:


Nursing

Peer-Reviewed Articles: continued


Abstracts with Associated Research Presentations:


White B, Nieto T, Wilson S. Partnering with patients and families to cultivate patient centeredness in a level I trauma center. 8th International Conference on Patient and Family-Centered Care, Baltimore, MD, June 11-13, 2018.
Nursing

Invited Research Presentations:


OBSTETRICAL / GYNECOLOGICAL SERVICES

Peer-Reviewed Articles:


Obstetrical / Gynecological Services

Peer-Reviewed Articles: continued


Abstracts with Associated Research Presentations:


Obstetrical / Gynecological Services

Abstracts with Associated Research Presentations: continued


Obstetrical / Gynecological Services

Abstracts with Associated Research Presentations: continued


OPHTHALMOLOGY

Peer-Reviewed Articles:


Ophthalmology

**Peer-Reviewed Articles:** continued


Sanfillipo F, Powell D, Folberg R, Tykocinski M. Dealing with deans and academic medical center leadership: Advice from leaders. Acad Pathol. 2018 Apr 8;5: 2374289518765462.


Ophthalmology

Peer-Reviewed Articles: continued


Ophthalmology

Peer-Reviewed Articles: continued


Book Chapter or Full Book Publications:


Abstracts with Associated Research Presentations:


Drenser KA. Regenerative medicine WNT-signaling and retinal vascular disease Association for Research in Vision and Ophthalmology (ARVO), Honolulu, HI, April 29-May 3, 2018.

Abstracts with Associated Research Presentations: continued


Invited Research Presentations:


**Capone Jr A**. Telemedicine for ROP: Where do we stand? Aspen Retinal Detachment Society Meeting Management of Retinal Detachment in ROP Following Anti-VEGF, Snowmass, CO, March 3-7, 2018,

**Capone Jr A**. Diagnosis and management of the ocular features of Norrie’s Disease. Norrie’s Disease Meeting, Boston, MA, August 9-12, 2018.


Invited Research Presentations: continued


Drenser KA. Chairperson/Speaker: Pediatric retinal surgery. The 18th Congress of the European Society of Retina Specialists (EURETINA), Vienna, Austria, September 20-23, 2018.


Dunn SP. Factors associated with graft rejection in the corneal preservation time study. Cornea Society/Eye Bank Association of America (EBAA) Meeting, Chicago, IL, October 25-26, 2018.


Folberg R. The vasculogenic mimicry story. Department of Ophthalmology 100th Anniversary Congress, Hadassah-Hebrew University School of Medicine, Jerusalem, Israel, June 21, 2018.


Invited Research Presentations: continued


Hassan TS. Intravitreal steroid use in the management of cystoid macular edema unrelated to diabetic macular edema or retinal vein occlusion. 37th Annual Squaw Valley Retinal Symposium, Lake Tahoe, CA, February 1-4, 2018.


Hassan TS. Emerging techniques in the management of large and/or recurrent macular holes. 33rd Asia-Pacific Academy of Ophthalmology Congress and 29th Hong Kong Ophthalmological Symposium, Hong Kong, China, February 8-11, 2018.


Hassan TS. World retina surgical panel. Surgical diabetic retinopathy panel. Challenging surgical cases panel. 43rd Congress of the Brazilian Retina and Vitreous Society, Foz Do Iguacu, Brazil, April 11-14, 2018.

Hassan TS. Management of recurrent macular holes. 43rd Congress of the Brazilian Retina and Vitreous Society, Foz Do Iguacu, Brazil, April 11-14, 2018.

Hassan TS. Is it necessary to peel ILM during retinal detachment repair? 43rd Congress of the Brazilian Retina and Vitreous Society, Foz Do Iguacu, Brazil, April 11-14, 2018.

Hassan TS. Is digitally assisted vitrectomy a toy or something that can help vitreoretinal surgery function better? BRUIN Surgical and Medical Meeting, Boston, MA, April 25, 2018.


Hassan TS. The ethics of retina: Also known as darn I cannot believe my colleague did (said) that. 36th Annual American Society of Retina Specialists (ASRS) Meeting, Vancouver, British Columbia, Canada, July 20-25, 2018.
Ophthalmology

**Invited Research Presentations: continued**


**Hassan TS.** Outcomes of anti-VEGF therapy for choroidal neovascularization in fellow eyes of previously treated neovascular age-related macular degeneration patients. 18th Euretina Congress, Vienna, Austria, September 20-23, 2018.


