

MANJUNATH (“AMIT”) P. PAI

**Office Contact Information**

College of Pharmacy, [University of Michigan](#)
 3569 CCL, 428 Church Street, Ann Arbor, MI 48109
 Email amitpai@med.umich.edu
 Research Profile: <https://pharmacy.umich.edu/pai-lab>

Current Status

USA – Naturalized Citizen (June 2006)

Date & Place of Birth

September 22, 1976, Lusaka, Zambia, Southern Africa

Secondary Education

Cambridge IGCSE with Distinction, International School of Lusaka, Zambia (1992)

Education**Pre-Pharmacy Coursework** (1992 – 1994)

Cerritos College, Norwalk, California

Doctor of Pharmacy (1994 – 1998)*Honors Program*

Mentor: Daniel J. Acosta, Jr., Ph.D.

College of Pharmacy, The University of Texas at Austin & The University of Texas, Health Sciences Center at San Antonio

Post Doctoral Training**Pharmacy Practice Residency** (1998 – 1999)

Clinical Pharmacology Service, Bassett Healthcare, Cooperstown, New York

Mentor: Joseph S. Bertino, Jr., Pharm.D.

Fellowship in Infectious Diseases Pharmacotherapy (1999 – 2001)

College of Pharmacy, University of Illinois at Chicago

Mentors: Keith A. Rodvold, Pharm.D., Larry H. Danziger, Pharm.D.

Clinical Research Scholars Program (2001 – 2003)

General Clinical Research Center, University of New Mexico

Mentor: Corey C. Ford, M.D., Ph.D.

Clinical and Translation Science Center Scholar – KL2 (2006 – 2008)

CTSC, School of Medicine, University of New Mexico

Mentor: C. Richard Lyons, M.D., Ph.D.

Academic Leadership Program Fellow (2021 – 2022)

Big Ten Academic Alliance, [University of Michigan](#)

Current Position**Chair, Department of Clinical Pharmacy** (July 2020- Present)**Professor with Tenure** (September 2020 – Present)

College of Pharmacy, [University of Michigan](#)

Co-Director of the [PK Core](#) (July 2016 – Present)

College of Pharmacy, [University of Michigan](#)

Shared Resource, UM Comprehensive Cancer Center

Associate Director, Pharmacomorphomics for the [Morphomics Analysis Group](#)

Michigan Medicine, [University of Michigan](#)

Research Affiliations**Faculty Affiliate, Michigan Center for Infectious Diseases Threats**

[University of Michigan](#)

Faculty Affiliate, Center for Research on Complex Generics

University of Maryland, Baltimore & [University of Michigan](#)

Member, Michigan Metabolomics and Obesity CenterMichigan Medicine, [University of Michigan](#)**Member, Weil Institute for Critical Care Research & Innovation**Michigan Medicine, [University of Michigan](#)**Member, Caswell Diabetes Institute**Michigan Medicine, [University of Michigan](#)**Member, Rogel Cancer Center**Michigan Medicine, [University of Michigan](#)**Employment History****Associate Professor with Tenure** (July 2016 – August 2020)College of Pharmacy, [University of Michigan](#)**Professor with Tenure** (May 2015 – June 2016)

Albany College of Pharmacy and Health Sciences, Albany, New York

Associate Professor, Tenure Track (April 2009 – April 2015)

Albany College of Pharmacy and Health Sciences, Albany, New York

Scientist, Translational Medicine (October 2008 – March 2009)

Institute for Clinical Pharmacodynamics, Ordway Research Institute, Latham, New York

Associate Professor with Tenure (July 2007 – September 2008)

College of Pharmacy, University of New Mexico, Albuquerque, New Mexico

Assistant Professor, Tenure Track (August 2001 – June 2007)

College of Pharmacy, University of New Mexico, Albuquerque, New Mexico

Licensure

New York Pharmacist License (053446) Renewal Date: 8/31/2026

Illinois Pharmacist License (051.287468) Renewal Date: 03/31/2026

Michigan Pharmacist License (5302045545) Renewal Date: 05/26/2025

Honors and Awards**Russell R Miller Award**, American College of Clinical Pharmacy (2023)**Excellence in Achievement**, American College of Clinical Pharmacology (2020)**Pharmacotherapy Paper of the Year**, Society of Infectious Diseases Pharmacists (2019)**Fellow**, American College of Clinical Pharmacology (2018)**Preceptor of the Year**, Albany College of Pharmacy and Health Sciences (2014)**Researcher of the Year**, Albany College of Pharmacy and Health Sciences (2014)**Impact Paper of the Year**, Society of Infectious Diseases Pharmacists (2013)**Regulatory Science Excellence Award**, Renal Drug Dosing Group, Center for Drug Evaluation and Research, United States Food and Drug Administration (US FDA), Silver Spring, MD (2011)**Teacher of the Year**, College of Pharmacy, UNM, Albuquerque, NM. (2008)**Young Investigator Award**, Society of Infectious Diseases Pharmacists (2007)**Drug Therapy Research Award**, American Society of Health Systems Pharmacy (2007)**Preceptor of the Year**, College of Pharmacy, UNM, Albuquerque, NM. (2005)**Teacher of the Year**, College of Pharmacy, UNM, Albuquerque, NM. (2004)**Fellowship Research Award**, College of Pharmacy, UIC, Chicago, IL. (2001)**Pharmacy Alumni Association Endowed Scholarship**, College of Pharmacy, UT Austin, Austin, TX. (1997)**Rho Chi**, College of Pharmacy, UT Austin, Austin, TX. (1995)**Award of Excellence in Chemistry**, Cerritos College, Norwalk, CA. (1994)**Award of Excellence in Pre-Pharmacy**, Cerritos College, Norwalk, CA. (1994)

SCHOLARSHIP

Narrative: My research program over the past approximately 25 years has focused on optimizing drug doses in specific populations that are underrepresented in clinical trials. This work has included the use of *in vitro*, *in vivo*, and *in silico* pharmacokinetic and pharmacodynamic (PK-PD) models to bridge the translational gap between drug potency, on-target, and off-target effects on safety and efficacy. My research focus has led to improvements in antimicrobial dosing in patients across body size, lifespan, and organ dysfunction (renal impairment). My career has seen multiple cycles of re-invention and growth of new skillsets to adapt to changes in research funding opportunities. Since taking on the role of co-director of a pharmacokinetic core laboratory, my knowledgebase of drug metabolism and pharmacokinetics (DMPK), analytical chemistry, and team-science approach has expanded. I have begun to apply physiology based pharmacokinetic models (PBPK) to aid dosage scaling across species and nanomedicine biodistribution, application of population pharmacokinetic models with semi-mechanistic body composition (morphomic) parameters to aid dose individualization. Most recently my research group has secured federal support for a new discipline that I coined as “Pharmacomorphomics”. My research knowledgebase, collegiality, and passion for scholarship allow me to lead a sustainable research program by fostering team-science based collaborations as well as independent research. The following scholarship sections reflect my independent and collaborative team-science role. My collaborative network, scholarly activity, and grant funding is also accessible [here](#).

GRANTS AWARDED (amount in total dollars)

1. **National Institutes of Health, UM1AI104681-12.** \$266,053. Bioanalysis of Cefepime, Meropenem, and Iohexol for the ARLG OPTIMIZE GNI Study. [University of Michigan College of Pharmacy](#). Project Period April 2024 - March 2027. 2.5% Salary Support. **Principal-Investigator (Pai)**
2. **National Institutes of Health, R01HD110921.** \$489,140. The PediatRic sEpiS induCed MODS: Relationship of Immune-phenotypes and antibiotic Exposures (PRESCRIBE) study [University of Michigan College of Pharmacy](#). Project Period June 2023 - October 2028. 2.5% Salary Support. **Sub-Award Principal-Investigator (Pai)**, Principal Investigators (Downes).
3. **US Food and Drug Administration (FDA), HHS75F40122C00147.** \$400,000. Advancing Methods to Optimize Antimicrobial Dosing in Patients with Obesity. [University of Michigan College of Pharmacy](#). Project Period September 2022 – September 2025. 10% salary support. **Co-Principal Investigators (Pai/Wang)**.
4. **National Institutes of Health, R01HD103755-01A1.** \$748,956. Assessment of MODS and Personalized Exposures of Antibiotics (AMPLE). [University of Michigan College of Pharmacy](#). Project Period November 2021 - October 2026. 2.5% Salary Support. **Sub-Award Principal-Investigator (Pai)**, Principal Investigators (Downes, Scheetz).
5. **Agency for Healthcare Research and Quality, R01HS027788.** \$2,429,906. Precision coordination of therapeutic and prophylactic antibiotics to reduce infection, toxicity, and emergence of resistance following acute abdominal surgery. [University of Michigan College of Pharmacy](#). Project Period August 2021 - July 2026. 10% Salary Support. **Co-Principal Investigators (Pai/Wang)**.
6. **American Foundation for Pharmaceutical Education, Fellowship.** \$20,000. Home-based therapeutic drug monitoring of immunosuppression in kidney transplantation. [University of Michigan College of Pharmacy](#). Project Period August 2021 - July 2022. 0% Salary Support. **Co-Principal Investigators (Pai/Leino)**. In support of my graduate student – Abbie Leino
7. **US Food and Drug Administration (FDA), HHS75F40120C00200.** \$2,212,490. Setting Patient-Centric Quality Standards (PCQS) for Modified Release (MR) Oral Drug Products with Biopredictive *In Vitro* Dissolution-Models. [University of Michigan College of Pharmacy](#). Project Period September 2020 – November 2023. 10% salary support. **Co-Principal Investigators (Pai/Sun)**.

8. **US Food and Drug Administration (FDA), HHS75F40120C00200.** \$2,500,000. Center for Research on Complex Generics. [University of Michigan College of Pharmacy](#). Project Period September 2020 – August 2025. 0% salary support. **Co-Investigator (Pai)**, Principal Investigator (Schwendeman A).
9. **National Institutes of Health, R01CA248310.** \$2,679,777. Development of a first-in-class mEGFR dimerization inhibitor. [University of Michigan College of Pharmacy](#). Project Period September 2019 - August 2024. 5% Salary Support. **Co-Investigator (Pai)**, Principal Investigator (Nyati, Lawrence).
10. **Agency for Healthcare Research and Quality, R01HS027183.** \$2,383,921. Precision Prophylaxis of Surgical Site Infection Utilizing Pharmacomorphomics. [University of Michigan College of Pharmacy](#). Project Period September 2019 - August 2024. 10% Salary Support. **Co-Investigator (Pai)**, Principal Investigator (Wang SC).
11. **National Institutes of Health, R01GM127787-04.** \$2,033,563. L-Carnitine as a Metabolic Biomarker of Drug Toxicity Risk. [University of Michigan College of Pharmacy](#). Project Period January 2019 - November 2022. 20% Salary Support. **Principal-Investigator (Pai Y4, Rosania Y1-3)**
12. **Cystic Fibrosis Foundation, Clinical Pilot and Feasibility Award.** \$169,375. Pharmacokinetics of Polymyxin B in Adult Patients with Cystic Fibrosis. [University of Michigan College of Pharmacy](#). Project Period August 2019 - July 2021. 5% salary support. **Principal Investigators (Pai/Jia)**.
13. **American Heart Association.** \$3,709,200. Michigan Resuscitation Innovation and Science Enterprise (M-RISE). [University of Michigan College of Pharmacy](#). Project Period July 2019 - June 2023. 5% Salary Support. **Co-Investigator (Pai)**, Principal Investigator (Neumar, Nallamothu, Sanderson, Silbergeit)
14. **Massey Traumatic Brain Injury Grand Challenge.** \$219,952. Valproic Acid Treatment for Varying Severities of Traumatic Brain Injury. [University of Michigan College of Pharmacy](#). Project Period August 2019 - July 2020. 10% Salary Support. **Principal Investigators (Alam, Biervesteld, Pai)**
15. **Hematology/Oncology Pharmacy Association.** \$50,000. Optimizing Brain Tumor Precision Medicine. [University of Michigan College of Pharmacy](#). Project Period January 2019- December 2019. 100% of Grant Budget allocated to PK Core. **Co-Investigator (Pai MP)**, Principal Investigator (Marini)
16. **National Institutes of Health, P30 CA046592.** \$25,095,073. Rogel Cancer Center Support Grant. [University of Michigan College of Pharmacy](#). Project Period June 2018- May 2023. 5% salary support. **Assistant Core Direct-PK Core (Pai MP)**, Principal Investigator (Fearon).
17. **Merck. Investigator Initiated Research Grant, PAF04623.** \$164,853. Preclinical Evaluation of the Vancomycin Dose-Nephrotoxicity Relationship when Combined with Piperacillin/Tazobactam or Imipenem-Cilastatin/Relebactam (MK-7655A). [University of Michigan College of Pharmacy](#). Project Period June 2018 – June 2021. 1% salary support. **Principal-Investigator (Pai MP)**.
18. **Department of Defense US Army, BA150793.** \$3,046,174. Dose Optimization of Valproic Acid in a Swine Model of Traumatic Brain Injury, Hemorrhage, and Poly-Trauma, with the Initiation of a Clinical Trial. [University of Michigan College of Pharmacy](#). Project Period May 2017 – November 2021. 10% salary support. **Co-Investigator (Pai MP)**, Principal Investigators (Alam).
19. **US Food and Drug Administration (FDA), HHSF22301310144C.** \$3,526,785. Modernization of in vivo-in vitro Oral Bioperformance Prediction and Assessment. [University of Michigan College of Pharmacy](#). Project Period September 2013 – November 2017. 10% salary support. **Co-Investigator (Pai MP)**, Principal Investigators (Amidon/Sun).
20. **US Food and Drug Administration (FDA), HHSF22301310144C.** \$1,390,802. Wireless Pharmaceutical Analysis Device (WPAD) and Computational Model to Determine in Vivo Drug Dissolution in GI Tract for Distinguishing Meaningful Product Differences and Ensuring Bioequivalence. [University of Michigan College of Pharmacy](#). Project Period September 2015 – September 2018. 5% salary support. **Co-Investigator (Pai MP)**, Principal Investigators (Sun).

21. **National Institutes of Health, P30 CA046592.** \$3,937,767. University of Michigan Cancer Center Support Grant. University of Michigan College of Pharmacy. Project Period September 2012- May 2018. 7% salary support. **Assistant Core Direct-PK Core (Pai MP),** Principal Investigator (Fearon).
22. **New York State Department of Health, Wadsworth Center and Albany College of Pharmacy and Health Sciences. Investment in Collaborative Research.** \$375,000. Modeling the genetic basis for the development of antimicrobial resistance. Albany College of Pharmacy and Health Sciences. Project Period January 2016 – June 2016. 5 % salary support. **Multiple Principal Investigators (Pai MP, Malik M, McDonough K, Pata J).**
23. **Cubist Pharmaceuticals. Investigator Initiated Research Grant.** \$179,824. Single Dose Pharmacokinetics of Intravenous Tedizolid Phosphate in Morbidly Obese and Age-, Sex-, and Ideal Body Weight-Matched Non-Obese Adults. Albany College of Pharmacy and Health Sciences. Project Period March 2015 – February 2016. 10% salary support. **Principal Investigator (Pai MP)**
24. **National Institutes of Health, US FDA 1U01-FD004889-01.** \$499,999. An *in vitro-in vivo* correlation model to predict serum non-transferrin bound iron. Albany College of Pharmacy and Health Sciences. Project Period September 2013 – September 2014 (6 month NCE). 20% salary support. **Co-Investigator (Pai MP),** Principal Investigator (Pai AB).
25. **Forest Pharmaceuticals, Inc. Investigator Initiated Research Grant.** \$137,512. Ceftaroline Fosamil versus Standard of Care for Community-Acquired Bacterial Pneumonia: Clinical Outcomes among Hospitalized Adults at a Single United States Hospital. Albany College of Pharmacy and Health Sciences. Project Period January 2012 – December 2013. 2% salary support. **Co-Investigator (Pai MP),** Principal Investigator (Lodise TP).
26. **Pfizer, Inc. Investigator Initiated Research Grant.** \$198, 491. Pharmacokinetics of tigecycline in morbidly obese subjects. Albany College of Pharmacy and Health Sciences. Project Period November 2011 – March 2013. 10% salary support. **Principal Investigator (Pai MP).**
27. **Center for Drug Evaluation and Research (Intramural-Critical Path Initiative), US FDA.** \$75,190. Optimizing Weight-Based Drug Dosing in Obese Patients with Kidney Impairment. Albany College of Pharmacy and Health Sciences. Project Period July 2011 – June 2012. No salary permitted. **Co-Principal Investigator (Pai MP and Xu N).**
28. **National Kidney Foundation of Northeast New York.** \$29,997. Reducing the risk of drug-related nephrotoxicity in obese patients. Albany College of Pharmacy and Health Sciences. Project Period July 2010 – June 2011. No salary permitted. **Principal Investigator (Pai MP).**
29. **Roche Laboratories, Inc. Investigator Initiated Research Grant.** \$253, 579. Pharmacokinetics of oseltamivir carboxylate in morbidly obese subjects. Albany College of Pharmacy and Health Sciences. Project Period February 2010 – June 2011. 5% salary support. **Principal Investigator (Pai MP).**
30. **Pfizer, Inc. Investigator Initiated Research Grant.** \$109, 397. Pharmacokinetics of voriconazole in obese subjects. Albany College of Pharmacy and Health Sciences. Project Period July 2009 – June 2010. 3% salary support. **Principal Investigator (Pai MP).**
31. **Cubist Pharmaceuticals. Investigator Initiated Research Grant.** \$99,412. Evaluating the epidemiology and outcomes of patients with MRSA bloodstream infections that express heteroresistance to vancomycin. Albany College of Pharmacy and Health Sciences. Project Period November 2009 – October 2010. No salary support. Role: **Co-Investigator (Pai MP),** Principal Investigator (Lodise TP)
32. **Clinical and Translational Science Center, Research Career Development Award.** 0.75 FTE (\$75,000/year). Brain antifungal pharmacodynamics: Use of ¹⁹F-Magnetic Resonance Spectroscopy and Microdialysis. University of New Mexico, College of Pharmacy. Project Period 2006-2008. **Principal Investigator (Pai MP)**
33. **Astellas Pharma, Inc. Research Grant, pMS-06-001.** \$30,492. Pharmacodynamic evaluation of micafungin, liposomal amphotericin B, and flucytosine in an *in vitro* fibrin clot model of *Candida albicans* infective endocarditis. University of

New Mexico, College of Pharmacy. Project Period 2006-2007. **Principal Investigator (Pai MP)**.

