Sarah Kim, PhD

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Appointments

Assistant Professor (tenure-track) 06/2021 – present
University of Florida College of Pharmacy Orlando, FL, USA

- Department of Pharmaceutics (Lake Nona)
- Core Member, Center for Pharmacometrics and Systems Pharmacology
- Full Member, Intelligent Critical Care Center

Research Assistant Professor 01/2019 – 05/2021
University of Florida College of Pharmacy Orlando, FL, USA

- Department of Pharmaceutics (Lake Nona)
- Core Member, Center for Pharmacometrics and Systems Pharmacology

Education

Postdoctoral Training in Pharmacometrics 11/2015 – 12/2018
University of Florida College of Pharmacy Orlando, FL, USA

- **ASCPT David Goldstein Trainee Award (top score) & Presidential Trainee Awards**
- Supervisors: Drs. Mirjam N. Trame, Stephan Schmidt & Lawrence J. Lesko

Ph.D. in Mathematics 08/2010 – 12/2015
Florida State University Tallahassee, FL, USA

- **Area of Study: Biomathematics**
- Dean's Scholarship
- Supervisor: Dr. Monica K. Hurdal | Committee: Drs. Richard Bertram, Nick Cogan & Oliver Steinbock

M.S. in Applied Mathematics 03/2008 – 02/2010
Hanyang University ERICA (Education Research Industry Cluster at Ansan) Ansan, South Korea

- **LG Graduate Research Fellowship**
- Supervisor: Dr. Do Wan Kim

B.S. in Applied Mathematics 03/2004 – 02/2008
Hanyang University ERICA Ansan, South Korea

- ***Summa cum Laude* President Graduation Honor**

Research Grants

Ongoing Research Support

JDRF (3-SRA-2022-1157-S-B), PI: Sarah Kim 06/01/2022 – 05/31/2025
Deep Learning-based Analyses of Pancreatic Islet Beta-Cell Heterogeneity and MRI Pancreas Volume as Biomarkers to Improve Understanding of Type 1 Diabetes Progression

- Goal: This project seeks to develop a deep learning based imaging analysis and informatics tool for better understanding of type 1 diabetes progression.
- Amount: $750,000
- Role: Principal Investigator

NIH/NCATS (R21TR004006), PI: Sarah Kim 09/01/2021 – 07/31/2024

Optimizing Muscular Dystrophy Clinical Trial Designs using Modeling and Simulation

- Goal: This project seeks to optimize clinical trial designs of efficacy evaluation studies of potential therapies of Duchenne muscular dystrophy using magnetic resonance imaging and spectroscopy biomarkers.
- Amount: $414,187
- Role: Principal Investigator

Sail Bio (P0270000), PI: Sarah Kim 08/01/2022 – 07/31/2024

Quantifying Clinical and Genetic Factors Influencing Rate and Severity of Mucin1 (MUC1) and Uromodulin (UMOD) Variants of Autosomal Dominant Tubulointerstitial Kidney Disease

- Goal: This project seeks to develop a model-based natural history characterization and clinical trial simulation tool intended to describe rate and severity of disease progression and to optimize the design of studies to investigate efficacy of potential therapies for autosomal dominant tubulointerstitial kidney disease.
- Amount: $175,000
- Role: Principal Investigator

NIH/NIAID (R01AI173238), PIs: George L Drusano & Arnold Louie 01/25/2023 – 12/31/2027

Optimizing Multi-drug Mycobacterium tuberculosis Therapy for Rapid Sterilization and Resistance Suppression

- Goal: This proposal will delineate a pathway to evaluate combinations of agents (3-4 drugs) for therapy of *Mycobacterium tuberculosis*. This pathway will identify regimens which will kill rapidly, suppress resistance and allow shortening of duration of therapy.
- Proposed amount: $6,636,797
- Role: Co-Investigator

UF College of Public Health and Health Professions (PHHP Research Innovation Fund), PIs: Rebecca Willcocks & Sarah Kim 08/21/2023 – 08/20/2024

Deep Learning-powered Assessment of Bone Quantity in Duchenne Muscular Dystrophy

- Goal: This pilot project aims to establish an auto-segmentation workflow and algorithm for mid-femur bone geometry in order to increase understanding of bone fragility in Duchenne muscular dystrophy by leveraging artificial intelligence to learn from existing magnetic resonance imaging databases.
- Amount: $24,669
- Role: Co-Principal Investigator

UF Strategic Fund, PIs: Krista Vandenborne, Sarah Kim & Glenn Walter 12/04/2023 – 06/30/2026

AI Applications to Pediatric Neuromedicine

- Goal: This pilot project aims to capitalize on the most comprehensive MR imaging natural history data set (funded by NIH multicenter grant ImagingDMD) acquired in boys with Duchenne muscular dystrophy to create deep learning algorithms that can capture disease progression and therapeutic efficacy in neuromuscular diseases.
- Amount: $480,000
- Role: Co-Principal Investigator

Completed Research Support

JDRF (2-SRA-2020-903-A-N), PI: Sarah Kim 02/01/2020 – 01/31/2023

A Model-based Clinical Trial Simulation Tool to Optimize Clinical Trial Designs for Type 1 Diabetes Prevention Studies

- Goal: This project seeks to optimize clinical type 1 diabetes prevention trials by identifying subgroups of the population that differ in disease state and progression through modeling and simulation.
- Amount: $150,000
- Role: Principal Investigator

NIH/NIAID (P01AI123036), PI: George L Drusano 08/20/2016 – 07/31/2022

Optimizing Combination Therapy to Accelerate Clinical Cure of Tuberculosis

- Goal: This project seeks to markedly shorten the length of TB treatments and prevent the emergence of resistance through the integrated use of experimental and mathematical analysis techniques.
- Amount: $9,368,574
- Role: Key personnel (Faculty)

Astellas Pharma/Italfarmaco/Catabasis Pharmaceuticals/Sarepta Therapeutics (AGR17513), PIs: Krista Vandenborne & Sarah Kim 10/01/2019 – 12/23/2021

MR Biomarkers Research Service Agreement

- Goal: This project establishes a Committee of Stakeholders that work together to understand and model MR biomarker data of disease progression in Duchenne muscular dystrophy in support of a fit for purpose submission to the FDA and an equivalent submission to the EMA for endorsement of muscle MR measures as a biomarker for Duchenne muscular dystrophy.
- Amount: $400,000
- Role: Co-Principal Investigator

UF Informatics Institute (AI SEED Fund PRDSP112), PI: Sarah Kim 06/01/2021 – 06/01/2022

Deep Learning-based Analysis for Pancreatic Islet Beta-Cell Heterogeneity to Improve Understanding of Type 1 Diabetes Progression

- Goal: This project seeks to develop a deep learning based imaging analysis and informatics tool for better understanding of type 1 diabetes progression
- Amount: $27,600 (plus, HiperGator allocations worth $5,000)
- Role: Principal Investigator

UF Clinical and Translational Science Institute (P0152121), PI: Sarah Kim 12/16/2019 – 06/15/2021

Optimizing Clinical Trial Designs using Imaging Data for Duchenne Muscular Dystrophy

- Goal: It is a pilot project to optimize clinical trial designs of efficacy evaluation studies of potential therapies of Duchenne muscular dystrophy using magnetic resonance imaging and spectroscopy biomarkers.
- Amount: $19,619
- Role: Principal Investigator

Critical Path Institute (AWD05774-P0116210), PI: Sarah Kim 03/07/2019 – 03/06/2020

A Model-based Clinical Trial Simulation Tool to Optimize Clinical Trial Design of Studies to Investigate Efficacy of Potential Therapies for Duchenne Muscular Dystrophy

- Goal: This project seeks to develop a disease progression model-based clinical trial simulation tool intended to optimize the design of clinical trial studies to investigate efficacy of potential therapies for Duchenne muscular dystrophy.
- Amount: $50,000
- Role: Principal Investigator

Scholarships

Scholarship	Southern Scholarship Foundation (2012 – 2013)
Dean's Scholarship	Florida State University (2010 – 2011)
Teaching Assistantship	Department of Mathematics, Florida State University (2010 – 2013)
Graduate Research Fellowship	LG Corporation Yonam Foundation (2008 – 2010)
Teaching Assistantship	Department of Applied Mathematics, Hanyang University (2008)
Scholarship	Beakwoon Scholarship Foundation (2006 – 2007)
Full Tuition Scholarship	Hanyang University (2004 – 2007)

Awards & Honors

First author (∗), Co-author (◦), and Correspondence (⋆)

International

2024 **Presidential Trainee Award (⋆)**, American Society for Clinical Pharmacology and Therapeutics
2023 **Presidential Trainee Award (⋆)**, American Society for Clinical Pharmacology and Therapeutics
2023 **Jason Morrow Trainee Award (⋆)**, American Society for Clinical Pharmacology and Therapeutics
2020 **Trainee Abstract Award (⋆)**, American Conference on Pharmacometrics
2020 **Simcyp Academic Award (◦)**, Certara
2020 **Presidential Trainee Award (⋆)**, American Society for Clinical Pharmacology and Therapeutics
2020 **Jason Morrow Trainee Award (⋆)**, American Society for Clinical Pharmacology and Therapeutics
2018 **Peer Review Award**, Pharmacology & Toxicology, Publons
2018 **Presidential Trainee Award (∗)**, American Society for Clinical Pharmacology and Therapeutics
2017 **Presidential Trainee Award (∗)**, American Society for Clinical Pharmacology and Therapeutics
2017 **David Goldstein Trainee Award (∗)**, American Society for Clinical Pharmacology and Therapeutics

