



Henry Ford Health Department of Neurosurgery

Detroit, Michigan
Residency Overview



Our History

- Founded in 1915 by Henry Ford
- First Closed Staff System in Country
- **1926 - Department of Neurosurgery Established by Dr. Albert Crawford**
- **Former Chairmen:**



Dr. Albert S. Crawford Dr. Robert Knighton Dr. James I. Ausman Dr. Mark L. Rosenblum



Henry Ford Health Today

- Comprehensive and Integrated Health Care System
- 6 Hospitals, Over 2,400 beds
- 16 Emergency Departments
- Over 40 Outpatient Centers
- New Ambulatory Surgical Centers
- 120,000+ Yearly Admissions
- Nearly 90,000 Surgical Procedures Performed

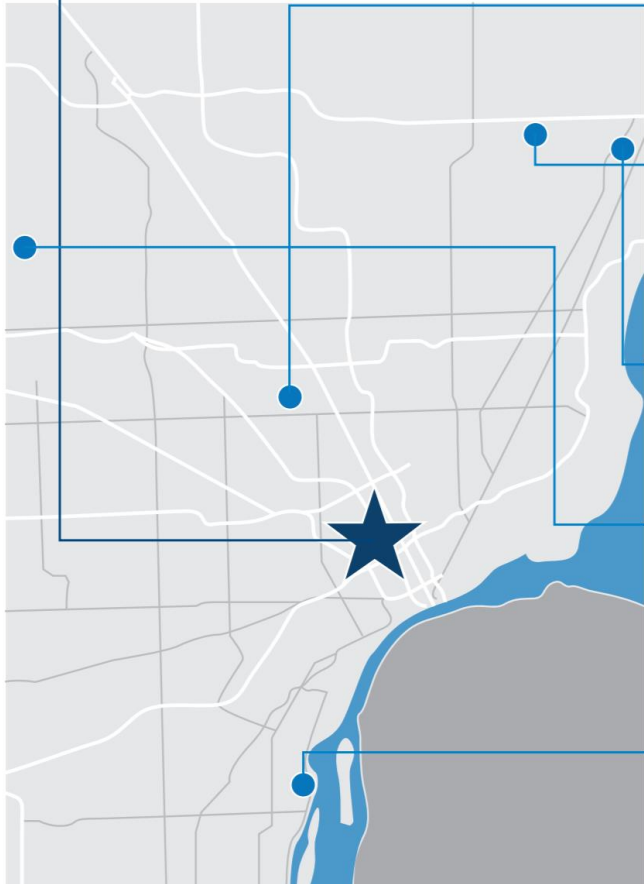
**HENRY
FORD
HEALTH**



Hospitals

★ HENRY FORD HOSPITAL

This 877-bed tertiary care hospital, education and research complex in Detroit's New Center Area is the flagship hospital for the health system. Henry Ford Hospital (HFH) is recognized for clinical excellence and innovation in the fields of cardiology and cardiovascular surgery, neurology and neurosurgery, orthopaedics and sports medicine, organ transplants, and treatment for cancer care. HFH is a Level 1 trauma center.



● HENRY FORD KINGSWOOD HOSPITAL

This 100-bed hospital offers inpatient care for child, adolescent and adult patients with acute episodes of mental illness.

● HENRY FORD MACOMB HOSPITAL – CLINTON TWP.

This 361-bed hospital in Clinton Township has nationally recognized quality, 24-hour emergency care, chest pain, stroke and trauma centers, and comprehensive cancer, women's, orthopaedic and cardiovascular care.

● HENRY FORD MACOMB HOSPITAL – MT. CLEMENS

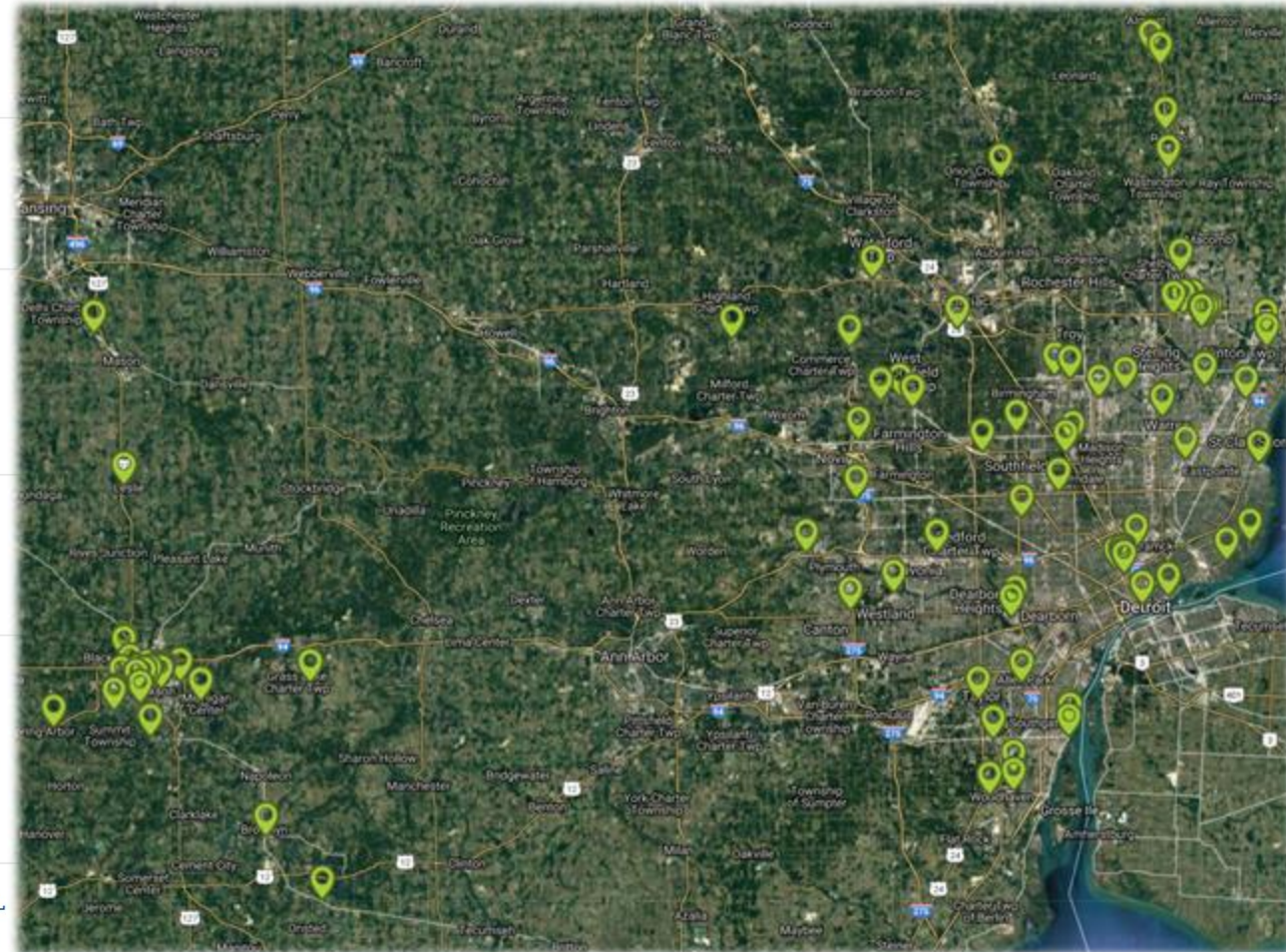
This 90-bed hospital offers inpatient and emergency psychiatric services.