34. **General Clinical Research Center Grant, NCR, NIH 5 M01 RR00997**. \$3,080. Accuracy of creatinine clearance equations in morbidly obese patients: Influence of central body fat distribution. University of New Mexico, College of Pharmacy. Project Period 2005-2007. **Principal Investigator (Pai MP)**.
35. **Clinical Research Feasibility Fund Grant, NCR, NIH 5 M01 RR00997**. \$20,000. Dose ranging study of an oral curcumin/piperine formulation in adult cystic fibrosis patients: Assessment of safety, pharmacokinetics, and disease modifying effects. University of New Mexico, College of Pharmacy. Project Period 2005-2006. **Principal Investigator (Pai MP)**.
36. **Society of Infectious Diseases Pharmacists**. \$20,000. Pharmacodynamic evaluation of antifungals in an in vitro model of *Candida* spp. infective endocarditis. University of New Mexico, College of Pharmacy. Project Period 2005-2006. **Principal Investigator (Pai MP)**.
37. **Astellas Pharma, Inc. Research Grant**. \$7,500. Activity of micafungin against *Candida* species using antibiotic medium #3. University of New Mexico, College of Pharmacy. Project Period 2004-2005. **Principal Investigator (Pai MP)**.
38. **Cubist Pharmaceuticals, Inc. Independent Research Grant**. \$26,069. Investigator Initiated. Characterization of daptomycin pharmacokinetics and glomerular filtration rate in morbidly obese patients. University of New Mexico, College of Pharmacy. Project Period: 2004-2005. **Principal Investigator (Pai MP)**.
39. **Pfizer, Inc. Independent Research Grant**. \$10,062. Investigator Initiated. Retrospective analysis of vancomycin-induced neutropenia in patients with serious gram-positive infection. University of New Mexico, College of Pharmacy. Project Period: 2004-2005. **Principal Investigator (Pai MP)**.
40. **University of New Mexico Resource Allocation Committee (RAC) Grant**. \$10,000. Investigator Initiated. Effects of intravenous iron sucrose on the rate of *Staphylococcus aureus* growth in uremic serum. University of New Mexico, College of Pharmacy. Project Period: 2004-2005. **Co-Principal Investigator (Pai MP)**, Co-Principal Investigator (Pai AB).
41. **American Association of Colleges of Pharmacy, New Investigator Award**. \$10,000. The effect of calcium supplementation on the steady-state pharmacokinetics of oral once daily 750-milligram doses of levofloxacin in adult cystic fibrosis patient. University of New Mexico, College of Pharmacy. Project Period 2003-2004. **Principal Investigator (Pai MP)**.
42. **Western Alliance to Expand Student Opportunities**. \$1,756. Time-kill analysis of antifungal combinations against *Candida albicans*. University of New Mexico, College of Pharmacy. Project Period Fall 2003. **Principal Investigator (Pai MP)**.
43. **Fujisawa, Inc. Research Grant**. \$9,665. A prospective evaluation of the epidemiology and susceptibility of *Candida* isolates using the NCCLS and YeastOne® Methods. University of New Mexico, College of Pharmacy. Project Period 2003-2004. **Principal Investigator (Pai MP)**.
44. **General Clinical Research Center Grant, NCR, NIH 5 M01 RR00997**. \$11,292. Assessment of effective renal plasma flow, enzymuria and cytokine release during the administration of amphotericin B in healthy volunteers. University of New Mexico, College of Pharmacy. Project Period 2003-2004. **Principal Investigator (Pai MP)**.
45. **Western Alliance to Expand Student Opportunities**. \$1,756. Antifungal activity of *Melaleuca alternifolia* (Tea Tree) oil against *Candida* species during stationary and exponential phase growth. University of New Mexico, College of Pharmacy. Project Period: Fall 2002. **Principal Investigator (Pai MP)**.
46. **Pfizer, Inc. Research Grant**. \$22,000. Investigator Initiated. A prospective evaluation of the epidemiology and susceptibility of *Candida* isolates. University of New Mexico, College of Pharmacy. Project Period: 2001-2002.

Principal Investigator (Pai MP).

- 47. Merck Research Grant.** \$20,000. Investigator Initiated. Antimicrobial resistance and patient outcomes among patients with documented bacteremia: Correlating resistance with patient outcomes using palm pilots. University of Illinois at Chicago, College of Pharmacy. Project Period: 2000-2001. **Co-Investigator (Pai MP)**, Principal Investigator (Danziger LH).
- 48. Roche Laboratories Research Grant.** \$110,000. Investigator Initiated. The steady state pharmacokinetics of once daily saquinavir-SGC in antiretroviral naïve HIV infected female patients. University of Illinois at Chicago, College of Pharmacy. Project Period: 2000-2001. **Co-Investigator (Pai MP)**, Principal Investigator (Rodvold KA)

CONTRACTS AWARDED (amount in total dollars)

- 1. NanoMedicine Innovation Center, Contract.** \$551,201. Formulation Based Paclitaxel Tumor and Tissue Localization by Mass Spectrometry Imaging in non-carrier strain (FVB) and PyMT transgenic mouse model of Breast Cancer. University of Michigan College of Pharmacy. Project Period June 2018 – May 2020. 5% salary support. **Principal-Investigator (Pai MP)**
- 2. NanoMedicine Innovation Center, Contract.** \$360,674. Tumor and Tissue Localization of Doxorubicin and Liposomal-Doxorubicin Formulations in PyMT transgenic & its orthotopic xenograft mouse models. University of Michigan College of Pharmacy. Project Period March 2018 – March 2020. 5% salary support. **Principal-Investigator (Pai MP)**
- 3. NanoMedicine Innovation Center, Contract.** \$163,859. Single-Dose Pharmacokinetics and Tissue Distribution of Intravenous and Subcutaneous Administered Novel Formulation of Compound VTX-2337. University of Michigan College of Pharmacy. Project Period December 2017 – June 2019. 5% salary support. **Principal-Investigator (Pai MP)**
- 4. Spero Therapeutics, Contract.** \$184,100. Stability and compatibility of SPR741 solutions with common intravenously administered antibiotics. University of Michigan College of Pharmacy. Project Period September 2017 – August 2018. 10% salary support. **Principal-Investigator (Pai MP)**, Co-Investigator (Sun D)
- 5. NanoMedicine Innovation Center, Contract.** \$288,186. Single-Dose Pharmacokinetics and Tissue Distribution of Intravenous and Subcutaneous Administered Reference Listed Drug (RLD) and Alternate Formulation. University of Michigan College of Pharmacy. Project Period June 2017 – June 2018. 5% salary support. **Principal-Investigator (Pai MP)**
- 6. Celgene, Corp.** \$190,000. Altered elimination and metabolism of abraxane in comparison with taxol in FcRn knockout and wild-type mice. University of Michigan College of Pharmacy. Project Period December 2016 – May 2017. 8.33% salary support. **Principal-Investigator (Sun D)**, **Co-Investigator (Pai MP)**
- 7. Pfred Pharma, LLC.** \$13,626.18. Comparison of the reconstitution of lyophilized productions of piperacilin and tazobactam for Injection. Albany College of Pharmacy and Health Sciences. Project Period: January 2014 – June 2014. 2% salary support. **Co-Principal Investigator (Pai MP)**, Co-Principal Investigator (Zheng H)
- 8. Luminous Medical, Inc.** \$10,764. Interference screening for optical glucose measurements. University of New Mexico, College of Pharmacy. Project Period 2006-2007. **Co-investigator (Pai MP)**, Principal Investigator (Felton LA)
- 9. University of Houston.** \$9,250. *Candida* susceptibility testing and outcomes data. University of New Mexico, College of Pharmacy. Project Period: 2004-2005. **Principal Investigator (Pai MP)**.

INTRAMURAL AWARD

- 1. University of Michigan.** Assistant/Associate Professor Position. 0.5 FTE (in perpetuity) + 50% Start-Up. Racial Justice in Healthcare: Informatics and Data-Driven Approaches. Provost anti-racism hiring initiative. Project Period: 2021 –

Present. Leads (Pai, Moyer, Vienot [contact lead], Jones, Anthony). One of two proposals selected out of 11 from 15 schools and colleges across the university in round-one.

2. **Michigan Diabetes Research Center, DISP 2021. \$70,000.** Engineering a type 2 diabetes precision drug dosing model. University of Michigan College of Pharmacy. Project Period January 2022 - December 2023. 0% Salary Support. Co-Principal Investigators (Pai/Rothberg). In support of my graduate student – Shuhan Liu

PUBLICATIONS AND BROADCASTS

Scholarly Products: 200

Google Scholar Statistics:

Citations: 8,663 h-index: 43 i10-index: 117

Books

1. *Drug Interactions in Infectious Diseases: Mechanisms and Models of Drug Interactions, Fourth Edition.* Editors: **Pai MP**, Kiser JJ, Gubbins PO, Rodvold KA. Springer, New York, NY. 2018
2. *Drug Interactions in Infectious Diseases: Antimicrobial Drug Interactions, Fourth Edition.* Editors: **Pai MP**, Kiser JJ, Gubbins PO, Rodvold KA. Springer, New York, NY. 2018
3. *Drug Interactions in Infectious Diseases, Third Edition.* Editors: Piscitelli S, Rodvold KA, **Pai MP**. Springer, New York, NY. 2011

Radio Broadcasts and Podcasts

1. **Pai MP**, Kyler K. Weighting on a Miracle: Understanding Unknowns of Dosing Children and Adults with Obesity. SIDP Breakpoints Episode #80, Aired 6/02/23. <https://sidp.pinecast.co/>
2. Crass RC, **Pai MP**. Dosing Consult: Linezolid Therapeutic Drug Monitoring. SIDP Breakpoints Episode #61, Aired 8/19/22. <https://sidp.pinecast.co/>
3. **Pai MP**. Drug Dosing in Obesity. *Academic Minute*, Aired 6/7/2011. WAMC, Northeast Public Radio.
4. **Pai MP**, Lodise TP Jr. Weight based versus fixed dosing of daptomycin. *ACCP Podcasts*, Aired 9/28/2018. Episode 28.

Original Research Publications (*Indicates Corresponding Author)

2024

1. Wangchinda W, Pogue JM, Thamlikitkul V, Leelawattanachai P, Koomanachai P, **Pai MP***. Population pharmacokinetic/pharmacodynamic target attainment analysis of IV fosfomycin for the treatment of MDR Gram-negative bacterial infections. *J Antimicrob Chemother*. 2024 Apr 10:dkae111. doi: 10.1093/jac/dkae111. Epub ahead of print.
2. Angelini J, Liu S, Giuliano S, Flammini S, Martini L, Tascini C, Baraldo M, ***Pai MP**. Revolutionizing Daptomycin Dosing: A Single 7-11 Hour Sample for Pragmatic Application. *Clin Infect Dis*. 2024 Mar 29:ciae178. doi: 10.1093/cid/ciae178. Epub ahead of print
3. Koschmann C, Al-Holou WN, Alonso MM, Anastas J, Bandopadhyay P, Barron T, Becher O, Cartaxo R, Castro MG, Chung C, Clausen M, Dang D, Doherty R, Duchatel R, Dun M, Filbin M, Franson A, Galban S, Garcia Moure M, Garton H, Gowda P, Marques JG, Hawkins C, Heath A, Hulleman E, Ji S, Jones C, Kilburn L, Kline C, Koldobskiy MA, Lim D, Lowenstein PR, Lu QR, Lum J, Mack S, Magge S, Marini B, Martin D, Marupudi N, Messenger D, Mody R, Morgan M, Mota M, Muraszko K, Mueller S, Natarajan SK, Nazarian J, Niculcea M, Nuechterlein N, Okada H, Opiari V, **Pai MP**, Pal S, Peterson E, Phoenix T, Prensner JR, Pun M, Raju GP, Reitman ZJ, Resnick A, Rogawski D, Saratsis A, Sbergio SG, Souweidane M, Stafford JM, Tzaridis T, Venkataraman S, Vittorio O, Wadden J, Wahl D, Wechsler-Reya RJ, Yadav VN,

Zhang X, Zhang Q, Venneti S. A road map for the treatment of pediatric diffuse midline glioma. *Cancer Cell*. 2024 Jan 8;42(1):1-5. doi: 10.1016/j.ccell.2023.11.002. Epub 2023 Nov 30.

4. Takyi-Williams J, Leino AD, Li R, Downes KJ, Zuppa AF, Bwint A, Sun D, Scheetz MH, **Pai MP***. Bioanalysis of Six Antibiotics from Volumetric Microsamples: A New Tool for Precision Dosing in Critically Ill Children. *Bioanalysis* 2024 Jan;16(1):19-31. doi: 10.4155/bio-2023-0171.

2023

5. Hall RG*, Liu S, Putnam WC, Kallem R, Gumbo T, **Pai MP**. Optimizing anidulafungin exposure across a wide adult body size range. *Antimicrob Agents Chemother* 2023 Nov 15;67(11):e0082023. doi: 10.1128/aac.00820-23.
6. Jennaro TS, Puskarich MA, Flott TL, McLellan LA, Jones AE, **Pai MP**, Stringer KA*. Kidney Function as a Key Driver of the Pharmacokinetic Response to High-Dose L-Carnitine in Septic Shock. *Pharmacotherapy*. 2023 Sep 29. doi: 10.1002/phar.2882. Epub ahead of print.
7. Leino AD, Magee JC, Kershaw DB, **Pai MP**, Park JM*. A comprehensive mixed-method approach to characterize the source of diurnal tacrolimus exposure variability in children: Systematic review, meta-analysis, and application to an existing dataset. *J Clin Pharmacol*. 2023 Sep 23. doi: 10.1002/jcph.2352. Epub ahead of print.
8. Liu S, Matvekas A, Al Naimi T, Ghanem A, Li R, Rajapakse K, Derstine B, Ross B, Wullivan J, Yun H, Regenbogen S, Byrn J, Su G, Wang S, **Pai MP***. Morphomics-Informed Population Pharmacokinetic and Physiologically-Based Pharmacokinetic Modeling to Optimize Cefazolin Surgical Prophylaxis. *Pharmacotherapy* 2023 Sep 20. doi: 10.1002/phar.2878. Epub ahead of print.
9. **Pai MP***, Cojutti PG, Gerussi V, Della Siega P, Tascini C, Pea F. Linezolid Population Pharmacokinetics to Improve Dosing in Cardiosurgical Patients: Factoring a New Drug-Drug Interaction Pathway. *Clin Infect Dis*. 2023 Apr 3;76(7):1173-1179. doi: 10.1093/cid/ciac917.
10. Pasternak A*, Park J, **Pai MP**. Evaluating the predictive capacity of population pharmacokinetic models on tacrolimus dose requirements in pediatric solid organ transplant recipients. *Therapeutic Drug Monitoring* 2023 Feb 1;45(1):95-101, doi: 10.1097/FTD.0000000000001002
11. Jin G, Ho JW, Keeney-Bonthrone TP, Pai MP, Wen B, Ober RA, Dimonte D, Chtraklin K, Joaquin TA, Latif Z, Vercruyse C, Alam HB. Prolonging the therapeutic window for valproic acid treatment in a swine model of traumatic brain injury and hemorrhagic shock. *J Trauma Acute Care Surg*. 2023 Jun 14. doi: 10.1097/TA.0000000000004022. Epub ahead of print.
12. Yun HG, Smith AJF, DeBacker KC, **Pai MP***. Estimated Glomerular Filtration Rate with and without Race for Drug Dosing: Cystatin C versus Serum Creatinine. *Br J Clin Pharmacol*. 2022 Nov 11. doi: 10.1111/bcp.15592. Epub ahead of print
13. **Pai MP***, Sitaruno S, Abdelnabi M. Removing race and body surface area indexation for estimated kidney function based drug dosing: Aminoglycosides as justification of these principles. *Pharmacotherapy*. 2022 Nov 19. doi: 10.1002/phar.2746. Epub ahead of print.

2022

14. Leino AD, Takyi-Williams J, Wen B, Sun D, **Pai MP***. Application of a new volumetric microsampling device for quantitative bioanalysis of immunosuppression. *Bioanalysis*. 2022 Oct 8;14(17):1141–52. doi: 10.4155/bio-2022-0155. Epub ahead of print.

