

CURRICULUM VITAE

March 2009

NANCY RUTLEDGE ZAHNISER

Professor & Associate Dean for Research Education
University of Colorado Denver, School of Medicine
Department of Pharmacology
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EDUCATION AND EMPLOYMENT HISTORY:

1966-1970 B.A. in chemistry, College of Wooster, Wooster, OH
1971 High School Science Teacher, Woodstock School, Mussoorie, U.P., India
1972-1977 Ph.D. in pharmacology, Department of Pharmacology, University of Pittsburgh, School of Pharmacy, Pittsburgh, PA (Dr. Israel Hanin, thesis advisor)
1977-1980 Postdoctoral fellow, Department of Pharmacology, School of Medicine (SOM), University of Colorado Health Sciences Center (UCHSC), Denver, CO (Dr. Perry B. Molinoff, mentor)
1980-1981 Instructor, Department of Pharmacology, SOM, UCHSC, Denver, CO
1981-1987 Assistant Professor, Department of Pharmacology, SOM, UCHSC, Denver, CO
1985-1987 Assistant Professor, Neuroscience Program, SOM, UCHSC, Denver, CO
1987-1991 Associate Professor, Department of Pharmacology, Neuroscience Program and Medical Student Training Program (MSTP), SOM, UCHSC, Denver, CO
1991-present Professor, Department of Pharmacology, Neuroscience Program and MSTP, SOM, University of Colorado Denver (UC Denver), Aurora, CO
1994 Sabbatical leave, Vollum Institute, Oregon Health Sciences University, Portland, OR (Dr. Susan G. Amara's laboratory)
1998-present Professor, Biomedical Science Program (BSP), SOM, UC Denver, Aurora, CO
2003-2004 Vice Chair, Department of Pharmacology, SOM, UCDHSC, Aurora, CO
2004-2005 Acting Chair, Department of Pharmacology, SOM, UCDHSC, Aurora, CO
2005-2007 Vice Chair, Department of Pharmacology, SOM, UCDHSC, Aurora, CO
2006 Acting Chair, Department of Pharmacology, SOM, UCDHSC, Aurora, CO
2007-present Associate Dean for Research Education, SOM, UC Denver, Aurora, CO

RESEARCH INTERESTS:

- Cellular mechanisms regulating dopamine transporter trafficking and activity
- Role played by dopamine and glutamate systems in individual differences in cocaine-induced behavioral activation, addiction and toxicity
- Interactions of adenosine and dopamine in the basal ganglia and limbic systems

FELLOWSHIPS AND HONORS:

1974-1976 National Institutes of Health Predoctoral Traineeship
1976-1977 University of Pittsburgh Equalization Opportunity Grant
1978-1980 National Institutes of Health Postdoctoral Fellowship
1984-1986 Pharmaceutical Manufacturers Association Foundation Faculty Development Award
1992, 2002 Department of Pharmacology Faculty Award: Excellence in Teaching
1992-2002 Research Scientist Development Award from National Institute on Drug Abuse (NIDA)
1993-1995 Vice-Chair, Gordon Research Conference on Catecholamines
1994 Elizabeth Gee Memorial Lectureship Award, University of Colorado
1995-1997 Chair, Gordon Research Conference on Catecholamines
1998, 2001 UCHSC School of Medicine Medical Student Council Excellence in Teaching Award
1999-present NIH MERIT Award (NIDA)
2000 Ph.D. thesis examiner, Karolinska Institute, Stockholm, Sweden
2001-2002 Secretary-Treasurer of the American Society for Pharmacology and Experimental Therapeutics (ASPET)
2001-2005 PI, Postdoctoral Training Grant (NIAAA)
2002-present Senior Scientist Award (NIDA)
2002-2006 NIH National Advisory Council on Drug Abuse
2003 University of Pittsburgh School of Pharmacy Distinguished Lecturer
2003-2005 NIDA Council liaison to the NIDA Intramural Research Program
2004 First Annual "Israel Hanin Seminar", Dept. Pharmacology, Loyola University Stritch School of Medicine
2005-2006 Fellow, Executive Leadership in Academic Medicine (ELAM) program
2005-present PI, Pharmacology Predoctoral Training Grant (NIGMS)
2006 Third Annual Mariann Blum Lectureship in the Neurosciences, University of Texas Health Sciences Center, San Antonio
2007-present Associate Dean for Research Education, UC Denver School of Medicine
2007-present Member, NIDA Intramural Research Program Board of Scientific Counselors
2008 Department of Pharmacology Faculty Award: Excellence in Research
2009 University of Pittsburgh School of Pharmacy Distinguished Alumna Award

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

1979-present Society for Neuroscience (SFN)
1982-present American Society for Pharmacology and Experimental Therapeutics (ASPET)
1992-2009 Research Society on Alcoholism (RSA)
2001-2009 International Society for Biomedical Research on Alcoholism (ISBRA)

EDITORIAL BOARDS:

1991-2003 *Pharmacological Communications*
1994-2008 *CNS Neuroscience & Therapeutics*
2001-present *Journal of Neuroscience Methods*

