

Saint Joseph Hospital Internal Medicine Residency Curriculum

Contents

Rotations	1
Didactics.....	4
Where We Train: Caritas Clinic	6
Scholarly Activity.....	7
Resident Projects.....	7
Resident and Faculty Publications.....	12

Residents at Saint Joseph Hospital manage patients on inpatient rotations in General Internal Medicine, Critical Care, and Oncology. The pathology seen is very diverse and while residents are given plenty of autonomy, there are always hospitalists and intensivists available in-house 24/7. Electives opportunities exist at Saint Joseph Hospital, Kaiser Permanente, National Jewish Health, and the University of Colorado. Categorical residents will follow and manage a panel of patients in the Caritas Clinic, a charitable clinic for the underserved. Residents will typically have one full day of clinic twice a month.

All rotations strictly adhere to the guidelines and work hour regulations of the American College of Graduate Medical Education.

Rotations

The number of months allotted to each rotation is different for each post-graduate year, as summarized below:

- PGY-1 Preliminary
 - Wards*: 4-5
 - Oncology Wards: 0-1
 - ICU: 0-1
 - Float: 2
 - Caritas: 0
 - ED: 0-1 (required for anesthesiology prelim interns)
 - Admit: 1
 - Electives: 3

- PGY-1 Categorical
 - Wards*: 3-4
 - Oncology Wards: 1
 - ICU: 2
 - Float: 2
 - Caritas: 1
 - Admit: 0-1
 - Electives: 3
- PGY-2
 - Wards*: 2-3
 - Oncology Wards: 1
 - ICU: 2
 - Float: 1
 - Caritas: 1
 - ED: 1
 - CTM: 0-1
 - Electives: 4
- PGY-3
 - Wards*: 3-4
 - Oncology Wards: 0-1
 - ICU: 1
 - Float: 0-1
 - Caritas: 1
 - CTM: 1
 - Electives: 5

*Wards include a combination of Kaiser Permanente, MiM and FIT services.

General Medicine Kaiser Ward Rotation

There are four inpatient Kaiser ward teams at Saint Joseph Hospital. Each house staff team consists of one senior resident (PGY II or III) supervising one intern (PGY I). All teams will also have either a third- or fourth-year medical student, and some may have both. Medical student education is taken very seriously, and this gives the residents abundant opportunities to teach. Residents are responsible for the care of patients from admission to discharge and are the primary providers for the patients. Residents are supervised by a teaching attending who manages patients and conducts teaching rounds with the house staff team. Teams take "long call" every sixth night, triaging new admissions to the various Ward teams until 9:00 p.m.; there is no overnight call. Overnight admissions are the responsibility of the Night Float team, which transfers the care of these patients to the Ward teams in the morning.

Night Float Rotation

There is one Night Float team on service every month, consisting of one supervising resident (PGY II or III) and three interns (PGY I). The supervising resident works 7:00 p.m. to 7:00 a.m. Sunday through Thursday. On Friday and Sunday, a supervising resident from an elective covers this shift according to a schedule made by the Chief Resident. Interns rotate through two days of 3:00 p.m. to 3:00 a.m., two days of 7:00 p.m. to 7:00 a.m., and two days off. The team is responsible for cross-cover management of inpatients on the teaching services and for new admissions. Supervision of the Night Float team is by the admitting attending physician for each specific patient.

Midtown Inpatient Medicine (MiM) Rotation/Faculty Inpatient Team (FIT) Rotation

This team consists of a senior resident (PGY II or III) supervising one intern (PGY I). All teams will also have either a third- or fourth-year medical student, and often times, both. Medical student education is taken very seriously, and this gives the residents abundant opportunities to teach. Residents on the FIT team are responsible for admission and ongoing care of patients from the Caritas Clinic (our resident-run clinic), and "unassigned" patients from the Emergency Department in collaboration with the MiM team. The FIT team also provides medical consultations for other specialties in the hospital. The team is supervised by one of the core Internal Medicine Faculty. The FIT team is in house daily but has no overnight call. The Night Float team covers cross-cover issues and new admissions overnight.

Intensive Care Unit Rotation

Three critical care teams are on service each month at Saint Joseph Hospital, consisting of a senior resident (PGY II or III) supervising one intern (PGY I), and frequently one sub-intern (MS IV). Residents are the primary caretakers of patients in the Intensive Care Unit, responsible for admission and ongoing management. The teams rotate through ten day shifts followed by five night shifts. The day teams alternate rounding and on-call, with the on-call team triaging admissions during the day until 8:00 p.m., and the rounding team helping with admissions and patient care until no later than 1:00 p.m. The night call team arrives at 8:00 p.m. and is responsible for new admission and cross-coverage until 7:00 a.m., but stays until 9:00 a.m. to complete their work, to check-out to the day teams, and to participate in teaching rounds. The long-call and night call teams respond to and manage all adult Medical Resuscitation Alerts calls, and all Rapid Response Team calls in the hospital. When patients transfer out of the ICU, one of the floor teams assumes their care. Formal teaching/management rounds are made each weekday with both a Kaiser Permanente and National Jewish Health Intensivist. Bedside ultrasound is taught and frequently utilized. During this month the residents do not have responsibilities at the Caritas Clinic.

Oncology Medicine Rotation

One Oncology team is on service each month, consisting of one senior resident (PGY II or III) supervising one intern (PGY I). Residents are supervised by both Oncologists and Internal Medicine

Hospitalists, who help direct the day-to-day care of individual patients, as well as performing bedside teaching rounds daily during weekdays. Multi-disciplinary rounds occur daily with the treatment team and Palliative Care service. The Oncology team is in house daily but does not take call and there is no overnight call. The Night Float team covers cross-cover issues and new admissions.