15. Sitaruno S, Santimaleeworagun W, Pattharachayakul S, DeBacker KC, Vattanavanit V, Binyala W, **Pai MP***. Comparison of Race and Non-Race Based Equations for Kidney Function Estimation in Critically Ill Thai Patients for Vancomycin Dosing. *J Clin Pharmacol*. 2022 Oct;62(10):1215-1226. doi: 10.1002/jcph.2070. Epub ahead of print.
 16. Hertz DL*, Chen L, Henry NL, Griggs JJ, Hayes DF, Derstine B, Su GL, Wang SC, **Pai MP**. Muscle Mass Affects Paclitaxel Systemic Exposure and May Inform Personalized Paclitaxel Dosing. *Br J Clin Pharmacol*. 2022 Jan 26. doi: 10.1111/bcp.15244. Epub ahead of print.
 17. Liu S, ***Pai MP**, Lester CR. - Medication use among U.S. adults after bariatric surgery: a population-based analysis of NHANES 2015-2018. *Diabetes Care*. 2022 Jan 19;dc212285. doi: 10.2337/dc21-2285. Epub ahead of print.
- 2021**
18. Wakam GK, Biesterveld BE, **Pai MP**, Kemp MT, O'Connell RL, Rajanayake KK, Chtraklin K, Vercruysse CA, Alam HB. A single dose of valproic acid improves neurologic recovery and decreases brain lesion size in swine subjected to an isolated traumatic brain injury. *J Trauma Acute Care Surg*. 2021 Nov 1;91(5):867-871. doi: 10.1097/TA.0000000000003136.
 19. ***Pai MP**, Wilcox M, Chitra S, McGovern P. Safety and efficacy of omadacycline by body mass index in patients with community-acquired bacterial pneumonia: Subanalysis from a randomized controlled trial. *Respir Med*. 2021 Aug;184:106442. doi: 10.1016/j.rmed.2021.106442.
 20. Crass RL, Al Naimi T, Wen B, Souza E, Murray S, ***Pai MP**, Jia S. Pharmacokinetics of Polymyxin B in Hospitalized Adults with Cystic Fibrosis. *Antimicrob Agents Chemother*. 2021 Jul 12;AAC0079221. doi: 10.1128/AAC.00792-21. Epub ahead of print.
 21. Luan X, Yuan H, Song Y, Hu H, Wen B, He M, Zhang H, Li Y, Li F, Shu P, Burnett JP, Truchan N, Palmisano M, **Pai MP**, Zhou S, Gao W, Sun D. Reappraisal of anticancer nanomedicine design criteria in three types of preclinical cancer models for better clinical translation. *Biomaterials*. 2021 Jun 3;275:120910. doi: 10.1016/j.biomaterials.2021.120910. Epub ahead of print.
 22. Homan MJ, Franson A, Ravi K, Roberts H, **Pai MP**, Liu C, He M, Matvekas A, Koschmann C, Marini BL. Panobinostat penetrates the blood-brain barrier and achieves effective brain concentrations in a murine model. *Cancer Chemother Pharmacol*. 2021 Jun 11. doi: 10.1007/s00280-021-04313-2. Epub ahead of print.
 23. ***Pai MP**, Wilcox MH, Chitra S, McGovern PC. Safety and efficacy of omadacycline by BMI categories and diabetes history in two Phase III randomized studies of patients with acute bacterial skin and skin structure infections. *J Antimicrob Chemother*. 2021 Apr 13;76(5):1315-1322. doi: 10.1093/jac/dkaa558.
 24. Auriti C, Goffredo BM, Ronchetti MP, Piersigilli F, Cairolì S, Bersani I, Dotta A, Bagolan P, ***Pai MP**. High-Dose Micafungin in Neonates and Young Infants with Invasive Candidiasis: Results of a Phase 2 Study. *Antimicrob Agents Chemother*. 2021 Mar 18;65(4):e02494-20. doi: 10.1128/AAC.02494-20.
 25. He M, Souza E, Matvekas A, Crass RL, ***Pai MP**. Alteration in Acute Kidney Injury Potential with the Combination of Vancomycin and Imipenem-Cilastatin/Relebactam or Piperacillin/Tazobactam in a Preclinical Model. *Antimicrob Agents Chemother*. 2021 Mar 18;65(4):e02141-20. doi: 10.1128/AAC.02141-20.
 26. Falcone M, Menichetti F, Cattaneo D, Tiseo G, Baldelli S, Galfo V, Leonildi A, Tagliaferri E, Di Paolo A, **Pai MP**. Pragmatic options for dose optimization of ceftazidime/avibactam with aztreonam in complex patients. *J Antimicrob Chemother*. 2021 Mar 12;76(4):1025-1031. doi: 10.1093/jac/dkaa549.
 27. Ravi K, Franson A, Homan MJ, Roberts H, **Pai MP**, Miklja Z, He M, Wen B, Benitez LL, Perissinotti AJ, Bixby DL, Koschmann C, Marini BL. Comparative pharmacokinetic analysis of the blood-brain barrier penetration of dasatinib and ponatinib in mice. *Leuk Lymphoma*. 2021 Mar 7:1-6. doi: 10.1080/10428194.2021.1894647.

28. Wakam GK, Biesterveld BE, **Pai MP**, Kemp MT, O'Connell RL, Williams AM, Srinivasan A, Chtraklin K, Siddiqui AZ, Bhatti UF, Vercruyse CA, Alam HB. Administration of valproic acid in clinically approved dose improves neurologic recovery and decreases brain lesion size in swine subjected to hemorrhagic shock and traumatic brain injury. *J Trauma Acute Care Surg*. 2021 Feb 1;90(2):346-352. doi: 10.1097/TA.0000000000003036.

2020

29. Morley VJ, Kinnear CL, Sim DG, Olson SN, Jackson LM, Hansen E, Usher GA, Showalter SA, **Pai MP**, Woods RJ, Read AF. An adjunctive therapy administered with an antibiotic prevents enrichment of antibiotic-resistant clones of a colonizing opportunistic pathogen. *Elife*. 2020 Dec 1;9:e58147. doi: 10.7554/eLife.58147.
30. Hsu CH, Tiba MH, McCracken BM, Colmenero CI, Pickell Z, Leander DC, Weitzel AM, Raghunayakula S, Liao J, Jinka T, Cummings BC, **Pai MP**, Alam HB, Ward KR, Sanderson TH, Neumar RW. Dose optimization of early high-dose valproic acid for neuroprotection in a swine cardiac arrest model. *Resusc Plus*. 2020 Jun 1;1-2:100007. doi: 10.1016/j.resplu.2020.100007. Erratum in: *Resusc Plus*. 2020 Dec 11;4:100049
31. Biesterveld BE, Pumiglia L, Iancu A, Shamshad AA, Remmer HA, Siddiqui AZ, O'Connell RL, Wakam GK, Kemp MT, Williams AM, **Pai MP**, Alam HB. Valproic acid treatment rescues injured tissues after traumatic brain injury. *J Trauma Acute Care Surg*. 2020 Dec;89(6):1156-1165. doi: 10.1097/TA.0000000000002918.
32. ***Pai MP**, DeBacker KC. Modeling Kinetic Glomerular Filtration Rate in Adults with Stable and Unstable Kidney Function: Vancomycin as the Motivating Example. *Pharmacotherapy*. 2020 Jul 8. doi: 10.1002/phar.2442. Online ahead of print.
33. Miklja Z, Yadav VN, Cartaxo RT, Siada R, Thomas CC, Cummings JR, Mullan B, Stallard S, Paul A, Bruzek AK, Wierzbicki K, Yang T, Garcia T, Wolfe I, Leonard M, Robertson PL, Garton HJ, Wahl DR, Parmar HA, Sarkaria JN, Kline C, Mueller S, Nicolaides T, Glasser C, Leary SES, Venneti S, Kumar-Sinha C, Chinnaiyan AM, Mody R, **Pai MP**, Phoenix TN, Marini BL, Koschmann C. Everolimus improves the efficacy of dasatinib in PDGFR α -driven glioma. *J Clin Invest*. 2020 Oct 1;130(10):5313-5325. doi: 10.1172/JCI133310.
34. Mehta RK, Pal S, Kondapi K, Sitto M, Dewar C, Devasia T, Schipper MJ, Thomas DG, Basrur V, **Pai MP**, Morishima Y, Osawa Y, Pratt WB, Lawrence TS, Nyati MK. Low dose Hsp90 inhibitor selectively radiosensitizes HNSCC and Pancreatic xenografts. *Clin Cancer Res*. 2020 Oct 1;26(19):5246-5257. doi: 10.1158/1078-0432.CCR-19-3102. Online ahead of print.
35. Souza E, Felton J, Crass RL, Hanaya K, ***Pai MP**. Accumulation of major linezolid metabolites in patients with renal impairment. *Antimicrob Agents Chemother*. 2020 Mar 9. pii: AAC.00027-20.
36. **Pai MP**, Debacker KC, Derstine B, Sullivan J, Su GL, Wang SC. Comparison of Body Size, Morphomics, and Kidney Function as Covariates of High-Dose Methotrexate Clearance in Obese Adults with Primary Central Nervous System Lymphoma. *Pharmacotherapy*. 2020 Feb 23. doi: 10.1002/phar.2379
37. Wubben TJ, Pawar M, Weh E, Smith A, Sajjakulnukit P, Zhang L, Dai L, Hager H, **Pai MP**, Lyssiotis CA, Besirli CG. Small molecule activation of metabolic enzyme pyruvate kinase muscle isozyme 2, PKM2, circumvents photoreceptor apoptosis. *Sci Rep*. 2020 Feb 19;10(1):2990.
38. Souza E, Felton J, Crass RL, Hanaya K, ***Pai MP**. Development of a sensitive LC-MS/MS method for quantification of linezolid and its primary metabolites in human serum. *J Pharm Biomed Anal*. 2020 Jan 30;178:112968.

2019

39. Yu A, Koenigsknecht MJ, Hens B, Baker JR, Wen B, Jackson TL, **Pai MP**, Hasler W, Amidon GL, Sun D. Mechanistic Deconvolution of Oral Absorption Model with Dynamic Gastrointestinal Fluid to Predict Regional Rate and Extent of GI Drug Dissolution. *AAPS J*. 2019 Nov 11;22(1):3.

40. Shu P, Zhao T, Wen B, Mendelsohn-Victor K, Sun D, Friese CR, *Pai MP. Application of an innovative high throughput liquid chromatography-tandem mass spectrometry method for simultaneous analysis of 18 hazardous drugs to rule out accidental acute chemotherapy exposures in healthcare workers. *J Oncol Pharm Pract* 2019 Sep 4:1078155219870591.
41. Dunn R, Crass RL, Hong J, Pai MP, *Krop L. Vancomycin volume of distribution estimation in adults with class III obesity. *Am J Health Sys Pharm* 2019 Oct 20. pii: zxz241.
42. Jang SM, Pai MP, Shaw AR, Mueller BA. Antibiotic Exposure Profiles in Trials Comparing Intensity of Continuous Renal Replacement Therapy. *Crit Care Med*. 2019 Aug 8. doi: 10.1097/CCM.0000000000003955.
43. Biesterveld BE, Williams AM, Pai MP, Dennahy IS, Graham NJ, Chtraklin K, Siddiqui AZ, O'Connell RL, Bhatti UF, Liu B, Russo RM, Li Y, *Alam HB. Dose Optimization of Valproic Acid in a Lethal Model of Traumatic Brain Injury, Hemorrhage and Polytrauma in Swine. *J Trauma Acute Care Surg*. 2019 Aug 5. doi: 10.1097/TA.0000000000002460.
44. Crass RL, Cojutti PG, *Pai MP, Pea F. A reappraisal of linezolid dosing in renal impairment to improve safety. *Antimicrob Agents Chemother*. 2019 Jul 25;63(8). pii: e00605-19. doi: 10.1128/AAC.00605-19.
45. *Barks JDE, Liu Y, Wang L, Pai MP, Silverstein FS. Repurposing azithromycin for neonatal neuroprotection. *Pediatr Res*. 2019 May 17. doi: 10.1038/s41390-019-0408-6.
46. Li F, Yuan H, Zhang H, He M, Liao J, Chen N, Li Y, Zhou S, Palmisano M, Yu A, *Pai MP, *Sun D. Neonatal Fc Receptor (FcRn) Enhances Tissue Distribution and Prevents Excretion of nab-Paclitaxel. *Mol Pharm*. 2019 Apr 19. doi: 10.1021/acs.molpharmaceut.8b01314.
47. Crass RL, *Pai MP. Optimizing Estimated Glomerular Filtration Rate to Support Adult to Pediatric Pharmacokinetic Bridging Studies in Patients with Cystic Fibrosis. *Clin Pharmacokinet* 2019 Apr 10. doi: 10.1007/s40262-019-00761-5.
48. *Lasek-Nesselquist E, Lu J, Schneider R, Ma Z, Russo V, Mishra S, Pai MP, Pata JD, McDonough KA, Malik M. Insights Into the Evolution of Staphylococcus aureus Daptomycin Resistance From an in vitro Bioreactor Model. *Front Microbiol*. 2019 Feb 28;10:345. doi: 10.3389/fmicb.2019.00345. eCollection 2019.
49. Crass RL, *Pai MP, Lodise TP Jr. Individualizing piperacillin/tazobactam dosing in adult patients with cystic fibrosis: can tobramycin measurements help? *J Antimicrob Chemother*. 2019;74(1):136-129. doi: 10.1093/jac/dky388.
- 2018**
50. Li YF, Zhang C, Zhou S, He M, Zhang H, Chen N, Li F, Luan X, Pai MP, Yuan H, Sun D, *Li Y. Species difference in paclitaxel disposition correlated with poor pharmacological efficacy translation from mice to humans. *Clinical Pharmacology: Advances and Applications* 2018;10 165–174
51. Crass RL, Rodvold KA, Mueller BA, *Pai MP. Renal Dosing of Antibiotics: Are We Jumping the Gun? *Clin Infect Dis*. 2018 Sep 13. doi: 10.1093/cid/ciy790.
52. Crass RL, Dunn R, Hong J, Krop LC, *Pai MP. Dosing vancomycin in the super obese: less is more. *J Antimicrob Chemother*. 2018 Sep 6. doi: 10.1093/jac/dky310.
53. Li F, Zhang H, He M, Liao J, Chen N, Li Y, Zhou S, Palmisano M, Yu A, Pai MP, Yuan H, *Sun D. Different nanoformulations alter the tissue distribution of paclitaxel, which aligns with reported distinct efficacy and safety profiles. *Mol Pharm*. 2018 Sep 4. doi: 10.1021/acs.molpharmaceut.8b00527.
54. Auriti C, Goffredo BM, Ronchetti MP, Piersigilli F, Cairolì S, Bersani I, Dotta A, *Pai MP. Validation of Heelstick Microsampling to Optimize Micafungin Doses in Neonates and Young Infants. *Antimicrob Agents Chemother*. 2018 Jul 16. pii: AAC.01199-18. doi: 10.1128/AAC.01199-18.

55. Butterfield-Cowper JM, Lodise TP Jr, *Pai MP. A Fixed versus Weight-Based Dosing Strategy of Daptomycin may Improve Safety in Obese Adults. *Pharmacotherapy*. 2018 Jun 15. doi: 10.1002/phar.2157.
56. Crass RL, Ross BE, Derstine BA, Lichty M, Sullivan JA, Su GL, Wang SC, *Pai MP. Measurement of Skeletal Muscle Area Improves Estimation of Aminoglycoside Clearance across Body Size. *Antimicrob Agents Chemother*. 2018 May 25;62(6). pii: e00441-18. doi: 10.1128/AAC.00441-18.
57. Ma Z, Lasek-Nesselquist E, Lu J, Schneider R, Shah R, Oliva G, Pata J, McDonough K, Pai MP, Rose WE, Sakoulas G, *Malik M. Characterization of genetic changes associated with daptomycin nonsusceptibility in *Staphylococcus aureus*. *PLoS One*. 2018 Jun 7;13(6):e0198366. doi: 10.1371/journal.pone.0198366.eCollection 2018.
58. *Pai AB, Pai MP, Meyer DE, Bales BC, Cotero VE, Zheng N, Jiang W. In vitro and in vivo DFO-chelatable labile iron release profiles among commercially available intravenous iron nanoparticle formulations. *Regul Toxicol Pharmacol*. 2018 May 29;97:17-23. doi: 10.1016/j.yrtph.2018.05.014.
59. Hertz DL, Kidwell KM, Vangipuram K, Li F, Pai MP, Burness M, Griggs JJ, Schott AF, Van Poznak C, Hayes DF, Smith EM, Henry NL. Paclitaxel Plasma Concentration After the First Infusion Predicts Treatment-Limiting Peripheral Neuropathy. *Clin Cancer Res*. 2018 Apr 27. pii: clincanres.0656.2018. doi: 10.1158/1078-0432.CCR-18-0656.
60. Eschenauer GA, Carver PL, *Patel TS, Lin SW, Klinker KP, Pai MP, Lam SW. Survival in Patients with *Candida glabrata* Bloodstream Infections is Associated with Fluconazole Dose. *Antimicrob Agents Chemother*. 2018 Mar 26. pii: AAC.02566-17.
61. Bunnell KL, Pai MP, Sikka M, Bleasdale SC, Wenzler E, Danziger LH, Rodvold KA. Pharmacokinetics of Telavancin at Fixed Doses in Normal Body Weight and Obese (Classes I, II, and III) Adult Subjects. *Antimicrob Agents Chemother*. 2018 Jan 8. pii: AAC.02475-17. doi: 10.1128/AAC.02475-17.
62. Miglis C, Rhodes NJ, Avedissian S, Kubin CJ, Yin MT, Nelson B, Pai MP, Scheetz MH. Population pharmacokinetics of polymyxin B in acutely ill adult patients. *Antimicrob Agents Chemother*. 2018 Jan 8. pii: AAC.01475-17. doi: 10.1128/AAC.01475-17.
63. Conner TM, Nikolian VC, Georgoff PE, Pai MP, Alam HB, Sun D, Reed RC, Zhang T. Physiologically based pharmacokinetic modeling of disposition and drug-drug interactions for valproic acid and divalproex. *Eur J Pharm Sci*. 2018 Jan 1;111:465-481. doi: 10.1016/j.ejps.2017.10.009
- 2017**
64. Natesan S, Pai MP, *Lodise TP. Determination of Alternative Ceftolozane/Tazobactam (C/T) Dosing Regimens for Patients with Infections Due to *Pseudomonas aeruginosa* with High (C/T) MIC Values. *J Antimicrob Chemother* 2017;72(10):2813-2816. doi: 10.1093/jac/dkx221
65. Yu A, Jackson T, Tsume Y, Koenigsnecht M, Wysocki J, Marciani L, Amidon GL, Frances A, Baker JR, Hasler W, Wen B, Pai A (MP), Sun D*. Mechanistic Fluid Transport Model to Estimate Gastrointestinal Fluid Volume and Its Dynamic Change Over Time. *AAPS J*. 2017;19(6):1682-1690. doi: 10.1208/s12248-017-0145-x.
66. Cojutti P, Pai MP, Pea F. Population Pharmacokinetics and Dosing Considerations for the Use of Linezolid in Overweight and Obese Adult Patients. *Clin Pharmacokinet* 2017 Oct 28. doi: 10.1007/s40262-017-0606-5.
67. Pai MP, Derstine B, Lichty M, Ross B, Sullivan J, Su G, Wang SL*. Relationships of Vancomycin Pharmacokinetics to Body Size and Composition by Computed Tomography Analysis: A novel "Pharmacomorphic" approach. *Antimicrob Agents Chemother* 2017 24;61(11). pii: e01402-17. doi: 10.1128/AAC.01402-17.
68. Koenigsnecht MJ, Baker JR, Fioritto AF, Yu A, Tsume Y, Wen B, Zhao T, Pai MP, Bleske B, Zhang X, Lionberger R, Lee A, Amidon GL, Hasler WL, *Sun D. *In Vivo* Dissolution and Systemic Absorption of Immediate Release Ibuprofen in Human Gastrointestinal Tract Under Fed and Fasted Conditions. *Mol Pharm* 2017 Oct 5. doi: 10.1021/acs.molpharmaceut.7b00425.

