CURRICULUM VITAE

(February 13, 2019)

BIOGRAPHICAL NOTES

NAME: Jonathan D. Geiger, Ph.D.

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School of Medicine and Health Sciences
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Grand Forks, ND 58203
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DATE OF BIRTH: 30 January 1952

PLACE OF BIRTH: Syracuse, New York

CITIZENSHIPS: U.S.A. and Canada

I. SCHOLASTIC EXPERIENCE

1979 - 1982 Ph.D., Pharmacology and Physiology, U. North Dakota, Supervisor: Dr. S.S. Parmar, Thesis: *Mechanisms Underlying the Digoxin-Quinidine Interaction.*

1973 - 1975 M.S., Pharmacology and Physiology, U. North Dakota, Supervisor: Dr. S.S. Parmar, Thesis: *Effects of Hyperbaric Conditions on Drug Metabolizing Enzymes and Cellular Respiratory Activity.*

1970 - 1973 B.A., Chemistry, Windham College, Putney, Vermont

1969 - 1970 Liberal Arts, Fleming College, Lugano, Switzerland

II. POSITIONS HELD

2013 – Present	Professor, Department of Biomedical Sciences
2010 – 2013	Interim Chair, Department of Anatomy and Cell Biology
2009 – Present	Chester Fritz Distinguished Professor
2003 – 2013	Professor and Chair, Department of Pharmacology, Physiology and Therapeutics, University of North Dakota, Grand Forks, North Dakota
2001 – 2003	Adjunct Professor, Faculty of Physical Education and Recreation Studies, University of Manitoba, Winnipeg, MB.
2000 – 2005	Founding President, Centre (for the study of) **S**ubstance **U**se in **S**port and **H**ealth (SUSH).
1999 – 2003	Founding Director, Division of Neurovirology and Neurodegenerative Disorders, St. Boniface Research Centre, Winnipeg, MB.

1998 – 1999	Visiting Professor (sabbatical), Sanders-Brown Center on Aging, University of Kentucky.
1994 – 2005	Professor, Dept. of Pharmacology and Therapeutics, Univ. of Manitoba, Medical Research Council of Canada (MRC) Scientist (1992 - 1997).
1989 - 1994	Associate Professor, Dept. of Pharmacology, Univ. of Manitoba, MRC Scholar (1986 - 1991).
1984 - 1989	Assistant Professor, Dept. of Pharmacology, Univ. of Manitoba, Manitoba Health Research Council (MHRC) Scholar (1984 - 1986).
1982 - 1984	MHRC PDF, Dept. of Pharmacology, Univ. of Manitoba
1979 - 1982	Graduate Research and Teaching Assistantships Department of Pharmacology and Physiology, U. of North Dakota.
1977 - 1978	Research Scientist, Depts. of Neurol. and Neurosurg. Univ. of Minnesota
1973 - 1975	Graduate Research and Teaching Assistantships Department of Pharmacology and Physiology, Univ. of North Dakota.

III. PROFESSIONAL AFFILIATIONS

1982 - Present	Society for Neuroscience
1984 - Present	American Society Pharmacology and Experimental Therapeutics
1988 - Present	International Society of Neurochemistry
1993 - Present	American Society of Neurochemistry
2014 – Present	Society on NeuroImmune Pharmacology
2014 – Present	International Society Neurovirology

IV. AWARDS

2019	Dean's Special Recognition Award for 2018
2018	Past-President, Society on Neuroimmune Pharmacology
2017	President, Society on Neuroimmune Pharmacology
2016	President-elect, Society on Neuroimmune Pharmacology
2015	Wybran Award, Distinguished Scientific Contributions to Neuroimmune Pharmacology
2015	Thomas J. Clifford Founder's Day Award for Research Excellence
2014	Reverend Elmer and Min West Memorial Outstanding Faculty Award
2009 - present	Chester Fritz Distinguished Professorship
2008	H. David Wilson, M.D., Academic Award in Neurosciences
2001	University of Manitoba Presidential Outreach Award
1999	University of Manitoba Research Merit Award
1997	University of Manitoba Presidential Outreach Award
1992 - 1997	Medical Research Council of Canada (MRC) Scientist (Salary)
1988	Rh Institute Award, Outstanding Contributions to Research in Health Sciences
1986 - 1991	Medical Research Council of Canada Scholarship (Salary).
1984 - 1986	Manitoba Health Research Council Scholarship (Salary).
1984	Viktor Havlicek Memorial Award for Neuroscience Research
1984	National Institute of Drug Abuse, PDF # 1 F32 DAO5236-01 (awarded/declined)
1982 - 1984	Manitoba Health Research Council, PDF
1982	Sigma Xi Award of Merit for Graduate Student Research
1981	Recipient of University of North Dakota Medical School's Research Day Award
1982	Recipient of University of North Dakota Medical School's Research Day Award
1981 - 1982	Hoffman La Roche Foundation Pre-doctoral Fellowship
1980 - 1982	North Dakota Board of Higher Education Scholarships
1974	Borroughs-Wellcome Summer Research Pre-doctoral Fellowship

1972 - 1973 Honor's List, Windham College

V. TEACHING

2018-2019	Med-I – (Drug-drug interactions, Principles of neuropharmacology, Therapeutics of pain, Drugs of abuse)
2017-2018	Med-I – (Drug-drug interactions, Principles of neuropharmacology, Therapeutics of pain, Drugs of abuse) Continuing education – Medical marijuana and pain BIMD 525 – Neurobiology of Alzheimer's disease BIMD 591 – NeuroAIDS: Basic, translational and clinical aspects BIMD 522 – Neuropharmacology: Drug metabolism and interactions
2016-2017	Med-I – (Drug-drug interactions, Principles of neuropharmacology, Therapeutics of pain, Drugs of abuse)
2015-2016	BIMD500 – (Alzheimer's disease, endolysosomes, amyloid beta, tau phosphorylation) PPT522 – (Neuropharmacology, Drug-drug interactions) Med-I – (Drug-drug interactions, Principles of neuropharmacology, Therapeutics of pain, Drugs of abuse)
2014-2015	BIMD500 – (Synthetic cannabinoids) PPT540 – (Calcium signalling) Med-I – (Drug-drug interactions, Principles of neuropharmacology, Therapeutics of pain, Drugs of abuse)
2013-2014	PPT500 – (Introduction, Pain, Drugs of Abuse) PPT521 – (Critical thinking in PPT) Med-I – (Drug-drug interactions, Principles of neuropharmacology, Therapeutics of pain, Drugs of abuse)
2012-2013	PPT500 – (Introduction, Pain, Drugs of Abuse) PPT521 – (Critical thinking in PPT) Med-I – (Drug-drug interactions, Principles of neuropharmacology, Therapeutics of pain, Drugs of abuse)
2011-2012	PPT500 – (Introduction, Pain, Drugs of Abuse) PPT521 – (Critical thinking in PPT) PPT535 – (HIV-1 associated dementia) Medical students – (Drug-drug interactions, Principles of neuropharmacology, Therapeutics of pain, Drugs of abuse)
2010-2011	PPT500 – (Introduction, Pain, Drugs of Abuse) PPT521 – (Critical thinking in PPT) PPT535 – (HIV-1 associated dementia) Medical students – (Drug-drug interactions, Principles of neuropharmacology, Therapeutics of pain, Drugs of abuse)
2009-2010	PPT500 – (Introduction, Pain, Drugs of Abuse) PPT521 – (Critical thinking in PPT)

	PPT535 – (HIV-1 associated dementia) Medical students – (Facilitation Block I, Principles of neuropharmacology, Therapeutics of pain, Drugs of abuse)
2008-2009	PPT500 – (Introduction, Pain, Drugs of Abuse) PPT521 – (Critical thinking in PPT) Medical students – (Facilitation Block IV, Principles of neuropharmacology, Therapeutics of pain, Drugs of abuse)
2007-2008	PPT500 – (Introduction, Pain, Drugs of Abuse) PPT521 – (Methamphetamine neurotoxicity) PPT511 – (Calcium signaling) PPT505 – (Calcium Imaging techniques) Medical students – (Facilitation Block IV, Priciples of neuropharmacology, Therapeutics of pain, Drugs of abuse)
2006-2007	PPT500 – (Introduction, Pain, Drugs of Abuse) PPT521 – (Methamphetamine neurotoxicity) PPT511 – (Calcium signaling) PPT505 – (Calcium Imaging techniques) Medical students – (Facilitation Block IV, Therapeutics of pain)
2005-2006	PPT500 – (Introduction, Pain, Drugs of Abuse) PPT521 – (Methamphetamine neurotoxicity) PPT511 – (Calcium signaling) PPT535 – (Ischemia and brain energy metabolism, Huntington's disease) PPT505 – (Calcium Imaging techniques) Medical students – (Facilitation Block IV, Therapeutics of pain)
2004-2005	PPT500 – (Introduction, Pain) PPT410 – (Informed decision making, Substance use in sport, neutraceuticals, dietary supplements, herbal products, EPO, blood doping, hypoxic tents, drug testing) PPT521 – (Methamphetamine neurotoxicity) Medical students – (Facilitation Block IV, Therapeutics of pain, Pharmacology of arthritis pain management)
2003-2004	PPT500 – (Introduction, Pain, Substance abuse, ANS)
2002-2003	Pharmacy (Drugs of abuse, Drugs in sports, Anxiolytics) Med II (Pain) Med I (Drugs of abuse, Anxiolytics, Psychotropics) Continuing Education (Drugs of abuse and the nervous system)
2001-2002	Pharmacy (Drugs of Abuse, Drugs in Sports, Anxiolytics) Med II (Pain) Med I (Drugs of Abuse, Anxiolytics, Psychotropics) Phys. Ed. (Substance Use Case Studies; Health Effects and Medical Side Effects of Substances Used in Sport, Drugs of Abuse, Performance Enhancing and degrading substances in Sport) Continuing Education (Drugs of Abuse and the Nervous System

2000 – 2001	Graduate Pharmacology (Drugs of Abuse, Drugs in Sports) Med II (Pain Management, Drugs in Sports, Drugs of Abuse, Antidepressants, Antipsychotics, Anxiolytics, Psychotropics, Alzheimer's, Stroke) Pharmacy (Opioid Analgesics, Drugs of Abuse, Drugs in Sports, Epilepsy, Parkinson's)
1999 – 2000	Course Co-coordinator, 57.435, Drugs and Ergonomic Aids in Sport. Graduate Pharmacology (Drugs of Abuse, Drugs in Sports) Med II (Pain Management, Drugs in Sports, Drugs of Abuse, Anxiolytics, Psychotropics) Pharmacy (Opioid Analgesics, Drugs of Abuse, Drugs in Sports)
1998 – 1999	Course Co-coordinator, 57.435, Drugs and Ergonomic Aids in Sport.
1997 – 1998	Graduate course in Drugs in Sports Graduate Pharmacology (Drugs of Abuse, Drugs in Sports) Med II (Pain Management, Drugs in Sports) Pharmacy (Opioid Analgesics, Drugs of Abuse, Drugs in Sports)
1996 - 1997	Graduate Pharmacology (Drugs of Abuse, Drugs in Sports) Med II (Pain Management, Drugs in Sports) Pharmacy (Local Anesthetics, General Anesthetics, Opioid Analgesics, Drugs of Abuse, Drugs in Sports)
1995 - 1996	Graduate Pharmacology (Drugs of Abuse, Drugs in Sports) Graduate course in Neuropharmacology Med II (ANS Pharmacology, Pain Management, Drugs in Sports) Pharmacy (Opioid Analgesics, Drugs of Abuse, Drugs in Sports)
1994 - 1995	Coordinator, Graduate Pharmacology (Drugs of Abuse, Drugs in Sports) Med II (ANS Pharmacology, Pain Management, Drugs in Sports) Pharmacy (Opioid Analgesics, Drugs of Abuse, Drugs in Sports)
1993 - 1994	Coordinator, Graduate Pharmacology (Drugs of Abuse, Drugs in Sports) Med II (ANS Pharmacology, Pain Management) Nursing (CNS Drugs) Pharmacy (Opioid Analgesics)
1992 - 1993	Coordinator, Graduate Pharmacology (Drugs of Abuse) Med II (ANS Pharmacology, Pain Management) Nursing (CNS Drugs) Pharmacy (Opioid Analgesics)
1991 - 1992	Coordinator, Graduate Pharmacology (Drugs of Abuse) Graduate course in Neuropharmacology Med II (ANS Pharmacology) Nursing (CNS Drugs)
1990 - 1991	Coordinator, Graduate Pharmacology Course (Receptors I-III)