Caritas Clinic Ambulatory Rotation

Every month there are 2 or 3 categorical residents rotating at the Caritas Clinic. Residents take care of patients with acute illness, follow-up on hospital discharges, and are trained in how to perform numerous joint injections, skin biopsies, and cryotherapy. Time is also allotted to teaching residents about specific ambulatory care topics and all residents learn about malpractice at Colorado's largest malpractice insurance carrier. Residents may also be given protected time to develop and implement a quality-improvement project at the Caritas Clinic.

Emergency Medicine Rotation

All categorical residents and preliminary interns that require an Emergency Medicine month will rotate in our Emergency Medicine Department. Residents are responsible for assessing patients as they enter the Emergency Department, formulating and implementing the plan of care, and discharging them appropriately. Residents work on a shift schedule and are supervised by Emergency Medicine attending physicians.

Elective Rotations

Elective months are available to all residents in each year of training. Residents have numerous options for their elective months, allowing them to tailor their training to their interests. Elective rotations are available in all specialties, and are offered at Saint Joseph Hospital, Kaiser Permanente, National Jewish Health, and the University of Colorado. Residents may also arrange unique elective months to suit their own educational goals; these include research electives and electives in rural, out-of-state, or international settings.

Didactics

The Internal Medicine Residency Program provides an extensive series of weekday conferences in general internal medicine, medical subspecialties, and related disciplines. The goal of the conferences is to provide an intellectual atmosphere conducive to the acquisition of medical knowledge, and the interchange of ideas relevant to the management of internal medicine patients.

Afternoon Report

Afternoon Report, typically facilitated by the Program Director, is a clinically directed conference where residents present 2 patient cases from the inpatient services. Laboratory values, imaging, and electrocardiograms are reviewed, and appropriate management and clinical decision-making

is discussed with an emphasis on evidence-based medicine and high-value care. Residents are required to review a key teaching point about each patient that is presented.

POCUS Conference

Ultrasound Conference is held several times a month. Attendees practice and enhance their skills in image interpretation. Periodically, there is also a combined EKG/Ultrasound conference.

Noon Conference

Noon Conferences are held daily and include lectures in all specialties with an emphasis on core Internal Medicine topics. Additional educational opportunities include Medicine Grand Rounds, Clinical-Pathological Conference, and Morbidity & Mortality Conference.

Clinic Conferences

Clinic conferences focusing on common ambulatory medicine topics are held daily by a core faculty member in the Caritas Clinic. This is protected learning time and occurs before the residents are scheduled to see patients.

Simulation Lab

Residents get formal training on the use of ultrasound in performing routine procedures such as central lines, thoracentesis, paracentesis, radial arterial lines and lumbar puncture. Residents also receive formal training in intraosseous line placement, bedside diagnostic ultrasound, airway management, and how to run a code/rapid response.

Journal Club

Journal Club is held monthly to review and critique meaningful scientific articles in Internal Medicine. Each meeting is focused on a specific sub-specialty in Internal Medicine (e.g. Cardiology). Articles are reviewed and presented by senior residents (PGY II and III), followed by a discussion with 1 or 2 expert sub-specialists, Internal Medicine Faculty, and an expert statistician. Residents learn evidence-based medicine and how to interpret the literature with a focus on both statistical significance and clinical relevance.

Professor's Rounds

Professor's Rounds are conducted with each inpatient team monthly by the Program Director for in-depth discussion of specific cases. In the Intensive Care Unit, daily rounds are made with Pulmonary critical care specialists. On the ward teams, attending rounds occur daily with an assigned teaching attending.

Intern Lecture Series

During the first month, the intern lecture series will be provided by upper-level residents. Topics during this series include discussions addressing commonly encountered conditions in the hospital and how to manage these issues while on call.

To access Intern Lecture Series materials, please visit [The Landing](#) (login required).

Where We Train: Caritas Clinic

Caritas Internal Medicine

For more than 40 years, the Caritas Internal Medicine Clinic, Latin for charity and love, has been meeting the community's growing need for acute illness care, chronic disease management, and a proactive approach to routine prevention and screening for disease. The Caritas Internal Medicine Clinic is open Monday through Friday from 7:30 a.m. to 5:00 p.m., serves an ethnically diverse patient population, and delivers the highest quality care to an underserved and vulnerable population in Colorado. We have an extraordinary ancillary staff that includes acute transitional care, social workers, referral coordinators, behavioral health psychologist, and substance abuse counselors in addition to our bilingual front desk and medical assistants who work diligently to support our patient and the residents through training.

Continuity Clinic

The continuity clinic at Caritas Internal Medicine is required for all categorical residents. The Internal Medicine Resident will receive extensive training in ambulatory care and preventative medicine. The resident functions as the primary care provider, making all management decisions regarding their patients under the supervision of the Internal Medicine faculty. Residents are scheduled to see patients one full day twice a month throughout residency training to maximize continuity of care. You begin your ambulatory experience with three days of orientation to the clinic that includes shadowing a senior resident and introductions to all clinic departments. You will initially be scheduled 2 patients per half day and progress throughout residency to seeing 13 patients per full day of clinic. Intermountain Health has chosen EPIC to manage electronic medical records and we utilize EPIC Ambulatory, so residents have full access to inpatient and outpatient medical record data. During your continuity clinic you will receive an ambulatory didactic curriculum built on core primary care topics presented weekly by faculty and residents.

Ambulatory Clinic Block

During residency, all categorical residents are scheduled to complete a 1-month block of ambulatory care each academic year at Caritas Internal Medicine Clinic in addition to scheduled Continuity Clinic dates. Residents experience a variety of outpatient specialty clinics during the Ambulatory Clinic Block that include: Acute Clinic – same/next day appointment for urgent issues; Joint Clinic – joint injections; Dermatology Clinic – work directly with a dermatologist attending to perform routine dermatology focused primary care evaluation and procedures; Rheumatology clinic- work directly with a Rheumatologist to manage interesting rheumatologic disorders. Additionally, upper level / senior residents spend 3 days rotating at Colorado's largest malpractice insurance carrier (COPIC) to gain knowledge around legal matters as it pertains to general medical practice. The Resident of the Month is also responsible for triaging patient telephone calls for medical advice and supporting ancillary staff for ongoing patient care needs in the clinic.

