Curriculum Vitae

David E. Smith, Ph.D.

Personal Data

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Url: <http://pharmacy.umich.edu/people/smithb>

# Education

1970-1975: School of Pharmacy, State University of New York, Buffalo, New York, B.S. in Pharmacy

1976-1981: School of Pharmacy, University of California, San Francisco, California, Ph.D. in Pharmaceutical Chemistry

# Academic Appointments

1981-1986: Assistant Professor of Pharmaceutics, College of Pharmacy, University of Michigan, Ann Arbor, MI

1986-1997: Associate Professor of Pharmaceutics, College of Pharmacy, University of Michigan, Ann Arbor, MI

1991-2010: Member, Upjohn Center for Clinical Pharmacology, Medical School, University of Michigan, Ann Arbor, MI

1991-present: Member, Comprehensive Cancer Center, Medical School, University of Michigan, Ann Arbor, MI

1997-1999: Professor of Pharmaceutics, College of Pharmacy, University of Michigan, Ann Arbor, MI

1999-2008: Professor of Pharmaceutical Sciences, College of Pharmacy, University of Michigan, Ann Arbor, MI

2008-present: John G. Wagner Collegiate Professor of Pharmaceutical Sciences, College of Pharmacy, University of Michigan, Ann Arbor, MI

Member, Michigan Gastrointestinal Peptide Research Center, Medical School, University of Michigan, Ann Arbor, MI

# Academic administrative Appointments

1999-2010: Founding Chair of Pharmaceutical Sciences, College of Pharmacy, University of Michigan, Ann Arbor, MI

senior postdoctoral training

1989-1990: Department of Drug Metabolism and Pharmacokinetics, Schering-Plough Research, Bloomfield, NJ (one year leave of absence)

1996-1997: Visiting Scientist, Department of Medicine, Renal Division, Brigham and Women's Hospital, Harvard Medical School, Boston, MA (six month sabbatical leave)

2011: Visiting Professor, Department of Bioengineering and Therapeutic Sciences, University of California, San Francisco, CA (six month sabbatical leave)

# Pharmacy License

1975: New York State (inactive)

1977: California (inactive)

# Pharmacy practice

1975-1976: Clinical Pharmacist, Deaconess Hospital, Buffalo, NY

# Honors and awards

1973: Rho Chi Scholarship Award, Pharmacy Honor Society

1977-1980: National Research Service Award, National Institutes of Health

1985: Rho Chi Membership, Pharmacy Honor Society

1998: Fellow, American Association of Pharmaceutical Scientists

2002: James R. Gillette *Drug Metabolism and Disposition* Best Paper Award, American Society for Pharmacology and Experimental Therapeutics

2003: Teaching Excellence Award, College of Pharmacy, University of Michigan

Student Appreciation Award, College of Pharmacy, University of Michigan

2008: James R. Gillette *Drug Metabolism and Disposition* Best Paper Award, American Society for Pharmacology and Experimental Therapeutics

John G. Wagner Collegiate Professor of Pharmaceutical Sciences, College of Pharmacy, University of Michigan

2012: Fellow, American Association for the Advancement of Science

2016: Invited Professor Appointment, Faculty of Pharmacy, University of Paris Descartes, France (one month leave of absence)

scientific activites

### Federal Government Public Advisory Committees / Grant Review

1983: Reviewer, Kentucky Equine Drug Research Council

1985: Member, Toxicology Study Section, National Institutes of Health

1994-1996: Reviewer, NATO Advanced Study Institute, National Science Foundation

1998-2002: Member, Pharmacology Study Section, National Institutes of Health

### Editor

2001-2017: *Pharmaceutical Research*

Editorial Advisory Board

1999-2006: *AAPS PharmSci*

2010-present: *Fluids and Barriers of the CNS*

2018-present: *Pharmaceutical Research*

##### **Journal Reviewer (ad hoc)**

AAPS PharmSci

Antimicrobial Agents and Chemotherapy

Biopharmaceutics and Drug Disposition

Blood

Brain Research

British Journal of Clinical Pharmacology

Clinical Pharmacology and Therapeutics

Clinical Pharmacy

Drug Metabolism and Disposition

Fluids and Barriers of the CNS

International Journal of Pharmaceutics

Journal of Chromatography

Journal of Clinical Investigation

Journal of Drug Targeting

Journal of Neurochemistry

Journal of Pharmaceutical Sciences

Journal of Pharmacokinetics and Pharmacodynamics

Journal of Pharmacology and Experimental Therapeutics

Molecular Pharmaceutics

Pharmaceutical Research

### Scientific and Professional Memberships

American Association for the Advancement of Science

American Association of Colleges of Pharmacy

American Association of Pharmaceutical Scientists

American Pharmacists Association

American Society for Pharmacology and Experimental Therapeutics

International Society for the Study of Xenobiotics

consulting positions

1983: The Upjohn Company, Kalamazoo, MI

1984: American Cyanamid Co, Pearl River, NY

Smith Kline and French Laboratories, Philadelphia, PA

1987: Abbott Laboratories, North Chicago, IL

1988: Hoffmann-La Roche Laboratories, Nutley, NJ

1994: Hoffmann-La Roche Laboratories, Nutley, NJ

Somerset Pharmaceuticals Inc, Tampa, FL

Warner-Lambert/Parke-Davis, Ann Arbor, MI

1995: Eli Lilly and Company, Indianapolis, IN

1996-1997: Biogen, Cambridge, MA

1999: Warner-Lambert/Parke-Davis, Ann Arbor, MI

2002: Aventis Pharmaceuticals, Bridgewater, NJ

Bristol-Myers Squibb, New Brunswick, NJ

Sterne, Kessler, Goldstein and Fox

2003: Pfizer Global Research and Development, Ann Arbor, MI

2003-2011: Statprobe, Ann Arbor, MI

2004: Pfizer Global Research and Development, Groton, CT

Hoffmann-La Roche Laboratories, Nutley, NJ

2007: Bristol-Myers Squibb, Princeton, NJ

Schering-Plough Research Institute, Kenilworth, NJ

2008-2010: Eli Lilly and Company, Indianapolis, IN

2009-2010 Upsher-Smith Laboratories, Maple Grove, MN

2009-2014: F. Hoffmann-La Roche, Basel, Switzerland

2011-2012: Isis Pharmaceuticals, Carlsbad, CA

2015-2016: Biogen Idec, Cambridge, MA

2015-2018: Therapeutic Systems Research Laboratories, Ann Arbor, MI

2016-2018: AbbVie, North Chicago, IL

2019-present: Ann Arbor Pharmacometrics Group, Ann Arbor, MI (A2PG)

**teaching activities**

# Courses

1981-1989: Applied Pharmacokinetics (P562; 2 cr), Course coordinator and lecturer, 65 pharmacy students (26 lecture hr every yr)

1981-2010: Pharmacokinetics and Biopharmaceutics (P464/560; 4 cr), Course coordinator and lecturer, 65 pharmacy students, 15 graduate students (26 lecture hr every yr)

Advanced Pharmacokinetics and Biopharmaceutics (P760; 2 cr), Course coordinator and lecturer, 10 graduate students, 2-5 postdoctoral fellows (16 lecture hr every other year)

1986-1988 Chemical Kinetics and Mechanisms (P752; 2 cr), Course lecturer, 10 graduate students (5 lecture hr every other year)

1986-1996 Senior Pharmacology and Therapeutics (LA2U6E), Course lecturer, 50 medical students (2 lecture hr every yr)

1986-2010: Drug Delivery Systems (P762; 3 cr), Course lecturer, 15 graduate students (2 lecture hr every other year)

2009-present: Bioreaction Engineering and Design (BME 321; 3 cr), Course lecturer, 50 engineering students (2 lecture hr every yr)

2010-present: Pharmacokinetic Concepts and Applications (608; 4 cr), Course coordinator and lecturer, 80 pharmacy students (11 lecture hr every yr)

Biopharmaceutics and Drug Disposition (700; 3 cr), Course coordinator and lecturer, 15 graduate students (21 lecture hr every other yr)

Advanced Pharmacokinetics and Biopharmaceutics (760; 3 cr), Course coordinator and lecturer, 10 graduate students, 2-5 postdoctoral fellows (12 lecture hr every other year)

Conferences/Workshops

1986-1989: Pharmacokinetics/Dynamics for Non-Kineticists, American Chemical Society Short Course, Organizer and Lecturer

1993: Strategies for Oral Drug Delivery, Pharmaceutics Short Course, Lecturer

1995: Strategies for Oral Drug Delivery, Pharmaceutics Short Course, Lecturer

2000: Strategies for Oral Drug Delivery, Pharmaceutics Short Course, Lecturer

Doctoral Committees, Chair

1986: 1. Henry Lau, Thesis entitled, “The Pharmacokinetics and Pharmacodynamics of Bumetanide” (Current position: Executive Director of Biopharmaceutics, Watson Pharmaceuticals, Parsippany, NJ)

2. Ling-Jar Lee, Thesis entitled, “Renal Transport Kinetics of Furosemide and Chlorothiazide in the Isolated Perfused Rat Kidney” (Last position: Associate Director of Clinical Pharmacology, Berlex Laboratories, Montville, NJ; deceased)

1987: 3. Jack Cook, Thesis entitled, “Acute Diuretic Tolerance to Bumetanide” (Current position: Vice President of Clinical Pharmacology, Pfizer Global R & D, Groton, CT)

1991: 4. Carlos Rodríguez, Thesis entitled, “Determinants of Renal Drug Elimination: The Role of Protein Binding and Organ Perfusion on the Renal Excretion of Cefonicid” (Current position: Director of Clinical Pharmacology and Pharmacokinetics-Dynamics, PharmaPolaris, Danville, CA)

1993: 5. Alan Kugler, Thesis entitled, “Determinants of Renal Drug Elimination: Effect of Renal Metabolism on the Renal Disposition of Quinapril and Quinaprilat” (Current position: Chief Scientific Officer, Coastal Pharma Group, Concord, MA)

1995: 6. Nancy Janiczek, Thesis entitled, “Pharmacokinetic and Pharmacodynamic Evaluation of Pirmenol Enantiomers” (Current position: Clinical Pharmacologist, Ann Arbor Pharmacometrics Group, Ann Arbor, MI)

1997: 7. Han-Yi Kuan, Thesis entitled, “Regional Pharmacokinetics of Halogenated Pyrimidines” (Current position: Associate Director of Pharmacokinetics, Valeant Pharmaceuticals, Aliso Viejo, CA)

8. Ching-Ling Cheng (Co-Chair), Thesis entitled, “Absorption and Disposition of Poorly Water Soluble Weak Bases: Application to Delavirdine” (Current position: Professor and Chair of Pharmacy, Chia-Nan University of Pharmacy & Science, Tainan, Taiwan)

9. Wiyada Akarawut, Thesis entitled, “Effect of Quinapril on Organic Anion and Peptide Transport in Renal Membrane Vesicles” (Current position: Bioequivalence Study Center, Ministry of Public Health, Nonthaburi, Thailand)

1998: 10. Chun-Jung Lin, Thesis entitled, “Interaction between ACE Inhibitors and Renal Oligopeptide Transporters” (Current position: Professor of Pharmacy, National Taiwan University, Taipei, Taiwan)

2000: 11. Tong Zhu, Thesis entitled, “Role of Oligopeptide Transporters Rat PEPT1 and PEPT2 in the Transport of Angiotensin Converting Enzyme Inhibitors” (Current position: Associate Director of Clinical Pharmacology, Pfizer Global R & D, Groton, CT)

2001: 12. Micha Levi, Thesis entitled, “Regional Pharmacokinetics of the Cytoprotective Agent Amifostine” (Current position: Senior Expert Modeler, Novartis Pharmaceuticals, East Hanover, NJ)

13. Cathye Shu, Thesis entitled, “Role of Peptide Transporters in the Disposition of Peptides and Mimetics in Intestine, Kidney and Brain” (Current position: Director, Translational Medicine Development, Janssen Pharmaceuticals, NJ)

14. Christopher Lepsy, Thesis entitled, “Renal Disposition of Cefdinir in the Isolated Perfused Rat Kidney” (Current position: Senior Director of Pharmacokinetics, Dynamics and Drug Metabolism Translational Research, Pfizer Global R & D, Groton, CT)

2002: 15. Nathan Teuscher, Thesis entitled, “Peptide Transporters in the Brain: Role of PEPT2 in Choroid Plexus” (Current position: Senior Director of Clinical Pharmacology, Reata Pharmaceuticals, Irving, TX)

2004: 16. Gretchen Larson (Co-Chair), Thesis entitled, “Development of Anionic Liposomal Carriers Containing Listeriolysin O and RBC Ghosts as Plasmid DNA Delivery Platforms” (Current position: Independent Biotechnology Professional, Houston, TX)