National & Domestic

2024 **Best Poster Award: Grad Category (⋆)**, University of Florida College of Pharmacy
2024 **Oral Competition Finalist: Postdoc Category (⋆)**, University of Florida College of Pharmacy
2023 **Oral Competition Finalist: Grad Category (⋆)**, University of Florida College of Pharmacy
2023 **Best Poster Award: Grad Category (◦)**, University of Florida College of Pharmacy
2022 **SURF Lake Nona Pioneer (⋆)**, University of Florida College of Pharmacy
2022 **Oral Competition Finalist: Postdoc Category (⋆)**, University of Florida College of Pharmacy
2022 **Best Poster Award: PharmD Category (⋆)**, University of Florida College of Pharmacy
2020 **Best Poster Award: Grad Category (◦)**, University of Florida College of Pharmacy
2012 **Pi Mu Epsilon Honor**, National Mathematics Honor Society
2009 **Poster Presentation Award (◦)**, Korean Society for Mathematical Biology
2008 ***Summa Cum Laude* Graduation Honor**, President of Hanyang University
2007 **Volunteer Corps Essay Contest Award**, Hanyang University
2004 **Highest Entrance Examination Score**, College of Science & Technology, Hanyang University

Travel Grants

First author (∗), Co-author (◦), and Correspondence (⋆)

International

2024 **Four Trainee Travel Grants (⋆)**, American Society for Clinical Pharmacology and Therapeutics
2015 **Landahl Travel Grant (∗)**, Society of Mathematical Biology

National & Domestic

2015 **Conference Travel Grant (∗)**, Department of Mathematics, Florida State University

Certificates

Click (⋆) to see credentials

Artificial Intelligence/Machine Learning

04/2023 **AI for Clinical Care Workshop (Advanced Track: Train the Trainer)**, UF College of Medicine
02/2022 **Applications of AI for Anomaly Detection (⋆)**, NVIDIA Deep Learning Institute
06/2021 **Fundamentals of Accelerated Data Science with RAPIDS (⋆)**, NVIDIA Deep Learning Institute
02/2021 **Classification with Transfer Learning in Keras (⋆)**, Coursera
01/2021 **Python (⋆)**, Kaggle
01/2021 **Basic Image Classification with TensorFlow (⋆)**, Coursera
09/2020 **Build a Deep Learning Based Image Classifier with R (⋆)**, Coursera
07/2020 **Fundamentals of Deep Learning for Computer Vision (⋆)**, NVIDIA Deep Learning Institute
07/2020 **Structuring Machine Learning Projects (⋆)**, Coursera

Pharmacometric Modeling and Simulation

09/2019 **101-CL: Introduction to Population Modeling using Phoenix NLME**, Certara University
09/2019 **100-CL: Introduction to Phoenix WinNonlin**, Certara University

Grant Writing

12/2020 **Professional NIH Grant Development Workshop**, Grant Training Center

Teaching

08/2012 **Program for Instructional Excellence**, Florida State University

Others

02/2008 **ERICA certificate**, Hanyang University
12/2007 **Six Sigma Green Belt**, Hanyang University

Teaching

Course Coordinator (⋆)

Instructor

College of Pharmacy, University of Florida

Duties included: preparing and delivering lectures; creating and grading hands-on learning materials & assignments; holding office hours; designing a course syllabus (⋆)

- **PHA 6122 Population Pharmacokinetics and Pharmacodynamics (⋆)** — Every other Spring 2024 – present
- **PHA 6935 Population Pharmacokinetics and Pharmacodynamics (⋆)** — Spring 2023
- PHA 6935 Introduction to Artificial Intelligence in Pharmacy — Fall 2023
- PHA 6125 Introduction to Quantitative Pharmacology — Every Fall Since 2021 – present
- PHA 7979 Advanced Research — Spring 2023 – present
- PHA 6910 Supervised Research — Fall 2022 – present
- PHA 5905 Research Elective (PharmD) — Spring 2022 – present
- PHA 6125 Pharmacokinetics & Biopharmaceutics — Spring 2020

Substitute Instructor
College of Pharmacy, University of Florida
Duties included: preparing and leading active classes
- PHA 5132 Principles of Drug Therapy Individualization — Spring 2018 & Spring 2019

Instructor with Full Classroom Responsibility
Department of Mathematics, Florida State University
Duties included: preparing and delivering lectures; creating, giving, and grading exams and quizzes; preparing syllabi; holding office hours
- MAC 2311 Calculus with Analytic Geometry I — Fall 2013
- MAC 1140 Pre-Calculus Algebra — Spring 2013

Lab Lecturer
Department of Mathematics, Florida State University
Duties included: preparing and delivering lectures; helping students better understand mathematics and programming questions; grading weekly assignments; holding office hours
- MAP 2480 Bio-Calculus Computer Programming — Spring 2012 & Fall 2012

Teaching Assistant
Department of Mathematics, Florida State University
Duties included: proctoring weekly tests and quizzes; helping students better understand mathematics and programming (MAP 2480) questions; holding office hours
- MAC 1140 Pre-Calculus Algebra — Summer 2012, Spring 2013 & Summer 2013
- MAP 2480 Bio-Calculus Computer Programming — Fall 2011
- MAC 1114 Trigonometry — Fall 2011
- MGF 1106/1107 Mathematics for Liberal Arts — Spring 2011
- MAC 1105 College Algebra — Fall 2010, Summer 2012 & Summer 2013

Teaching Assistant
Department of Applied Mathematics, Hanyang University
Duties included: preparing lecture materials using LaTeX; proctoring and grading tests and quizzes; holding office hours
- Calculus I & II — Spring 2009 & Fall 2009
- Numerical Analysis — Fall 2008
- Linear Algebra — Spring 2008

Mentoring

Primary Supervisor (⋆) and Committee Member/Co-Supervisor (◦), Current Affiliation

Postdoctoral Associates

Sanghoon Kang, PhD (⋆) — 07/2023 – present
Deok Yong Yoon, PharmD, PhD (⋆), Novartis — 03/2022 – 07/2023
Juan Francisco Morales, PhD (⋆), Critical Path Institute — 01/2020 – 12/2022

Graduate Students

Shyam S Ramesh (⋆) — 08/2022 – present
Clemence Boivin-Champeaux (◦) — 08/2022 – present
Parsshava Mehta (◦) — 08/2021 – present
Mai Abdelmageed (◦) — 08/2021 – present
Corey Perkins (◦) — 08/2019 – present
Omar Elashkar (⋆) — 08/2022 – 09/2023
Mohammed Almoslem, PhD (◦), Certara — 08/2019 – 08/2023
Karthik Lingineni, PhD (◦), Novartis — 05/2017 – 05/2021

OPS Research Scientists

Jongjin Kim (⋆) 10/2023 – present
Nicholas D Waddington (⋆) 02/2022 – 11/2023

Undergraduate Students (Research Projects)

Natalia Maya (⋆) 02/2024 – present
Pedro L Tirado-Velez (○) 08/2022 – present
Jordan Wilk Summer Undergraduate Research at Florida (SURF) program (⋆) 05/2022 – 08/2022

PharmD Students (Research Projects)

Michael D Outar 02/2024 – present
Michael Morillo 07/2022 – 01/2023, 11/2023 – present
Devanand U Adhin 09/2023 – present
Matthew Todd 05/2023 – present
Shunwen Wu 10/2022 – present
Deyaneira Laboy Baiz 10/2021 – 02/2022, 11/2023 – 02/2024
Christopher A Stone 10/2022 – 02/2023
Victoria A Hayes 10/2022 – 02/2023
Shefa O Ali 10/2022 – 02/2023
Nghi T Nguyen 11/2022 – 02/2023
Lora A Sellers 07/2022 – 01/2023
Ai Quynh Nguyen, Magellan Rx Management/Prime Therapeutics 10/2021 – 05/2022
Orniel Y Caban 10/2021 – 05/2022
Keisha Natoya Persaud, Takeda 10/2021 – 05/2022
Seth Malhotra 08/2021 – 05/2022
Melissa Thomas, AstraZeneca 01/2020 – 08/2021
Justin R Collins, AdventHealth Celebration 06/2018 – 05/2021

International Exchange Students

Marian Klose, PharMetrX 11/2021 – 05/2022
Yannick Hoffert, KU Leuven 11/2021 – 05/2022

Service

Committee Member
University of Florida College of Pharmacy
- Standing Committee
  – Artificial Intelligence Initiative Committee 09/2020 – present
- Ad hoc Committees
  – Artificial Intelligence Faculty Search Committee 09/2023 – present
  – Research Related Faculty Awards (Review Panelist) 03/2023
  – Research Faculty Search Committee 03/2022 – 06/2022
  – Admission to the Doctor of Pharmacy Program (Faculty Interviewer) 09/2021 – present

Steering Committee Member
American Society for Clinical Pharmacology & Therapeutics
- Pharmacometrics & Pharmacokinetics (PMK) Community Committee 05/2022 – present

Faculty Advisor
University of Florida College of Pharmacy Student Organization
- student Personalized Medicine Coalition (sPMC) 09/2021 – present

Academic Advisor
Consortium
- Duchenne Muscular Dystrophy Regulatory Science Consortium (D-RSC) 03/2019 – present
  Critical Path Institute

Grant Reviewer

Grants

- **National Institutes of Health** 02/2024 – present
  – *Accepted for participation in the Early Career Reviewer program at the Center for Scientific Review, NIH*
- **JDRF** 02/2022 – present
  – *FY24 Training Awards Review Panel*
  – *FY23 Training Awards Review Panel*
  – *FY22 RFA: Improving Risk Prediction for T1D Onset: Modeling and Assay Development for Clinical and Commercial Use Review Panel*
- **UF Clinical and Translational Science Institute**
  – *FY24 CTSI Pilot Application Review Panel* 01/2024