● HENRY FORD WEST BLOOMFIELD HOSPITAL

This all-private-room, 191-bed hospital offers comprehensive medical care, including 24-hour emergency care, neurosciences, women's and children's health, orthopaedics, diagnostic testing and a wellness center with complementary therapies.

● HENRY FORD WYANDOTTE HOSPITAL

This 401-bed acute care hospital serves the Downriver and western Wayne County communities. It offers a full range of clinical services, including general medicine, surgery, birthing center, trauma care, orthopedics, rehabilitation and 24-hour emergency care.





Henry Ford Hospital

- Flagship hospital
- 877-Bed Tertiary Care + Educational + Research Complex
- Level 1 Trauma Center
- Leading Transfer Hospital
- 33 Operating Rooms
- Over 100,000 ED visits
- Upcoming: new hospital building with 300



Henry Ford Hospital Expansion

Announced in Feb. 2023, Henry Ford Health is planning a major expansion to its Henry Ford Hospital campus in Detroit

- New hospital tower with 300+ beds, all-new operating rooms, and surgical and neuro-critical care units.
- New joint medical research center with Henry Ford Health and Michigan State University
- Tom Gores, Owner of Detroit Pistons, to build 500+ apartments/community space adjacent to hospital complex
- Total project cost \$2.5 Billion



Henry Ford West Bloomfield



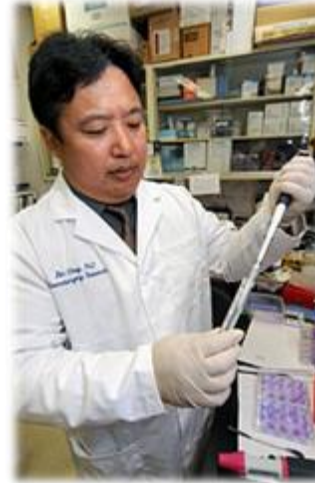
- Opened in 2009
- 200 All Private Rooms
- "Privademic" style practice
- PGY-6's function as chief
- ~125 Neurosurgical Cases Performed Per Month
 - Craniotomies, open vascular, open and MIS spine, robotic spine
- Experienced APP Coverage 24/7
- Home Call





Education and Research

- ~700 Residents & 900 Medical Students
- 50 Accredited Programs
- 1st in Michigan and 17th Nationally for NIH Funding of Independent Hospitals
- Top 20% of All Institutions Granted NIH Funding
- 40% of All Physicians in Michigan Formally Trained at Henry Ford
- Henry Ford Innovation Institute



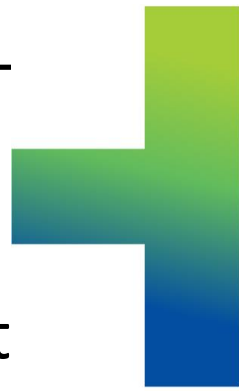
MICHIGAN STATE
UNIVERSITY



Michigan State University



- Landmark Hospital + Research + Medical Education Partnership
- Construction of New Medical School and Research Building at Detroit Campus
- New NCI Comprehensive Cancer Center Designation



**HENRY FORD
HEALTH +
MICHIGAN STATE
UNIVERSITY**
Health Sciences



Michigan State University



- Landmark Hospital + Research + Medical Education Partnership
- \$2.5 Billion Campus in Partnership with Pistons Owner
- Construction of New Medical School and Research Building at Detroit Campus
- New NCI Comprehensive Cancer Center Designation



In The City

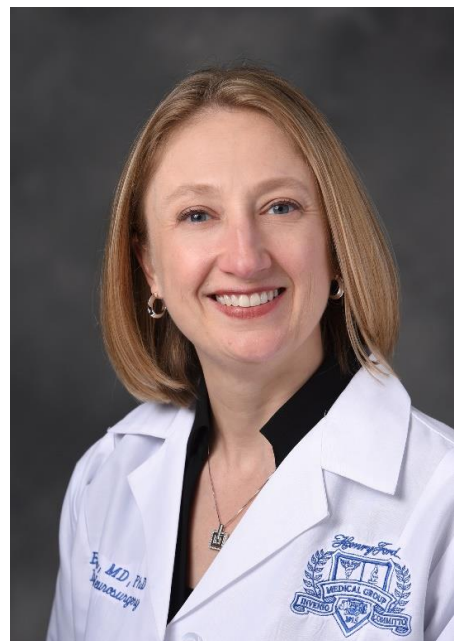
- Exclusive Medical Providers of the Detroit Lions and the Detroit Pistons



