

## CURRICULUM VITAE

**Name:** James R. Bloedel

**Home Address:** 3001 Hemlock Circle  
Ames, Iowa 50014

**Phone:** (515) 296-1425

**Office Address:** Department of Biomedical Sciences  
4415 Veterinary Medicine  
Iowa State University  
Ames, Iowa 50011

**Phone:** (515) 294-1785

**Birthplace:** Minneapolis, Minnesota

**Birth Date:** April 7, 1940

**Citizenship:** United States

**Marital Status:** Married

**Wife:** Joyce

**Children:** 3

**High School Attended and Date of Graduation:**

Concordia High School  
St. Paul, Minnesota

Diploma, 1958

**Colleges Attended with Dates and Degrees:**

St. Olaf College

Northfield, Minnesota

B.A. 1962

University of Minnesota

Ph.D. 1967 (Physiology)

Minneapolis, Minnesota

M.D. 1969 (Medicine)

**Undergraduate Honors:**

Phi Beta Kappa, St. Olaf College

B.A. - Summa cum laude, St. Olaf College

Blue Key - St. Olaf College

**Graduate and Professional Honors:**

Alpha Omega Alpha

Fellow, Life Insurance Medical Research Fund

Member, James Moore Society, University of Minnesota

Member, Cyrus Barnum Society

Jacob Javits Award - 1986

Honorary Professor - University of Nanjing, P.R.C. – 1995

Fellow, American Academy of Kinesiology and Physical Education – 2003

Speaker, Graduate College Commencement – Fall, 2006

College of Human Sciences Career Achievement in Research Award, 2007

**Memberships in Societies:**

AAAS	1970
American Physiological Society	1970
Sigma Xi	1970
Society for Neuroscience	1970
Neurosurgical Society of America - Associate Member	1975-
International Association for the Study of Pain	1976-1985
New York Academy of Sciences	1980-1995
International Brain Research Organization (IBRO)	1985

**Positions and Responsibilities:**

1962	Worked under Dr. Richard Varco at the University of Minnesota on the Kidney Transplantation Project
1965	Worked at Woods Hole, Massachusetts for three months while studying synaptic transmission in the squid giant synapse
1966-1967	Worked for ten months at the Institute of Physiology, University of Pisa, Italy
1967-1968	Worked under Dr. C.A. Terzuolo and Dr. R. Llinas in the Laboratory of Neurophysiology, University of Minnesota
1968-1973	Assistant Professor, Departments of Neurosurgery and Physiology, University of Minnesota, Minneapolis, Minnesota
1972	Visiting Professor for one month at Laboratory of Neurophysiology, Good Samaritan Hospital, Portland, Oregon
1973-1978	Associate Professor, Departments of Neurosurgery and Physiology, University of Minnesota, Minneapolis, Minnesota
1976-	Ad Hoc Reviewer - NIH Ad Hoc Study Sections and site visits
1972-1984	Laboratory Director, Department of Neurosurgery, University of Minnesota, Minneapolis, Minnesota
1978-1984	Professor, Departments of Neurosurgery and Physiology, University of Minnesota, Minneapolis, Minnesota
1978-1984	Fellowship Training in Electroencephalography at the University of Minnesota under Dr. F. Torres
1984-2000	Chairman, Division of Neurobiology, Barrow Neurological Institute, Phoenix, Arizona
1984-1988	Member, Neurology B1 Study Section, NIH
1986-1987	Vice Chairman, Phoenix Educator's Alliance
1986-2000	Research Professor, Department of Physiology, University of Arizona
1990-2000	Adjunct Research Professor, Department of Exercise Science and Physical Education, Arizona State University
1991-1996	Board Member, Winter Conference on Brain Research
1992-1995	Member, Arizona Disease Control Research Commission
1995	Co-organizer, International Meeting, Acquisition of Motor Behavior in