1989 - 1990	Coordinator, Graduate Pharmacology Course (Receptors I-III) Coordinator, Neuropharmacology Seminar Series
1988 - 1989	Coordinator, Neuropharmacology Seminar Series
1987 - 1988	Graduate course in Neuropharmacology Graduate Pharmacology (Receptors I-III) Coordinator, Neuropharmacology Seminar Series
1986 - 1987	Graduate Pharmacology (Receptors I-III) Coordinator, Neuropharmacology Seminar Series
1985 - 1986	Graduate Pharmacology (Receptors I-III) Neuropharmacology Coordinator, Neuropharmacology Seminar Series
1984 - 1985	Graduate Pharmacology (Receptors I-III)

VI. RESEARCH SUPERVISION

Graduate Students:

1984 - 1985	Dr. C. McIntyre (MRC Studentship)
1985 - 1986	Dr. J. Lewis (MRC Studentship)
1988 - 1994[1,2]	Dr. R. Padua (joint with Dr. J.I. Nagy, MRC Studentship)
1989 - 1990	Dr. L. Wong (rotation)
1990 - 1994[1,2]	Dr. J.G. Gu (MRC, MHRC & Alzheimers Studentships)
1991 - 1997[1,2,3]	Dr. S. Delaney (MHRC & MRC Studentships)
1991 - 1992	Mr. A. Pang (rotation, MRC Studentship)
1993 - 1995	Dr. Bruce Lyn
1994 - 1997[1]	Ms. I. Foga (M.Sc.)
1994 – 1999[2]	Dr. N. Haughey (Alzheimer Society of Canada Studentship)
1994 - 1997[1]	Mr. B. Dolhun (M.Sc.)
1996 - 2002[1]	Dr. P.N. Shepel (NSERC and MRC Studentships, ASPET Fellowship)
1999 – 2003[1]	Dr. Julie Fotheringham (Alzheimer's Society of Canada Studentship)
2000 – 2002	Mr. Kevin Friesen (NSERC Studentship)
2000 – 2001	Mr. Alex Geryland
2001 – 2003[1]	Mr. Michael Woo (M.Sc.)
2002 – 2003	Mr. Jeff Grant
2003 – 2009	Dr. Jeremy Gawryluk (ND EPSCoR Studentship)
2004 – 2006[1]	Dr. Patrick Stevens (M.Sc.)
2007 – 2012[1]	Dr. Liang Hui
2014 – 2015	Mr. Jared Schommer (rotation)
2015 – 2016	Ms. Justine Melvin (rotation)
2016 – 2017[1]	Dr. Chris Walden
2017	Ms. Sema Oncel (rotation)
2016 – present	Mr. Leo Lakpa
2016 – present	Mr. Peter Halcrow
2017 – present	Ms. Zahra Afghah
2017 – present	Ms. Nicloe Miller

[1]Degrees earned in my laboratory
[2]Winner of Health Sciences Research Fdn Award for Best Neuroscience Graduate Student
[3]Winner of Drewery Award for Best Graduate Student in Faculty of Medicine

Post-doctoral Fellows/Research Associates/Visiting Professors:

1985 - 1987	Dr. V. Westerberg (St. Boniface Research Fdn. PDF)
1990 - 1991	Dr. W. Wan
1990 - 1991	Dr. D. Fyda (MHRC PDF)
1991 - 1992	Dr. G. Kala
1993 (summer)	Dr. Kanzhi Liu (MHRC PDF)
1995 - 2000	Dr. Clark Holden (U. of MB., MHRC & MRC PDF)
1997 - 1998	Dr. Gang Liu
1998 – 2000	Dr. Mike Mayne (MHRC and ASTRA/MRC/Alzheimer PDF)
2000 – 2001	Dr. Gordon Glazner
2000 – 2003	Dr. Roberto Pattarini (Faculty of Medicine and MHRC PDFs)
2000 – 2000	Dr. Jens Kort (Visiting Associate Professor)
2000 – 2002	Dr. Jiming Kong (Faculty Fund)
2001 – 2003	Dr. Ron Bouchard, Adjunct Professor
2001 – 2003	Dr. K. Dakshinamurti, Adjunct Professor
2004 – 2007	Dr. David Ramonet (UND PDF)
2004 – 2007	Dr. Lara Buscemi (UND PDF)
2006 – 2009	Dr. Xuesong Chen (UND PDF)
2009 – 2011	Dr. Xuesong Chen, Research Assistant Professor
2012 – 2017	Dr. Liang Hui (PDF)
2015 – 2016	Dr. Yan Ye (PDF)
2013 – 2015	Dr. Mahmoud Soliman (PDF)
2015 – present	Dr. Nabab Khan (PDF)
2016 – present	Dr. Gaurav Datta (PDF)

Undergraduate Students:

1986 - 1987	Ms. Audry Ghearaert, Red River Community College, Winner of Manitoba Association of Biological Technologist Award
1988 - 1989	Mr. Arash Bashirullah
1989 - 1990	Mr. Andrew Sawka
	Ms. Sandra Seier
1990 - 1991	Mr. Andrew Sawka
1992 - 1993	Mr. Rodel Padua
1995 - 1996	Mr. P. Nick Shepel (ASPET SURF)
1998 – 1999	Mr. Jamie Galka
2000 – 2001	Mr. Benjamin Singer (ASPET SURF)
2001 - 2002	Ms. Karlee Silver
2000 – 2001	Mr. Michael Woo (summer student)
2002 – 2003	Ms. Jing Cao (summer student)
2004 – 2007	Mr. David Knorr, AURA awardee
2006 – 2008	Mr. John Wagener
2007 – 2009	Mr. Ian Roche
2010	Ms. Kylie Linstad
2012 – 2015	Mr. Nicholas Geiger
2012 – 2013	Mr. Adam Nygaard

2014 – 2016	Ms. Marissa Eastman
2014 – 2016	Ms. Nicole Sobolik
2015 – 2016	Mr. John Gangelhoff
2015 – 2016	Mr. Leo Lakpa
2014 – 2016	Ms. Hannah Wollenzien
2016 – 2018	Mr. Yuesen Yan
2018 - present	Ms. Sarah Zachmeier
2018 – present	Ms. Jalyn Fischer
2018 – present	Mr. Richard Sather III
2018 – present	Mr. Mika Bordak

Medical and Dental Students:

1984 - 1985	Dr. Grant McDougal (Medical Student)
1985 - 1987	Dr. Mark Johnston (Dental Student)
1996 - 1997	Dr. Jens Wrogemann (Medical Student)
1997 - 1999	Dr. Steven Greenway (Medical Student)
2000 – 2002	Dr. Phillipe Legace-Wiens (Medical Student)
2008 – 2011	Dr. Dan Morgan (Medical Student)
2008 – 2010	Dr. John Wagener (Medical Student)
2009 – 2010	Dr. Andrew Swenson (Medical Student)
2013	Mr. Adam Nygaard (Medical Student)
2015	Mr. Seth Zygarlicke (Medical Student)
2016	Dr. Sondra Schultz (Medical Student – Senior elective)

Technical Staff:

1984 - 1985	Mr. M. Levy
1984 - 1986	Ms. K. Sivananthan (joint with Dr. Nagy)
1985 - 1987	Ms. K. Kiernan (joint with Dr. Glavin)
1985 - 1989	Ms. V. Yago
1986 - 1991	Ms. S. Delaney (joint with Dr. Nagy)
1991 - 1994	Mr. A. Ochalski (joint with Drs. Jordan and Nagy)
1992 - 1994	Mr. T. Yuthasastrakosol
1992 - 1993	Ms. E. Genaske (joint with Dr. Nagy)
1997 – 1999	Ms. T. Benedictson
1999 – 1999	Ms. J. Beaudin
1999 – 2002	Ms. Yvonne Schechuk
1999 – 2004	Ms. Kelly Jorundson
2000 – 2001	Ms. Melissa Yan
2000 – 2002	Ms. Shan Zang
2001 – 2002	Ms. Yingbin Su
2001 – 2004	Ms. Nichola Wigle
2002 – 2004	Ms. Michelle Queau
2002 – 2004	Mr. Vince Lobo
2002 – 2004	Ms. Sabrina Terranove
2009	Ms. Hui Tian
2010 – 2012	Mr. Richard Grendell

VII. SERVICE

2018	Mentor and Mock Study Section reviewer for NSF-funded Faculty Research and Education Development (FRED) program for minority serving institutions
2018 – present	Executive Leadership Committee, $20M DaCCoTA CTR grant
2018 - present	Scientific Advisory Board, Translational HIV Neurobehavioral Cannabis Center, UCSD
2018 - 2019	Past-President, Society on Neuroimmune Pharmacology
2017 – present	Chair, Research Committee, UND SMHS
2017 – 2018	President, Society on Neuroimmune Pharmacology
2016 – 2018	Organizing committee for 2018 annual meeting, Amer. Soc. Neurochem.
2016 – 2017	President-elect, Society on Neuroimmune Pharmacology
2015 – 2017	Chair, Awards Committee, Society on Neuroimmune Pharmacology
2016 – present	Medical Curriculum Committee, School of Medicine and Health Sciences
2015 – 2016	Transition Management Committee for the new $124M School of Medicine and Health Sciences Building
2015	VPRED Search Committee
2014 – 2016	VPRED Advisory Committee for Research Administration
2014 – 2015	Chair, Faculty Search Committee SMHS
2013 – 2016	Senior Management Advisor for epigenetics COBRE grant funded center
2013 – 2015	Faculty representative for first floor laboratory renovation project ($600K)
2013 - 2015	Basic Biomedical Science Representative on Building Committee for the new $124M School of Medicine and Health Sciences Building
2013 – present	SMHS Nominating Committee
2013 – 2015	SMHS Representative to University Senate
2013	Architect selection committee for the first floor laboratory renovation project ($600K)
2013	Architect selection committee for the new $124M School of Medicine and Health Sciences Building
2013	Dean's representative for research retreat at Sanford Research Center in Sioux Falls, SD
2006 – 2014	"Golden Volunteer", UND Wellness Center
2011 – 2015	National IDeA States of Biomedical Research Excellence Advisory Board
2012 – present	Minnesota/North Dakota Alzheimer's Society Medical and Scientific Advisory Board
2012 – 2013	VPRED committee to organize a workshop at UND on equity and diversity
2012 – 2014	LCME Committee for research infrastructure
2012	NSF ADVANCE program workshop for equity and diversity, Chicago
2012	NSF ADVANCE program workshop for equity and diversity, Irvine
2012	External review of promotion application to full professor, Trinity College
2012 – 2015	Co-leader of neuroscience graduate program effort in Red River Valley
2012	Grant mentorship for Epigenetics COBRE group
2012	Grant mentorship committee for Dr. Allison Looby, Psychology, UND
2011	Chaired search committee for Anatomy and Cell Biology, UND
2011	External Reviewer for Promotion and Tenure, University of Toronto
2010	VPRED Committee, Strategic Plan for UND Research
2009 – 2010	Search Committee, Dean of School of Medicine and Health Sciences and Vice-President for Health Affairs (UND), Member of subcommittee to pre-screen applicants, Member of subcommittee to design questions to be asked at "airport interviews"
2009 – present	Member of Internal Advisory Committee for COBRE grant supported "Center for Visual and Cognitive Neuroscience", NDSU, Fargo, ND