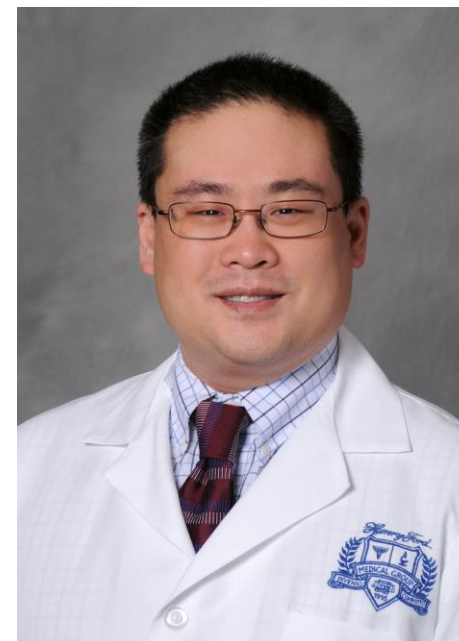
Neurosurgery – Our Program



- **Chair: Ellen L. Air, M.D., Ph.D.**
 - CNS Executive Committee
- **Program Director: Ian Y. Lee, M.D.**
 - Director, Hermelin Brain Tumor Center
- **Chair Emeritus: Dr. Steven Kalkanis, M.D.**
 - Chair of Neurosurgery, 2014-2021
 - CNS President, 2020-2021
 - Current CEO of Henry Ford Medical Group, Chief Academic Officer and Senior VP of Henry Ford Health
- Nearly All Staff Voted as Best in Region



Ellen L. Air, M.D., Ph.D.



Ian Y. Lee, M.D.



Congress of
Neurological
Surgeons



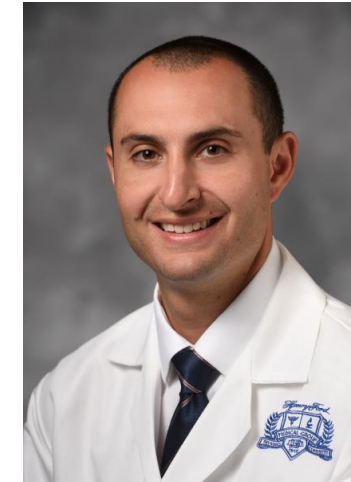
Neurosurgical Oncology



- World Class Hermelin Brain Tumor Center
- Leaders in Precision Medicine
- **Busiest and Most Robust Brain Tumor Center in Michigan and Tri-State Area**
- National Cancer Institute (NCI) leader
 - Only Michigan institution Contributing to the *Adult Brain Tumor Consortium* and *Brain Tumor Trials Collaborative*
- Previous Chair, Dr. Rosenblum, was a Founding Member and the Chair of the AANS/CNS Joint Section on Tumors