69. Nikolian VC, Georgoff PE, **Pai MP**, Dennahy IS, Chtraklin IS, Eidy H, Ghandour MH, Han Y, Srinivasan A, Li Y, Alam HB. Valproic acid decreases brain lesion size and improves neurologic recovery in swine subjected to traumatic brain injury, hemorrhagic shock, and polytrauma. *J Trauma Acute Care Surg* 2017 Jul 8. doi:0.1097/TA.0000000000001612.
70. Georgoff PE, Nikolian VC, Bonham T, **Pai MP**, Tafatia C, Halaweish I, To K, Watcharotone K, Lao R, Sun D, *Alam H. Pharmacokinetics and Safety of High-Dose Intravenous Valproic Acid in Healthy Subjects: A Dose Escalation Trial To Support Clinical Translational Studies. *Clin Pharmacokinet* 2017; May 11. doi: 10.1007/s40262-017-0553-1.
71. Martirosov DM, Bidell MR, **Pai MP**, Scheetz MH, Rosenkranz SL, *Lodise TP. Relationship between vancomycin exposure and outcomes among patients with MRSA bloodstream infections with vancomycin Etest® MIC values of 1.5mg/L: A pilot study. *Diagn Microbiol Infect Dis*. 2017 Apr 2. pii: S0732-8893(17)30084-6. doi:10.1016/j.diagmicrobio.2017.03.008.
72. *Pai AB, Meyer DE, Bales BC, Cotero VE, **Pai MP**, Zheng N, Jiang W. Performance of Redox Active and Chelatable Iron Assays to Determine Labile Iron Release From Intravenous Iron Formulations. *Clin Transl Sci*. 2017; 10(3):194-200. doi:10.1111/cts.12443.
73. ***Pai MP**, Hong J, Krop L. Vancomycin Area under the Curve Estimation in Obese Adults: The peak improves precision and lowers bias. *Antimicrob Agents Chemother* 2017;61(4). pii: e02490-16. doi: 10.1128/AAC.02490-16.

2016

74. Rahbar AJ, Lodise TP, Abraham P, Lockwood A, **Pai MP**, Patka J, Rabinovich M, Curzio K, Chester K, Williams B, Morse B, Chaar M, Huang V, Salomone J. Pharmacokinetic and Pharmacodynamic Evaluation of Doripenem in Critically Ill Trauma Patients with Sepsis. *Surg Infect (Larchmt)*. 2016;17(6):675-682.
75. *Auriti C, Ronchetti MP, Goffredo BM, Cairoli S, Crisafulli R, Fiammetta P, Corsetti T, Dotta A, **Pai MP**. High dose micafungin for preterm neonates and infants with invasive and central nervous system candidiasis. *Antimicrob Agents Chemother* 2016;60(12):7333-7339.
76. ***Pai MP**. Pharmacokinetics of tedizolid in morbidly obese and covariate matched non-obese adults. *Antimicrob Agents Chemother* 2016;60(8):4585-9.

Prior to 2016

77. White B, Lomaestro B, ***Pai MP**. Optimizing the initial amikacin dosage in adults. *Antimicrob Agents Chemother* 2015; 59(11):7094-6.
78. Hong J, *Kropp LC, Johns T, **Pai MP**. Individual vancomycin dosing in obese patients: A two-sample measurement approach improves target attainment. *Pharmacotherapy* 2015; 35(5):455-63.
79. Justo JA, Mayer S, **Pai MP**, Soriano M, Danziger LH, Novak R, *Rodvold KA. Pharmacokinetics of Ceftaroline in Normal Body Weight and Obese (Classes I, II, and III) Healthy Adult Subjects. *Antimicrob Agents Chemother* 2015; 59(7):3956-65.
80. **Pai MP**, Cojutti P, *Pea F. Pharmacokinetics and pharmacodynamics of continuous infusion meropenem in overweight, obese, and morbidly obese patients with stable and unstable kidney function: a step toward dose optimization for the treatment of severe gram-negative bacterial infections. *Clin Pharmacokinet* 2015; 54(9):933-41.
81. Zheng HA, Truong J, Carroll F, ***Pai MP**. Do differences between reference listed drug and generic products of Piperacillin-tazobactam affect reconstitution? *Antimicrob Agents Chemother* 2015; 59(3):1767-9.

82. **Pai MP**, Cojutti P, *Pea F. Levofloxacin Dosing Regimen in Severely Morbidly Obese Patients (BMI ≥ 40 kg/m²) Should Be Guided by Creatinine Clearance Estimates Based on Ideal Body Weight and Optimized by Therapeutic Drug Monitoring. **Clin Pharmacokinet** 2014;53(8):753-62
83. Zasowski E, Butterfield J, McNutt LA, Cohen J, Cosler L, **Pai MP**, Gottwald J, Chen WZ, *Lodise TP. Relationship between Time to Clinical Response and Outcomes among PORT III and IV Hospitalized Patients with Community-Acquired Pneumonia who Received Ceftriaxone and Azithromycin. **Antimicrob Agents Chemother** 2014;58(7):3804-3813.
84. **Pai MP**, Russo A, Novelli A, Venditti M, *Falcone M. Simplified Equations using two Concentrations to Calculate Area under the Curve for Antimicrobials with Concentration-Dependent Pharmacodynamics: Daptomycin as a motivating example. **Antimicrob Agents Chemother** 2014;58(6):3162-3167
85. ***Pai MP**. Serum and urine pharmacokinetics of tigecycline in morbidly obese class III and normal weight subjects. **Journal of Antimicrob Chemother** 2014;69(1):190-9.
86. Butterfield JM, Lodise TP, Beegle S, Rosen J, Farkas J, ***Pai MP**. Pharmacokinetics and pharmacodynamics of extended-infusion piperacillin/tazobactam in adult patients with cystic fibrosis-related acute pulmonary exacerbations. **Journal of Antimicrob Chemother** 2014 Jan;69(1):176-9.
87. Falcone M, Russo A, Venditti M, Novelli A, ***Pai MP**. Considerations for Higher Doses of Daptomycin in Critically Ill Patients with Methicillin-Resistant *Staphylococcus aureus* Bacteremia. **Clin Infect Dis** 2013; 57(11):1568-76.
88. Camaione L, Elliot K, Mitchell-Van Steele A, Lomaestro B, ***Pai MP**. Vancomycin dosing in children and young adults: Back to the drawing board. **Pharmacotherapy** 2013;33(12):1278-87
89. Butterfield JM, Lodise TP, Beegle S, Rosen J, Farkas J, ***Pai MP**. Pharmacokinetics and Pharmacodynamics of Once-Daily Administration of Intravenous Tobramycin in Adult Patients with Cystic Fibrosis Hospitalized for an Acute Pulmonary Exacerbation. **Antimicrob Agents Chemother** 2013 Oct;57(10):5175-7.
90. ***Pai MP**, Chen WZ, Garba A, Cui H, Zaffo B, El-Fawal HA, Mousa SA. The effects of obesity and sex on antimicrobial pharmacokinetics and acute kidney injury: Validation of a preclinical model. **Antimicrob Agents Chemother** 2013;57(2):716-22.
91. Hamilton R, *Thai XC, Ameri D, **Pai MP**. Oral bioavailability of linezolid before and after Roux-en-Y gastric bypass surgery: is dose modification necessary in obese subjects? **J Antimicrob Chemother** 2013;68(3):666-73.
92. Park EJ, **Pai MP**, Dong T, Zhang J, Chia-Wen K, Lawrence J, Crentsil V, Zhange L, *Xu NN. The influence of body size descriptors on the estimation of kidney function in normal weight, overweight, obese, and morbidly obese adults. **Ann Pharmacother** 2012;46(3):317-28.
93. ***Pai MP**, Lodise TP. Oseltamivir pharmacokinetics in obese adults: Dose modification for weight is not necessary. **Antimicrob Agents Chemother** 2011;55(12):5640-5.
94. ***Pai MP**, Nafziger AN, Bertino JS. Simplified dosing of aminoglycosides in underweight and obese adult patients. **Antimicrob Agents Chemother** 2011;55(9):4006-11.
95. Butterfield J, Patel N, **Pai MP**, Rosano TG, Drusano GL, *Lodise TP. Vancomycin protein binding estimates: identification of clinical factors that influence protein binding. **Antimicrob Agents Chemother** 2011;55(9):4277-82.
96. ***Pai MP**, Lodise TP. Steady-state plasma pharmacokinetics of voriconazole in obese adults. **Antimicrob Agents Chemother** 2011;55(6):2601-5.
97. Patel N, **Pai MP**, Rodvold K, Lomaestro B, Drusano GL, *Lodise TP. Vancomycin: We can't get there from here. **Clin Infect Dis** 2011;52(8):969-74.

98. *Pai MP, Bruce H, Felton LA. Clinical pharmacokinetics of oral controlled-release 5-fluorocytosine. *Antimicrob Agents Chemother* 2010;54(3):1237-41.
99. *Pai MP. Antifungal combinations against simulated *Candida albicans* endocardial vegetations. *Antimicrob Agents Chemother* 2009;53(6):2629-31.
100. Demirovic JA, Pai AB, *Pai MP. Estimation of creatinine clearance in morbidly obese patients. *Am J Health Syst Pharm* 2009;66(7):642-8.
101. *Pai MP, Sakoglu U, Peterson SL, Lyons CR, Sood R. Characterization of BBB permeability in a preclinical model of cryptococcal meningoencephalitis using magnetic resonance imaging. *J Cereb Blood Flow Metab* 2009;29(3):545-53.
102. *Pai MP, Sample ML, Mercier RC, Spilde MN. Activity and ultrastructural effects of antifungal combinations against simulated *Candida* endocardial vegetations. *Antimicrob Agents Chemother* 2008;52(7):2367-76.
103. *Pai MP, Norenberg JP, Anderson T, Goade DW, Rodvold KA, Telepak RJ, Mercier RC. Influence of morbid obesity on the single dose pharmacokinetics of daptomycin. *Antimicrob Agents Chemother* 2007;51(8):2741-7.
104. Chen H, Suda KJ, Turpin RS, Pai MP, Bearden DT, *Garey KW. High- versus low-dose fluconazole therapy for empiric treatment of suspected invasive candidiasis among high-risk patients in the intensive care unit: a cost-effectiveness analysis. *Curr Med Res Opin* 2007;23(5):1057-65
105. *Garey KW, Turpin RS, Bearden DT, Pai MP, Suda KJ. Economic analysis of inadequate fluconazole therapy in non-neutropenic patients with candidaemia: a multi-institutional study. *Int J Antimicrob Agents* 2007;29(5):557-62.
106. *Garey KW, Pai MP, Suda KJ, Turpin R, Rege M, Bearden DT. Inadequacy of fluconazole dosing in patients with candidemia based on Infectious Diseases Society of America (IDSA) guidelines. *Pharmacoepidemiol Drug Saf* 2007;16(8):919-27.
107. *Pai MP, Jones AL, Mullen CK. Effect of growth medium and susceptibility testing method on micafungin activity against *Candida* bloodstream isolated. *Diag Microbiol Infect Dis* 2007;58(1):129-32.
108. *Pai MP, Turpin RS, Garey KW. Association of fluconazole AUC/MIC and Dose/MIC with mortality in non-neutropenic patients with candidemia. *Antimicrob Agents Chemother* 2007;51:35-39.
109. Jackiche R, Borrego M, Raisch D, Gupchup G, Pai MP, Jakiche A. The cost-effectiveness of two strategies for vaccinating patients with hepatitis C virus infection against hepatitis A and hepatitis B in the US. *Am J Med Sci* 2007;333(1):26-34.
110. *Pai AB, Pai MP, Depczynski JC, McQuade C, Mercier RC. Effect of non-transferrin bound iron on *Staphylococcus aureus* growth in hemodialysis patients receiving intravenous iron sucrose. *Am J Nephrol* 2006;26:304-309.
111. *Garey KW, Rege M, Pai MP, Mingo DE, Suda KJ, Turpin RS, Bearden DT. Time until initiation of fluconazole therapy impacts mortality in patients with candidemia: A multi-institutional study. *Clin Infect Dis* 2006;43:25-31.
112. *Pai MP, Allen SE, Amsden GW. Altered steady state pharmacokinetics of levofloxacin in cystic fibrosis patients receiving 2-hour spaced calcium carbonate supplementation. *J Cyst Fibrosis* 2006;5(3):153-7.
113. *Pai MP, Mercier RC, Koster SA. Epidemiology of vancomycin-induced neutropenia in patients receiving home intravenous infusion therapy. *Ann Pharmacother* 2006;40(2):224-8.
114. *Pai MP, Norenberg JP, Telepak RJ, Sidney DS, Yang S. Assessment of effective renal plasma flow, enzymuria and cytokine release in healthy volunteers receiving a single dose of amphotericin B desoxycholate. *Antimicrob Agents Chemother* 2005;49(9):3784-8.

115. *Pai MP, Jones AL. Altered susceptibility of *Candida glabrata* bloodstream isolates to triazoles at clinically relevant pH values: Comparison of the NCCLS M27-A2, Sensititre YeastOne, and Etest methods. **Antimicrobial Agents Chemother** 2004;48(11):4441-3.
116. *Pai AB, Pai MP. A limited sampling algorithm for vancomycin dosing during hi-flux hemodialysis. **Am J Health Syst Pharm** 2004;61:1812-16.
117. Pai MP, Schriever CA, Diaz-Linares M, Novak RA, *Rodvold KA. Sex-related differences in the pharmacokinetics of once daily saquinavir soft-gel capsules boosted with low-dose ritonavir in HIV-1 infected patients. **Pharmacotherapy** 2004;24(5):592-9.
118. Graham AC, Mercier RC, Achusim LE, *Pai MP. Retrospective analysis of the safety and efficacy of extended interval aminoglycoside dosing in the treatment of enterococcal and staphylococcal osteomyelitis. **Ann Pharmacother** 2004;38:936-41.
119. Pai MP, *Pendland SL. National survey of hospital fungal susceptibility testing practices. **Ann Pharmacother** 2003;37(2):192-6.
120. Pai MP, Gonzales RD, Petrolati JM, Graham MB, Shreckenberger PC, *Rodvold KA, Quinn JA. Risk factors associated with the development of enterococcal resistance to linezolid. **Clin Infect Dis** 2002;35(10):1269-72.
121. Pai MP, Bordley J, *Amsden GW. Plasma Pharmacokinetics and Tissue Penetration of Alatrofloxacin in Morbidly Obese Individuals. **Clin Drug Invest** 2001;21(3):175-181.
122. Pai MP, Graci D, *Bertino JS Jr. Waste generation of drug product samples versus prescriptions obtained through pharmacy dispensing. **Pharmacotherapy** 2000;20(5): 593-595.

Review Articles and Guidelines (*Indicates Corresponding Authorship)

123. Alikhani R, Pai MP*. Reconsideration of the current models of estimated kidney function-based drug dose adjustment in older adults: The role of biological age. **Clin Transl Sci**. 2023 Sep 13. doi: 10.1111/cts.13643. Epub ahead of print.
124. Leino AD, Takyi-Williams J, *Pai MP. Volumetric Absorptive Microsampling to Enhance the Therapeutic Drug Monitoring of Tacrolimus and Mycophenolic Acid: A Systematic Review and Critical Assessment. **Ther Drug Monitor** 2023 Aug 1;45(4):463-478.
125. *Pai MP, Crass RL. Translation of Pharmacodynamic Biomarkers of Antibiotic Efficacy in Specific Populations to Optimize Doses. **Antibiotics** (Basel). 2021 Nov 9;10(11):1368. doi: 10.3390/antibiotics10111368.
126. *Pai MP. Antimicrobial Dosing in Specific Populations and Novel Clinical Methodologies: Kidney Function. **Clin Pharmacol Ther**. 2021 Feb 1. doi: 10.1002/cpt.2179. [Selected for translation and publication in the Chinese Edition of CPT]
127. *Pai MP. Antimicrobial Dosing in Specific Populations and Novel Clinical Methodologies: Obesity. **Clin Pharmacol Ther**. 2021 Feb 1. doi: 10.1002/cpt.2181.
128. Bidell MR, Pai MAP, Lodise TP. Use of Oral Tetracyclines in the Treatment of Adult Patients with Community-Acquired Bacterial Pneumonia: A Literature Review on the Often-Overlooked Antibiotic Class. **Antibiotics** (Basel). 2020 Dec 14;9(12):905. doi: 10.3390/antibiotics9120905.
129. Leino AD, *Pai MP. Maintenance Immunosuppression in Solid Organ Transplantation: Integrating Novel Pharmacodynamic Biomarkers to Inform Calcineurin Inhibitor Dose Selection. **Clin Pharmacokinet**. 2020 Jul 27. doi: 10.1007/s40262-020-00923-w. Online ahead of print

