Annual Research Productivity Report

Department of Internal Medicine

2022 Academic Year

1 July 2021 – 30 June 2022
Dear Friends—

I am very pleased to bring to you the Department of Internal Medicine’s Annual Research Productivity Report for 2022.

First of all, let me take this opportunity to thank our faculty, residents and fellows for their hard work and clinical service during the never-ending COVID-19 pandemic. Our research efforts did not escape the challenges that came with COVID-19, but we weathered the storm well as evidenced by our productivity. The Department had an extremely productive year with 127 peer-reviewed publications (a whopping increase of 41 over last year), a major textbook, 11 textbook chapters and a number of regional and national presentations. While the number of publications remains impressive and is an important metric, what impresses me is the quality of the articles and the high-impact journals they are published in. Let me take this opportunity to congratulate our faculty, residents and fellows, who despite an extremely busy clinical workload these past several months, continue to excel in other academic endeavors, namely teaching and research. I would also like to thank Dr. Jerzy Sarosiek for his tireless efforts to promote research amongst our faculty, residents and medical students and being a resource to them.

I am happy to note that our house staff remain very productive and reflect their commitment, enthusiasm and also mentoring/guidance by our program directors. Our faculty received research funding from both public and private sources, and the clinical research enterprise continues to grow under the stewardship of Mr. Sean Connery.

I hope next year Internal Medicine will be even more productive, and each and every one of us will need to put in the effort to make this possible. Of note, a QR code on the front of this report will take you to the electronic version of this report.

Finally, I wish all of you a fun and productive COVID (BA.5 variant) -FREE fall season!

Debabrata Mukherjee, M.D., M.S.
Chair, Department of Internal Medicine
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RESIDENT & FELLOW RESEARCH ACTIVITY (PGY 1-6)

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OPEN, ACTIVE RESEARCH

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42. Writing Committee Members; ACC/AHA Joint Committee Members, Mukherjee D. 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure. *J Card Fail.* 2022 Mar 14;S1071-9164(22)00076-8. PMID: 35378257.

**REVIEW – META ANALYSIS**


17) Dwivedi AK, Dubey P, Reddy SY, **Clegg DJ**. Associations of Glycemic Index and Glycemic Load with Cardiovascular Disease: Updated Evidence from Meta-analysis and Cohort Studies. *Curr Cardiol Rep*. 2022 Mar;24(3):141-161. PMID: [35119682](https://doi.org/10.1007/s11895-021-02457-7)


**CASE REPORTS**


**EDITORIAL / COMMENTARY**


7) Mares AC, Chatterjee S, Mukherjee D. Semaglutide for Weight Loss and Cardiometabolic Risk Reduction In Overweight/Obesity. *Curr Opin Cardiol*. 2022 Feb 16. PMID: [35175229](https://doi.org/10.1097/HCO.0000000000000945)


9) Mukherjee D. Is Percutaneous Coronary Intervention Now the Default Revascularization Strategy for Unprotected Left Main Coronary Artery Stenosis? *J Am Heart Assoc*. 2022 Apr 5;11(7):e025748. PMID: [35352567](https://doi.org/10.1161/JAHA.121.111008)


BOOKS/BOOK CHAPTERS

BOOKS


BOOK CHAPTERS


ABSTRACTS


and Outcome of Acute Ischemic Stroke and Intracerebral Hemorrhage Patients Undergoing Gastrostomy Tube Placement. Stroke. 2022;53:AWP132


31. Kalas MA; Ortega AJ; Dang T; Chavez L; McCallum R. An Unusual Case of Rapid Gastric Emptying. Am J Gastroenterol: October 2021 - Volume 116 - Issue - p S1466
33. Kesavan Chary P, Rehman AU, Bright TM. Adrenoleukodystrophy as a Cause of Spastic Paraparesis and Hyperpigmentation. Journal of the Endocrine Society, Volume 5, Issue Supplement_1, April-May 2021, Page A113
34. Kesavan Chary P, Kreit H, Bright T, Rehman A. A Rare Case of Bilateral Parathyroid Carcinoma in the Setting of Multiple Endocrine Neoplasia Type 1. Journal of the Endocrine Society In Press 2022.
35. Kesavan Chary P, Bright T, Rehman A. Primary Papillary Thyroid Carcinoma Arising from a Thyroglossal Duct Cyst. Journal of the Endocrine Society In Press 2022
39. Kreit H, Rehman AU, Bright TM. Graves’ Disease, a Late Complication of Chronic Graft vs Host Disease. Journal of the Endocrine Society, Volume 5, Issue Supplement_1, April-May 2021, Page A906