**Mahmoud T.** Course and panel director ARC vitreoretinal surgical course. Moderator of macular holes and myopic maculopathy sessions. European Vitreoretinal Society Meeting, Prague, Czech Republic, August 30-September 2, 2018.


**Mahmoud T.** Retracting ILM door for myopic macular holes. Moderator: Surgical retina panel: Autologous retinal transplant updates. 43rd Congress of the Brazilian Retina and Vitreous Society, Iguassu Falls, Brazil, April 11-14, 2018.


**Randhawa S.** Peripapillary choroidal lesion. Great Lakes Retina Study Club, Livonia, MI, January 29, 2018


Ophthalmology

Invited Research Presentations: continued


Trese M. How we got where we are today: The essentials and back story. 28th Annual Washington Retina Symposium, Washington DC, October 6, 2018


Ophthalmology

Invited Research Presentations: continued

Williams GA. OMIC discussion: Malpractice related to EMRs. 20th Annual American Society of Retinal Specialists (ASRS) Business of Retina Meeting, Dallas, TX, March 10-11, 2018.

Williams GA. Medicare and ophthalmology in 2018 and beyond initial retinal studies in iris, the tip of the iceberg, Visiting Professor, Ophthalmology Clinical Conference, University of Iowa Clinical Conference, Iowa City, IA, February 2, 2018.


**ORTHOPAEDIC SURGERY**

**Peer-Reviewed Articles:**


Orthopaedic Surgery

Peer-Reviewed Articles: continued


**Orthopaedic Surgery**

**Peer-Reviewed Articles:** continued


Orthopaedic Surgery

Peer-Reviewed Articles: continued


Book Chapter or Full Book Publications:


Abstracts with Associated Research Presentations:


Orthopaedic Surgery

Abstracts with Associated Research Presentations: continued


Orthopaedic Surgery

Abstracts with Associated Research Presentations: continued


Orthopaedic Surgery

Abstracts with Associated Research Presentations: continued


Orthopaedic Surgery

Abstracts with Associated Research Presentations: continued


Invited Research Presentations:


Orthopaedic Surgery

Invited Research Presentations: continued

Baker KC. Update on the basic science of degenerative disc disease. Instructional Course Lecture, Lumbar Spine Research Society, Chicago, IL, April 4-6, 2018.

Fischgrund JS. Spine deformity. Sun Yat-sen Memorial Hospital, Guandong, China, November 2018.

Fischgrund JS. Complex cervical surgery. Guangdong Provincial Hospital of Traditional Chinese Medicine, China Changzheng Hospital, Shanghai Hospital, Shanghai, China, November 2018.

Fischgrund JS. Cervical revision surgery. The 1st Affiliated Hospital of Guangzhou University of Traditional Chinese Medicine, Guandong, China, November 2018.


Pathology and Laboratory Medicine

Abstracts with Associated Research Presentations:

Cousineau C, Kanaan HD, Li W, Zhang PL. Acute tubular injury (ATI) secondary to thrombotic microangiopathy can be morphologically different from primary ATI due to ischemia. The United States and Canadian Academy of Pathology (USCAP) Annual Meeting, Vancouver, Canada, March 17-23, 2018.


Invited Research Presentations:


Pathology and Laboratory Medicine

Invited Research Presentations: continued

Ducatman BS. Moderator: How to deal with critical issues from those who have been through them. Association of Pathology Chairs (APC) 51st Annual Meeting, Coronado California, July 15-19, 2018.

Ducatman BS. Human papillomavirus (HPV) testing and primary screening. 27th Annual Symposium on Molecular Pathology: Clinical Applications of Genomic Medicine, Troy, MI, September 12-13, 2018.


Ducatman BS. Academic pathology: Launching the young pathologist: A forum on the transition from pathology trainee to effective pathology practitioner. CAP and Association of Pathology Chairs (APC) course, College of American Pathologists (CAP) Annual Meeting, Chicago, IL, October 20-24, 2018.


Huang J, Rayborn B, Bernacki K, Young M. Introducing laboratory medicine to medical students before they enter clinical clerkship. Oakland University William Beaumont School of Medicine’s Experience, Association of Pathology Chairs Annual Meeting, San Diego, CA, July 14-17, 2018.


Robinson-Dunn B. CRE, CRO, CPE, CSLI, FDA!!!! What’s a microbiologist to do? Michigan Branch, South Central Association for Clinical Microbiology, Lansing, MI, September 26, 2018.