Editorial Advisory Board Member

Journal

- **Journal of Pharmacokinetics and Pharmacodynamics** 02/2023 – present
  – *The Official Journal of the International Society of Pharmacometrics*

Journal Reviewer

Journals

- **Clinical Pharmacology & Therapeutics** 03/2023 – present
  – *The Official Journal of the American Society for Clinical Pharmacology & Therapeutics*
- **Drug Safety** 11/2022 – present
  – *The Official Journal of the International Society of Pharmacovigilance*
- **Clinical & Translational Science** 08/2022 – present
  – *The Official Journal of the American Society for Clinical Pharmacology & Therapeutics*
- **CPT: Pharmacometrics & Systems Pharmacology** 05/2022 – present
  – *The Official Journal of the American Society for Clinical Pharmacology & Therapeutics*
  – *The Official Journal of the International Society of Pharmacometrics*
- **Scientific Reports** 05/2022 – present
- **eLife** 09/2021 – present
- **Journal of Pharmacokinetics and Pharmacodynamics** 10/2020 – present
  – *The Official Journal of the International Society of Pharmacometrics*
- **Journal of Drug Delivery Science and Technology** 08/2018 – present
- **European Journal of Pharmaceutical Sciences** 07/2017 – present
  – *Selected as one of the most productive reviewers in 2017*

Scientific Programming/Abstract Reviewer

Conferences

- American Society for Clinical Pharmacology & Therapeutics 06/2020 – present
- American Conference on Pharmacometrics 01/2020 – present

Panelist

Workshop

- Machine Intelligence for Quantitative Modeling in Drug Discovery & Development Applications Workshop 09/2022

Judge

Conferences/Competitions

- University of Florida College of Pharmacy Research Showcase 2020 – 2022
- BioRender Graphical Abstract Contest 06/2020

Session Coach

Conferences/Webinars

- American Society for Clinical Pharmacology & Therapeutics 11/2023
  – *Tutorial: Engaging with AI and Machine Learning*
- American Conference on Pharmacometrics 11/2021
  – *Tutorial 3: Application of Machine Learning in Drug Development with Regulatory Considerations*

Session Chair
Conferences
- American Conference on Pharmacometrics 11/2022
  – *Roller Coaster 3 (Substitute)*
- American Conference on Pharmacometrics 10/2019
  – *Tutorial 2: The Use of Machine Learning in Drug Development with Regulatory Considerations*
- Pfizer Quantitative Lunch Extended Session Webinar 10/2019
  – *Introduction to Machine Learning in Drug Discovery and Development*
- Society for Mathematical Biology Annual Meeting 07/2015
  – *CS K7: Topics on Neural System*

Poster Host
Conference
- American Association of Pharmaceutical Scientists Annual Meeting and Exposition 11/2017
  – *Poster Forum 1: Analytical Methodology*
  – *Poster Forum 8: Regulatory Sciences*

Peer Reviewed Journal Articles

Click DOI# to see a full-text of the article

Correspondence (⋆) and Contributed equally (◦)

35. D.Y. Yoon, M.J. Daniels, R.J. Willcocks, W.T. Triplett, J.F. Morales, G.A. Walter, W.D. Rooney, K. Vandenborne, **S. Kim**⋆. Five multivariate Duchene muscular dystrophy progression models bridging six-min walk distance and MRI relaxography of leg muscles. Accepted for publication in *Journal of Pharmacokinetics and Pharmacodynamics*, **(2024)**.

34. M. Almoslem, S.D. Shah, V. Vozmediano, S. Guzy, **S. Kim**, M.L. Hudak, and S. Schmidt⋆. Pharmacokinetic and pharmacodynamic analysis of acetaminophen and ibuprofen dual therapy for patent ductus arteriosus closure in preterm neonates less than 29 weeks' gestation. *Journal of Clinical Pharmacology*, 64(3): 312-322 **(2024)**.
DOI: 10.1002/jcph.2386.

33. R.J. Willcock⋆, A. Barnard, M.J. Daniels, S. Forbes, W. Triplett, J. Brandsema, E. Finanger, W. Rooney, **S. Kim**, D.-J. Wang, D. Lott, C. Senesac, G. Walter, H.L. Sweeney, and K. Vandenborne. Clinical importance of changes in magnetic resonance biomarkers for Duchenne muscular dystrophy. *Annals of Clinical and Translational Neurology*, 11(1): 67-78 **(2024)**.
DOI: 10.1002/acn3.51933.

32. **S. Kim**⋆, R.J. Willcocks, M.J. Daniels, J.F. Morales, D.Y. Yoon, W.T. Triplett, A.M. Barnard, D.J. Conrado, V. Aggarwal, R. Belfiore-Oshan, T.N. Martinez, G.A. Walter, W.D. Rooney, and K. Vandenborne. Multivariate modeling of magnetic resonance biomarkers and clinical outcome measures for Duchenne muscular dystrophy clinical trials. *CPT: Pharmacometrics & Systems Pharmacology*, 12(10): 1437-1449 **(2023)**. PMID: 37534782.
DOI: 10.1002/psp4.13021.

31. D.B. Jackson⋆, R. Racz, **S. Kim**, S. Brock, and K. Burkhart. Rewiring drug research and development through human data-driven discovery (HD3). *Pharmaceutics*, 15(6):1673 **(2023)**. PMID: 37376121.
DOI: 10.3390/pharmaceutics15061673.

30. J. Burton⋆, B. Abuasal, S. Bachhav, J. Connarn, J. Cosman, N. Gupta, J. Jing, **S. Kim**, T. Long, N. Terranova, K. Venkatakrishnan, J. Wang, and Q. Liu. Future opportunities in drug development: American Society for Clinical Pharmacology and Therapeutics (ASCPT) Pharmacometrics and Pharmacokinetics (PMK) community vision. *Clinical Pharmacology & Therapeutics*, 114(3): 507-510 **(2023)**. PMID: 37303106.
DOI: 10.1002/cpt.2955.

29. J.F. Morales, R. Muse, J.T. Podichetty, J. Burton, S. David, P. Lang, S. Schmidt, K. Romero, I. O'Doherty, F. Martin, M. Campbell-Thompson, M.J. Haller, M.A. Atkinson, and **S. Kim**⋆. Disease progression joint model predicts

time to type 1 diabetes onset: Optimizing future type 1 diabetes prevention studies. *CPT: Pharmacometrics & Systems Pharmacology*, 12(7):1016–1028 **(2023)**. PMID: 37186151.
DOI: 10.1002/psp4.12973.

28. S. Schmidt*, V. Vozmediano, R. Cristofoletti, **S. Kim**, Z. Lin, N. de Moraes, F. Azeredo, B. Cicali, H. Leuenberger, J.D. Brown, J.Y. Jin, C.J. Musante, S. Tannenbaum, and Yaning Wang. Requirements, expectations, challenges and opportunities associated with training the next generation of pharmacometricians. *CPT: Pharmacometrics & Systems Pharmacology*, 12(7):883–888 **(2023)**.
DOI: 10.1002/psp4.12970.

27. W. Yamada, **S. Kim**, M. Almoslem, S. Kim, J. Myrick, J. Nole, B. Duncanson, A. Louie, C.A. Peloquin, S. Schmidt, G.L. Drusano, and M.N. Neely*. Combination therapy to kill *Mycobacterium tuberculosis* in its nonreplicating persister phenotype. *Antimicrobial Agents and Chemotherapy*, 66(10):e0069522 **(2022)**. PMID: 36165631.
DOI: 10.1128/aac.00695-22.

26. A.M. Barnard, D.W. Hammers, W.T. Triplett, **S. Kim**, S.C. Forbes, R.J. Willcocks, M.J. Daniels, C.R. Senesac, D.J. Lott, I. Arpan, W.D. Rooney, R.T. Wang, S.F. Nelson, H.L. Sweeney, K. Vandenborne, and G.A. Walter*. Evaluating genetic modifiers of Duchenne muscular dystrophy disease progression using modeling and MRI. *Neurology*, 99(21):e2406-e2416 **(2022)**. PMID: 36240102.
DOI: 10.1212/WNL.0000000000201163.

25. S.A. Mosley°, **S. Kim**°, N.E. Rouby, K. Lingineni, V. Vozmediano, Y. Gong, Y. Chen, D. Estores, K. Feng, H. Kim, M. Kinjo, T. Langaee, Z. Li, S.O.F. Schmidt, J.A. Johnson, R.F. Frye, L. Fang, L. Zhao, P.F. Binkley, S. Schmidt°, and L.H. Cavallari°*. A randomized, cross-over trial of metoprolol succinate formulations to evaluate PK and PD endpoints for therapeutic equivalence. *Clinical and Translational Science*, 15(7): 1764–1775 **(2022)**. PMID: 35488487.
DOI: 10.1111/cts.13294.

24. **S. Kim**, G. Lahu, M. Vakilynejad, T.G. Soldatos, D.B. Jackson, L.J. Lesko, and M.N. Trame*. Application of a patient-centered reverse translational systems-based approach to understand mechanisms of an adverse drug reaction of immune checkpoint inhibitors. *Clinical and Translational Science*, 15(6): 1430–1438 **(2022)**. PMID: 35191192.
DOI: 10.1111/cts.13254.

23. **S. Kim**, G. Lahu, M. Vakilynejad, T.G. Soldatos, D.B. Jackson, L.J. Lesko, and M.N. Trame*. A case study of a patient-centered reverse translational systems-based approach to understand adverse event profiles in drug development. *Clinical and Translational Science*, 15(4): 1003–1013 **(2022)**. PMID: 35014203.
DOI: 10.1111/cts.13219.