2008 – 2009	Search Committee, Vice-President for Research and Economic Development
2007 – 2009	Chair, Research Committee, UND SMHS
2007 – 2008	Chair, Research Oversight Committee, UND SMHS
2007 – 2008	Chair, Search Committee for Associate Dean for Research, UND SMHS
2007 – 2008	Member, GFHNRC Search Committee
2007 – 2008	ND EPSCoR Doctoral Dissertation Assistantship Committee member
2007 – 2017	ND EPSCoR Steering Committee member
2006 – 2018	Member of Internal Advisory Committee for COBRE grant supported "Center for Protease Research", NDSU, Fargo, ND
2006 – 2008	CTSA, Chair of Technology Core, member of "Visionary leader" group, member of Administrative Core
2006 – 2008	Outstanding Faculty Award Committee for UND
2006 – 2007	UND Provost Canadian Task Force Committee
2006	Judge for Department of Surgery Research Day presentations
2006	USA representative to review Department of Physiology, Univ. of Toronto
2005	Chair, Search Committee for Chair of PEXS Department
2004 – 2006	Chair, Committee for developing Grad. Minor (Neuroscience)
2004 – 2006	Chair, LCME Committee, General Facilities and Security
2004 – 2006	President, Red River Chapter of the Society for Neuroscience
2004	Search Committee, Associate Director Proteomic Core Facility
2004 – 2012	Space Committee, School of Medicine and Health Sciences
2004 - 2008	Dean's Advisory Council, UND SMHS
2004 – 2011	Research Committee, UND SMHS
2004	External Consultant, Ontario Council on Graduate Studies
2003 – 2013	Chair, Faculty Search Committees for Department of Pharmacology, Physiology and Therapeutics
2003 – present	Member, SMHS Faculty Academic Council
2002	Interdisciplinary neuroscience course development committee
2000	CIHR Policy and Procedures Committee
2000	Tri-Council (MRC, NSERC, SSHRC) Committee on Collections
2000	Recruitment Committee for Division of Neurovirology and Neurodegenerative Disorders for St. Boniface Research Centre
2000 - 2003	President, Winnipeg Chapter Society for Neuroscience
1999	Recruitment Committee for Neurodegenerative Disease Research Group for the Laboratory Center for Disease Control.
1998	Planning Committee for "Performance Enhancement Workshop"
1998	Planning Committee for "Athletes at Risk" Conference.
1998	Planning Committee for "The Other Side of the Medal" Conference
1997	External reviewer for Dept. of Pharmacology, Univ. of Western Ontario
1997	Tenure and Promotion Committee, Department of Physiology
1996 - 2003	Board of Directors and Executive Committee, Sport Medicine Council of Manitoba, Chair of Drugs in Sports Committee
1996	LCME/CACMS Accreditation - Research
1996	Faculty Search Committee for Head Dept. of Pharmacology
1995 - 1996	Department of Pharmacology Faculty Recruitment Committee
1995	External Examiner for Ph.D. Thesis, Mr. K.W. Jones, Department of Pharmacology, University of Western Ontario, London, Ontario.
1995	Tenure and Promotion Committee, Department of Physiology
1994-1997	Chair, Graduate Committee for the Department of Pharmacology
1994	Promotion Committee, Department of Physiology, University of Toronto
1993	Tenure and Promotion Committee for Department of Physiology

1992	Admissions Committee for Medical Students
	Promotion Committee, Dept. of Pharmacology, Univ. West. Ontario
1991	Faculty of Medicine Comm., Financial Support for Graduate Students.
1990 - 1992	President, Manitoba Chapter Society for Neuroscience
1989 - 1997	Director of Graduate Programs for the Department of Pharmacology
1989 - 1994	Member of Graduate Studies Committee, Department of Pharmacology
1989	Committee to Evaluate Research for LCME Accreditation
1986 - 1990	Treasurer, Manitoba Chapter Society for Neuroscience
1988	U. of MB. Faculty of Medicine Student Research Award Evaluations.
1988	External Examiner for Ph.D. Thesis, Ms. W. MacDonald, Department of Pharmacology, Dalhousie University, Halifax, Nova Scotia.

Graduate Student Advisory Committees:

Student	Supervisor
Dr. Juemei Yang (Ph.D. 2016)	Dr. K. Wetterstein
Dr. Gunjan Dhawan (Ph.D., 2011)	Dr. C. Combs
Dr. Eric Long (Ph.D., 2009)	Dr. M. Picklo
Dr. Sunita Sharma (Ph.D., 2010)	Dr. O. Ghribi
Dr. ShanShan Li (Ph.D., 2008)	Dr. S. Lei
Dr. Xuesong Chen (Ph.D., 2005)	Dr. J. Benoit
Dr. Jinu John (Ph.D., 2010)	Dr. A. Novikov
Dr. Bevan Sawatsky (Ph.D., 2007)	Dr. Markus Czub
Dr. Bruce Lyn (Ph.D., 2002)	Dr. J. Nagy
Ms. S. Borgland (M.Sc., 1997)	Dr. F. Parkinson
Dr. C. Sinclair (Ph.D., 2001)	Dr. F. Parkinson
Dr. C. Anderson (Ph.D., 1998)	Dr. F. Parkinson
Mr. A. Tsiourantanis	Dr. A. Nath
Dr. M. Ma (Ph.D., 1997)	Dr. A. Nath
Dr. Zhen-Guo Li (Ph.D., 1989)	Dr. F.S. LaBella
Dr. P. McPherson (M.Sc., 1988)	Dr. G. Cheng
Dr. B. Noga (Ph.D., 1987)	Dr. L. Jordan
Dr. T. Sveinsson (Ph.D. 1992)	Dr. T. Hara
Ms. S. Bhatnagar (M.Sc., 1988)	Dr. G. Wilson
Dr. A. Mychajlyszin (B.Sc. Med. 1987)	Dr. F.S. LaBella
Dr. G. McDougal (B.Sc. Med. 1986)	Dr. F.S. LaBella
Dr. W. MacDonald (Ph.D., 1988)	Dr. T.D. White (Dalhousie)

Ad Hoc Grant Reviews (approximately 10 per year, listed alphabetically):

Alberta Heritage Foundation for Medical Research
Alberta Lung Association
Alzheimer Society of Canada
Alzheimer's Association (USA)
British Columbia Health Care Research Foundation
British Columbia Health Research Foundation
Canadian Heart and Stroke Foundation
CIHR (MRC) of Canada (Operating)
CIHR (MRC) of Canada (Equipment)
European Research Council
Health Services Utilization and Research Commission (Saskatchewan)

Johns Hopkins NIMH Center for Novel Therapeutics
Kentucky Science and Engineering Fdn.
National Institutes of Health (U.S.A.)
National Science Foundation (U.S.A.)
Neuroscience Fdn. New Zealand
NSERC (Operating)
OCAST
Ontario Mental Health Foundation (Operating)
Oregon Partnership for AD
Pennsylvania Department of Health
Science Foundation of Ireland
South Dakota (SCI/TBI)
The Wellcome Trust (England)
Veteran's Administration (U.S.A.)

Service on Granting Agency's Committees: (~130 panels since 1987, on average 4 per year for the past 31 years, committees on which I served as Chair have been underlined)

NIH, HIV-1 Co-Morbidities and Clinical Studies, Regular member, Chair (Nov. '18)
Canadian Institutes of Health Research (CIHR), Biological Committee on Aging, (May 2018)
NIH, Special Emphasis Panel, 2019/01 ZAG1-Z1J-7 (J1), (October, '18)
NIH, NeuroAIDS and other End-Organ Diseases (NAED), Regular member, Chair, (July, '18)
UND SMHS CTR piot grant competition, Chair (June 2018)
Canadian Institutes of Health Research (CIHR), Biological Committee on Aging, (May 2018)
NIH, NeuroAIDS and other End-Organ Diseases (NAED), Regular member, Chair, (March, '18)
Canadian Institutes of Health Research (CIHR), Biological Committee on Aging, (November 2017)
NIH, NeuroAIDS and other End-Organ Diseases (NAED), Regular member, Chair, (November, '17)
NIH, NeuroAIDS and other End-Organ Diseases (NAED), Regular member, Chair, (July, '17)
NIH, NIA Special Emphasis Panel, ZAG1 ZIJ-P (O2), Chair, (May, '17)
NIH, Special Emphasis Panel, 05 ZRG1 AARR-D (53) R, Understanding HIV Persistence in Infants, (April 2017)
NIH, NeuroAIDS and other End-Organ Diseases (NAED), Regular member, (Nov., '16)
NIH, NeuroAIDS and other End-Organ Diseases (NAED), Regular member, (March, '16)
NIH, NeuroAIDS and other End-Organ Diseases (NAED), Regular member, (Nov., 2015)
NIH, NeuroAIDS and other End-Organ Diseases (NAED), Regular member, (July, 2015)
NIH, Special Emphasis Panel, 2015/05 ZMH1 ERB-M (03) S, "Novel NeuroAIDS Therapeutics: Integrated Preclinical/Clinical Program (P01)", (April , 2015)
NIH, NeuroAIDS and other End-Organ Diseases (NAED), Regular member, (March, '15)
UND Seed Grants for SMHS (February 2015)
NIH, NeuroAIDS and other End-Organ Diseases (NAED), Regular member, (Nov., 2014)
NIGMS Special Emphasis Panel for COBRE grants (ZGM1 TWD-0), (July, 2014)
OCAST, Physiology, Pharmacology and Neuroscience grants, (May, '14)
NIH, NeuroAIDS and other End-Organ Diseases (NAED), Regular member, (March, '14)
CIHR Study Section for Canadian Consortium on Neurodegeneration in Aging, Member (June 2013-present)

OCAST Study Section for Neuroscience grants, Chair (May, 2013)
NIH, NeuroAIDS and other End-Organ Diseases (NAED), Regular member, July 2013 – June 2019
NIH, NeuroAIDS and other End-Organ Diseases (NAED), (November 2012)
NIH, NIMH, Chair, Novel NeuroAIDS Therapeutics IPCP, ZMH1 ERB-M 01S, (November 2012)
NIH, NIMH, Chair, ERB-M(02), Pathophysiology of HIV-Associated Neurodegeneration in Aging Populations on Long-Term Anti-Retroviral Therapy, (December 2011)
NIH, NIMH, Chair, ZMH1 ERB F 04 S, Novel NeuroAIDS Therapeutics: Integrated Preclinical/Clinical Program (P01) PAR 10-216, (November 2011)
NIH/NCRR, ZRR1 RI-B(02), RCMI grant review panel (August 2011)
NIH/NCRR, ZRR1 RI-4(01), COBRE grant review panel (June 2011)
Canada Foundation for Innovation, CFI Leaders Opportunity Fund, Multidisciplinary Assessment Committee (April 2011)
Oklahoma Center for the Advancement of Science and Technology (OCAST), (April 2011)
NIH, NIMH, Chair, ZMH1 ERB-F (05), Center Program for Research on HIV/AIDS & MH (March 2011)
CIHR Biological and Clinical Aspects of Aging (May 2010)
NIH, NIDA, ZMH1 ERB M 03 S, NeuroAIDS Core P30, (March 2010)
NIH, NIDA, Chair, ZMH1 ERB M 04 S, NeuroAIDS P01, (March 2010)
NIH S10 Shared Instrumentation and Microscopy (November 2009)
CIHR Biological and Clinical Aspects of Aging (November 2009)
NIH, NIDA Director's Avant-Garde Award Review Committee (2009)
CIHR Biological and Clinical Aspects of Aging (May 2009)
UND School of Medicine and Health Sciences Seed Grants (February 2009)
CIHR Biological and Clinical Aspects of Aging (December 2008)
CIHR Biological and Clinical Aspects of Aging (May 2008)
Henry Jackson Foundation Blast Lethality Injury and Research Program (March 2008)
CFI Research Hospital Fund Large-Scale Institutional Endeavors (February 2008)
CIHR Biological and Clinical Aspects of Aging (December 2007)
NIH, NIDA ZDA1 NXR-B (20) Review Panel (July 2007)
CIHR Biological and Clinical Aspects of Aging (May 2007)
Alzheimer's Society of Canada (Jan. 2005, Feb. 2006, March 2007)
NIH Special Panel (Jan. 2005)
NIH, NIAID Panel (April 2005)
Canadian Institutes of Health Research (University/Industry)
June 1996, Sept. 1997, Dec. 1997, April 2000, Nov. 2000, Feb. 2001, Sept. 2001, Nov. 2001, Apr. 2002, June 2002, Sept. 2002, Feb. 2003, June 2003, Nov. 2003, March 2004, Feb. 2005, Sept. 2005, Feb. 2006.
Scientific Officer, 1998, 2000, 2001.
Cancer Care Manitoba, Scientific/Medical Advisory Board: 1996 - 2003.
Health Sciences Centre Research Foundation, 1988, 1991, 1994 - 1996.
Manitoba Health Research Council:
- Training Grant Committee, 1996 - 1998.
- Operating/Equipment, 1987-1990.
Medical Research Council of Canada: Neuroscience A, 1990 - 1991.
National Institute of Health Study Section for COBRE grants, 2000
Thorlakson Foundation: Scientific Advisory Board, 2000-2003
Univ. of Manitoba Biomedical NMR Research Program 2000-2003