Robinson-Dunn B. Identification and antimicrobial susceptibility testing of the non-tuberculous mycobacteria. South Eastern Association for Clinical Microbiology Annual Meeting, Charlotte, NC, November 8-10, 2018.

Simkowski KW. Biotin interference: Why do I let this stuff get in my hair and under my skin?! Michigan Section of American Association for Clinical Chemistry (MI AACC), Novi, MI, April, 2018.

Peer-Reviewed Articles:


Pediatric Services

Peer-Review Articles: continued


Book Chapter or Full Book Publications:


Pediatric Services

Abstracts with Associated Research Presentations:


Dupont A, Bilolikar A, McCormick ME, Gonzalez I. Early findings of myocardial fibrosis on cardiac MRI in a 9-year-old female with limb girdle muscular dystrophy type 2C. Midwest Society for Pediatric Research, Beaumont Children’s Oakland University School of Medicine, Royal Oak, MI, October 4-5, 2018.

**Pediatric Services**

**Abstracts with Associated Research Presentations:** continued


**Kennady G**, **McCormick ME**, Krishnan A. San Luis Valley Syndrome in a non-hispanic patient. A case report with neuroimaging findings. Midwest Society for Pediatric Research, Beaumont Children’s Oakland University School of Medicine, Royal Oak, MI, October 4-5, 2018.


**McCormick ME**, Kaleka G, Krishnan A. Beta-propellar protein-associated neurodegeneration (BPAN). Midwest Society for Pediatric Research, Beaumont Children’s Oakland University School of Medicine, Royal Oak, MI, October 4-5, 2018.

Pediatric Services

Abstracts with Associated Research Presentations: continued


Prabhu A, Dupont A. An infant with cardiac valular problems and respiratory distress: The heart may not be the culprit. Midwest Society for Pediatric Research, Beaumont Children’s Oakland University School of Medicine, Royal Oak, MI, October 4-5, 2018.


Prabhu A, Khandhar P, McCormick ME. Not just a delta wave: An uncommon diagnosis in a patient with WPW and neurologic events. Midwest Society for Pediatric Research, Beaumont Children’s Oakland University School of Medicine, Royal Oak, MI, October 4-5, 2018.


Son E, Kennady G, McCormick ME. Prenatal diagnosis of spinal muscle atrophy type 1: Successful initiation of intrathecal nusinersen induction on day 3 of life. Midwest Society for Pediatric Research, Beaumont Children’s Oakland University School of Medicine, Royal Oak, MI, October 4-5, 2018.

Invited Research Presentations:


PHARMACEUTICAL SERVICES

Peer-Reviewed Articles:


Invited Research Presentations:


**PHYSICAL MEDICINE AND REHABILITATION**

**Peer-Reviewed Articles:**


**Abstracts with Associated Research Presentations:**


Ysunza PA. Evidence based medicine in audiology, otoneurology and speech and language pathology. Asociacion Mexicana de Comunicacion, Audiologia, Otoneurologica y Foniatria (AMCAOF) International Symposium, Cancun, Quintana Roo, Mexico, March 7-11, 2018.

Ysunza PA. Controversies in the diagnosis and treatment of VPI. Methods, challenges and outcomes in the surgical treatment of VPI. Asociacion Mexicana de Comunicacion, Audiologia, Otoneurologica y Foniatria (AMCAOF) International Symposium, Cancun, Quintana Roo, Mexico, March 7-11, 2018.

Ysunza PA. Surgery for VPI in the era of sleep disordered breathing. Asociacion Mexicana de Comunicacion, Audiologia, Otoneurologica y Foniatria (AMCAOF) International Symposium, Cancun, Quintana Roo, Mexico, March 7-11, 2018.

Ysunza PA. Flexible endoscopic evaluation of swallowing (FEES) and modified barium swallow study (MBS) in children and adults. Asociacion Mexicana de Comunicacion, Audiologia, Otoneurologica y Foniatria (AMCAOF) International Symposium, Cancun, Quintana Roo, Mexico, March 7-11, 2018.

Physical Medicine and Rehabilitation

Abstracts with Associated Research Presentations: continued

Ysunza PA. Quasi systematic review of papers addressing diagnosis and treatment of VPI. Asociacion Mexicana de Comunicacion, Audiologia, Otoneurologica y Foniatria (AMCAOF) International Symposium, Cancun, Quintana Roo, Mexico, March 7-11, 2018.