22. T.G. Soldatos, **S. Kim**, S. Schmidt, L.J. Lesko, and D.B. Jackson*. Advancing drug safety science by integrating molecular knowledge with post-marketing adverse event reports. *CPT: Pharmacometrics & Systems Pharmacology*, 11(5): 540–555 **(2022)**. PMID: 35143713.
DOI: 10.1002/psp4.12765.

21. **S. Kim**, A. Louie, G.L. Drusano, M. Almoslem, S. Kim, J. Myrick, J. Nole, B. Duncanson, C.A. Peloquin, C.A. Scanga, W. Yamada, M.N. Neely, and S. Schmidt*. Evaluating the effect of clofazimine against *Mycobacterium tuberculosis* given alone or in combination with pretomanid, bedaquiline or linezolid. *International Journal of Antimicrobial Agents*, 59(2): 106509 **(2022)**. PMID: 34958863.
DOI: 10.1016/j.ijantimicag.2021.106509.

20. K. Lingineni, V. Aggarwal, J.F. Morales, D.J Conrado, D. Corey, C. Vong, J. Burton, J. Larkindale, K. Romero, S. Schmidt, and **S. Kim***, on behalf of the Cooperative International Neuromuscular Research Group investigators and Duchenne Muscular Dystrophy Regulatory Science Consortium members. Development of a model-based clinical trial simulation platform to optimize the design of clinical trials for Duchenne muscular dystrophy. *CPT: Pharmacometrics & Systems Pharmacology*, 11(3):318–332 **(2022)**. PMID: 34877803.
DOI: 10.1002/psp4.12753.

19. **S. Kim**, W.M. Yamada, B. Duncanson, J. Nole, S. Rogers, S. Parker, M. Bacci, N. Mtchedlidze, C.A. Peloquin, A. Louie, G.L. Drusano, S. Schmidt, and M.N. Neely*. Building optimal 3-drug combination chemotherapy regimens to eradicate *Mycobacterium tuberculosis* in its slow growth acid phase. *Antimicrobial Agents and Chemotherapy*, 65(10): e0069321 **(2021)**. PMID: 34339275.
DOI: 10.1128/AAC.00693-21.

18. G.L. Drusano*, S. Rogers, D. Brown, C.A. Peloquin, M. Neely, W. Yamada, **S. Kim**, M. Almoslem, S. Schmidt, and A. Louie. Dose-fractionation of moxifloxacin for the treatment of tuberculosis: Impact of dosing interval and elimination half-life on microbial kill and resistance suppression. *Antimicrobial Agents and Chemotherapy*, 18;65(4): e02533–20 **(2021)**. PMID: 33468465.
DOI: 10.1128/AAC.02533-20.

17. U. Caballero, **S. Kim**, E. Eraso, G. Quindós, V. Vozmediano, S. Schmidt, and N. Jauregizar*. In vitro synergistic interactions of isavuconazole and echinocandins against *Candida Auris*. *Antibiotics (Basel)*, 10(4): 355 **(2021)**. PMID: 33800601.
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16. G.L. Drusano*, **S. Kim**, M. Almoslem, S. Schmidt, D. D'Argenio, J. Myrick, B. Duncanson, J. Nole, D. Brown, C.A. Peloquin, M. Neely, W. Yamada, and A. Louie. The funnel: A screening technique for identifying optimal two-drug combination chemotherapy regimens. *Antimicrobial Agents and Chemotherapy*, 65(2): e02172–20 **(2021)**. PMID: 33199386.
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15. N. Farhan, R. Cristofoletti, S. Basu, **S. Kim**, K. Lingineni, S. Jiang, J. Brown, L. Fang, L. Lesko, and S. Schmidt*. Physiologically based pharmacokinetics modeling to investigate formulation factors influencing the generic substitution of dabigatran etexilate. *CPT: Pharmacometrics & Systems Pharmacology*, 10(3): 199–210 **(2021)**. PMID: 33449439.
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14. K. Lingineni, N. Farhan, **S. Kim**, R. Cristofoletti, L. Gordon, P. Kumar, S. Penzak, C. Hadigan, J. George, J. Brown, and S. Schmidt*. Quantitative benefit-risk assessment of P-gp mediated drug-drug interactions of dabigatran co-administered with pharmacokinetic enhancers in patients with renal impairment. *Clinical Pharmacology & Therapeutics*, 109(1): 193–200 **(2021)**. PMID: 33073366.
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13. C. Thomas, S. Mosley, **S. Kim**, K. Lingineni, N.E. Rouby, T. Langaee, Y. Gong, D. Wang, S. Schmidt, P. Binkley, D. Estores, K. Feng, H. Kim, M. Kinjo, Z. Li, L. Fang, A. Chapman, R. Cooper-Dehoff, J. Gums, I. Hamadeh, L. Zhao, S. Schmidt, R. Frye, J. Johnson, and L. Cavallari*. Examination of metoprolol pharmacokinetics and pharmacodynamics across CYP2D6 genotype-derived activity scores. *CPT: Pharmacometrics & Systems Pharmacology*, 9(12): 678–685 **(2020)**. PMID: 33067866.
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11. G.L. Drusano*, M.N. Neely, **S. Kim**, W.M. Yamada, S. Schmidt, B. Duncanson, J. Nole, N. Mtchedlidze, C.A. Peloquin, and A. Louie. Building optimal 3-drug combination chemotherapy regimens. *Antimicrobial Agents and Chemotherapy*, 64(11): e01610–20 **(2020)**. PMID: 32900682.
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10. **S. Kim**°, C.A. Scanga°, C. de Miranda Silva, M. Zimmerman, C. Causgrove, B. Stein, V. Dartois, C.A. Peloquin, E. Graham, A. Louie, J.L. Flynn, S. Schmidt*, and G.L. Drusano. Pharmacokinetics of tedizolid, sutezolid, and sutezolid-M1 in non-human primates. *European Journal of Pharmaceutical Sciences*, 151: 105421 **(2020)**. PMID: 32531349.

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9. I. Loisios-Konstantinidis°, B. Hens°, A. Mitra, **S. Kim**, C. Chiann, and R. Cristofoletti*. Using physiologically-based pharmacokinetic modeling to assess the risks of failing bioequivalence criteria: A tale of two ibuprofen products. *The American Association of Pharmaceutical Scientists Journal*, 22(5): 113 **(2020)**. PMID: 32830289. DOI: 10.1208/s12248-020-00495-4.

8. A. Talevi, J.F. Morales, G. Hather, J.T. Podichetty, **S. Kim**, P.C. Bloomingdale, S. Kim, J. Burton, J.D. Brown, A.G. Winterstein, S. Schmidt, J.K. White, and D.J. Conrado*. Machine learning in drug discovery and development part 1: A primer. *CPT: Pharmacometrics & Systems Pharmacology*, 9: 129–142 **(2020)**. PMID: 31905263. DOI: 10.1002/psp4.12491.

7. M.H. Shahin, S. Bhattacharya, D. Silva, **S. Kim**, J. Burton, J. Podichetty, K. Romero, and D.J. Conrado*. Open data revolution in clinical research: opportunities and challenges. *Clinical and Translational Science*, 13: 665–674 **(2020)**. PMID: 32004409. DOI: 10.1111/cts.12756.

6. B. Cicali°, T. Long°, **S. Kim**, and R. Cristofoletti*. Assessing the impact of cystic fibrosis on the antipyretic response of ibuprofen in children: physiologically-based modeling as a candle in the dark. *British Journal of Clinical Pharmacology*, 86(11): 2247–2255 **(2020)**. PMID: 32335930. DOI: 10.1111/bcp.14326. ***Simcyp Academic Awards***.

5. C.-Y. Wang, P.N. Pham, **S. Kim**, K. Lingineni, S. Schmidt, V. Diaby, and J. Brown*. Predicting cost-effectiveness of generic vs. brand dabigatran using pharmacometric estimates among patients with atrial fibrillation in the United States. *Clinical and Translational Science*, 13: 352–361 **(2020)**. PMID: 32053288. DOI: 10.1111/cts.12719.

4. **S. Kim**°, V.D. Sharma°, K. Lingineni, N. Farhan, L. Fang, L. Zhao, J.D. Brown, R. Cristofoletti, V. Vozmediano, S. Ait-Oudhia, L.J. Lesko, M.N. Trame, and S. Schmidt*. Evaluating the clinical impact of formulation variability: A metoprolol extended-release case study. *The Journal of Clinical Pharmacology*, 59(9): 1266–1274 **(2019)**. PMID: 31087554. DOI: 10.1002/jcph.1433.

3. S. Schmidt*, **S. Kim**, V. Vozmediano, R. Cristofoletti, A.G. Winterstein, and J.D. Brown. Pharmacometrics, physiologically based pharmacokinetics, quantitative systems pharmacology – What's next? – Joining mechanistic and epidemiological approaches. *CPT: Pharmacometrics & Systems Pharmacology*, 8(6): 352–355 **(2019)**. PMID: 31179639. DOI: 10.1002/psp4.12425.

2. D.J. Conrado*°, J. Larkindale°, A. Berg°, M. Hill, J. Burton, K.R. Abrams, R.T. Abresch, A. Bronson, D. Chapman, M. Crowther, T. Duong, H. Gordish-Dressman, L. Harnisch, E. Henricson, **S. Kim**, C.M. McDonald, S. Schmidt, C. Vong, X. Wang, B.L. Wong, F. Yong, and K. Romero, on behalf of the Duchenne Muscular Dystrophy Regulatory Science Consortium (D-RSC). Towards regulatory endorsement of drug development tools to promote the application of model-informed drug development in Duchenne muscular dystrophy. *The Journal of Pharmacokinetics and Pharmacodynamics*, 46(5): 441–455 **(2019)**. PMID: 31127458. DOI: 10.1007/s10928-019-09642-7.

