

CURRICULUM VITAE

April 2016

James R. Halpert, Ph.D.
Dean and Professor
University of Connecticut
School of Pharmacy
69 N. Eagleville Rd., U-3092
Storrs, CT 06269-3092
Ph: (860) 486-2128
Fax: (860) 486-1553
James.halpert@uconn.edu

Place of Birth: Los Angeles, California

EDUCATION

September 1967 - June 1971, University of California at Los Angeles, B.A. in Scandinavian Languages

September 1973 - June 1977, Uppsala University, Sweden, Ph.D. in Biochemistry. Dissertation Title: Structure and function of presynaptic neurotoxins from tiger snake venom. The role of phospholipase A activity. Dissertation Advisor: Dr. David Eaker

September 1976 - June 1978, Karolinska Institute, Stockholm, Sweden, M.S. in Toxicology. Thesis Title: Purification and characterization of rabbit liver epoxide hydrase. Thesis Advisor: Dr. Magnus Ingelman-Sundberg

STATEMENT OF MAJOR FIELD

General Area of Expertise: Enzyme Structure-Function

Specific Research Interests:

Structure-function analysis of cytochromes P450 2B
Structural basis of human cytochrome P450 3A specificity and activation

ACADEMIC AND PROFESSIONAL APPOINTMENTS

June 2014 -	Dean and Professor, School of Pharmacy, University of Connecticut
April 2009 - May 2014	Professor, Department of Pharmacology, School of Medicine, University of California, San Diego
March 2008 – May 2014	Professor and Associate Dean for Scientific Affairs, Skaggs School of Pharmacy and Pharmaceutical Sciences, University of California, San Diego
July 2004 - February 2008	Mary Gibbs Jones Distinguished Chair in Environmental Toxicology, University of Texas Medical Branch, Galveston, Texas

August 2003 - February 2008	Director, Environmental Health Sciences Center, University of Texas Medical Branch, Galveston, Texas
August 2003 - February 2008	Interim Director, Sealy Center for Environmental Health and Medicine, University of Texas Medical Branch, Galveston, Texas
Sept 2002 - August 2003	Deputy Director, Environmental Health Sciences Center, University of Texas Medical Branch, Galveston, Texas
Sept 2001 - July 1, 2004	The Chauncey Leake Distinguished Professorship in Pharmacology, University of Texas Medical Branch, Galveston, Texas
Sept 1998 - February 2008	Professor and Chairman, Department of Pharmacology and Toxicology, University of Texas Medical Branch, Galveston, Texas
May 1998 - June 2004	Foreign Adjunct Professor, Karolinska Institute, Stockholm, Sweden
October 1992 - August 1998	Deputy Director, Southwest Environmental Health Sciences Center, University of Arizona
July 1992 - August 1998	Professor, Department of Pharmacology and Toxicology, College of Pharmacy, University of Arizona, Tucson, Arizona
July 1991 - August 1998	Assistant Director, Center for Toxicology, University of Arizona
July 1987 - June 1992	Associate Professor, Department of Pharmacology and Toxicology, College of Pharmacy, University of Arizona, Tucson, Arizona
July 1989 - June 1990	Visiting Scholar, Laboratory of Biomedical and Environmental Sciences, University of California at Los Angeles
July 1983 - June 1987	Assistant Professor, Department of Pharmacology and Toxicology, College of Pharmacy, University of Arizona, Tucson, Arizona
Jan - June 1983	Assistant Professor of Biochemical Pharmacology, Karolinska Institute, Stockholm, Sweden
July 1981 - December 1982	Research Assistant Professor of Biochemical Toxicology, Karolinska Institute, Stockholm, Sweden
Jan - June 1981	Research Associate, Karolinska Institute, Stockholm, Sweden
Sept 1978 - December 1980	Research Associate, Center in Environmental Toxicology, Vanderbilt University, Nashville, Tennessee
July 1977 - August 1978	Research Associate, Karolinska Institute, Stockholm, Sweden
Sept - December 1977	Teaching Assistant in Pharmacology, Karolinska Institute, Stockholm, Sweden
Sept 1973 - December 1975	Teaching Assistant in Biochemistry, University of Uppsala, Sweden
Sept 1971 - August 1973	Laboratory Technician, University Hospital, Lund, Sweden
June - August 1971	Laboratory Technician, University of California at Los Angeles
June - August 1969	National Science Foundation Undergraduate Research
June - August 1968	Trainee, University of California at Los Angeles

UNIVERSITY, COLLEGE, AND DEPARTMENTAL SERVICE

University of Arizona

Seminar Coordinator, Department of Pharmacology and Toxicology, 1985-1989.
Member, Admissions Committee, M.Sc. in Toxicology, 1985-1988.
Member, Research and Graduate Affairs Committee, College of Pharmacy, 1985-1998.
Member, Faculty Search Committee, Department of Pharmacology and Toxicology, 1986-1989.
Member, Executive and Admissions Committee, Ph.D. Program in Pharmacology and Toxicology, 1987-1993.
Member, Ad hoc Committee for Review of Department Head, Department of Pharmacology and Toxicology, Spring 1988.
Member, Biomedical Research Support Grant Committee, College of Pharmacy, Spring 1989.
Member, Biotechnology Advisory Board, University of Arizona, 1990-1998.
Member, Medical Biochemistry Course Review Subcommittee, University of Arizona, 1990-1991.
Member, Faculty Status Committee, College of Pharmacy, 1990.
Member, University Committee on Graduate Studies, 1991-1995.
Member, Graduate Council, 1991-1995.
Member, Department of Astronomy Program Review Committee, Spring 1992.
Member, Department of Biochemistry Program Review Committee, Fall 1992.
Member, Promotion/Tenure Committee, Department of Pharmacology and Toxicology, 1990-1998.
Member, Assessment Team 3, Program for the Assessment of Institutional Priorities, 1993.
Member, User's Committee, Macromolecular Structure Facility, Biotechnology Division, 1992-1995.
Member, Management Team, Department of Pharmacology and Toxicology and Department of Pharmacology, 1995.
Member, Executive Committee, College of Pharmacy, 1994-1995.
Chairperson, Promotion/Tenure Committee, Department of Pharmacology and Toxicology, 1995-1998.
Member, Faculty Search Committee, Departments of Pharmacology and Pharmacology and Toxicology, 1995-1996.

University of Texas Medical Branch at Galveston

Member, Basic Science Chairs Committee, 1998-2008
Member, Chairman's Caucus, School of Medicine, 1998-1999
Member, Dean's Advisory Council, Graduate School of Biomedical Sciences, 1998-2008
Member, Executive Committee, School of Medicine, 1998-2008
Member, NIEHS Center, 1998-2008
Member, Howard Hughes Medical Institute Grant Committee, 1998-1999
Director, Biotransformation Research Core, NIEHS Center, 1998-2008
Member, Parasitology Search Committee, 1998-1999
Member, Dept. Chair Search Committee, Department of Pediatrics, 1998-2000
Member, GI Review Task Force, 1998-1999
Member, Bioinformatics/Proteomics Task Force, 1998-1999
Member, Mission-Based Management Steering Committee, 1998-2000
Member, Environmental Health Program Review Task Force, 1998-1999
Member, Advisory Panel for Environmental Toxicology Training Grant, 1998-2000

Member, Internal Advisory Board, NIEHS Center, 1998-2008
Member, Institutional Budget Committee, 1999-2005
Member, Mission-Based Management Administrative/Service Task Force, 1999-2000
Member, School of Medicine Budget Committee, 1999-2001
Member, President's Cabinet Award Committee, 1999-2000
Member, Corporate Health Consortium Committee, 1999-2000
Member, HHMI Advisory Committee, 1999-2004
Affiliate Member, Sealy Center for Structural Biology, 1999-2008
Member, Internal Advisory Board, Sealy Center for Structural Biology, 2000-2008
Member, Dept. Chair Search Committee, Dept. of Internal Medicine, 2000-2001
Member, Faculty Development Advisory Council, 2002
Member, Faculty/Staff Campaign Planning Committee, 2002-2008
Member, Research Centers Advisory Council, 2003-2008
Member, Search Committee for the Chair of Anatomy and Neurosciences, 2002-2003
Member, Search Committee for the Chair of Internal Medicine, 2004-2005
Member, Pharmacoinformatics Training Grant Advisory Committee, 2004-2005
Member, Research Advisory Task Force, 2005-2008
Member, President's Strategic Executive Council, 2006-2007
Member, Dean of Medicine Search Committee, 2006

University of California, San Diego

Member, Health Sciences Research Council, 2008-2014
Member, Executive Committee, Health Sciences Research Council, 2010-2014
Member, Health Sciences Deans and Chairs Committee, 2008-2014
Member, Health Sciences Space Advisory Committee, 2010-2014
Member, Executive Committee, Drug Discovery Institute, 2010-2014
Member, Search Committee for Chair of Internal Medicine, 2010-2011
Co-Chair, Pharmacogenomics Search Committee, Skaggs School of Pharmacy and
Pharmaceutical Sciences, 2008-2009
Chair, Pharmaceutical Sciences Search Committee, Skaggs School of Pharmacy and
Pharmaceutical Sciences, 2008-2009
Co-Chair, Computational Drug Discovery Search Committee, Skaggs School of Pharmacy and
Pharmaceutical Sciences, 2008-2009
Member, Educational Policy Committee, Skaggs School of Pharmacy and Pharmaceutical
Sciences, 2008-2011
Member, External Affairs Committee, Skaggs School of Pharmacy and Pharmaceutical
Sciences, 2008-2014
Member, Research Committee, Skaggs School of Pharmacy and Pharmaceutical Sciences,
2008-2014
Member, Health Sciences Budget Strategy Committee, 2009-2010
Member, UCSD Clinical and Translational Research Institute, 2009-2014

University of Connecticut

Member, Deans Advisory Council, 2014-
Member, *ad hoc* Committee on Promotion, Retention, and Tenure Guidelines, 2014-2015.
Member, Academic Pre-Proposal Review Committee, 2014-2015.
Member, STEM Facilities Steering Committee, 2015-
Member, School of Pharmacy Dean's Advisory Council, 2014-
Member, Student Dean's Liaison Committee, School of Pharmacy, 2016-

TEACHING AND ADVISING

Courses Taught

Karolinska Institute

- 1981 - 1983 Undergraduate course in toxicology. 4 hours of lecture per year. Subject: Phase I enzymes, 20 students.
- 1983 Graduate course in xenobiotic metabolism. 8 hours of lecture and 16 hours of lab. Subject: Phase I enzymes, **Course Coordinator**, 10 students.

University of Arizona

- 1985 - 1986 Pharmacology 699. (Graduate students). Journal club on drug metabolism. 30 hours of discussion per year, 5 students.
- 1984 - 1998 Pharmacology 471A,B (Pharmacy students). 10-13 hours of lecture per year. Subjects: Hypolipidemic drugs, prostaglandins, non-steroidal anti-inflammatory drugs, anti-gout drugs, adrenocorticoids, antibiotics, biotechnology, research in pharmacology and toxicology, 50-60 students.
- 1984 - 1998 Pharmacology 472 (Nursing students). 2-4 hours of lecture per year. Subjects: Non-steroidal anti-inflammatory drugs, anti-gout drugs, 50-60 students.
- 1984 - 1998 Biotoxicology 602 (Graduate students). 2-4 hours of lecture per year. Subjects: Hematopoietic toxicology, oxygen radicals in tissue injury. 4 hours of lab per year. Subject: Drug metabolism, 15-20 students.
- 1983 - 1998 Drug Metabolism and Disposition 550 (Graduate students). 8-12 hours of lecture per year. Subjects: Overview of drug metabolism, Phase I enzymes, mechanism of action of monooxygenases, inhibitors of drug metabolism, molecular biology of cytochromes P450, special topic. 4 hours of student presentations. **Course Coordinator** since 1987, 15 students.
- 1992 - 1998 Foundations of Modern Pharmacology 195A (Freshman). 15 hours of discussion; 6-8 hours individual consultation. **Course Leader**, 15 students.
- 1995 - 1998 Pharmacology 420, 421 (Pharmacy students). 10 hours of Case Studies per year, 10 students.

University of Texas Medical Branch

- 1998 - 1999 Principles of Drug Action (graduate students). Subjects: inhibitors and inducers of drug metabolism. 3 hours of lecture, 3 students
- 1999 - 2008 Molecular Pharmacology (graduate students). Subjects: introduction to drug metabolism and cytochromes P450. 2 hours of lecture, 15-20 students
- 2000 - 2001 Molecular Toxicology (graduate students). 4 hours of discussion, 2 students
- 2000 - 2008 Survey of Pharmacology (graduate students). Subjects: Hypolipidemic drugs; anti-inflammatory drugs; antibiotics. 3-4 hours of lecture, 2-12 students
- 2004 - 2008 Molecular Toxicology (graduate students). Subjects: Cytochromes P450 mechanisms, inhibition, structure-function and structure-activity. 4 hours of discussion, 8 students

University of California, San Diego

- 2008 - 2010 Principles of Pharmacology (SOM 217A: medical and pharmacy students). Subjects: Drug metabolism, pharmacogenetics. 3 hours of lecture, 200 students.

- 2008- Contemporary Topics in Pharmacology (SPPS 218A, B: pharmacy students). Subjects: anti-ulcer drugs, hypolipidemic drugs, drugs for gout and rheumatoid arthritis, antihistamines. 10 hours of student presentations, 60 students.
- 2009- Pharmacogenomics (SPPS 219: pharmacy students). Subjects: cytochromes P450. 1 hour of lecture, 60 students. Same course labeled BIOM/PHAR 235 for graduate students. 6 students. **Course Director starting 2013.**
- 2009- Pharmaceutical Biochemistry (SPPS 223: pharmacy students). Subjects: overview of drug metabolism, cytochromes P450. 2 hours of lecture, 60 students.
- 2010 - Principles of Pharmacology and Physiology (SPPS 247: pharmacy students). Subject: human drug metabolism. 2 hours of lecture, 60 students.
- 2011 - Molecular Basis of Drug Action and Disease Therapy (BIOM/PHAR 255: graduate students). Subject: drug metabolism and disposition. 2 hours of lecture, 20 students.
- 2010, 2013 Concepts in Pharmacy Practice (SPPS 202A: pharmacy students). Subject: cytochrome P450. 1 hour of lecture and 1 hour of discussion, 60 students.

Theses and Dissertations Directed

Karolinska Institute

Tapio Haaparanta. Ph.D. in Medical Sciences, 1983. Dissertation title: Isolation of subcellular fractions from the rat ventral prostate and characterization of prostatic cytochrome P-450. Dr. James Halpert, Co-supervisor.

Catriona MacGeoch. Ph.D. in Medical Sciences, 1986. Dissertation title: Characterization and growth-hormone regulation of sexually differentiated cytochrome P-450 isozymes in rat liver. Dr. James Halpert, Co-Supervisor. Current position: Research Scientist. Imperial Cancer Research Fund, London, England.

University of Arizona

Steve Teo. M.S. in Toxicology, 1985. Thesis title: Metabolism of amino-chloramphenicol. Possible role in chloramphenicol-induced aplastic anemia and leukemia. Current position: Scientist, Repligen, Cambridge, Massachusetts.

Natalie Miller. Ph.D. in Pharmacology and Toxicology, 1987. Dissertation title: Analogs of chloramphenicol as mechanism-based inactivators of rat liver cytochromes P-450. Current position: Research Scientist. Department of Metabolism and Environmental Fate. Rhone-Poulenc, Research Triangle Park, North Carolina.

David Duignan. Ph.D. in Pharmacology and Toxicology, 1987. Dissertation title: In vitro metabolism of polychlorinated biphenyls by dog hepatic cytochromes P-450. Current position: Research Scientist. Pfizer Inc., Groton, Connecticut.

Paul Ciaccio. Ph.D. in Pharmacology and Toxicology, 1989. Dissertation title: Structural and functional characterization of dog liver cytochromes P-450. Current position: Senior Molecular Toxicologist, AstraZeneca Pharmaceuticals LP, Wilmington, DE.

Jeffrey Stevens. M.S. in Toxicology, 1987. Thesis title: Selective inactivation of four rat liver

microsomal androstenedione hydroxylases by chloramphenicol analogs. Ph.D. in Pharmacology and Toxicology, 1991. Dissertation title: Steroid derivatives as probes of adrenal cytochrome P450 structure and function. Current position: Senior Director, Pharmacokinetics, Dynamics & Metabolism (PDM), Pfizer, St. Louis, MO.

Victor Dan Wall. M.S. in Toxicology, 1991. Thesis title: Expression of a mammalian cytochrome P450 in *Nicotiana tabacum* for bioremediation of PCB contaminated soils. James Halpert, Co-director. Current position: Ph.D. Student, Clemson University.

Scott W. Grimm. Ph.D. in Pharmacology and Toxicology, 1994. Dissertation title: Functional characterization of hepatic microsomal and heterologously expressed rabbit cytochrome P450 2B enzymes. Current position: Senior Research Biochemist. Drug Metabolism and Disposition Department. AstraZeneca Pharmaceuticals, Wilmington, DE.

Torka Poet. Ph.D. in Pharmacology and Toxicology, 1995. Dissertation title: Cytochromes P450 involved in the bioactivation of cocaine in the rat. Current position: Scientist, Battelle Pacific Northwest National Labs, Richland, WA.

Stephanie Born. Ph.D. in Pharmacology and Toxicology, 1996. Dissertation title: Characterization of canine hepatic cytochromes P450 2B and 3A. Current position: Toxicologist, Merck & Co., Inc., West Point, PA.

Juping Liu. M.S. in Pharmacology, 1996. Thesis title: Role of residue 480 in substrate specificity of cytochrome P450 2B5 and 2B11. Current position: Staff Biologist, Merck Research Laboratories, San Diego, CA.

David Fraser. Ph.D. in Pharmacology and Toxicology, 1998. Dissertation title: Isolation and characterization of cytochrome P450 3A26. Current position: Senior Scientist, Biotechnology Development, Novartis Pharma AG, Basel, Switzerland.

University of Texas Medical Branch

Cynthia Hernandez, M.S. in Pharmacology and Toxicology, 2006. Thesis title: Investigation of the role of cytochrome P450 2B4 active site residues in substrate metabolism based on crystal structures of the ligand-bound enzyme.

Laboratory Rotations Directed (Ph.D. in Pharmacology and Toxicology)

University of Arizona

Natalie Miller	1983
David Duignan	1984
Paul Ciaccio	1986
Linda Cornfield	1987
Scott Mobley	1987
Todd Kennedy	1987
Ingo Waschulewski	1989
Stephanie Born	1991
David Barber	1993
Todd Anthony	1994
David Fraser	1994

Jennifer Burkey 1995
Elizabeth Casarez 1995

University of Texas Medical Branch

Travis Young 1999
Robert Malmstrom 2003
Tori Strong 2003
Fan Zhao 2004

University of California, San Diego

Stephanie Huelga 2008

Service on Thesis and Dissertation Committees Other Than as Advisor

University of Arizona

Mike Hitt (M.S. in Toxicology, 1986)
Abbie Celnicker (Ph.D. in Molecular Biology, 1986)
Eric Stine (Ph.D. in Pharmacology and Toxicology, 1987)
Paul Silber (Ph.D. in Pharmacology and Toxicology, 1987)
Bill Bellamy (Ph.D. in Pharmacology and Toxicology, 1988)
Linda Cornfield (Ph.D. in Pharmacology and Toxicology, 1990)
Bill Smith (Ph.D. in Pharmacology and Toxicology, 1990)
Anthony Parola (Ph.D. in Pharmacology and Toxicology, 1990)
Wei Zheng (Ph.D. in Pharmacology and Toxicology, 1990)
Tzu-Chin Chen (M.Sc. in Toxicology, 1991)
Janet Firriolo (Ph.D. in Pharmacology and Toxicology, 1992)
Stacie Wild (Ph.D. in Pharmacology and Toxicology, 1993)
Lhanoo Gunawardhana (Ph.D. in Pharmacology and Toxicology, 1993)
Kathleen Henry Parton (M.S. in Toxicology, 1993)
David Pepperl (Ph.D. in Pharmacology and Toxicology, 1994)
Julie Doerr (Ph.D. in Pharmacology and Toxicology, 1995)
Amy Sharpe (Ph.D. in Pharmacology and Toxicology, 1995)
Roland Cooper (Ph.D. in Pharmacology and Toxicology, 1996)
Peter Chase (Ph.D. in Pharmacology and Toxicology, 1996)
Steve Stratton (Ph.D. in Pharmacology and Toxicology, 1997)
Suzette Maxwell (M.S. in Pharmacology, 1996)
Todd Anthony (Ph.D. student in Pharmacology and Toxicology)
Kristen Pierce (Ph.D. student in Pharmacology and Toxicology)

Karolinska Institute, Sweden

External Examiner to Mikael Oscarson, Ph.D. Thesis (1999)
External Examiner to Mats Hidestrand, Ph.D. Thesis (2002)

University of Texas Medical Branch at Galveston

Shannon Hardt (Ph.D. student in the Graduate School of Biomedical Sciences)
Roberto Galletto (Ph.D. student in the Graduate School of Biomedical Sciences)
John Hays (Ph.D. student in the Graduate School of Biomedical Sciences)
Suzanne Tomlinson (Ph.D., student in the Graduate School of Biomedical Sciences)

Göteborg University

External Examiner to Marie Ahlström, Ph.D. Thesis (2007)

University of California, San Diego

Camille Konopnicki (Ph.D. in Chemistry and Biochemistry, 2013)

Nicholas Treuheit (Ph. D. in Chemistry and Biochemistry, 2013)

Visiting Students Directed

University of California, San Diego

Kathy Vu, 2009. Pharmacy student, University of Gothenburg, Sweden

Sara Sjogren, 2010. M.S, student, Lund University, Sweden

Elisabeth Angermeier, 2011, Pharmacy student, Regensburg University, Germany

Ga-Yong Lee, 2011-2012. Ph.D. student, Chonnam University, Korea.

Sonia Lamime, 2012, Student, Engineering School of the University of Angers, France

Undergraduate Students Directed

University of Arizona

Eileen Villareal, 1986. Current position: M.D.

Kevin Wright, 1986-1987. Current position: Community Pharmacist.

Joanne Alfandre, 1988. Current position: M.D.

Pei Tsau, 1989-1990. Current position: M.D.

Cindy Nowlin, 1989. Current position: M.D.

Gina Escobar, 1988-1990. Current position: M.D.

Nicole Sirota, 1992

Paul Klekotka, 1991-1995. M.D./Ph.D. Current position: Instructor, Division of Dermatology,
Washington University, St. Louis, MO.

David Stepp, 1994-1995

Pragna Shankar, 1996-1998

University of Texas Medical Branch at Galveston

John Meitzen, 2000

Norma Fernandez, 2002

Grace Odi, 2002

Jeeba Kuriakose, 2003

Alva Gullstrand, 2004

Yan Larson, 2005

Christina Lindsey, 2006

University of California, San Diego

Kristen Darrell, 2013

Mariam Salib, 2013

Nicole Kimmet, 2013

University of Connecticut

Lisa Harris, 2015-

Post-doctoral Fellows Directed

University of Arizona

- John-Yan Jaw, Ph.D., 1987-1990. Current position: Scientist, SRI International, Menlo Park, CA.
- Penelope Graves, Sc. Dr., 1986-1990. Current position: Assistant Research Scientist, Department of Physiology, University of Arizona.
- Karen Kedzie, Ph.D., 1989-1992. Current position: Scientist, Allergan, Irvine, CA.
- James Kraner, Ph.D., 1992-1995. Current position: Laboratory Director, AIT Laboratories, Indianapolis, IN.
- Grazyna Szklarz, Ph.D., 1992-1998. Current position: Associate Professor of Basic Pharmaceutical Sciences, University of West Virginia, Morgantown, WV.
- Gilbert John, Ph.D., 1992-1995. Current position: Associate Professor of Microbiology, Oklahoma State University, Stillwater, OK.
- Vicki Burnett, Ph.D., 1992-1995. Current position: Senior Director, OmniViz, Inc., Maynard, MA.
- Greg Harlow, Ph.D., 1993-1998. Current position: Senior Research Scientist, Array Biopharma, Boulder, CO.
- Rick Fang, Ph.D., 1995-1997. Current position: Senior Research Chemist, Pharmacia & Upjohn, Kalamazoo, MI.
- Sharon Strobel, Ph.D., 1996-1998. Current position: Scientist, Molecular Biology, Celltech, Bothell, WA.
- Tammy Domanski, Ph.D., 1996-1998. Current position: Assistant Professor, Naval Academy, Annapolis, MD.
- Fabienne Roussel, Ph.D., 1997-1998. Current position: Technical Specialist III, Human Genome Sciences, Inc., Rockville, MD.
- Kishore Khan, Ph.D., 1998-1998. Current position: Research Scientist, Forest Research Institute, Farmingdale, NY.

University of Texas Medical Branch at Galveston

- Fabienne Roussel, Ph.D., 1998-2000. Current position: Technical Specialist III, Human Genome Sciences, Inc., Rockville, MD.
- Kishore Khan, Ph.D., 1998-2000. Current position: Research Scientist, Forest Research Institute, Farmingdale, NY.
- Emily Scott, Ph.D., 1999-2004. Current position: Associate Professor, Medicinal Chemistry, University of Kansas, KS. Recipient of 2011 Drug Metabolism Early Career Achievement Award, ASPET; Recipient of 2012 North American New Investigator Award, ISSX.
- Margit Spatzenegger, Ph.D., 1999-2002. Current position: Onepharm Research & Development GmbH
Veterinärplatz 1, 1210 Vienna, Austria.
- Qinmi Wang, Ph.D., 1999-2001. Current position: Senior Chemistry Scientist, Cygnus Corporation, Rockville, MD.
- Alexandra Botchkareva, Ph.D., 2002-2004. Current position: Post-doctoral Fellow, M.V. Lomonosov State University, Moscow, Russia.
- Wataru Honma, Ph.D., 2003-2005. Current position: Researcher, Discovery Biology Group Research Division, Novartis Pharma K.K., Ibaraki, Japan.
- Harshica Fernando, Ph.D., 2004-2008. Current position: Post-doctoral Fellow, Department of Pathology, UTMB, Galveston, TX.
- Yonghong Zhao, Ph.D., 2005-2006. Current position: Research Scientist, Molecular Discovery Technology Centocor, Inc., Radnor, PA.

Tamara Tsalkova, Ph.D., 2005-2007. Current position: Postdoctoral fellow, Department of Pharmacology and Toxicology, UTMB, Galveston, TX.
Alexander Pastukhov, Ph.D., 2006. Current location: Russia.
Jyothi C. Talakad, Ph.D., 2007- 2008.
Srinivas Sistla, Ph.D., 2007- 2008. Current position: Scientist, GE Health Sciences, India.

University of California, San Diego

Jyothi C. Talakad, Ph.D., 2008-2011. Current position: Assistant Professor of Chemistry, CMR Institute of Technology, Bangalore, India.
Ross Wilderman, Ph.D., 2008-2013. Current position: Assistant Project Scientist, UC San Diego.
Sean Gay, Ph.D., 2008-2011. Current position: Post-doctoral Fellow, Scripps Research Institute, La Jolla, CA.
Jessica Rumfeldt, Ph.D., 2009-2011. Current position: Post-doctoral Fellow, University of Waterloo, Canada.
Manish Shah, Ph.D., 2009-2012. Current position: Assistant Project Scientist, UC San Diego.
Keiko Maekawa, Ph.D., 2009. Current position: Scientist, National Institute of Health Sciences, Tokyo, Japan.
Hyun-Hee Jang, Ph.D., 2011- 2014. Current position: Post-doctoral fellow, Chonnam University, Korea.
Jingbao Liu, Ph.D. 2013-2014. Current position: Post-doctoral Researcher, University of Connecticut, Storrs, CT.

University of Connecticut

Jingbao Liu, Ph.D. 2014-
Luo Huo, Ph.D. 2014-2015. Current position: Scientist, Alliance Pharma Inc., Malvern, PA.
Chao Chen, Ph.D. 2015-

Visiting Scientists

University of Arizona

Julia Hasler, Ph.D., 1993. Professor, Department of Biochemistry, University of Zimbabwe.
Yasuna Kobayashi, Ph.D., 1996-1998, Associate Professor, Showa University, Tokyo, Japan.

University of Texas Medical Branch at Galveston

Dmitri Davydov, Ph.D., 2001-2003. Associate Professor, Biomedical Faculty, N. I. Pirogov Medical Institute, Moscow, Russia.
Yoshitaka Yamaguchi, 2002-2003. Researcher, Department of ADME and Toxicology, Screening, Developmental Research Laboratory, Shionogi & Co., Ltd., Japan.
Hong Liu, Ph.D., 2002, 2005. Professor, Shanghai Institute of Materia Medica, Chinese Academy of Sciences, China.

University of California, San Diego

Keiko Maekawa, Ph.D., 2008-2009. Senior Researcher, National Institute of Health Sciences, Tokyo, Japan

Research-Track Faculty and Scientists

Sharon Strobel, Ph.D., 1998. Current position: Scientist, Molecular Biology, Celltech, Bothell, WA.

Tammy Domanski, Ph.D., 1998-2001. Current position: Assistant Professor, Anne Arundel Community College, Arnold, MD.
Kishore Khan, Ph.D., 2000-2003. Current position: Research Scientist, Forest Research Institute, Farmingdale, NY.
Santosh Kumar, Ph.D., 2001-2008. Current position: Assistant Professor, School of Pharmacy, University of Missouri, Kansas City, MO.
Dmitri Davydov, Ph.D., 2003-2014. Current position: Lead Scientist, V.N. Orekhovich Research Institute of Biomedical Chemistry, Moscow, Russia
Bilikallahalli K. Muralidhara, Ph.D., 2005-2007. Current position: Principal Scientist, PhRD-Global Biologics, Pfizer Inc., Chesterfield, MO.
Elena Sineva, 2009-2013. Current position: Scientist, Pennsylvania State University.
Arthur Roberts, Ph.D., 2009-2011. Current Position: Assistant Professor, University of Georgia, College of Pharmacy, Augusta, GA.
Manish B. Shah, 2014-
P. Ross Wilderman, 2014-

HONORS AND AWARDS

Award in Excellence in Pharmacology and Toxicology, PhRMA Foundation, 2016.

Bernard B. Brodie Award in Drug Metabolism, American Society for Pharmacology and Experimental Therapeutics, 2010.

Fellow, American Association for the Advancement of Science, 2006

Distinguished Faculty Research Award, Graduate School of Biomedical Sciences, UTMB, 2006

MERIT Award, NIH, 2005, 2010

Burroughs Wellcome Fund Visiting Professor in Basic Medical Science, 2001

Research Career Development Award, NIH, 1985

Faculty Development Award. Pharmaceutical Manufacturers Association Foundation, 1984

Graduated Summa cum Laude from University of California at Los Angeles, 1971

Elected to Phi Beta Kappa, 1971

Regents Scholar at University of California at Los Angeles

Outstanding Freshman Chemistry Student at University of California at Los Angeles, 1968

GRANT SUPPORT

(Unless otherwise stated, Dr. Halpert is the principal investigator on all grants listed below. Only direct costs are indicated.)

Current:

R37 GM054995-20. National Institute of General Medical Sciences. Molecular Basis of Human Cytochrome P450 3A Function. 03/19/10 - 02/28/17. \$1,689,481; \$85,000 current year.

R01 ES003619-34. National Institute of Environmental Health Sciences. Molecular Basis of Selective P450 2B Function. 05/15/13 - 04/30/17. \$1,044,332; \$261,083 current year.

NSF IOS-1461359. Division of Integrative Organismal Systems. Collaborative Research. A Comprehensive Study of the Structure, Function, and Diversity of Detoxification Enzymes (CYP2B) in Mammalian Herbivores (*Neotoma*). 06/01/13 - 05/31/17. \$358,374; \$182,333 current year.

Completed:

R01 ES003619-(26-30). National Institute of Environmental Health Sciences. Molecular Basis of Selective P450 2B Function. 07/17/08 - 04/30/13. \$1,425,863.

U38 GD000070-01 (Kuo). Centers for Disease Control. Pharmacogenomics Education Program: Bridging the Gap between Science and Practice. 09/30/08 - 09/29/11. \$722,752. Role = Co-investigator at 5% effort.

R37 GM54995-(10-14). National Institute of General Medical Sciences. Molecular Basis of Human Cytochrome P450 3A Function. 02/01/05 - 02/28/10. \$1,309,656.

R01 ES03619-(20-25). National Institute of Environmental Health Sciences. Molecular Basis of Selective P450 2B Function. 02/01/03 - 07/16/08. \$1,231,170.

Welch Foundation. Conformational Flexibility and Heterogeneity of Cytochromes P450. 6/01/06 - 2/28/08. \$150,000.

P30 ES06676-(11-13). National Institute of Environmental Health Sciences. Cellular Response Mechanisms to Environmental Challenge. 04/01/05-03/31/10. \$5,134,117.

Welch Foundation. Cooperativity of Cytochrome P450: How Different is it From Other Allosteric Enzymes? 06/01/03 - 05/31/06. \$150,000.

P30 ES06676-(6-10). National Institute of Environmental Health Sciences. Cellular Response Mechanisms to Environmental Challenge. 04/01/00 - 03/31/05. \$4,704,005.

R01 GM54995-(6-9). National Institute of General Medical Sciences. Molecular Basis of Human Cytochrome P450 3A Function. 02/01/01 - 01/31/05. \$900,000.

F32 GM20674-03. National Institute of General Medical Sciences. National Research Service Award to Dr. Emily Scott (J. Halpert, sponsor). 08/01/00 - 07/31/03. \$125,704.

Welch Foundation. Cooperativity of Cytochrome P450: How Different is it From Other Allosteric Enzymes? 06/01/00 - 05/31/03. \$145,000.

R01 ES03619-(14-19). National Institute of Environmental Health Sciences. Molecular Basis of Selective P450 2B Function. 02/01/98 - 01/31/03. \$782,881.

Epidaurus Biotechnologie. CYP3A5 Polymorphism Study. 08/15/00 - 08/31/01. \$10,000

AstraZeneca Pharmaceuticals. Structure-Based Design of Selective Cytochrome P450 Inhibitors. 07/01/99 - 06/30/2001. \$76,000.

Merck Pharmaceuticals. Mechanisms of CYP3A4 Cooperativity. 08/01/99 - 07/31/00. \$30,000.

Epidaurus Biotechnologie. CYP3A4 Polymorphism M1-M8 Study. 03/27/00 - 03/26/01. \$10,000

R01 GM54995(1-5). National Institute of General Medical Sciences. Molecular Basis of Human Cytochrome P450 3A Function. 02/01/97 - 01/31/01. \$630,000.

F32 GM19058. National Institute of General Medical Sciences. National Research Service Award to Dr. Tammy Domanski (J. Halpert, sponsor). 12/01/97 - 11/31/99. \$55,020.

Pfizer Central Research, Postdoctoral Research Support. 05/01/97 - 10/31/98. \$120,204.

R01 ES03619 (9-13). National Institute of Environmental Health Sciences. Structural Basis of Selective P450 Inactivation. 02/01/93 - 01/31/98. \$704,190.

Southwest Environmental Health Sciences Center Pilot Project. Molecular basis of human cytochrome P450 3A4 Function. 07/01/96 - 06/30/97. \$15,000.

R01 ES04995 (4-8). National Institute of Environmental Health Sciences. Genes for PCB-Detoxifying Cytochromes P-450. 04/01/92 - 03/31/97. \$600,050.

F32 GM17860. National Institute of General Medical Sciences. National Research Service Award to Dr. Greg Harlow (J. Halpert sponsor). 02/01/96 - 01/31/97. \$28,600.

Procter & Gamble. Characterization of Canine Cytochromes P450 3A. 08/01/94 - 10/31/96. \$48,000.

F32 ES05613. National Institute of Environmental Health Sciences. National Research Service Award to Dr. James Kraner (J. Halpert sponsor). 06/01/93 - 05/31/96. \$81,200.

F32 ES05626. National Institute of Environmental Health Sciences. National Research Service Award to Dr. Gilbert John (J. Halpert sponsor). 10/1/93 - 09/30/95. \$61,100.

Zeneca Pharmaceuticals. Characterization of Rabbit Hepatic Cytochromes P450 2B. 01/01/91 - 12/31/94. \$40,000.

R01 ES03619 (4-8). National Institute of Environmental Health Sciences. Cytochrome P-450 Inhibition by Dichloromethyl Compounds. 02/01/88 - 01/31/93. \$408,975.

R01 ES04995 (1-3). National Institute of Environmental Health Sciences. Genes for PCB-Detoxifying Cytochromes P-450. 02/01/89 - 03/31/92. \$261,834.

F32 ES05502. National Institute of Environmental Health Sciences. National Research Service Award to Dr. Karen Kedzie (J. Halpert sponsor). 03/1/90 - 02/28/92. \$56,000.

K04 ES00151. National Institute of Environmental Health Sciences. Research Career Development Award: Isozyme-selective Inhibitors of Cytochromes P-450. 09/27/85 - 08/31/90. \$230,000.

Biomedical Research Support Grant. Structural and Functional Characterization of a Dog Liver Cytochrome P-450. 06/01/88 - 05/31/89. \$5,000.

R01 ES03619 (1-3). National Institute of Environmental Health Sciences. Biochemical Toxicology of Chloramphenicol. 02/01/85 - 01/31/88. \$215,000.

Biomedical Research Support Grant. Complementary DNA Sequence of the Major Phenobarbital-Inducible Isozyme of Dog Liver Cytochrome P-450. 06/01/87 - 05/31/88. \$5,000.

Biomedical Research Support Grant. Cloning of DNA Complementary to the Dog Liver Cytochrome P-450 Isozyme Responsible for the Metabolism of 2,2',4,4',5,5'-hexachlorobiphenyl. 06/01/86 - 05/31/87. \$6,500.

Biomedical Research Support Grant. Hepatic Metabolism of Polychlorinated Biphenyls. 06/01/85-05/31/86. \$5,900.

Faculty Development Award. Pharmaceutical Manufacturers Association Foundation. 07/01/84 - 06/30/86. \$48,650.

American Cancer Society Institutional Research Grant. Metabolism of Amino-Chloramphenicol. 06/01/84 - 05/31/85. \$4,500.

Starter Grant. Pharmaceutical Manufacturers Association Foundation. 01/01/84 - 12/31/85. \$15,500.

B85-03X-06800. Swedish Medical Research Council. Biochemical Toxicology of Chloramphenicol. 07/01/83 - 06/30/85. \$15,000.

B83-13P-6476. Research Assistant Professor of Toxicology. Swedish Medical Research Council. 07/01/82 - 06/30/83. \$25,000.

Swedish Work Environment Fund (J. Halpert, Co-principal Investigator). Metabolism of Halogenated, Aliphatic, and Aromatic Solvents. 01/01/82 - 12/31/84. \$240,000.

Guest Scientist. Swedish Work Environment Fund. 01/01/81 - 12/31/82. \$50,000.

F32 ES05171. National Institute of Environmental Health Sciences. National Research Service Award: Cytochrome P-450 inactivation by thiono-sulfur compounds. 01/01/80 - 12/31/80. \$16,000.

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Society Memberships and Offices Held

American Society for Pharmacology and Experimental Therapeutics (1985-present).

Society of Toxicology (1985-present).

American Society for Biochemistry and Molecular Biology (1988-present).

International Society on Toxicology (1977-1985).

Nominating Committee, Drug Metabolism Division, American Society for Pharmacology and Experimental Therapeutics (April 1986).

Councilor, Mountain West Chapter, Society of Toxicology (May 1986-April 1988).

Nominating Committee, Drug Metabolism Division, American Society for Pharmacology and Experimental Therapeutics (April 1989).

Vice-President, Mountain West Chapter, Society of Toxicology (May 1990-April 1991).

Member, Program Committee, Mechanisms Section, Society of Toxicology (May 1991-April 1992).

Member, Executive Committee, Drug Metabolism Division, American Society for Pharmacology and Experimental Therapeutics (1991-1994).

President, Mountain West Chapter, Society of Toxicology (May 1991-April 1992).

Nominating Committee, Drug Metabolism Division, American Society for Pharmacology and Experimental Therapeutics (October 1993).

Councilor, International Society for the Study of Xenobiotics (January 1996-December 1999).

Chair, Drug Metabolism Division, American Society for Pharmacology and Experimental Therapeutics (1997-1999).

Secretary/Treasurer, American Society for Pharmacology and Experimental Therapeutics (2003-2006).

President-Elect, President, Past President, American Society for Pharmacology and Experimental Therapeutics (2009-2012)

Treasurer-Elect, Treasurer, International Society for the Study of Xenobiotics (January 2014-December 2017)

Scientific Meetings or Sessions Organized/Chaired

Chairperson, General Platform Session, Annual Meeting of Mountain West Chapter of Society of Toxicology, Tucson (October 1986).

Chairperson, Platform Session “Biotransformation I”, Annual Meeting of Society of Toxicology, Washington D.C. (February 1987).

Chairperson, Platform Session “Mechanisms of Microsomal Oxidation I”, FASEB Meeting, Las Vegas (May 1988).

Chairperson, Platform Session “Mechanisms of Microsomal Oxidation I”, FASEB Meeting, New Orleans (March 1989).

International Advisory Committee, Biological Reactive Intermediates IV, Tucson (January 1990).

Chairperson, Symposium “Active Site Directed Inhibitors of Drug Metabolizing Enzymes”, FASEB Meeting, Washington, D.C. (April 1990).

Chairperson, Local Organizing Committee, Eighth Annual Meeting, Mountain West Chapter, Society of Toxicology, Tucson (October 1990).

Chairperson, Poster Discussion Session, “P-450: Regulation and Mechanisms of Oxidation”, ASPET Meeting, San Diego (August 1991).

Chairperson, Platform Session “Microsomal Oxidation III”, FASEB Meeting, Anaheim (April 1992).

Chairperson, Symposium “Selective Inhibitors of Cytochromes P450”, Society of Toxicology Annual Meeting, New Orleans (March 1993).

Organizer, Short Course, Fifth North American ISSX Meeting, Tucson (October 1993).

Chairperson, Program Committee, Fifth North American ISSX Meeting, Tucson (October 1993).

Organizer, Symposium “Recent Advances in Structure, Function, and Regulation of Key Phase I Oxidative Enzymes”, Gordon Conference on Drug Metabolism, New Hampshire (July 1995).

Chairperson, Symposium “Inhibitors of Drug Metabolizing Enzymes”, Eleventh International Symposium on Microsomes and Drug Oxidations, Los Angeles (July 1996).

Chairperson, Symposium “Protein Modification”, Tenth International Conference on Cytochrome P450: Biochemistry, Biophysics, and Molecular Biology, San Francisco (August 1997).

Chairperson, Symposium “Structure-Function of Cytochromes P450 and Flavin-Containing Monooxygenases - Implications for Drug Metabolism”, Experimental Biology ‘98, San Francisco (April 1998).

International Advisory Committee, Fourteenth International Symposium on Microsomes and Drug Oxidations, Sapporo, Japan (July 2002); Fifteenth International Symposium on Microsomes and Drug Oxidations, Mainz, Germany (July 2004). Sixteenth International Symposium on Microsomes and Drug Oxidations, Budapest, Hungary (September 2006). Seventeenth International Symposium on Microsomes and Drug Oxidations, Albany (July 2008). Eighteenth International Symposium on Microsomes and Drug Oxidations, Beijing (May 2010). Nineteenth International Symposium on Microsomes and Drug Oxidations, Noordwijk aan Zee (June, 2012). Twentieth International Symposium on Microsomes and Drug Oxidations, Stuttgart (May 2014). Twenty-first International Symposium on Microsomes and Drug Oxidations, Davis (October 2016).

Chairperson, “Structure-Function of Cytochromes P450: Implications for Drug Metabolism, Design & Therapy” XIVth World Congress of Pharmacology, San Francisco, CA (July 2002).

Chairperson, “Structure Metabolism Relationships”, Twelfth North American ISSX Meeting, Providence, R.I. (October 2003).

Chairperson, “Atypical P450 Kinetics”, Fifteenth International Symposium on Microsomes and Drug Oxidations, Mainz, Germany (July 2004).

Chairperson, “Mechanisms of Drug-Drug Interactions”, Eighth International Symposium on Drug-Drug Interactions, Seattle, WA (June 2005).

Chairperson, “Cytochromes P450: Structure, Mechanism, and Prediction of Function”, Sixteenth International Symposium on Microsomes and Drug Oxidations, Budapest, Hungary (September 2006).

Chairperson, “P450 Structure and Function”, Fifteenth International Conference on Cytochromes P450, Bled, Slovenia (June 2007).

Chairperson, “P450s: Structure, Function, in Silico Predictions”, Experimental Biology '08, San Diego (April 2008).

Chairperson, “Structure Function Relationships of Drug Metabolizing Enzymes: Predictions of Drug Metabolism”, Seventeenth International Symposium on Microsomes and Drug Oxidations, Albany (July 2008).

Chairperson, “P450 Structure and Function: Structure and Drug Design”, Eighteenth International Symposium on Microsomes and Drug Oxidations, Beijing, China (May 2010).

Chairperson, “Novel Aspects in Enzyme Catalysis and Dynamics”, Nineteenth International Symposium on Microsomes and Drug Oxidations/Twelfth European ISSX Joint Meeting, Nordwijk aan Zee, Netherlands (June 2012).

Chairperson, “Cytochrome P450 Structures”, Eighteenth International Conference on Cytochromes P450, Seattle (June 2013).

Chairperson, “Application of Structural Biology to the Prediction of Drug Response, Metabolism, and Toxicity”, Tenth International ISSX Meeting, Toronto, (September 2013).

Editorial and Peer Review Duties

NIH Reviewers Reserve (July 1, 1989-June 30, 1993; July 1, 1995-June 30, 1999).

Ad hoc member, Pharmacology Study Section (October 1990, February 1991, October 1991, February 1992, June 1992).

Member, NIEHS Special Emphasis Panel, Review of NIEHS Center at the University of Medicine and Dentistry of New Jersey, June 12, 1992.

Member, Pharmacology Study Section (July 1992-June 1995), **Chairperson** (July 1993-June 1995).

Editorial Board, Toxicology and Applied Pharmacology (May 1989-June 1996).

Editorial Board, Chemical Research in Toxicology (January 1993-December 1995).

Regular Reviewer, Biochemistry (January 1993-present).

Editorial Board, Toxicology Letters (July 1993-February 1996).

Editorial Board, Drug Metabolism and Disposition (January 1994-1996).

Editorial Board, Archives of Biochemistry and Biophysics (July 1994-2006).

Editorial Board, Molecular Pharmacology (January 1995-December 1999).

Ad hoc reviews for: National Science Foundation (March 1991, 1992), Medical Research Council of Canada (December 1991), NIH Small Business Innovation Research (April 1993, 1994).

Ad hoc review of proposed Ph.D. in Toxicology, University of Texas at El Paso (November 1995).

Member, NIEHS Special Emphasis Panel, Review of NIEHS Center at the University of Cincinnati, May 7, 1996.

Member, NIEHS Special Emphasis Panel, Review of NIEHS Center at the University of Cincinnati, June 5, 1997.

Chair, NIGMS Special Emphasis Panel, Review of Program Project at Vanderbilt University, March 24, 1997.

Associate Editor, Drug Metabolism and Disposition (Aug. 1997-Dec. 1999).

Editor, Drug Metabolism and Disposition (Jan. 2000-Dec. 2005).

Member, Board of Publications Trustees, American Society for Pharmacology and Experimental Therapeutics (Jan. 2000-Dec. 2005).

Ad hoc review for Biomedical Research and Research Training Subcommittee - A/B, University of Wisconsin Program in Molecular and Cellular Pharmacology, September 29, 1997.

Member, NIEHS Special Emphasis Panel, Review of Program Project at Massachusetts Institute of Technology, March 17-18, 1998.

Outside Reviewer, GSBS Toxicology Program, University of Texas, Houston, TX, June 29-30, 1999.

Member, NIGMS Biomedical Research and Research Training (BRT) Review Committee (2000-2003).

Member, Review Panel, Laboratory of Pharmacology and Chemistry, National Institute of Environmental Health Sciences, Research Triangle Park, NC, July 18-20, 2004.

Chairperson, NIH Predictive ADME-Tox Special Emphasis Panel, June 30 - July 1, 2005.

Scientific Advisory Board, Drug Metabolism and Disposition (May 2007-

Member, Review Panel, Laboratory of Pharmacology, National Institute of Environmental Health Sciences, Research Triangle Park, NC, March 22-24, 2009.

Ad hoc Member, Environmental Health Sciences Review Committee, National Institute of Environmental Health Sciences, Research Triangle Park, NC, August 25-27, 2009.

PLATFORM AND SYMPOSIUM PRESENTATIONS AT MAJOR MEETINGS

Platform

Swedish Society of Toxicology Annual Meeting, Stockholm, March 1981, "Inactivation of rat liver cytochrome P-450 by chloramphenicol".

Swedish Biochemical Society Annual Meeting, Uppsala, December 1982, "Mechanism of inactivation of rat liver cytochrome P-450 by chloramphenicol".

Sixth International Symposium on Microsomes and Drug Oxidations, Brighton, August 1984, "Identification of the isozymes of rat lung and liver cytochrome P-450 involved in the bioactivation and detoxification of n-hexane".

Fifth International Conference on Biochemistry, Biophysics, and Induction of Cytochrome P-450, Budapest, August 1985, "Suicide inactivation of rat liver cytochromes P-450 by chloramphenicol: mechanism, isozyme-selectivity, and structural requirements".

Pharmaceutical Manufacturers Association Foundation, New York, December 1985, "Selective inhibitors of cytochromes P-450".

Federation of American Societies for Experimental Biology Annual Meeting, Las Vegas, May 1988, "Selective inactivation of rabbit liver microsomal progesterone hydroxylases by 21-chlorinated steroids".

Invited Lectures

Gordon Conference on Drug Metabolism, New Hampshire, July 1986, "Protein-modification as a mechanism of suicide inactivation of rat liver cytochrome P-450".

Mountain West Regional Chapter of the Society of Toxicology Annual Meeting, Tucson, October 1986, "Mechanism-based inactivators as modulators of cytochrome P-450 function".

American Society for Pharmacology and Experimental Therapeutics/American Physiological Society Joint Fall Meeting, Montreal, October 1988, "Multiple mechanisms of cytochrome P-450 inactivation by dichloromethyl compounds".

Society of Toxicology Annual Meeting, Atlanta, February 1989, Special Platform Session - Frontiers in Toxicology, "Design of isozyme-specific cytochrome P-450 inactivators".

Fourth International Symposium on Biological Reactive Intermediates, Tucson, January 1990, "Cytochrome P-450 as a target of biological reactive intermediates".

Federation of American Societies for Experimental Biology Annual Meeting, Washington, D.C., April 1990, "Selective inactivation of hepatic cytochromes P-450 by chloramphenicol and analogs".

Eighth International Symposium on Microsomes and Drug Oxidations, Stockholm, June 1990,

“Steroid derivatives and chloramphenicol analogs as probes of cytochrome P-450 function”.

Society of Toxicology Annual Meeting, Seattle, February 1992, Continuing Education Course on Liver Toxicology, “Role of cytochromes P-450 in bioactivation and detoxification”.

Mountain West Regional Chapter of the Society of Toxicology Annual Meeting, Logan, September 1992, “Structure and function of cytochromes P450 2B”.

Society of Toxicology Annual Meeting, New Orleans, March 1993, “Structural basis of P450 inactivation”.

Delaware Valley Drug Metabolism Discussion Group, May 1993, “Selective inhibitors of cytochromes P450”.

Experimental Biology ‘94, Anaheim, March 1994, “Structural determinants of functional diversity among cytochromes P450 2B”.

Tenth International Symposium on Microsomes and Drug Oxidations, Toronto, July 1994, “Structural basis of selective P450 inactivation”.

International Symposium on Strategy of Drug Metabolism Study for New Drug Development, Tokyo, June 1995, “Site-directed mutagenesis for elucidation of P450 structure-function relationships: application to drug metabolism studies”.

Fourth International Meeting of the International Society for the Study of Xenobiotics, Seattle, August 1995, “Alteration of cytochrome P450 substrate specificity by site-directed mutagenesis: application to drug metabolism studies”.

Eleventh International Symposium on Microsomes and Drug Oxidations, Los Angeles, July 1996, “Structural basis of cytochrome P450 2B specificity”.

NIEHS Center Directors’ Meeting, Tucson, December 1996, “Molecular basis of P450 2B specificity: from mutants to models”.

Tenth International Conference on Cytochrome P450: Biochemistry, Biophysics, and Molecular Biology, San Francisco, August 1997, “Molecular basis of P450 2B and 3A specificity: Mutants, models, and mechanisms”.

American Chemical Society Meeting, Dallas, March 1998, “Structure-function analysis of mammalian cytochromes P450 by site-directed mutagenesis and homology modeling”.

Drug Metabolism in the New Millennium, San Francisco, April 1998, “Molecular basis of P450 inhibition and activation: Implications for drug development and drug therapy”.

Experimental Biology ‘98, San Francisco, April 1998, “Structural basis of cytochrome P450 3A4 specificity and activation”.

Twelfth International Symposium on Microsomes and Drug Oxidations, Montpelier, July 1998, “Topology of CYP2B active sites”.

Fifth International Meeting of the International Society for the Study of Xenobiotics, Cairns, October 1998, “Molecular basis of P450 3A4 specificity and stimulation”.

Glaxo Wellcome P450 Modeling Symposium, North Carolina, April 1999, “Concerted use of site-directed mutagenesis and homology modeling for analysis and prediction of P450 inhibition and activation”.

Eleventh International Conference on Cytochrome P450 Biochemistry, Biophysics and Molecular Biology in Modulation of P450 Activities, Tokyo, Japan, August 1999, “Site-directed mutagenesis for analysis of P450 3A4 activation by steroids and flavonoids”.

Thirty-third Annual American Chemical Society Middle Atlantic Regional Meeting, University of Delaware, May 2000, “Concerted use of site-directed mutagenesis and homology modeling for analysis and prediction of P450 inhibition and activation”.

Merck Cytochrome P450 Symposium, August 2000. “Substrate multiplicity of CYP3A4”.

Computational Chemistry/DMPK Workshop AstraZeneca Meeting, September 2000. “Use of protein and homology models for predicting P450 substrates inhibitors and activators: examples from the 2B and 3A subfamilies”.

The First Southwest P450 Meeting, May 2001. “Structural basis of CYP3A4 cooperativity”.

XIVth World Congress of Pharmacology, San Francisco, July 2002. “Structural determinants of cytochrome P450 3A4 substrate specificity and cooperativity”.

Sixth International Symposium on P450 Biodiversity: Functional Biochemistry & Molecular Biology of P450 Cytochromes in Microorganisms, Plants and Insects, Los Angeles, August 2002. “Site-directed mutagenesis of cytochrome P450eryF: Implications for substrate oxidation, cooperativity, and topology of the active site”.

Sixth International Conference on Drug-Drug Interactions, San Diego, June 2003. “Structure-function analysis of cytochromes P450 2B and 3A: Implications for prediction of substrate specificity and drug interactions”.

Thirteenth International Conference on Cytochromes P450: Biochemistry, Biophysics, and Drug Metabolism, Prague, June-July 2003. “Structural basis of P450 2B specificity”.

Twelfth North American ISSX Meeting, Providence, October 2003. “Cytochromes P450 2B as a model system for mammalian P450 structure-function analysis”.

AstraZeneca P450 Workshop, February 2004. “CYP2B4 structure and function”.

New England Drug Metabolism Group Summer Symposium, Shrewsbury, June 2004. “Structure and function of cytochromes P450 2B: Implications for prediction of drug metabolism”.

NIH Summit Workshop on Predictive Drug Toxicology, June 2004. “Use of x-ray crystal structures to predict mammalian cytochrome P450 function”.

Fifteenth International Symposium on Microsomes and Drug Oxidations, Mainz, July 2004.

“Mechanistic basis of atypical P450 kinetics”.

Eighth World Congress on Clinical Pharmacology and Therapeutics, Brisbane, August 2004. “Use of homology models and x-ray crystal structures for analysis and prediction of P450 function”.

The 125th Annual Meeting of the Pharmaceutical Society of Japan, Tokyo, March 2005. “Structure-function of cytochromes P450: implications for drug discovery and drug therapy”.

Eighth International Conference on Drug-Drug Interactions, Seattle, June 2005. “Structure-function of cytochromes P450: Implications for prediction of drug metabolism and drug interactions”.

Great Lakes Drug Metabolism Group, Second Annual Meeting, Ann Arbor, May 2007. “Conformational flexibility and heterogeneity of cytochromes P450”.

Fifteenth International Conference on Cytochromes P450, Bled, June 2007. “Insights into structure and function of cytochromes P450 2B”.

Eighth International Meeting of the International Society for the Study of Xenobiotics, Sendai, October 2007. “Structure and function of cytochromes P450 2B: X-ray crystallography and solution biophysical studies”.

9th International Symposium on Cytochrome P450 Biodiversity and Biotechnology, Nice, June 2008. “Similarities and differences between bacterial P450eryF and human P450 3A4 cooperativity”.

Seventeenth International Symposium on Microsomes and Drug Oxidations, Albany, July 2008. “Structure and function of P450 2B and 3A enzymes: Role of conformational flexibility and heterogeneity”.

Sixteenth International Conference on Cytochrome P450, Okinawa, Japan, June 2009. “Engineering of mammalian cytochromes P450 2B and 3A by site-directed mutagenesis and directed evolution”.

Sixteenth North American ISSX Meeting, Baltimore, October 2009. “Conformational plasticity and heterogeneity of cytochromes P450 2B and 3A: Implications for prediction of drug metabolism”.

Eighteenth International Symposium on Microsomes and Drug Oxidations, Beijing, China, May 2010. “Conformational plasticity of rabbit cytochrome P450 2B4 and human cytochrome P450 2B6: Implications for prediction of drug metabolism and interactions”.

Seventeenth International Conference on Cytochrome P450, Manchester, England, June 2011. “Structure and function of cytochromes P450 2B: X-ray crystallographic, solution biophysical, and computational studies”.

Society of Chinese Biochemists in America, 13th International Symposium, Guangzhou, China, July 2011. “Conformational plasticity of mammalian cytochromes P450: Implications for prediction of drug metabolism from X-ray crystal structures”.

Fifteenth International Conference on Drug-Drug Interactions, Seattle, June 2012. “Insights gained from mechanism-based inactivation studies with cytochromes P450 2B”.

2012 Gordon Conference on Drug Metabolism. July 2012. "Predicting Drug Metabolism using

Cytochrome P450 Structure".

Fourth CSSX/ISSX Joint Workshop, Kaifeng, China, May 2013. "What have we learned from a decade of X-ray crystallography of mammalian cytochromes P450?"

Eighteenth International Conference on Cytochrome P450, Seattle, June 2013. "Structural determinants of drug and hydrocarbon binding to P450 2B enzymes".

Tenth International ISSX Meeting, Toronto, September 2013. "Can we understand and predict ligand binding to a highly flexible P450"?

Nineteenth International Conference on Cytochrome P450, Tokyo, June, 2015. "Structural plasticity of human, rabbit, and rodent CYP2B enzymes: role in species differences".

Twenty-first International Symposium on Microsomes and Drug Oxidations, Davis, October 2016. "Studies of P450 2B selectivity: Plasticity, peripheral pockets, pi bonds, and packrats".

Seminars

Vanderbilt University, Department of Biochemistry, February 1980, "Inactivation of rat liver cytochrome P-450 by parathion".

National Institute of Environmental Health Sciences, May 1982, "Suicide inactivation of rat liver cytochrome P-450 by chloramphenicol".

Chemical Industry Institute of Toxicology, May 1982, "Suicide inactivation of rat liver cytochrome P-450 by chloramphenicol".

Vanderbilt University, Center in Environmental Toxicology, May 1982, "Suicide inactivation of rat liver cytochrome P-450 by chloramphenicol".

University of Michigan, Department of Biochemistry, June 1984, "Mechanism of inactivation of rat liver cytochrome P-450 by chloramphenicol".

Huddinge Hospital, Department of Medical Nutrition, September 6, 1988, "Design of isozyme-selective cytochrome P-450 inactivators".

Karolinska Institute, Department of Physiological Chemistry, September 8, 1988, "Design of isozyme-selective cytochrome P-450 inactivators".

Queen's University, Department of Pharmacology, October 14, 1988, "Design of specific cytochrome P-450 inactivators".

University of Toronto, Faculty of Pharmacy, October 17, 1988, "Design of specific cytochrome P-450 inactivators".

University of California at San Francisco, School of Pharmacy, May 22, 1989, "Design of isozyme selective inactivators of cytochromes P450".

Washington University, Department of Pharmacology, December 7, 1989, "Design of specific

cytochrome P-450 inactivators”.

University of California at Irvine, Department of Pharmacology, May 3, 1990, “Substrate and inhibitor probes of cytochrome P450IIB function”.

Vanderbilt University, Center in Molecular Toxicology, December 12, 1990, “Substrate and inhibitor probes of cytochrome P450IIB function”.

St. Jude Children's Research Hospital, Pharmaceutical Division, December 13, 1990, “Substrate and inhibitor probes of cytochrome P450IIB function”.

Oregon Health Sciences University, Department of Pharmacology, January 17, 1991, “Substrate and inhibitor probes of cytochrome P450IIB function”.

University of California at Los Angeles, Department of Environmental Health Sciences, April 17, 1991, “The role of cytochromes P450IIB in polychlorinated biphenyl detoxification”.

University of Alberta, Faculty of Pharmacy, May 16, 1991, “Substrate and inhibitor probes of cytochrome P450IIB function”.

Emory University, Departments of Pharmacology and Biochemistry, June 17, 1991, “Substrate and inhibitor probes of cytochrome P450IIB function”.

University of Arizona, Cancer Center, February 3, 1992, “Design of specific cytochrome P450 inhibitors”.

University of Montreal, Faculty of Medicine, May 15, 1992, “Substrate and inhibitor probes of cytochrome P450 2B function”.

Parke-Davis, March 17, 1992, “Characterization of canine hepatic cytochromes P450”.

Smith-Kline Beecham Pharmaceuticals, May 26, 1993, “Characterization of canine hepatic cytochromes P450”.

Huddinge Hospital, Center for Biotechnology, August 12, 1993, “Structural basis of cytochrome P450 2B specificity”.

Wayne State University, Department of Pharmacology, November 12, 1993, “Structural determinants of P450 2B specificity”.

Procter and Gamble, December 8, 1993, “Structural determinants of cytochrome P450 2B specificity”.

Procter and Gamble, December 8, 1993, “Characterization of canine hepatic cytochromes P450”.

University of Arizona, Cancer Center, August 29, 1994, “Structural basis of cytochrome P450 2B specificity”.

Pfizer Central Research, October 4, 1994, “Structural basis of cytochrome P450 2B specificity”.

Memorial University of Newfoundland, Department of Biochemistry, March 30, 1995, “Structural basis of cytochrome P450 2B specificity”.

Memorial University of Newfoundland, Health Science Center, March 31, 1995, “Use and design of selective cytochrome P450 inhibitors”.

Merck Research Laboratories, October 18, 1995, “Structure-function analysis of cytochromes P450 2B”.

University of Arizona, Department of Physiology, February 2, 1996, “Cytochromes P450: importance, inhibition, and structure-function”.

Oregon State University, Department of Biochemistry and Biophysics, April 9, 1996, “Structural basis of cytochrome P450 2B specificity”.

Pfizer Central Research, April 29, 1996, “Structure and function of canine cytochromes P450 2B and 3A”.

University of Minnesota, College of Pharmacy, May 21, 1996, “Structural basis of cytochrome P450 2B specificity”.

University of Louisville, Department of Pharmacology and Toxicology, August 26, 1996, “Structural basis of cytochrome P450 2B specificity”.

North Carolina State University, Department of Toxicology, September 11, 1996, “Structural basis of cytochrome P450 2B specificity”.

Purdue University, Department of Biochemistry, October 28, 1996, “Structural basis of cytochrome P450 2B specificity”.

Vanderbilt University, Center in Molecular Toxicology, March 7, 1997, “Structural basis of cytochrome P450 2B and 3A specificity”.

University of Michigan, Department of Pharmacology, April 9, 1997, “Structural basis of P450 2B and 3A specificity”.

Oregon State University, Environmental Health Sciences Center, April 24, 1997, “Structural basis of cytochrome P450 2B and 3A specificity: mutants, models, and mechanisms”.

University of Texas Medical Branch at Galveston, Department of Pharmacology and Toxicology, June 16, 1997. “Molecular basis of cytochrome P450 2B and 3A specificity”.

University of Maryland, College of Pharmacy, August 12, 1997, “Molecular basis of cytochrome P450 2B and 3A specificity”.

University of Florida, Superfund Program Project, September 17, 1997, “Molecular basis of cytochrome P450 2B and 3A specificity”.

Karolinska Institute, Department of Environmental Toxicology, Sweden, October 16, 1997, “Molecular basis of cytochrome P450 2B and 3A specificity: Mutants, models, and mechanisms”.

Huddinge University Hospital, Center for Biotechnology, October 20, 1997, “Molecular basis of cytochrome P450 2B and 3A specificity: Mutants, models, and mechanisms”.

University of Texas at Austin, November 3-4, 1999, “Structural basis of P450 2B and 3A specificity: Mutants, models, and mechanisms”.

Karolinska Institute, Department of Molecular Toxicology, Institute of Environmental Medicine, Sweden, December 2, 1999, “Site-directed mutagenesis and homology modeling of P450 2B and 3A enzymes: Structural basis of inhibition and activation”.

University of California, Davis, Department of Pharmacology, March 13, 2000, “Structural basis of P450 2B and 3A inhibition or activation: Mutants, models and mechanisms”.

Louisiana State University, Department of Pharmacology, April 10, 2000, “Structural basis of P450 2B and 3A inhibition or activation: Mutants, models and mechanisms”.

AstraZeneca Pharmaceuticals, Wilmington, Delaware, May 18, 2000, “Structural basis of P450 2B and 3A inhibition or activation: Mutants, models and mechanisms”.

Huddinge University Hospital, Center for Biotechnology, Sweden, September 4, 2000, “Structural basis of cytochrome P450 2B and 3A specificity: mutants, models, and mechanisms”.

Uppsala University, Department of Biochemistry, Sweden, September 7, 2000, “Structural basis of cytochrome P450 2B and 3A specificity: mutants, models, and mechanisms”.

University of Arkansas Medical Sciences, Little Rock, Arkansas, February 14, 2001, “Structural basis of cytochrome P450 2B and 3A specificity: mutants, models, and mechanisms”.

West Virginia University, Health Sciences Center, April 11, 2001, “Mechanism-based inactivation of cytochromes P450 and design of selective inhibitors”.

West Virginia University, Health Sciences Center, April 11, 2001, “Species, strain, and individual differences in P450 2B and 3A function”.

West Virginia University, Health Sciences Center, April 12, 2001, The Wellcome Lecture “Structure-function relationships of mammalian drug-metabolizing cytochromes P450”.

University of Utah, Department of Pharmacology and Toxicology, April 23, 2001, “Structural basis of cytochrome P450 2B and 3A specificity: mutants, models, and mechanisms”.

University of Texas Health Science Center at San Antonio, March 22, 2002, “Structure and function of cytochromes P450 2B and 3A: mutants, models, and mechanisms”.

Karolinska Institute, Department of Molecular Toxicology, Institute of Environmental Medicine, December 16, 2002, “Structural basis of cytochrome P450 2B specificity”.

University of Texas Medical Branch, Department of Medicine, April 8, 2003, “Cytochromes P450 2B as a model system for mammalian P450 structure-function analysis”.

Vanderbilt University, Center in Molecular Toxicology, March 18, 2004, “Twenty-five years of research on cytochromes P450 2B”.

AstraZeneca, Lund, May 10, 2004, “Structural basis of cytochrome P450 2B specificity”.

Karolinska Institute, Department of Molecular Toxicology, Institute of Environmental Medicine, May 13, 2004, “Structural and functional aspects of cytochrome P450-dependent drug metabolism and toxicity”.

Huddinge University Hospital, Center for Biotechnology, May 14, 2004, “Twenty-five years of research on cytochromes P450 2B”.

University of Michigan, Department of Pharmacology, June 2, 2004, “Structural and functional aspects of cytochrome P450-dependent drug metabolism”.

Pfizer, Ann Arbor, June 3, 2004, “Structural basis of cytochrome P450 2B specificity”.

University of Queensland, School of Biomedical Sciences, August 5, 2004, “Structural basis of cytochrome P450 2B specificity”.

Fifth Annual Structural Biology Symposium, Galveston, September 28, 2004, “Structure and function of cytochromes P450 2B and 3A: role of conformational flexibility in enzyme function”.

University of Colorado Health Sciences Center, Department of Pharmaceutical Sciences, October 21, 2004, “Structural and functional aspects of cytochrome P450-dependent drug metabolism”.

University of Arizona, Southwest Environmental Health Sciences Center, November 4, 2004, “Structural and functional aspects of cytochrome P450-dependent drug metabolism”.

Uppsala University, Department of Biochemistry, Sweden, December 7, 2004, “Role of cytochromes P450 in drug metabolism and toxicity: use of x-ray structures for prediction of P450 function”.

Astex, December 9, 2004, “Structural and functional aspects of cytochrome P450 2B dependent drug metabolism”.

NIEHS, February 14, 2005, “Structure and function of cytochromes P450 2B: role of conformational flexibility”.

GlaxoSmithKline, February 15, 2005, “Structural and functional aspects of cytochrome P450 2B dependent drug metabolism”.

Shionogi & Co., LTD., Japan, March 2005, “Structural and functional aspects of cytochrome P450 2B dependent drug metabolism”.

KECK/HAMPB Center, Rice University, Houston, October 14, 2005, “Structure and function of cytochromes P450: role of conformational flexibility in enzyme function”.

Pfizer, Inc., St. Louis, MO, October 18, 2005, “Structure and function of cytochromes P450 2B: role of conformational flexibility”.

Karolinska Institute, Department of Molecular Toxicology, Institute of Environmental Medicine, Sweden, November 15, 2005, “Can we use x-ray crystal structures to predict cytochrome P450-dependent drug metabolism?”

AstraZeneca, Sweden, November 18, 2005, “Can we use x-ray crystal structures to predict cytochrome P450-dependent drug metabolism?”

Emory University, Department of Pharmacology, January 17, 2006. “Can we use x-ray crystal structures to predict cytochrome P450-dependent drug metabolism?”

University of Kansas, Department of Medicinal Chemistry, February 21, 2006. “Can we use x-ray crystal structures to predict cytochrome P450-dependent drug metabolism?”

University of California at San Diego, Skaggs School of Pharmacy and Pharmaceutical Sciences, April 9, 2007. “Conformational plasticity of cytochromes P450: Implications for prediction of drug metabolism”.

Pfizer, Inc., La Jolla, CA, April 4, 2008. “Structure and function of cytochromes P450 2B: From mechanism-based inactivators to X-ray crystal structures”.

University of California at San Diego, Department of Chemistry and Biochemistry, October 29, 2008. “Conformational flexibility and heterogeneity of cytochromes P450”.

University of Missouri, Kansas City, College of Pharmacy, March 26, 2009. “Conformational flexibility and heterogeneity of cytochromes P450”.

Pfizer, Inc., La Jolla, CA, April 24, 2009. “Structure and function of cytochromes P450 2B: From mechanism-based inactivators to X-ray crystal structures”.

Pfizer, Inc., La Jolla, CA, September 11, 2009. “Structure-function of cytochromes P450: Implications for prediction of drug metabolism”.

University of Toronto, Distinguished Lectureship in Pharmacology & Toxicology, September 15, 2009. “Conformational flexibility and heterogeneity of cytochromes P450: Implications for prediction of drug metabolism and interactions”.

AstraZeneca, Sweden, October 2, 2009. “Conformational flexibility and heterogeneity of cytochromes P450: Implications for prediction of drug metabolism and interactions”.

University of California, San Diego, May 10, 2011. “Conformational plasticity of rabbit cytochrome P450 2B4 and human cytochrome P450 2B6: Implications for prediction of drug metabolism and interactions”.

University of Washington, May 12, 2011. “Conformational plasticity of rabbit cytochrome P450 2B4 and human cytochrome P450 2B6: Implications for prediction of drug metabolism and interactions”.

Shanghai Institute of Materia Medica, Chinese Academy of Sciences, August 8, 2011. “Conformational plasticity of mammalian cytochromes P450: Implications for prediction of drug metabolism from X-ray crystal structures”.

Karolinska Institute, Department of Physiology and Pharmacology, Sweden, October 7, 2011. “Conformational plasticity of mammalian cytochromes P450: Implications for prediction of drug metabolism from X-ray crystal structures”.

National Institute of Health Sciences, Division of Medicinal Safety Science, Tokyo, October 16, 2012. “Use of X-ray crystal structures for prediction of drug metabolism and interactions”.

Soochow University, School of Pharmacy, Suzhou, China. January 4, 2013. “Use of cytochrome P450 X-ray crystal structures for prediction of drug metabolism and interactions”.

Jiao Tong University, College of Pharmacy, Shanghai, China, May 21, 2013. “Use of cytochrome P450 X-ray crystal structures for prediction of drug metabolism and interactions”.

Shanghai University of Traditional Chinese Medicine, Shanghai, China, May 22, 2013. “Use of cytochrome P450 X-ray crystal structures for prediction of drug metabolism and interactions”.

Roche Pharmaceuticals, Shanghai, China, May 23, 2013. “Use of cytochrome P450 X-ray crystal structures for prediction of drug metabolism and interactions”.

Wenzhou University, School of Pharmacy, Wenzhou, China, December 15, 2014. “Structural basis of cytochrome P450 specificity: Prediction of drug metabolism”.

China Pharmaceutical University, Nanjing, China, December 16, 2014. “Structural basis of cytochrome P450 specificity: Prediction of drug metabolism”.

Peking University, School of Pharmacy, Beijing, China, December 18, 2014. “Structural basis of cytochrome P450 specificity: Prediction of drug metabolism”.

Taipei Medical University, School of Pharmacy, Taipei, Taiwan, December 22, 2014. “Structural basis of cytochrome P450 specificity: Prediction of drug metabolism”.

University of Texas Medical Branch, Environmental Health Sciences Center, April 13, 2015. “Structural basis of cytochrome P450 specificity: Prediction of drug metabolism”.

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