Ysunza A. Videonasopharyngoscopy or videofluoroscopy or both? American Cleft Palate Association (ACPA) 75th Annual Scientific Meeting, Pittsburgh, PA, April 10-14, 2018.

Ysunza A. Videonasopharyngoscopy and videofluoroscopy for the diagnosis and treatment planning of VPI: State of the art and innovations. Asociacion Mexicana de Labio y Paladar Hendido (AMLPH) International Course on Innovations in the Diagnosis and Treatment of Velopharyngeal Insufficiency (VPI), Mexico City, Mexico, May 21-25, 2018.

Ysunza A. The planning of surgical procedures for correcting VPI according to findings of imaging: Tailor made pharyngeal flaps. Asociacion Mexicana de Labio y Paladar Hendido (AMLPH) International Course on Innovations in the Diagnosis and Treatment of Velopharyngeal Insufficiency (VPI), Mexico City, Mexico, May 21-25, 2018.

Ysunza A. Nasometry: Methods and interpretation. Asociacion Mexicana de Labio y Paladar Hendido (AMLPH) International Course on Innovations in the Diagnosis and Treatment of Velopharyngeal Insufficiency (VPI), Mexico City, Mexico, May 21-25, 2018.

Ysunza A. Modified barium swallow study (MBSS): Methods and interpretation. Asociacion Mexicana de Labio y Paladar Hendido (AMLPH) International Course on Innovations in the Diagnosis and Treatment of Velopharyngeal Insufficiency (VPI), Mexico City, Mexico, May 21-25, 2018.


Invited Research Presentations:


Physical Medicine and Rehabilitation

Invited Research Presentations: continued

Peer-Reviewed Articles:


Radiation Oncology

Peer-Reviewed Articles: continued


Radiation Oncology

Peer-Reviewed Articles: continued


Radiation Oncology

**Peer-Reviewed Articles: continued**


Radiation Oncology

Peer-Reviewed Articles: continued


Radiation Oncology

Peer-Reviewed Articles: continued


Book Chapter or Full Book Publications:


Abstracts with Associated Research Presentations:


Radiation Oncology

Abstracts with Associated Research Presentations: continued


Radiation Oncology

Abstracts with Associated Research Presentations: continued


Kant S, Prabhu AH, Kesarwani P, Kumar P, Graham SF, Chinnaiyan P. Integrative metabolomics and genomic analysis identifies fatty acid oxidation as a metabolic node in glioblastoma. Annual Meeting of the American Association for Cancer Research (AACR), Chicago, IL, April 14-18, 2018.


Radiation Oncology

Abstracts with Associated Research Presentations: continued


Sala IM, Maurer BA, Myziuk NK, Stevens CW, Guerrero TM. High frequency percussive ventilation for chest wall motion immobilization. Annual Meeting of the American Society for Radiation Oncology (ASTRO), San Antonio, TX, October 21-24, 2018.

Radiation Oncology

Abstracts with Associated Research Presentations: continued


*Sura K, Nandalur SR. HDR prostate brachytherapy. ARRO Case presented on American Society for Radiation Oncology (ASTRO) website, May 2018.


Radiation Oncology

Abstracts with Associated Research Presentations: continued


*Zhou J, Li X, Kabolizadeh P, Liang J, Yan D, Stevens CW, Ding X. Stopping power ratio (SPR) uncertainty in pencil beam scanning (PBS) proton CT (pCT) reconstruction: Dependency on energy straggling and detector energy resolution. Annual Meeting of Radiological Society of North America (RSNA), Chicago, IL, November 25-30, 2018

Invited Research Presentations:

Castillo E. Algorithms for quantifying biomechanical properties from dynamic imaging. IEEE Corona Chapter Meeting University of Texas at Tyler, Houston Engineering Center, Houston, TX, December 4, 2018.

Castillo E. CT-derived functional imaging and its applications. University of Houston, Mathematics Department, Image Analysis Seminar, Houston, TX, February 13, 2018.

Castillo E. CT-derived functional imaging for radiation dose response modeling. Center for Computational Oncology Seminar Series, University of Texas at Austin, Austin, TX, January 31, 2018.


Ding X. Proton beam therapy development in the era of pencil beam scanning and beyond. Union Hospital, Wuhan, China, March 30, 2018.