1. T.H. Kim°, S. Shin°, **S. Kim**, J.B. Bulitta, K.-Y. Weon, S.H. Joo, E. Ma, S.D. Yoo, G.-Y. Park, D.R. Kwon, S.W. Jeong, D.Y. Lee, and B.S. Shin*. Alterations in pharmacokinetics of gemcitabine and erlotinib by concurrent administration of Hyangsayukgunja-tang, a gastroprotective herbal medicine. *Molecules*, 22(9):1515 **(2017)**. PMID: 28891960. DOI: 10.3390/molecules22091515.

Peer Reviewed Book Chapters

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Correspondence (*)

2. S. Krishnaswami*, A. de la Pena, **S. Kim**, and S. Menon. Therapeutics for COVID-19, *Textbook of SARS-CoV-2 and COVID-19*, Chapter 16, Mani S. and Weitkamp J-H (eds.), *Elsevier*, 1 **(2022)**. ISBN: 9780323875394.

1. **S. Kim** and M.K. Hurdal*. A Biomechanical Model of Cortical Folding. *Research in Shape Modeling*, Chapter 4, K. Leonard and S. Tari (eds.), *Springer-Verlag*, 1: 41-55 **(2015)**. DOI: 10.1007/978-3-319-16348-2_4.

Dissertation & Theses

Doctoral Dissertation

- **S. Kim**. A Mathematical Model of Cerebral Cortical Folding Development Based on A Biomechanical Hypothesis. Department of Mathematics, Florida State University, Tallahassee, FL, USA **(2015)**.

Master's Thesis

- **S. Kim**. Semi-Analytical Method for Multi-Scale Problem in Post Exposure Bake Process in Lithography. Department of Applied Mathematics, Hanyang University, ERICA, South Korea **(2010)**.

Undergraduate Honors Thesis

- **S. Kim**. Simplified Models for Physically Based Motion in Fluid. Department of Applied Mathematics, Hanyang University, ERICA, South Korea **(2008)**.

Invited Podium Presentations (Selected)

Correspondence (⋆)

15. **S. Kim** & S. Ramesh. "Natural History Study: Model-informed Drug Development"
– Invited talk presented at Wake Forest ADTKD Family Day Virtual & In-Person Meeting, Winston-Salem, NC, USA, September 30, **2023**.

14. **S. Kim** & R. Belfiore-Oshan. "Duchenne Regulatory Science Consortium (D-RSC) Showcase: DMD Model-Based Clinical Trial Simulation Tool"
– Invited talk presented at Critical Path Institute's Rare and Orphan Disease Conference, Washington, DC, USA, September 11–13, **2023**.

13. **S. Kim**. "Population Pharmacokinetics and Pharmacodynamics"
– Invited talk presented at Modeling and Simulation Workshop, Department of Mathematics, Konkuk University, Seoul, South Korea, June 8, **2023**.

12. **S. Kim**. "Model-informed & AI-powered Drug Development"
– Invited talk presented at Clinical Pharmacology Seminar, Department of Clinical Pharmacology and Therapeutics, College of Medicine, Seoul National University, Seoul, South Korea, June 7, **2023**.

11. **S. Kim**. "Seminar: Together Moving Mountains & Hands-on Workshop: Introduction to Population Pharmacokinetics and Pharmacodynamics"
– Invited talk presented at Hanyang Institute for Precision Therapeutics, Hanyang University, Ansan, South Korea, May 31, **2023**.

10. **S. Kim**. "Part I: D-RSC CTS Tool: Tutorial & Part II: ImagingDMD CTS Tool: Modeling Progress"
– Invited talk presented at Duchenne Regulatory Science Consortium Modeling & Simulation Working Group Virtual Meeting, July 28, **2022**.

9. **S. Kim**. "Pharmacometrics: Bridging Pharmacology & Applied Mathematics to Inform Drug Development"
– Invited talk presented at Hanyang University, Ansan, South Korea, June 8, **2022**.

8. **S. Kim**. "A Model-based Clinical Trial Simulation Tool to Optimize Clinical Trial Designs for Type 1 Diabetes Prevention Studies"
– Invited talk presented at the TrialNet Steering Committee Hybrid Meeting, May 5, **2022**.

– *Authors*: J. Morales, R. Muse, J. Podichetty, J. Burton, S. David, P. Lang, F. Martin, M.A. Atkinson, M.J. Haller, M. Campbell-Thompson, K. Romero, I. O'Doherty, S. Schmidt, **S. Kim**⋆.

7. **S. Kim**. "Leveraging the Data Revolution in Model-informed Drug Discovery & Development"
– Conference talk presented at the 11th Lake Nona Leadership Council Meeting, Orlando, FL, USA, April 4–5, **2022**.

6. **S. Kim**. "Evaluating the Effect of Clofazimine against *Mycobacterium Tuberculosis* When Given Alone or In Combination with Pretomanid, Bedaquiline or Linezolid"
– Conference talk presented at the 13th International Workshop on Clinical Pharmacology of Tuberculosis Drugs Virtual Meeting, November 11–12, **2021**.
– *Authors*: **S. Kim**, A. Louie, G.L. Drusano, M. Almoslem, S. Kim, J. Myrick, J. Nole, B. Duncanson, C.A. Peloquin, C.A. Scanga, W. Yamada, M.N. Neely, and S. Schmidt⋆.

5. **S. Kim**. "Application of A Systems Pharmacology Approach for A Detailed Investigation of An Adverse Drug Reaction due to Distinct Mechanisms of Immune Checkpoint Inhibitors"
– Conference talk presented at the American Society for Clinical Pharmacology and Therapeutics 2018 Annual Meeting, Orlando, FL, USA, March 21–24, **2018**.
– *Authors*: **S. Kim**, G. Lahu, M. Vakilynejad, L.J. Lesko, and M.N. Trame⋆.

4. **S. Kim**. "An Exemplar of A Systems Pharmacology Approach for A Detailed Ivestigation of An Adverse Drug Event As A Result of Drug-Drug Interactions"
– Conference talk presented at the American Society for Clinical Pharmacology and Therapeutics 2017 Annual Meeting, Washington, DC, USA, March 15–18, **2017**.
– *Authors*: **S. Kim**, G. Lahu, L.J. Lesko, and M.N. Trame⋆.

3. **S. Kim**. "A Biomechanical Model of Cerebral Cortical Folding Development"
– Invited talk presented at Inha University, Incheon, South Korea, February 4, **2016**.

2. **S. Kim**. "A Mathematical Model of Cerebral Cortical Folding Development Based on A Biomechanical Hypothesis"
– Conference talk presented at the Society for Mathematical Biology Annual Meeting 2015, Atlanta, GA, USA, June 30–July 3, **2015**.
– *Authors*: **S. Kim** and M.K. Hurdal⋆.

1. **S. Kim**. "Semi-Analytical Method for Multi-Scale Problem in Post Exposure Bake Process in Lithography"
– Conference talk presented at 10th United States National Congress on Computational Mechanics, Columbus, OH, USA, July 16–19, **2009**.
– *Authors*: **S. Kim** and D.W. Kim⋆.

Peer Reviewed Conference Proceedings & Abstracts: International

Correspondence (⋆) and Contributed equally (○)

45. R. Belfiore-Oshan⋆, V. Aggarwal, J. Wilk, M. Pauley, D. Corey, K. Romero, C. Hovinga, T. Martinez, K. Lingineni, D.Y. Yoon, J.F. Morales, and **S. Kim**, on behalf of the Duchenne Regulatory Science Consortium (D-RSC) and the CINRG DNHS investigators. A Clinical Trial Simulation Tool to Accelerate Trial Design In DMD: Description of the Graphical User Interface Features and Applications. Conference abstract presented at the 28th Annual Congress of the World Muscle Society, Charleston, SC, USA, October 3–7, **2023**.

44. C. Perkins, J. Jiang, H. Hakimjavadi, J. Brant, Z. Zhang, J.-H. Lee, D. Quashie, Y. Mao, J. Ali, **S. Kim**, M. Campbell-Thompson, and T. Schmittgen⋆. Race as a Predictive Confounder in the Rate of Transdifferentiation and Drug Response in Human Pancreatic Acinar Ductal Metaplasia. Conference abstract presented at the American Association for Cancer Research Annual Meeting, Orlando, FL, USA, April 14–19, **2023**.

43. D.Y. Yoon, M.J. Daniels, J. Morales, R.J. Willcocks, W.T. Triplett, A.M. Barnard, S. Forbes, G.A. Walter, W.D. Rooney, K. Vandenborne, and **S. Kim**⋆, on behalf of DMD MR Biomarker Steering Committee. Optimizing Clinical Tri-

als for Duchenne Muscular Dystrophy using Multivariate Disease Progression Models that Bridge a Functional Endpoint and MRI Relaxography of Five Leg Muscles. Conference poster presented at the American Society for Clinical Pharmacology and Therapeutics Annual Meeting, Atlanta, GA, USA, March 22–24, **2023**. ***Presidential Trainee Award & Jason Morrow Trainee Award***.

42. M. Almoslem, V. Vozmediano, S. Guzy, S. Shah, **S. Kim**, M. Hudak, and S. Schmidt*. Pharmacokinetic and Pharmacodynamic Modeling of Acetaminophen and Ibuprofen to Evaluate the Time of Patent Ductus Arteriosus Closure in Preterm Neonates. Conference poster presented at the American Society for Clinical Pharmacology and Therapeutics Annual Meeting, Atlanta, GA, USA, March 22–24, **2023**.

