Annual Research Productivity Report

TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER
EL PASO

Paul L. Foster School of Medicine
Department of Internal Medicine

Department of Internal Medicine

2021 Academic Year

1 July 2020 – 30 June 2021

Prepared by: Sean M. Connery
Dear Friends—

I am very pleased to bring to you the **Department of Internal Medicine’s Annual Research Productivity Report** for 2021.

First of all, let me take this opportunity to thank our faculty, residents and fellows for their hard work and clinical service during the ongoing COVID-19 pandemic. Our research efforts did not escape the challenges that came with COVID-19, but we weathered the storm well by shifting priorities and working remotely as needed. The Department had another productive year with **76** peer-reviewed publications (an increase of **18** over last year), **19** 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 also delighted to welcome **Dr. Deborah Clegg**, Vice President for Research, as a new member of our Department. She has already contributed significantly to this scholarly productivity report with her high-tier articles.

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 (Delta variant) -FREE fall season!

![Signature]

Debabrata Mukherjee, M.D., M.S.
Chair, Department of Internal Medicine
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JOURNAL ARTICLES, ORIGINAL INVESTIGATIONS


autophagosome-lysosome fusion and endolysosomal dynamics. Mol Cell Oncol. 2020 Jul 25;7(5):1789418. PMID 32944643


20. Paszkiewicz RL, Bergman RN, Santos RS, Frank AP, Woolcott OO, Iyer MS, Stefanovski D, Clegg DJ, Kabir M. A Peripheral CB1R Antagonist Increases Lipolysis, Oxygen Consumption Rate, and Markers of Beiging in 3T3-L1 Adipocytes Similar to RIM, Suggesting that Central Effects Can Be Avoided. *Int J Mol Sci.* 2020 Sep 10;21(18):6639. PMID: 32927872


REVIEW - META ANALYSIS

1) Brower RD, Hogg T, Francis MD, Lange RA, Ogden PE. Paul L. Foster School of Medicine, Texas Tech University Health Sciences Center El Paso. Acad Med. 2020 Sep;95(9S A Snapshot of Medical Student Education in the United States and Canada: Reports From 145 Schools);S495-S499. PMID: 33626752


the management of atrial fibrillation with a special focus on non-pharmacological approaches to prevent thromboembolism: a review of current recommendations. J Invest Med. 2020 Dec;68(8):1317-1333. PMID: 33203786


CASE REPORTS


EDITORIAL/COMMENTARY


7. McCallum R. Update on Journal of Investigative Medicine-yes, we are on the right road! J Investig Med. 2021 Mar;69(3):687-688. PMID: 33664153


**LETTER TO THE EDITOR**

**BOOKS/BOOK CHAPTERS**

**BOOKS**


**BOOK CHAPTERS**


Rangaswami J., Lerma E., McCullough P. (eds) Kidney Disease in the Cardiac Catheterization Laboratory. Springer, Cham.


• Mukherjee D. Upper Extremity and Vertebral Angiography and Interventions In: Cardiac Catheterization and Interventional Cardiology Self-Assessment Program (CATHSAP) 5 Update [American College of Cardiology], 2020


• Patel D, Makhija R, Siddiqui T, Mukherjee D. TCT 690. Transbrachial Recanalization of Radial Artery Complicated with Compartment Syndrome. TCT Connect 2020

ABSTRACTS


11) Galura G, Diaz J, **McCallum R**. Identification of a New Entity of Abnormal Gastric Emptying and Implications for Therapy: *Am J Gastroenterol*. 2020;115:S238


13) Gours S, **Philipovskiy A**, Orazi A et al. ABVD (doxorubicin, bleomycin, vinblastine, dacarbazine) as front-line therapy for Hodgkins lymphoma in Hispanic patients: A single center experience from Texas-Mexico Border. *J Clin Oncol* 39, 2021 (suppl 15; abstr e19514


ST-Segment Elevation Myocardial Infarction. *J Am Coll Cardiol* 76 (17 Supplement), B18; October 2020


JOURNAL ARTICLES, ORIGINAL INVESTIGATIONS


REVIEW - META ANALYSIS


CASE REPORTS


EDITORIAL/ COMMENTARY

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BOOK CHAPTERS


Multimedia, Electronic, Online


**ABSTRACTS**


40. Shanker A, Robles A, Deoker A, Sarosiek I; Daryani NE, Rezaie A; Rezaei N; Schmulson M; Zuckerman M; Bashashati M. Cytokine Gene Polymorphisms in Irritable Bowel Syndrome vs Inflammatory Bowel Disease: A Network Meta-Analysis: S0483. *Am J Gastroenterol.* 2020;115:S241
OPEN, ACTIVE, ONGOING RESEARCH

Investigator Initiated Research Studies

GRANT FUNDED FY21

- **New Concepts for Advancing Knowledge in Basic Science, Clinical, and Therapeutic Aspects of Gastroparesis**
  Co-PIs- Richard McCallum, MD and Irene Sarosiek, MD
  National Institutes of Health - National Institute of Diabetes and Digestive and Kidney Diseases (NIH/NIDDK). 09/25/2016 - 08/31/2021 $1,870,531
  - FY17   $382,500
  - FY18   $378,366
  - FY19   $374,151
  - FY20   $369,887
  - FY21   $365,627
  ======
  $1,870,531

- **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 - 08/31/2021 $147,930

- **Effects of COVID-19 in Patients with Gastroparesis: A GpCRC Supplement.**
  Co-PIs- Richard McCallum, MD and Irene Sarosiek, MD

- **Evaluation of mutation and gene expression profiles in breast cancers derived from Hispanic women**
  - Alexander Philipovskiy, MD – UTEP Border Biomedical Research Center. (BBRC) Sub-Award- National Institute on Minority Health and Health Disparities (NIH). 03/01/2020 – 05-31-2021 $40,000

**Department of Internal Medicine Pilot Small Projects Funded - Cycle 11.**

Dr. Harsha S. Nagarajarao: **A 5-Year Retrospective Analysis for Congenital Coronary Artery Anomalies in Adult Patients of Hispanic Origin at the University Medical Center of El Paso**

Dr. Alexander Philipovskiy: **Study of the relationship between the tumor gene-expression profiles and the response to neoadjuvant chemotherapy in patients with local or locally advanced breast cancer**
Dr. Irene Sarosiek: **Endocannabinoid gene polymorphisms in diabetic gastroparesis: a case control study**

Dr. Marc Zuckerman: **The epidemiology of functional gastrointestinal disorders on the U.S Mexico Border based on Rome IV criteria**

**Pharmaceutically Sponsored Clinical Research Studies Open, Active Clinical Trials**

- **A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Phase 2b Study to Evaluate the Efficacy and Safety of Twice-Daily Oral Administration of a Peripherally Acting Dopamine Receptor D2/D3 Antagonist, TAK-906 for the Treatment of Adult Subjects With Symptomatic Idiopathic or Diabetic Gastroparesis.** Pharmaceutical Sponsor: Takeda (Millennium Pharmaceuticals, Inc.) Site Investigators: Richard McCallum, MD Site Sub-Investigator - Irene Sarosiek, MD.

- **A Phase III, Randomized, Double-Blind, Placebo-Controlled Study Evaluating the Efficacy and Safety of GDC-0077 Plus Palbociclib and Fulvestrant Versus Placebo Plus Palbociclib and Fulvestrant in Patients with PIK3CA-Mutant, Hormone Receptor Positive, HER2-Negative Locally Advanced or Metastatic Breast Cancer.** Pharmaceutical Sponsor: Genentech, Inc. Roche Group, Syneos Health, LLC, F. Hoffmann-La Roche Ltd. Site Investigator: Alexander Philipovskiy, MD.


- **A Trial Evaluating Escalating Doses and the Safety of Intracystic Injection of NanoPac® in Subjects with Mucinous Cystic Pancreatic Neoplasms.** Pharmaceutical
Sponsor: US Biotest, Inc. Site Investigator: **Antonio Mendoza Ladd, MD.** Site Sub-Investigator: Sumit Gaur, MD.

- **A Phase 1, Single Dose PK And Safety Study With Ni-03 Followed By A Phase 2, Randomized, Double-Blind, Parallel-Group Dose-Ranging Study To Evaluate The Safety And Efficacy Of Ni-03 Compared To Placebo In Subjects With Chronic Pancreatitis.** Pharmaceutical Sponsor: Stason Pharmaceuticals, Inc. Site Investigator: **Antonio Mendoza Ladd, MD.** Site Sub-Investigator: Marc Zuckerman, MD.

- **MoPill Gastrointestinal Pill Study (MoPill-GPS).** Pharmaceutical Sponsor: Rock West Medical Devices, LLC. Site Investigator: **Richard McCallum, MD.** Site Sub-Investigator: Irene Sarosiek, MD.

- **A Phase 3b, Randomized, Double-blind, Placebo-controlled, Parallel-group Trial of Linaclotide 290 μg Administered Orally for 12 Weeks Followed by a 4-week Randomized Withdrawal Period in Patients with Irritable Bowel Syndrome with Constipation.** Pharmaceutical Sponsor: Ironwood Pharmaceuticals. Site Investigator: **Marc Zuckerman, MD.** Site Sub-Investigator: Antonio Mendoza Ladd, MD.

- **A Phase 3, Randomized, Double-blind, Placebo-controlled, Parallel-group, Multicenter Trial of Oral IW-3718 Administered to Patients with Gastroesophageal Reflux Disease while receiving Proton Pump Inhibitors.** Pharmaceutical Sponsor: Ironwood Pharmaceuticals. Site Investigator: **Marc Zuckerman, MD.** Site Sub-Investigator: Antonio Mendoza Ladd, MD.
A Phase 2, Randomized, Double-blind, Placebo-controlled, Parallel-group, Dose-range finding Study of MD-7246 Administered Orally for 12 Weeks to Treat Abdominal Pain in Patients with Diarrhea-predominant Irritable Bowel Syndrome. Pharmaceutical Sponsor: Ironwood Pharmaceuticals. Site Investigator: Marc Zuckerman, MD Site Sub-Investigator: Antonio Mendoza Ladd, MD.

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 Site Sub-Investigator: Antonio Mendoza Ladd, MD., Sherif Elhanafi, 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 Site Sub-Investigator: Antonio Mendoza Ladd, MD., Sherif Elhanafi, MD.