Dr. Ian Y. Lee



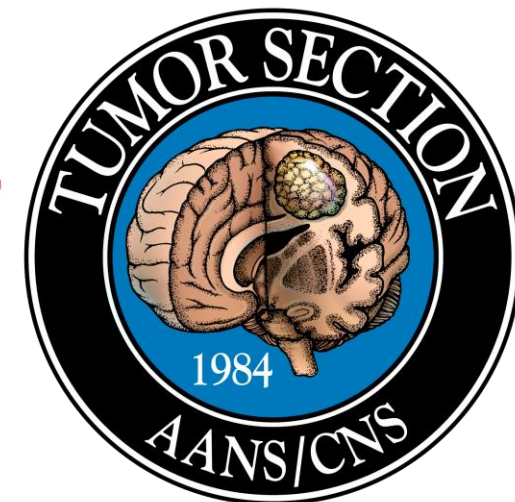
Dr. Adam M. Robin



Dr. Jack P. Rock



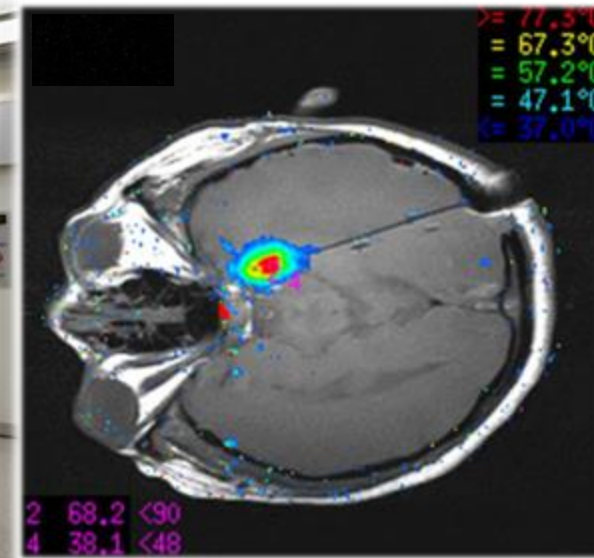
**NATIONAL
CANCER
INSTITUTE**



Neuro-Oncology



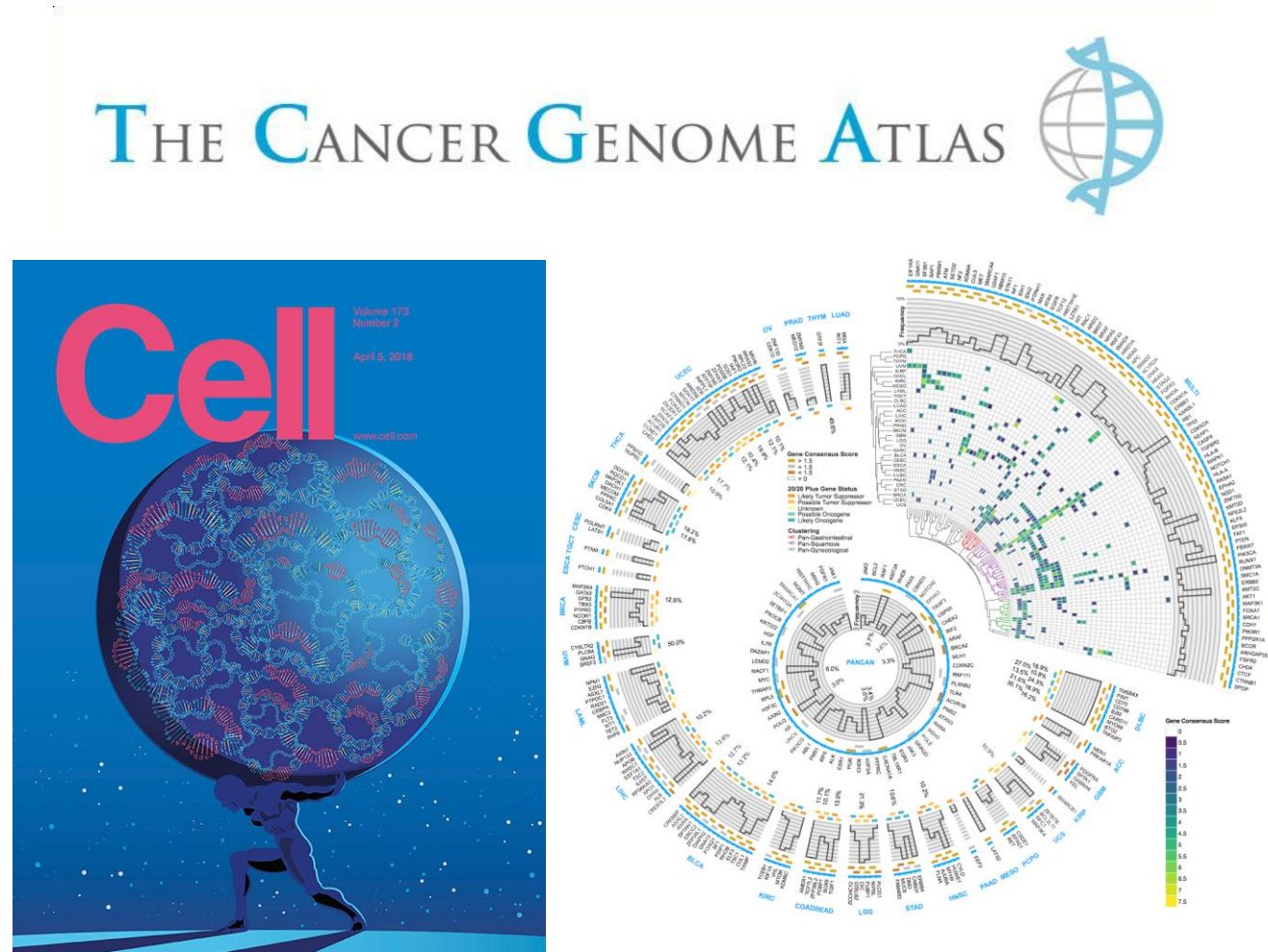
- Highly Specialized Care
 - Intraoperative MRI
 - Laser Interstitial Thermal Therapy
 - First Ever in Michigan – Cranial
 - 2nd in the Country - Spine
 - Fluorescence-Guided Surgery
 - Bright Matter / Synaptive Navi
 - Awake Craniotomies (~1qWk)
 - Many Clinical Trials
 - 3 staff neuro-oncologists
- Multi-Disciplinary Tumor Board
- Robust tumor bank



Neuro-Oncology



- Tumor Bank One of the Three Largest in the World, Containing More than 5,000 Tissue Samples
- Henry Ford Has Contributed 40% of All Glioblastoma Tissues Collected for Analysis by the NIH
- Over 25% of All Gliomas Studied by the NCI were Donated by the Hermelin Brain Tumor Center
- Major Contributor to TCGA





Neuro-Oncology

- New Brigitte Harris Cancer Pavilion opened in 2022
- Ambulatory cancer treatment, precision medicine, clinical trials and research
- \$155 Million, 187,000 square feet
- Dr. Kalkanis, former Chairman, current Director of the Henry Ford Cancer Institute
- Expands our already leading neuro-oncology service



Neuro-Oncology

- In The News:

- Dr. Kalkanis Elected President of CNS and Lead 2021 Annual Meeting in Austin titled: *Neurosurgery: Vision for the Future*
- First in the world to enroll patient in GBM Agile Trial (Adaptive Global Innovative Learning Environment)
- First in Michigan, Second in the World, to Use Laser Interstitial Thermal Therapy For Spine Tumors
- 10-Year Survivor Celebration of Henry Ford Patients with GBM Treated Surgically



Spine Surgery



- **Performs More Spine Surgeries Than Any Other Neurosurgery Department in the State of Michigan**
- Multi-Disciplinary Spine Center
- 75% of All Spine Call at Henry Ford Hospital, 100% of spine call at West Bloomfield
- Leaders in Spine Research and Pioneers of the *Michigan Spine Surgery Improvement Collaborative*



**Dr. Muwaffak M.
Abdulhak**



**Dr. Mokbel K.
Chedid**



**Dr. Victor W.
Chang**

Spine Surgery



- **Newest and Most Advanced Intraoperative Tools**
- Multiple O-Arms
- AIRO
- Excelsius Globus Spine Robot
- Medtronic Mazor