41. **S. Kim***, R.J. Willcocks, M.J. Daniels, J. Morales, D.Y. Yoon, W.T. Triplett, A.M. Barnard, D.J. Conrado, V. Aggarwal, R. Belfiore-Oshan, T. Martinez, G.A. Walter, W.D. Rooney, and K. Vandenborne, on behalf of DMD MR Biomarker Steering Committee. Multivariate Modeling of Magnetic Resonance Biomarkers and Clinical Outcome Measures in Clinical Trials for Duchenne Muscular Dystrophy. Conference poster presented at the MDA Clinical & Scientific Conference, Dallas, TX, USA, March 19–22, **2023**.

40. **S. Kim***, R.J. Willcocks, M.J. Daniels, J.F. Morales, W.T. Triplett, A.M. Barnard, D.Y. Yoon, K. Lingineni, S. Schmidt, D.J. Conrado, J. Larkindale, V. Aggarwal, R. Belfiore-Oshan, T. Martinez, K. Romero, G.A. Walter, W.D. Rooney, and K. Vandenborne, on behalf of DMD MR Biomarker Steering Committee. Optimizing Use of Imaging Biomarkers in Clinical Trials for Duchenne Muscular Dystrophy: a Multivariate Model of a Fat Fraction Magnetic Resonance Biomarker and a Functional Endpoint. Conference poster presented at the 13th American Conference on Pharmacometrics, Aurora, CO, USA, October 30–November 3, **2022**.

39. R. Muse, **S. Kim**, J. Burton, D. Corey, L. Quinlan, R. Belfiore-Oshan, T. Martinez, K. Romero, and V. Aggarwal*, on behalf of the Duchenne Regulatory Science Consortium (D-RSC) and the CINRG DNHS investigators. Multivariate Joint Models to Predict Clinically Meaningful Decline in Duchenne Muscular Dystrophy as measured by NSAA Using Timed Function Test Trajectories. Conference poster presented at the 13th American Conference on Pharmacometrics, Aurora, CO, USA, October 30–November 3, **2022**.

38. R.J. Willcocks, A.M. Barnard, S.C. Forbes, W.T. Triplett, J. Brandsema, E.L. Finanger, W.D. Rooney, **S. Kim**, D.J. Wang, D.J. Lott, C.R. Senesac, G.A. Walter, H.L. Sweeney, and K. Vandenborne*. Minimum Clinically Important Difference in Magnetic Resonance Biomarkers in DMD. Conference poster presented at the 27th International Hybrid Annual Congress of the World Muscle Society, Halifax, Nova Scotia, Canada, October 11–15, **2022**.

37. R. Belfiore-Oshan, V. Aggarwal, S. Sivakumaran, D. Corey, K. Romero, C. Ollivier, K. Vandenborne, **S. Kim**, J.F. Morales, K. Lingineni, and T. Martinez*, on behalf of the Duchenne Regulatory Science Consortium and the CINRG DNHS investigators. C-Path's Duchenne Regulatory Science Consortium: Accelerating Drug Development for Duchenne Muscular Dystrophy. Conference poster presented at the 27th International Hybrid Annual Congress of the World Muscle Society, Halifax, Nova Scotia, Canada, October 11–15, **2022**.

36. J.F. Morales, R. Muse, J. Podichetty, J. Burton, S. David, P. Lang, F. Martin, M.A. Atkinson, M.J. Haller, M. Campbell-Thompson, K. Romero, I. O'Doherty, S. Schmidt, and **S. Kim***. A Model-based Clinical Trial Simulation Tool to Optimize Clinical Trial Designs for Type 1 Diabetes Prevention Studies. Conference abstract presented at the 82nd American Diabetes Association Scientific Sessions, New Orleans, LA, USA, June 3–7, **2022**.

35. R. Belfiore-Oshan° , V. Aggarwal, R. Muse, **S. Kim**, S. Schmidt, J.F. Morales, K. Lingineni, S. Sivakumaran, D. Corey, K. Romero, and T. Martinez°*, on behalf of the Duchenne Regulatory Science Consortium and the CINRG DNHS investigators. Acceleration of clinical trial design in Duchenne muscular dystrophy by building a model-based clinical trial simulation tool. Conference poster presented at the MDA Clinical & Scientific Conference, Nashville, TN, USA, March 13–16, **2022**.

34. J.F. Morales, R. Muse, J. Burton, J. Podichetty, F. Martin, M.A. Atkinson, M.J. Haller, K. Romero, I. O'Doherty, S. Schmidt, and **S. Kim***. Joint modeling of longitudinal and survival data to find subject features influencing the likelihood of eventual type 1 diabetes diagnosis. Conference e-poster presented at the 12th American Conference on Pharmacometrics, November 8–12, **2021**.

33. R. Muse, J. Larkindale, **S. Kim**, S. Schmidt, J.F. Morales, K. Lingineni, S. Sivakumaran, R. Belfiore-Oshan, D. Corey, V. Aggarwal, K. Romero, and J. Burton*, on behalf of the Duchenne Muscular Dystrophy Regulatory Sci-

ence Consortium and the Cooperative International Neuromuscular Research Group investigators. Modeling Informative Drop Out in a Disease Progression Model of Duchenne Muscular Dystrophy. Conference e-poster presented at the 12th American Conference on Pharmacometrics, November 8–12, **2021**.

32. J.F. Morales, R. Muse, J. Burton, J. Podichetty, F. Martin, M.A. Atkinson, M.J. Haller, M. Campbell-Thompson, K. Romero, I. O'Doherty, S. Schmidt, and **S. Kim**⋆. Optimizing type 1 diabetes prevention clinical trial designs through model-informed drug development. Conference e-poster presented at the 18th annual Immunology of Diabetes Society Congress, November 1–4, **2021**.

31. J.F. Morales, J. Podichetty, J. Burton, P. Lang, F. Martin, M.A. Atkinson, M.J. Haller, I. O'Doherty, S. Schmidt, and **S. Kim**⋆. Finding subject features influencing the likelihood of eventual type 1 diabetes diagnosis using a time-to-event modeling approach. Conference e-poster presented at the American College of Clinical Pharmacology Virtual Annual Meeting, September 13–17, **2021**.

30. J.F. Morales, K. Lingineni, M. Thomas, P. Lang, J. Podichetty, J. Burton, S. David, J. Dunne, M.A. Atkinson, M.J. Haller, K. Romero, I. O'Doherty, S. Schmidt, and **S. Kim**⋆. Modeling Longitudinal Glucose Dynamics to Inform Type 1 Diabetes Prevention Clinical Trial Studies. Conference e-poster presented at the 11th American Conference on Pharmacometrics, November 9–13, **2020**.

29. K. Lingineni, J.F. Morales, D.J. Conrado, C. Vong, N. Hanan, D. Corey, J. Burton, J. Larkindale, K. Romero, S. Schmidt, and **S. Kim**⋆, on behalf of the Cooperative International Neuromuscular Research Group investigators and Duchenne Muscular Dystrophy Regulatory Science Consortium members. Towards Achieving Regulatory Endorsement of A Disease Progression Model-Based Clinical Trial Simulation Tool for Duchenne Muscular Dystrophy – Models of Progression of Timed Motor Function Tests. Conference e-poster presented at the 11th American Conference on Pharmacometrics, November 9–13, **2020**. ***Trainee Abstract Award***.

28. K. Vandenborne⋆, **S. Kim**, R.J. Willcocks, J.F. Morales, K. Lingineni, A.M. Barnard, S. Schmidt, M.J. Daniels, W.T. Triplett, J. Larkindale, G.A. Walter, W.D. Rooney, and DMD MR Biomarker Steering Committee. Development of Clinical Trial Simulation Tools for Duchenne Muscular Dystrophy using MR Imaging Biomarkers. Conference e-poster presented at the World Muscle Society Virtual Congress, September 28–October 2, **2020**.

27. J. Larkindale⋆, **S. Kim**, K. Lingineni, J.F. Morales, S. Schmidt, D. Corey, J. Burton, V. Aggarwal, and K. Romero, on behalf of the Duchenne Regulatory Science Consortium and the Cooperative International Neuromuscular Research Group Duchenne Natural History Study investigators. Development of A Regulatory-Ready Clinical Trial Simulation Tool for Duchenne Muscular Dystrophy. Conference e-poster presented at the World Muscle Society Virtual Congress, September 28–October 2, **2020**.

26. J. Larkindale⋆, **S. Kim**, K. Lingineni, J.F. Morales, S. Schmidt, D. Corey, J. Burton, V. Aggarwal, and K. Romero, on behalf of the Duchenne Regulatory Science Consortium and the Cooperative International Neuromuscular Research Group Duchenne Natural History Study investigators. The Duchenne Regulatory Science Consortium: Solutions to Bottlenecks That Slow Drug Development. Conference e-poster presented at Parent Project Muscular Dystrophy Virtual Annual Conference, July 22–25, **2020**.

25. J. Larkindale⋆, **S. Kim**, K. Lingineni, S. Schmidt, D. Corey, K. Romero, on behalf of the Duchenne Regulatory Science Consortium and the Cooperative International Neuromuscular Research Group Duchenne Natural History Study investigators. Disease Progression Models of Six Endpoints And The Development of A Regulatory-Ready Clinical Trial Simulation Tool for Duchenne Muscular Dystrophy. Accepted for conference poster presentation at the MDA Clinical & Scientific Conference, Orlando, FL, USA, March 22–25, **2020**.