130. Jennaro TS, Puskarich MA, McCann MR, Gillies CE, **Pai MP**, Karnovsky A, Evans CR, Jones AE, Stringer KA. Using L-Carnitine as a Pharmacologic Probe of the Interpatient and Metabolic Variability of Sepsis. *Pharmacotherapy*. 2020 Jul 20. doi: 10.1002/phar.2448.
131. Rybak MJ, Le J, Lodise TP, Levine DP, Bradley JS, Liu C, Mueller BA, **Pai MP**, Wong-Beringer A, Rotschafer JC, Rodvold KA, Maples HD, Lomaestro BM. Therapeutic monitoring of vancomycin for serious methicillin-resistant *Staphylococcus aureus* infections: A revised consensus guideline and review by the American Society of Health-System Pharmacists, the Infectious Diseases Society of America, the Pediatric Infectious Diseases Society, and the Society of Infectious Diseases Pharmacists. *Clin Infect Dis*. 2020 Jul 13. ciaa303.
132. Rybak MJ, Le J, Lodise TP, Levine DP, Bradley JS, Liu C, Mueller BA, **Pai MP**, Wong-Beringer A, Rotschafer JC, Rodvold KA, Maples HD, Lomaestro BM. Therapeutic monitoring of vancomycin for serious methicillin-resistant *Staphylococcus aureus* infections: A revised consensus guideline and review by the American Society of Health-System Pharmacists, the Infectious Diseases Society of America, the Pediatric Infectious Diseases Society, and the Society of Infectious Diseases Pharmacists. *Am J Health Syst Pharm*. 2020 Mar 19. pii: zxaa036.
133. Rybak MJ, Le J, Lodise TP, Levine DP, Bradley JS, Liu C, Mueller BA, **Pai MP**, Wong-Beringer A, Rotschafer JC, Rodvold KA, Maples HD, Lomaestro BM. Executive Summary: Therapeutic Monitoring of Vancomycin for Serious Methicillin-Resistant *Staphylococcus aureus* Infections: A Revised Consensus Guideline and Review of the American Society of Health-System Pharmacists, the Infectious Diseases Society of America, the Pediatric Infectious Diseases Society, and the Society of Infectious Diseases Pharmacists. *Pharmacotherapy*. 2020 Apr;40(4):363-367.
134. Rodvold KA, Burgos RM, Tan X, **Pai MP**. Omadacycline: A Review of the Clinical Pharmacokinetics and Pharmacodynamics. *Clin Pharmacokinet*. 2019 Nov 27. doi:10.1007/s40262-019-00843-4.
135. Rodvold KA, **Pai MP**. Pharmacokinetics and Pharmacodynamics of Oral and Intravenous Omadacycline. *Clin Infect Dis*. 2019 Aug 1;69(Supplement_1):S16-S22.
136. Crass RL, ***Pai MP**. Pharmacokinetics and Pharmacodynamics of Beta-lactamase Inhibitors. *Pharmacotherapy*. 2018 Dec 27. doi: 10.1002/phar.2210. [Epub ahead of print]
137. Bland CM, **Pai MP**, *Lodise TP. Reappraisal of Contemporary Pharmacokinetic and Pharmacodynamic Principles for Informing Aminoglycoside Dosing. *Pharmacotherapy*. 2018 Dec;38(12):1229-1238. doi: 10.1002/phar.2193.
138. Crass RL, ***Pai MP**. Estimating Renal Function in Drug Development: Time to Take the Fork in the Road. *J Clin Pharmacol*. 2018 Sep 5. doi: 10.1002/jcph.1314. [Epub ahead of print]
139. ***Pai MP**. Treatment of bacterial infections in obese patients: How to appropriately manage the dosage. *Curr Opin Pharmacol* 2015; 24:12-17.
140. **Pai MP**, Neely M, Rodvold KA, *Lodise TP. Innovative Approaches to Optimizing the Delivery of Vancomycin in Individual Patients. *Adv Drug Deliv Rev* 2014 Jun 5. pii: S0169-409X(14)00128-8.
141. Heh-Foster AM, Naber M, **Pai MP**, *Lesar TS. Epoetin in the 'untransfusable' anaemic patient: a retrospective case series and systematic analysis of literature case reports. *Transfus Med* 2014;24(4):204-8.. doi: 10.1111/tme.12120.
142. ***Pai MP**, Rodvold KA. Aminoglycoside dosing in patients by kidney function and area under the curve: the Sawchuk-Zaske method revisited in the era of obesity. *Diagn Microbiol Infect Dis* 2014;78(2):178-87, Audioslides [<http://www.sciencedirect.com/science/article/pii/S0732889313005488>]
143. ***Pai MP**. Weight-based and body surface area-based dosing of drugs: Mathematical assumptions and limitations in obesity. *Pharmacotherapy* 2012;32(9):856-868.

144. *Morrish G, **Pai MP**, Green B. The effects of obesity on drug pharmacokinetics in humans. *Exp Opin Drug Metab Toxicol* 2011;7(6):697-706
145. ***Pai MP**. Estimating the glomerular filtration rate for drug dosing in obesity. *Adv Chron Kid Dis* 2010;17(5):e53-62.
146. **Pai MP**, *Bearden DT. Antimicrobial dosing considerations in morbidly obese patients. *Pharmacotherapy* 2007;27(8):1081-1091.
147. **Pai MP**, Momary K, *Rodvold KA. Antibiotic drug interactions. *Med Clin North Am* 2006;90:1223-55.
148. *Pai AB, **Pai MP**. Optimizing antimicrobial therapy for gram-positive bloodstream infections in patients on hemodialysis. *Adv Chron Kid Dis* 2006;13(3):259-70.
149. Reed K, ***Pai MP**. Adjunctive granulocyte colony stimulating factor therapy for diabetic foot infections. *Ann Pharmacother* 2004;38(12):2150-3.
150. *Kraus DM, **Pai MP**, Rodvold KA. The Safety and Efficacy of Extended Interval Aminoglycoside Dosing in Pediatric Patients. *Pediatric Drugs* 2002;4(7):469-84.
151. **Pai MP**, Danziger LH, *Pendland SL. Management of serious fungal infections. *J Pharm Pract* 2002;15(2): 1-9.
152. ***Pai MP**, Pendland SL, Danziger LH. Antimicrobial-Coated/Bonded Intravascular Catheters. (CE Article). *Ann Pharmacother* 2001;35(10):1255-63
153. ***Pai MP** and Paloucek FP. The origin of the 'ideal' body weight equations. *Ann Pharmacother* 2000; 34(9): 1066-1069.
154. **Pai MP**, Graci D, *Amsden GW. Macrolide Drug Interactions: An Update (CE Article). *Ann Pharmacother* 2000; 34(4): 495-513

Case Reports (*Indicates Corresponding Authorship)

155. Kim CK, Rosano TG, Chambers EE, **Pai MP**, *Desemone J. Insulin glargine and insulin aspart overdose with pharmacokinetic analysis. *AACE Clin Case Rep* 2015; [online ahead of print 7/7/2015]
156. ***Pai MP**, Mercier RC, Allen SE. Dosing daptomycin in a morbidly obese patient with lymphedema, recurrent cellulitis, renal insufficiency and vancomycin failure. *Ann Pharmacother* 2006;40(3):553-8.
157. *German JW, Kellie SM, **Pai MP**, Turner PT. Treatment of a chronic *Scedosporium apiospermum* vertebral osteomyelitis. *Neurosurg Focus* 2004;17(6):E9,1-8.
158. ***Pai MP**, Allen S. Voriconazole inhibition of tacrolimus metabolism. *Clin Infect Dis* 2003;36(8):1089-91.

Chapters / Sections (*Indicates Corresponding Authorship)

159. ***Pai MP**, Cottrell M, Bertino Jr JS. In Mandell GL, Bennett JE, Dolin RL, Blaser M, Ed. Application of Pharmacokinetic and Pharmacodynamics of Antiinfectives. **Principles and Practice of Infectious Diseases, 11th Edition**, Philadelphia, PA, Elsevier 2024-*forthcoming*. [[The Premier Infectious Diseases Textbook](#)]
160. ***Pai MP**, Lodise TP. In Bennett JE, Dolin RL, Blaser M, Doi Y, Ed. Aminoglycosides. **Principles and Practice of Infectious Diseases, 11th Edition**, Philadelphia, PA, Elsevier 2024-*forthcoming*. [[The Premier Infectious Diseases Textbook](#)]
161. Pai MP. Pharmacokinetics in Obesity. In: Beringer P, Ed. 7th edition Winters Basic Clinical Pharmacokinetics, Wolters Kluwer, New York, 2023- *forthcoming*.
162. Crass RL, ***Pai MP**. Appropriate Antibiotic Use & Dosing Strategies. *Nephrology Pharmacotherapy: A Pharmacist's Guide to Advanced Kidney Disease and Medication Management*. 2019

163. Crass RL, **Pai MP**, *Rodvold KA. Infective endocarditis (Case). In Schwinghammer TL, Ed. **Pharmacotherapy Casebook 11th Edition**, Chicago, McGraw-Hill 2020.
164. ***Pai MP**, Cottrell M, Bertino Jr JS. In Mandell GL, Bennett JE, Dolin RL, Blaser M, Ed. Application of Pharmacokinetic and Pharmacodynamics of Antiinfectives. **Principles and Practice of Infectious Diseases, 9th Edition**, Philadelphia, PA, Elsevier 2020. [[The Premier Infectious Diseases Textbook](#)]
165. Crass RL, Bertino Jr JS, ***Pai MP**. In Mandell GL, Bennett JE, Dolin RL, Blaser M, Ed. Tables of Antimicrobial Agent Pharmacology. **Principles and Practice of Infectious Diseases, 9th Edition**, Philadelphia, PA, Elsevier 2020. [[The Premier Infectious Diseases Textbook](#)]
166. ***Pai MP**, Kiser JJ, Gubbins PO, Rodvold KA. Introduction to Drug Interactions. In Piscitelli S, Rodvold KA, Pai MP, Ed. *Drug Interactions in Infectious Diseases: Mechanisms and Models of Drug Interactions, Fourth Edition*. Editors: **Pai MP**, Kiser JJ, Gubbins PO, Rodvold KA. New York, NY, Springer 2018
167. * **Pai MP**, Kiser JJ, Gubbins PO, Rodvold KA. Macrolides. In Piscitelli S, Rodvold KA, Pai MP, Ed. *Drug Interactions in Infectious Diseases: Antimicrobial Drug Interactions, Fourth Edition*. Editors: **Pai MP**, Kiser JJ, Gubbins PO, Rodvold KA. New York, NY, Springer 2018
168. Bunnell KL, **Pai MP**, *Rodvold KA. Infective endocarditis (Case). In Schwinghammer TL, Ed. **Pharmacotherapy Casebook 10th Edition**, Chicago, McGraw-Hill 2017.
169. ***Pai MP**. In Rodvold KA, Rotschaffer J, Andes DA, Ed. Pharmacodynamics and Obesity. **Antibiotic Pharmacodynamics**. Humana Press 2016.
170. ***Pai MP**, Cottrell M, Kashuba ADM, Bertino Jr JS. In Mandell GL, Bennett JE, Dolin RL, Blaser M, Ed. Application of Pharmacokinetic and Pharmacodynamics of Antiinfectives. **Principles and Practice of Infectious Diseases, 8th Edition**, Philadelphia, PA, Elsevier 2014. [[The Premier Infectious Diseases Textbook](#)]
171. **Pai MP**, *Bertino Jr JS. In Mandell GL, Bennett JE, Dolin RL, Blaser M, Ed. Tables of Antimicrobial Agent Pharmacology. **Principles and Practice of Infectious Diseases, 8th Edition**, Philadelphia, PA, Elsevier 2014. [[The Premier Infectious Diseases Textbook](#)]
172. McConeghy K, **Pai MP**, *Rodvold KA. Infective endocarditis (Case). In Schwinghammer TL, Ed. **Pharmacotherapy Casebook 9th Edition**, Chicago, McGraw-Hill 2013.
173. Butterfield J, Lodise TP, ***Pai MP**. In Dasgupta A, Ed. Application of pharmacokinetic and pharmacodynamic principles for informed dose selection. **Therapeutic Drug Monitoring: Newer Drugs and Biomarkers, 1st Edition**, Waltham, MA, Elsevier 2012.
174. ***Pai MP**. Macrolides, Azalides and Ketolides. In Piscitelli S, Rodvold KA, Pai MP, Ed. **Drug Interactions in Infectious Diseases, 3rd Edition**, New York, NY, Springer 2011.
175. Crawford T, **Pai MP**, *Rodvold KA. Infective endocarditis (Case). In Schwinghammer TL, Ed. **Pharmacotherapy Casebook 8th Edition**, Chicago, McGraw-Hill 2011.
176. *Deming P, Mercier RC, **Pai MP**. Viral hepatitis. In DiPiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM, Ed. **Pharmacotherapy: A Pathophysiologic Approach 7th Edition**, Chicago, McGraw-Hill 2008.
177. **Pai MP**, *Rodvold KA. Infective endocarditis (Case). In Schwinghammer TL, Ed. **Pharmacotherapy Casebook 7th Edition**, Chicago, McGraw-Hill 2008.
178. ***Pai MP**, Mercier RC, Raebel MA. Viral hepatitis. In DiPiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM, Ed. **Pharmacotherapy: A Pathophysiologic Approach 6th Edition**, Chicago, McGraw-Hill 2005.
179. **Pai MP**, Smith R, *Rodvold KA. Infective endocarditis (Case). In Schwinghammer TL, Ed. **Pharmacotherapy Casebook 6th Edition**, Chicago, McGraw-Hill 2005.

180. *Pai AB, **Pai MP**. Acute Renal Diseases. In Tisdale J, Miller D, Ed. **Drug-Induced Diseases, Prevention, Detection and Management**, Washington D.C., American Society of Health System Pharmacists 2005.
181. **Pai MP**, Smith R, *Rodvold KA. Infective endocarditis (Case). In Schwinghammer TL, Ed. **Pharmacotherapy Casebook 5th Edition**, Chicago, McGraw-Hill 2002.
182. **Pai MP**, Lesch CA, *Rodvold KA. Lower urinary tract infection (Case). In Schwinghammer TL, Ed. **Pharmacotherapy Casebook 5th Edition**, Chicago, McGraw-Hill 2002.
183. **Pai MP**, Schriever CS, *Pendland SL: Anti-Infective Agents. In Rau JA, Ed: **Respiratory Care Pharmacology 6th Edition**, St. Louis, Mosby 2002.

Letters to the Editor and Editorials (*Indicates Corresponding Authorship)

184. Rybak MJ, Le J, Lodise TP, Levine DP, Bradley JS, Liu C, Mueller BA, **Pai MP**, Wong-Beringer A, Rodvold KA, Maples HD. Questions on Vancomycin Dosing. *Clin Infect Dis*. 2021;73(7):e1777-e1778. doi: 10.1093/cid/ciaa1775.
185. Rybak MJ, Le J, Lodise TP, Levine DP, Bradley JS, Liu C, Mueller BA, **Pai MP**, Beringer AW, Rodvold KA, Maples HD. Validity of 2020 vancomycin consensus guidelines and further guidance for practical application. *Am J Health Syst Pharm*. 2021 Mar 25:zxab123. doi: 10.1093/ajhp/zxab123..
186. Rybak MJ, Le J, Lodise TP, Levine DP, Bradley JS, Liu C, Mueller BA, **Pai MP**, Beringer AW, Rodvold KA, Maples HD. Questions on Vancomycin dosing. *Clin Infect Dis*. 2020 Nov 26:ciaa1775.
187. Falcone M, Russo A, Venditti M, Novelli A, ***Pai MP**. Response to Di Paolo et al. *Clin Infect Dis* 2014;58(12):1789-90.
188. ***Pai MP**. Polymyxin B dosing in obese and underweight adults. *Clin Infect Dis* 2013;57(12):1785.
189. ***Pai MP**, Nafziger AN, Bertino JS Jr. The not so 'ideal' body weight dosing of Integriilin in obesity. *Am Heart J* 2012;163(4):e23.
190. ***Pai MP**. Comment on: Acute renal insufficiency during telavancin therapy in clinical practice. *J Antimicrob Chemother* 2012;67(5):1300-1.
191. ***Pai MP**. Pharmacy education: Beyond the basics. *Pharmacotherapy* 2004;24(5):690-1.

Book Reviews

192. **Pai MP**. Management of Multiple Drug-Resistant Infections. Ed: Stephen H. Gillespie, Humana Press, Totowa, NJ, 2004. *Ann Pharmacother* 2004;38:1.

Scientific Papers Presented

1. Liu S, **Pai MP**. Modeling Cefoxitin Plasma and Subcutaneous Adipose Tissue Exposure in Patients with Obesity Undergoing Elective and Emergent Colorectal Surgeries with Morphomic Variables. 2023 American Conference on Pharmacometrics (ACoP14), National Harbor, MD {[Study Abstract Award](#)}
2. Hall RG, Liu S, **Pai MP**. Impact of Class II/III Obesity on Doxorubicin Pharmacokinetics in Women with Breast Cancer. 2023 Innovations in Cancer Prevention and Research Conference, **Galveston, TX**. October 2023
3. Liu S, Rothberg A, **Pai MP**. Probing Gastric Emptying & Drug Metabolism Changes in Patients with Obesity Undergoing Weight-Loss Using a Cocktail Containing Acetaminophen, Caffeine & Omeprazole. American College of Clinical Pharmacology Annual Meeting, **Bellevue, WA**. September 2023.
4. Liu S, Rothberg A, **Pai MP**. Probing CYP3A4 Drug Metabolism Change in Patients with Obesity Undergoing Weight-Loss