JOURNAL REVIEWS:

1980-present *Ad hoc* reviewer: *J. Neurosci., Neuroscience, J. Neurochem., J. Pharmacol. Exp. Ther., Mol. Pharmacol., Science, J. Biol. Chem., Alcohol Drug Res., Neurosci. Lett., Pharmacol. Biochem. Behav., Brain Res., Neurochem. Res., Life Sci., Biochem. Pharmacol., Alcohol, Alcohol. Clin. Exp. Res., Neuropsychopharmacology, J. Neurosci. Res., Neuropsychiatric Genetics, Curr. Pharmacogenomics, Proc. Natl. Acad. Sci. USA, Biol. Psychiatry, Curr. Drug Targets, Eur. J. Neurosci., Psychopharmacology, Synapse, Neuropharmacology, Prog. Neuro-Psychopharmacol., Biol. Psychiatr., Int. J. Neuropsychopharmacology*

NATIONAL/INTERNATIONAL GRANT REVIEW PANELS:

1983-present *Ad hoc* reviewer: NSF, Human Frontier Science Program, VA, NY Academy of Sciences and March of Dimes, North Dakota EPSCoR Seed Grant Program, Austrian Science Fund, and New Zealand Marsden Fund grant proposals

1984 NIA Program Project Site Visit Committee, *ad hoc* member

1986-1990 NIH Neurological Sciences Study Section (Subcommittee 2), regular member

1991-1995 NIDA Pharmacology II Study Section, regular member

1993 NIMH New Neuroscience of Mental Health Workshops, Neuropsychopharmacology Panel

1996 NIMH Special Emphasis Panel

1997 NIDA Neuropharmacology Research Subcommittee, *ad hoc* member

1998 NIMH Molecular, Cellular and Developmental Neurobiology Review Committee, *ad hoc* member

1998 NIDA Medication Development Special Emphasis Panel, *ad hoc* chair

1999 NIH Molecular, Cellular and Developmental Neurobiology-5 Special Emphasis Panel, *ad hoc* member

2000 NIH Special Emphasis Panel ZRG1-IFCN-2(3M), *ad hoc* member

2001 NIDA "Cutting Edge Basic Research Award" (CEBRA) Program Initiative

2005 Austrian Science Fund (FWF) grant application

2006 Human Frontier Science Program fellowship review

2007 NIDA "Cutting Edge Basic Research Award" (CEBRA) Program Initiative, reviewer

2007 NIGMS BRT-A (training grant) Review Committee, *ad hoc* member

2007 NIDA K99/R00 Review Committee, *ad hoc* member

NATIONAL COMMITTEES:

1985-1988 ASPET Subcommittee on Women in Pharmacology

1993-1999 Scientific Advisory Committee, The New England Regional Primate Center, Harvard Medical School

1996-1999 ASPET Neuropharmacology Executive Committee

1997-1998 WCBR Program Committee

1998-1999 NIDA Search Committee for the Director of the Division of Basic Research

1999-2000 ASPET Short Course/Continuing Education Committee

- 1999-present Scientific Advisory Board, University of Texas Waggoner Center for Alcohol and Addiction Research
- 2000-2003 ASPET Council
- 2000-2003 ASPET Finance Committee and Investment Subcommittee
- 2000-2003 ASPET Council liaison to ASPET Committee on Minorities
- 2001 University of Texas Institute for Neuroscience Review Committee
- 2002 Search Committee for a Tenured Scientist in the Cellular Neurophysiology Branch, NIDA Intramural Research Program
- 2002-2006 NIH National Advisory Council on Drug Abuse
- 2002-2006 NIH National Advisory Council on Drug Abuse Steering Committee
- 2003 NIDA Intramural Research Program Board of Scientific Councilors
- 2003-present Scientific Advisory Board for the Oregon Health and Sciences University Methamphetamine Abuse Research Center (MARC)
- 2003-present Scientific Advisory Board for the University of Utah NIH Program Project “Differential Effects of Methamphetamine and Cocaine”
- 2003-2005 NIDA Council liaison to the NIDA Intramural Research Program
- 2003-2005 “Kitchen Cabinet” Committee for 2005 Catecholamine Gordon Research Conference
- 2004-2006 ASPET Goodman and Gilman Award in Receptor Pharmacology Committee
- 2005 University of Utah Graduate Council External Review Committee for the Department of Pharmacology & Toxicology
- 2005-present External Review Committee and Scientific Advisory Board for University of Kentucky Center for Drug Abuse Research Translation (CDART)
- 2006-2008 ASPET Awards Committee
- 2006-present Society for Neuroscience Jacob P. Waletzky Memorial Award Committee
- 2007-present NIDA Intramural Research Program (IRP) Board of Scientific Counselors
- 2008-2009 NIDA IRP Search Committee for Investigator (Tenure-Track)

ORGANIZATION OF NATIONAL MEETINGS:

- 1995 “Gordon Research Conference on Catecholamines”, co-organizer
- 1996 “Catecholamine Storage and Transporter” Theme, 8th International Catecholamine Symposium, co-organizer
- 1997 “Gordon Research Conference on Catecholamines”, organizer
- 1998 Symposium for American Society for Neurochemistry Annual Meeting, “New Insights into Regulation of Monoaminergic Neurons: A Symposium in Honor of Dr. Norman Weiner”, organizer
- 1998 Symposium for Experimental Biology Annual Meeting, “Genetic and Epigenetic Regulation of Monoamine Transporters”, co-organizer
- 2000 ASPET Continuing Education Short Course for ASPET/ASBMB Annual Meeting, “Introduction to Receptors and Cell Signaling”, co-organizer
- 2001 Symposium for Research Society on Alcoholism Annual Meeting, “Emerging Evidence for Interactions between Ethanol and Alcoholism and Monoamine Transporters”, co-organizer
- 2002 Winter Conference on Brain Research panel, “Substrate-Mediated Regulation of Neurotransmitter Transporters”, organizer
- 2002 Dopamine 2002 Meeting session, “Presynaptic Mechanisms: Dopamine Synthesis, Release, and Reuptake”, invited co-organizer

MENTORING OF THESIS STUDENTS, MEDICAL STUDENTS, AND POSTDOCTORAL FELLOWS AT UC DENVER:

1982-1986 Robert P. Yasuda, Ph.D. thesis research
1984-1988 Joanna Peris, postdoctoral research
1984-1987 Jerry A. Miller, postdoctoral research
1984-1986 Linda P. Dwoskin, postdoctoral research
1986-1989 Donald M. Burnett, Ph.D. thesis research
1986-1987 Carol M. Bier-Laning, medical student honors project
1988-1991 Wayne A. Cass, postdoctoral research
1990-1992 David R. Wallace, postdoctoral research
1990-1993 R. Dayne Mayfield, postdoctoral research
1992-1995 Elizabeth J. Cline, postdoctoral research
1994-1996 Margaret J. Velardo, Ph.D. thesis research
1994-1996 Si-Jia Zhu, postdoctoral research
1996-1998 Shelly D. Dickinson, postdoctoral research
1997-1998 Dan Zhou, postdoctoral research
1998-2002 Jilla Sabeti, Ph.D. thesis research
1998-2002 Taleen Hanania, postdoctoral research
1998-2002 Suzanne Doolen, postdoctoral research
1999 Hollie Wayment, postdoctoral research
2000-2004 Heather M. Haughey, postdoctoral research
2000-2004 Joshua M. Gulley, postdoctoral research
2002-2007 Brian R. Hoover, postdoctoral research
2003-2004 Sophia Briegleb, M.S. thesis research
2005-present Bruce H. Mandt, Ph.D. thesis research
2006-present Anna M. Nelson, Ph.D. thesis research
2006-present Toni L. Richards-Winter, postdoctoral research
2007-present David A. Price, postdoctoral research
2007-present Dorothy J. Yamamoto, Ph.D. thesis research
2007-present Melissa J. Kleschen, medical student “Mentored Scholarly Activity”

MENTORING OF FACULTY:

- 1986-1988 Mentor for Dr. Linda P. Dvoskin, Instructor in Department of Pharmacology, UCHSC
1986-1990 Co-Sponsor on CIDA Award of Dr. Sally J. Boyson, Department of Neurology, UCHSC
1993-1999 Mentor for Dr. R. Dayne Mayfield, Instructor in Department of Pharmacology, UCHSC
2002-2004 Mentor for Dr. Taleen Hanania, Instructor in Department of Pharmacology, UCHSC
2002-2006 Consultant on K08 Award of Dr. Jody Tanabe, Department of Radiology, UCDHSC
2002 Consultant for the revision of Howard Hughes starter grant of Dr. Irina Grichtchenko, Department of Physiology & Biophysics, UCHSC
2003-present Mentor and Sponsor for K08 Award to Dr. Kennon Heard, Department of Surgery and Division of Emergency Medicine, UC Denver
2004-present Mentor for Dr. Ulli Bayer, Department of Pharmacology, UC Denver
2006-present “Senior distance mentor” for Dr. Habibeh Khoshbouei, Assistant Professor, Department of Biomedical Sciences, Meharry Medical College, Nashville, TN

FACULTY SABBATICALS IN MY LABORATORY:

- 1990-1991 Kim A. Heidenreich, Associate Professor, U California at San Diego
2007 Susan Schenk, Professor and Head of School of Psychology, Victoria U of Wellington, New Zealand
2008 Richard M. Allen, Associate Professor, Department of Psychology, UC Denver

COURSE DIRECTION AT UC DENVER:

- 1980-1981 Graduate Student Introductory Pharmacology course, director
1981-1982 Medical Student Pharmacology course, co-director of second quarter
1982 Graduate Student Membrane Pharmacology course, co-director
1983-1985 Medical Student Pharmacology course, co-director of second quarter
1984 Graduate Student Biochemical Neurotransmission course, director
1985-1989 Graduate Student Molecular Pharmacology course and laboratory, co-director
1990-1993 Medical Student Pharmacology course, co-director
1991 Neuropharmacology course for Third Year Psychiatry Residents, organizer
1994-1997 Graduate Student Molecular Pharmacology course, co-director
1997-1999 Medical Student Pharmacology course, co-director
1999-2000 Graduate Student Ethics in Research course, co-director
2002-2004 Graduate Student Pharmacology course, co-director
2005-2006 Medical Student Pharmacology course, co-director
2008 Pharmacology Advanced Elective: Drug Addiction Research, co-organizer and -director

TEACHING RESPONSIBILITIES:

- 1971 High school teacher (science, chemistry and physics), Woodstock School, Mussoorie, India
- 1972-1977 Laboratory Assistant in Pharmacy Student Pharmacology course and lecturer in Pharmacy Student Physiology course, University of Pittsburgh School of Pharmacy
- 1980-1997 Lecturer in Graduate Student Introductory Pharmacology course, UCHSC
- 1981-1991 Lecturer in Dental Student Pharmacology course, UCHSC
- 1981-2005 Lecturer in Medical Student Pharmacology course, UCDHSC
- 1982 Lecturer in Graduate Student Membrane Pharmacology course, UCHSC
- 1984-1997 Lecturer in Graduate Student Neuropharmacology course, UCHSC
- 1984-1985 Lecturer in Graduate Student Biochemistry course, UCHSC
- 1985-1997 Participant in Graduate Student Molecular Pharmacology course, UCHSC
- 1989-1990 Lecturer in Graduate Student Gerontological Pharmacology course, UCHSC
- 1991-1993 Lecturer in Neuropharmacology course for Third Year Psychiatry Residents, UCHSC
- 1995 Lecturer in Basic Science Course for Neurology Residents, UCHSC
- 1996- 2002 Discussion Leader in Graduate Student Ethics course, UCHSC
- 1997 Discussion Leader in Endocrinology Journal Club, UCHSC
- 1998-2001 Lecturer in Graduate Student Biomedical Sciences Core Course, UCHSC
- 1998-2000 Lecturer in Graduate Neuroscience Molecules to Behavior course, UCHSC
- 1998-present Lecturer in Graduate Pharmacology course, UC Denver
- 1999 Lecturer in Current Topics in Neuroscience course, Regis University, Denver, CO
- 1999-present Lecturer in Graduate Cellular & Molecular Neurobiology course, UC Denver
- 2000 Lecturer in Graduate Frontiers in Pharmacology course, UCHSC
- 2002 2007 Lecturer in neuropharmacology for Neurology Residents, UCHSC
- 2002-2003 Discussion leader in Graduate Student Ethics course, UCHSC
- 2004, 2006, 2008 Lecturer in Graduate Molecular Basis of Neuropsychiatric Disorders course, UC Denver
- 2006-present Lecturer in Medical School integrated curriculum, UC Denver
- 2006 Lecturer in Graduate Tissue Biology and Disease Mechanisms, UC Denver
- 2007-present Lecturer in neuropharmacology for Neurology Residents, UC Denver
- 2008 Lecturer in Pharmacology Advanced Elective: Drug Addiction Research, UC Denver
- 2008 Lecturer in Graduate Frontiers in Pharmacology, UC Denver

SUPERVISION OF STUDENT RESEARCH ROTATIONS AT UC DENVER:

- 1982 Danny Stene, Pharmacology graduate student
- 1983 Michael Hall, Pharmacology graduate student
- 1985 Michelle Mynlieff, Pharmacology graduate student
- 1986 Donald Burnett, Pharmacology graduate student
Carol Bier-Laning, Medical student
Karen Parfitt, Pharmacology graduate student
Peter Huettl, Pharmacology graduate student
- 1987 Dianne Metcalf, MSTP student
- 1988 Lie-Huey Lin, Neuroscience graduate student
- 1989 Brandi Soldo, Pharmacology graduate student
Janice Gleavy, Pharmacology graduate student

1990 Anne Wiser, Neuroscience graduate student
 1991 Barbara Duff, Pharmacology graduate student
 1991-1992 Danny Muskardin, Pharmacology graduate student
 1992 James Brundage, Pharmacology graduate student
 1993 Richard A. Orona, UC Denver undergraduate student
 1993 Brett Masayeva, Alcohol Research Center summer undergraduate student
 1993 Kelley Wear, Neuroscience graduate student
 1993 T.K. Booker, Pharmacology graduate student
 1995 Cheryl Bykowitz, Pharmacology graduate student
 1996 Danielle Salaz, Alcohol Research Center summer undergraduate student
 1997-1998 Jilla Sabeti, Pharmacology graduate student
 1997 Kathleen Brady, Regis University senior internship
 1998 Amy Henderson, MSTP graduate student
 2002 Eric Horne, Pharmacology graduate student
 2002 Katherine Barlow, Neuroscience graduate student
 2002-2003 Beth Stubblefield, Pharmacology graduate student
 2003-2004 Danielle Salaz, Pharmacy workstudy student
 2003 Sophia Briegleb, Neuroscience graduate student
 2003 Anne M. Lyons, Alcohol Research Center summer undergraduate student
 2004 Bruce Mandt, Pharmacology graduate student
 2005 Tianna Hicklin, Neuroscience graduate student
 2005 Anna Nelson, MSTP graduate student
 2005 Rebekah Vest, Pharmacology graduate student
 2005-2006 David Cantu, Neuroscience graduate student
 2006 Dorothy Yamamoto, Pharmacology graduate student
 2007 Carmen Sepulveda, Summer Undergraduate Research Fellowship (SURF) student
 2008 Rachael Cave, SURF student