2005: 17. Scott Ocheltree Hynes, Thesis entitled, “The Role and Relevance of Proton-Coupled Oligopeptide Transporters in Multiple Organ Systems: Implications for the Regional and Systemic Disposition of Peptides/Mimetics” (Current position: Director, Global PK/PD and Pharmacometrics, Eli Lilly, Indianapolis, IN)

2006: 18. Hong Shen, Thesis entitled, “PEPT2 Immunolocalization and its Role in Cefadroxil Renal Tubular Reabsorption and Brain Penetration” (Current position: Principal Scientist, Drug Metabolism and Pharmacokinetics, Bristol-Myers Squibb, Princeton, NJ)

19. Theresa Nguyen (Co-Chair), Thesis entitled, “Dipeptide Uptake Enhances the Absorption of 3-Substituted GABA Derivatives by Trans-Stimulation of Amino Acid Exchangers” (Current position: Associate Principal Scientist, Drug Metabolism and Pharmacokinetics, Merck, San Diego, CA)

2007: 20. Zheng Lu, Thesis entitled, “Optimization of Amifostine Administration for Radioprotection” (Current position: Associate Director of Pharmacokinetics, Astellas Pharma, Chicago, IL)

2008: 21. Mohamed Kamal, Thesis entitled, “The Pharmacokinetics and Pharmacodynamics of CNS-Acting Agents” (Current position: Director, Clinical Pharmacology, Regeneron Pharmaceuticals, Tarrytown, NY)

2009: 22. Dilara Jappar, Thesis entitled, “Role of Proton-Coupled Oligopeptide Transporters in Small Peptide Absorption and Disposition” (Current position: Staff Fellow, Food & Drug Administration, Silver Spring, MD)

2010: 23. Katherine (Ke) Ma, Thesis entitled, “Role, Relevance and Regulation of PEPT1 in Peptide Intestinal Absorption” (Last position: Scripps Research Institute, Jupiter, FL)

2011: 24. Shu-Pei Wu, Thesis entitled, “Kinetic and Dynamic Effects of Intestinal PEPT1 on the Bacterially-Produced Chemotactic Peptide fMet-Leu-Phe and the anti-inflammatory peptide Lys-Pro-Val” (Current position: Senior Scientist, Vertex Pharmaceuticals, Cambridge, MA)

2012: 25. Bei Yang, Thesis entitled, “Role of Peptide Transporter PEPT1 in the Absorption and Pharmacokinetics of the Amino Acid Ester Prodrug Valacyclovir” (Last position: Associate Director, Clinical Pharmacology, Sanofi-Aventis, Shanghai, China)

26. Maria Posada, Thesis entitled, “Importance of PEPT1 in the Absorption, Tissue Distribution and Disposition of Cefadroxil” (Current position: Senior Research Scientist, Eli Lilly, Indianapolis, IN)

2013: 27. Yeamin Huh, Thesis entitled, “Effect of Inflammation of Cefadroxil Pharmacokinetics in Brain and Kidney and Pharmacometric Modeling of PepT2-Mediated Disposition of Glycylsarcosine in Brain” (Current position: Pharmacometrician and Manager, Pfizer, Groton, CT)

2014: 28. Yehua Xie, Thesis entitled, “Role and Relevance of PEPT1 in Intestinal Absorption and Pharmacokinetics of 5-Aminolevulinic Acid” (Current position: Associate Director, Clinical Pharmacology, Exton, PA)

2015: 29. Yongjun Hu, Thesis entitled, “Development, Characterization and Application of a Novel Mouse Line Humanized for the Intestinal Peptide Transporter PepT1” (Current position: Associate Research Scientist, Department of Pharmaceutical Sciences, University of Michigan, Ann Arbor, MI)

2016: 30. Xiaomei Chen, Thesis entitled, “Influence of PEPT2 on the Regional Distribution Kinetics of Cefadroxil in Brain Using Intracerebral Microdialysis in Rats, Wildtype and PEPT2 Knockout Mice” (Current position: Postdoctoral Fellow, Pharmacometrics Group, Uppsala University, Sweden)

2017: 31. Xiaoxing Wang, Thesis entitled, “Role and Relevance of PHT1 in Brain Disposition and Pharmacokinetics of L-Histidine” (Current position: Manager, Pfizer, Groton, CT)

2019: 32. Daniel Epling, Thesis entitled, “Characterization of the Intestinal Permeability and Oral Absorption of Valacyclovir in Wildtype and huPepT1 Transgenic Mice” (Current position: Ann Arbor Pharmacometrics Group, Ann Arbor, MI)

2020: 33. Brian Thompson, Thesis entitled, “Mechanisms and Modeling of the Intestinal Absorption, Activation, and Systemic Exposure of Gemcitabine and a Gemcitabine Prodrug for Oral Administration” (Current position: Research Scientist, Eli Lilly, Indianapolis, IN)

Masters Committee, Chair

1984: 1. Masayuki Imai

2000: 2. Yong Woo

2002: 3. Philip Lorenzi

Current Graduate Students

2015-present: 1. Kai Wang (co-advise)

2017-present: 3. Lucy Her (co-advise)

2018-present: 4. Emily Briggs (co-advise)

Postdoctoral Fellows/Visiting Scholars/Visiting Graduate Students

1988-1990: 1. Hae-Young Ahn (Current position: Deputy Director, Division of Clinical Pharmacology, CDER, FDA, Rockville, MD)

1992-1994: 2. Jyoti K. Paliwal (Current position: Professor of Pharmaceutics, National Institute of Pharmaceutical Education and Research, Mohali, India)

1996-1997: 3. Angela Steel (Current position: Director of Clinical Operations, GlaxoSmithKline, Collegeville, PA)

1997-2002: 4. Hong Shen (Current position: Research Investigator II of Drug Metabolism and Pharmacokinetics, Bristol-Myers Squibb, Princeton, NJ)

1998-1999: 5. Chun-Jung Lin (Current position: Professor of Pharmacy, National Taiwan University, Taipei, Taiwan)

2003-2006: 6. Lisa Chen (Current position: Principal Research Investigator, PK Projects and Pharmacokinetics, Sanofi, Bridgewater, NJ)

2007-2008: 7. Huidi Jiang (Current position: Professor of Pharmaceutical Sciences, Zhejiang University, Hangzhou, China)

2010-2012: 8. Naoki Nishio (Current position: Research Scientist of Drug Metabolism and Pharmacokinetics, Dainippon-Sumitomo, Osaka, Japan)

2013-2014: 9. Yuqing Wang (Co-Advised, Graduate Student, Zhejiang University, Hangzhou, China)

2015-2016: 10. Feifeng Song (Co-Advised, Graduate Student, Zhejiang University, Hangzhou, China)

2017-2018: 11. Rui Song (Current position: Associate Professor of Pharmaceutical Sciences, China Pharmaceutical University, Nanjing, China)

**Research Staff**

2002-2011: 1. Yongjun Hu (Laboratory Manager, Department of Pharmaceutical Sciences, University of Michigan, Ann Arbor, MI)

2015-present: 2. Yongjun Hu (Associate Research Scientist, Department of Pharmaceutical Sciences, University of Michigan, Ann Arbor, MI)

**PharmD Investigational Research Projects**

1982: 1. James Lang

2. Nancy Caplan

1984: 3. Joanne Kure

1985: 4. Jill Wikman

1986: 5. Michael Nangle

1987: 6. John Gardynik

7. Larry Thurston

1988: 8. Jill Vandette

9. Judith Bammert

1989: 10. Bradley Shinn

1992: 11. Kathleen Liedholm

1993: 12. Allen Flynn

1995: 13. Carol Yarrington

1996: 14. Rachael Sutton

1997: 15. Greta Fulton

16. Cindy Anthony

1999: 17. Garen Steele

**Dissertation Committees, Member**

1983: 1. David Schwinke

1984: 2. James Ferry

3. Gregory Szpunar

1985: 4. Umesh Shukla

1986: 5. RD Aminah

6. Chia-Ming Chiang

7. Barbra Stewart

1987: 8. Mark Rogge

1989: 9. Tanya Djanegara

10. Iraida Gonzalez

1990: 11. Tzyy-Show Chen

12. Steven Rose

1991: 13. Kathleen Lee

1995: 14. Audra Stinchcomb

15. Nontima Vardhanabhuti

1996: 16. Pablo Dávila-Zavala

17. Julie Rhie

1997: 18. Nasir Idkaidek

19. Shyamala Jayaraman

20. Li-Heng Pao

1998: 21. Nancy Jezyk

22. Nusara Piyapolrungroj

1999: 23. Hayden Thomas

2000: 24. Pablo Caetano

25. Sally Choe

2001: 26. Kai Kwok

27. Lillian Li

28. Lang Li

2003: 29. Yongtao Li

2004: 30. Sujatha Menon

2007: 31. Vivien Chen

2008: 32. Sarah Nehm

33. Beata Chertok

2010: 34. Tao Zhang

2011: 35. Tien-Yi Lee

36. Adam Cole

37. Na Hyung Kim

38. Peng Zou

39. Yanke Yu

2012: 40. Jason Baik

41. Sarah Hsiu-Fang Lee

2013: 42. Meong Cheol Shin

2015: 43. Joseph Burnett

44. Jamie Austin

45. Jamie Connarn

46. Hayley Paholak

47. Kanokwan (Kate) Sansanaphongpricha

2018: 48. Mari Gasparyan

49. Alex Yu

50. Dan Li

# Invited Presentations

1982: 1. Preliminary study on the kinetics and dynamics of bumetanide. Alumni Seminar in Pharmaceutics, College of Pharmacy, University of Michigan, Ann Arbor, MI

2. Basic overview of pharmacokinetics. Southeastern Michigan Society of Hospital Pharmacists, Annual Seminar, Farmington Hills, MI

1983: 3. Kinetics and dynamics of the loop diuretic bumetanide. Medical Bioavailability Unit, The Upjohn Company, Kalamazoo, MI

1984: 4. Pharmacokinetics and pharmacodynamics of bumetanide. College of Pharmacy, Ohio State University, Columbus, OH

5. Determinants of bumetanide response in the dog. Smith Kline and French Laboratories, King of Prussia, PA

6. Pharmacokinetics and pharmacodynamics of bumetanide in the dog. American Cyanamid Company, Pearl River, NY

1986: 7. Effect of protein binding on the renal transport kinetics of furosemide in the isolated perfused rat kidney. Division of Clinical Pharmacology, Carl-Korth-Institut, Erlangen, West Germany.

1987: 8. Loop diuretics: Effect in an eliminating organ. Abbott Laboratories, North Chicago, IL

9. Loop diuretics: Effect in an eliminating organ. Third Annual Pittsburgh Pharmacodynamic Conference, University of Pittsburgh, Pittsburgh, PA

1988: 10. Kinetics, dynamics and complicating factors in analyzing dose-response relationships. College of Pharmacy, Wayne State University, Detroit, MI

11. Determinants of renal drug transport. Genentech Inc, South San Francisco, CA

12. Bumetanide kinetics, dynamics and complicating factors in analyzing dose-response relationships. Roche Laboratories, Nutley, NJ

1989: 13. Kinetics, dynamics and complicating factors in analyzing the dose-response relationship of bumetanide. College of Pharmacy, University of Michigan, Ann Arbor, MI

14. Effect of protein binding and organ perfusion on renal drug transport. Schering Corp, Bloomfield, NJ

15. Effect of organ perfusion on renal drug transport. BMSR Workshop, NIH Sponsored Meeting, University of Southern California, Los Angeles, CA

1991: 16. Stereoselective disposition of ibuprofen in the dog after systemic exposure: Enantiomeric interaction. Stereoisomerism Symposium, ACCP Annual Meeting, Atlanta, GA

1994: 17. Disposition of quinapril and quinaprilat in the isolated perfused rat kidney. Warner-Lambert/Parke-Davis, Ann Arbor, MI

18. Disposition of quinapril and quinaprilat in the isolated perfused rat kidney. Hoffmann-La Roche, Nutley, NJ

19. Renal transport/metabolic coupling: Application to ACE inhibitors. PPDM Symposium, AAPS Annual Meeting, San Diego, CA

20. Renal transport/metabolic coupling: Application to ACE inhibitors. Renal Division, Harvard Medical School, Boston, CA

1995: 21. Stereoselective disposition of ibuprofen: Effect of competitive and nonlinear plasma protein binding. Indianapolis-Cincinnati Discussion Group, AAPS Sponsored Meeting, Indianapolis, IN

22. Renal transport/metabolic coupling: Concepts and applications. Eli Lilly and Company, Indianapolis, IN

23. Disposition of ibuprofen in the presence of nonlinear plasma protein binding. Drug Chirality Symposium, ACCP Annual Meeting, Rockville, MD

24. Stereoselective disposition of ibuprofen in humans: Enantiomeric plasma protein binding interaction. Center for Drug Evaluation and Research, Food and Drug Administration, Rockville, MD