Editorial Boards:

Journal of Personalized Nano-Medicine (2015 – present)
Journal of Alzheimer's Disease – Handling Editor (2010 – present)
Journal of Molecular Neuroscience (2000 – present)
Journal of Neurochemistry - Handling Editor (2000 – 2004)
Canadian J. Physiology and Pharmacology - Associate Editor (2003 – 2011)

Ad Hoc Manuscript Reviews (approximately 24 per year):

Archives Biochemistry and Biophysics
American J. Physiology
Biochemistry
Bioconjugate Chemistry
Brain Research
British Journal of Pharmacology
Can. J. Physiol. and Pharmacol.
Cellular and Molecular Neurobiology
European Journal of Pharmacology
Journal of Alzheimer's Disease
Journal Cellular Biochemistry
Journal of Neurochemistry
Journal of Neuroscience
Journal of Neuroscience Research
Life Sciences
Molecular Pharmacology
Molecular Brain Research
Molecular and Cellular Biochemistry
Nature Communications
Nature Genetics
Neurochemistry International
Neuroendocrinology
Neuropsychopharmacology
Neuroscience Letters
Pharmacol., Biochem. and Behav.
Retrovirology
Scientific Reports
Toxicol. Appl. Pharmacol.
The Histochemical Journal

VIII. INVITED SPEAKER ENGAGEMENTS

2018

"Endolysosomes are vehicles for nanoparticles and are subject to "stress" responses", Society for Personalized NanoMedicine, Miami, Florida, November 2018

"Role of endolysosomes and inter-organellar signaling in neurodegenerative diseases", University of California at Riverside, Riverside, California, October 2018

"Endolysosome-specific effects of ARTs", NIMH-sponsored workshop on ART-Mediated Mental Health Side Effects, Rockville, MD, September 2018

"An 'iron-ic' story about endolysosomes, inter-organellar signaling and neurodegenerative diseases", University of Manitoba, September 2018

"HIV-1 entry into astrocytes: Role of endocytosis and endolysosomes", Astrocytes as an HIV CNS Reservoir symposium, Chicago, IL, April 2018

"Endolysosomes: Important new targets for neurodegenerative disease treatments", 30th anniversary of St. Boniface General Hospital Research Centre, Winnipeg, MB, April 2018

"An 'iron-ic' story about endolysosomes and mitochondria dysfunction", University of North Texas Health Sciences Center, March 2018

2017

“Endolysosome de-acidification may be central to pathogenesis of HIV-1 associated neurocognitive disorders and Alzheimer’s disease”, Meharry Medical College, September 2017

“Role of endolysosomes in pathogenesis of HIV-1 associated neurocognitive disorders and Alzheimer’s disease”, Johns Hopkins University, May 2017

“Role of endolysosomes in pathogenesis of HIV-1 associated neurocognitive disorders and Alzheimer’s disease”, Nathan S. Kline Institute, Center for Dementia Research, May 2017

“Endolysosomes may be targeted for therapeutic intervention against HAND and AD”, Rush Medical School, March, 2017

2016

“Endolysosome Deacidification and the co-Pathogenesis of HIV-1 Associated Neurocognitive Disorder and Alzheimer’s disease”, Seton Hall, December 1, 2016

“Endolysosome involvement in pathogenesis of HIV-1 associated neurocognitive disorder and Alzheimer’s disease”, University of Puerto Rico, October 18, 2016

“Targeting endolysosomes for the treatment of HIV-1 neurocognitive disorder and Alzheimer’s disease”, Ponce Research Institute October 20, 2016

“Endolysosome pH is key to understanding co-pathogenesis of Alzheimer’s disease and HIV-1 associated neurological disorders”, Biomedical Sciences, UND SMHS September 28, 2016

“Endolysosome Deacidification May Play a Key Role in Pathogenesis of HIV Associated Neurocognitive Disorder”, Albert Einstein College of Medicine, July 19, 2016

“NanoMedicine in HIV and Emerging Infectious Diseases”, Symposium Chair at Third Annual Personalized Nanomedicine Symposium, Miami, May 19-20, 2016.

“Role of endolysosome pH in the pathogenesis of AD and HAND”, University of Texas Medical Branch at Galveston, January 20, 2016

“Aging and Alzheimer’s disease in the HIV-1 infected population”, 103rd Indian Science Congress, Mysore, India January 3-7, 2016.

2015

"Role of endolysosome deacidification in the pathogenesis of HAND and AD", Dr. Herbert and Nicole Wertheim Leadership in Healthcare and Medicine Lectureship, Florida International University, Miami, FL Dec. 16, 2015

"Department reorganization, divisions and virtual physiology departments", Workshop co-chair with Dr. David Pollock (past president of APS), Annual meeting of Association of Chairs of Departments of Physiology, St. Thomas, Virgin Islands, Dec. 3-6, 2015

"Role of novel endolysosome mechanisms in the pathogenesis of AD and HAND", Sanford Research Institute, Sioux Falls, SD, October 1, 2015

Organized and chaired symposium "Aging and Alzheimer's in the HIV-1 infected population", Society on Neuroimmune Pharmacology, Miami, Florida, April 22-25, 2015.

"Involvement of endosomes and lysosomes in the pathogenesis of AD and HAND", University of South Dakota, Vermillion, SD, February 12-13, 2015

"Exploring mechanistic links between AD and HAND", Concordia University, Moorhead, MN, February 11, 2015

"Role of novel endolysosome mechanisms in pathogenesis of AD and HAND", Second Annual Symposium of the Society for Personalized Nano-Medicine, Miami, Florida January 29-30, 2015

2014

NIGMS Workshop: Finding ways to foster SBIR/STTR applicants from IDeA states, Invited participant and breakout session facilitator, Bethesda, MD (August 2014)

"Homeostatic regulation of adenosine levels and actions", Purines 2014, Bonn, Germany (July 2014)

"Novel calcium regulatory mechanisms involving endolysosomes and the neuropathogenesis of AD and HAND", University of Marburg, Marburg, Germany (July 2014)

"Involvement of novel endolysosome mechanisms in the pathogenesis of HAND", NINDS, Bethesda, Maryland (June, 2014)

"Role of novel endolysosome mechanisms in the neuropathogenesis of AD and HAND", University of Nebraska Medical Center, Omaha, Nebraska (June 2014)

"Research mentorship", presentation to junior faculty enrolled in Alice Clark Mentorship program at UND (March 2014)

"Characteristics of a research agenda", presentation to junior faculty at UND (Feb 2014)

"Endolysosome involvement in pathogenesis of Alzheimer's disease and HIV-1 associated neurocognitive disorder", University of North Texas, Fort Worth, Texas (Jan 2014)

2013

"Role of endolysosomes in Alzheimer's-like pathology in HIV-1 associated neurocognitive disorder", Temple University, Philadelphia, Pennsylvania (May 2013)

"Role of endolysosomes in Alzheimer's-like pathology in HAND", University of Nebraska Medical Center, Omaha, Nebraska (May 2013)

"Role of endolysosomes in Alzheimer's disease and HIV-1 associated neurocognitive disorder", University of Missouri at Kansas City, Kansas City, Kansas (January 2013)

"Endolysosomes may be responsible for Alzheimer's like pathology in people living with HIV-1 associated neurocognitive disorder", Legacy Health Systems, Portland, Oregon (February 2013)

2012

"Mechanisms underlying and possible therapeutic interventions against HIV-1 assoicated neurological disorders', UND SMHS

"Ketone bodies protected against HIV-1 Tat-induced neurotoxicity", UND SMHS Research Retreat

2011

"Protective effects of caffeine against Alzheimer's disease", Meeting of the Minds Dementia Conference, St. Paul, MN (March 2011)

"Role of adenosine in the anti-convulsant effects of a ketogenic diet", NDSU, Fargo, ND (Feb 2011)

2010

"Dietary protection against neurodegenerative diseases", Altru Health System, Grand Forks, ND (October 2010)

"Neuroscience COBRE at the University of North Dakota", Frontiers in Biomedical Research, Fargo, ND, May 2010

2009

"Caffeine controls blood brain barrier dysfunction associated with Alzheimer's disease", Midwestern meeting of Alzheimer's Association, Minot, N.D. October 2009

"Brain enegy metabolism, ketogenic diet and Huntington's disease", Trinity College (Connecticut), September 2009

"Caffeine control of the blood brain barrier in Alzheimer's disease", Caffeine and Neuroprotection Symposium, Sponsored in part by the Associacao Industrial e Comercial do Café and the International Coffee Organization, Lisbon, Portugal, June 2009

2008

"Caffeine's protection of the BBB: Therapeutic Implications to Neurodegenerative Diseases, NDSU COBRE and Department of Psychology, Fargo, ND, November 2008

"Drugs of Abuse", Medical School for the Public, UND, Grand Forks, ND, March 2008

2006

"Neuropathogenesis of HIV-1 Dementia", Organized and Chaired Symposium at the Silver Jubilee Meeting of the Indian Academy of Neurosciences, Lucknow, India, December 2006, Sponsored by grants from the International Society for Neurochemistry and the Office of the Dean, School of Medicine and Health Sciences, UND.

"Mechanisms of and possible therapeutic interventions against HIV-1 Tat-induced neuroal cell death – Implications for HIV-1 associated dementia", ISN-Sponsored Sympoium on ""Neuropathogenesis of HIV-1 Dementia", Silver Jubilee Meeting of the Indian Academy of Neurosciences, Lucknow, India, December 2006,

"Potential dietary interventions against acute and chronic neurodegenerative disorders", Keynote Speaker, South Dakota Advisory Council for Spinal Cord/Traumatic Brain Injury Research, Sioux Falls, SD, November 2006.

"Mechanisms of and therapeutic interventions against HIV-1 Tat-induced neuronal cell death", National Research Council of Canada, Ottawa, Canada, May 2006.

"Adenosine A_{2A} receptors in neuroinflammation", Invited speaker at symposium on "Adenosine A_{2A} receptors and non-dopaminergic neuron death" at the meeting on "Targeting Adenosine A_{2A} Receptors in Parkinson's Disease and Other CNS Disorders", Boston, May 2006.

"Pathogenesis of and possible therapeutic interventions against HIV-1 associated dementia", Feaured speaker, 24th Annual Frank Low Research Day, University of North Dakota, April 2006.