Ding X. Clinical commission and operation of a proton center with pencil beam scanning. Ruijin Hospital Proton Therapy Center, Shanghai, China, April 9, 2018.

Ding X. Proton beam therapy development in the era of pencil beam scanning and beyond. Shenzhen Cancer Center, Shenzhen, China, April 11, 2018.

Radiation Oncology

**Invited Research Presentations:**

**Ding X.** Acceptance and commission of a proton system. IBA Proteus User Meeting, Stockholm, Sweden, March 10-11, 2018.


**Ding X.** The status of the proton beam therapy. 2018 Nuclear Medicine Technologist Conference, Royal Oak, MI, January 27, 2018.


**Snyder M.** Framing new therapeutic windows. Integrated Course in Biology and Physics in Radiation Oncology (IBPRO) NIH R25 Sponsored, Wayne State University, Detroit, MI, April 27-May 2, 2018.

**Snyder M.** Predicting the radiological effectiveness of novel radiotherapies. Medical Physics Conference, Beaumont Health Systems, October 17, 2018.


**Yan D.** Advances of proton therapy technologies. Chinese Society of Medical Physics, Beijing, China, August 23-26, 2018.


**Yan D.** Quality control assurance in clinical application of IGRT. 13th Pan-Pearl-River Area Congress of Radiation Oncology (PPRA-RTOG) Conference, Wuhan, China, April 12-15, 2018.
Research Administration

Peer-Reviewed Articles:


Klaver AC, Coffey MP, Aasly JO, Loeffler DA. CSF lamp2 concentrations are decreased in female Parkinson’s disease patients with LRRK2 mutations. Brain Res. 2018;1683:12-16.


Abstracts with Associated Research Presentations:


SUBSPECIALTY DIVISIONS OF SURGICAL SERVICES

BREAST CARE CENTER
GENERAL SURGERY
MULTI-ORGAN TRANSPLANT SURGERY
NEUROSURGERY
OTOLARGYNGOLOGY
PEDIATRIC SURGERY
PLASTIC SURGERY
THORACIC SURGERY
VASCULAR SURGERY
Abstracts with Associated Research Presentations:


**GENERAL SURGERY**

**Book Chapter or Full Book Publications:**


**Abstracts with Associated Research Presentations:**


Al-Hadidi A. How early intraoperative PTH levels can aid in surgical decision making. 48th Annual Residents’ and Fellows’ Research Forum, Royal Oak, MI, May 22, 2018.

Baker D. Transition from an open based surgical ICU model to a mixed surgical ICU model at a level I trauma center. 65th Annual Michigan Chapter American College of Surgeons, Traverse City, MI, May 16-18, 2018.


General Surgery

Abstracts with Associated Research Presentations: continued


Luehmann N. Influence of final intraoperative parathyroid hormone levels on long-term recurrence after parathyroidectomy. 39th Annual Meeting of the American Association of Endocrine Surgeons, Durham, NC, May 6-8, 2018.


Luehmann N. Early intraoperative PTH values can help guiding surgical decision making. 13th Annual Academic Surgical Congress, Jacksonville, FL, January 30-February 1, 2018.


Invited Research Presentations:


Non Peer-Reviewed Research Publications:

General Surgery

Non Peer-Reviewed Research Publications: continued


MULTI-ORGAN TRANSPLANTATION

Peer-Reviewed Articles:


Abstracts with Associated Research Presentations:


Peer-Reviewed Articles:


Abstracts with Associated Research Presentations:


Perez-Cruet M. Novel device to achieve intervertebral disc regeneration using human stem cell generated nucleus pulposus cells. 34th Annual Meeting of the Section on Disorders of the Spine and Peripheral Nerves (AANS/CNS), Orlando, FL, March 14-17, 2018.

Perez-Cruet M. Potential of human NP-like cells derived from umbilical cord to treat degenerative disc disease: Novel mechanism for disc regeneration. 34th Annual Meeting of the Section on Disorders of the Spine and Peripheral Nerves (AANS/CNS), Orlando, FL, March 14-17, 2018.


Perez-Cruet M. Assessment of clinical outcomes and efficacy of minimally invasive transforaminal lumbar interbody fusion (TLIF) in obese patients with debilitating back pain from spondylolisthesis. 34th Annual Meeting of the Section on Disorders of the Spine and Peripheral Nerves (AANS/CNS), Orlando, FL, March 14-17, 2018.