- Using a Micro-Dose of Midazolam. American College of Clinical Pharmacology Annual Meeting, **Bellevue, WA**. September 2023.
5. Leino A, Takyi-Williams J, Park J, Sun D, Farris K, **Pai MP**. Clinical Validation of Two Volumetric Absorptive Microsampling Devices to Support Home-based Therapeutic Drug Monitoring of Immunosuppression in Kidney Transplantation. American College of Clinical Pharmacology Annual Meeting, **Bellevue, WA**. September 2023.
 6. Liu S, **Pai MP**. A Morphomics-Informed Population Pharmacokinetic Model to Characterize Cefazolin Exposure in Subcutaneous Adipose Tissue in Colorectal Surgery Patients. American College of Clinical Pharmacology (ACCP) Annual Meeting, **Bethesda, MD**, September 2022 {[Study Abstract Award](#)}
 7. Liu S, **Pai MP**. A Physiologically-based Pharmacokinetic Model to Characterize Cefazolin Exposure in Gut and Adipose to Inform Personalized Dosing Recommendations for Colorectal Surgery Patients with Morbid Obesity. American College of Clinical Pharmacology (ACCP) Annual Meeting, **Bethesda, MD**, September 2022 {[Study Abstract Award](#)}
 8. Leino AD, Takyi-Williams J, Wen B, Sun D, **Pai MP**. Analytical and Clinical Validation of the Tasso-M20 Device to support Home-based Therapeutic Drug Monitoring in Kidney Transplantation. ACCP Global Conference on Clinical Pharmacy, San Francisco, CA. October 2022
 9. Takyi-Williams J, Leino AD, Wen B, Sun D, **Pai MP**. Development of sampling strategy for VAMS Tasso-M20 device under laboratory setting combined with impact-assisted extraction method immunosuppression LC-MS/MS assay. ASMS Conference on Mass Spectrometry and Allied Topics, Minneapolis, MN. June 2022.
 10. **Pai MP**, Wilcox MH, Curran M, Chitra S, Garrity-Ryan L, McGovern PC. Safety and efficacy of omadacycline by patient body mass index for the treatment of acute bacterial skin and skin structure infections. 29th European Congress of Clinical Microbiology and Infectious Diseases, **Amsterdam, Netherlands**, April 2019.
 11. **Pai MP**, Wilcox MH, Curran M, Chitra S, Garrity-Ryan L, McGovern PC. Safety and efficacy of omadacycline by body mass index in patients with community-acquired bacterial pneumonia [**Oral Rapid Fire**]. 29th European Congress of Clinical Microbiology and Infectious Diseases, **Amsterdam, Netherlands**, April 2019.
 12. Crass RL, Cojutti PG, **Pai MP**, Pea F. Linezolid doses should be lowered in renal impairment to improve safety [**Oral Platform**]. 29th European Congress of Clinical Microbiology and Infectious Diseases, **Amsterdam, Netherlands**, April 2019.
 13. Crass RL, Patel TS, **Pai MP**. Renal impairment increases the risk of thrombocytopenia and anaemia during prolonged treatment with linezolid. 29th European Congress of Clinical Microbiology and Infectious Diseases, **Amsterdam, Netherlands**, April 2019.
 14. Souza E, Crass RL, He M, Matvekas A, Hoenerhoff M, **Pai MP**. Imipenem-cilastatin/relebactam lowers acute kidney injury in a preclinical model of vancomycin nephrotoxicity. 29th European Congress of Clinical Microbiology and Infectious Diseases, **Amsterdam, Netherlands**, April 2019.
 15. Crass RL, Jia S, Patel TS, Fitzgerald L, Simon R, **Pai MP**. Higher risk of acute kidney injury with piperacillin/tazobactam versus cefepime or meropenem in adult cystic fibrosis patients treated with vancomycin and tobramycin. 29th European Congress of Clinical Microbiology and Infectious Diseases, **Amsterdam, Netherlands**, April 2019.
 16. Crass RL, Ross BE, Derstine BA, Sullivan JA, Su GL, Wang SC, **Pai MP**. Body composition measures improve estimation of aminoglycoside clearance: a semi-mechanistic pharmacomorphomic analysis. 28th European Congress of Clinical Microbiology and Infectious Diseases, **Madrid, Spain**, April 2018.
 17. Crass RL, Lodise TP, **Pai MP**. Individualizing piperacillin/tazobactam dosing in adult patients with cystic fibrosis: can tobramycin measurements help? 28th European Congress of Clinical Microbiology and Infectious Diseases, **Madrid, Spain**, April 2018
 18. Bunnell KL, Sikka M, Bleasdale SC, Wenzler E, **Pai MP**, Danziger LH, Rodvold KA. Pharmacokinetics of fixed dose

- telavancin in obese and non-obese adult subjects. 26th European Congress of Clinical Microbiology and Infectious Diseases, **Vienna, Austria**, April 2017.
19. Krop L, Hong J, **Pai MP**. Improving the Bayesian prediction of vancomycin exposure in obese adults with trough only measurements. ASM Microbe 2016 (ICAAC), **Boston, MA**, June 2016.
 20. **Pai MP**, Russo A, Novelli A, Venditti M, Falcone M. Simplified equations using two concentrations to calculate area under the curve for daptomycin. 24th European Congress of Clinical Microbiology and Infectious Diseases, **Barcelona, Spain**, May 2014.
 21. **Pai MP**. A Preclinical Model to Test the Influence of Sex and Obesity on Pharmacokinetics and Acute Kidney Injury. *American College of Clinical Pharmacology Annual Meeting*, **San Diego, California**, September 2012.
 22. Park EJ, **Pai MP**, Zhang J, Dong T, Ko CW, Crensil V, Xu NN. Estimation of creatinine clearance across all weight strata. *Annual Meeting of the American Society for Clinical Pharmacology and Therapeutics*. **Dallas, Texas**, March 2011.
 23. **Pai MP**, Lodise TP. Pharmacokinetics of Voriconazole in Obese Adults. 50th *Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Boston, MA**, September 2010.
 24. **Pai MP**, Nafziger AN, Bertino JS. Aminoglycoside Dosing in Underweight, Normal Weight, Overweight, and Obese Adult Patients. 50th *Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Boston, Massachusetts**, September 2010.
 25. **Pai MP**, Nafziger AN, Bertino JS. Lean Body Weight Normalizes the Pharmacokinetic Parameters of Ertapenem in Normal Weight and Obese Adults. 50th *Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Boston, Massachusetts**, September 2010.
 26. Van Wart SA, **Pai MP**, Bhavnani SM, Wiegand UW, Jones RN, Ambrose PG. Pharmacokinetic-Pharmacodynamic (PK-PD) Target Attainment (TA) Analyses to Evaluate Susceptibility Breakpoints for Labeled Ceftriaxone (CRO) Dosing Regimens. 49th *Interscience Conference on Antimicrobial Agents and Chemotherapy*, **San Francisco, California**, September 2009.
 27. Tsuji BT, Bulitta JB, Forrest A, Kelchlin PA, Brown T, Holden PN, **Pai MP**, Bhavnani SM, Fernandes P, Jones RN, Ambrose PG. Pharmacokinetics-Pharmacodynamics (PK-PD) of CEM-102 against Methicillin-Resistant *Staphylococcus aureus* (MRSA) Using an In Vitro PD Model (IVPM) and Mechanism-Based (MB) Modeling. 49th *Interscience Conference on Antimicrobial Agents and Chemotherapy*, **San Francisco, California**, September 2009.
 28. Bulitta JB, Okusanya OO, Forrest A, Bhavnani SM, Reynolds DK, **Pai MP**, Still JG, Fernandes P, Ambrose PG. Population Pharmacokinetics (PPK) of CEM-102 in Healthy Subjects. 49th *Interscience Conference on Antimicrobial Agents and Chemotherapy*, **San Francisco, California**, September 2009.
 29. **Pai MP**, Lyons CR. Effects of 5-Fluorocytosine (5FC) and Fluconazole (FLZ) Simultaneous and Staggered Combination (CMB) on Emergence of Resistance (R) in *Cryptococcus neoformans* (CN). 48th *Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Washington, D.C.**, October 2008.
 30. **Pai MP**, Lyons CR. Quantifying Phenotypic Expression of Fluconazole (FLZ) Resistance (R) in *Cryptococcus neoformans* (CN). 48th *Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Washington, D.C.**, October 2008.
 31. **Pai MP**, Peterson SL, Lyons CR. Serum and brain pharmacokinetics of 5-fluorocytosine and fluconazole. 48th *Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Washington, D.C.**, October 2008.
 32. Sakoglu U, Sood R, **Pai MP**. Non-invasive measurement of blood-brain-barrier disruption in cryptococcal meningoencephalitis. 48th *Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Washington, D.C.**, October 2008.
 33. Bruce HP, **Pai MP**, Felton LA. Development of a high dose, highly water soluble, controlled release matrix tablet.

American Association of Pharmaceutical Scientists; 2007; **San Diego, California**, October 2007.

34. **Pai MP**, Samples M, Mercier RC. Activity of flucytosine, micafungin, and voriconazole in an in-vitro pharmacodynamic model of *Candida* spp. simulated endocardial vegetations. *47th Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Chicago, Illinois**, September 2007.
35. **Pai MP**, Samples M, Mercier RC. *Candida albicans* biofilm activity of flucytosine, liposomal amphotericin B, and micafungin in an in-vitro pharmacodynamic model of simulated endocardial vegetations. *47th Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Chicago, Illinois**, September 2007.
36. **Pai MP**, Norenberg JP, Anderson T, Goade D, Rodvold KA, Telepak R, Mercier RC. Daptomycin pharmacokinetics in morbidly obese subjects. *46th Interscience Conference on Antimicrobial Agents and Chemotherapy*, **San Francisco, California**, September 2006.
37. **Pai MP**, Mullen C. Activity of trans-Cinnamonaldehyde and flucytosine against planktonic and biofilm forming *Candida albicans*. *46th Interscience Conference on Antimicrobial Agents and Chemotherapy*, **San Francisco, California**, September 2006.
38. **Pai MP**, Samples M, Mullen C, Apodaca A, Okoli N, Mercier RC. Ultrastructural characterization and pharmacodynamic evaluation of flucytosine and voriconazole in an in-vitro model of *Candida* spp. infective endocarditis. *46th Interscience Conference on Antimicrobial Agents and Chemotherapy*, **San Francisco, California**, September 2006.
39. Hrebickova L, Young S, DeCoster T, Dziamka P, **Pai MP**, Mercier RC. Safety and disposition of tobramycin impregnated polymethylmethacrylate beads in orthopedic patients. *46th Interscience Conference on Antimicrobial Agents and Chemotherapy*, **San Francisco, California**, September 2006.
40. Demirovic J, Pai AB, **Pai MP**. Predictive value of creatinine clearance equations in morbidly obese patients. *46th Interscience Conference on Antimicrobial Agents and Chemotherapy*, **San Francisco, California**, September 2006.
41. **Pai MP**, Mullen CK. Comparison of the MICs of Micafungin (MFGN) against *Candida* bloodstream isolates (BSI) using the NCCLS M27-A2 (M27-A2), Antibiotic Medium 3 (AM3) and Sensititre YeastOne (SYO) Methods. *45th Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Washington, D.C.**, December 2005.
42. **Pai MP**, Mullen CK. Activity of Tea Tree Oil (TTO), trans-Cinnamonaldehyde (Cin), and Curcumin (Cur) against non-Triazole Susceptible (nTS) *Candida* species (CSp) by the Sensititre[®] YeastOne (SYO) Method. *45th Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Washington, D.C.**, December 2005.
43. **Pai MP**, Mullen CK. Comparison of Ravuconazole (RAV) and Voriconazole (Vor) MICs against *Candida* Species (CSp) with Decreased Fluconazole (FLU) Susceptibility: Assessment of pH-related changes. *45th Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Washington, D.C.**, December 2005.
44. Rege M, **Pai MP**, Mingo DE., Suda KJ, Turpin RS, Garey KW. Changes in empirically prescribed fluconazole in patients with *Candida glabrata* infection. *45th Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Washington, D.C.**, December 2005.
45. Garey KW, Rege MR, **Pai MP**, Mingo D, Suda K, Bearden DT. Time till initiation of fluconazole therapy impacts mortality in patients with candidemia: A multi-institutional study. *45th Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Washington, D.C.**, December 2005.
46. Dziamka P, **Pai MP**, Namdar R, Wright H, Young ., Mercier RC. Identification of MRSA Strains as an Independent Risk Factor in Hospitalized Patient Outcome. Mid-Year Meeting, *American Society of Health Systems Pharmacy*, **Las Vegas, Nevada**, December 2005.
47. Pai AB, **Pai MP**, Depczynski JC, McQuade C, Mercier RC. Effect of Non-Transferrin Bound Iron on *Staphylococcus aureus* Growth in Hemodialysis Patients Receiving Intravenous Iron Sucrose. *Renal Week, American Society of Nephrology*, **Philadelphia, PA**, November 2005.

48. Pai AB, **Pai MP**, Raj DSC. Hemodialysis Clearance of Amino Acids (AA) during Intradialytic Supplementation. *Renal Week, American Society of Nephrology, Philadelphia, PA*, November 2005.
49. **Pai MP**, Norenberg JP, Yang S, Sidney D, Telepak RJ. Measurement of Subclinical Markers of Amphotericin B (AmB)-Related Toxicity in Healthy Subjects. *44th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, D.C.*, November 2004.
50. **Pai MP** and Jones AL. Comparison of the MIC and MFC of Micafungin (MFGN) against *Candida* bloodstream isolates using the NCCLS M27-A2 (M27-A2) and Sensititre[®] YeastOne[®] (SYO) Methods. *44th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, D.C.*, November 2004.
51. **Pai MP** and Jones AL. Development of an Index to Quantify the Trailing End-Point (TEP) Phenotype in *Candida* spp. isolates tested against Fluconazole (Flu). *44th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, D.C.*, November 2004.
52. Jackiche R, Dwivedi P, Borrego M, Raisch D, Gupchup G, **Pai MP**, Qualls C, Jakiche A. US Veterans with Hepatitis C Have a High Prevalence of Immunity to Hepatitis A and Hepatitis B, and a High Prevalence of Decompensated Liver Disease. *American College of Gastroenterology, 69th Annual Scientific Meeting, Orlando, FL*, November 2004.
53. Norenberg JP, Telepak RJ, **Pai MP**. Sex-related alterations in the effective renal plasma flow during amphotericin B administration in healthy volunteers. *2004 International Congress on Clinical Pharmacy. Paris, France*, April 2004.
54. **Pai MP** and Jones AL. Altered Susceptibility of *Candida glabrata* (CG) to Triazoles at Clinically Relevant pH values: Comparison of the NCCLS M27-A2 Microbroth (MB), Sensititre[®] YeastOne (SYO) and Etest[™] (ET) Methods. *43rd Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, Illinois*, September 2003.
55. **Pai MP** and Jones AL. Activity of *Melaleuca alternifolia* Against non-Triazole Susceptible (nTS) *Candida* species (CS) by the NCCLS M27-A2 Microbroth (MB), Sensititre[®] YeastOne (SYO), and Time-kill (TK) Methods. *43rd Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, Illinois*, September 2003.
56. **Pai MP**, Dietz RM, Jones AL, and Mercier RC. Pharmacodynamic Evaluation of Once-daily Flucytosine (F) and Twice daily Voriconazole (V) in an In-Vitro Model of *C. albicans* (CA) Infective Endocarditis (IE). *43rd Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, Illinois*, September 2003.
57. **Pai MP** and Jones AL. Comparison of Amphotericin B (AB) MICs Against *Candida* species by Geometric Dilution (GD) NCCLS M27-A2 Microbroth (MB), and Etest (ET) methods. *43rd Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, Illinois*, September 2003.
58. **Pai MP** and Mercier RC. The Influence of pH on the Susceptibility of *Candida* Bloodstream isolates against fluconazole, itraconazole, and voriconazole. *2002 Annual Meeting of the American College of Clinical Pharmacy. Albuquerque, New Mexico*, October 2002.
59. Graham AC, Mercier RC, Achusim L, **Pai MP**. Retrospective Analysis of Adverse Events Associated with Long-Term Antibiotic Therapy for Serious Gram-Positive Infections. *2002 Annual Meeting of the American College of Clinical Pharmacy. Albuquerque, New Mexico*, October 2002.
60. Suda KJ, **Pai MP**, Gupta V, Quinn JP, Pendland SL. National Survey Of Antifungal Susceptibility Testing (AST) Practices In Community Hospitals (CH) Throughout The United States. *42nd Interscience Conference on Antimicrobial Agents and Chemotherapy, San Diego, California*, September 2002.
61. **Pai MP**, Gonzales RD, Petrolati JM, Graham MB, Shreckenberger PC, Rodvold KA, Quinn JA. Risk factors associated with the development of enterococcal resistance to linezolid. *41st Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, Illinois*, December 2001.
62. **Pai MP**, Prause JL, Pendland SL. National survey of hospital fungal susceptibility testing practices. *41st Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, Illinois*, December 2001.

63. **Pai MP**, Prause JL, Pendland SL. The influence of pH on the MIC of fluconazole and voriconazole against non-*albicans* *Candida* isolates. 41st *Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Chicago, Illinois**, December 2001.
64. Garey KW, **Pai MP**, Glowacki RC. Interventions performed by a clinical pharmacy team on hospitalized patients with HIV. *2001 Spring Meeting of American College of Clinical Pharmacy*. **Salt Lake City, Utah**, April 2001
65. **Pai MP**, Prause JL, Danziger LH, Pendland SL. In-Vitro Activity of Voriconazole and Other Azoles Against *Candida* Isolates. Abstract Number 121. *2000 Annual Meeting of the American College of Clinical Pharmacy*. **Los Angeles, California**, November 2000.
66. Sheehan JB, Garey KW, Cannon JP, **Pai MP**, Soforonici-Smith R, Danziger LH. Amphotericin B Deoxycholate vs. Lipid-Associated Amphotericin B Products for the Treatment of Documented *Aspergillus/Zygomycetes* Pulmonary Infections. Abstract Number: 200426. *38th Annual Meeting of the Infectious Diseases Society of America*. **New Orleans, Louisiana**, September 2000.
67. **Pai MP**, Prause JL, Danziger LH, Haclemann JL, Pendland SL. The Epidemiology and Susceptibility of *Candida* Isolates for Mycological Outcomes Assessment. Abstract Number: 224. *40th Interscience Conference on Antimicrobial Agents and Chemotherapy*, **Toronto, Ontario, Canada**, September 2000.
68. **Pai MP**, Cannon J, Jung R, Danziger LH. Epidemiology and outcomes of *Candida* infections in an urban teaching hospital. Abstract Number: 13. *Focus on Fungal Infections 10*. **Atlanta, Georgia**, February 2000.
69. Graci D, **Pai MP**, Garey KW, McConnell SA, Bertino JS, Streetman DS. The potential clinical value of an inpatient clinical pharmacist warfarin counseling and monitoring service. *1999 International Congress on Clinical Pharmacy*. **Orlando, Florida**, April 1999.
70. Krohn NR, **Pai MP**, Amato M. Acceptance of clinical pharmacy recommendations in an extended-care therapy center. *1997 Annual Meeting of the American College of Clinical Pharmacy*. **Phoenix, Arizona**, October 1997.