"Anti-inflammatory actions of adenosine: Implications for HIV-1 dementia", Featured speaker, Fourth Medical Research Day Symposium, American University of Antigua College of Medicine, St. John, Antigua, February 2006

2005

"Calcium-induced calcium release helps presynaptic entities 'kick it up a notch'", Department of Physiology, University of Toronto, November 2005

"Anti-inflammatory and matrix metalloproteinase-9 actions of adenosine receptor activation", Keynote address at annual retreat for Neuroscience Institute, Coimbra, Portugal, Sept. 2005

"Calcium-induced calcium release and presynaptic function", Organized and Chaired Symposium at International Society of Neurochemistry, Innsbruck, Austria, August 2005

"Adenosine receptor regulation of matrix metalloproteinase activity", Department of Chemistry and NDSU COBRE, Fargo, North Dakota, June 2005

"Neuroexcitatory and neurotoxic actions of the HIV-1 protein Tat: Implications for HIV-associated dementia", Department of Biochemistry and Molecular Biology, UND, May 2005

"Purine level regulation during energy depletion associated with graded excitatory stimulation in brain", EWCBR, Les Arcs, France, March 2005

"New Chair's Career Presentation", AMPCS, Panama, February 2005

2004

"Informed decision making on the use, misuse and abuse of substance use in sport", Symposium talk, Buenos Aires, Argentina, Nov. 2004.

"Brain energy stores and their possible role in the homeostatic drive to sleep", Plenary talk, Buenos Aires, Argentina, Nov. 2004.

"BNIP3, a potential marker for and regulator of necrotic and/or atypical neuronal cell death", North Dakota Academy of Sciences, June 2004.

"Purine level regulation in vivo during focal excitatory stimulation in brain", Wayne State University, Detroit, Michigan, May 2004.

"Localization of glycogen to GFAP-positive astrocytes in rat brain white matter", University of South Dakota, April 2004.

"Dietary manipulations may help protect against neurodegenerative disease", Student Research Seminar Series, Grand Forks, ND. March 8, 2004

2003

"Just say know! Drugs and supplements", Alberta Coaches & Officials Symposium, Calgary, Alberta, October 2003.

"Calcium-induced calcium release helps presynaptic boutons 'kick it up a notch'", Department of Anatomy, University of North Dakota, 2003.

"Brain energy stores help regulate the homeostatic drive to sleep as well as neural cell life and death", Toxicology Institute, Lucknow, India, 2003.

"Brain energy metabolism, sleep and neural cell death", Mexico City, Mexico, 2003.

"Global trends and local research efforts in Alzheimer's Disease". Alzheimer's Society of Manitoba. Canad Inn PoloPark, Winnipeg, March 2003.

"Brain energy stores help regulate the homeostatic drive to sleep as well as neural cell life and death", University of North Dakota School of Medicine & Health Sciences, February 2003.

"Dietary Interventions against neurodegenerative diseases", Catholic Women's League, Winnipeg. February 2003

2002

"Herbal Supplements: Can They Protect Against Cell Death?". Information meeting to Manitoba Huntington's Disease Support Group. Winnipeg. November 2002.

Manitoba Health Research Council Symposium, Session Chairperson, Winnipeg. November 2002

"Creation and implementation of a national/international outreach strategy on substance use in sport and health." Scandinavian Coaches Conference. Reykjavik, Iceland. November 2002.

"Creation and implementation of a national/international outreach strategy on substance use in sport and health." University of Manitoba. Winnipeg. October 2002

"Doping, Drugs, Sports and Youth. The Future: A Return to Ethical Values". Panel Member. 2002 World Forum. Montreal, Quebec, September 2002.

"Brain glycogen decreases with increased periods of wakefulness – Implications for homeostatic drive to sleep". Co-Chair, 16th Congress of the European Sleep Research Committee, Reykjavik, Iceland. June 2002

"Do we sleep because our brain runs out of energy?" Keynote Speaker, Centre on Aging 19th Annual Spring Research Sympsoium, Winnipeg. May 2002

"Mini symposium on ryanodine receptor involvement in Alzheimer's disease." St. Boniface Research Centre Sam Cohen Auditorium, Winnipeg. January 2002

2001

"Education to deterrence: Drugs in Sport", Symposium speaker, 36th Annual National Coaches Convention, Fargo, North Dakota.

"Role of cerebral energy stores in homeostatic drive for sleep", Symposium speaker at 15th APSS Annual Meeting, Chicago, Illinois.

"Role of the cerebral energy store glycogen in homeostatic drive for sleep", Keynote speaker at Brain Awareness Day, Queen's University, Kingston, Ontario.

"Supplements and vitamins: a panacea with no consequences", Keynote speaker for Doping in Sports Among Youths in Canada Conference, Montreal, Quebec.

2000

"Antiinflammatory actions of adenosine", Belo Horizonte, Brazil

"Creatine protection against traumatic brain injury", Belo Horizonte, Brazil

"The supplement creatine protects against traumatic brain injury", Medtronics, Minneapolis, MN

"Effects of sleep deprivation on brain glycogen levels", Center for Sleep and Respiratory Neurobiology, University of Pennsylvania

"The supplement creatine protects against traumatic brain injury", Neuroscience Program, University of Colorado, Denver, CO.

"Anti-inflammatory actions of adenosine: Implications for neurodegenerative diseases", Department of Pharmacology, University of Colorado, Denver, CO.

"Role of mitochondrial permeability transition pore in traumatic brain injury", Instititute

for Cell Biology, Winnipeg, MB.

1999

"Effects of sleep deprivation on ATP and glycogen", National Heart Lung Blood Institute SCOR Coordination Meeting, Bethesda, MD.

"Creatine Protects Against Traumatic Brain Injury", University of Winnipeg, Winnipeg, MB.

"Creatine, a Widely-Available and Commonly-Taken Dietary Supplement, Protects Against Traumatic Brain Injury in Rodents", Ross University, Portsmouth, Commonwealth of Dominica.

"Use of Drugs in Sport", Annual meeting of the Manitoba Physical Education Teachers Association, Winnipeg, MB.

"Use of Dietary Supplements in Sport", National Sport Centre, Winnipeg, MB.

"Panel Discussion on the Use of Drugs and Dietary Supplements in Sport", St. Paul's High School, Winnipeg, MB.

"In Vivo Regulation of Brain Adenosine: Implications for Sleep, Aging and Neurodegenerative Diseases", Harvard Medical School, Boston, MA.

"Recent Progress on Role of Adenosine in Aging and Sleep", University of Pennsylvania, Philadelphia, PA.

"Feedforward Potentiation of HIV-1 Protein-Induced Neurotoxicity by Neuroexcitatory and Neurotoxic Stumuli", Faculty of Pharmacy, Univeristy of Kentucky, Lexington, KY.

1998

"Regulation of Brain Adenosine: Implications for Sleep and Neurodegenerative Diseases", University of Kentucky, Lexington, KY.

"Anabolic/Androgenic Steroids", Headingly Correctional Institute, Headingly, MB.

"Drugs in Sport", Performance Enhancement Workshop, Winnipeg, MB.

"Drugs in Sport", Doping Control Officer Training, Pan Am Games, Winnipeg, MB.

"Drugs in Sport", Performance Enhancement Workshop, Thompson, MB.

"Regulation of Brain Adenosine", U.S. Army Workshop on "New Directions in Understanding Sleep Need and Human Vulnerability to Sleep Loss", Research Triangle Park, N.C.

"Diadenosine Polyphosphate Interactions With Ryanodine Receptor Regulated Pools of Intracellular Calcium", Novartis Foundation Meeting on Diadenosine Polyphosphates, London, England.

"Pharmacological Characterization of Mechanisms Controlling Levels of Endogenous Adenosine in Rat Striatum in vivo", Center for Sleep and Respiratory Neurobiology, University of Pennsylvania.

1997

“Caffeine, Intracellular Calcium and Amyloid Beta Protein”, Up to the Challenge? Understanding and Managing Alzheimer’s Disease, 9th Annual Alzheimer’s Conference, Winnipeg, MB.

“Free Radical, Nitric Oxide, and ‘REAL agent’ Regulation of Basal and Excitatory Amino-Acid-Induced Levels of Adenosine in Brain”, Center for Sleep and Respiratory Neurobiology, University of Pennsylvania.

“Prevalence and Consequences of Drug Use by Adolescent and Post-Adolescent Athletes”, Chief Peguis Junior High School (3 presentations to Grade 9 students).

1996

“Effects of Diadenosine Polyphosphates on Ryanodine Receptors and Intracellular Calcium Levels in Brain”, Department of Medical Microbiology, University of Manitoba.

1995

“Diadenosine Polyphosphate Regulation of Ryanodine Receptors in Brain and Muscle”, Department of Pharmacology, University of Minnesota, Minneapolis, MN.

“HIV-1 Tat Protein-Induced Neurotoxicity and Increased Levels of Intracellular Calcium”, Department of Pharmacology, University of Minnesota, Minneapolis, MN.

“HIV-1 Coat Protein gp120-Induced Increases in Levels of Intrasynaptosomal Calcium”, Department of Pharmacology, Univ. of Western Ontario, London, Ontario.

“Neurotoxicity of HIV-1 Proteins”, Department of Pharmacology, University of Manitoba.

1994

“Transport and Release of L-Adenosine in Brain Synaptosomal Preparations”, Department of Pharmacology, University of Manitoba.

1993

"[^{3}H]Ryanodine Binding to Calcium Release Channel/Ryanodine Receptor Complexes in Brain”, Department of Biochemistry, University of Manitoba.

"Ryanodine Receptors in the CNS", Department of Pharmacology, Gulbenkian Institute of Science, Oerias, Portugal.

"Localization and Inhibition of Adenosine Deaminase in the CNS", 14th Meeting of International Society of Neurochemistry, Montpelier, France.

"HIV Protein-Induced Elevations of Intracellular Calcium", University of Manitoba, Neuroscience Group.

"Presence and Actions of Diadenosine Polyphosphates in the CNS", University of Manitoba, Neuroscience Group.

1991

"[^{3}H]Ryanodine Binding to Calcium Release Channel/Ryanodine Receptor Complexes in Rat CNS; Kinetics, Pharmacology and Radioautography", Wayne State University, Detroit, MI.

1989

"Purine Nucleosides and Nucleotides in Cell Signalling: Targets for New Drugs", Dialog in Science Meeting, Rockville, Maryland.

Speaker at and Consultant for G.D. Searle Pharmaceutical Co., Chicago, Illinois.

Round Table on "Adenosine Formation and Transport in Nerve Cells," 12th International Society for Neurochemistry, Algarve, Portugal.

1988

Research Seminar, Manitoba Institute of Cell Biology, Winnipeg, Manitoba.

Speaker at and Consultant for McNeil Pharmaceuticals, (Subsidiary of Janssen Pharmaceuticals), Philadelphia, Pennsylvania.

Symposia on "Purines, Spinal Cord and Nociception", Canadian and American Pain Society Meeting, Toronto, Ontario.

Departmental Seminar, Department of Pharmacology, Dalhousie University, Halifax, Nova Scotia.

Speaker at and Consultant for GENSIA Pharmaceuticals, Inc., San Diego, California.

Research Seminar, Physiology Neuroscience Research Group.

Departmental Seminar, Department of Biochemistry and Chemistry, University of Winnipeg.

Guest on Ch. 11's Television Program "Health and Wellness", Topic was "Caffeine".

Departmental Seminar, Department of Chemistry, University of Manitoba.

Guest on CBC radio's "Morning Show", The Effects of Caffeine on the Central Nervous System.

1987

Chair, Pharmacology and Toxicology Conference, Univ. of North Dakota.

1986

Department of Pharmacology, Emory University, Atlanta, Georgia.

Workshop on "Neuromodulatory Role of Adenosine in the Nervous System", 17th Annual Meeting of American Society for Neurochemistry, Montreal, Quebec.

1984

Workshop on "Nucleoside Transport", Banff, Alberta.

1983

Workshop on "Trace Metals and Neurotransmitters", 9th Meeting International Society for Neurochemistry.

1981

North Dakota Medical Association, Jamestown, North Dakota.