24. R.J. Willcocks, **S. Kim**, S. Schmidt, W.D. Rooney, M.J. Daniels, G.A. Walter, W.T. Triplett, S.C. Forbes, D.J. Wang, K. Vandenborne⋆. Developing a Clinical Trial Optimization Tool for DMD using Muscle MR Biomarkers. Accepted for conference poster presentation at the MDA Clinical & Scientific Conference, Orlando, FL, USA, March 22–25, **2020**.

23. **S. Kim**, G. Drusano, A. Louie, J. Myrick, J. Nole, B. Duncanson, C. Peloquin, W. Yamada, M. Neely, and S. Schmidt⋆. Clofazimine: A Promising Drug for Tuberculosis Combination Chemotherapy. Accepted for conference poster

presentation at the American Society for Clinical Pharmacology and Therapeutics Annual Meeting, Houston, TX, USA, March 18–21, **2020**.

22. K. Lingineni, D.J. Conrado, D. Corey, M. Hill, C. Vong, J. Burton, J. Larkindale, K. Romero, S. Schmidt, and **S. Kim***, on behalf of the Cooperative International Neuromuscular Research Group investigators and Duchenne Muscular Dystrophy Regulatory Science Consortium members. Towards Achieving Regulatory Endorsement of A Disease Progression Model-Based Clinical Trial Simulation Tool for Duchenne Muscular Dystrophy – Model of Progression of Forced Vital Capacity. Accepted for conference poster presentation at the American Society for Clinical Pharmacology and Therapeutics Annual Meeting, Houston, TX, USA, March 18–21, **2020**. ***Presidential Trainee Award & Jason Morrow Trainee Award***.

21. S.A. Mosley, N.E. Rouby, **S. Kim**, K. Lingineni, Y. Gong, D. Estores, K. Feng, H. Kim, M. Kinjo, T. Langaee, Z. Li, S. Schmidt, J.A. Johnson, R. Frye, P. Binkley, S. Schmidt, L. Zhao, and L.H. Cavallari*. Randomized, Prospective, Clinical Trial Comparing Metoprolol Succinate Extended-Release Formulations. Accepted for conference poster presentation at the American Society for Clinical Pharmacology and Therapeutics Annual Meeting, Houston, TX, USA, March 18–21, **2020**.

20. **S. Kim**, R.J. Willcocks, J.F. Morales, S. Schmidt, M.J. Daniels, W.T. Triplett, J. Larkindale, G.A. Walter, W.D. Rooney, K. Vandenborne*, and DMD MR Biomarker Steering Committee. Development of Clinical Trial Simulation Tools for Duchenne Muscular Dystrophy using MR Imaging Biomarkers. Accepted for conference poster presentation at the 18th International Conference on Duchenne and Becker Muscular Dystrophy, Rome, Italy, February 28–March 1, **2020**.

19. **S. Kim**, J. Myrick, J. Nole, M. Maynard, B. Duncanson, A. Louie, S. Schmidt*, and G.L. Drusano. An Exemplar of Model-Informed Drug Discovery and Development Towards Discovering Promising Combination Therapies for *Mycobacterium Tuberculosis*. Conference poster presented at the 10th American Conference on Pharmacometrics, Orlando, FL, USA, October 20–23, **2019**.

18. K. Lingineni, D.J. Conrado, D. Corey, M. Hill, J. Larkindale, K. Romero, S. Schmidt, and **S. Kim***, on behalf of the Cooperative International Neuromuscular Research Group investigators and Duchenne Muscular Dystrophy Regulatory Science Consortium members. Towards Achieving Regulatory Endorsement of A Disease Progression Model-Based Clinical Trial Simulation Tool for Duchenne Muscular Dystrophy – An Exemplar using Clinical Data from the North Star Ambulatory Assessment. Conference poster presented at the 10th American Conference on Pharmacometrics, Orlando, FL, USA, October 20–23, **2019**.

17. J. Larkindale, **S. Kim**, K. Lingineni, S. Schmidt, D. Corey, and K. Romero, on behalf of the Duchenne Regulatory Science Consortium. Development of Clinical Trial Simulation Tool for Duchenne Muscular Dystrophy through The Duchenne Regulatory Science Consortium. Conference poster presented at the 24th International Annual Congress of the World Muscle Society, Copenhagen, Denmark, October 1–5, **2019**.

16. K. Lingineni, N. Farhan, **S. Kim**, L. Gordon, S. Penzak, C. Hadigan, J.M. George, and S. Schmidt*. Quantitative Benefit-Risk Assessment of P-gp Mediated Drug-Drug Interactions of Dabigatran Co-Administered with Pharmacokinetic Enhancers in Patients with Renal Impairment. Conference poster presented at the American College of Clinical Pharmacology Annual Meeting, Chicago, IL, USA, September 15–17, **2019**.

15. **S. Kim**, G. Drusano, A. Louie, C. Peloquin, W. Yamada, M. Neely, and S. Schmidt*. Mathematical modeling using in vitro checkerboard assay data: Clofazimine as a potentially synergistic anti-TB drug. Conference poster presented at the 12th International workshop on Clinical Pharmacology of Tuberculosis Drugs, London, UK, September 10, **2019**.

14. J. Larkindale*, K. Lingineni, **S. Kim**, M. Hill, S. Schmidt, D.J. Conrado, D. Corey, and K. Romero, on behalf of the Duchenne Regulatory Science Consortium and the Cooperative International Neuromuscular Research Group Duchenne Natural History Study investigators. Development of Clinical Trial Simulation Tool for Duchenne Muscular Dystrophy through the Duchenne Regulatory Science Consortium. Conference poster presented at the Parent Project Muscular Dystrophy Annual Conference, Orlando, FL, USA, June 26–30, **2019**.

13. C.Y. Wang, **S. Kim**, K. Lingineni, S. Schmidt, K. Diaby, and J. Brown*. Predicting the Cost-Effectiveness of Generic

versus Brand Dabigatran using Pharmacometric Estimates Among Patients with Atrial Fibrillation. Conference poster presented at the International Society for Pharmacoeconomics and Outcomes Conference, New Orleans, LA, USA, May 18–22, **2019**, *Value in Health*, 22(S1) (2019).

12. C.D. Thomas, S.A. Mosley, N. El Rouby, **S. Kim**, K. Lingineni, T. Langaee, Y. Gong, J.A. Johnson, S.O. Schmidt, S. Schmidt, R.F. Frye, and L.H. Cavallari*. Determination of CYP2D6 Phenotyping for Metoprolol using The CYP2D6 Genotype-Derived Activity Score: Results from A Prospective, Clinical trial. Conference poster presented at the American Society for Clinical Pharmacology and Therapeutics Annual Meeting, Washington, DC, USA, March 13–16, **2019**.

11. **S. Kim**°, V.D. Sharma°, K. Lingineni, N. Farhan, L. Fang, L. Zhao, J.D. Brown, R. Cristofoletti, V. Vozmediano, S. Ait-Oudhia, L.J. Lesko, M.N. Trame, and S. Schmidt*. A Model and Systems Based Approach to Assess Impact of Potential Pharmacokinetic Differences on Pharmacodynamics and Questions Regarding Generic Substitution – A Case Study on Metoprolol Extended-Release Tablets. Conference poster presented at the 9th American Conference on Pharmacometrics, San Diego, CA, USA, October 7–10, **2018**.

10. N. Farhan, S. Basu, **S. Kim**, K. Lingineni, V. Vozmediano, S. Ait-Oudhia, L. Fang, L. Zhao, L.J. Lesko, and S. Schmidt*. Application of Physiologically Based Oral Absorption & Pharmacokinetic Modeling to Investigate Formulation Factors Influencing The Pharmacokinetics of Novel Oral Anticoagulants. Conference poster presented at the 9th American Conference on Pharmacometrics, San Diego, CA, USA, October 7–10, **2018**.

9. **S. Kim**, G. Lahu, M. Vakilynejad, L.J. Lesko, and M.N. Trame*. Using a Systems Pharmacology Approach to Understand Mechanisms of Adverse Drug Reactions of Immune Checkpoint Inhibitors. *American Society for Clinical Pharmacology and Therapeutics: Quantitative Pharmacology Hot Topic Commentaries*, **(2018)**.

8. **S. Kim**, G. Lahu, M. Vakilynejad, L.J. Lesko, and M.N. Trame*. Application of A Systems Pharmacology Approach for A Detailed Investigation of An Adverse Drug Reaction Due to Distinct Mechanisms of Immune Checkpoint Inhibitors. Conference poster presented at the American Society for Clinical Pharmacology and Therapeutics Annual Meeting, Orlando, FL, USA, March 21–24, **2018**. ***Presidential Trainee Award***.

7. **S. Kim**, K. Lingineni, A. Meng, V.D. Sharma, R.Miller, M.N. Trame, J.D. Brown, L.J. Lesko, and S. Schmidt*. A Model and Systems Based Approach to Safety and Efficacy Questions Related to Generic Substitution – A Novel Oral Anticoagulants Case Study. Conference poster presented at the American Association of Pharmaceutical Scientists Annual Meeting and Exposition, San Diego, CA, USA, November 12–15, **2017**.

6. **S. Kim**, G. Lahu, L.J. Lesko, and M.N. Trame*. An Exemplar of A Systems Pharmacology Approach for A Detailed Investigation of An Adverse Drug Event As A Result of Drug-Drug Interactions. Conference poster presented at the American Society for Clinical Pharmacology and Therapeutics Annual Meeting, Washington, DC, USA, March 15–18, **2017**. ***Presidential Trainee Award & David Goldstein Trainee Award***.