After Hours Care of Caritas Clinic Patients

When Caritas Internal Medicine patients have after hours medical needs the initial call is received / triaged by an answering service, and urgent medical needs are paged to the clinic on-call pager covered by the on-call resident who is in the hospital.

Inpatient Care of Caritas Patients

When a Caritas Internal Medicine patient is evaluated in the Emergency Department, the primary care physician receives a summary of the care provided to the patient. The resident is expected to review the summary of care and communicate any special follow-up needed to the Transitional Care Coordinator. Should the patient require admission, they are admitted to the inpatient faculty teaching service. The resident for the patient will receive notification of admission and they are expected to follow the hospital course of care through the electronic medical record and although it is appreciated by patients to receive a courtesy visit, the inpatient medical team will round on the patient and provide the assigned primary care physician a discharge summary. Once the discharge summary is reviewed, the primary care physician should communicate with the Transitional Care Coordinator regarding appropriate follow-up needs for the patient.

Caritas Internal Medicine Quality Improvement

PGY-3 Internal Medicine Residents are required to be involved in quality improvement projects for Caritas Internal Medicine. An emphasis is placed on a topic of interest to the resident and should focus on a direct benefit to clinic patient outcomes. The PGY-3 residents are expected to present their quality improvement project to the residency program at the end of the academic year.

Scholarly Activity

Residents are encouraged to participate in clinical and basic research projects throughout their training. Each resident is assigned to a Faculty mentor who is available to assist in developing projects. Saint Joseph Hospital has opportunities for physicians to conduct clinical research (see figure below for available resources.) For those residents interested in the basic sciences, research may be conducted through our relationship with National Jewish Health, or through our affiliation with the University of Colorado.

Residents who perform research are given the opportunity to present their work at multiple venues. Residents are given financial support and coverage to be able to present their work regionally or nationally. Residents most commonly present their scholarly work at The American College of Physicians (ACP), Society of General Internal Medicine, and Hospital Medicine Symposium meetings. Over the past 20 years, Saint Joseph Hospital has an outstanding track record for being selected to present at national meetings.

Resident Projects

Cardiovascular Innovations Symposium, Denver, CO, July 18-20, 2024

Poster Presentations

- **Veronica Graham, DO:** Bioprosthetic Mitral Valve Dysfunction Complicated by PEA Arrest Subsequently Requiring Transcatheter Replacement and Staging of Secondary Aortic Stenosis
- **Nicholas Wenz, DO:** Pulmonary Artery Perforation After Elective Left Atrial Appendage Occlusion

American College of Physicians, Colorado Chapter Resident Fellow Meeting, Denver, CO, May 22, 2024

Oral Presentations:

- **Jane Li, DO:** Acinar Predominant Invasive BRAF V600E Adenocarcinoma of the Lung Presenting as Pneumonia: A Case Series (THIRD PLACE WINNER)
- **KC Moore, MD:** Mastication-Induced Vertigo
- **Zach Schultz, DO:** Suspicious Cysts: A Spontaneous Tension Pneumothorax leading to the Diagnosis of Familial Birt-Hogg-Dube Syndrome (SECOND PLACE WINNER)

Poster Presentations:

- **Konner Feldhus, DO:** Chest pain, an uncommon case of STEMI during pregnancy
- **Veronica Graham, DO:** Case of bioprosthetic valve failure with concomitant coccidioidomycosis
- **Erica Hinricher, DO:** Extreme Lactate Elevation in the Setting of Thrombotic Thrombocytopenic Purpura
- **Hamid Hussaini, DO:** A Case of Tumefactive Multiple Sclerosis, A Rare Diagnostic Challenge
- **Mitchell Kerr, MD:** Case of ANCA vasculitis causing diffuse lymphadenopathy requiring tracheostomy placement
- **Mitchell Kerr, MD:** Case of vitamin D deficiency causing a type II renal tubular acidosis Fanconi syndrome
- **Jane Li, DO:** The narrower, the puffier: SVC syndrome presenting as recurrent angioedema
- **Ashley McKenzie, MD:** Impact of Rheumatic Disease on Fertility and Desired Family Size for Women: A Proposed Methodology (SECOND PLACE WINNER)
- **KC Moore, MD:** The painless puzzle: a rare clinical manifestation of calciphylaxis
- **Megan Parfait, MD:** Incidental findings on high-resolution computed tomographic lung imaging in individuals with rheumatoid arthritis (THIRD PLACE WINNER)
- **Riley Parr, MD:** Barriers to Accurate and Timely Urine Output Measurements in the Inpatient Setting
- **Riley Parr, MD:** Inflammatory Interloper: A Case of Intrathoracic Pancreatic Pseudocyst leading to Respiratory Failure
- **Nicholas Wenz, DO:** New fibromuscular dysplasia presenting as a hypertensive emergency; complicated by spontaneous coronary artery dissection and stress cardiomyopathy

American Thoracic Society International Conference, San Diego, CA, May 17-22, 2024

Poster Presentations:

- **Kelsey Klingel, DO:** Malignant Masquerader: A Case of Hepatocellular Carcinoma Extending Through the Inferior Vena Cava to Present as an Isolated Right Atrial Mass
- **Jane Li, DO:** The Narrower, The Puffier: SVC Syndrome Presenting as Recurrent Angioedema
- **Alyssa Manteufel, DO:** Inflammatory Interloper: A Case of Intrathoracic Pancreatic Pseudocyst Leading to respiratory Failure

Society for Hospital Medicine Converge, San Diego, CA, April 12-15, 2024

Poster Presentation:

- **Hamid Hussaini, DO:** A Case of Tumefactive Multiple Sclerosis, A Rare Diagnostic Challenge