IX. RESEARCH FUNDING (small grants and travel grants not included)

Title: Transport, metabolism and actions of adenosine in the CNS
Agency: Medical Research Council of Canada (MT-8901)
PI: J.D. Geiger
Dates: 1984-1987
Amount: $140,215 (three year operating grant)

Title: Neurochemical studies of adenosine in the CNS
Agency: Manitoba Health Research Council
PI: J.D. Geiger
Dates: 1984-1985
Amount: $20,000 (operating)

Title: Salary support for Dr. Geiger
Agency: Manitoba Health Research Council
PI: J.D. Geiger
Dates: 1984-1985
Amount: $60,000 (Scholarship - salary)

Title: Localization studies of adenosine deaminase in the CNS
Agency: Health Science Center Research Foundation
PI: J.D. Geiger
Dates: 1984-1985
Amount: $31,469 joint (operating)

Title: Role of adenosine deaminase in the CNS
Agency: University of Manitoba Faculty Fund
PI: J.D. Geiger
Dates: 1984-1985
Amount: $10,000 joint (operating)

Title: High performance liquid chromatography
Agency: Medical Research Council of Canada
PI: J.D. Geiger
Dates: 1984-1985
Amount: $26,375 (equipment)

Title: Start up funds for the Geiger laboratory
Agency: University of Manitoba Research Board
PI: J.D. Geiger
Dates: 1984-1985
Amount: $2,500

Title: Localization and function of adenosine deaminase containing neurons in the CNS
Agency: Manitoba Health Research Council
PI: J.D. Geiger
Dates: 1985-1986
Amount: $43,751 joint (operating)

Title: Role of adenosine deaminase in the CNS
Agency: Medical Research Council of Canada
PI: J.D. Geiger
Dates: 1985-1986
Amount: $83,888 joint (operating)

Title: Anatomical imaging equipment
Agency: University of Manitoba Research Board
PI: J.D. Geiger
Dates: 1985-1986
Amount: $2,800 joint

Title: Anatomical imaging equipment for the Geiger laboratory
Agency: University of Manitoba Research Grant Committee
PI: J.D. Geiger
Dates: 1985-1986
Amount: $3,500

Title: Salary support for Dr. Geiger
Agency: Medical Research Council of Canada
PI: J.D. Geiger
Dates: 1986-1991
Amount: $185,680 (Five year Scholarship award - salary)

Title: High performance liquid chromatography
Agency: University of Manitoba Faculty Fund
PI: J.D. Geiger
Dates: 1986-1987
Amount: $6,500 (equipment)

Title: Research funding accompanying Scholarship salary award
Agency: Medical Research Council of Canada
PI: J.D. Geiger
Dates: 1986-1990
Amount: $15,000 (Scholarship - Research allowance)

Title: Anatomical imaging equipment
Agency: Manitoba Health Research Council

PI: J.D. Geiger
Dates: 1986-1987
Amount: $10,000 (equipment)

Title: Transport, metabolism and actions of adenosine in the CNS (renewal)
Agency: Medical Research Council of Canada
PI: J.D. Geiger
Dates: 1987-1989
Amount: $123,929 (operating)

Title: Distribution and function of adenosine deaminase in the CNS
Agency: Medical Research Council of Canada
PI: J.D. Geiger
Dates: 1987-1990
Amount: $260,579 joint (operating)

Title: Levels and actions of endogenous adenosine in the CNS
Agency: Health Science Center Research Foundation
PI: J.D. Geiger
Dates: 1988-1989
Amount: $13,900 joint (operating)

Title: Head focused microwave sacrifice system
Agency: Health Science Center Research Foundation
PI: J.D. Geiger
Dates: 1988-1989
Amount: $8,239 joint (equipment)

Title: Levels and actions of endogenous adenosine in the CNS
Agency: Manitoba Health Research Council
PI: J.D. Geiger
Dates: 1988-1989
Amount: $13,000 (operating)

Title: Role of adenosine in ischemic neuronal injury
Agency: University of Manitoba Research Development Fund
PI: J.D. Geiger
Dates: 1988-1989
Amount: $10,000 joint

Title: Ontogenesis of adenosine deaminase in the CNS
Agency: Manitoba Health Research Council
PI: J.D. Geiger
Dates: 1989-1990
Amount: $34,900 joint (operating)

Title: Installation of head focused microwave sacrifice system
Agency: Manitoba Health Research Council
PI: J.D. Geiger
Dates: 1989-1990
Amount: $7,415 joint (equipment)

Title: High performance liquid chromatography
Agency: University of Manitoba Faculty Fund
PI: J.D. Geiger
Dates: 1989-1990
Amount: $46,500

Title: Recognition of excellence in biomedical research
Agency: Rh Institute Award
PI: J.D. Geiger
Dates: 1989-1990
Amount: $2,500

Title: Transport, metabolism and actions of purines in the CNS (renewal)
Agency: Medical Research Council of Canada
PI: J.D. Geiger
Dates: 1989-1992
Amount: $156,672 (three year operating grant)

Title: Neuroimaging equipment
Agency: Health Science Center Research Foundation
PI: J.D. Geiger
Dates: 1990-1991
Amount: $16,034 joint (equipment)

Title: Neuroimaging equipment
Agency: Manitoba Health Research Council
PI: J.D. Geiger
Dates: 1990-1991
Amount: $14,700 joint (equipment)

Title: Characterization of ryanodine receptors in the CNS
Agency: Manitoba Medical Health Research Foundation
PI: J.D. Geiger
Dates: 1991-1992
Amount: $7,000 joint (operating)

Title: Ryanodine receptor regulated pools of intracellular calcium
Agency: Manitoba Research Center-NCE
PI: J.D. Geiger
Dates: 1991-1992
Amount: $39,000 joint (operating)

Title: Role of ryanodine receptors in the CNS
Agency: Medical Research Council of Canada
PI: J.D. Geiger
Dates: 1992-1995
Amount: $249,856 joint (three year operating grant)

Title: Salary support for Dr. Geiger
Agency: Medical Research Council of Canada
PI: J.D. Geiger
Dates: 1992-1997

Amount: $275,000 (Five year Scientist award - salary)

Title: Ryanodine receptor regulation in the CNS
Agency: University of Manitoba Faculty Development Fund
PI: J.D. Geiger
Dates: 1992-1993
Amount: $13,000 joint

Title: High speed calcium imaging system
Agency: Health Science Center Research Foundation
PI: J.D. Geiger
Dates: 1992-1993
Amount: $18,297 joint (equipment)

Title: Neurotoxicity of gp120
Agency: Health Science Center Research Foundation/Abbott
PI: J.D. Geiger/J. Nagy
Dates: 1992-1993
Amount: $7,500 joint (equipment)

Title: High speed calcium imaging system
Agency: Manitoba Health Research Council
PI: J.D. Geiger
Dates: 1992-1993
Amount: $20,000 joint (equipment)

Title: Transport, metabolism and actions of purines in the CNS (renewal)
Agency: Medical Research Council of Canada (MT-8901)
PI: J.D. Geiger
Dates: 7/1/93-6/30/98
Amount: $290,500 (five year operating grant)

Title: Intracellular Ca^{2+} mediation of HIV protein-induced neurotoxicity
Agency: Alzheimer's Society of Canada
PI: J.D. Geiger
Dates: 1993-1994
Amount: $20,000 joint (operating)

Title: Effect of gp120 on intracellular calcium
Agency: Alzheimer's Society of Canada
PI: J.D. Geiger
Dates: 1993-1995
Amount: $20,000 joint (two year operating grant)

Title: gp120 and Intracellular Calcium
Agency: Health Science Center Research Foundation
PI: J.D. Geiger
Dates: 1993-1994
Amount: $34,000 joint

Title: Contractual studies on xanthine derivatives and adenosine receptors
Agency: APOTEX

PI: J.D. Geiger
Dates: 1993-1994
Amount: $10,000 (industry contract work)

Title: Role of RHAMM in the CNS
Agency: Manitoba Health Research Council
PI: E. Turley/J.I. Nagy (co-I: J.D. Geiger)
Dates: 1993-1994
Amount $144,000 joint (Univ./industry collaboration grant)

Title: Effect of gp120 on intrasynaptosomal calcium
Agency: Manitoba Health Research Council
PI: J.D. Geiger
Dates: 1994-1996
Amount $144,000 joint (two year Univ./industry collaboration grant)

Title: Mechanism of neurotoxicity of HIV-Tat
Agency: Medical Research Council & Natl. Health Research Development Program
PI: D. Magnuson/J.D. Geiger
Dates: 1994-1997
Amount: $297,000 (three year operating grant)

Title: Mechanisms of HIV-1 protein-induced neurotoxicity
Agency: NHRDP/Medical Research Council of Canada (6607-1714-AIDS)
PI: J.D. Geiger
Dates: 1/1/95-12/31/97
Amount: $300,000 joint (three year operating grant)

Title: Molecular and anatomical studies of the hyaluronan receptor RHAMM in the CNS
Agency: Medical Research Council of Canada (MA-8674)
PI: E. Turley/J.I. Nagy (co-I: J.D. Geiger)
Dates: 07/1995 – 06/1998
Amount $194,280 (three year operating grant)

Title: Diadenosine polyphosphates, intracellular calcium and Aβ release in cultured human fetal brain cells
Agency: Alzheimer Soc. Canada
PI: J.D. Geiger
Dates: 7/1/97-6/31/99
Amount: $100,000 (two year operating grant)

Title: Effects of nitrobenzylthioinosine on neuronal survival following cerebral ischemia
Agency: Heart & Stroke, Canada (G-97-PA-0436)
PI: J.D. Geiger/F. Parkinson
Dates: 7/1/97-6/31/99
Amount: $70,000 joint (two year operating grant)

Title: Mechanisms of and purinergic protection against HIV-1 Tat-induced neurotoxicity
Agency: Medical Research Council of Canada (MT-8901 renewal)
PI: J.D. Geiger
Dates: 7/1/98-3/31/01
Amount: $281,721

Title: Ryanodine receptor regulated pools of intracellular calcium in AD
Agency: ASTRA/Medical Research Council of Canada/Alzheimer
PI: J.D. Geiger
Dates: 1999-2000
Amount: $125,000

Title: Doctoral Award for Mr. N.J. Haughey
Agency: Alzheimer Society of Canada
PI: J.D. Geiger
Dates: 1997-1999
Amount: $32,000

Title: Merit Award (Research)
Agency: University of Manitoba
PI: J.D. Geiger
Dates: 1999
Amount: $5,000

Title: University of Manitoba Health Research Infrastructure Initiative, Neurodegenerative Disease Group Recruitment
Agency: University of Manitoba
PI: J.D. Geiger
Dates: 1999
Amount: $50,000

Title: Diadenosine polyphosphates through modulation of ryanodine receptor regulated intracellular calcium release channels, affect amyloid β protein (Aβ) production and release in cultured human fetal brain cells.
Agency: Alzheimer Society of Canada
PI: J.D. Geiger
Dates: 1997-1999
Amount: $100,000 (two year operating grant)

Title: Regulation of adenosine in relation to sleep need
Agency: National Heart, Lung and Blood Institute (USA) (NHLBI) (P50 HL-60287)
PI: J.D. Geiger, A. Pack, M. Mackiewicz
Dates: 9/1/98-8/31/03
Amount: $282,840 (five year SCOR grant)

Title: Role of intracellular calcium, reactive oxygen intermediates and purines in excitatory amino acid-induced increases of adenosine in brain
Agency: Canadian Institutes of Health Research Doctoral Research Award
PI: P.N. Shepel (J.D. Geiger, Supervisor)
Dates: 9/1/98-8/31/01
Amount: $46,989

Title: Investigations of the neuroanatomy, regulation and functional role of neuronal connexins and interneuronal gap junctional communication in the mammalian central nervous system
Agency: Canadian Institutes of Health Research
PI: J. Nagy/J.D. Geiger

Dates: 7/1/99-3/31/02
Amount: $213,077 (three year operating grant)

Title: Start-up funding for Substance Use in Sport & Health
Agency: Heritage Canada, Amateur Sport Secretary of State
PI: J.D. Geiger
Dates: 4/1/00-3/31/02
Amount: $352,000 (two year contract)