Vertebrates, Key West, Florida, April, 1995

1996-1999 Board Member, Neural Control of Movement  
1996 Member, NIMH Special Emphasis Panel  
1997- Board of Co-Editors, Experimental Brain Research  
1999-2000 Organizing Committee – IX International Symposium on Motor Control  
2000. 2000- Board of Editors, Cerebellum  
2000-2005 Vice Provost for Research and Advanced Studies and Dean of the  
Graduate College  
2000- Professor of Health and Human Performance and Biomedical Sciences,  
Iowa State University of Science and Technology.  
2000-2005 Member, Iowa Business Council Executive Technical Committee  
2000-2005 Member, Iowa Research Council  
2000- Member, Ames Economic Development Commission Board of Directors  
2001-2005 President, Iowa Research Council  
2002 Charter Member, Iowa Coalition for Innovation and Growth  
2002-2003 Board of Regents representative, Iowa Economic Development Board  
2002- Member, Ames Economic Development Executive Committee  
2002-2003 Vice President of Finance and Membership, Ames Economic  
Development Commission  
2002-2003 Member, Biotechnology Task Force  
2002-2003 Member, Life Sciences Research Office Subcommittee on Integrative and  
Organ Systems Science Steering Committee  
2002 Member, Council of Graduate Schools Dissertation Award Committee  
2003 Chair, Council of Graduate Schools Dissertation Award Committee  
2003-2004 President-Elect/Vice President of Marketing, Ames Economic  
Development Commission  
2004-2005 President, Ames Economic Development Commission (AEDC)  
2004-2005 Member, Ames Chamber of Commerce  
2004-2005 Member, Executive Committee, Council of Research Policy and Graduate  
Education  
2004-2006 Member, National Association of State Universities and Land-Grant  
Colleges Board of Directors  
2004-2005 Chair, Platform Subcommittee, BioAlliance of Iowa  
2004-2005 Board Member, BioAlliance of Iowa  
2004-2005 Member, Commercialization Subcommittee, BioAlliance of Iowa  
2003-2006 Member, AEDC Executive Committee  
2004-2006 Member, Legislative Subcommittee of the Ames Chamber of Commerce  
2006- Member, Data and Safety Monitoring Committee, New Link Genetics  
2006 Member, Steering Committee for Ward 2 Candidate, Jami Larson  
2007- Member, Fundraising Committee of the AEDC  
2006- Member, Membership Committee for the American Academy of  
Kinesiology and Physical Education

**Grant Awards:**

Principal Investigator:

1. "Role of Cerebellum in Regulation of Postural Tonus in Primates"  
NIH Award, Total first year budget: \$46,000. 9/70-9/73.
2. "Problems in Cerebellar Cortical Physiology"  
Minnesota Medical Foundation Award, Total budget: \$2,000. 1971-1972.
3. "Organization and Function of Central Nervous System Structures in Motor Control"  
NIH Award, Total first year budget: \$131,877. 9/73-9/76.
4. "Basic Mechanisms of Pain Perception and Their Application to Clinical Problems"  
Medtronic, Inc. Award, Total first year budget: \$85,000. 10/73-10/76.
5. "A Psychophysical and Neurophysiological Study of Pain"  
NIH Award, Total first year budget: \$126,362. 5/76-4/79.
6. "The Neocerebellum - Aspects of Organization and Function"  
NIH Award, Total first year budget: \$179,307. 9/76-9/79.
7. "Cerebellar Physiology"  
Minnesota Medical Foundation, Total budget: \$3,000. 1978-1979.
8. "Physiological Action of Afferent and Efferent Systems of the Neocerebellum"  
Graduate School, University of Minnesota Award, Total budget: \$1,000. 1978-1979.
9. "Study of the Effects of Electrical Stimulation of the Cerebellum"  
NIH Contract, Co-principal investigator with Dr. T. Ebner, Total budget: \$93,541.  
1/79-9/80.
10. "Neurophysiological and Psychophysical Study of Pain Systems"  
NIH Award, Total first year budget: \$169,736. 5/1/79-4/30/82.
11. "Patterns of Integration Occurring Along Cerebellar Afferent Systems"  
NIH Grant, Total first year budget: \$143,506. 8/1/79-7/31/82.
12. "The Use of Cerebellar Stimulation to Modify Spasticity"  
NIH Contract, Co-principal investigator with Dr. T. Ebner, First year: \$82,433, Total  
budget: \$271,405. 10/1/80-9/30/83.
13. "Neuronal Integration in Cerebellar Systems"  
NIH Grant, Total budget: \$352,173. 8/1/82-7/31/87.
14. "Motor Deficits Following Central Lesions in Primates"  
NSF Grant, Total budget: \$220,000 (including indirect costs). 6/1/84-5/31/87. This  
grant remained at the University of Minnesota when Dr. Bloedel moved to the Barrow  
Neurological Institute.
15. "Facilities Improvement for Animal Care and Storage"  
NIH Grant, Total budget: \$85,316. 8/1/86-7/31/87.
16. "Neuronal Integration in Cerebellar Systems"  
NIH Grant, Total budget: \$959,544. 8/1/87-7/31/94. Javits Award.
17. "Training Program in Motor-Control Neurobiology"  
NIH Grant, Co-principal Investigator with Dr. Douglas Stuart,  
Total budget: \$486,975. 7/1/87-6/30/92.
18. "Biomedical Research Support Grant"  
NIH grant, Total budget: \$34,278. 4/1/87-3/31/88.