American College of Cardiology, Atlanta, GA, April 6-8, 2024

Oral Presentations:

- **Mitchell Kerr, MD and**
- **Michal Klepadlo, DO:** Cardiac Extramedullary Plasmacytoma

American College of Physicians, Colorado Chapter Annual Meeting, Colorado Springs, CO, February 9-10, 2024

Oral Presentation:

- **Kelsey Klingel, DO:** Malignant Masquerader: A Case of Hepatocellular Carcinoma Extending Through Inferior Cava Presenting as Isolated Right Atrial Mass

Poster Presentations:

- **Dylan Bergstedt, MD:** Swimming Induced Pulmonary Edema
- **Veronica Graham, DO:** Sequelae of Kawasaki disease in adults: long-term complications and limited treatment options
- **Samantha Schapiro, DO :** Mind Melting Mosquitoes: A Case of Necrotizing West Nile Virus
- **Nicholas Wenz, DO:** A Unique Diagnostic Case of a Masquerading Facial Rash; That's Not Dermatomyositis!
- **Madeline Youakim, MD:** Hemolysis Happens

Critical Care Congress, Society of Critical Care Medicine, Phoenix, AZ, January 21-23, 2024

Oral Presentation:

- **Jane Li, DO:** Bubbling Pancreas

Western Medical Research Conference, Carmel CA, January 18-20, 2024

Oral Presentation:

- **Megan Parfait, MD:** Incidental Findings on High Resolution Computed Tomography Scanning of the Lungs Performed to Evaluate for Interstitial Lung Disease in Rheumatoid Arthritis

CHEST Annual Meeting, Honolulu, HI, October 8-11, 2023

Poster Presentation:

- **Samantha Schapiro, DO, et al.:** Simultaneous use of Chemotherapy and Extracorporeal Membrane Oxygenation in Acute Respiratory Failure due to Hairy Cell Leukemia
-

Mountain West Society of General Internal Medicine, Aurora, CO, October 6, 2023

Poster Presentations:

- **Konner Feldhus, DO, et al.:** Digoxin Toxicity
- **Alyssa Manteufel, DO:** Syndrome of Inappropriate ADH Secretion After Cutaneous Herpes Zoster
- **Megan Parfait, MD, et al.:** Conservative Management of Emphysematous Gastritis

Congress of Clinical Rheumatology, San Diego, CA, September 5-8, 2024

Poster Presentation:

- **Ashley McKenzie, MD:** Sex-Related Differences in Treatment of Severe Osteoporosis: parenteral versus oral medication following hip fracture in veterans over age 65

American Thoracic Society, National Meeting, Washington DC, May 21-24, 2023

Poster Presentations:

- **Dylan Bergstedt, MD, et al:** Erysipelatoclostridium Ramosum: A Rare Cause of Fournier's Gangrene
- **Sophia Raia, MD, et al:** HIDDEN DANGERS: A Case of Progressive Lung Disease in an Immunocompromised Patient, Found to Have Persistent COVID Positivity on Bronchoscopy

American College of Physicians, Colorado Chapter Resident Fellow Meeting, Denver, CO, May 17, 2023

Oral Presentations:

- **David Baldwin, DO:** Recurrent squamous cell carcinoma with metastatic lesions to right ventricle (FIRST PLACE WINNER)
- **Jane Li, DO:** A Curious Case of Recurrent Abdominal Abscesses
- **Alyssa Manteufel, DO:** Cerebral Vasculitis, an atypical presentation of Granulomatosis with Polyangiitis
- **Rachel Resnick, DO:** Paralysis by Analysis

Poster Presentations:

- **Hamid Hussaini, DO:** A case of statin induced necrotizing autoimmune myositis
- **Brian Lelling, DO:** Neurosyphilis: Which test is best? (FIRST PLACE WINNER)
- **Alyssa Manteufel, DO:** Using Point of Care Ultrasound to Diagnose a Trapped Lung (SECOND PLACE WINNER)
- **Dave Sheneman, MD:** Drug-induced thrombotic microangiopathy due to pegylated liposomal doxorubicin: a case report

Society of General Internal Medicine, National Meeting, Denver, CO, May 10-13, 2023

Poster Presentation:

- Anand Tekriwal, MS, **Dylan Bergstedt, MD**, et al: Challenges in treatment and follow-up of undocumented persons

American College of Physicians, National Meeting, San Diego, CA, April 27-29, 2023

Poster Presentation:

- **Michael Cerniglia, MD:** Improving Breast Cancer Screening Compliance in an Uninsured Population (CO Chapter Governor's Choice Award)

American College of Physicians, Colorado Chapter Annual Meeting, Colorado Springs, CO, February 10-11, 2023

Oral Presentations:

- **Michael Cerniglia, MD:** Improving Breast Cancer Screening Compliance in an Uninsured Population

Poster Presentations:

- **Peter Huang, DO:** A Case of AIDP in Waldenstrom Macroglobulinemia
- **Sam Schapiro, DO:** Act Fast or Disseminate More: and the catastrophic consequences of Tuberculous Meningitis

American Thoracic Society Meeting, San Francisco, CA, May 13-18, 2022

Poster Presentations:

- Laura Harper, MD and Ken Lyn-Kew, MD: Not a Contaminant: A Case of *Corynebacterium* Infection
- Sophia Raia, MD, Chelsea Ratliff, MD and Ken Lyn-Kew, MD: Double Trouble in the ICU: Point-of-Care Ultrasound Detection of Simultaneous Hemothorax and Empyema

- Sophia Raia, MD, Elizabeth Wittrock, DO, et al: An Examination of Early Intubation Versus Initial Trial of Non-Invasive Ventilation on outcomes in COVID-19 Pneumonia
- Elizabeth Wittrock, DO, Sophia Raia, MD, et al: Examining the unintended Consequences of Steroid Use in Severe COVID-19 Disease: A Retrospective Observational Analysis