Invited Presentations

1. **Pai MP**. Estimation of Kidney Function For Drug Dosing in Patients with Obesity: Pitfalls and Opportunities. US FDA Lunch and Learn Series, Center for Drug Evaluation and Research. Web Based Presentation and Roundtable (May 2023)
2. **Pai MP**. Shooting for the middle misses the mark: Repurposing real world data to improve drug dosing. University of Michigan, College of Pharmacy PRO series. Ann Arbor, MI (April 2023)
3. **Pai MP**. Precision dosing: Sizing up the challenge. Dean's Distinguished Speaker Series. Palm Beach Atlantic University, West Palm Beach, FL (March 2022).
4. **Arya V, Anderson K, Pai MP**. Panel discussion on the hybrid workplace. 2021 American College of Clinical Pharmacology Annual Meeting. Web based session (September 2021)
5. **Pai MP**. Old and new antibiotics for MDR Gram negative bacilli: pragmatic options and dose optimization. Gruppo Italiano Per La Stewardship Antimicroba. Pisa, Italy (October 2021)
6. **Pai MP**. Optimal Dosing of Antibiotics for *S. aureus* Bacteremia in Specific Populations. IDWeek 2021. Web Based Symposium (September 2021)
7. **Pai MP**. Demystifying two-sample Bayesian estimated AUC: Simple but no simpler. Making a Difference in Infectious Diseases 2021. Web Based Symposium (May 2021)
8. **Pai MP**. Precision Drug Dosing in Obesity. Great Lakes Pharmacy Conference. Ann Arbor, MI (March 2021)
9. **Pai MP**. Antibiotic Dosing in Abnormal Kidney Function. Update and Treatment of Hospital-Acquired Bacterial

- Pneumonia (HABP) and Ventilator-Associated Bacterial Pneumonia (VABP). University of Illinois at Chicago, College of Pharmacy Symposium. (March 2021)
10. **Pai MP, Rybak M.** The ABCs of Vancomycin AUCs. American Society of Health Systems Pharmacy Webinar Series (November 2020).
 11. **Pai MP.** Precision dosing: Sizing up the challenge. Distinguished Speaker Series. Texas Tech University Health Sciences Center, **Amarillo, TX** (November 2020)- via Zoom.
 12. **Pai MP.** On the road: Trekking through academia. Lesson's Learned Series. American College of Clinical Pharmacology, Webinar Series (October 2020)
 13. **Pai MP.** Antibiotic Pharmacokinetics/Pharmacodynamics in Special Populations. 23rd Annual DMC Infectious Diseases and Critical Care Symposium. **Dearborn, MI** (March 2019).
 14. **Pai MP.** Drug Pharmacokinetic in Obesity. *Symposium*. 1st Annual Research Day, National Taiwan University, **Taipei, Taiwan** (June 2018).
 15. **Pai MP.** Kidney function estimation for drug dosing: Pick your poison. *Visiting Professor*. Merck, **Blue Bell, PA** (March 2018).
 16. **Pai MP.** Hot topics in PK/PD. *Convener of a Rapid Fire Session*. ASM Microbe 2017, **New Orleans, LA** (June 2017).
 17. **Pai MP.** An update on Anti-infective Dosing in Obese Patients. *Symposium*. Making a Difference in Infectious Diseases (MAD-ID), **Orlando, FL** (May 2017)
 18. **Pai MP.** Controversies in antimicrobial dosing. *Symposium: Updates in Infectious Diseases*. 2017 Madison Clinical Conference, University of Wisconsin, **Madison, WI** (April 2017)
 19. **Pai MP, Rybak MJ.** Vancomycin is clinically alive and well. *Interactive Debate: Pro Position*. Midyear Meeting of the American Society of Health System Pharmacists , **Las Vegas, NV** (December 2016)
 20. **Pai MP.** Under and over dosing in obesity. *Symposium: Getting It Right from the Start—Controversies in Dosing of Antimicrobials*. IDWeek 2016, **New Orleans, LA** (October 2016)
 21. **Pai MP.** Daptomycin Dosing in Critically Ill Patients. Infectious Diseases Conference. University of Toronto, Leslie Dan Faculty of Pharmacy, **Toronto, Canada** (October 2015)
 22. **Pai MP.** Dosing Strategies for Obese Patients in the ICU. Infectious Diseases Conference. University of Toronto, Leslie Dan Faculty of Pharmacy, **Toronto, Canada** (October 2015)
 23. **Pai MP.** Vancomycin dosing in obesity: Is body weight the best descriptor. Annual Meeting of the American College of Clinical Pharmacology, **San Francisco, CA** (September 2015)
 24. **Pai MP, Hope W.**(Conveners) I have a white powder but want a drug: Shepherding compounds through the valley of death, **San Diego, CA** (September 2015)
 25. **Pai MP.** Antimicrobial dosing considerations in obese patients with chronic kidney disease. CINE-HDC-Renal Class and University of Sao Paulo (USP), Integrated Quality Symposium on Hemodialysis, **Sao Paulo, Brazil**. (June 2015)
 26. **Pai, MP.** Finding the Right Dose and Schedule to Optimize Antimicrobials. Argentine Society of Infectious Diseases 2015 Annual Meeting, **Buenos Aires, Argentina**. (June 2015)
 27. **Pai, MP.** Treatment of Resistant Gram-Positive Bacteria: A Pharmacologic Perspective. Argentine Society of Infectious Diseases 2015 Annual Meeting, **Buenos Aires, Argentina**. (June 2015)
 28. **Pai, MP.** Dosing Regimen Matters. *Continuing Education*. Visiting Professorship, *University of Illinois at Chicago, Chicago, IL*. (April 2015)

29. **Pai, MP.** Dosing Regimen Matters. *Continuing Education*. Visiting Professorship, *University of Illinois at Chicago, Chicago, IL*. (April 2015)
30. **Pai, MP.** Antimicrobial Dosing Regimen Matters. *Continuing Education*. Annual Infectious Diseases Program, *Albany College of Pharmacy and Health Sciences, Albany, NY*. (February 2015)
31. **Pai, MP.** Antimicrobial Dosing Regimen Matters. *Continuing Education*. Annual Infectious Diseases Program, *Albany College of Pharmacy and Health Sciences, Albany, NY*. (February 2015)
32. **Pai, MP.** Dose Adjustment of Anti-Infective Agents in Obese Patients. *Symposium: When Bigger is not Better-Infectious Diseases and Obesity*. IDWeek 2014, **Philadelphia, PA** (October 2014).
33. **Pai, MP.** Antimicrobial dose extrapolation in the obese. *Special Conference*. Anti-infective Review Group, Health Canada, **Ottawa, Canada** (September 2014).
34. **Pai, MP.** Antimicrobial dosing considerations in the obese and critically ill. *Grand Rounds*. Citywide Infectious Diseases Conference, **Ottawa, Canada** (September 2014).
35. **Pai, MP.** Can serum antibiotic concentration help dosing in the ICU? *Interactive Symposium* (Course Convener). 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, **Washington, DC** (September 2014).
36. **Pai, MP.** Clinical considerations of obesity. *Pharmacokinetics/Pharmacodynamics Workshop*. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, **Washington, DC** (September 2014).
37. **Pai, MP.** Dose individualization of aminoglycosides and vancomycin. *Continuing Education*. American Society of Consultant Pharmacists, **Syracuse, NY**, (June 2014)
38. **Pai, MP.** Antimicrobial dosing in obesity: Finding the holy scale. *Continuing Education*. 61st Annual Alumni Continuing Education Program, *Ferris State University College of Pharmacy, Big Rapids, MI* (May 2014)
39. **Pai, MP.** Antimicrobial dosing considerations for obese patients with MRSA related infections. *Continuing Education*. Annual Infectious Diseases Program, *Albany College of Pharmacy and Health Sciences, Albany, NY*. (March 2014)
40. **Pai MP.** Clinical dose extrapolation for body size. *Workshop (Co-sponsored by the US FDA)*. 2013 American College of Clinical Pharmacology Annual Meeting, **Bethesda, MD** (September 2013)
41. **Pai, MP.** Dosing in obesity: Finding the holy scale. *Continuing Education*. 16th Annual Making a Difference in Infectious Diseases Conference, **Orlando, FL** (May 2013)
42. **Pai, MP.** Antimicrobial dosing in obesity: Finding the holy scale. *Continuing Education*. Midyear Meeting of the American Society of Health System Pharmacists, **Las Vegas, NV** (December 2012)
43. **Pai, MP.** Antimicrobial dosing in obesity: Finding the holy scale. *Continuing Education*. Infectious Diseases Grand Rounds, *State University of New York Upstate Medical Center, Syracuse, NY* (November 2012)
44. **Pai, MP.** Estimation of kidney function for drug dosing. *Continuing Education*. Grand Rounds, *St. Peter's Healthcare, Albany, NY* (March 2012)
45. **Pai MP.** Estimation of Kidney Function and Dosing in Obesity. Symposium Application of PK/PD for informed dose selection. 51st Interscience Conference on Antimicrobial Agents and Chemotherapy, **Chicago, Illinois**, September 2011.
46. **Pai, MP.** Introduction to mechanisms of drug interactions. *Continuing Education*. Annual Infectious Diseases Program, *Albany College of Pharmacy and Health Sciences, Albany, NY*. (February 2011)
47. **Pai, MP.** Metabolism based interactions: Macrolides, azalides, and ketolides. *Continuing Education*. Annual Infectious Diseases Program, *Albany College of Pharmacy and Health Sciences, Albany, NY*. (February 2011)
48. **Pai, MP.** Drug dosing in obesity: Finding the holy scale. *Continuing Education*. Pharmacy Practice Residency and Fellowship Program, *University of Illinois at Chicago, Chicago, IL* (January 2011)

49. **Pai, MP.** Drug dosing in obesity: Finding the holy scale. Office of Clinical Pharmacology Seminar held at the Center for Drug Evaluation and Research, *US Food and Drug Administration, Silver Spring, MD* (June 2010)
50. **Pai, MP.** Antimicrobial dosing considerations in obese patients: *Continuing Education*. Annual Infectious Diseases Program, *Albany College of Pharmacy and Health Sciences, Albany, NY*. (February 2010)
51. **Pai, MP.** Antimicrobial dosing considerations in obese patients: *Continuing Education*. 24th Annual Conference: Concepts and Controversies in Infectious Diseases. **Chicago, IL**. (October 2009)
52. **Pai MP.** Estimation of Renal Function in Obese Individuals. Interactive Symposium Antimicrobial Dosing in the Obese Patient [Co-Moderator]. *47th Annual Meeting of the Infectious Diseases Society of America, Philadelphia, PA*. (October 2009).
53. **Pai MP.** Antimicrobial Dosing in the Obese Patient. Interactive Symposium. *49th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA*. (September 2009).
54. **Pai, MP.** Controversies in the management of Candidiasis among critically ill patients. *35th Annual Symposium: Bioterrorism and Emerging Infections*. New Mexico Thoracic Society. **Albuquerque, NM**. (May 2007)
55. **Pai MP.** Candidiasis in the critically ill patient. *Critical Care Case Conference*. **Albuquerque, NM**. (September 2006)
56. **Pai, MP.** Antifungal Drug Selection: Novel agents, controversies and decision modeling. *Surgical Grand Rounds*. **Albuquerque, NM**. (June 2006)
57. **Pai, MP.** Optimizing antifungal therapy against Candidiasis using antifungal pharmacodynamics. *Presbyterian Hospital*. **Albuquerque, NM**. (March 2006)
58. **Pai, MP.** Know your *Candida* Susceptibility?. *Community Practitioners*. **Albuquerque, NM**. (October 2005)
59. **Pai, MP.** Antifungal agents: An emphasis on safety. *Continuing Education*. 19th Annual Conference: Concepts and Controversies in Infectious Diseases. **Chicago, IL**. (October 2004)
60. **Pai, MP.** Safety and efficacy of linezolid in pediatric patients. *Continuing Education*. University Hospital, **Albuquerque, NM**. (April 2004)
61. **Pai, MP.** Antiretrovirals and Clinical Pharmacy. *Continuing Education*. 22nd Annual General Meeting of the Zambian Pharmaceutical Association, Mulungushi Conference Center, **Lusaka, Zambia**. (June 2003)
62. **Pai, MP.** Rational use of Lipid Based Amphotericin B formulations. *Continuing Education*. Memorial Hospital, **Las Cruces, NM**. (March 2003)
63. **Pai, MP.** Assessment of effective renal plasma flow, enzymuria, and cytokine release during amphotericin B administration in healthy volunteers. *Scholars Program*. General Clinical Research Center, **Albuquerque, NM**. (February 2003)
64. **Pai, MP.** Guidelines for the use of Lipid Based Amphotericin B formulations. *Continuing Education*. Dallas Health System Pharmacists, **Dallas, TX**. (October 2002)
65. **Pai, MP.** Novel Antifungal Agents for Invasive Aspergillosis. *Continuing Education*. New Mexico Society of Health System Pharmacists, **Albuquerque, NM**. (October 2002)
66. **Pai, MP.** Direct to consumer advertising: A pill for every ill? *Scholars Program*. General Clinical Research Center, Albuquerque, NM. (May 2002)
67. **Pai, MP.** The management of candidemia. *Continuing Education*. Internal Medicine Department, Kirtland Air Force Base, **Albuquerque, NM**. (May 2002)
68. **Pai, MP.** The 'immortal' chicken heart and the HeLa 'monster'. *Scholars Program*. General Clinical Research Center, **Albuquerque, NM**. (April 2002)

69. **Pai, MP.** An overview of the safety and efficacy of voriconazole. *Continuing Education.* Hematology/Oncology Department, School of Medicine, **Albuquerque, NM.** (April 2002)
70. **Pai, MP.** Antifungal agents: An emphasis on safety. *Continuing Education.* St. Josephs Pharmacy Department, **Albuquerque, NM.** (September 2001)
71. **Pai, MP.** The influence of susceptibility testing conditions on the morphology of *Candida albicans*. *Fellowship Forum.* Annual Infectious Diseases Pharmacotherapy Fellowship Forum, **Chicago, IL.** (March 2001)
72. **Pai, MP.** The epidemiology and susceptibility of *Candida* isolates from the Chicago region for clinical relevance assessment. *Fellowship Forum.* Annual Infectious Diseases Pharmacotherapy Fellowship Forum, **Hilton Head Island, SC.** (March 2000)
73. **Pai, MP.** The role of G-CSF and GM-CSF for the treatment of infections in nonneutropenic patients. *Fellowship Seminar.* University of Illinois, College of Pharmacy, **Chicago, IL.** (October 1999)
74. **Pai, MP.** The use of primary rat myocytes as a model for gemfibrozil and cyclosporin induced myopathy. *Honors Project Seminar.* Faculty mentor: Daniel J. Acosta, Ph.D. University of Texas, College of Pharmacy, **Austin, TX.** (February 1997)

TEACHING

Narrative: I am a natural educator with a strong passion for teaching and have received consistent ratings of excellence throughout my academic career. My teaching pedagogical style is based on a combination of teacher centered approach and a student centered approach that is dependent on the format and learning objectives of the course. I typically follow the teacher centered approach as a part of an introductory lecture to the major topics that are to be covered with subsequent material delivered through a student centered approach. The student centered approach follows the process laid out by the requirements of the team based learning course. I believe in constructing clear learning objectives and ensuring that that key take away points are delivered in a manner that can be easily retained. I also believe in the value of multimedia, visual aids, and humor to deliver key pieces of information. I am genuinely committed to the development, sponsorship, and advancement of my mentees.

Clinical Pharmacy Translational Sciences PhD & PharmD/PhD Program

University of Michigan, College of Pharmacy:

Teddy Jennaro, PharmD (July 2019-May 2023), Secondary Mentor

Abbie Leino, PharmD (July 2020-May 2024), Primary Mentor [Awarded Rackham Fellowship 2023-2024]

Shuhan Liu, M.S. (November 2020- May 2024), Primary Mentor

Logan Smith, PharmD (November 2020- Present), Thesis Committee

Levi Hooper, PharmD/PhD Candidate (November 2020-Present), Primary Mentor [Awarded MiCHR T32 Fellowship 2023-2025]

Radin Alikhani, PharmD (January 2023 – Present), Primary Mentor

Pharmaceutical Sciences PhD & PharmD/PhD Program

University of Michigan, College of Pharmacy:

Sunny Jung, PharmD/PhD Candidate PharmD (July 2021-Present), Thesis Committee

Emily Briggs, BS (July 2020-May 2022), Thesis Committee

Alex Yu, BS (June 2017-May 2018), Thesis Committee

Clinical Pharmacy Translational Sciences Fellowship

Mentor, 2-3 year training program in preclinical and clinical pharmacokinetics/pharmacodynamics research,

University of Michigan, College of Pharmacy:

Ryan Crass, PharmD (July 2017-June 2019)

Ernane Souza, PhD (September 2018- June 2020).

Fellowship in Infectious Diseases Pharmacotherapy

Co-director, 2-3 year training program in infectious diseases pharmacotherapy research, Albany College of Pharmacy and Health Sciences:

Jill Butterfield, PharmD (May 2010-June 2013)

Dimitriy Matirosov, PharmD (July 2014 – May 2015).

Graduate Thesis

PhD Thesis Committee:

Natalie Boyd, PharmD (July 2016- August 2020). Examination of Non-Antibiotic Drugs against *Staphylococcus aureus* Using Novel Screening Assays. Translational Sciences, The University of Texas at Austin, The University of Texas Health Science Center at San Antonio, San Antonio, TX.

Gloria Wong, MBBS, Hon. Bsc (June 2019). A pharmacokinetic-pharmacodynamic evaluation of beta-lactam antibiotics TDM-guided dose adjustment in critically ill patients. College of Medicine, University of Queensland, Queensland, Australia. Role: Examiner.

Master's Thesis Committee: Rita Jakiche (June 2004). The cost effectiveness of two strategies for vaccinating patients with Hepatitis C virus against Hepatitis A and Hepatitis B. University of New Mexico, College of Pharmacy.

Master's Thesis Committee: Riddhi Shah (May 2014). Identification of the markers of antibiotic resistance in daptomycin non-susceptible strains of *Staphylococcus aureus*. Albany College of Pharmacy and Health Sciences.

Specialized Residency in Infectious Diseases Pharmacotherapy

Co-Director, 1 year training program in infectious diseases pharmacotherapy. The American Society of Health System Accredited. University of New Mexico, College of Pharmacy. Residents trained (graduation date):

Lara H. Nakano, PharmD (June 2002)

Agatha C. Graham, PharmD (June 2003)

Katherine Werner, PharmD (June 2004)

Lenka Hrebickova, PharmD (June 2005)

Paulina (Dziamka) Deming, PharmD (June 2006)

Jasmina Demirovic, PharmD (June 2007).