42. Loganathan P, Diaz J; Ortega AJ; McCallum R. The 4-Hour Gastric Scintigraphy Emptying Study Identifies a Treatable Diagnosis in Most Patients Being Evaluated for Previously Unexplained Upper Gastrointestinal Post-Prandial Symptoms. Am J Gastroenterol: October 2021 - Volume 116 - Issue - p S658-S659


47. McCallum R; Diaz J; Espino K; Bright T; Dwivedi AK.; Alvarado I.; Davis B; Bashashati M; Padilla, O; Sarosiek I. Normalization of Gastric Emptying After Pyloroplasty in Gastroparetic Patients Can Be Achieved Despite Abnormal Smooth Muscle Histology Am J Gastroenterol: October 2021 - Volume 116 - Issue - p S244


60. Sarosiek I, Bashashati M, Espino K, Padilla O, Marwaha V, Bright T, Dominguez KA, Davis BR, McCallum RW. Pyloric Pathology Is A Determinant Of Outcome Of A Double-Blind Randomized Trial Of Gastric Electrical Stimulation Combined With Pyloroplasty Compared To Pyloroplasty Alone In Gastroparesis. Gastroenterology. 2022 May 1;162(7):S-249.

61. Sarosiek I; Davis B; Espino K; Diaz J; Dwivedi A; Alvarado L; Padilla O; McCallum R. Do Histological Characteristics of the Gastric Smooth Muscle Predict Clinical Outcomes in Gastroparetic Patients After Surgical Pyloroplasty? Am J Gastroenterol: October 2021 - Volume 116 - Issue - p S225


JOURNAL ARTICLES, ORIGINAL INVESTIGATIONS


REVIEW – META ANALYSIS


**CASE REPORTS**


EDITORIAL / COMMENTARY


4) Rodriguez JBC. Beyond Left Ventricular Ejection Fraction Improvement in the Optimization of Cardiac Resynchronization Therapy. Angiology. 2022 Apr;73(4):293-295. PMID: 33977766

BOOKS/BOOK CHAPTERS

BOOK CHAPERS


ABSTRACTS


25. Kalas MA; **Ortega Aj; Dang T; Chavez L; McCallum R**. An Unusual Case of Rapid Gastric Emptying. Am J Gastroenterol: October 2021 - Volume 116 - Issue - p S1466


27. Kesavan Chary P, Rehman AU, Bright TM. Adrenoleukodystrophy as a Cause of Spastic Paraparesis and Hyperpigmentation. Journal of the Endocrine Society, Volume 5, Issue Supplement_1, April-May 2021, Page A113

29. Kesavan Chary, P., Bright T., Rehman A. Primary Papillary Thyroid Carcinoma Arising from a Thyroglossal Duct Cyst. Journal of the Endocrine Society  In Press 2022
32. Kreit H, Rehman AU, Bright TM. Graves' Disease, a Late Complication of Chronic Graft vs Host Disease. Journal of the Endocrine Society, Volume 5, Issue Supplement_1, April-May 2021, Page A906
34. Loganathan P, Diaz J; Ortega AJ; McCallum R. The 4-Hour Gastric Scintigraphy Emptying Study Identifies a Treatable Diagnosis in Most Patients Being Evaluated for Previously Unexplained Upper Gastrointestinal Post-Prandial Symptoms. Am J Gastroenterol: October 2021 - Volume 116 - Issue - p S658-S659
36. McCallum R; Diaz J; Espino K; Bright T; Dwivedi AK.; Alvarado I.; Davis B; Bashashati M; Padilla, O; Sarosiek I. Normalization of Gastric Emptying After Pyloroplasty in Gastroparetic Patients Can Be Achieved Despite Abnormal Smooth Muscle Histology Am J Gastroenterol: October 2021 - Volume 116 - Issue - p S244
44. **Sarosiek I, Bashashati M, Espino K, Padilla O, Marwaha V, Bright T, Dominguez KA, Davis BR, McCallum RW.** Pyloric Pathology Is A Determinant Of Outcome Of A Double-Blind Randomized Trial Of Gastric Electrical Stimulation Combined With Pyloroplasty Compared To Pyloroplasty Alone In Gastroparesis. Gastroenterology. 2022 May 1;162(7):S-249.