American College of Physicians, Colorado Chapter Resident Fellow Meeting, Denver, CO, May 10, 2022

Oral Presentations:

- Elizabeth Wittrock, DO: Intercostal Arteries: The Only Thing that Doesn't Sag with Age (FIRST place Winner)
- Michael Stachler, MD: Adult Minimal Change Disease After SARS-COV2 mRNA Vaccination

Poster Presentations:

- Josh Knol, DO: It Is Not From the Milk
- Michael Klepadlo, DO and Jason Wang, MD: To (Fluid) Resuscitate or Not to Resuscitate: A Case of Abdominal Compartment Syndrome in the Setting of Acute Pancreatitis

American College of Physicians, Colorado Chapter Annual Meeting, Colorado Springs, CO, February 3-5, 2022

Oral Presentations:

- Elizabeth Wittrock, DO and Sophia Raia, MD: Under Pressure

Poster Presentations:

- Laura Harper, MD and Ken Lyn-Kew, MD: Not a Contaminant: A Case of *Corynebacterium* Infection
- Michael Klepadlo, DO: *Neisseria gonorrhea* Infective Endocarditis
- Morgan McCarthy, MD and Dylan Bergstedt, MD: Fat emboli Syndrome: A Traumatic Ending to an Elective Orthopedic Surgery
- Richard Stephens, DO and Amy Cacace, MD: Papillary Muscle, Intra-Parenchymal and Pulmonary Abscesses: The Take of Disseminated *Nocardia paucivoran*

Resident and Faculty Publications

Resident Publications:

1. **Sheneman, D. W.**, Hu, J., Das, S., et al. Chemotherapy delivery in early-onset colorectal cancer is impacted by urban versus rural settings in Colorado. *Colorectal Cancer*, 13(1), 2024. <https://doi.org/10.1080/1758194X.2024.2400045>

2. Paek M, Rinderle T, **Resnick R**, Bekelman D. Fast Facts and Concepts #467: Palliative Care Issues in Aortic Stenosis. Palliative Care Network of Wisconsin, 2023.
3. **Cerniglia M, Klepadlo M, Sheneman D**, Kim SS. Response to PD-1 inhibitor after progression on PD-L1 inhibitor in advanced HCC. BMJ Case Rep. 2022 Aug 12;15(8):e250009. doi: 10.1136/bcr-2022-250009. PMID: 35961684.
4. **Bergstedt DT**, Tarter WJ, Peterson RA, et al. Antibodies to Citrullinated Protein Antigens, Rheumatoid Factor Isotypes and the Shared Epitope and the Near-Term Development of Clinically-Apparent Rheumatoid Arthritis. Front Immunol. 2022 Jun 22;13:916277. doi: 10.3389/fimmu.2022.916277. PMID: 35812446; PMCID: PMC9265214.
5. **Cerniglia M**, Xiu J, Grothey A, Pishvaian MJ, et al. Association of Homologous Recombination-DNA Damage Response Gene Mutations with Immune Biomarkers in Gastroesophageal Cancers. Mol Cancer Ther. 2021 Nov 1. doi: 10.1158/1535-7163.MCT-20-0879. PMID: 34725190
6. Ebbs D, Hirschbaum JH, **Mika A**, Matsushita SC, Lewis JH. Expanding Medical Education for Local Health Promoters Among Remote Communities of the Peruvian Amazon: An Exploratory Study of an Innovative Program Model. Adv Med Educ Pract. 2020;11:215-223.
7. **Rinderle T**, Willett J. Bioethical Distinctions of End of Life Care Practices. Palliative Care Network of Wisconsin. 2021; (422).
8. Blankenship JM, **Rosenberg RC**, Rynders CA, Melanson EL, Catenacci VA, Creasy SA. Examining the Role of Exercise Timing in Weight Management: A Review. Int J Sports Med. 2021.
9. **Wells L, Cerniglia M**, et al. Treatment of Metastatic Disease with Immune Checkpoint INhibitors Nivolumab and Pembrolizumab: Effect of Performance Status on Clinical Outcomes. Journal Clinical Oncology. 2021 10.1200/JCO.2021.39.15_suppl.e21574.
10. **Claus D**, Anderson D, Staley V, Forster J, Meron A. Trends in the Physical Medicine and Rehabilitation Match: Analysis of NRMP Data from 2007 to 2018. PM R. 2020.
11. Presley CL, Kolodziejczyk TC, Pulsipher KJ, Maghfour J, Militello M, Rietcheck HR, Fonseca A, Olayinka TJ, **Rundle CW**, Waller JD, Dellavalle RP. A Scoping Review of Pharmacotherapy, Complementary and Alternative Medicine (CAM), and Surgical Therapies for Androgenic Alopecia. Current Dermatology Reports. Accepted December 2020.
12. Militello M, Presley CL, **Rundle CW**, Pulsipher KJ, Dellavalle RP. Assessing a Paradigm Shift: Perceptions of the USMLE Step 1 Scoring Change to Pass/Fail. Journal of Drugs in Dermatology. Accepted October 2020 **Rundle CW**, Rietcheck HR, Militello M, Laughter M, Presley CL. Pediatric hidradenitis suppurativa with concomitant bipolar disorder: an underrepresented population. Dermatology. Accepted September 2020.