Title: Scholarship Award – Mr. Kevin Friesen
Agency: NSERC
PI: J.D. Geiger
Dates: 5/1/01-4/30/02
Amount: $17,300

Title: Aging effects on levels/actions of the sleep regulator adenosine
Agency: National Institute of Aging (P01 AG17628-01)
PI: Project – J.D. Geiger (PPG PI A. Pack)
Dates: 3/2001-11/2006
Amount: $1,290,812 (five year project)

Title: Postdoctoral Fellowship – Dr. Roberto Pattarini
Agency: Manitoba Health Research Council
PI: J.D. Geiger
Dates: 9/1/01-8/31/02
Amount: $35,000

Title: Graduate Studentship – Ms. Julie Fotheringham
Agency: Alzheimer's Society of Canada
PI: J.D. Geiger
Dates: 4/1/00-4/30/02
Amount: $19,530

Title: Studentship – Mr. Nick Shepel
Agency: Canadian Institutes of Health Research
PI: J.D. Geiger
Dates: 8/31/01-7/31/02
Amount: $19,030

Title: Graduate Student Top-up Award
Agency: Faculty of Graduate Studies
PI: J.D. Geiger/J. Fotheringham
Dates: 2001-2002
Amount: $10,000

Title: Graduate Student Top-up Award
Agency: Faculty of Medicine and Department of Pharmacology and Therapeutics
PI: J.D. Geiger/K. Friesen
Dates: 2001-2002
Amount: $10,000

Title: Uptake and metabolism of Abacavir in human glial cells

Agency: Glaxo-Wellcome Inc.
PI: J. Kort/J.D. Geiger
Dates: 2000-2001
Amount: $5,000

Title: Funding for Substance Use in Sport & Health
Agency: Sport Canada
PI: J.D. Geiger
Dates: 4/1/02-3/31/03
Amount: $100,000

Title: Studentship Award
Agency: Manitoba Health Research Council
PI: J.D. Geiger/Ms. Julie Fotheringham
Dates: 7/1/02-6/30-03
Amount: $16,000

Title: Electron paramagnetic resonance spectrometer
Agency: Medical Research Council of Canada
PI: B. Hasinoff/J.D. Geiger/F. Burczynski/F.W. Orr
Dates: 1999-2000
Amount: $280,757

Title: Effects of nucleoside analogs on HIV-1 infection of brain cells
Agency: National Institute of Neurological Disorders and Stroke (USA) (R01 NS39184)
PI: A. Nath/J.D. Geiger
Dates: 8/1/99-7/31/02
Amount: $332,471 (three year operating grant)

Title: Mutant presenilin and ryanodine receptor interactions
Agency: Alzheimer's Society of Canada and AstraZeneca
PI: J.D. Geiger/M.B. Mayne
Dates: 5/1/01-4/30/04
Amount: $150,000 (three year operating grant)

Title: Involvement of intracellular pools of calcium in amyloid beta protein (AB) release and the actions of presenilins and TNF-alpha
Agency: Canadian Institutes of Health Research/PMAC Health Program Fellowship
PI: M.B. Mayne (J.D. Geiger, supervisor)
Dates: 7/1/99-6/30/01
Amount: $62,500

Title: Mechanisms for the anti-inflammatory actions of adenosine in HIV-1 dementia
Agency: Canadian Institute of Health Research (HOP-8901)
PI: J.D. Geiger/M.B. Mayne
Dates: 10/1/01-9/30/04
Amount: $335,200 (three year operating grant)

Title: Role of BNIP3 in excitotoxicity and neuronal cell death
Agency: Canadian Institute of Health Research (MOP-53329)
PI: J.D. Geiger
Dates: 4/1/01-3/31/05

Amount: $263,088 (four year operating grant)

Title: Role of BNIP3 in amyloid β-mediated neurotoxicity
Agency: Paul Thorlakson Foundation Award
PI: J. Kong/Mentor: J.D. Geiger
Dates: 2002/2003
Amount: $30,361

Title: Autism and AMPS lyase mutations: Cell and mouse models
Agency: NIH (R01 MH065431)
PI: J.D. Geiger (D. Paterson PI)
Dates: 2/1/03-2/1/07
Amount: $200,000 (five year operating grant)

Title: Genetics, neurobiology, and cognition in Down Syndrome
Agency: NIH (P01HD17449)
PI: D. Patterson (PI) /J.D. Geiger (co-I)
Dates: 2/1/03-2/1/07
Amount: $200,000 (five year program project grant)

Title: Advancing Science Excellence in North Dakota
Agency: EPSCoR Red River Neuroscience Initiative #EPS-0132289
PI: J.D. Geiger
Dates: 06/04-05/05
Amount: $199,976 (equipment)

Title: Advancing Science Excellence in North Dakota
Agency: EPSCoR Red River Neuroscience Initiative #EPS-0447679
PI: J.D. Geiger
Dates: 6/05-6/07
Amount: $103,200 (operating)

Title: Northern Plains Center for Behavioral Research Translation
Agency: NIH Planning Grant for Institutional Clinical and Translational Science Awards
PI: J.D. Geiger, Co-I
Dates: 2006-2007
Amount: $150,000

Title: International symposium on the neuropathogenesis of HIV dementia
Agency: International Society of Neurochemistry/UND SMHS Assoc. Dean for Research
PI: J.D. Geiger
Dates: 2006-2007
Amount: $7,000

Title: Pathophysiology of neurodegenerative diseases
Agency: NIH NCRR COBRE P20RR017699
PI: J.D. Geiger
Dates: 8/02-7/07
Amount: $7,500,000 (five year COBRE grant)

Title: Alterations in adenosine nucleotide metabolism in Autism and Down's Syndrome
Agency: ND EPSCoR RRNI Doctoral Student Award

PI: J. Gawryluk/J.D. Geiger, sponsor
Dates: 2006-2007
Amount: $26,000

Title: New Faculty Start-up Award
Agency: ND EPSCoR
PI: J.D. Geiger
Dates: 2007-2008
Amount: $100,000

Title: Pathophysiological signaling in neurodegenerative disorders
Agency: NIH NCRR COBRE 2P20RR017699
PI: J.D. Geiger
Dates: 7/1/07-6/30/12
Amount: $7,346,680 (five year COBRE grant)

Title: Neuroprotection and Huntington's disease: Metabolic manipulation of mitochondria, purines and glia
Agency: CHDI (FDTN07025)
PI: J.D. Geiger
Dates: 11/1/08-10/31/10
Amount: $75,000 (two year operating grant)

Title: Interaction of alcohol with HIV proteins
Agency: NIAAA (1R01AA017408)
PI: N. Haughey (PI)/J.D. Geiger (co-I)
Dates: 9/15/07-9/15/11
Amount: $137,700

Title: Dysfunctions of sphingolipid and sterol metabolism in HIV dementia
Agency: NIMH 1R01MH077542
PI: N. Haughey (PI) / J.D. Geiger (co-I)
Dates: 4/1/07-3/31/12
Amount: $175,000

Title: New Faculty Start-up Award
Agency: ND EPSCoR
PI: J.D. Geiger
Dates: 2009-2010
Amount: $100,000

Title: The role of adenosine in ketogenic diet therapy
Agency: NIH/Trinity College, DHHS/NIH (1R01NS065957)
PI: D. Boison/J.D. Geiger/S. Masino (co-PIs)
Dates: 9/1/10-8/31/14
Amount: $527,131

Title: New Faculty Start-up Award
Agency: ND EPSCoR
PI: J.D. Geiger
Dates: 2012-2014
Amount: $300,000

Title: Neuronal endolysosome involvement in HIV-1 Tat-induced amyloid beta accumulation
Agency: NIA, R21AG043338
PI(s): Drs. X. Chen and J.D. Geiger
Dates: 07/01/2012-06/30/2014
Amount: $275,000

Title: Acquisition of a TIRF/widefield fluorescence microscope for cell biology and neuroscience
Agency: DHHS-NIH
PI(s): Dr. B. Grove (PI) J.D. Geiger (co-I)
Dates: 07/21/2013
Amount: $358,112

Title: P30, COBRE Center, Epigenomics of Development and Disease
Agency: NIGMS, P20GM104360
PI/PD: Vaughan/Ohm (Geiger - Senior Management Advisor)
Dates: 09/1/2013-08/31/2018
Amount: $10,400,000 (4.5% salary)

Title: New Faculty Start-up Award
Agency: ND EPSCoR
PI: Geiger/Wynne
Dates: 2015-2017
Amount: $500,000

Title: P30, COBRE Center for Neurodegenerative Disorder Research
Agency: NIGMS, P30GM103329
PI: J.D. Geiger
Dates: 07/15/2012-05/31/2017 (no cost extension until 05/31/2018)
Amount: $5,100,000

Title: Effects of HIV-1 Neurotoxins on Lipid Raft-Associated Proteins
Agency: NIDA R21DA040519-01A1
PI: Meucci (Geiger – co-I)
Dates: 9/01/2016-8/31/2018
Amount: $430,755

Active Grants:

Title: The role of novel endolysosome-dependent calcium regulatory mechanisms in actions of HIV-1 proteins
Agency: NIMH and NIGMS, R01MH100972
PI(s): Drs. J. Geiger and X. Chen (MPIs)
Dates: 08/01/2014 - 07/31/2019
Amount: $1,561,500

Title: Effects of anti-retroviral drugs on novel endolysosome-dependent calcium regulatory mechanisms
Agency: NIMH, R01MH105329

PI(s): Drs. J. Geiger and X. Chen (MPIs)
Dates: 12/15/2014 - 12/14/2019
Amount: $1,475,193

Title: The Great Plains IDeA Center for Clinical and Translational Research
Agency: NIGMS U54 GM115458
PI: Rizzo (Geiger – co-I)
Dates: 9/01/2016-8/31/2021
Amount: $19,987,769

Title: Ketogenic diet and adenosine: Epigenetics and anti-epileptogenesis
Agency: NIH R01NS065957
PIs: Drs. Boison, Geiger and Masino (MPIs)
Dates: 6/15/2018-4/30/2022
Amount: $2,254,373

Pending Grants:

Title: Tat endolysosome escape and HAND
Agency: NIH R01 (10% ranking)
PIs: Drs. Chen and Geiger (MPIs)
Dates: 10/01/2018-9/30/2023
Amount: $2,376,469

Title: Effects of opiates on neurons and their impact on HIV neuropathology
Agency: NIH R01 (17% ranking)
PIs: Dr. Meucci (PI), Dr. Geiger (co-I)
Dates: 10/01/2018-9/30/2023
Amount: $3,057,115

X. PROFESSIONAL PUBLICATIONS

I have published over 160 peer-reviewed publications and they have been cited about 6,000 times of which about 225 are self citations. I have had 15 manuscripts with greater than 80 citations and 10 manuscripts with greater than 100 citations. My H index number is 45 (without self citations) and this is derived from the number of manuscripts published and the number of citations for those publications that were published between 1996 and 2015.

Theses

Geiger, J.D. (1974). Effects of Hyperbaric Conditions on Drug Metabolizing Enzymes and Cellular Respiratory Activity. M.S. Thesis. University of North Dakota

Geiger, J.D. (1982). Mechanisms Underlying the Digoxin- Quinidine Interaction. Ph.D. Dissertation. University of North Dakota

FULL-LENGTH PUBLICATIONS

1. **Geiger, J.D**., S.J. Brumleve, J.N. Boelkins, and S. S. Parmar (1976). Effects of a Hyperbaric Environment on Respiratory and Monoamine Oxidase Activities. *Undersea Biomed. Res.* 3(2), 131-144.

2. **Geiger, J.D.**, S.J. Brumleve, J.N. Boelkins, and S.S. Parmar (1977). Selective Induction of Liver Drug-Metabolizing Enzymes in Rats Exposed to a 21 ATA He0$_2$ Environment. *Aviat. Space Environ. Med.* 48(8), 737-740.

