

CPT. JACOB E. HOWARD, MD

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EDUCATION AND TRAINING

- 2025-28 Emergency Medicine Residency**
Madigan Hospital, Joint Base Lewis-McChord, US Army
ALS Instructor (2025-)
- 2021-25 Yale School of Medicine**
MD, Class of 2025
Thesis: "Portable Magnetic Resonance Imaging & Vehicular Platforms"
- 2016-20 B.S. in Biomedical Sciences, Honors**
Minors: Philosophy, Cultural & Religious Studies
Honors Thesis: "Understanding Medical Error in Surgical Stapler Use: A Philosophical and Scientific Analysis"
University of Central Florida - Orlando, Florida
- 2019,24 Yale Interdisciplinary Center for Bioethics (Student 2019, Graduate Teaching Assistant 2024)**
Sherman B. Nuland Summer Institute in Bioethics

HONORS AND AWARDS

- 2026 1st Year Resident of the Year, Madigan Army Medical Center Department of Emergency Medicine**
Rookie of the Year
- 2026 CORD Clinical Pathological Case Semifinalist (Semifinalist)**
"Burning Fire" A unique case of diethylene glycol poisoning.
- 2025 Yale University Miriam Kathleen Dasey Award**
Awarded annually to six graduating students who by strength of character, personal integrity, and academic achievement give promise of fulfilling the ideal of the compassionate physician.
- 2023 Yale Global Health Institute International Case Competition, 1st Place Winner**
- 2021 F. Edward Hébert Armed Forces Health Professions Scholarship Recipient**
UCF Founders' Day Award; Outstanding Thesis Prize Winner
- 2020 UCF Undergraduate International Presentation Travel Award**
- 2019 Burr & Forman Scholar Award**

RESEARCH

- 2024-25 Portable MRI vs Conventional MRI in the Emergency Department**
Randomized control trial comparing speed and efficacy of portable MRI against conventional MRI in the ED
PI: Dr. Kevin Sheth
- 2024 Hospital Ethics Consult Database**
Developing and populating a database characterizing every eligible hospital ethics team consult placed 2015-current.
PI: Dr. Gary Kopf
- 2022-25 Creating a Mobile Vehicle Conducive to Portable MRI Environment and Deployability**
Designing and constructing a box truck to safely transport a 1 ton low-field portable MRI safely, while also being able to comfortably support patient scanning and service within the environment.
PI: Dr. Kevin Sheth & Lab
- 2021-22 Fracture Microenvironment Characterization in the Setting of Local Breast Cancer Metastases and Rescue of Fracture Healing Through Inhibition of ERK1/2 Signaling**
Utilization of a mouse model to induce and set a femur fracture, then observe breast cancer metastases.
American Academy of Orthopaedic Surgeons 2022 Annual Meeting
Co-Author, PI Dr. Francis Lee
- 2019-20 Honors Thesis Project: Understanding Medical Error in Surgical Stapler Use: A Philosophical and Scientific Analysis**
A study on risk classification and preventable errors of surgical staplers usage over the last ten years.
Thesis Chair: Dr. Luciana Garbayo, Co-Chair: Dr. William T. Self
UCF Burnett School of Biomedical Science, Burnett Honors College
- 2019 Yale Bioethics Research Project: Can the Carpenter Blame Their Tools; Who Holds Responsibility in Robotic Surgery?**
Advisor: Dr. Daniel Tigard
Yale Interdisciplinary Center for Bioethics
- Collaborative Bioethics Research Ethics, Disability & Medical Practice: Implications of Physician Disclosure in Informed Consent
Research Collaborator: Jordan Taylor
- 2019 Pabst Steinmetz Innovation Award Project: Creative Aging**
Role: Research Assistant, Medical humanities and philosophy activity development for caregiver/care partners with dementia through art interventions.
Co-PIs: Dr. Julia Listengarten, Dr. Kerry Watson, Dr. Luciana Garbayo
UCF College of Arts & Humanities, College of Medicine, and Atlantic Center for the Arts

2016-18 Age-related Cognitive Decline and Compensatory Brain Activity in Explicit and Implicit Category Rule
 Assisted with Data Entry, Running Studies on Subjects, and Utilizing fNIR technology.
 Role: Research Assistant
 PI: Dr. Corey Bohil, Categorization and Decision Lab

PUBLICATIONS

- 2025 Howard, J.E. (2025). "Portable Magnetic Resonance Imaging Safety, Comfort, and Compatibility With Vehicular Platforms"**
 Medical Graduate Theses.
- 2021 Howard, J. E. (2021). "Weaknesses in Medical Device Regulation Worsened by Trump Administration."**
 Essay, *Harvard Law Petrie-Flom Center Bill of Health*
- 2021 Pacia, D. & Howard, J. E. (2021). "Surprising Surge of Egg Freezing During the Pandemic Raises Ethical Questions."** Essay,
The Hastings Center Bioethics Forum
- 2020 Howard, J. E. (2020). "Understanding Medical Error in Surgical Stapler Use: A Philosophical And Scientific Analysis"** *Honors Undergraduate Theses*. 797. <https://stars.library.ucf.edu/honorsthesis/797>
- 2019 Taylor, J. & Howard, J. E. (2019). "I Didn't Sleep Last Night"; Implications of Physician Disclosure of Health in Informed Consent.**
Duke Medical Ethics Journal.