13. **Oto E**, et al. The Harm of Anticoagulation in Patients with Low-Risk by CHADS2 and reclassified as High-Risk by CHA2DS2VASc: Inferences from TRAF Cohort. European Review for Medical Pharmacological Sciences. 2020; 24.
14. **Adams R**, Chopra P, Miranda R, and Calderon A. Ertapenem-induced encephalopathy. BMJ Case Rep 2020;13(6). doi: 10.1136/bcr-2019-231875. PMID 32487528.
15. **Barber, K**, Sarmiento C, Niehaus W. Hyperextension-Induced Dorsal Cord Syndrome: Case Presentation. PM R. 2020;12(5):518-521. doi: 10.1002/pmrj.12249.
16. **Steinberg, AW**, Wechsler ME, Fernandez Perez ER. Trends in Antineutrophil Cytoplasmic Autoantibody-Associated Vasculitis-Related Mortality in the United States, 1999 to 2017. Annals of Internal Medicine. 2020;172(2):160-163. doi: 10.7326/M19-1564.
17. Cruickshank-Quinn C, **Zheng LK**, Quinn K, Bowler R, Reisdorph R, Reisdorph N. Impact of Blood Collection Tubes and Sample Handling Time on Serum and Plasma Metabolome and Lipidome. Metabolites. 2018;8(4) doi:10.3390/metabo8040088
18. **Hesterberg K**, Babu A, Frank M, Hogan S, Krantz MJ. Severe tricuspid regurgitation due to valvular entrapment of an inferior vena cava stent. Clin Case Rep 2017;5, 130-133. doi:10.1002/ccr3.812
19. **Freundt M**, Philipp A, Kolat P, Rupprecht L, Friedrich C, Hirt SW, Haneya A. Impact of Elevated Donor Troponin I as Predictor of Adverse Outcome in Adult Heart Transplantation: A Single-center Experience. Thorac Cardiovasc Surg 2017doi:10.1055/s-0037-1606363
20. **Freundt M**, Lunz D, Philipp A, Panholzer B, Lubnow M, Friedrich C, Rupprecht L, Hirt S, Haneya A. Impact of dynamic changes of elevated bilirubin on survival in patients on veno-arterial extracorporeal life support for acute circulatory failure. PLoS One 2017;12, e0184995. doi:10.1371/journal.pone.0184995
21. Huenges K, Dreyer J, Panholzer B, Grothusen C, Renner J, Schäfer P, **Freundt M**, Schoeneich F, Schöttler J, Rahimi-Barfeh A, Cremer J, Haneya A. Iatrogenic Catheter-Induced Acute Aortic Dissection Type A after Coronary Angiography-A Retrospective Consecutive Case Series. Thorac Cardiovasc Surg 2017;65, 85-89. doi:10.1055/s-0036-1594290
22. **Owsley J**, Jimeno A, Diamond JR. Palbociclib:CDK4/6 inhibition in the treatment of ER-positive breast cancer. Drugs Today (Barc) 2016;52, 119-129. doi:10.1358/dot.2016.52.2.2440528
23. **Freundt M**, Ried M, Philipp A, Diez C, Kolat P, Hirt SW, Schmid C, Haneya A. Minimized extracorporeal circulation is improving outcome of coronary artery bypass surgery in the elderly. Perfusion 2016;31, 143-148. doi:10.1177/0267659115588634.

24. Cao M, Wamboldt FS, Brown KK, **Hickman J**, Olson AL, Solomon JJ, Swigris JJ. Supplemental oxygen users with pulmonary fibrosis perceive greater dyspnea than oxygen non-users. *Multidiscip Respir Med* 2015;10, 37. doi:10.1186/s40248-015-0035-y
25. **Freundt M**, Haneya A, Schmid C, Hirt S. Dangerous surgical scavenger hunt: the complicated course of a patient with left ventricular assist device and end-stage renal disease undergoing reconstructive flap surgery. *Perfusion* 2015;30, 469-471. doi:10.1177/0267659114560043
26. **Tamblyn JM**, Calderon AJ, Combs S, O'Brien MM. Patients from abroad becoming patients in everyday practice: torture survivors in primary care. *J Immigr Minor Health* 2011;13, 798-801. doi:10.1007/s10903-010-9429-2

Saint Joseph Hospital Faculty Publications:

1. Holden MS, Portillo A, **Salame G**. Skills Classification in Cardiac Ultrasound with Temporal Convolution and Domain Knowledge Using a Low-Cost Probe Tracker. *Ultrasound Med Biol* 2021. DOI: 10.1016/j.ultrasmedbio.2021.06.011.
2. Farasat M, Sanchez JM, West JJ, Burke JM, Prouse AF, Gore MO, **Salame GA**, et al. A Point-of-Care Algorithm to Guide Proper Device Selection for Ambulatory Electrocardiography. *Crit Pathw Cardiol* 2021;20(3):140-142. DOI: 10.1097/HPC.0000000000000259.
3. Trent SA, Stella S, Skinner A, **Salame G**, et al. Improving Atraumatic Chest Pain Evaluation in an Urban, Safety-net Hospital Through Incorporation of a Modified HEART Score. *Crit Pathw Cardiol* 2020;19(4):173-177. DOI: 10.1097/HPC.0000000000000204.
4. Linzer M, Smith CD, Hingle S, Poplau S, **Miranda R**, Freese R, and Palamara K. Evaluation of Work Satisfaction, Stress, and Burnout Among US Internal Medicine Physicians and Trainees. *JAMA Netw Open*. 2020;3(10):e2018758.
5. **Salame G**, Northcutt N, Soni NJ. Focused Cardiac Ultrasonography for Left Ventricular Systolic Function. *N Engl J Med* 2020;382(10):976-977. DOI: 10.1056/NEJMc2000059.
6. Adams R, Chopra P, **Miranda R**, and Calderon A. Ertapenem-induced encephalopathy. *BMJ Case Rep* 2020;13(6). doi: 10.1136/bcr-2019-231875. PMID 32487528.
7. Soni NJ, Franco-Sadud R, Kobaidze K, Schnobrich D, **Salame G**, et al. Recommendations on the Use of Ultrasound Guidance for Adult Lumbar Puncture: A Position Statement of the Society of Hospital Medicine. *J Hosp Med* 2019;14(10):591-601. DOI: 10.12788/jhm.3197.
8. Maw AM, Hassanin A, Ho PM, McInnes MDF, Moss A, Juarez-Colunga E, Soni NJ, Miglioranza MH, Platz E, DeSanto K, Sertich AP, **Salame G**, et al. Diagnostic Accuracy of Point-of-Care Lung Ultrasonography and Chest Radiography in Adults With Symptoms Suggestive of Acute Decompensated Heart Failure: A Systematic Review and Meta-analysis. *JAMA Netw Open* 2019;2(3):e190703. DOI: 10.1001/jamanetworkopen.2019.0703.