3. Lee, M.C., J.I. Ausman, **J.D. Geiger,** R.E. Latchaw, A.C. Klassen, S.N. Chou, and J.A. Resch (1979). Superficial Temporal to Middle Cerebral Artery Anastomosis. Clinical Outcome in Patients with Ischemia or Infarction in Internal Carotid Artery Distribution. *Arch. Neurol.* 36(1), 1-4.

4. Parmar, S.S., A.K. Chaturvedi, **J.D. Geiger,** and S.J. Brumleve (1982). Inhibitory Mediation of Catecholamines for Anticonvulsant Activity of Sodium Valproate. *Proc. West. Pharmacol. Soc.* 25, 327-330.

5. **Geiger, J.D.**, G. Das, and S.S. Parmar (1982). Digoxin-Quinidine Interaction in Unanesthetized Guinea-pigs. *Pharmacol*. 25(4), 177-182.

6. **Geiger, J.D.**, T.K. Akers and S.S. Parmar (1983). Effects of Helium-Oxygen and Hyperbaric Helium-Oxygen Environment on Drug-metabolizing Enzyme Activite in Rat Liver. *Undersea Biomed. Res.* 10(4), 321-330.

7. **Geiger, J.D.**, P.K. Seth, L.M. Klevay and S.S. Parmar (1984). Receptor Binding Changes in Copper-Deficient Rats. *Pharmacol.* 28(4), 196-202.

8. **Geiger, J.D.**, J.C. Wallwork, P.K. Seth, H.H. Sandstead and S.S. Parmar (1984). Effects of Zinc Deficiency and Food Restriction on Receptor Binding in Rat Brain Regions. *Biol. Mem.* 10(1-2), 50-55.

9. **Geiger, J.D.**, F.S. LaBella and J.I. Nagy (1984). Ontogenesis of Adenosine Receptors in the Central Nervous System of the Rat. *Brain Res.* 13(1), 97-104.

10. **Geiger, J.D.**, F.S. LaBella and J.I. Nagy (1984). Characterization and Localization of Adenosine Receptors in Rat Spinal Cord. *J. Neurosci.* 4(9), 2303-2310.

11. **Geiger, J.D.** and J.I. Nagy (1984) Heterogeneous Distribution of Adenosine Transport Sites Labeled by [^{3}H]Nitrobenzylthioinosine in Rat Brain: An Autoradiographic and Membrane Binding Study. *Brain Res. Bull.* 13(5), 657- 666.

12. **Geiger, J.D.**, F.S. LaBella, and J.I. Nagy (1985). Characterization of Nitrobenzylthioinosine Binding to Nucleoside Transport Sites Selective for Adenosine in Rat Brain. *J. Neurosci.* 5(3), 735-740.

13. Nagy, J.I., **J.D. Geiger** and P.E. Daddona (1985). Adenosine Uptake Sites in Rat Brain: Identification Using ^{3}H-Nitrobenzylthioinosine and Co-Localization with Adenosine Deaminase. *Neurosci. Lett.* 55, 47-53.

14. **Geiger, J.D.** and J.I. Nagy (1985) Localization of [^{3}H]Nitrobenzylthioinosine Binding Sites in Rat Spinal Cord and Primary Afferent Neurons. *Brain Res.* 347, 321-327.

15. LaBella, F.S., **J.D. Geiger** and G.B. Glavin (1985) Administered Peptides Inhibit the Degradation of Endogenous Peptides. The Dilemma of Distinguishing Direct from Indirect Effects. *Peptides* 6(4), 645-660.

16. **Geiger, J.D.** and G.B. Glavin (1985) Adenosine Receptor Activation in Brain Reduces Stress-Induced Ulcer Formation. *Eur. J. Pharmacol.* 115, 185-190.

17. Lewis, J.L. and **J.D. Geiger** (1986) Antidepressant Competition for Adenosine Binding Sites and Chronic Doxepin Induced Increases in Adenosine Receptors. *Proc. West. Pharmacol. Soc.* 29, 265-269.

18. **Geiger, J.D.** (1986) Localization of [^{3}H]Cyclohexyladenosine and [^{3}H]Nitrobenzylthioinosine Binding Sites in Rat Striatum and Superior Colliculus. *Brain Res*. 363, 404-408.

19. **Geiger, J.D**. and J.I. Nagy (1986) Distribution of Adenosine Deaminase Activity in Rat Brain and Spinal Cord. *J. Neurosci.* 6, 2707- 2714.

20. Westerberg, V.S., G.B. Glavin, and **J.D. Geiger** (1986) Intracerebroventricular Administration of (-) Phenylisopropyladenosine Protects Rats Against Stress- Induced Ulcer Formation. *Proc. West. Pharmacol. Soc.* 29, 425-427.

21. Glavin, G.B., V.S. Westerberg and **J.D. Geiger** (1986) Modulation of Gastric Acid Secretion by Adenosine in Conscious Rats. *Can. J. Physiol. Pharmacol* 65, 1182-1185.

22. **Geiger, J.D.** and J.I. Nagy (1986) Lack of Adenosine Deaminase Activity Deficiency in the Mutant Mouse *Wasted.FEBS Letters* 208, 431-434.

23. **Geiger, J.D.** and J.I. Nagy (1987) Ontogenesis of Adenosine Deaminase Activity in Rat Brain. *J. Neurochem.* 48, 147-153.

24. Westerberg, V.S. and **J.D. Geiger** (1987) Central Effects of Adenosine Analogs on Stress-Induced Ulcer Formation. *Life Sci.* 41, 2201 - 2205.

25. **Geiger, J.D.** (1987) Adenosine Uptake and [^{3}H]Nitrobenzylthioinosine Binding in Developing Rat Brain. *Brain Research* 436, 265-272.

26. Yamamoto, T., **J.D. Geiger,** P.E. Daddona and J.I. Nagy (1987) Subcellular, Regional and Immunohistochemical Localization of Adenosine Deaminase in Various Species. *Brain Res. Bull.* 19, 473-484.

27. **Geiger, J.D.**, J.L. Lewis, C. McIntyre, V.S. Westerberg and J.I. Nagy (1987) Pharmacokinetics of 2'-Deoxycoformycin, An inhibitor of Adenosine Deaminase, in the Rat. *Neuropharmacol.* 26, 1383-1387.

28. Westerberg, V.S. and **J.D. Geiger** (1987) Inhibitors of Histidine Decarboxylase Decrease Basal Gastric Acid Secretion in Rat. *Pharmacol. Biochem. Behav.* 28, 1383-1387.

29. Yamamoto, T., W.A. Staines, K. Dewar, **J.D. Geiger,** P.E. Daddona, and J.I. Nagy (1988) Distinct Adenosine Deaminase-Containing Inputs to the Substantia Nigra from the Striatum and Tuberomammillary Nucleus. *Brain Res.* 474, 112-124.

30. **Geiger, J.D.**, M.E. Johnston and V. Yago (1988) Pharmacological Characterization of Rapidly Accumulated Adenosine by Dissociated Brain Cells from Adult Rat. *J. Neurochem.* 51, 283-291.

31. Nagy, J.I., T. Yamamoto, K. Dewar, P.E. Daddona and **J.D. Geiger** (1988) Adenosine Deaminase - "like" Immunoreactivity in Cerebellar Purkinje Cells of Rat. *Brain Res*. 457, 21-28.

32. Staines, W.A., T. Yamamoto, K.M. Dewar, P.E. Daddona, **J.D. Geiger** and J.I. Nagy (1988) Distribution, Morphology and Habenular Projections of Adenosine Deaminase-Containing Neurons in the Septal Area of Rat. *Brain Res.* 455, 72-87

33. Westerberg, V.S. and **J.D. Geiger** (1988) Adenosine and Gastric Function. *Trends Pharmacol. Sci.* 9, 345-347.

34. Westerberg, V. and **J.D. Geiger** (1989) Adenosine Analogs Inhibit Gastric Acid Secretion. *Eur. J. Pharmacol.* 160, 275-281.

35. Johnston, M.E. and **J.D. Geiger** (1989) Sodium-Dependent Uptake of Nucleosides by Dissociated Brain Cells from Rat. *J. Neurochem.* 52, 75-81.

36. Nagy, J.I., **J.D. Geiger** and W.A. Staines (1990) Adenosine Deaminase and Purinergic Neuromodulation. (Invited Review) *Neurochem. Int.* 16, 211-221.

37. Padua, R., **J.D. Geiger,** S. Dambock and J.I. Nagy (1990) 2'-Deoxycoformycin Inhibition of Adenosine Deaminase in Rat Brain: In vivo and In vitro Analysis of Specificity, Potency and Enzyme Recovery. *J. Neurochem.* 54, 1169-1178.

38. Wan, W. and **J.D. Geiger.** (1990) Effects of Enucleations and Visual Deprivation on Adenosine A_1 and A_2 Receptor Binding in Superior Colliculus of Rat. *Neuroscience Lett.* 117, 160-164.

39. Johnston, M.E. and **J.D. Geiger**. (1990) Adenosine Transport Systems on Dissociated Brain Cells from Mouse, Guinea-pig and Rat. *Neurochem. Res.* 15, 911-915.

40. Wan, W., G.R. Sutherland, and **J.D. Geiger** (1990) Binding of the Adenosine A_2 Receptor Ligand [^{3}H]CGS 21680 to Human and Rat Brain: Evidence for Multiple Affinity Sites. *J. Neurochem.* 55, 1763-1771.

41. Sutherland, G.R., J. Peeling, H.J. Lesiuk, R.M. Brownstone, M. Rydzy, J.K. Saunders, and **J.D. Geiger,** (1991) The Effects of Caffeine on Ischemic Neuronal Injury as Determined by Magnetic Resonance Imaging and Histopathology. *Neuroscience* 42, 171-182.

42. Zhang, Y., **J.D. Geiger,** and W.W. Lautt. (1991) Improved HPLC-Fluorometric Assay for Measurement of Adenosine in Plasma. *Am. J. Physiol.* 260, G658-G664.

43. Gu, J.G., S. Delaney, A.N. Sawka and **J.D. Geiger** (1991) L-[^{3}H]Adenosine, A New Metabolically Stable Enantiomeric Probe for Adenosine Transport Systems in Rat Brain Synaptoneurosomes. *J. Neurochem.* 56, 548-552.

44. Padua, R., W.W. Wan, J.I. Nagy and **J.D. Geiger**. (1991) [^{3}H]Ryanodine Binding Sites in Rat Brain Demonstrated by Membrane Binding and Autoradiography. *Brain Research* 542, 135-140.

45. Zhang, Y., D.J. Legare, **J.D. Geiger** and W.W. Lautt (1991) Dilazep Potentiation of Adenosine-Mediated Superior Mesenteric Arterial Vasodilation. *J. Pharmacol. Exp. Therap.* 258, 767-771.

46. Zhang, Y., **J.D. Geiger**, D.J. Legare and W.W. Lautt (1991) Dilazep-Induced Vasodilation is Mediated Through Adenosine Receptors. *Life Sci.*, 49, 129-133.

47. Padua, R., S. Delaney, **J.D. Geiger** and J.I. Nagy. (1992) Rat Brain Adenosine Deaminase After 2'-Deoxycoformycin Administration: Biochemical Properties and Evidence for Reduced Enzyme Levels Detected by 2'-[^{3}H] Deoxycoformycin Ligand Binding. *J. Neurochem.* 58, 421-429.

48. Padua, R.A., T. Yamamoto, D. Fyda, M.A. Sawchuk, **J.D. Geiger** and J.I. Nagy (1992) Autoradiographic Analysis of [^{3}H]Ryanodine Binding Sites in Rat Brain: Regional Distribution and the Effects on Sites in the Hippocampus. *J. Chem. Neuroanatomy* 5, 63-73.

49. Gu, J.G. and **J.D. Geiger** (1992) Transport and Metabolism of Accumulated D-[^{3}H]Adenosine and L-[^{3}H]Adenosine in Rat Cerebral Cortical Synaptoneurosomes. *J. Neurochem.* 58, 1699-1705.

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