5. **S. Kim**, G. Lahu, L.J. Lesko, and M.N. Trame*. Systems Pharmacology Analysis of Oncology Drug Combinations to Evaluate Adverse Events Due to Drug-Drug Interactions. Conference poster presented at the 7th American Conference on Pharmacometrics, Bellevue, WA, USA, October 23–26, **2016**.

4. M.K. Hurdal* and **S. Kim**. A Biomechanical Model of Cerebral Cortical Folding Development. Conference poster presented at the Organization for Human Brain Mapping Annual Meeting, Geneva, Switzerland, June 26–30, **2016**.

3. **S. Kim** and M.K. Hurdal*. A Mathematical Model of Cerebral Cortical Folding Development Based on A Biomechanical Hypothesis. Conference abstract presented at the Society for Mathematical Biology Annual Meeting, Atlanta, GA, USA, June 30–July 3, **2015**.

2. **S. Kim** and D.W. Kim*. *Semi-Analytical Method for Multi-Scale Problem in Post Exposure Bake Process in Lithography.* Conference abstract presented at 10th United States National Congress on Computational Mechanics, Columbus, OH, USA, July 16–19, **2009**.

1. M. Jung, **S. Kim**, D.W. Kim, and H.K. Oh*. Heat Conduction from Hot Plate to Photoresist on Top of Wafer including Heat Loss to the Environment. *Proceedings of SPIE*, 7520: 75202I **(2009)**. DOI: 10.1117/12.837236.

Peer Reviewed Conference Proceedings & Abstracts: National & Domestic

Correspondence (⋆) and Contributed equally (∘)

22. S. Ramesh, D.Y. Yoon, M. Rogge, K. Kidd, A. Williams, J. Roignot, K. Blakeslee, A.J. Bleyer, and **S. Kim**⋆. Time to Event Modeling to Predict Age of End-Stage Renal Disease for Patients with ADTKD. Conference poster presented at the 37th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 5–6, **2024**. ***Best Poster Award: Grad Category***.

21. S. Kang∘, J.D. Penaloza Aponte∘, M. Morillo, O. Elashkar, N. Waddington, D. Lamb, H. Ju, M. Campbell-Thompson∘⋆, and **S. Kim**∘⋆. Toward Finding Biomarkers for T1D: Building Deep Learning Powered Bioimage Analysis Workflow. Conference abstract presented at the 37th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 5–6, **2024**. ***Oral Competition Finalist: Postdoc Category***.

20. M. Todd, S. Wu, D. Adhin, S. Kang, D.Y. Yoon, R. Willcocks, and **S. Kim**⋆. Machine Learning-fueled Analysis of Functional Endpoints vs. Imaging Biomarkers in DMD Trials. Conference poster presented at the 37th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 5–6, **2024**.

19. S. Ramesh, D.Y. Yoon, K. Kidd, A. Williams, J. Roignot, K. Blakeslee, M. Rogge, A.J. Bleyer, and **S. Kim**⋆. Autosomal Dominant Tubulointerstitial Kidney Disease Progression Model. Conference abstract presented at the 36th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 6–7, **2023**. ***Oral Competition Finalist: Grad Category***.

18. N. Waddington, A. Nguyen, K. Persaud, J.F. Morales, O. Elashkar, H. Ju, D. Lamb, M. Campbell-Thompson, and **S. Kim**⋆. Automatic Segmentation of Pancreatic Islets on Whole Slide Images. Conference poster presented at the 36th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 6–7, **2023**.

17. O. Elashkar, N. Waddington, H. Ju, D. Lamb, M. Campbell-Thompson, and **S. Kim**⋆. Deep Learning Analysis of Pancreatic Whole Slide Images for Type I Diabetes. Conference poster presented at the 36th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 6–7, **2023**.

16. D. Yoon, M. Daniels, J.F. Morales, R. Willcocks, W. Triplett, A. Barnard, S. Forbes, G. Walter, W. Rooney, K. Vandenborne, and **S. Kim**⋆, on behalf of DMD MR Biomarker Steering Committee. DMD Progression Models Bridging a Functional Endpoint and MRI T2 Biomarkers. Conference poster presented at the 36th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 6–7, **2023**.

15. S. Wu, S. Ali, N. Nguyen, V. Hayes, C. Stone, D. Yoon, R. Willcocks, and **S. Kim**⋆. Review of Clinical Trials using MR Biomarkers for Duchenne Muscular Dystrophy. Conference poster presented at the 36th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 6–7, **2023**.

14. M. Almoslem, V. Vozmediano, S. Guzy, S. Shah, **S. Kim**, and S. Schmidt⋆. Acetaminophen and Ibuprofen in Preterm Neonates with Patent Ductus Arteriousus. Conference poster presented at the 36th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 6–7, **2023**. ***Best Poster Award: Grad Category***.

13. C. Perkins, J. Jiang, H. Hakimjavadi, J. Brant, Z. Zhang, J.-H. Lee, D.Q. Jr., Y. Mao, J. Ali, M. Campbell-Thompson, **S. Kim**, and T.D. Schmittgen⋆. Race Plays a Role on the Rate of Transdifferentiation in Human Pancreatic Acinar Ductal Metaplasia and Its Drug Response. Conference poster presented at the 36th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 6–7, **2023**.

12. O. Caban-Varela, D. Laboy-Baiz, S. Malhotra, A. Nguyen, K. Persaud, J.F. Morales, N. Waddington, Y. Gong, M. Campbell-Thompson, and **S. Kim**⋆. Leveraging Imaging Data to Optimize Type 1 Diabetes Clinical Trial Designs. Conference abstract presented at the 35th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 7–8, **2022**. ***Best Poster Award: PharmD Category***.

11. J.F. Morales, R. Muse, J. Podichetty, J. Burton, S. David, P. Lang, F. Martin, M. Atkinson, M. Haller, M. Campbell-Thompson, K. Romero, I. O'Doherty, S. Schmidt, and **S. Kim**⋆. A Clinical Trial Simulation Tool to Optimize Type

1 Diabetes Prevention Studies. Conference abstract presented at the 35th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 7–8, **2022**. ***Oral Competition Finalist: Postdoc Category***.

10. M. Abdelmageed, J.F. Morales, S. Malhotra, J. Colon, T. Cripe, H. Chau, A. Shin-Ann, L. Rodriguez-Vera, **S. Kim**, V. Vozmediano, M. Rogge, and S. Schmidt*. Characterization of Monoclonal Antibodies Immunogenicity using Machine Learning. Conference abstract presented at the 35th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 7–8, **2022**.

9. M. Almoslem, S. Shah, S. Guzy, V. Vozmediano, **S. Kim**, M. Hudak, and S. Schmidt*. Clinical Pharmacokinetic and Pharmacodynamic Strategies for the Treatment of Patent Ductus Arteriosus. Conference abstract presented at the 35th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 7–8, **2022**.

8. J.F. Morales, J. Podichetty, J. Burton, N. Hanan, M. Thomas, K. Lingineni, P. Lang, S. David, F. Martin, M.A. Atkinson, M.J. Haller, K. Romero, I. O'Doherty, S. Schmidt, and **S. Kim*** Quantifying Heterogeneity Contributing to Risk of Type 1 Diabetes Diagnosis. Conference poster presented at the Lake Nona Leadership Council Virtual Meeting, April 7, **2021** and the 34th University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, April 12–13, **2021**.

7. K. Lingineni, N. Farhan, **S. Kim**, L. Gordon, S. Penzak, C. Hadigan, J.M. George, and S. Schmidt*. Quantitative Benefit-Risk Assessment of P-gp Mediated Drug-Drug Interactions of Dabigatran Co-Administered with Pharmacokinetic Enhancers in Patients with Renal Impairment. Conference poster presented at the 33rd University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 10, **2020**. ***Best Poster Award: Grad Category***.

6. J. Collins, **S. Kim**, C. de Miranda Silva, G. Alvira, S. Schmidt, and V. Vozmediano*. Development of A Web Based Application using R Shiny and mrgsolve to Explore The Pharmacokinetic/ Pharmacodynamic Outcomes of Different Voriconazole Dosing Regimens. Conference poster presented at the 32nd University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 11, **2019**.

5. M. Gonzalez°, R.M. Poole°, **S. Kim**°, B. Moya, and V. Vozmediano*. Evaluation of Levofloxacin Therapy in Geriatric Patients with Prostatitis. Conference poster presented at the 32nd University of Florida College of Pharmacy Annual Research Showcase, Gainesville, FL, USA, February 11, **2019**.

4. A. Kilinc, **S. Kim**, and M.K. Hurdal*. A Mathematical Model of Cerebral Cortical Folding Development. Conference abstract presented at the 41st SIAM Southeastern Atlantic Section Conference, Tallahassee, FL, USA, March 18–19, **2017**.

3. B. Lee, S. Choi, J. Lee, **S. Kim**, H. Kim, and E. Jung*. Optimal Control Applied to The Ecstasy Model with Peer Pressure. Conference poster presented at 4th Annual meeting of Korean Society for Mathematical Biology, Daejeon, South Korea, October 29–30, **2009**. ***Poster Presentation Award***.

2. **S. Kim** and D.W. Kim*. Study on The Effect of Heat Loss in Post Exposure Bake Process. Conference poster presented at 10th Spring conference of Korean Society for Industrial and Applied Mathematics, Seoul, South Korea, May 29–30, **2009**.

1. **S. Kim** and D.W. Kim*. Rigid Body Motions in Hydrostatic Liquid. Conference poster presented at 8th Spring conference of Korean Society for Industrial and Applied Mathematics, Pohang, South Korea, May 30–31, **2008**.