GRANT FUNDING

OPEN, ACTIVE, ONGOING RESEARCH
Investigator Initiated Research Studies
GRANT FUNDED FY22

➢ Administrative Supplement to Gastroparesis Consortium. Co-PIs- Richard McCallum, MD and Irene Sarosiek, MD National Institutes of Health - National Institute of Diabetes and Digestive and Kidney Diseases (NIH/NIDDK). 09/30/2020 - 08/31/2022 $147,930


➢ Saving Sight, Improving Diabetic Eye Screening. PI Tamis Bright, MD. DKBmed/Regeneron - 07/01/2021 06/30/2022 $170,000

➢ Differences in Myocardial Steatosis PI: Deborah Clegg, PhD. DHHS - National Heart Lung and Blood Institute – 02/01/2021 – 01/31/2023 $23,951


Department of Internal Medicine Pilot Small Projects Funded - Cycle 12

Drs. Deoker & Hechanova: Influencing the Impact of Medical Language Barriers in a Multilingual Population

Dr. Dihowm: Evaluating the impact of algorithms on the frequency of ordered lab work by IM residents

Dr. Hechanova: Introduction of Point of Care Ultrasound Curriculum to Increase Resident Exposure, Knowledge, Usability, and Competence (POCUS Study)

Dr. Irene Sarosiek: Correlation of the findings of two diagnostic tests (gastric scintigraphy and electrogastrography) with recordings obtained by utilization of the MoPill Motility Capsule System in healthy volunteers
Pharmaceutically Sponsored Clinical Research Studies Open, Active Clinical Trials

- A Phase 3, Randomized, Double-Blind, Two-Phase, Multicenter Study to Evaluate the Efficacy and Safety of Vonoprazan 20 mg Compared to Lansoprazole 30 mg for Healing in Patients with Erosive Esophagitis and to Evaluate the Efficacy and Safety of Vonoprazan (10 mg and 20 mg) Compared to Lansoprazole 15 mg for the Maintenance of Healing in Patients with Healed Erosive Esophagitis. Pharmaceutical Sponsor: Phathom Pharmaceuticals, Inc. Site Investigator: Marc Zuckerman, MD

- A Phase 3 Randomized Multicenter Study to Evaluate the Efficacy and Safety of Open-Label Dual Therapy with Oral Vonoprazan 20 mg or Double-Blind Triple Therapy with Oral Vonoprazan 20 mg Compared to Double-Blind Triple Therapy with Oral Lansoprazole 30 mg Daily in Patients with Helicobacter Pylori Infection. Pharmaceutical Sponsor: Phathom Pharmaceuticals, Inc. Site Investigator: Marc Zuckerman, MD


- A Phase 3 Randomized Controlled Study of Renal Autologous Cell Therapy (REACT) In Subjects With Type 2 Diabetes And Chronic Kidney Disease. Pharmaceutical Sponsor: ProKidney Site Investigator: Adcel Ahmad, MD

- A Phase 3, Randomized, Double-Blind, Multicenter Study to Evaluate the Efficacy and Safety of Vonoprazan 10 and 20 mg Compared to Placebo for Relief of Heartburn in Subjects with Symptomatic Non-Erosive Gastroesophageal Reflux Disease (NERD) After 4 Weeks and to Evaluate the Efficacy and Safety of Vonoprazan 10 and 20 mg for Relief of Heartburn in Subjects with NERD After 6 Months
Pharmaceutical Sponsor: Phathom Pharmaceuticals, Inc. Site Investigator: Zuckerman, Marc, M.D.

➤ Clinical Validation of An Optimized Multi-Target Stool DNA (mt-sDNA 2.0) Test, for Colorectal Cancer Screening “BLUE-C” Pharmaceutical Sponsor: Exact Sciences Corporation Site Investigator: Marc Zuckerman, MD

➤ A Phase 2, Randomized, Double-Blinded, Placebo Controlled, Parallel Group Study Evaluating The Efficacy And Safety Of Amiselimod (Mt-1303) In Subjects With Mild To Moderate Ulcerative Colitis (UC) Pharmaceutical Sponsor: Salix Pharmaceuticals Inc. Site Investigator: Ihsan Al-Bayati, MD