Pharmacy Practice General Residency

Mentor, Residency Research Program,

Veteran Administration Hospital, Albany, NY: Evan Kujawski (2009-2010)

Albany Medical Center, Albany, NY: Lauren Camaione (2012-2013), Bryan White (2014-2015)

Michigan Medicine, Ann Arbor, MI: Andrew Smith (2020-2021)

Mentor, Teaching Learning Program

St. Peter's Hospital, Albany, NY: Jake Patterson (2014-2015)

Albany Medical Center, Albany, NY: Kiernan O'Connor (2015-2016)

Experiential Training

Preceptor, Pharmacy Practice – Doctor of Pharmacy Program, Albany College of Pharmacy and Health Sciences. 4th year students. APPE [(40 hours/week x 6 weeks) / block]. 10 students per year (2-3 students per block). August 2009-Present

Preceptor, Pharmacy Practice – Doctor of Pharmacy Program, University of New Mexico. 4th year students. Pharm 770 [(40 hours/week X 4 weeks) / student]. Fall 2001 (4 students), Spring 2002 (6 students), Summer 2002 (2 students), Fall 2002 (8 students), Spring 2003 (4 students), Summer 2003 (2 students), Fall 2003 (6 students), Fall 2004 (4 students, 1 resident), Spring 2005 (2 students, 2 residents), Fall 2005 (3 students, 2 residents), Spring 2006 (2 students, 2 residents), Summer 2006 (2 students), Fall 2006 (2 students, 1 resident), Spring 2007 (6 students, 2 residents), Fall 2007 (0 students), Spring 2008 (2 students)

Preceptor, Pharmacy Practice – Doctor of Pharmacy Program, University of New Mexico. 1st year students. Pharm 716 (6 hours/week X 8 weeks). Six students per session. Spring 2002-2005.

Team-Based Learning

Course Coordinator (2017), Instructor (2017-2019) – Doctor of Pharmacy Program, [University of Michigan](#), College of Pharmacy. 2nd year students. Pharm 612 (3 hours/week X 14 weeks). Eighty-three students (14 groups). Winter 2017. Three course topics, two laboratory session, five exams, review sessions, and other coordination responsibilities.

Facilitator. Pharmacy Practice – Doctor of Pharmacy Program, Albany College of Pharmacy and Health Sciences. 3rd year students. **Integrated Problem Solving 6**, Pharm 502 (3 hours/week X 14 weeks). Twenty four students per session. Spring, 2012- present

Instructor. Pharmacy Practice – Doctor of Pharmacy Program, University of New Mexico. 3rd year students. Student-centered, **Problem Based Learning**, Pharm 731 (3 hours/week X 8 weeks). Eight students per session. Fall 2006.

Instructor. Pharmacy Practice – Doctor of Pharmacy Program, University of New Mexico. 2nd year students. Student-centered, **Problem Based Learning**, Pharm 721 (3 hours/week X 8 weeks). Eight students per session. Spring 2002-2005.

Instructor. Pharmacy Practice – Doctor of Pharmacy Program, University of New Mexico. 1st year students. Student-centered, **Problem Based Learning**, Pharm 711 (3 hours/week X 8 weeks). Eight students per session. Spring 2002-2005.

Instructor. Pharmacy Practice – Doctor of Pharmacy Program, University of New Mexico. 2nd year students. **Clinical Communications Laboratory**, Pharm 750 (4 hours/week X 16 weeks). Fifteen students per session. Spring 2002.

Didactic

Course Coordinator (Fall 2018, 2020). Clinical Pharmacy Translational Sciences Graduate Program, [University of Michigan](#), College of Pharmacy. 1st year students. **Clinical Translational Pharmacokinetics**, CPTS820 (14 lecture hours).

Lecturer (Fall 2019, 2020). Pharmaceutical Sciences, [University of Michigan](#), College of Pharmacy. 2nd year PharmD students. **Basic and Clinical Pharmacokinetics**, PS608 (12 lecture hours).

Lecturer (Winter 2019). Pharmaceutical Sciences Graduate Program, [University of Michigan](#), College of Pharmacy. 3rd year students. **Advanced Pharmacokinetics**, PS760 (3 lecture hours, workshop on use of R for EDA, Modeling & Simulation).

Lecturer (Winter 2017, 2018, 2019). Doctor of Pharmacy Program, [University of Michigan](#), College of Pharmacy. 3rd year PharmD students. **Biopharmaceutics and Pharmacogenomics**, PS718 (4 lecture hours).

Course Coordinator (Fall 2017, 2018, 2019, 2020). Bachelors of Pharmaceutical Science, [University of Michigan](#), College of Pharmacy. 1st year students. **Science of Medicines**, Pharm200 (15 lecture hours).

Lecturer (Winter 2017, 2018, 2019). Bachelors of Pharmaceutical Science, [University of Michigan](#), College of Pharmacy. 3rd year students. **From Molecules to Drug and Drug Products**, PS101 (3 lecture hours).

Course Coordinator (2010-2012), Lecturer (2013). Pharmacy Practice – Doctor of Pharmacy Program, Albany College of Pharmacy and Health Sciences, **Pathophysiology, Therapeutics, Pharmacology and Medicinal Chemistry (PTP&M)-Infectious Diseases**. Spring 2010 (18 lecture hours), Spring 2011 (14 lecture hours), Spring 2012 (14 lecture hours), Spring 2013 (6 lecture hours), relinquished to junior faculty member.

Lecturer. Pharmacy Practice – Doctor of Pharmacy Program, Albany College of Pharmacy and Health Sciences, **Pharmacotherapy III**. Fall 2009 (9 lecture hours)

Lecturer. Pharmacy Practice – Doctor of Pharmacy Program, Albany College of Pharmacy and Health Sciences, **Pharmacotherapy II**. Summer 2009 (1 lecture hour)

Instructor. Pharmacy Practice – Doctor of Pharmacy Program, University of New Mexico. 3st year students. **Clinical Pharmacokinetics**, Pharm 745. Fall 2001 (3 lecture hours), Fall 2002 (4 lecture hours), Fall 2003 (8 lecture hours), Fall 2004 (8 lecture hours), Fall 2005 (8 lecture hours), Fall 2006 (5 lecture hours)

Instructor of Record (2004- 2005). Pharmacy Practice – Doctor of Pharmacy Program, University of New Mexico. 3st year students. **Pharmacotherapy II**, Pharm 752. Fall 2001 (5 lecture hours), Spring 2003 (8 lecture hours), Spring 2004 (9 lecture hours, 40 hours course co-ordination), Spring 2005 (8 lecture hours), Spring 2006 (13 lecture hours)

Instructor. School of Medicine – Doctor of Medicine Program. University of New Mexico. 2nd year students. **Transitions Block.** Spring 2003 (1 lecture hour).

Elective Courses

Course Facilitator. Pharmacy Practice – Doctor of Pharmacy Program, Albany College of Pharmacy and Health Sciences, **Drug Interactions.** (3 lecture hours) Fall 2014, (3 lecture hours) Fall 2015

Course Coordinator. Pharmacy Practice – Doctor of Pharmacy Program, Albany College of Pharmacy and Health Sciences, **Advanced Topics in Infectious Diseases.** (20 lecture hours) Fall 2012, (24 lecture hours) Fall 2013, (36 lecture hours) Fall 2015

Lecturer. Pharmaceutical Sciences – Masters of Pharmaceutical Sciences, Albany College of Pharmacy and Health Sciences, **Regulatory Science.** (2 lecture hours) Spring 2012

On-line Courses

Course Faculty. Principles of Clinical Pharmacology, National Institutes of Health, Clinical Center, **Pharmacokinetics and obesity.** (1.5 lecture hours) November 2017 – June 2018, November 2018 – June 2019.

Accessed through: <https://ocr.od.nih.gov/courses/principles-clinical-pharmacology.html>

SERVICE

Narrative: I have delivered excellent service to the numerous academic committees, clinical practice (prior to 2016), my profession, and the scientific community at large. I have served on international scientific programming committees, national research support programs focused on antimicrobial resistance, and regulatory science committee at the local and national level. I currently serve on four editorial boards and am most passionate about eventually serving in the role of scientific editor for a key clinical pharmacology journal.

International and National Committee Appointments

American College of Clinical Pharmacology 2025 Program Committee (November 2023 – September 2025) **Member**
. Plan sessions for this premier annual conference in clinical pharmacology through topic and speaker selection, create theme direction, serve as an ambassador for proposal submissions, participate in annual meetings. (10 hours/year)

American College of Clinical Pharmacology 2024 Program Committee (November 2022 – September 2024) **Co-Chair**
. Plan sessions for this premier annual conference in clinical pharmacology through topic and speaker selection, create theme direction, serve as an ambassador for proposal submissions, participate in annual meetings. (60-100 hours/year)

IDWeek Program Committee (November 2022 – October 2025) **Member - Category A:**
Antimicrobial Agents Including Antibacterial, Antiviral, and Antifungal Drugs. Plan sessions for this premier annual international conference in Infectious Diseases through topic and speaker selection, select abstract submission for oral or poster sessions under category A. (40-60 hours/year)

ICAAC (ASM Microbe) Program Committee (October 2014 – October 2017)- **Co-Chair for Category A**
Plan sessions for this premier annual international conference in Infectious Diseases through topic and speaker selection, select abstract submission for oral or poster sessions under category A: pharmacokinetic, pharmacodynamics and general pharmacology. (60-100 hours/year)

Society of Infectious Diseases Pharmacists (October 2014 – October 2017)- **Member, Interorganization Committee**
Develop and define symposia for cross collaboration between SIDP and other key Infectious Diseases and Clinical Pharmacology based societies.

Society of Infectious Diseases Pharmacists (October 2014 – July 2015)- **Chair, Obesity Working Group**
Lead a team of national experts on antimicrobial pharmacokinetics and pharmacodynamics to develop a 'White Paper' on the current state of knowledge and future direction associated with the interactions between infection, obesity, and drug dosing.

Society of Infectious Diseases Pharmacists (October 2006 – July 2008)
Annual report committee (10 hours / year)

Society of Infectious Diseases Pharmacists (August 2002 – July 2005)
Membership Committee, review 40-50 applicants each year. (5 hours / year)

Grants Review Committees

Antimicrobial Resistance Leadership Group (ARLG), Special Emphasis Panel- Pharmacokinetics (August 2015-Present) - **Member**

The ARLG is a \$62 million (6.5 year) NIH sponsored program to support clinical research in antibacterial research. Review and select the highest-quality protocols that advance the ARLG scientific agenda.

Defense Medical Research and Development Program CET-1 (2016, 2017, 2018) – Scientist Reviewer
Reviewed clinical and preclinical proposals pertaining to development of therapeutics for combat related wound infections with special emphasis on ESKAPE pathogens

National Institutes of Health (November 2014, November 2015) – Expert Reviewer
Special Emphasis Panel (ZHL1 CSR-B (F1)), NHLBI SBIR Phase IIB Bridge and Small Market Awards. Two separate meetings held to review R44 research proposals related to bridge and small market awards, respectively. (30 hours)

Israel Science Foundation (May 2013) – Expert Reviewer
Reviewed research proposals related to pharmacology in obesity and bariatric surgery (12 hours)

Scholarship of Discovery-Intramural Grants Program (April 2013)- Chair
Coordinated the review of proposals submitted to the intramural grants program, Albany College of Pharmacy and Health Sciences. (15 hours)

New Investigator Grant Review Committee (September 2004)- Expert Reviewer
Review proposals submitted to this program, American Association of Colleges of Pharmacy. (15 hours)

Promotion and Tenure

University of Minnesota, College of Pharmacy (2019, 2022) – Reviewer (6 hours)

University of Illinois at Chicago, College of Pharmacy (2015, 2017, 2018, 2023) - Reviewer (4 hours/each)

University of Houston, College of Pharmacy (2014, 2018) – Reviewer (4 hours)

University at Buffalo, College of Pharmacy and Pharmaceutical Sciences (2013, 2018, 2022) – Reviewer (4 hours)

University of New Mexico, College of Pharmacy (2007-2008) – Committee Member

Editorial

Editorial Board

Antimicrobial Agents and Chemotherapy (January 2018 – Present)

Pharmacotherapy (January 2018 – Present)

Journal of Clinical Pharmacology (September 2019 – February 2024)

Diagnostic Microbiology and Infectious Diseases (May 2017 – July 2023)

Annals of Pharmacotherapy (September 2003 – December 2013)

Manuscript Reviewer

Frequent (6 to 12/year): Antimicrobial Agents and Chemotherapy, Pharmacotherapy

Less Frequent (2 to 5/year): Clinical Infectious Diseases, Diagnostic Microbiology Infectious Diseases, Journal of Clinical Pharmacology, Journal of Antimicrobial Chemotherapy, Clinical Pharmacokinetics

Rare (~1/year) Clinical Drug Investigation, Drug Development and Industrial Pharmacy, Pediatric Nephrology, Journal of Infectious Diseases, Nature Medicine, Annals of Pharmacotherapy, PlosOne, OFID

Regulatory Science/Task Forces

2019 FDA/CDER Oncology Drugs Advisory Committee (ODAC) meeting-United States Food and Drug Administration (March 9, 2023)- Temporary Member

American Society of Nephrology/National Kidney Foundation Race and eGFR Task Force (December 11, 2020)-
Discussant

2019 FDA/CDER Endocrinology and Metabolic Drugs Advisory Committee (EMDAC) meeting-United States Food and Drug Administration (November 13, 2019)- Temporary Member

Pharmaceutical Science and Clinical Pharmacology Advisory Committee Meeting- United States Food and Drug Administration (May 7, 2019)- Drug Dosing in Renal Impairment - Temporary Member

Institutional Animal Care and Use Committee-ACPHS (July 2011 – June 2016) - Member
Ensure safe and ethical conduct of animal research, ACPHS, Albany, New York (1-2 hours / month)

Institutional Review Board-Albany Medical College (January 2012 – May 2015) - Member
Ensure safe and ethical conduct of human research, Albany, New York (4 hours / month)

Institutional Review Board-ACPHS (July 2009 – January 2015) - Member
Ensure safe and ethical conduct of human research, ACPHS, Albany, New York (1-2 hours / month)

Human Research Review Committee (October 2006 – September 2008)-Member

Ensure safe and ethical conduct of human research, UNMHSC, Albuquerque, New Mexico (10 hours / month)

Elected Positions

Faculty Senate, Senator (September 2012 – July 2014)

Represented the Department of Pharmacy Practice, ACPHS, Albany, NY (4 hours / month)

Academic Accreditation Committees

American College of Pharmacy Education Self-Study, Standards 27-30 (Jan 2010 – June 2010)- Chair
Generate supporting materials for standards 27-30 for the self-study report. Standard 6 (June 2015 – June 2016)-
Primary Writer. (2 hours/month)

PRR Committee for the Middle States Commission on Higher Education (September 2014 – February 2015)- Chair
Generate supporting materials for standard 11 (Educational Offerings) of the period review report. (2 hours/month)

Academic Committees

Precision Health Faculty Advisory Committee (January 2021 – Present)- Member

Executive Committee (July 2020 – Present)- Member (non-Voting)

Administrative Operations Committee (July 2020 – Present)- Member

Bachelor of Science in Pharmaceutical Sciences Admissions Committee (July 2017 – August 2020)- Member
Support curricular redesign through the construct of clinical pharmacy relevant course-work.

Bachelor of Science in Pharmaceutical Sciences Curriculum Committee (July 2016 – Present)- Member
Support curricular redesign through the construct of clinical pharmacy relevant course-work.

Research Committee (September 2009 – June 2011)-Member, (October 2014 – January 2015)-Member, (February 2015 – August 2015)-Chair, (September 2015 – June 2016)-Member
Define policies and procedures to foster scholarship, ACPHS, Albany, New York (4 hours / month)

Pharmacy Admissions Interviewer (September 2011 – June 2016)
Interview 8-10 students each year, ACPHS, Albany, NY (3-6 hours / year)

Continuing Education Committee (October 2010 – June 2012)-Member
Identify and support the delivery of continuing education programs, ACPHS, Albany, NY (2 hours / month)

Graduate Council (September 2009 – March 2010)-Member
Define policy and procedures associated with the graduate program, ACPHS, Albany, New York (4 hours / month)

Research Strategic Planning Committee (October 2005 – September 2008)

Promote and expand research activity, College of Pharmacy, UNM, Albuquerque, New Mexico. (10 hours / year)

Admissions Committee (October 2002 – July 2006)

Interview 24 and review 200 candidates each year, College of Pharmacy, UNM, Albuquerque, New Mexico. (60 hours / year)

Recruitment Committees

Pharmaceutical Sciences Search Committee (June 2022 – June 2023) - Identify and hire one open rank professors of Pharmaceutical Sciences

Clinical Pharmacy Search Committee (Jan 2020 – Present) – Chair, Identify and hire five open rank clinical professors of Pharmaceutical Sciences

Pharmaceutical Sciences Search Committee (June 2019 – June 2020) - Identify and hire two open rank professors of Pharmaceutical Sciences

Deputy Director of the Medicinal Chemistry Core (December 2017 – March 2018) - Identify and hire of a Research Assistant Professor of Medicinal Chemistry

Pharmacy Practice Faculty Search Committee (December 2012 – Present)-Member, (June 2013 – October 2015) - Chair

Identify and support the hire of Pharmacy Practice faculty, ACPHS, Albany, NY (20 hours/hire)

Arts and Sciences Faculty Search Committee (December 2013 – March 2014)- Member

Identify and support the hire of a faculty member in Microbiology, ACPHS, Albany, NY (10-12 hours)

Pharmaceutical Sciences Faculty Search Committee (June 2012 - October 2012)- Member

Identify and support the hire of a faculty member in Pharmaceutics, ACPHS, Albany, NY (15-30 hours)

Animal Research Facility Manager and Radiation Safety Officer Search Committee (January 2011 – March 2011)- Member

Identify and support the hire of a research facility manager, ACPHS, Albany, NY (10-15 hours)

Clinical

Antimicrobial Monitoring Service (May 2010 – June 2016).

Pharmacokinetic Service. Albany Medical Center Hospital, Albany, New York. (10 hours/week x 24 weeks/year)

Antimicrobial Monitoring Service (August 2009 – March 2010)

Pharmacokinetic Service. Stratton Veteran Administration, Albany, New York. (8 hours/week)

Infectious Diseases Consult Service (January 2002 – October 2006)

Antimicrobial Pharmacotherapy Consultant, UNMHSC, Albuquerque, New Mexico. (8 hours/week)

Adult Cystic Fibrosis Clinic (January 2003 – May 2005)

Antimicrobial Pharmacotherapy Consultant, UNMHSC, Albuquerque, New Mexico. (4 hours/week)

Antibiotic Subcommittee (September 2001 – January 2007)

Pharmacy and Therapeutics Committee, UNMHSC, Albuquerque, New Mexico. (1 hour / month)