Spine MSSIC



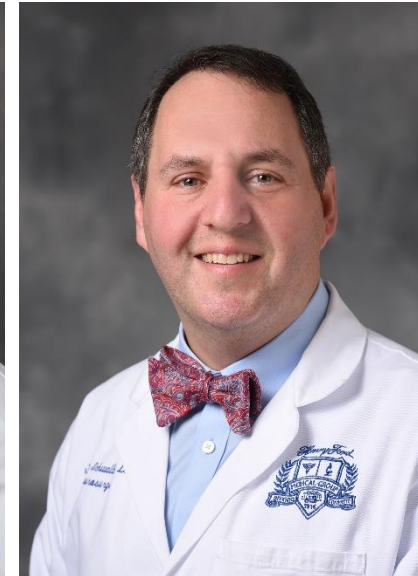
- Michigan Spine Surgery Improvement Collaborative (MSSIC)
 - State-Wide Collaborative of 26 Hospitals
 - **Henry Ford is the Coordinating Center**
 - **50 Published Articles and Counting**



Dr. Victor W. Chang



Dr. Muwaffak M. Abdulhak



Dr. Jason M. Schwalb



A Matched Cohort Analysis of Drain Usage in Elective Anterior Cervical Discectomy and Fusion A Michigan Spine Surgery Improvement Collaborative (MSSIC) Study

Lim, Seokchun MD^a; Bazydlo, Michael MS^b; Macki, Mohamed MD^a; Haider, Sameah MD^a; Schultz, Lonni PhD^{a,b}; Nerenz, David PhD^{a,c}; Fadel, Hassan MD^a; Pawloski, Jacob MD^a; Yeh, Hsueh-Han PhD^c; Park, Paul MD^d; Aleem, Ilyas MD^e; Khalil, Jad MD^f; Easton, Richard MD^f; Schwalb, Jason M. MD^a; Abdulhak, Muwaffak MD^a; Chang, Victor MD^a

NEURO SURGERY

THE REGISTER OF THE NEUROSURGICAL MEME

RESEARCH—HUMAN—CLINICAL STUDIES: SPINE

The Effect of Preoperative Symptom Duration on Patient-Reported Outcomes After Anterior Cervical Discectomy and Fusion in Nonmyelopathic Patients: Analyses From the Michigan Spine Surgery Improvement Collaborative (MSSIC)

NEURO SURGERY

THE REGISTER OF THE NEUROSURGICAL MEME

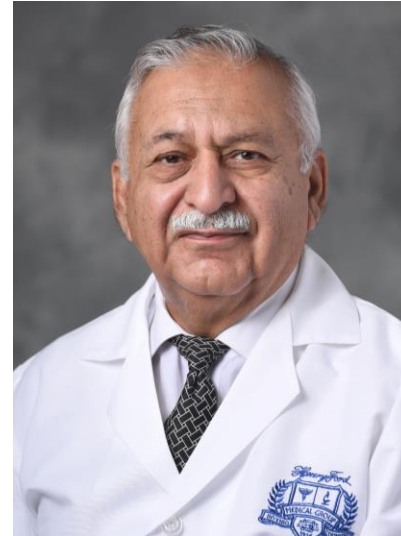
The Association of Preoperative Opioid Usage With Patient-Reported Outcomes, Adverse Events, and Return to Work After Lumbar Fusion: Analysis From the Michigan Spine Surgery Improvement Collaborative (MSSIC)

Hesham Mostafa Zakaria, MD, Tarek R Mansour, MD, Edvin Telemi, MD, Karam Asmaro, MD, Michael Bazydlo, MS, Lonni Schultz, PhD, David R Nerenz, PhD, Muwaffak Abdulhak, MD, Jad G Khalil, MD, Richard Easton, MD ... [Show more](#)

Cerebrovascular Surgery



- Robust Open & Endovascular program
- Dedicated Bi-Plane Endovascular Suites
- Wide Referral Base
- Expert Second or Third Opinions
- Neuroendovascular Fellowship
- 1st Comprehensive Stroke Center in MI
- Great mentors
 - Dr. Malik – 50 years of Experience in CV Neurosurgery, Large AVM Database



Dr. Ghaus M. Malik



Dr. Max K. Kole



Dr. Asim Mahmood



Dr. Donald M. Seyfried



Dr. Horia Marin



Dr. Alex Chebl

Cerebrovascular Surgery



- Leading Comprehensive Stroke Center treating ~3,000 patients a year
- One of only two Detroit Hospitals to be a Thrombectomy-Capable Stroke Center (Along with St. Joseph Mercy)
- **The Most Fellowship-Trained Stroke Neurologists in the Region**
- Cerebrovascular Occlusive Clinic
- Home of the Detroit Stroke Conference



**The Joint
Commission®**



**American Heart
Association®
American Stroke
Association®**

C E R T I F I C A T I O N

Meets standards for

**Comprehensive Stroke Center
&
Thrombectomy-Capable
Stroke Center**



Skull Base



- Over 1,000 Patient Visits
- Multi-disciplinary approach with close partnerships with rhinology, neuro-otology, ophthalmology, endocrinology.
- Endoscopic and Open Surgery
- Annual Skull Base/Pituitary Symposium



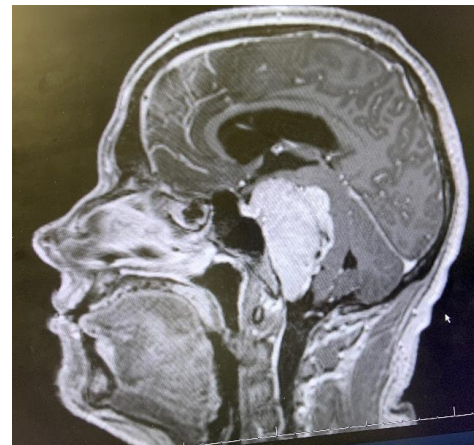
Dr. Karam P. Asmaro



Dr. Jack P. Rock



Dr. Adam M. Robin



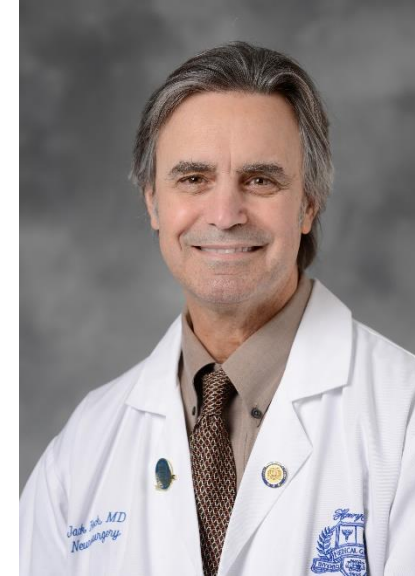
Skull Base



- Expanded endoscopic approaches performed by Dr. Asmaro
- Henry Ford trained, completed Stanford Skullbase Fellowship, joined department as faculty 2022
- Firsts in Michigan:
 - Endoscopic approaches to the cavernous sinus
 - Endoscopic approaches to anterior skullbase/sellar meningiomas
 - Endoscopic endonasal odontoidectomies



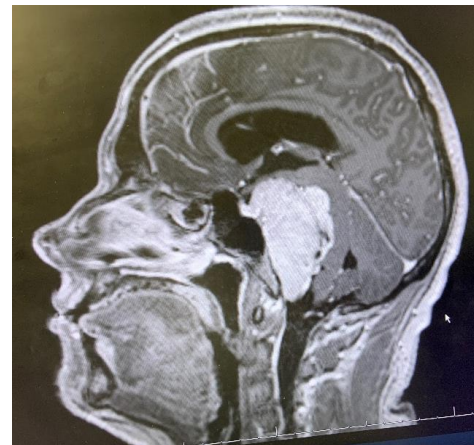
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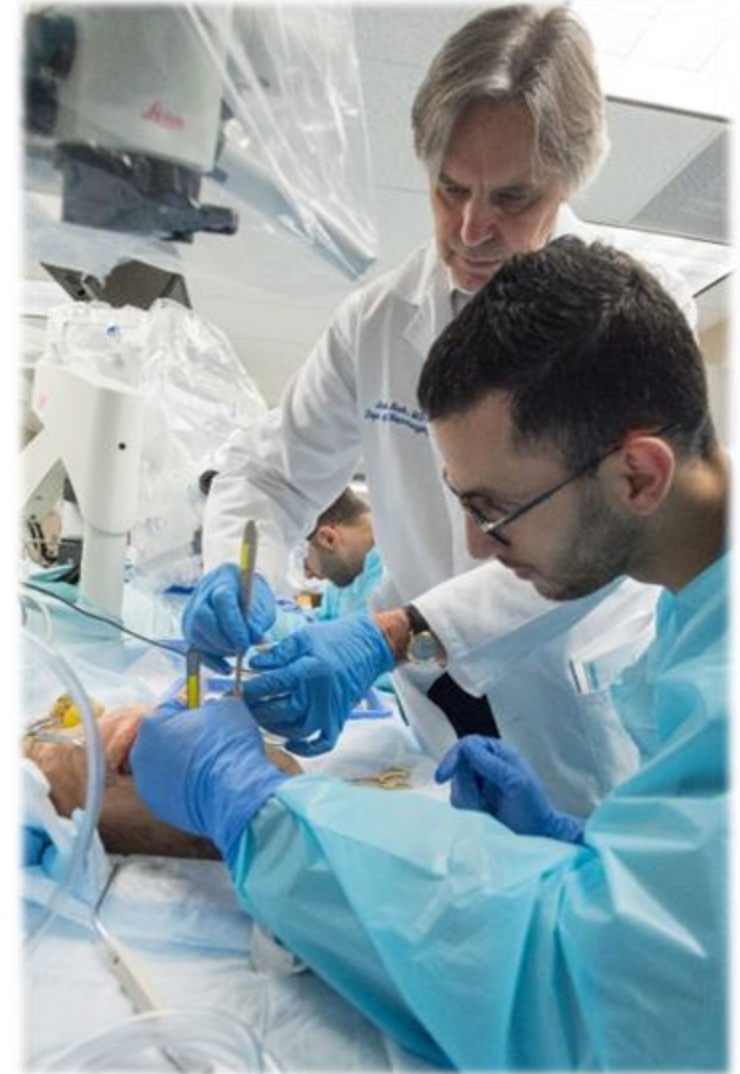
Dr. Adam M. Robin