PRESENTATIONS

- 2026 Presentation: "Burning Desire: Diethylene Glycol Poisoning"**
- 2026 March Presentation: "IVC Agenesis Discovered With Ultrasound"**
 GSACEP 2026
- 2025 Sept Presentation: "Hypoinsulinemic Emergencies: DKA, Euglycemic DKA, & HHS"**
 Grand Rounds, Department of Emergency Medicine - Madigan Army Medical Center
- 2025 May Poster "pMRI Safety, Comfort, and Compatibility With Vehicular Platforms"**
 Student Research Day, Yale University
- 2023 March Presentation: "Ansekann: Expecting Together"; Tackling challenges exacerbating maternal mortality in Haiti utilizing low-cost community based group prenatal care & versatile mobile deployment of medication & resources.**
 Emory University
- 2021 January Poster "Surgical Stapler Error; A Scientific and Philosophical Review"**
 APA Eastern Division Teaching Hub Poster Presentation
- 2020 April Poster & PPT Presentation: "Health Disclosure in Informed Consent: Implications for Disabled Doctors"**
 Ohio State University Multiple Perspectives Conference; Ethel Louise Armstrong Poster Competition
- 2020 February Poster: "Understanding Medical Error in Surgical Stapler Use: A Philosophical and Scientific Analysis"**
 Florida Undergraduate Research Conference at Florida Gulf Coast University
- 2019 July Poster: "Can the Carpenter Blame Their Tools: Who Holds Responsibility in Robotic Surgery?"**
 Summer Institute in Bioethics Annual Poster Session at Yale Medical Library
- 2019 March Poster: "Engaging Persons with Dementia: An Interdisciplinary Reflection on the Impact of Artistic Activities on the Self-estimation of Wellbeing" (Co-Presenters: Dr. Luciana Garbayo, Mary Utt)**
 Brain Awareness Symposium at University of Central Florida
- 2018 Moderator/Host of Socratic Series on Bioethics at UCF**
 -Bioethics of Genetic Modification (Dr. Jonathan Beever)
 -Bioethics of Body Augmentation (Dr. Luis Favela)
 -Ethics of Professional Development and Happiness in Careers of Medicine (Dr. Luciana Garbayo)

COMMUNITY SERVICE

- 2020-21 Healthy Island Project, Deer Isle, Maine USA**
 Non-profit local community health initiatives. Specifically working with vaccine education and reducing vaccine hesitancy.
- 2019 Atlantic Center for the Arts, New Smyrna Beach, Florida USA**
 Provided assistance on Saturdays to arts and wellness programs geared towards those with dementia
- 2017-18 Phi Delta Epsilon Volunteer Initiatives**
 Buddy Ball, Health Fair, Give Kids the World, Relay for Life, Viva Puerto Rico
- 2017 UCF SGA Volunteer Chair**
 Organized and led volunteer initiatives such as campus cleanup, health fairs, and UCF arboretum volunteering
- 2016-19 Ocean Cleanup/ Invasive Species Removal Project**
 10 SCUBA Operations out of Miami & Ft. Lauderdale, Florida with other divers to remove waste and invasive lionfish
- 2014-17 Cleveland Clinic Hospital of Florida**
 ICU/ER Administrative Work, Catering to Patients through the Sweet Dreams Program

INSTITUTIONAL SERVICE

- 2022-23 Yale School of Medicine Senator (Graduate & Professional Student Senate)**

- 2022** **Yale School of Medicine Global Health Representative**
- 2021-22** **Yale Journal of Biology and Medicine**
Soliciting Editor, Reviewing Editor
- 2016-20** **Founder/ Editor of *The Stallion* at UCF** (www.saltystallion.com)
Created and led satirical student newspaper with 5,000+ unique monthly readers and a team of 15 fellow students pre-COVID

TEACHING SERVICE

- 2024** Sherwin B. Nuland Bioethics International Summer Program
Graduate Teaching Assistant
Yale University, Interdisciplinary Center for Bioethics
- 2020** Ethical Theory (PHI3670), Dr. Luciana Garbayo
Teaching Assistant
UCF College of Arts and Humanities, Department of Philosophy
- 2019-20** Medical Biochemistry (BCH4024), Dr. Ning Sui
Teaching Assistant
UCF Burnett School of Biomedical Sciences
- 2018-19** General Microbiology (MCB3020L), Dr. Ambivero
Teaching Assistant, Lab Assistant
UCF Burnett School of Biomedical Sciences
- 2017** Honors Symposium (IDH1920H) Dr. Dupuis
Team Leader
UCF Honors College

LEADERSHIP

- 2022-23** Yale School of Medicine Wilderness Medicine Club, **President ('23)**
- 2021-22** Yale School of Medicine Orthopedic Surgery Interest Group, **Co-President ('22)**
- 2017-20** Zooni Media LLC, **Founding Partner / CFO**
Small Media Student Network of Satirical Publications of UCF, FAU, USF
- 2017-19** Phi Delta Epsilon Florida Beta, **President ('18)** Ethics Board Member (17')
Spearheaded the creation of academic and volunteer programs, contributed to efforts in raising organizational GPA from 3.3-3.7, Implemented creation of chapter ethics board.

MILITARY SERVICE

- 2025-** **Captain, U.S. Army**
- 2021-25** **2nd Lieutenant, U.S. Army**

CIVILIAN WORK EXPERIENCE

- 2020-21** Heanssler Oil Co.
Diesel Mechanic (Full time, 40hrs/week) Maine, USA
- 2018-20** Valvoline / Metrolube Enterprises Inc.
Senior Automotive Technician (Full Time, 40hrs/week) Orlando, Florida USA
- 2017** Fuzzy's Tire & Auto Florida, USA
Automotive Mechanic / External Sales and Marketing Consultant (Full Time, 40hrs/week) Ft. Lauderdale, Florida USA
- 2015-17** AMC Theatres
Repairman (Part Time, 20hrs/week) Ft. Lauderdale, Florida USA

INTERESTS

Playing piano (10+ yrs), fishing, scuba diving, writing, hobbyist mechanic.