9. Lenchus J, **Calderon, AJ**. Teaching Procedural Skills. In: Kim MDDI, ed. A Textbook for Today's Chief Medical Resident, 25th Edition. Alliance for Academic Internal Medicine, 2018:128-135
10. Chacko KM, Halvorsen AJ, Swenson SL, Wahi-Gururaj S, **Steinmann AF**, Call S, Myers JS, Vidyarthi A, Arora VM. US Internal Medicine Program Director Perceptions of Alignment of Graduate Medical Education and Institutional Resources for Engaging Residents in Quality and Safety. Am J Med Qual 2017;106:286-296. doi:10.1177/1062860617739119
11. Young E, Stickrath C, McNulty M, **Calderon AJ**, Chapman E, Gonzalo JD, Kuperman EF, Lopez M, Smith CJ, Sweigart JR, Theobald CN, Burke RE. Residents' Exposure to Educational Experiences in Facilitating Hospital Discharges. J Grad Med Educ 2017;9, 184-189. doi:10.4300/JGME-D-16-00503.1
12. Caverzagie KJ, Lane SW, Sharma N, Donnelly J, Jaeger JR, Laird-Fick H, Moriarty JP, Moyer DV, Wallach SL, Wardrop RM, **Steinmann AF**. Proposed Performance-Based Metrics for the Future Funding of Graduate Medical Education: Starting the Conversation. Acad Med 2017;doi:10.1097/ACM.0000000000002096
13. Young E, Stickrath C, McNulty MC, **Calderon AJ**, Chapman E, Gonzalo JD, Kuperman EF, Lopez M, Smith CJ, Sweigart JR, Theobald CN, Burke RE. Internal Medicine Residents' Perceived Responsibility for Patients at Hospital Discharge: A National Survey. J Gen Intern Med 2016;31, 1490-1495. doi:10.1007/s11606-016-3855-3
14. Butkus R, Lane S, **Steinmann AF**, Caverzagie KJ, Tape TG, Hingle ST, Moyer DV, Alliance for Academic Internal Medicine and American College of Physicians Graduate Medical Education Task Forces FTHAPPCOTACOP. Financing U.S. Graduate Medical Education: A Policy Position Paper of the Alliance for Academic Internal Medicine and the American College of Physicians. Ann Intern Med 2016;165, 134-137. doi:10.7326/M15-2917
15. Fazio SB, **Steinmann AF**. A New Era for Residency Training in Internal Medicine. JAMA Intern Med 2016;176, 161-162. doi:10.1001/jamainternmed.2015.6952
16. Vu TR, Angus SV, Aronowitz PB, Harrell HE, Levine MA, Carbo A, Whelton S, Ferris A, Appelbaum JS, McNeill DB, Ismail NJ, Elnicki DM, CDIM-APDIM **COTTICACTIG**. The Internal Medicine Subinternship--Now More Important than Ever: A Joint CDIM-APDIM Position Paper. J Gen Intern Med 2015;30, 1369-1375. doi:10.1007/s11606-015-3261-2
17. Murphy EN, **Miranda R**. Doubts about treating hypogonadism due to long-term opioid use with testosterone therapy: a teachable moment. JAMA Intern Med 2014;174, 1892-1893. doi:10.1001/jamainternmed.2014.5299
18. Rieselbach RE, Feldstein DA, Lee PT, Nasca TJ, Rockey PH, **Steinmann AF**, Stone VE. Ambulatory training for primary care general internists: innovation with the affordable care act in mind. J Grad Med Educ 2014;6, 395-398. doi:10.4300/JGME-D-14-00119.1

19. **Calderon AJ**, Newman JS, Winawer NH. Update in hospital medicine: evidence published in 2013. *Ann Intern Med* 2014;161, 139-144. doi:10.7326/M14-0266
20. **Calderon AJ**, Wener MH. Erythrocyte sedimentation rate and C-reactive protein. *Hospital Medicine Clinics* 2012;1, e313-e337.
21. White KJ, **Miranda, R** and Aagaard, E. Tips for Learning on the Ambulatory Clerkship. In: Israel J, Tunkel AR, eds. *Medicine: A Competency-Based Companion*. Elsevier Health Sciences, 2012
22. **Steinmann AF**. Threats to graduate medical education funding and the need for a rational approach: a statement from the alliance for academic internal medicine. *Ann Intern Med* 2011;155, 461-464. doi:10.7326/0003-4819-155-7-20110040-00008
23. Stamm CA, **Miranda RH**, McGregor JA. An evidence-based approach to managing common STIs in adolescents-CDC's 2010 Sexually Transmitted Diseases Treatment Guidelines form the nucleus of this evidence-based approach to diagnosing and treating two of the most common STIs in adolescent and young women, who are most at risk. *Contemporary OB/GYN* 2011;43

National Jewish Health Teaching Faculty:

1. Wilson TM, **Solomon JJ**, Humphries SM, et al. Serum antibodies to peptidylarginine deiminase-4 in rheumatoid arthritis associated-interstitial lung disease are associated with decreased lung fibrosis and improved survival. *Am J Med Sci* 2023;365(6):480-487. DOI: 10.1016/j.amjms.2023.03.003.
2. Vu TTT, Brown KK, **Solomon JJ**. Myositis-associated interstitial lung disease. *Curr Opin Pulm Med* 2023;29(5):427-435. DOI: 10.1097/MCP.0000000000001000.
3. **Solomon JJ**, Brown KK. Interstitial Lung Disease: 150 Years of Progress. *Immunol Allergy Clin North Am* 2023;43(2):xiii-xv. DOI: 10.1016/j.iac.2023.03.001.
4. Moore RE, Wang T, Duvvuri B, et al. Prediction of Erosive Disease Development by Antimitochondrial Antibodies in Rheumatoid Arthritis. *Arthritis Rheumatol* 2023;75(6):890-899. DOI: 10.1002/art.42428.
5. Fernandez Perez ER, Crooks JL, Lynch DA, et al. Pirfenidone in fibrotic hypersensitivity pneumonitis: a double-blind, randomised clinical trial of efficacy and safety. *Thorax* 2023. DOI: 10.1136/thorax-2022-219795.
6. Wilson TM, **Solomon JJ**, Demoruelle MK. Treatment approach to connective tissue disease-associated interstitial lung disease. *Curr Opin Pharmacol* 2022;65:102245. DOI: 10.1016/j.coph.2022.102245.
7. Volk BM, Roberts CGP, VanTieghem M, et al. Reduced COVID-19 severity elicited by weight loss from a medically supervised ketogenic diet in a geographically diverse ambulatory

- population with type 2 diabetes and obesity. *BMJ Nutr Prev Health* 2022;5(2):154-158. DOI: 10.1136/bmjnp-2022-000444.
8. New ML, **Huie TJ**. ABCDE Approach for Massive Hemoptysis: A Novel Cognitive Aid. *ATS Sch* 2022;3(2):197-203. DOI: 10.34197/ats-scholar.2022-0008PS.
 9. Allam JS, Burkart KM, Coruh B, et al. The Virtual Interview Experience: Perspectives of Pulmonary and Critical Care Fellowship Applicants. *ATS Sch* 2022;3(1):76-86. DOI: 10.34197/ats-scholar.2021-0076OC.
 10. Roofeh D, Barratt SL, Wells AU, et al. Outcome measurement instrument selection for lung physiology in systemic sclerosis associated interstitial lung disease: A systematic review using the OMERACT filter 2.1 process. *Semin Arthritis Rheum* 2021;51(6):1331-1341. DOI: 10.1016/j.semarthrit.2021.08.001.
 11. **Mohning MP**, Amigues I, Demoruelle MK, et al. Duration of rheumatoid arthritis and the risk of developing interstitial lung disease. *ERJ Open Res* 2021;7(1). DOI: 10.1183/23120541.00633-2020.
 12. Juge PA, **Solomon JJ**, van Moorsel CHM, et al. MUC5B promoter variant rs35705950 and rheumatoid arthritis associated interstitial lung disease survival and progression. *Semin Arthritis Rheum* 2021;51(5):996-1004. DOI: 10.1016/j.semarthrit.2021.07.002.
 13. Juge PA, Lee JS, Lau J, et al. Methotrexate and rheumatoid arthritis associated interstitial lung disease. *Eur Respir J* 2021;57(2). DOI: 10.1183/13993003.00337-2020.
 14. Goel K, Maleki-Fischbach M, **George MP**, et al. A 56-Year-Old Man With Emphysema, Rash, and Arthralgia. *Chest* 2021;160(5):e513-e518. DOI: 10.1016/j.chest.2021.06.045
 15. Goel K, Hon SM, Farber HW, **George MP**. Pulmonary Arterial Hypertension: What Rare Diseases Tell Us About Disparities in Disease Registries, Clinical Trials, and Treatment Algorithms. *Chest* 2021;160(5):1981-1983. DOI: 10.1016/j.chest.2021.06.010.
 16. **Solomon JJ**, Matson S, Kelmenson LB, et al. IgA Antibodies Directed Against Citrullinated Protein Antigens Are Elevated in Patients With Idiopathic Pulmonary Fibrosis. *Chest* 2020;157(6):1513-1521. DOI: 10.1016/j.chest.2019.12.005.
 17. Kim D, Roberts C, McKenzie A, **George MP**. Nutritional ketosis to treat pulmonary hypertension associated with obesity and metabolic syndrome: a case report. *Pulm Circ* 2021;11(1):2045894021991426. DOI: 10.1177/2045894021991426.
 18. Natalini JG, Kassutto SM, **Huie TJ**, Kreider ME. Fellowship Education in Interstitial Lung Disease. A National Survey of Program Directors and Trainees. *ATS Sch* 2020;1(4):384-394. DOI: 10.34197/ats-scholar.2020-0065OC.
 19. **George MP**, Maier LA, Kasperbauer S, Eddy J, Mayer AS, Magin CM. How to Leverage Collaborations Between the BME Community and Local Hospitals to Address Critical

Personal Protective Equipment Shortages During the COVID-19 Pandemic. Ann Biomed Eng 2020;48(9):2281-2284. DOI: 10.1007/s10439-020-02580-3.

20. **George MP**, Gladwin MT, Graham BB. Exploring New Therapeutic Pathways in Pulmonary Hypertension. Metabolism, Proliferation, and Personalized Medicine. Am J Respir Cell Mol Biol 2020;63(3):279-292. DOI: 10.1165/rcmb.2020-0099TR.
21. Channick CL, Garrison G, **Huie TJ**, et al. ATS Core Curriculum 2020. Adult Pulmonary Medicine. ATS Sch 2020;1(4):416-435. DOI: 10.34197/ats-scholar.2020-0016RE.
22. Case AH, Hellkamp AS, Neely ML, et al. Associations between Patient-reported Outcomes and Death or Lung Transplant in Idiopathic Pulmonary Fibrosis. Data from the Idiopathic Pulmonary Fibrosis Prospective Outcomes Registry. Ann Am Thorac Soc 2020;17(6):699-705. DOI: 10.1513/AnnalsATS.201906-437OC.
23. Park BD, **Lyn-Kew K**, **Granchelli A**, Mehta A. A 62-Year-Old Woman With Diffuse Myalgias, Fatigue, and Shortness of Breath. Chest 2020;157(3):e75-e78. DOI: 10.1016/j.chest.2019.09.041.