Skull Base & Anatomy Lab



Skull Base Courses



International Neurosurgery



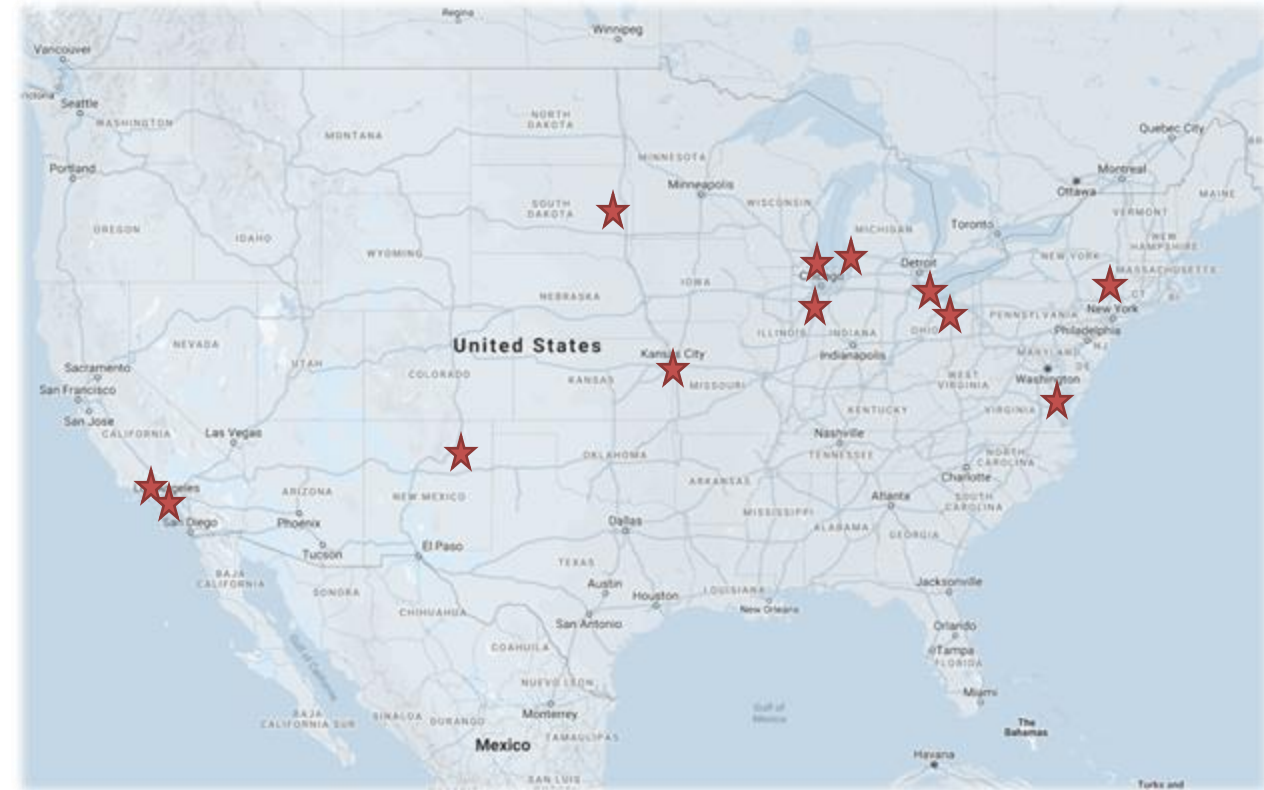
- Annual trips with Dr. Rock – A pioneer of global neurosurgery outreach and a leader in global neurosurgery education





Our Residency Program

- Two-Residents a Year
- Diverse residents from across the country
- Predominantly train at Henry Ford Main Hospital and Henry Ford West Bloomfield
- 13 of the last 14 Chief Residents have Gone on to Fellowship





Residency Schedule

- **Intern** – Vascular Surgery, Plastic Surgery, Neurology, Neuro ICU, Neurosurgery
- **PGY-2** – Neurosurgery – Henry Ford Main Hospital – Q-4 call
- **PGY-3** – Endovascular, Pediatrics (Cincinnati), Functional/Peripheral Nerve n
- **PGY-4** – Neurosurgery – Henry Ford Hospital – Q-4 call
- **PGY-5** – Research Year / Electives
- **PGY-6** – Chief Resident Henry Ford West Bloomfield – Home Call
- **PGY-7** – Chief Resident Henry Ford Main Hospital – Home Call

Residency Basics & Perks



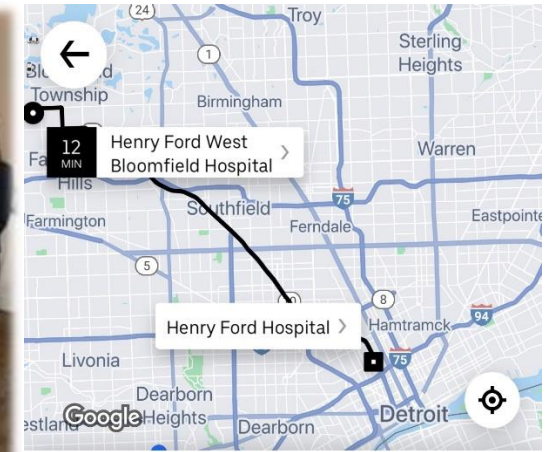
- Conference Funding
 - Unlimited if Presenting
- EPIC EMR & Care Everywhere
- Voice to Text For Notewriting
- Funding for Loupes
- GME covers Medical Licensing and Board Fees
- Four Weeks of Vacation Per Year

PGY	Annual Salary	Professional Development Fund
1	\$56,413	\$900
2	\$58,514	\$1,500
3	\$60,615	\$1,500
4	\$64,817	\$1,500
5	\$66,817	\$1,500
6	\$66,919	\$1,500
7	\$69,020	\$1,500




Residency Basics & Perks



- Henry Ford iPhone
- GME Uber Account
- \$1500 annual food credit
- Personalized Jackets and Gear
- Moonlighting Opportunities



Choose a ride, or swipe up for more

	UberX 4 11:26pm dropoff	\$26.37 3x reward pts
	Comfort New 11:28pm	\$33.47 3x reward pts
	Select Faster dropoff	\$63.97 3x reward pts

 **Henry Ford GME**
Billed to company

Confirm UberX



Residents: Where Are They Now



- Recent Grads:

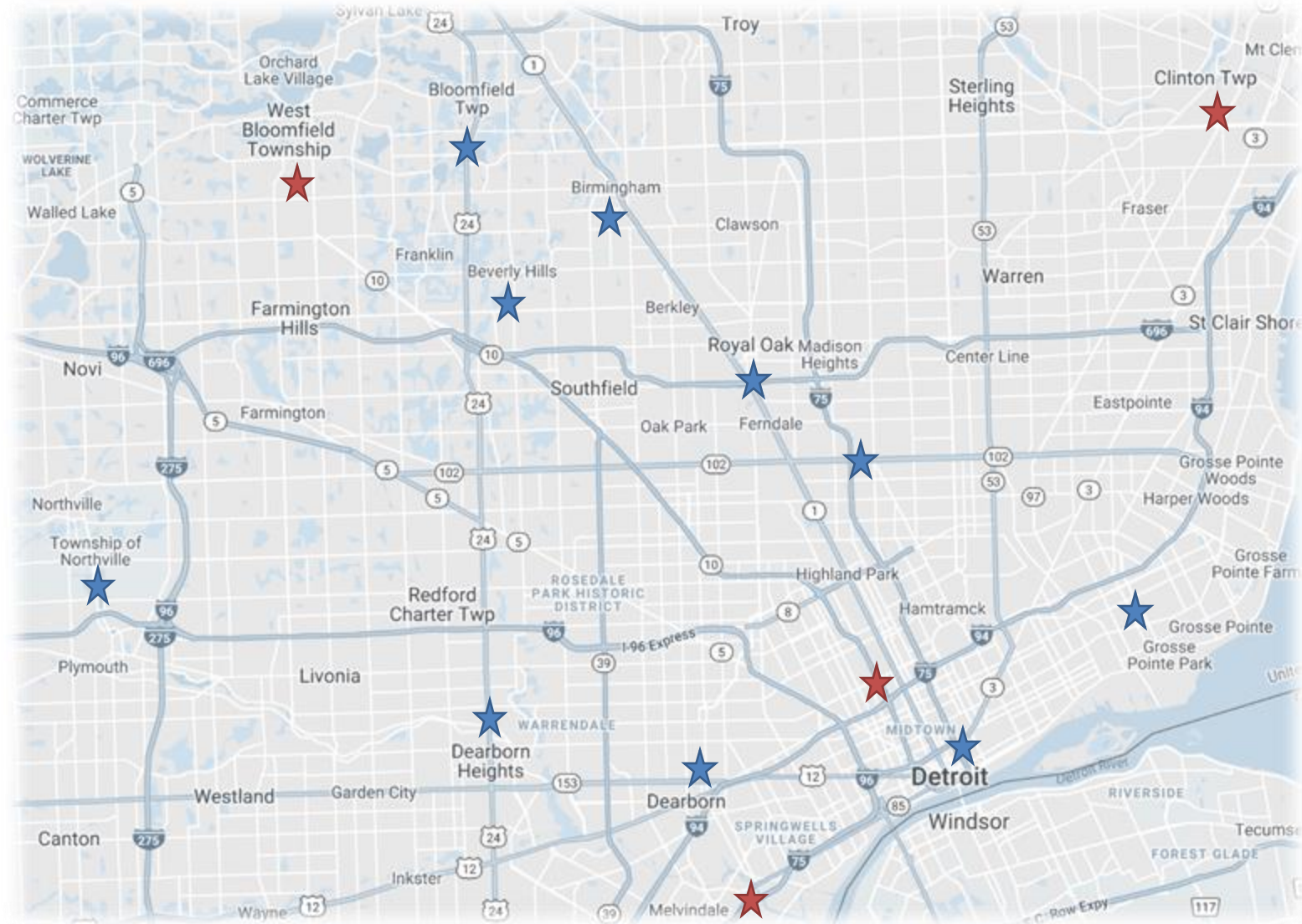
- **Sameah Haider, M.D.**
 - Neuro-Oncology Fellowship, Miami
- **Scott Lim, M.D.**
 - Sanford Health, South Dakota
- **Karam Asmaro, M.D.**
 - Skull Base Fellowship, Stanford
- **Lara Massie, M.D.**
 - Complex Spine Fellowship, Duke
- **Richard Rammo, M.D.**
 - Functional/Epilepsy, Cleveland Clinic
- **Thomas Noh, M.D.**
 - Neuro-Oncology, Brigham and Women's
- **Rizwan Tahir, M.D.**
 - Endovascular, Thomas Jefferson
 - Open Vascular, University of Illinois Chicago
- **Hesham Zakaria, M.D.**
 - Spine/Spine Oncology, Johns Hopkins
- **Mohamed Macki, M.D.**
 - Complex Spine, UCSF
- **Thomas Zervos, M.D.**
 - Pediatric Spine, Columbia
 - Pediatric, Barrow



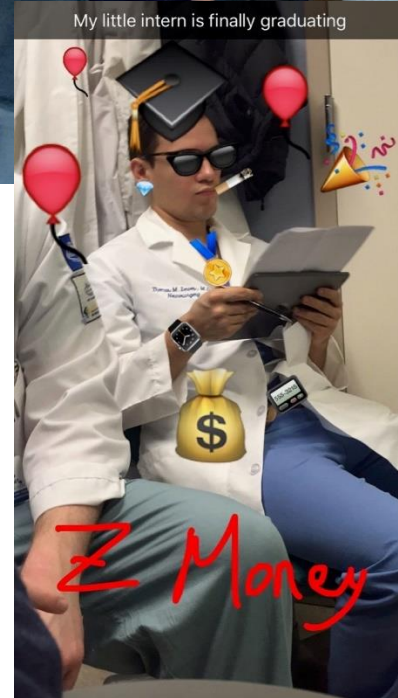
Residency: Living



- Residents and Staff Live All over Metro-Detroit
 - Downtown
 - Royal Oak
 - Birmingham
 - Grosse Point
 - Dearborn
 - Northville
 - Hazel Park



Residency Family



Join Us!





Thank You For Considering
Henry Ford Neurosurgery!