Perez-Cruet M. Minimally invasive transforaminal lumbar interbody fusion using a novel autograft bone collector is a cost-saving alternative method for spinal fusion surgery. 34th Annual Meeting of the Section on Disorders of the Spine and Peripheral Nerves (AANS/CNS), Orlando, FL, March 14-17, 2018.
Neurosurgery

**Invited Research Presentations:**

**Fahim DK.** Advances and updates in neurosurgical oncology. OUWB Radiation Oncology Department Resident Lecture Series, Royal Oak, MI, April 20, 2018.

**Fahim DK.** Advances in minimally invasive management of spinal metastases. Michigan Association of Neurological Surgeons, Crystal Mountain, MI, June 8-10, 2018.

**Fahim DK.** Advances in cervical disc arthroplasty. Minimally Invasive Neurosurgical Society, Mackinac Island, MI, August 9-11, 2018.


**Perez-Cruet M.** Minimally invasive spine techniques and operative nuances. Minimally Invasive Neurosurgical Society, Mackinac Island, MI, August 9-11, 2018.

OTOLARYNGOLOGY

Peer-Reviewed Articles:


Otolaryngology

Peer-Reviewed Articles: continued


**Peer-Reviewed Articles:**


**Book Chapter or Full Book Publications:**


**Abstracts with Associated Research Presentations:**


PLASTIC SURGERY

**Peer-Reviewed Articles:**


**Abstracts with Associated Research Presentations:**


**Invited Research Presentations:**


THORACIC SURGERY

Peer-Reviewed Articles:


Invited Research Presentations:

Peer-Reviewed Articles:


Abstracts with Associated Research Presentations:


Invited Research Presentations:


Vascular Surgery

**Invited Research Presentations:** continued

**Brown OW.** Vascular surgery has evolved into a specialty separate and distinct from general surgery: It should now have its own separate governing bodies: Many benefits will accrue. Vascular and Endovascular Issues (VEITH) Symposium, New York, NY, November 13-17, 2018.


**Brown OW:** How to avoid medical malpractice. The Mote Vascular Symposium, Sarasota, FL, November 30-December 1, 2018.


Peer-Reviewed Articles:


**Urology**

**Peer-Reviewed Articles: continued**


Urology

Peer-Reviewed Articles: continued


Urology

Peer-Reviewed Articles: continued


**Urology**

**Peer-Reviewed Articles:** continued


**Book Chapters or Full Book Publications:**


**Abstracts with Associated Research Presentations:**


Urology

Abstracts with Associated Research Presentations: continued


Abstracts with Associated Research Presentations: continued


Urology

Abstracts with Associated Research Presentations: continued


Urology

Abstracts with Associated Research Presentations: continued


Abstracts with Associated Research Presentations: continued


Invited Research Presentations:


**Urology**

**Invited Research Presentations:** continued


**Non Peer-Reviewed Publications:**


EMERGENCY MEDICINE

Peer-Reviewed Articles:


Emergency Medicine

Peer-Reviewed Articles: continued


Invited Research Presentations:

Invited Research Presentations:


OTOLARYNGOLOGY

Peer-Reviewed Articles:

PLASTIC SURGERY

Peer-Reviewed Articles:


ANESTHESIOLOGY

Peer-Reviewed Articles:

CARDIOVASCULAR DISEASE

Peer-Reviewed Articles:


Rogers FJ. The rule of the artery is supreme. Or, is it? J Am Osteopath Assoc. 2018 Jul 1;118(7):429-430.

IDIAGNOSTIC RADIOLOGY

Peer-Reviewed Articles:

PHARMACEUTICAL SERVICES

Peer-Reviewed Articles:


SUBSPECIALTY DIVISIONS OF INTERNAL MEDICINE

DERMATOLOGY

ENDOCRINOLOGY

GENERAL INTERNAL MEDICINE

INFECTIOUS DISEASES

PALLIATIVE CARE
DERMATOLOGY

**Peer-Reviewed Articles:**


Peer-Reviewed Articles:

**Peer-Reviewed Articles:**


INFECTIOUS DISEASES

Peer-Reviewed Articles:


PALLIATIVE CARE

Peer-Reviewed Articles:

OBSTETRICAL / GYNECOLOGICAL SERVICES

Peer-Reviewed Articles:


Peer-Reviewed Articles:

**RADIATION ONCOLOGY**

**Peer-Reviewed Articles:**


Radiation Oncology

Peer-Reviewed Articles: continued


Abstracts with Associated Research Presentations: