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
FY 2019
1 September 2018 – 31 August 2019

Prepared by: Sean M. Connery & Karina Espino
Dear Friends,

I am very pleased to bring you the annual Internal Medicine departmental research productivity report for FY19. The department had another productive year, with 47 peer-reviewed publications, several textbooks 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. In addition, department faculty edited two major textbooks—a daunting and impactful undertaking. Let me take this opportunity to congratulate our faculty, residents and fellows who, despite an extremely busy clinical workload, 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.

Finally, I wish all of you a fun and productive fall!

Debabrata Mukherjee, M.D., M.S.
Chair, Department of Internal Medicine
Table of Contents

FACULTY PEER REVIEW/PUBMED PUBLICATIONS
JOURNAL ARTICLES................................................................. 4-5
REVIEW – META ANALYSIS..................................................... 6-7
CASE REPORTS .................................................................... 7-8
LETTER TO THE EDITOR/EDITORIALS/COMMENT .......... 8
BOOKS/BOOK CHAPTERS.................................................... 9-10
MULTIMEDIA ....................................................................... 10-11
ABSTRACTS ........................................................................ 12-14

RESIDENT & FELLOW RESEARCH ACTIVITY (PGY 1-6)
JOURNAL ARTICLES............................................................. 15-16
REVIEW – META ANALYSIS.................................................... 17
LETTER TO THE EDITOR- EDITORIAL ......................... 18
CASE REPORTS .................................................................... 18
ABSTRACTS ........................................................................ 19-21

OPEN, ACTIVE RESEARCH
GRANT FUNDED FY19.......................................................... 21
Department Funded Pilot Small Projects................................................. 22
OPEN, ACTIVE CLINICAL TRIALS.............................................. 22-25
**PubMed Publications**  TTUHSC El Paso Dept of Internal Medicine 2018-2019

**IM Faculty Member**

*Citation format – Uniform requirements for manuscripts submitted to biomedical journals:
International Committee of Medical Journal Editors

**PUBMED PEER REVIEW PUBLICATIONS**

**JOURNAL ARTICLES, ORIGINAL INVESTIGATIONS**


3. Blankenship JC, Choi JW, Das TS, McElgunn PM, Mukherjee D,… et al. *SCAI/ACVP expert consensus statement on cardiovascular catheterization laboratory economics: If the cath lab is your home you should understand its finances: This statement was endorsed by the Alliance of Cardiovascular Professionals (ACVP) in April 2019.* Catheter Cardiovasc Interv. 2019 Jul 1;94(1):123-135. PMID: 31104353


REVIEW - META ANALYSIS


CASE REPORTS


EDITORIALS


**BOOKS/BOOK CHAPTERS**

**BOOKS:**


**BOOK CHAPTERS:**


MULTIMEDIA/Online Publications

1. 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], 2018  https://www.acc.org/education-and-meetings/products-and-resources/cathsap-5


3. Mukherjee D. American Heart Association Science News Commentaries The Under-Recognized Burgeoning Cardiovascular Risks of Water Pipe or Hookah Smoking, May 2019


Abstracts


6. Chaudhary, D; Khan, F; Pinkston, C; Abell, T; Parkman, HP; McCallum, RW; Koch, KL; Kuo, B; Sarosiek, I; et al. Autoimmune Antibodies and Symptoms of Autoimmune Disorder in Gastroparesis Patients. Gastroenterology 2019. Volume 156, Issue 6, S-85–S-86. (Abstract 429)


12. Orthey, P; Van Natta, ML; Parkman, HP; Koch, KL; Kuo, B; Sarosiek, I; …; McCallum, RW; et al. Gastric Retention in Gastroparesis: Relationship of Proximal, Distal, and Total Gastric Retention to Symptoms. *Gastroenterology* 2019. Volume 156, Issue 6, S-792. (Abstract 1589)


15. Parkman, HP; Wilson, I; Koch, KL; Hasler, WL; Nguyen, LAB; Abell, T; Snape, WJ; Clarke, JO; Kuo, B; McCallum RW; Sarosiek I; et al. Does Other End-Organ Damage Correlate with Risk of Gastroparesis in Diabetics? *Gastroenterology* 2019. Volume 156, Issue 6, S-792–S-793. (Abstract 1591)


17. Parkman, HP; Yamada, G; McCallum, RW; Koch, KL; Kuo, B; Sarosiek, I; et al. Body Weight and Body Weight in Gastroparesis: Relationship to Symptoms of Gastroparesis. *Gastroenterology* 2019. Volume 156, Issue 6, S-792. (Abstract 1590)


JOURNAL ARTICLES, ORIGINAL INVESTIGATIONS


REVIEW - META ANALYSIS


LETTER TO THE EDITOR/EDITORIALS/COMMENT


CASE REPORTS


Abstracts


OPEN, ACTIVE, ONGOING RESEARCH

Investigator Initiated Research Studies

GRANT FUNDED FY19


<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
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<tbody>
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<td>FY17</td>
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<td>FY18</td>
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<tr>
<td>FY19</td>
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<tr>
<td>FY20</td>
<td>$369,887</td>
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<tr>
<td>FY21</td>
<td>$365,627</td>
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<td>$1,870,531</td>
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➢ Pathway Exploration and Analysis in Renal Lupus (PEARL) - Accelerating Medicines Partnership (AMP) – PI: F. Payan-Schober, MD, Sub-I A Ahmad, MD. Public-private partnership between the National Institutes of Health (NIH), the U.S. Food and Drug Administration (FDA), 10 biopharmaceutical companies and multiple non-profit organizations. NIH - National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) and the National Institute of Allergy and Infectious Diseases (NIAID).

<table>
<thead>
<tr>
<th>Phase</th>
<th>Duration</th>
<th>Amount</th>
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<tr>
<td>Start Up Phase</td>
<td>July 2015 – Dec 2015</td>
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<tr>
<td>Phase 0</td>
<td>Dec 2015 – May 2016</td>
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<tr>
<td>Phase 1</td>
<td>Jan 2016 - Aug 2016</td>
<td>$29,535</td>
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<td>Phase 2</td>
<td>June 2017 – 31 May 2020</td>
<td>$66,290</td>
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<tr>
<td>Total</td>
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<td>$117,559</td>
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</tbody>
</table>
Department of Internal Medicine Pilot Small Projects Funded - Cycle 10

- Dr. Tamis Bright: Bone Density and Aromatase Inhibitors
- Dr. Javier Corral: Mismatch repair enzyme deficiency in pancreatic cancer amongst Hispanic
- Dr. Alexander Philipovskiy: Adherence of Hispanic/Latina Breast Cancer Patients to Adjuvant Inhibitors (AIs) - Second Phase
- 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-Blinded, Placebo-Controlled Trial to Evaluate the Safety and Efficacy of Inhaled Treprostinil in Subjects with Pulmonary Hypertension due to Parenchymal Lung Disease (INCREASE Study).** Pharmaceutical Sponsor: United Therapeutics Corporation. Site Investigator: Hernando Garcia, MD.

- **An Open-Label Extension study of Inhaled Treprostinil in Subjects with Pulmonary Hypertension due to Parenchymal Lung Disease.** Pharmaceutical Sponsor: United Therapeutics Corporation. Site Investigator: Hernando Garcia, MD.

- **A Phase 3, Randomized, Placebo-controlled, Double-blind, Adaptive Study to Evaluate the Safety and Efficacy of Inhaled Treprostinil in Patients with Pulmonary Hypertension due to Chronic Obstructive Pulmonary Disease (PH-COPD) – (SOUTHPAW Study).** Pharmaceutical Sponsor: United Therapeutics Corporation. Site Investigator: Haider Alkhatbeeb, MD; Alejandro Marmol-Velez, MD. Site-Sub-Investigator: Hernando Garcia, MD.

- **Phase 2 Multicenter, Double-Blind, Placebo Controlled, Efficacy, Safety, and Pharmacokinetic Study of 2 Doses of CXA-10 on Stable Background Therapy in Subjects**
with Pulmonary Arterial Hypertension (PAH) (PRIMEx Study). Pharmaceutical Sponsor: Complexa Inc. Site Investigator: Hernando Garcia, MD.

- **An Open-Label Extension study of Inhaled Treprostinil in Subjects with Pulmonary Hypertension due to Parenchymal Lung Disease.** Pharmaceutical Sponsor: Complexa Inc. Site Investigator: Hernando Garcia, MD.

- **A Phase 3, Randomized, Placebo-controlled, Double-blind, Adaptive Study to Evaluate the Safety and Efficacy of Inhaled Treprostinil in Patients with Pulmonary Hypertension due to Chronic Obstructive Pulmonary Disease (PH-COPD) (PERFECT Study).** Pharmaceutical Sponsor: Lung Biotechnology PBC/ United Therapeutics Corporation. Site Investigator: Hernando Garcia, MD.

- **A Multicenter, Randomized, Double- Controlled Study To Assess The Efficacy Of Tradipitant In Relieving Symptoms Of Blind, Placebo Gastroparesis.** Pharmaceutical Sponsor: Vanda Pharmaceuticals, Inc. Site Investigator: Richard McCallum, MD. Site Sub-Investigator: Irene Sarosiek, MD.

- **A Multicenter, Double-Blind, Randomized, Placebo-Controlled, Parallel-Group Phase 2 Study to Assess the Efficacy, Safety, and Tolerability of Velusetrag for the Treatment of Diabetic or Idiopathic Gastroparesis (DIGEST Study).** Pharmaceutical Sponsor: Theravance Biopharma R&D, Inc. Site Investigator: Richard McCallum, MD. Site Sub-Investigator: Irene Sarosiek, MD.

- **A 12-week, Randomized, Double-blind, Placebo-controlled, Phase 3 Study to Evaluate the Safety and Efficacy of Relamorelin in Patients with Diabetic Gastroparesis.** Pharmaceutical Sponsor: Allergan Sales, LLC. Site Investigator: Richard McCallum, MD. Site Sub-Investigator: Irene Sarosiek, MD.
A 46-week, Double-blind, Placebo-controlled, Phase 3 Study with a 6-week Randomized-withdrawal Period to Evaluate the Safety and Efficacy of Relamorelin in Patients with Diabetic Gastroparesis. Pharmaceutical Sponsor: Allergan Sales, LLC. Site Investigator: Richard McCallum, MD. Site Sub-Investigator: Irene Sarosiek, MD.

A 52-week, Randomized, Double-blind, Placebo-controlled, Phase 3 Study to Evaluate the Safety and Efficacy of Relamorelin in Patients with Diabetic Gastroparesis. Pharmaceutical Sponsor: Allergan Sales, LLC. Site Investigator: Richard McCallum, MD. Site Sub-Investigator: Irene Sarosiek, MD.


A Randomized, Controlled Double-blind Study Comparing the Efficacy and Safety of Orelvo (voclosporin) (23.7 mg Twice Daily) with Placebo in Achieving Renal Response in Subjects with Active Lupus Nephritis (AURORA 01 Study). Pharmaceutical Sponsor: Aurinia Pharmaceuticals Inc. Site Investigator: Fernanda Payan-Schober, MD. Site Sub-Investigator: Adeel Ahmad, MD.

A Randomized, Controlled, Double-blind, Continuation Study Comparing the Long-term Safety and Efficacy of Orelvo (voclosporin) (23.7 mg Twice Daily) with Placebo in Subjects with Lupus Nephritis (AURORA 02 Study). Pharmaceutical Sponsor: Aurinia Pharmaceuticals Inc. Site Investigator: Fernanda Payan-Schober, MD. Site Sub-Investigator: Adeel Ahmad, 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.

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.