1996: 25. Steady-state pharmacokinetics of delavirdine in HIV-positive patients: Effect on erythromycin breath test. Biogen, Cambridge, MA

1997: 26. Mechanisms of renal drug elimination: Application to ACE inhibitors. Institute of Pharmaceutical Technology, Johann Wolfgang Goethe-University, Frankfurt-Niederusal, Germany

27. Mechanisms of renal drug elimination: Rat IPK, in vivo micropuncture and renal membrane vesicle studies. Biogen, Cambridge, MA

28. Oligopeptide transporters: Substrate specificity of ACE inhibitors. PPDM Symposium, AAPS Annual Meeting, Boston, MA

1998: 29. Regional kinetics-dynamics of amifostine radioprotection. US Bioscience, West Conshohocken, PA

1999: 30. Localization of oligopeptide transporters in kidney. Renal and Molecular Therapeutics Symposium, ASCPT Annual Meeting, San Antonio, TX

31. Heterogeneity of renal peptide transporters. Warner-Lambert/Parke-Davis, Ann Arbor, MI

32. Kidney transporters and their role in ACE inhibitor elimination. New Jersey Drug Metabolism Discussion Group, ACS Sponsored Meeting, Somerset, NJ

33. Transport of ACE inhibitors in kidney and intestine. International Research Conference on Membrane Transporters: New Perspectives in Drug Delivery and Drug Targeting, Ascona, Switzerland

34. Transport of ACE inhibitors in kidney and intestine: Role of oligopeptide transporters. Division of Nephrology, University of Michigan, Ann Arbor, MI

35. Role of oligopeptide transporters in ACE inhibitor disposition. Department of Neurosurgery, University of Michigan, Ann Arbor, MI

2000: 36. Hepatic clearance, first-pass and regional delivery. University of Michigan Short Course on Strategies for Oral Drug Delivery, Lake Tahoe, NV

37. Membrane transporters: PEPT1 and PEPT2. University of Michigan Short Course on Strategies for Oral Drug Delivery, Lake Tahoe, NV

38. Role of PEPT2 in peptide trafficking in the CNS. Faculty of Pharmacy, University of Toronto, Ontario, Canada

39. Peptide transporters: Opportunities in drug design, delivery and targeting. ISSX Short Course on Drug Transporters – Role in Uptake, Elimination and Tissue Distribution, Indianapolis, IN

2001: 40. Peptide transporters: Opportunities in drug design, delivery and targeting. Department of Industrial and Physical Pharmacy, Purdue University, West Lafayette, IN

41. Peptide transporters: Role in the choroid plexus. PPDM Symposium on Role of Drug Transporters in the Brain, AAPS Annual Meeting, Denver, CO

2002: 42. Peptide transporters and their role in peptide, peptidomimetic and neuropeptide disposition in the CNS. College of Pharmacy and Allied Health Professions, Wayne State University, Detroit, MI

43. Functional and molecular evidence for the presence of PEPT2 in the brain: Implications in drug design, delivery and targeting. Department of Biochemistry and Molecular Biology, Medical College of Georgia, Augusta, GA

44. Overview of peptide transporters. Aventis Pharmaceuticals, Bridgewater, NJ

45. Role of PEPT2 in drug delivery to the CNS. Aventis Pharmaceuticals, Bridgewater, NJ

46. Role of PEPT2 in peptide/mimetic trafficking at the blood-CSF barrier. Intracellular Trafficking Symposium, Controlled Release Society Annual Meeting, Seoul, Korea

47. Pharmacokinetic evaluation of dosage form performance: Absorption kinetics. Department of Pharmaceutical Sciences, Chulalongkorn University, Bangkok, Thailand

48. Clearance concepts: Application to hepatic clearance, first-pass and regional drug delivery. Department of Pharmaceutical Sciences, Chulalongkorn University, Bangkok, Thailand

49. Graduate studies in pharmaceutical sciences: Past, present and beyond**.** Department of Pharmaceutical Sciences, Chulalongkorn University, Bangkok, Thailand

50. Role of PEPT2 in peptide/mimetic trafficking at the blood CSF barrier. Department of Pharmaceutical Sciences, Chulalongkorn University, Bangkok, Thailand

51. Role of PEPT2 in peptide/mimetic trafficking and drug delivery to the brain. Bristol-Myers Squibb, New Brunswick, NJ

52. Peptide transporters in the CNS. Globalization of Pharmaceutics Education Network (GPEN), University of Michigan, Ann Arbor, MI

2003: 53. Molecular characterization of peptide transporter distribution and activity in brain. International Congress on Molecular Biopharmaceutics, Honolulu, HI

54. Role and relative importance of PEPT2 in choroid plexus. Pharmacokinetics and Drug Delivery Research Laboratories, Sankyo, Tokyo, Japan

55. Peptide and peptide-analog transport in the choroid plexus. Todai International Symposium on Drug Delivery to the CNS, Tokyo, Japan

56. Relative importance of PEPT2 in the choroid plexus. Academy of Pharmaceutical Sciences and Technology Japan, Tokyo, Japan

57. PEPT2 transport of peptides and mimetics at the choroid plexus. Vth International Conference of Cerebral Vascular Biology, Amarillo, TX

58. Role of proton-coupled oligopeptide transporters in peptide/mimetic disposition. Pfizer Global Research and Development, Ann Arbor, MI

59. Knockout mouse of the oligopeptide transporter PEPT2. PPDM Symposium on Knockout Mouse Models of Xenobiotic Transporters, AAPS Annual Meeting, Salt Lake City, UT

60. Role of proton-coupled oligopeptide transporters in peptide, neuropeptide and peptidomimetic disposition. College of Pharmacy, University of Michigan, Ann Arbor, MI

2004: 61. Proton-coupled oligopeptide transporters and their role in peptide, neuropeptide and mimetic drug disposition. Pfizer Global Research and Development, Groton, CT

62. Role and relevance of PEPT2 in the brain and kidney. Hoffmann-La Roche, Nutley, NJ

63. Role and relevance of PEPT2 in the brain and kidney. Department of Pharmaceutics, Rutgers University, Piscataway, NJ

64. Role and relevance of PEPT2 in the brain and kidney. Division of Pharmaceutics, Ohio State University, Columbus, OH

2005: 65. Role and relevance of PEPT2 in the kidney and brain: In vivo implications for drug delivery and disposition. Biomedical Transporters Conference: Bridging Basic and Applied Sciences, St. Gallen, Switzerland.

66. Role and relevance of PEPT2 in the kidney and brain: In vivo implications for drug delivery and disposition. PPDM Roundtable on Transporters as Therapeutic and Drug Delivery Targets, AAPS Annual Meeting, Nashville, TN

67. Role and relevance of PEPT2 in the body as determined by in vivo studies with glycylsarcosine in wild-type and PEPT2 knockout mice. ChE/Pharm/BME 596 Health Science and Engineering Seminar, Colleges of Engineering and Pharmacy, Ann Arbor, MI

2006: 68. Impact of genetic knockout of PEPT2 on peptide/mimetic disposition and dynamics. Department of Pharmaceutical Sciences, State University of New York, Buffalo, NY

69. Regional pharmacokinetics of gemcitabine in dogs: Role of the liver, gastrointestinal tract and splanchnic region. Chinese Academy of Medical Sciences, Beijing, China

70. Regional pharmacokinetics of gemcitabine in dogs: Role of the liver, gastrointestinal tract and splanchnic region. Peking University, Beijing, China

71. Impact of genetic knockout of PEPT2 on peptide/mimetic disposition and dynamics. China Pharmaceutical University, Nanjing, China

72. Impact of genetic knockout of PEPT2 on peptide/mimetic disposition and dynamics. Jiao Tong University, Shanghai, China

73. Distribution of glycylsarcosine in the brain of wild type and PEPT2 null mice following intracerebroventricular administration. Gordon Research Conference on Barriers of the CNS, Tilton, NH

74. Role and relevance of PEPT2 on the pharmacokinetics, renal tubular reabsorption and brain penetration of cefadroxil: Studies in wild-type and PEPT2 knockout mice. Transporters 2006 Conference, Parma, Italy

75. Role and relevance of PEPT2 on the pharmacokinetics, renal tubular reabsorption and brain penetration of cefadroxil: Studies in wild-type and PEPT2 knockout mice. Department of Neuroscience, University of Michigan, Ann Arbor, MI

2007: 76. Role of PEPT2 in neuropharmacokinetics and neuroprotection. Bristol-Myers Squibb, Princeton, NJ

77. Role of PEPT2 in neuropharmacokinetics and neuroprotection. Department of Physiology, Anatomy and Genetics, University of Oxford, United Kingdom

78. Role of PEPT2 in neuropharmacokinetics and neuroprotection. Pharmaceutical Sciences Research Division, Kings College, London, United Kingdom

79. Role of PEPT2 in 5-aminolevulinic acid neuroprotection. Department of Pharmaceutical Sciences, University of Tennessee, Memphis, TN

80. Pharmacy and pharmaceutical sciences: Managing the challenges and opportunities. School of Pharmacy, University of Maryland, Baltimore, MD

81. Pharmacy and pharmaceutical sciences: Managing the challenges and opportunities. College of Pharmacy, University of Nebraska Medical Center, Omaha, NE

82. Impact of proton-coupled oligopeptide transporters in drug absorption, disposition and dynamics. Schering-Plough Research Institute, Kenilworth, NJ

83. How can knockout animals be used to elucidate the significance of transport proteins on drug kinetics and dynamics? ISSX Short Course on Novel Technologies for Transport Study in Drug Design and Development, Sendai, Japan

84. Role and relevance of proton-coupled oligopeptide transporters in drug absorption, disposition and dynamics: Lessons from transgenic mice. Tohoku University, Sendai, Japan

85. Role of PEPT2 in protecting the brain from neurotoxic substances. PPDM Symposium on Transporters in Pathophysiology and Toxicology, AAPS Annual Meeting, San Diego, CA

86. Role of PEPT2 in protecting the brain from neurotoxic substances. UCSF Department of Biopharmaceutical Sciences Symposium on The Impact of Pharmacokinetics in Modern Drug Development, Co-Sponsored by AAPS, San Francisco, CA

2008: 87. Creating futures in pharmacy practice and research. School of Pharmacy, University of Washington, Seattle, WA

88. Role and relevance of PEPT1 and PEPT2 in drug absorption, disposition and dynamics: Lessons from transgenic mice. Lilly Research Laboratories, Indianapolis, IN

89. Role of PEPT2 in the pharmacologic and toxicologic responses to peptide/mimetic substrates in brain. Barriers of the Central Nervous System, Gordon Research Conference, Tilton, NH

90. Use of transgenic mice to elucidate the significance of PEPT1 and PEPT2 in drug absorption, disposition, and dynamics. Solvo Biotechnology, Budaors, Hungary

91. Use of transgenic mice to elucidate the significance of PEPT1 and PEPT2 in drug absorption, disposition, and dynamics. University of Vienna, Austria

92. Role and relevance of the oligopeptide transporter PEPT1 in intestinal absorption. Michigan Gastrointestinal Peptide Research Center, University of Michigan, Ann Arbor, MI

93. Significance of PEPT1 and PEPT2 in drug absorption, disposition and dynamics: Lessons learned from transgenic mice. Department of Pharmacology, University of Michigan, Ann Arbor, MI

2009: 94. Translation of PEPT2-mediated changes in peptide/mimetic disposition on regional pharmacodynamics. Department of Pharmaceutical Sciences, University of Kentucky, Lexington, KY

95. Translation of POT-mediated changes in peptide/mimetic absorption and disposition on regional pharmacodynamics. The Chinese University of Hong Kong, China

96. Role and relevance of PEPT1 and PEPT2 in peptide/mimetic physiology, pharmacology and toxicology. Zhejiang University, Hangzhou, China

97. Enhanced antinociceptive response to intracerebroventricular kyotorphin in Pept2 null mice. The 8th Cerebral Vascular Biology International Conference, Sendai, Japan

98. Significance of PEPT1 and PEPT2 in drug absorption, disposition and dynamics: Lessons learned from transgenic mice. Biomedical Transporters Conference: Membrane Transporters and their Impact on Drug Discovery, Thun, Switzerland

99. Genetic knockout of Pept1 and Pept2 in mice: Impact on peptide/mimetic ADMET and pharmacologic response. F. Hoffman-La Roche, Basel, Switzerland

100. Genetic knockout of Pept1 and Pept2 in mice: Impact on peptide/mimetic ADMET and pharmacologic response. Upsher-Smith Laboratories, Maple Grove, MN

2010: 101. Application of knockout mice in elucidating the significance of transport proteins on drug kinetics and dynamics. Department of Biomedical Engineering, University of Michigan, Ann Arbor, MI

102. Impact of PEPT2 on glycylsarcosine and cefadroxil disposition in brain of wild-type and Pept2 null mice following icv administration. Barriers of the Central Nervous System, Gordon Research Conference, New London, NH

103. Application of knockout mice in elucidating the significance of transport proteins on drug kinetics and dynamics. Land O’Lakes Conference on Drug Metabolism and Applied Pharmacokinetics, Merrimac, WI

104. Relevance of intestinal PEPT1 in peptide and peptide-like drug absorption: Studies in wild-type and knockout mice. Science Symposium on Physical Chemistry in the Age of Molecular and Cellular Biology, College of Pharmacy, University of Michigan, Ann Arbor, MI

2011: 105. PEPT1 and PEPT2 prodrug strategies. AAPS Workshop on Drug Transporters in ADME: From the Bench to the Bedside, Bethesda, MD

106. Translation of PEPT1- and PEPT2-mediated changes in pharmacokinetics on peptide/mimetic pharmacology and toxicology. Giacomini-Fischbach Group Seminar, University of California, San Francisco, CA

107. Translation of PEPT1- and PEPT2-mediated changes in pharmacokinetics on peptide/mimetic pharmacology and toxicology. Research in Inflammation Lecture, University of Michigan, Ann Arbor, MI

108. Translation of PEPT1- and PEPT2-mediated changes in pharmacokinetics on peptide/mimetic pharmacology and toxicology. School of Pharmacy, University of Washington, Seattle, WA

109. Transgenic approaches to study carnosine metabolism. International Congress on Carnosine in Exercise and Disease, Ghent, Belgium

110. Impact of PEPT1 and PEPT2 in drug delivery. Biomedical Transporters Conference: Membrane Transporters in Drug Discovery, Grindelwald, Switzerland

111. Genetic knockout of Pept1 and Pept2 in mice: Impact on peptide/mimetic ADMET and pharmacologic response. Department of Pharmacology and Pharmaceutical Sciences, University of Southern California, Los Angeles, CA

112. Genetic knockout of Pept1 and Pept2 in mice: Impact on peptide/mimetic ADMET and pharmacologic response. Isis Pharmaceuticals, Carlsbad, CA

113. Genetic knockout of Pept1 and Pept2 in mice: Impact on peptide/mimetic ADMET and pharmacologic response. Pharmaceutical Sciences and Pharmacogenomics Graduate Program, University of California, San Francisco, CA

2012: 114. Genetic knockout of Pept1 and Pept2 in mice: Impact on peptide/mimetic ADMET and pharmacologic response. School of Pharmacy, Palm Beach Atlantic University, West Palm Beach, FL

115. Role of intestinal PEPT1 on bacterially produced chemotactic peptides and inflammatory bowel disease. PPDM Symposium on Getting Personal with Bacteria: Role of the Intestinal Microflora in Drug Discovery, Disease and Therapeutics, AAPS Annual Meeting, Chicago, IL

116. Role of intestinal PEPT1 on bacterially produced chemotactic peptides and inflammatory bowel disease. 9th Annual IBD Education Day Research Program, University of Michigan, Ann Arbor, MI

2013: 117. Role and relevance of PepT1 and PepT2 on the absorption, disposition and dynamics of peptides, mimetics and peptide-Like drugs: Studies in genetically modified mice. National Taiwan University, School of Pharmacy, Taipei, Taiwan

118. Role and relevance of PepT1 and PepT2 on the absorption, disposition and dynamics of peptides, mimetics and peptide-Like drugs: Studies in genetically modified mice. National Defense University, School of Pharmacy, Taipei, Taiwan

119. Role and relevance of PepT1 and PepT2 on the absorption, disposition and dynamics of peptides, mimetics and peptide-Like drugs: Studies in genetically modified mice. Taipei Medical University, School of Pharmacy, Taipei, Taiwan

120. Role and relevance of PepT1 and PepT2 on the absorption, disposition and dynamics of peptides, mimetics and peptide-Like drugs: Studies in genetically modified mice. Chia-Nan University College of Pharmacy & Science and Taiwan Pharmaceutical Manufacturer’s Association, Tainan, Taiwan

121. Role of intestinal PEPT1 on bacterially produced chemotactic peptides and inflammatory bowel disease. Microbiome Research Group, University of Michigan, Ann Arbor, MI

122. In vivo and in silico evaluation of PepT1 on the absorption and pharmacokinetics of valacyclovir during dose escalation. Biomedical Transporters Conference: Transporters and Channels in Drug Discovery and Preclinical Development, St Moritz, Switzerland

123. Use of genetically modified mouse models to evaluate PepT1-mediated absorption, disposition and dynamics. F. Hoffman-La Roche, Basel, Switzerland

124. Use of genetically modified mouse models to evaluate PepT1-mediated absorption, disposition and dynamics. Uppsala University, Faculty of Pharmacy, Sweden

2014: 125. Use of genetically modified mouse models to evaluate PepT1-mediated absorption. Department of Pharmacology and Systems Therapeutics, Icahn School of Medicine at Mount Sinai, New York, NY

126. Humanized PEPT1 mouse model for translational biopharmaceutics. Thirteenth Annual Buffalo Pharmaceutics Symposium, University at Buffalo, SUNY

2015: 127. Humanized PEPT1 mouse model for translational biopharmaceutics. Department of Pharmaceutics, University of Nebraska Medical Center, Omaha, NE

128. Role and relevance of PepTs in drug transport across the barriers in intestine and CNS. Biogen Idec, Cambridge, MA

129. Development, characterization and application of a humanized PEPT1 mouse model for studying peptide/mimetic absorption and pharmacokinetics. Great Lakes Drug Metabolism & Disposition Group, 10th Annual Meeting, Ann Arbor, MI

130. Development, characterization and application of a humanized PEPT1 mouse model for studying peptide/mimetic absorption and pharmacokinetics. Symposium on Humanized Mouse Models in Translating Oral Drug Absorption and Disposition from Rodent to Human, AAPS Annual Meeting, Orlando, FL

131. Use of genetically-modified mouse models to evaluate PEPT1-mediated absorption, disposition and transporter-targeted therapy. Department of Molecular and Integrative Physiology, University of Michigan, Ann Arbor, MI

2016: 132. Academic freedom lecture. Faculty Governance Conference, University of Michigan, Ann Arbor, MI

133. Use of genetically-modified mouse models to evaluate PEPT1-mediated absorption, disposition and transporter-targeted therapy. Department of Pharmacokinetics, University of Paris Descartes, France

134. Use of genetically-modified mouse models to evaluate PEPT1-mediated absorption, disposition and transporter-targeted therapy. Institute of Pharmacy and Biochemistry, University of Mainz, Germany

2017: 135. Use of genetically-modified mouse models to evaluate SLC15A-mediated absorption, disposition and transporter-targeted therapy. PSTP Seminar, University of Michigan, Ann Arbor, MI

136. Membrane transporters and drug response. Facultad de Farmacia, Universidad de Ciencias Medicas, San José, Costa Rica

137. Role and relevance of proton-coupled oligopeptide transporters in the brain. Food and Drug Administration - University of Maryland CERSI seminar, Rockville, MD

138. Role and relevance of proton-coupled oligopeptide transporters in the brain. University of Heidelberg, Institute of Pharmacy and Molecular Biotechnology, Germany

2018: 139. Role and relevance of proton-coupled oligopeptide transporters in the brain. College of Pharmacy, University of Texas, Austin, TX

140. Influence of peptide transporter 2 (PEPT2) on the brain disposition/dynamics of peptides and peptide-like drugs. Symposium on Transporters at the Blood-CNS Barriers, ASPET Annual Meeting at Experimental Biology, San Diego, CA

141. Application of genetically-modified mouse models to characterize the SLC15A-mediated absorption, disposition and targeting of peptides and peptide-like drugs, Department of Clinical Pharmacology and School of Pharmacy, Ben-Gurion University of the Negev, Beer-Sheva, Israel

142. Application of genetically-modified mouse models to characterize the SLC15A-mediated absorption, disposition and targeting of peptides and peptide-like drugs, Division of Clinical Pharmacy, School of Pharmacy, The Hebrew University of Jerusalem, Israel

2019: 143. Application of genetically-modified mouse models to characterize the SLC15A-mediated absorption, disposition and targeting of peptides and peptide-like drugs, School of Pharmacy, Texas Tech University Health Sciences Center, Amarillo, TX

144. Application of genetically-modified mouse models to characterize the SLC15A-mediated absorption, disposition and targeting of peptides and peptide-like drugs, Department of Cell Biology and Biochemistry, Texas Tech University Health Sciences Center, Lubbock, TX

145. SLC15A transporters: a 25 year perspective, 41st Symposium on Interactions between Biomembranes and Drugs, Toho University, Chiba, Japan

146. Linear vs nonlinear pharmacokinetics: concepts and applications, Toho University, Chiba, Japan

2020: 147. SLC15A transporters: a 25 year perspective, Eshelman School of Pharmacy, University of North Carolina, Chapel Hill

**other presentations**

1978: 1. Smith DE, Brater DC, Lin ET, Benet LZ. Attenuation of furosemide’s diuretic effect by indomethacin: Pharmacokinetic evaluation. American Pharmaceutical Association Annual Meeting, Montreal, Canada

1979: 2. Smith DE, Benet LZ. Relationship between urinary excretion rate, steady-state plasma levels, and diuretic response of furosemide in the rat. APhA Academy of Pharmaceutical Sciences, Kansas City, MO

1980: 3. Smith DE, Lin ET, Benet LZ. Absorption and disposition of furosemide in healthy volunteers, measured with a metabolite-specific assay. American Pharmaceutical Association Annual Meeting, Washington, DC

4. Smith DE, Gambertoglio JG, Vincenti F, Benet LZ. Pharmacokinetic-pharmacodynamic evaluation of furosemide in kidney transplant patients. APhA Academy of Pharmaceutical Sciences, San Antonio, TX

1981: 5. Smith DE, Benet LZ. Plasma protein binding of furosemide in kidney transplant patients. APhA Academy of Pharmaceutical Sciences, Orlando, FL

1982: 6. Smith DE, Lau HSH. Determinants of bumetanide response in the dog: Effect of probenecid. APhA Academy of Pharmaceutical Sciences, San Diego, CA

7. Smith DE, Lau HSH. Determinants of bumetanide response in the dog: Effect of indomethacin. APhA Academy of Pharmaceutical Sciences, San Diego, CA

1983: 8. Lau HSH, Shih LJ, Smith DE. Effect of probenecid on the dose-response relationship of bumetanide at steady-state. APhA Academy of Pharmaceutical Sciences, Miami Beach, FL

1984: 9. Smith DE, Hyneck ML, Berardi RR, Port FK. Urinary protein binding, kinetics and dynamics of furosemide in nephrotic patients. APhA Academy of Pharmaceutical Sciences, Philadelphia, PA

10. Lau HSH, Hyneck ML, Berardi RR, Swartz RD, Smith DE. Kinetics, dynamics, and bioavailability of bumetanide in patients with chronic renal failure. APhA Academy of Pharmaceutical Sciences, Philadelphia, PA

1985: 11. Lee LJ, Cook JA, Smith DE. Renal transport kinetics of furosemide in the isolated perfused rat kidney. APhA Academy of Pharmaceutical Sciences, Minneapolis, MN

1986: 12. Cook JA, Smith DE. Development of acute tolerance to bumetanide: Bolus injection studies. American Association of Pharmaceutical Scientists Annual Meeting, Washington DC

13. Lee LJ, Cook JA, Smith DE. Renal transport kinetics of chlorothiazide in the isolated perfused rat kidney. American Association of Pharmaceutical Scientists Annual Meeting, Washington DC

1988: 14. Cook JA, Smith DE. Development of acute tolerance to bumetanide: Constant-rate infusion studies. American Association of Pharmaceutical Scientists Annual Meeting, Orlando, FL

15. Cook JA, Smith DE, Cornish LA, Tankanow RM, Nicklas JM, Hyneck ML. Kinetics, dynamics, and bioavailability of bumetanide in healthy subjects and patients with congestive heart failure. American Association of Pharmaceutical Scientists Midwest Regional Meeting, Chicago, IL

1989: 16. Haberkamp MB, Flynn GL, Smith DE. Evaluation of the efficacy of sunscreen formulations with transepithelial water loss measurements and turnover time determinations. American Association of Pharmaceutical Scientists Annual Meeting, Atlanta GA

1990: 17. Radwanski E, Smith D, Symchowicz, Affrime M, Teal M, Lin C, Cayen M. Multiple dose pharmacokinetics of ceftibuten in young male volunteers. American Association of Pharmaceutical Scientists Annual Meeting, Las Vegas, NV

18. Lee L-J, Affrime M, Bordens R, DeVries JK, Jacobs S, Patrick J, Smith DE. Pharmacokinetics of recombinant human granulocyte-macrophage colony-stimulating factor (rHu-GM-CSF) after subcutaneous administration to healthy male volunteers. American Association of Pharmaceutical Scientists Annual Meeting, Las Vegas, NV

19. Ahn H-Y, Amidon GL, Smith DE. Stereoselective disposition of ibuprofen enantiomers in dog. American Association of Pharmaceutical Scientists Annual Meeting, Las Vegas, NV

20. Rodríguez CA, Amidon GL, Wagner JG, Smith DE. Effect of protein binding on the renal excretion of cefonicid in the isolated perfused rat kidney. American Association of Pharmaceutical Scientists Annual Meeting, Las Vegas, NV

1991: 21. Janiczek N, Bockbrader HN, Chang T, Amidon GL, Smith DE. Stereoselective liquid chromatographic assay for pirmenol enantiomers in dog plasma. American Association of Pharmaceutical Scientists Annual Meeting, Washington DC

22. Janiczek N, Smith DE, Chang T, Ventura A, Mertz TE. Pharmacokinetics and pharmacodynamics of pirmenol enantiomers in dogs. American Association of Pharmaceutical Scientists Annual Meeting, Washington DC

23. Rodríguez CA, Smith DE. Effect of alterations in renal flow on the excretion of cefonicid in the isolated perfused rat kidney. American Association of Pharmaceutical Scientists Annual Meeting, Washington DC

1992: 24. Brenner DE, Smith DE, Knutsen CA, DeRemer SJ, Terrio PA, Johnson NJ, Stetson PL, Ensminger WD. 5-Fluorouracil pharmacokinetic interactions with iododeoxyuridine and bromodeoxyuridine. American Association of Cancer Research Annual Meeting, San Diego, CA

25. Kugler AR, Olson SC, Smith DE. Quinapril and quinaprilat disposition in the isolated perfused rat kidney. American Association of Pharmaceutical Scientists Annual Meeting, San Antonio, TX

26. Smith DE, Cox SR, Berardi RR, Dunn-Kucharski V, Elta GH. Stereoselective kinetics of ibuprofen after oral administration of individual enantiomers and admixtures to healthy subjects. American Association of Pharmaceutical Scientists Annual Meeting, San Antonio, TX

1993: 27. Kugler AR, Olson SC, Smith DE. Effect of competitive inhibitors on quinapril and quinaprilat disposition in the isolated perfused rat kidney. American Association of Pharmaceutical Scientists Annual Meeting, Orlando, FL

28. Kugler AR, Olson SC, Smith DE. Quantitation of 3H-quinapril and 3H-quinaprilat in biological fluids using HPLC/RD coupled to LSC spectrometry. American Association of Pharmaceutical Scientists Annual Meeting, Orlando, FL

29. Smith DE, Kugler AR. Influence of intrarenal metabolism on the analysis of renal drug transport mechanisms. American Association of Pharmaceutical Scientists Annual Meeting, Orlando, FL

30. Paliwal JK, Smith DE, Cox SR, Berardi RR, Dunn-Kucharski V, Elta GH. Stereoselective, competitive and nonlinear plasma protein binding of ibuprofen enantiomers as determined in vivo in healthy subjects. American Association of Pharmaceutical Scientists Annual Meeting, Orlando, FL

1994: 31. Janiczek N, Smith DE, Chang T, Sedman AJ, Stringer KA. Pharmacokinetics of pirmenol enantiomers and pharmacodynamics of pirmenol racemate in patients with PVCs. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

1995: 32. Akarawut W, Smith DE. Effect of ACE inhibitors on p-aminohippurate transport in rabbit renal basolateral membrane vesicles. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

33. Kuan HY, Smith DE, Ensminger WD, Knol JA, DeRemer SJ, Yang Z, Stetson PL. Regional pharmacokinetics of 5-bromo-2´-deoxyuridine in dogs: Hepatic arterial vs. portal venous infusions. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

34. Cheng CL, Smith DE, Cox SR, Watkins PB, Blake DS, Carver PL, Kauffman CA, Meyer KM, Amidon GL, Stetson PL. Correlation between erythromycin breath test and oral exposure to delavirdine mesylate in HIV-positive patients. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

1996: 35. Cheng CL, Smith DE, Cox SR, Watkins PB, Blake DS, Carver PL, Kauffman CA, Meyer KM, Amidon GL, Stetson PL. Steady-state pharmacokinetics of delavirdine in HIV-positive patients: In vivo effect of delavirdine on the erythromycin breath test. Interscience Conference on Antimicrobial Agents and Chemotherapy Annual Meeting, New Orleans, LA

36. Akarawut W, Smith DE. Effect of ACE inhibitors on glycylsarcosine transport in rabbit renal brush border membrane vesicles. American Association of Pharmaceutical Scientists Annual Meeting, Seattle, WA

37. Kuan HY, Smith DE, Ensminger WD, Knol JA, DeRemer SJ, Yang Z, Stetson PL. Regional pharmacokinetics of 5-fluorouracil in dogs: Hepatic arterial vs. portal venous infusions. American Association of Pharmaceutical Scientists Annual Meeting, Seattle, WA

1997: 38. Voorman RL, Cox SR, Maio SM, Borin MT, Smith DE, Freimuth WW. Qualitative in vitro and in vivo correlation for interaction of delavirdine with CYP3A4. Pharmaceutical Research and Manufacturers of America Drug Metabolism Meeting, Rockville, MD

39. Lin CJ, Smith DE. Competitive inhibition of Gly-Sar by enalapril in rabbit renal BBMV: Effect on high-affinity peptide symporter. American Association of Pharmaceutical Scientists Annual Meeting, Boston, MA

40. Kuan HY, Smith DE, Ensminger WD, Knol JA, DeRemer SJ, Yang Z, Stetson PL. Regional pharmacokinetics of 5-fluorouracil in the liver, gastrointestinal tract, and lungs in dogs. American Association of Pharmaceutical Scientists Annual Meeting, Boston, MA

1998: 41. Shen H, Smith DE, Yang T, Huang YG, Schnermann JB, Brosius III FC. Localization of PEPT1 and PEPT2 proton-coupled oligopeptide transporter mRNA and protein in rat kidney. American Society of Nephrology Annual Meeting, Philadelphia, PA

42. Lin CJ, Smith DE. GlySar uptake in rabbit renal BBMV isolated from outer-cortex or outer-medulla: Evidence for heterogeneous distribution of oligopeptide transporters. American Association of Pharmaceutical Scientists Annual Meeting, San Francisco, CA

43. Zhu T, Steel A, Chen XZ, Hediger MA, Smith DE. Differential recognition of ACE inhibitors in Xenopus oocytes expressing the intestinal and renal peptide transporters PepT1 and PepT2. American Association of Pharmaceutical Scientists Annual Meeting, San Francisco, CA

1999: 44. Shen H, Brosius III FC, Smith DE. Developmental expression of PEPT1 and PEPT2 peptide transporters in kidney and intestine. American Society of Nephrology Annual Meeting, Miami Beach, FL

45. Zhu T, Chen XZ, Hediger MA, Smith DE. Competitive inhibition of GlySar by enalapril in Xenopus laevis oocytes expressing rat PEPT1 and PEPT2. American Association of Pharmaceutical Scientists Annual Meeting, New Orleans, LA

46. Shu C, Hopfer U, Smith DE. Competitive inhibition of GlySar by fosinopril and zofenopril in Caco-2 and SKPT cells. American Association of Pharmaceutical Scientists Annual Meeting, New Orleans, LA

47. Lepsy CS, Kugler AR, Guttendorf RJ, Smith DE. Renal transport mechanisms of cefdinir in the isolated perfused rat kidney. American Association of Pharmaceutical Scientists Annual Meeting, New Orleans, LA

2000: 48. Shu C, Shen H, Keep RF, Smith DE. Role of PEPT2 in peptide/mimetic trafficking at the BCSFB: Studies in rat choroid plexus epithelial cells in primary culture. American Association of Pharmaceutical Scientists Annual Meeting, Indianapolis, IN

49. Levi M, Knol JA, DeRemer SJ, Dou C, Ensminger WD, Lunte SM, Shaw LM, Smith DE. Regional pharmacokinetics of amifostine in dogs: Role of the liver, gastrointestinal tract, lungs and kidneys. American Association of Pharmaceutical Scientists Annual Meeting, Indianapolis, IN

50. Teuscher NS, Novotny A, Keep RF, Smith DE. Functional evidence for the presence of PEPT2 in rat choroid plexus: Studies with glycylsarcosine. American Association of Pharmaceutical Scientists Annual Meeting, Indianapolis, IN

2001: 51. Teuscher NS, Keep RF, Smith DE. PEPT2-mediated uptake of neuropeptides in rat choroid plexus. American Association of Pharmaceutical Scientists Annual Meeting, Denver, CO

52. Levi M, DeRemer SJ, Dou C, Ensminger WD, Smith DE. Selective protection of the liver by amifostine in tumor-bearing rats: Regional vs. systemic administration. American Association of Pharmaceutical Scientists Annual Meeting, Denver, CO

2002: 53. Teuscher NS, Shu C, Keep RF, Smith DE. Carnosine transport in primary cultured rat choroid plexus epithelial cells. American Association of Pharmaceutical Scientists Annual Meeting, Toronto, Canada

54. Shen H, Smith DE, Keep RF, Brosius FC. Localization of peptide transporter PEPT2 in rat brain. American Association of Pharmaceutical Scientists Annual Meeting, Toronto, Canada

55. Ocheltree SM, Keep RF, Shen H, Hughes BA, Smith DE. Expression and function of the peptide transporter, PHT1, in the human retinal pigment epithelium. American Association of Pharmaceutical Scientists Annual Meeting, Toronto, Canada

2003: 56. Keep RF, Xiang J, Shen H, Smith DE. Glutamine and 5-aminolevulinic acid transport at the rat choroid plexus: Lessons from culture systems and knockout mice. 2nd International Workshop on Choroid Plexus, London, England.

57. Xiang J, Smith DE, Keep RF. Polarity at the blood-CSF barrier in vitro. Vth International Conference on Cerebral Vascular Biology, Amarillo, TX

58. Ocheltree SM, Shen H, Hu Y, Xiang J, Keep RF, Smith DE. Mechanisms of cefadroxil uptake in the choroid plexus: Studies in wild type and PEPT2 knockout mice. American Association of Pharmaceutical Scientists Annual Meeting, Salt Lake City, UT

2004: 59. Ocheltree SM, Shen H, Hu Y, Xiang J, Keep RF, Smith DE. Role of PEPT2 in the choroid plexus uptake of glycylsarcosine and 5-aminolevulinic acid: Studies in wild-type and null mice. 2nd Pharmaceutical Sciences World Congress, Kyoto, Japan.

60. Ocheltree S, Shen H, Hu Y, Keep RF, Smith DE. *In vivo* disposition kinetics of glycylsarcosine in wild-type and PEPT2 knockout mice. American Association of Pharmaceutical Scientists Annual Meeting, Baltimore, MD

61. Shen H, Keep RF, Smith DE, Brosius III FC. Localization of the peptide transporter PEPT2 in developing rat brain. American Association of Pharmaceutical Scientists Annual Meeting, Baltimore, MD

62. Hu Y, Ocheltree S, Xiang J, Keep RF, Smith DE. Role of PEPT2 in neuropeptide transport at the choroid plexus: Studies with glycylglutamine. American Association of Pharmaceutical Scientists Annual Meeting, Baltimore, MD

63. Chen LJ, Smith DE. Determination of WR-1065 in human blood by high-performance liquid chromatography following fluorescent derivatization by a maleimide reagent ThioGlo3. American Association of Pharmaceutical Scientists Annual Meeting, Baltimore, MD

2005: 64. Ocheltree SM, Shen H, Hu Y, Keep RF, Smith DE. Role and relevance of PEPT2 in the kidney and choroid plexus: In vivo studies with glycylsarcosine in wild-type and PEPT2 knockout mice. American Association of Pharmaceutical Scientists Annual Meeting, Nashville, TN

65. Shen H, Keep RF, Smith DE. Role of PEPT2 in aminocephalosporin transport at the blood-cerebrospinal fluid barrier: Studies with cefadroxil in rat choroid plexus primary cell cultures. American Association of Pharmaceutical Scientists Annual Meeting, Nashville, TN

2006: 66. Shen H, Ocheltree S, Hu Y, Keep RF, Smith DE. Impact of genetic knockout of PEPT2 on cefadroxil pharmacokinetics, renal tubular reabsorption and brain penetration in mice. American Association of Pharmaceutical Scientists Annual Meeting, San Antonio, TX

67. Hu Y, Keep RF, Smith DE. Functional evaluation of glycylsarcosine uptake in regional brain slices from adult and neonatal mice. American Association of Pharmaceutical Scientists Annual Meeting, San Antonio, TX

68. Lu Z, Normolle DP, Coyle JM, Parsels JD, Chen L, Lawrence TS, Smith DE. Relationship between amifostine dose, administration route, and sampling time on WR-1065 exposure in the liver of tumor-bearing mice. American Association of Pharmaceutical Scientists Annual Meeting, San Antonio, TX

69. Chen L, Smith DE, Knol J, Coyle J, Parsels J, Ensminger WD. Regional pharmacokinetics of gemcitabine in dogs: Role of the liver, gastrointestinal tract and splanchnic region. American Association of Pharmaceutical Scientists Annual Meeting, San Antonio, TX

70. Nguyen TV, Fleisher D, Smith DE. In vivo effects of glycylglutamate on gabapentin oral absorption in rat. American Association of Pharmaceutical Scientists Annual Meeting, San Antonio, TX

2007: 71. Jappar D, Hu Y, Keep RF, Smith DE. Transport mechanism of carnosine in SKPT cells: Role of the proton-coupled oligopeptide transporters PEPT2 and PHT1. 3rd Pharmaceutical Sciences World Congress, Amsterdam, The Netherlands

72. Lu Z, Feng R, Normolle DP, Chen L, Lawrence TS, Smith DE. Clinical pharmacokinetics of amifostine and its active metabolite WR1065 in liver cancer patients. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

73. Kamal MA, Hu Y, Keep RF, Smith DE. A physiological perspective of PEPT2: In vivo studies investigating the disposition of L-carnosine in wild-type and PEPT2 knockout mice. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

2008: 74. Kamal MA, Smith DE, Cook J, Feltner D, Moton A, Ouellet D. Utility of an ordered categorical pharmacodynamic scale to evaluate lorazepam sleepiness and dizziness. American Society for Clinical Pharmacology and Therapeutics, Orlando, FL

75. Jappar D, Smith DE. Uptake, efflux, and transepithelial kinetics of carnosine in SKPT cells. Globalization of Pharmaceutics Education Network, Leuven, Belgium.

76. Hu Y, Smith DE, Ma K, Jappar D, Thomas W, Pak YA, Hillgren KM. Targeted disruption of peptide transporter PEPT1 gene in mice significantly reduces dipeptide absorption in intestine. American Association of Pharmaceutical Scientists Annual Meeting, Atlanta, GA

77. Ma K, Hu Y, Smith DE. Peptide transporter 1 is responsible for the in vitro intestinal uptake of glycylsarcosine in wild type versus PEPT1 null mice. American Association of Pharmaceutical Scientists Annual Meeting, Atlanta, GA

78. Jappar D, Smith DE. Significance of SLC15A1 in the in situ intestinal permeability of glycylsarcosine in wild-type and PEPT1 knockout mice. American Association of Pharmaceutical Scientists Annual Meeting, Atlanta, GA

79. Chen Z, Lu X, Pan H, Zeng S, Smith DE, Jiang H. Intestinal absorption of apigenin is more efficient than luteolin when administered orally as chrysanthemum morifolium extract or pure individual compounds in rats. American Association of Pharmaceutical Scientists Annual Meeting, Atlanta, GA

80. Huang S, Sun D, Ye Y, Hong Y, Wu P, Smith DE, Jiang H. Stereoselectivity of dl-tetrahydropalmatine absorption, plasma protein binding, and metabolism. American Association of Pharmaceutical Scientists Annual Meeting, Atlanta, GA

2009: 81. Wu SP, Jappar D, Hu Y, Smith DE. Regional intestinal permeability of glycylsarcosine in wild-type and *Pept1* null mice as determined by *in situ* single-pass intestinal perfusion. American Association of Pharmaceutical Scientists Annual Meeting, Los Angeles, CA

82. Jappar D, Hu Y, Smith DE. Dose-independent *in vivo* oral absorption of glycylsarcosine in wild-type and *Pept1* knockout mice. American Association of Pharmaceutical Scientists Annual Meeting, Los Angeles, CA

83. Ma K, Hu Y, Smith DE. Influence of fed-fasted state on intestinal PEPT1 expression and glycylsarcosine pharmacokinetics *in vivo* in wild-type and *Pept1* knockout mice. American Association of Pharmaceutical Scientists Annual Meeting, Los Angeles, CA

2010: 84. Li J, Akagi K, HuY, Volfovsky N, Stephens RM, Smith DE, Symer DE. Polymorphic LTR retrotransposons can terminate transcripts at a distance, causing mouse lineage variation. 2nd ASM Conference on Mobile DNA, Montreal, Canada

85. Li J, Akagi K, HuY, Volfovsky N, Stephens RM, Smith DE, Symer DE. Polymorphic LTR retrotransposons can terminate transcripts at a distance, causing mouse lineage variation. CSHL Meeting on The Biology of Genomes, Cold Spring Harbor, NY

86. Nagaraja TN, Fenstermacher JD, Keep RF, Hu Y, Shen H, Smith DE. Distribution of glycylsarcosine and cefadroxil among cerebrospinal fluid, choroid plexus and brain parenchyma following intracerebroventricular injection in wild-type and *Pept2*-null mice. Barriers of the Central Nervous System, Gordon Research Conference, New London, NH

87. Smith DE, Hu Y, Shen H, Nagaraja TN, Fenstermacher JD, Keep RF. Impact of PEPT2 on the disposition of glycylsarcosine and cefadroxil in cerebrospinal fluid, choroid plexus, and brain parenchyma following intracerebroventricular injection to wild-type and *Pept2*-null mice. International Society for the Study of Xenobiotics, Istanbul, Turkey

88. Yang B, Amidon GL, Smith DE. PEPT1-mediated permeability of the antiviral prodrug valacyclovir in intestinal segments of wild-type and *Pept1* null mice. American Association of Pharmaceutical Scientists Annual Meeting, New Orleans, LA

89. Wu SP, Smith DE. Impact of intestinal PEPT1 on the kinetics and dynamics of N-formyl-methionyl-leucyl-phenylalanine, a bacterially-produced chemotactic peptide. American Association of Pharmaceutical Scientists Annual Meeting, New Orleans, LA

90. Huh Y, Yu J, Tungol A, Smith DE, Feng R. Prediction of human clearance: Comparison of small and macromolecule drugs. American Association of Pharmaceutical Scientists Annual Meeting, New Orleans, LA

2011: 91. Posada MM, Smith DE. Relevance of PEPT1 in the intestinal permeability of cefadroxil. AAPS Workshop on Drug Transporters in ADME: From the Bench to the Bedside, Bethesda, MD

92. Shuangsong H, Smith DE, Wiley JW. Chronic stress-induced visceral hyperplasia: Evidence for region-specific, corticosterone-mediated reduction in colon epithelial tight junction protein levels and increased permeability to macromolecules. American Gastroenterological Association, Chicago, IL

93. Yang B, Feng R, Lu Z, Smith DE. Interspecies Scaling and Pharmacokinetics of WR-1065 in Animals and Humans Using Nonlinear Mixed Effects Modeling. American Conference on Pharmacometrics, San Diego, CA

94. Yang B, Amidon GL, Smith DE. Contribution of PEPT1 to the pharmacokinetics of antiviral drug acyclovir after oral administration of its prodrug valacyclovir in wild-type and *Pept1* null mice. American Association of Pharmaceutical Scientists Annual Meeting, Washington DC

95. Posada M, Smith DE. Importance of PEPT1 in the *in vivo* absorption and disposition of cefadroxil in wild-type and *Pept1* knockout mice. American Association of Pharmaceutical Scientists Annual Meeting, Washington DC

96. Wu S-P, Smith DE. Impact of intestinal PEPT1 on the permeability of Lys-Pro-Val, an anti-inflammatory tripeptide derived from α-melanocyte-stimulating hormone. American Association of Pharmaceutical Scientists Annual Meeting, Washington DC

2012: 97. Huh Y, Smith DE, Feng MR. Nonlinear mixed-effects modeling of the distribution kinetics of PEPT2 substrate glycylsarcosine at the blood-cerebrospinal fluid barrier. American Society of Clinical Pharmacology and Therapeutics Annual Meeting, National Harbor, MD

98. Feng MR, Chen X, Hutchmatt M, Lu Z, Yang B, Smith DE. Simultaneous pharmacokinetic modeling of WR-1065 in blood and tissues using nonlinear mixed-effects modeling and extrapolation from rats to humans with body weight as a covariate. American Society of Clinical Pharmacology and Therapeutics Annual Meeting, National Harbor, MD

99. Posada MM, Smith DE, Feng MR. Nonlinear mixed-effects modeling of the interspecies pharmacokinetic scaling of cefadroxil after oral and intravenous bolus administration. American Society of Clinical Pharmacology and Therapeutics Annual Meeting, National Harbor, MD

100. Huh Y, Ocheltree SM, Smith DE, Feng MR. Importance of peptide transporter 2 on the cerebrospinal fluid efflux kinetics of glycylsarcosine in wild-type and PEPT2 knockout mice. World Congress on Pharmacometrics, Seoul, Korea

101. Xie Y, Smith DE. Role of PEPT1 in intestinal absorption of the photodynamic therapy agent 5-aminolevulinic acid: *In situ* perfusion studies in wild-type and PEPT1 knockout mice. American Association of Pharmaceutical Scientists Annual Meeting, Chicago, IL

102. Huh Y, Keep RF, Smith DE. Effect of lipopolysaccharide-induced inflammation on the disposition of the aminocephalosporin cefadroxil. American Association of Pharmaceutical Scientists Annual Meeting, Chicago, IL

103. Yang B, Smith DE. *In silico* modeling of the contribution of PEPT1 in the intestinal absorption and pharmacokinetics of valacyclovir in wild-type and PEPT1 null mice. American Association of Pharmaceutical Scientists Annual Meeting, Chicago, IL

104. Chen X, Li M, Smith DE, Feng MR. Interspecies pharmacokinetic scaling of four macromolecular drugs using nonlinear mixed effects modeling. American Association of Pharmaceutical Scientists Annual Meeting, Chicago, IL

2013: 105. Xie Y, Smith DE, Hu Y, Shen H, Feng MR. Semi-mechanistic population PK modeling of cefadroxil: An example of PepT2-mediated renal tubular reabsorption. American Conference on Pharmacometrics, Fort Lauderdale, FL

106. Huh Y, Keep RF, Smith DE. Effect of lipopolysaccharide-induced acute inflammation on the elimination kinetics of cefadroxil. American Association of Pharmaceutical Scientists Annual Meeting, San Antonio, TX

107. Smith DE, Posada MM, Bolger MB. In silico predictions of the absorption and pharmacokinetics of cefadroxil in wild-type and PepT1 knockout mice. American Association of Pharmaceutical Scientists Annual Meeting, San Antonio, TX

108. Wang X, Chen B, Smith DE, Feng MR. Population pharmacokinetics of mycophenolic acid in liver transplant patients and the limited-sampling strategy in therapeutic monitoring. American Association of Pharmaceutical Scientists Annual Meeting, San Antonio, TX

109. Xie Y, Smith DE, Hu Y, Shen H, Feng MR. Semi-mechanistic population pharmacokinetic modeling of cefadroxil: An example of PEPT2-mediated renal tubular reabsorption. American Association of Pharmaceutical Scientists Annual Meeting, San Antonio, TX

2014: 110. Chen X, Loryan I, Payan M, Keep RF, Smith DE, Hammarlund-Udenaes M. Influence of probenecid on cefadroxil distribution in brain using microdialysis. Gordon Research Conference, New London, NH

111. Wang X, Feng MR, Nguyen H, Smith DE, Park JM. Population pharmacokinetics and inter-occasional variability of mycophenolic acid in lung transplant recipients with cystic fibrosis. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

112. Xie Y, Smith DE. Role of Pept1 on the in vivo pharmacokinetics of 5-aminolevulinic acid in wildtype and genetically modified mice. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

113. Hu Y, Smith DE. Generation and initial characterization of a novel humanized mouse line for hPEPT1 gene. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

114. Chen X, Loryan I, Payan M, Keep RF, Smith DE, Hammarlund-Udenaes M. Influence of probenecid on cefadroxil distribution in brain using microdialysis. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

2015: 115. Wang X, Feng MR, Nguyen H, Smith DE, Park JM. Population pharmacokinetics and inter-occasional variability of mycophenolic acid in lung transplant recipients with cystic fibrosis. Great Lakes Drug Metabolism and Disposition Group Meeting, Ann Arbor, MI

116. Hu Y, Smith DE. Generation and initial characterization of a novel humanized mouse line for hPEPT1 gene. Great Lakes Drug Metabolism and Disposition Group Meeting, Ann Arbor, MI

117. Wang X, Hu Y, Keep RF, Smith DE. A novel role for Pht1 in the disposition of L-histidine in brain: implications in histamine neurohomeostasis. 11th International Conference on Cerebral Vascular Biology, Paris, France

118. Hu Y, Smith DE. Species difference in intestinal permeability of cefadroxil in wildtype and humanized huPepT1 mice. American Association of Pharmaceutical Scientists Annual Meeting, Orlando, FL

119. Hu Y, Smith DE. Dose-dependent intestinal absorption of cefadroxil in humanized huPepT1 mice but not wildtype mice after oral dose escalation. American Association of Pharmaceutical Scientists Annual Meeting, Orlando, FL

120. Wang X, Hu Y, Keep RF, Smith DE. A novel role for Pht1 in the disposition of L-histidine in brain: implications in histamine neuro-homeostasis. American Association of Pharmaceutical Scientists Annual Meeting, .Orlando, FL

121. Zheng T, Hu Y, Yang B, Jiang H, Smith DE, Feng MR. Characterize and compare the oral pharmacokinetics of apigenin and luteolin in   
Sprague-Dawley rats. American Association of Pharmaceutical Scientists Annual Meeting, Orlando, FL

122. Wang XX, Feng MR, Zheng T, Smith DE, Cibrik DM, Park JM. Population pharmacokinetics of mycophenolic acid and its glucuronide metabolite in lung transport patients with and without cystic fibrosis. American Conference on Pharmacometrics, Washington, DC

2016: 123. Xiaomei Chen, Yan Liang, Hao-Jie Zhu, Richard F. Keep, Margareta Hammarlund-Udenaes, David E. Smith. Influence of peptide transporter 2 on the distribution of cefadroxil in mouse brain: a microdialysis study. Gordon Research Conference, New London, NH

124. Wang XX, Smith DE, Feng MR. Semi-mechanistic physiologically-based pharmacokinetic modeling of L-histidine disposition and brain uptake in wildtype and *Pht1* null mice. American Conference on Pharmacometrics, Bellevue, WA

125. Wang XX, Keep RF, Smith DE. A novel role for PHT1 in the disposition of L-histidine in brain: *in vitro* slice and *in vivo* pharmacokinetic studies in wildtype and *Pht1* null mice. American Association of Pharmaceutical Scientists Annual Meeting, Denver, CO

126. Song F, Hu Y, Jiang H, Smith DE. Species differences in PepT2-mediated transport of glycylsarcosine and cefadroxil in Pichia pastoris expressing the human, mouse and rat transformants. American Association of Pharmaceutical Scientists Annual Meeting, Denver, CO

2017: 127. Epling D, Hu Y, Smith DE. Characterization of valacyclovir intestinal permeability in wildtype and humanized PEPT1 transgenic mice. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

128. Hu Y, Song F, Epling D, Tsume Y, Amidon GL, Smith DE. Effect of biphenyl hydrolase-like (BPHL) gene disruption on the intestinal stability and permeability of valacyclovir in wildtype and BPHL knockout mice. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

2018: 129. Hu Y, Song F, Jiang H, Nuñez G, Smith DE. SLC15A2 and SLC15A4 mediate the transport of bacterially-derived di/tripeptides to enhance the NOD-dependent immune response in mouse bone marrow-derived macrophages. American Association of Pharmaceutical Scientists Annual Meeting, Washington DC

130. Hu Y, Northup J, Gruber KA, Smith DE. In vitro investigation of the transport mechanism(s) of the anti-cachexia cyclic nonapeptide TCMCB07 by ABC and SLC transporters in transfected cell lines. American Association of Pharmaceutical Scientists Annual Meeting, Washington DC

131. Hu Y, Smith DE. In silico prediction of cefadroxil absorption profiles in humans using segmental permeability data scaled from humanized PepT1 mice. American Association of Pharmaceutical Scientists Annual Meeting, Washington DC

2019: 132. Thompson BR, Hu Y, Smith DE. Mechanisms of gemcitabine oral absorption as determined by in situ intestinal perfusions in mice. American Association of Pharmaceutical Scientists Annual Meeting, San Antonio TX

**committee and administrative service**

**National/International**

1983: Member, Organizing Committee, 2nd Japanese-American Conference on Pharmacokinetics and Biopharmaceutics, Ann Arbor, MI

1986: Moderator, PPDM Poster Session, American Association of Pharmaceutical Scientists Annual Meeting, Washington DC

1994: Member, PPDM Strategic Planning Committee, American Association of Pharmaceutical Scientists

Member, PPDM Graduate and Undergraduate Education Committee, American Association of Pharmaceutical Scientists

Member, PPDM Publications Committee, American Association of Pharmaceutical Scientists

Organizer and Moderator, PPDM Symposium on Kinetic and Dynamic Challenges of the 90’s, American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

1995: Chair, PPDM Graduate and Undergraduate Education Committee, American Association of Pharmaceutical Scientists

Organizer and Moderator, Special Session on Student Chapters, American Association of Pharmaceutical Scientists Annual Meeting, Miami, FL

1995-1996: Member, PPDM/CS Graduate Symposium Selection Committee, American Association of Pharmaceutical Scientists

1996: Member, PPDM Abstract Screening Committee, American Association of Pharmaceutical Scientists

Member, Education Parent Committee, American Association of Pharmaceutical Scientists

Chair, Student Chapters Subcommittee, American Association of Pharmaceutical Scientists

Organizer, Special Session on Student Chapters, American Association of Pharmaceutical Scientists Annual Meeting, Seattle, WA

1997: Member, PPDM Program Advisory Committee, American Association of Pharmaceutical Scientists

Organizer and Moderator, PPDM Symposium on Coupling as a Way of Life: Mammalian Drug and Solute Transporters, American Association of Pharmaceutical Scientists Annual Meeting, Boston, MA

2001-2003: Member, PPDM Fellows Selection Committee, American Association of Pharmaceutical Scientists

2002: Organizer and Moderator, PPDM Symposium on Role of Drug Transporters in the Brain, American Association of Pharmaceutical Scientists Annual Meeting, Denver, CO

2002-2004: Member, Drug Transport and Uptake Focus Group Steering Committee, American Association of Pharmaceutical Scientists

Member, Hot Topics Committee, American Association of Pharmaceutical Scientists

2003: Organizer and Moderator, PPDM Symposium on Knockout Mouse Models of Xenobiotic Transporters, American Association of Pharmaceutical Scientists Annual Meeting, Salt Lake City, UT

2003-2005: Chair, PPDM Fellows Selection Committee, American Association of Pharmaceutical Scientists

2004: External Reviewer, Division of Pharmaceutics, The Ohio State University, Columbus, OH

2005: Organizer, PPDM Roundtable on Transporters as Therapeutic and Drug Delivery Targets, American Association of Pharmaceutical Scientists Annual Meeting, Nashville, TN

2005-2006: Vice-Chair, AAPS Fellows Selection Committee, American Association of Pharmaceutical Scientists

2006-2007: Chair, AAPS Fellows Selection Committee, American Association of Pharmaceutical Scientists

2007: Co-Chair, International Society for the Study of Xenobiotics Short Course on Novel Technologies for Transport Study in Drug Design and Development, Sendai, Japan

Organizer and Moderator, PPDM Symposium on Transporters in Pathophysiology and Toxicology, American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA

2007-2008: Past-Chair, AAPS Fellows Selection Committee, American Association of Pharmaceutical Scientists

2008: External Reviewer, Pharmaceutical Sciences and Pharmacogenomics Program, University of California, San Francisco, CA

2009: External Examiner, Professional Pharmacy Program, The Chinese University of Hong Kong, China

Member, International Scientific Program Committee, The 8th Cerebral Vascular Biology International Conference, Sendai, Japan (June, 2009)

Co-Chair, Symposium Molecular Biology and Regulation of the Choroid Plexus and Other Barriers, The 8th Cerebral Vascular Biology International Conference, Sendai, Japan

2010: Chair, Pharmaceutical Research Meritorious Manuscript Committee, American Association of Pharmaceutical Scientists Annual Meeting, New Orleans, LA

Debate Moderator, BCS and BDDCS: A new era in pharmaceutical sciences. Science Symposium on Physical Chemistry in the Age of Molecular and Cellular Biology, College of Pharmacy, University of Michigan, Ann Arbor, MI

Panelist, Fellows Application Process, AAPS Annual Meeting, New Orleans, LA

2012: External Member, Search Committee for Full Professor of Pharmaceutical Sciences, University of Vienna, Austria

Co-Chair of Drug Delivery Session, Barriers of the Central Nervous System, Gordon Research Conference, New London, NH

Organizer and Moderator, PPDM Symposium on Getting Personal with Bacteria: Role of the Intestinal Microflora in Drug Discovery, Disease and Therapeutics, AAPS Annual Meeting, Chicago, IL

2014: Discussion Leader on Delivery strategies to improve treatment of CNS diseases,” Barriers of the Central Nervous System, Gordon Research Conference, New London, NH

2015: Co-Chair of AAPS-CVB Joint Session on Transporters at the Brain Barriers, 11th International Conference on Cerebral Vascular Biology, Paris, France

Organizer and Moderator, Symposium on Humanized Mouse Models in Translating Oral Drug Absorption and Disposition from Rodent to Human, AAPS Annual Meeting, Orlando, FL

2016: External Examiner, Graduate Pharmacy Program, The Chinese University of Hong Kong, China

**University of Michigan**

1983-2008: Ad hoc reviewer, General Clinical Research Center, Medical School

1992-1994: Member, Biomedical Research Council, Medical School

1994-2008: Member, Advisory Committee, General Clinical Research Center, Medical School

2001-2010: Member, Biology Track Subcommittee, Pharmacological Sciences Training Program, Medical School

2001-2010: Member, Parent Committee, Pharmacological Sciences Training Program, Medical School

2010: Member, Vivarium Space Review Committee, Office Vice-President for Research

2012: Member, Grievance Hearing Board, Academic Human Resources

2014-2015: Member, Medical Affairs Committee (SACUA Liaison)

2014-2017: Member, Senate Assembly

Member, Senate Advisory Committee on University Affairs (SACUA)

Member, Tenure Committee (SACUA Liaison)

2015-2017: Member, Research Policy Committee (SACUA Liaison)

2017: Rackham Predoctoral Fellowship Selection Committee

**College of Pharmacy**

1981-1982: Member, Search Committee, Clinical Pharmacy Faculty Positions

1981-1989: Member, Animal Care Committee

1982-1989: Member, Curriculum Committee

1983-1987: Member, Library and Educational Resources Committee

1984-1987: Member, Executive Committee

1987-1989: Member, Graduate Affairs and Research Resources Committee

1989-2000: Member, Research Resources Committee

1990-1991: Chair, Search Committee, Pharmaceutics Faculty Position

1991-1994: Member, Admissions Committee

1991-1996: Academic Advisor, PharmD Students

1993-2000: Member, Academic Standing Committee

1995-1996: Member, Search Committee, Pharmaceutics Faculty Position

1999-2010: Member, Executive Committee (ex officio, without vote)

2000-2011: Chair, Research Resources and Shared Equipment Committee

2001-2010: Member, Policy Review Committee

2011-2012: PharmD Investigations Committee

Web Advisory Committee

2012-present: Member, Research Resources & Shared Equipment Committee

2013-2014: Faculty Ombuds

2013-2015: Senate Assembly Representative

2014-2015: Member, Executive Committee

2015-2016: Member, PharmD Investigations Committee

2016-present: Member, Faculty Development Committee

2019-present: Faculty Ombuds

**Department of Pharmaceutical Sciences**

1982-1991 Organizer, Pharmaceutics Alumni Conferences

1984-1993: Chair, Graduate Student Admissions Committee

1994-2010: Chair, Departmental Faculty Meetings

2011-2012: Member, Faculty Search Committee for Assistant Professor

2011-2016: Graduate Recruitment and Admissions

2012-2017: Chair, Faculty Search Committee for Maddox Endowed Professor

2014-2015: Chair, Faculty Target of Opportunity Search for Assistant Professor

2016-present: Member, Undergraduate and PharmD Curriculum Committee

Member, Website and PharmD/PhD Program Committee

Member, Social and Faculty Organized Events Committee

**grant support**

**Previous (direct costs)**

Faculty Research Rackham Grant, University of Michigan; Absorption and Disposition of Furosemide in Neonates, Infants and Young Children; PI: David E. Smith; 20% effort; 05/01/81-12/30/82; $10,000

Biomedical Research Support Grant, College of Pharmacy; Disposition and Dose-Response Relationship of Bumetanide; PI: David E. Smith; 10% effort; 06/01/81-05/31/82; $3,000

Hoffmann-La Roche; Gift for unrestricted research under the direction of David E. Smith; 08/01/81-indefinite; $20,000

Biomedical Research Support Grant, College of Pharmacy; Determinants of Furosemide Response in Nephrotic Patients; PI: David E. Smith; 10% effort; 03/29/82-03/28/83; $1,575

National Kidney Foundation of Michigan; Determinants of Furosemide Response in Nephrotic Patients; PI: David E. Smith; 15%; 07/01/83-06/30/85; $6,375

Hoffmann-La Roche; Pharmacokinetics and Pharmacodynamics of Bumetanide in Chronic Renal Failure Patients; PI: David E. Smith (Co-PI: Martha L. Hyneck); 20% effort; 11/13/83-11/12/85; $21,000

Upjohn Research Award, College of Pharmacy; Effect of Protein Binding on Renal Drug Transport; PI: David E. Smith; 15% effort; 07/26/84-01/26/86; $15,000

Hoffmann-La Roche; Clinical Response and Pharmacokinetics of Bumetanide in Congestive Heart Failure Patients; PI: David E. Smith (Co-PI: Martha L. Hyneck); 20% effort; 03/02/85-03/01/87; $23,805

Upjohn Company; Stereoselective Transport of Ibuprofen Enantiomers in Rat IPK; PI: David E. Smith; 20% effort; 07/01/87-06/30/88; $21,551

National Institutes of Health; Protein Binding/Organ Perfusion and Renal Drug Transport; PI: David E. Smith; 25% effort; 02/01/88-01/31/91; $191,324

National Institutes of Health; Host/Tumor Response to BUDR/IUDR Administration; PI: Philip L. Stetson; Co-Investigator, 5% effort; 08/15/88-07/31/93; $532,640

Warner-Lambert/Parke-Davis; Gift for unrestricted research under the direction of David E. Smith; 04/01/90-indefinite; $50,000

Food and Drug Administration; Oral Drug Delivery and Bioavailability-AIDS; PI: Gordon L. Amidon; Co-Investigator, 10% effort; 09/01/90-08/31/91; $161,825

Upjohn Company; Stereoselective Kinetics of Ibuprofen after Oral Administration of Individual Enantiomers and Admixtures to Healthy Subjects; PI: David E. Smith; 15% effort; 05/01/91-04/30/92; $67,363

CONRAD Program; Fellowship Support for Dr. Jyoti K. Paliwal; PI: David E. Smith; 0% effort; 09/01/92-08/31/93; $27,437

National Institutes of Health; Phase I Studies of New Chemopreventive Agents-Workstatement 15-Acetylsalicylic Acid; PI: Dean E. Brenner; Co-Investigator, 5% effort; 09/30/92-12/31/93; $184,232

RW Johnson Pharmaceutical Research Institute; Single-Dose Pharmacokinetics and Safety of FK-037 in the Presence of Renal Dysfunction; PI: David E. Smith; 5% effort; 06/01/93-05/31/94; $73,587

National Institutes of Health (Program Project Grant, PI: William D. Ensminger); Project 3: Role of the Liver in Halogenated Pyrimidine Kinetics; PI: David E. Smith; 20% effort; 08/01/93-07/31/96; $240,753

Upjohn Research Award, College of Pharmacy; Determinants of Renal Drug Elimination; PI: David E. Smith; 15% effort; 02/01/94-06/30/95; $25,000

Upjohn Company; Steady-State Pharmacokinetics of Delavirdine Mesylate in HIV-Positive Patients; PI: David E. Smith; 5% effort; 4/18/94-12/31/96; $267,544

National Institutes of Health; Heterogeneity of Renal Peptide Transporters; PI: David E. Smith; 20% effort; 08/01/96-07/31/00; $486,092

Biogen; Disposition of CVT-124 in Kidney; PI: David E. Smith; 5% effort; 06/01/98-05/31/99; $152,280

Warner-Lambert/Parke-Davis; Renal Transport Mechanisms of Cefdinir in Rat IPK; PI: David E. Smith; 5% effort; 07/28/98-06/30/00; $78,928

Warner-Lambert/Parke-Davis; Gift to David E. Smith in support of the Pharmaceutics Seminar Series; 07/01/99-06/30/01; $20,000

Upjohn Research Award, College of Pharmacy; Development and Evaluation of PEPT2 Knockout Mice; PI: David E. Smith; 15% effort; 08/01/00-03/31/01; $40,000

Vahlteich Research Award, College of Pharmacy; Development and Validation of a Primary Cell Culture Model of Rat Choroid Plexus; PI: David E. Smith; 10% effort; 08/01/00-03/31/01; $15,000

Warner-Lambert/Parke-Davis; Gift to David E. Smith in support of the Pharmaceutics Seminar Series; 07/01/01-06/30/03; $20,000

National Institutes of Health; Peptide/Mimetic Transport Mechanisms in Choroid Plexus; PI: David E. Smith; 04/01/02-03/31/03; $18,000 (Supplement)

National Institutes of Health; Research Facilities Construction; PI: George L. Kenyon (Co-PI: Henry I. Mosberg); Co-Participant; 06/15/03-06/14/05; $2,000,000

National Institutes of Health; Peptide/Mimetic Transport Mechanisms in Choroid Plexus; PI: David E. Smith; 20% effort; 04/01/01-12/31/05; $660,000

National Institutes of Health; Liver Radioprotection by Systemic or Regional Amifostine; PI: Theodore S. Lawrence; Co-Investigator, 10% effort; 08/01/03-07/31/08; $1,465,279

National Institutes of Health; Peptide/Mimetic Transport Mechanisms in Choroid Plexus; PI: David E. Smith; 04/01/05-12/31/05; $36,790 (Supplement)

College of Pharmacy - Vahlteich Research Award; Regional Role of PEPT2 in the Brain; PI: David E. Smith; 04/01/05-03/31/06; $40,000

Warner-Lambert/Parke-Davis; Gift to David E. Smith in support of the Pharmaceutics Seminar Series; 07/01/03-06/30/05; $20,000

Pfizer; Gift to David E. Smith in support of the Pharmaceutics Seminar Series; 01/01/06-12/31/07; $20,000

Amgen; Gift to David E. Smith in support of the Pharmaceutics Graduate Student Research Meeting; 06/01/08-09/01/08; $5,000

Pfizer; Gift to David E. Smith in support of the Pharmaceutics Seminar Series; 01/01/08-12/31/08; $5,000

UM Initiative on Rare Diseases Pilot Research Grant Program; Role of Proton-Coupled Oligopeptide Transporters in Porphyrias; PI: Richard F. Keep; Co-PI, 2% effort; 03/01/08-08/31/09; $30,000

Michigan Gastrointestinal Peptide Research Center Pilot/Feasibility Program; Role of the Oligopeptide Transporter PEPT1 in Inflammatory Bowel Disease; PI: David E. Smith; 20% effort; 09/01/08-08/31/09; $10,000

Pfizer; Gift to David E. Smith in support of the Pharmaceutics Seminar Series; 01/01/09-12/31/09; $5,000

F. Hoffmann-La Roche, Basel, Switzerland; *In Vivo* Studies with Tamiflu in Wild-Type and *Pept1* Knockout Mice; PI: David E. Smith; 10% effort; 10/01/09-03/31/10; $45,000

National Institutes of Health; Role of PEPT2 in Peptide/Mimetic Disposition-Dynamics; PI: David E. Smith; 20% effort; 01/01/06-07/31/10; $800,000

Upsher-Smith; *In Vitro* Inhibition Studies of Glycylsarcosine by Investigational Compounds in Pichia Pastoris Yeast Cells Expressing hPEPT1; PI: David E. Smith; 5% effort; 03/01/10-05/31/10; $17,645

Pfizer; Gift to David E. Smith in support of the Pharmaceutics Seminar Series; 07/01/10-06/30/11; $5,000

Dainippon Sumitomo; Gift to David E. Smith in support of research by Naoki Nishio; 10/1/10-09/30/12; $20,000

Pfizer; Gift to David E. Smith in support of the Pharmaceutics Seminar Series; 07/01/11-06/30/12; $5,000

Dr. Joan B. Kessler Award; Role of PEPT2 on the Regional Distribution of Cefadroxil in Brain; Rackham International Research Award; 09/01/12-08/31/13; $6,000 (research support for Xiaomei Chen while studying at Uppsala University, Sweden)

Pfizer; Gift to David E. Smith in support of the Pharmaceutics Seminar Series; 07/01/12-06/30/13; $5,000

National Institutes of Health; Role and Relevance of PEPT1 in Drug Absorption, Disposition, and Dynamics - Equipment Supplement; PI: David E. Smith; 09/19/12-05/31/14; $95,367

National Institutes of Health; Role and Relevance of PEPT1 in Drug Absorption, Disposition, and Dynamics; PI: David E. Smith; 20% effort; 08/01/10-11/30/14; $900,000

Department of Defense; Developing Novel PepT1-Targeted Modulators for Inflammatory Bowel Disease (IBD) Therapy; University of Michigan PI: David E. Smith (Mount Sinai School of Medicine PI: Avner Schlessinger); 5% effort; 09/15/15-03/14/17; $199,416

National Institutes of Health SBIR/STTR; Development of a Cancer Cachexia Therapeutic; PI (Sub-Contract): David E. Smith; 15% effort; 04/01/17-03/31/19; $380,755

**Current (direct costs)**

National Institutes of Health; Novel Transport and Activation Strategy to Improve the Bioavailability of Targeted Prodrugs; PI: David E. Smith (Co-PI: Gordon L. Amidon); 20% effort; 08/01/15-08/31/20; $221,772 (NCTE)

Discretionary funds to support the research of Dr. David E. Smith; $50,000; indefinite

### inventions and technology disclosures

1. PEPT1 and PEPT2 Antisera; UM File # 2067; Disclosed: 01/29/2001

2. Homozygous and Heterozygous PEPT2-Deficient Knockout Mice; UM File # 2355; Disclosed: 05/20/2002

3. PEPT1/PEPT2 Double Knockout Mice; UM File # 4072; Disclosed: 05/19/2008

4. Humanized hPEPT1 Transgenic Mice; UM File # 6798; Disclosed 08/31/2015

### bibliography

1. Smith DE, Brater DC, Lin ET, Benet LZ. Attenuation of furosemide's diuretic effect by indomethacin: Pharmacokinetic evaluation. J Pharmacokin Biopharm 7:265-274, 1979.

2. Lin ET, Smith DE, Benet LZ, Hoener BA. High-performance liquid chromatographic assays for furosemide in plasma and urine. J Chromatogr 163:315-321, 1979.

3. Smith DE, Benet LZ. Relationship between urinary excretion rate, steady-state plasma levels, and diuretic response of furosemide in the rat. Pharmacology 19:301-306, 1979.

4. Smith DE, Gee WL, Brater DC, Lin ET, Benet LZ. Preliminary evaluation of furosemide-probenecid interaction in humans. J Pharm Sci 69:571-575, 1980.

5. Smith DE, Lin ET, Benet LZ. Absorption and disposition of furosemide in healthy volunteers, measured with a metabolite-specific assay. Drug Metab Dispos 8:337-342, 1980.

6. Smith DE. Drug monographs on chlordiazepoxide, ethambutol, and indomethacin. In Drug Level Monitoring: Analytical Techniques, Metabolism, and Pharmacokinetics, by Sadée W and Beelen GCM. John Wiley & Sons, Inc., New York, 1980, pp. 172-176, 236-239, 280-284.

7. Smith DE, Gambertoglio JG, Vincenti F, Benet LZ. Furosemide kinetics and dynamics after kidney transplant. Clin Pharmacol Ther 30:105-113, 1981.

8. Smith DE, Benet LZ. Plasma protein binding of furosemide in kidney transplant patients. J Pharmacokin Biopharm 10:663-674, 1982.

9. †Smith DE. High-performance liquid chromatographic assay for bumetanide in plasma and urine. J Pharm Sci 71:520-523, 1982.

10. Deans KW, Lang JR, †Smith DE. Stability of trimethoprim-sulfamethoxazole injection in five infusion fluids. Am J Hosp Pharm 38:1681-1684, 1982.

11. Benet LZ, Smith DE, Lin ET, Vincenti F, Gambertoglio JG. Furosemide assays and disposition in healthy volunteers and renal transplant patients. Federation Proc. 42:1695-1698, 1983.

12. Smith DE, Benet LZ. Biotransformation of furosemide in kidney transplant patients. Eur J Clin Pharmacol 24:787-790, 1983.

13. †Smith DE, Lau HSH. Determinants of bumetanide response in the dog: Effect of probenecid. J Pharmacokin Biopharm 11:31-46, 1983.

14. †Smith DE, Lau HSH. Determinants of bumetanide response in the dog: Effect of indomethacin. J Pharm Sci 72:1298-1302, 1983.

15. †Smith DE, Lau HSH, Fox JL. Application of effect-compartment model to bumetanide-indomethacin interaction in dogs. J Pharmacokin Biopharm 11:355-368, 1983.

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† Denotes those publications in which David E. Smith is the principal and corresponding author.

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Available upon request.

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