UC DENVER THESIS ADVISORY AND DEFENSE COMMITTEES:

1981-1985 Margaret Contreras, Dept. Pharmacology
 1981-1986 Chris Bode, Dept. Pharmacology
 1981-1985 Stewart Abramson, Dept. Pharmacology
 1982 Susan Sadler, Dept. Pharmacology
 1984 Larry Bazier, Dept. Pharmacology
 1984 Mindy Fine, Dept. Pharmacology
 1984-1987 Michael Hall, Dept. Pharmacology
 1985-1988 Michelle Mynlieff, Dept. Pharmacology
 1986 Ron Emeson, Dept. Physiology
 1987-1991 David Sundin, Dept. Biochemistry, Biophysics and Genetics
 1987-1990 Bruce Murrow, Dept. Physiology (MSTP)
 1988-1991 Dianne Metcalf, Dept. Microbiology and Immunology (MSTP)
 1989 Karen Parfitt, Dept. Pharmacology
 1989 Peter Huettl, Dept. Pharmacology
 1989 Lise Thomas, Dept. Pharmacology
 1989-1993 Jordon Firestone, Dept. Pharmacology (MSTP)
 1993 Jo Velardo, Neuroscience Program

1993 John Glod, Dept. Pharmacology (MSTP)
 1993-1996 Yvonne Rollins, Dept. Pharmacology (MSTP)
 1994-1995 Anne Wiser, Neuroscience Program
 1994-1995 Carol Hope, Dept. Pharmacology
 1995-1998 Kathy Farrow, Dept. Biochemistry, Biophysics and Genetics (MSTP)
 1995-1998 Cristina Bäckman, Neuroscience Program
 1995-1996 Valerie Whatley, Dept. Pharmacology
 1995-1998 Marc Hurlbert, Dept. Pharmacology
 1996-1999 Alex Hoffman, Dept. Pharmacology
 1997 Dan David, Neuroscience Program
 1997-1999 Elizabeth Gonzales, Dept. Pharmacology
 1997-2002 Shelli Kirsten, Dept. Pharmacology - chair
 1998-1999 Burns Blaxall, Dept. Pharmacology
 2000-2001 David Grosshans, Dept. Pharmacology (MSTP)
 2002-2005 Erik Maclaren, Dept. Pharmacology - chair
 2002-2004 Enrique Alavarez, Neuroscience Program (MSTP)
 2004-2006 Brandon Cornejo, Dept. Pharmacology (MSTP) - chair
 2004-2005 Christina Rapp Prescott, Neuroscience Program (MSTP) - chair
 2004-2006 Roman Brunecky, Dept. Pharmacology
 2005 Davin Korstjens, Dept. Pharmacology - chair
 2006-2008 Adele Blackler, Dept. Pharmacology
 2006-2008 Elizabeth Stubblefield, Dept. Pharmacology
 2007-2008 Renee L. Good, Toxicology Program, School of Pharmacy
 2007-present Brian Ziemba, Dept. Pharmacology
 2007-present Tianna Hicklin, Neuroscience Program – chair
 2008 Holly H. Robertson, Dept. Pharmacology
 2008-present Santiago Farias, Neuroscience Program

ADVISOR FOR UC DENVER GRADUATE STUDENT “MAJOR SEMINARS”:

1981 Robert Yasuda
 1982 Kevin Pang
 1983 Michael Hall
 1984 Linda Fossum
 1991 David Flory
 1997 Shelli Kirsten
 2001 Jason Tregellas
 2003 Brandon Cornejo
 2004 Wei Hu
 2005 Holly Hudson Robertson

UC DENVER COMPREHENSIVE EXAM COMMITTEES (Dept. Pharmacology, unless noted):

1981	Paula Bickford
1982	Joe Zirrolli, Peter Haroldson, Ron Emeson (Physiology)
1983	David Young (Physiology), Michael Hall
1984	Linda Fossum
1985	Kevin Caldwell
1986	Donald Burnett, David Sundin (Biochemistry, Biophysics and Genetics)
1987	Brian Regis (Microbiology and Immunology), David Engstrom, Bruce Murrow (Physiology)
1989	Dianne Metcalf (Microbiology and Immunology/MSTP), David Jones
1990	Jun Li, Ken Malcom, John Glod (MSTP)
1991	Janice Gleavy, Anya Lin
1992	Danny Muskardin
1993	Jo Velardo (Neuroscience), Rich Klinghoffer, Jason Frazier (Neuroscience)
1995	Tom Schlesinger (MSTP), Kathy Farrow (Biochemistry Biophysics and Genetics /MSTP), Teri Whisenand (Neuroscience), Gail Perez (Neuroscience), Christina Bäckman (Neuroscience)
1996	Alex Hoffman, Meleik Hebert (Neuroscience)
1997	Devon Zastrow (Neuroscience), Chen Gu (Neuroscience), Leonard Kish (Neuroscience), Shelli Kirsten
1998	Larry Martinez, Michele Schaefer (Neuroscience)
2000	David Grosshans (MSTP)
2001	Enrique Alavarez (MSTP)
2003	Christina Rapp (MSTP/Neuroscience) - chair
2004	Davin Korstjens - chair
2005	Angela Zimmerman (Neuroscience), Adele Blackler
2006	Brian Ziemba, Tianna Hicklin (Neuroscience) – chair, Kennon Heard (Clinical Science)
2007	David Cantu (Neuroscience)
2008	Santiago Farias (Neuroscience)

UNIVERSITY OF COLORADO SYSTEM-WIDE COMMITTEES:

1995-1997	Elizabeth Gee Memorial Lecture Award Committee
2006-2007	Elizabeth Gee Award Committee

UC DENVER COMMITTEES:

1982-present	Graduate Faculty
1984	Gerontology Subcommittee of the Long Range Planning Committee
1983-1985	Curriculum Review Committee
1985-1986	Search Committee for Department of Anesthesiology Chairperson
1985-1986	Salary Equity Review Committee
1986-1990	BRS Committee
1986-1990	Graduate Committee
1989-present	<i>Ad hoc</i> subcommittees of the Faculty Promotions Committee
1990-1991	Search Committee for Neuroscience Program Faculty
1991	Graduate Student Fellowship Competition Committee
1992-1993	Dean's Advisory Committee
1992-1993	Dean's Distinguished Seminar Series, sponsor
1992-1993	Search Committee for Department of Physiology Chairperson
1994-1997	Medical Student Promotions Committee
1994-present	MSTP Credentials Committee
1995-1998	Neuroscience Program Graduate Training Committee
1999-2000	Neuroscience Program Advisory Committee
2000	Neuroscience Program Training Grant Committee, chair
1999-2003	Medical Student Promotions Committee
1999-2000	Search Committee for Department of Psychiatry Chair
2000-2003	Faculty Senate, representative from the Department of Pharmacology
2001-2001	Neuroscience Program Seminar Committee
2001-2006	Neuroscience Program Membership Committee, chair
2001-2006	Neuroscience Program Steering Committee
2003-2004	Search Committee for Department of Pathology Chair
2003-2005	Women's Health Research Initiative, Advisory Committee
2004-present	Women in Medicine Committee
2004	MSTP Associate Director Search Committee
2004-2005	School of Medicine Executive committee
2004-2005	Basic Science Chairs Committee
2005-2006	Committee on Class Size & Tuition
2005-2006	SOM Task Force on Basic Science Reorganization
2006	Search Committee for School of Pharmacy Dean
2006-2007	Search Committee for UC Denver Vice Chancellor for Research
2007-2008	Clinical Translational Science Award (CTSA) Research Education Administration Committee
2007-present	School of Medicine Clinical Translational Advisory Committee (CTRAC)/Colorado Clinical Translational Science Institute (CCTSI) Internal Advisory Committee (IAC)
2007	UC Denver Learning Task Force
2007-present	BNAT Training Committee
2008-present	CCTSI Education Training and Career Development (ETCD) Executive Committee
2008-present	Research Advisory Committee (RAC), <i>ad hoc</i> member
2008-present	School of Medicine Faculty Promotions Committee
2009-present	UC Denver Accreditation Task Force 3

UC DENVER DEPARTMENT OF PHARMACOLOGY COMMITTEES:

1984-1991	Graduate Training Committee
1987-1990	Graduate Training Committee, chair
1990-2000	UPI/ICR Committee
1990-2001	Curriculum Committee
1994-1995	Graduate Training Committee
1994-1995	Departmental Programs Committee
1996-2004	Promotions Committee and Post-Tenure Review Committee
1997	Committee to Organize New Graduate Pharmacology Course, co-chair
2000-2003	School of Medicine Faculty Senate, departmental senator
2000-2002	Recent Publications Committee
2001-2006	Space Planning Committee
2002-2003	Departmental Self-Study Review Committee
2003	Departmental Retreat Planning Committee
2003-2008	Departmental Advisory Committee
2003-2004	Research Initiative Committee
2004-2005	Curriculum Committee, chair
2004	School of Medicine Faculty Senate, departmental senator
2005-present	Curriculum Committee
2005-2008	Promotions & Tenure Committee
2006-present	Post-tenure Review Committee
2009-present	Senior Space and Department Advisory Committee
2009-present	Medical Student Pharmacology Curriculum Review Committee

COMMUNITY SERVICE:

7/88	Aspen MSTP Student Conference, moderator
7/89	UCHSC Summer Minority Student Program, faculty mentor
1/90	Annual UCHSC Medical and Graduate Student Research Forum, judge
3/90	Scientific Careers for Women, University of Colorado at Boulder, lecturer
1/91	Regis High School "Shadow Program", faculty mentor
1/91	Annual UCHSC Medical and Graduate Student Research Forum, judge
1/92	Annual UCHSC Medical and Graduate Student Research Forum, judge
1/93	Annual UCHSC Medical and Graduate Student Research Forum, judge
1993	High school science lab, consultant
1/95	Annual UCHSC Medical and Graduate Student Research Forum, judge
1/96	Annual UCHSC Medical and Graduate Student Research Forum, judge
5/96	Brain Awareness Day, speaker
1/97	Annual UCHSC Medical and Graduate Student Research Forum, judge
12/97	Lab tour for groups of students from Horizon High School, faculty host
1/98	WCBR Town Meeting "Understanding Drug Abuse and Addiction: Myth vs. Reality", Salt Lake City, UT, panel member
9/98-12/98	Senior internship of Kathleen Brady (Regis University), mentor
1/99	Annual UCHSC Medical and Graduate Student Research Forum, judge
4/99	Judge for ASPET Division of Neuropharmacology Best Graduate Student Paper Award
1/01	Mentor for Evergreen High School Senior Seminar Project

2002-2005 SFN Annual Meeting mentoring program
 10/03 Annual UCHSC Medical and Graduate Student Research Forum, judge
 5/05 Rocky Mountain Regional Neuroscience Group spring meeting, poster judge
 5/06 CU School of Medicine Alumni Weekend Fitzsimons Tour
 1/08 Annual UC Denver Student Research Forum, judge
 1/09 Annual UC Denver AMC Student Research Forum, judge

INVITED PRESENTATIONS:

7/81 Dept. Biology, University of Pittsburgh, Pittsburgh, PA
 9/82 Surface Membrane Receptors Conference, UCHSC
 12/84 Dept. Pharmacology, University of Pennsylvania, Philadelphia, PA
 7/85 Gordon Research Conference on Catecholamines, Proctor Academy, NH
 12/85 PMAF Annual Meeting, New York City, NY
 4/86 Hoechst Pharmaceuticals, Somerville, NJ
 11/86 Society for Neuroscience Short Course, Washington, D.C.
 1/87 Winter Conference on Brain Research, Vail, CO
 9/87 Dopamine 87, Hunter Valley, Australia
 9/87 NIDA Technical Review on Cocaine, Bethesda, MD
 12/87 AMA Creative Concepts in Cancer Conference, Vail, CO
 4/88 Dept. Pharmacology, Cornell University, Ithaca, NY
 5/88 FASEB Annual Meeting, Las Vegas, NV
 9/88 NIDA Addiction Research Center, Baltimore, MD
 9/88 Dept. Chemistry, College of Wooster, Wooster, OH
 10/88 Dept. Anesthesiology, UCHSC
 1/89 Winter Conference on Brain Research, Snowbird, UT
 3/89 Dept. Pharmacology, University of Nebraska, Omaha, NE
 10/89 Neurology Grand Rounds, UCHSC
 12/89 Dept. Pharmacodynamics, University of Florida, Gainesville, FL
 3/90 US/Taiwan Neurobiology Seminar, Taipai and Kenting, Taiwan
 6/90 Dept. Pharmacology, Georgetown University, Washington, D.C.
 7/90 Dopamine 90, Como, Italy
 11/90 Dept. Biology, Colorado College, Colorado Springs, CO
 1/91 Winter Conference on Brain Research, Vail, CO
 4/91 Lafayette Clinic and Dept. Pharmacology, Wayne State University, Detroit, MI
 5/91 Division of Clinical Pharmacology, Dept. Medicine, UCHSC
 1/92 Winter Conference on Brain Research, Steamboat Springs, CO
 3/92 School of Pharmacy, University of Colorado, Boulder, CO
 6/92 7th International Catecholamine Symposium, Amsterdam, The Netherlands
 7/92 Alcoholism and Drug Abuse Program, Washington State University, Pullman, WA
 10/92 Dept. Chemistry, Occidental College, Los Angeles, CA
 1/93 Division of Clinical Pharmacology, Dept. Medicine, UCHSC
 3/93 Dept. Chemistry, Middlebury College, Middlebury, VT
 4/93 Festschrift for Dr. Norman Weiner, Colorado Springs, CO
 7/93 Gordon Research Conference on Catecholamines, Proctor Academy, NH
 11/93 Program in Neuronal Growth & Development, Colorado State Univ., Fort Collins, CO
 5/94 Dept. Pharmacology, University of Pennsylvania, Philadelphia, PA

9/94 Dept. Medical Psychology, Oregon Health Sciences Univ., Portland, OR
 10-11/94 Elizabeth Gee Memorial Lectures, University of Colorado
 1/95 School of Pharmacy, University of Kentucky, Lexington, KY
 1/95 Winter Conference on Brain Research, Steamboat Springs, CO
 4/95 Division of Clinical Pharmacology, Dept. Medicine, UCHSC
 5/95 Gordon Research Conference on Catecholamines, Barga, Italy
 5/95 University Centre for Pharmacy, Groningen, The Netherlands
 9/95 6th Annual Colorado Clinical Scholars Program, Aspen, CO
 11/95 Dept. Psychiatry Grand Rounds, UCHSC
 1/96 Dept. Physiology, UCHSC
 1/96 Winter Conference on Brain Research, Snowmass, CO
 7/96 Pharmacia-Upjohn, Kalamazoo, MI
 10/96 8th International Catecholamine Symposium, Asilomar, CA
 3/97 Division of Clinical Pharmacology, Dept. Medicine, UCHSC
 8/97 FASEB Summer Research Conference on Drug Abuse, Copper Mountain, CO
 10/97 NIDA Satellite Symposium, "Cocaine and a Changing Brain", New Orleans, LA
 3/98 American Society for Neurochemistry Meeting, Denver, CO
 3/98 Dept. Pharmacology & Physiology, University of Rochester, Rochester, NY
 4/98 Dept. Psychiatry Grand Rounds, University of Michigan, Ann Arbor, MI
 4/98 Dept. Pharmacology, University of Michigan, Ann Arbor, MI
 4/98 Experimental Biology Annual Meeting, San Francisco, CA
 3/99 Dept. Pharmacology and Toxicology, University of Utah, Salt Lake City, UT
 5/99 Dept. Pharmacology, Vanderbilt University, Nashville, TN
 6/99 Dept. Behavioral Neuroscience, Oregon Health Sciences University, Portland, OR
 6/99 FASEB Summer Research Conference on Transporters, Copper Mountain, CO
 7/99 Gordon Research Conference on Catecholamines, Oxford, England
 11/99 Waggoner Center for Alcohol and Addiction Research, University of Texas, Austin TX
 3/00 Karolinska Institute, Stockholm, Sweden
 3/00 Texas Conference on the Neurobiology of Addiction, Austin, TX
 1/01 Winter Conference on Brain Research, Steamboat Springs, CO
 7/01 Gordon Research Conference on Catecholamines, Proctor Academy, NH
 1/02 Neuroscience Program, University of Colorado, Boulder, CO
 4/02 Dept. Physiology & Biophysics, University of Illinois, Chicago, IL
 6/02 Taiwan-USA Seminar, Breckenridge, CO
 9/02 Dept. Psychiatry, University of Texas Southwestern, Dallas, TX
 4/03 Dept. Neurobiology, University of Texas, Austin, TX
 5/03 Dept. Physiology & Neuroscience, Medical University of South Carolina, Charleston, SC
 6/03 Parkinson's Disease Group, VAMC, Portland, OR
 10/03 U Pittsburgh School of Pharmacy Distinguished Lecture Series, Pittsburgh, PA
 8/04 Dept. Pharmacology "Israel Hanin Seminar", Loyola University, Chicago, IL
 3/05 Neuroscience Program, Regis College, Denver, CO
 3/05 Dept. Pharmacology, Vanderbilt University, Nashville, TN
 4/05 Dept. Neural & Behavioral Sciences, Penn State College of Medicine, Hershey, PA
 4/05 Neuroscience Program, UCDHSC, Aurora, CO
 7/05 Gordon Research Conference on Catecholamines, Proctor Academy, NH
 10/05 Dept. Pharmacology, UCDHSC, Aurora, CO
 10/05 Dept. Pharmacology, Physiology & Therapeutics, U North Dakota, Grand Forks, ND
 11/05 15th *Neuropharmacology* Conference: Neurotransmitter Transporters, Washington, DC

3/06 3rd Annual Mariann Blum Lectureship in the Neurosciences, Dept. Pharmacology &
Center for Biomedical Neuroscience, U Texas Health Sciences Center, San Antonio, TX
3/07 Neuroscience Program, Regis College, Denver, CO
5/07 Dept. Biomedical Sciences, Meharry Medical College, Nashville, TN
3/08 PITTCON (Pittsburgh Conference) Symposium, New Orleans, LA
4/08 ASBMB Symposium, EB '08 Meeting, San Diego, CA
4/08 Dept. Biological Sciences, U Texas El Paso, El Paso, TX
12/08 Dept. Anesthesiology, UC Denver, Aurora, CO
12/08 Dept. Pharmacology & Toxicology, U Utah, Salt Lake City, UT

PUBLICATIONS:

DOCTORAL DISSERTATION:

"Is 2-Dimethylaminoethanol (Deanol) a Precursor of Acetylcholine? A Neurochemical and Behavioral Investigation."

REFERED JOURNAL ARTICLES:

1. Zahniser, N.R., Chou, D. and Hanin, I. Is 2-dimethylaminoethanol (deanol) indeed a precursor of brain acetylcholine? A gas chromatographic evaluation. *J. Pharmacol. Exp. Ther.* 200:545-559, 1977.
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