- \$24,726. 4/1/88-3/31/89.  
\$29,482. 4/1/89-3/31/90.  
\$36,058. 4/1/90-3/31/91.  
\$18,498. 4/1/91-3/31/92.
19. "Supplement Proposal to NIH Grant 5R01 NS 21958"  
NIH Grant, Total budget: \$147,861. 12/15/90-7/31/94.
  20. "Modification and Control of Motor System Function"  
NIH Grant, Total budget: \$4,045,383. 7/1/92-6/30/97. Program Project.
  21. "Training Grant in Motor-Control Neurobiology"  
NIH Grant, Co-principal Investigator with Dr. Douglas Stuart,  
Total budget: \$806,916. 7/1/93-6/30/98.
  22. "Training Grant in Motor-Control Neurobiology"  
NIH Grant, Co-principal Investigator with Dr. Douglas Stuart,  
Total budget: \$703,660. 7/1/98 – 6/30/03
  23. "Neuronal Integration in Cerebellar Systems"  
NIH Grant, Total budget: \$1,005,437. 8/1/94 - 7/31/99.
  24. "Cerebellar Contribution to Reaching Behaviors"  
NIH Grant, Total budget: \$1,241,277. 5/15/98 – 4/30/03.
  25. "Cerebellar Dysfunction in Reach-to-Grasp Movements"  
NIH Grant, Total budget: \$461,567. 9/7/98 – 4/30/02.
  26. Supplement to "Cerebellar Contribution to Adaptive Reaching Behaviors"  
NIH Grant, Total budget: \$50,000. 5/15/98 – 4/30/99.
  27. "Neuronal Integration in Cerebellar Systems"  
NIH Grant, Total budget: \$1,917,831. 9/21/00 – 8/31/05.
  28. "IRB Review Web Based System"  
NIH Grant, Total budget: \$200,000. 9/12/03 - 12/31/05.

Co-investigator:

1. "Study of Effects of the Electrical Stimulation of the Cerebellum"  
NIH Contract, Total budget: \$241,015. 6/74-5/77 (renewed 1977-1978).
2. "Neocerebellar Afferent and Efferent Studies"  
Graduate School, University of Minnesota Award, Total budget: \$4,000. 6/76-5/77.
3. "Mossy and Climbing Fiber Interactions in the Cerebellum"  
NIH Grant, Dr. Timothy J. Ebner, Principal Investigator, Total award: \$95,817. 4/1/82-  
3/31/85.
4. "Early Locomotor Training in Cerebral Palsied and Normal Infants"  
Arizona Disease Control Commission, Dr. Elizabeth L. Leonard, Principal Investigator,  
Total budget: \$52,000. 7/1/90-6/30/92.
5. "The Intermediate Cerebellum in Adaptive Reflex Control"  
NIH Grant, Dr. Vlastislav Bracha, Principal Investigator, Total budget: \$916,871.  
7/20/98 – 4/30/02.

**Committees - University of Minnesota**

1969-1970 Phase A Subcommittee, Introduction to Clinical Medicine  
1970 Substitute for Dr. C.A. Terzuolo on Phase B Curriculum Committee for Neuroscience in his absence  
1971-1982 Phase D Curriculum Committee for Neuroscience  
1971-1973 Chairman, Phase B Preclinical Curriculum Committee for Neuroscience  
1973-1984 Phase B Neuroscience Committee  
1971-1972 Medical School Admissions Committee  
1973-1977 Scholastic Standing Committee, Medical School  
1974-1976 Dean's Grievance Committee  
1976-1977 Subcommittee for the Educational Policy Committee on Grading  
1976-1977 Alternate, University Faculty Senate  
1976-1984 Consultant, NIH (site visits, ad hoc study sections)  
1977-1980 Member, University Faculty Senate  
1977 Ad Hoc Neuroscience Committee  
1977-1978 Grievance Committee, Department of Neurosurgery  
1976, 1978 Substitute for Dr. Chou on the Health Science Research Advisory Committee to the Graduate School  
1977-1984 Advisory Committee, Research Animal Resources  
1979 Chairman, Ad Hoc Committee of the Advisory Committee, Research Animal Resources  
1980-1981 Search Committee for Assistant Professor, Research Animal Resources  
1981-1982 Bucaner Award Committee, Department of Physiology  
1982 Chairman, Internal Review Committee for the Department of Neurology  
1982-1983 Alternate, University Faculty Senate  
1982-1984 Neuroscience Advisor, Biomedical Library  
1982 Chairman, Local Arrangements Committee, National Neuroscience Meeting  
1982-1983 President, Voyageurs Chapter, Neuroscience Society  
1983-1984 Nervous System Pathophysiology Course Committee  
1983 Bucaner Award Committee, Department of Physiology  
1983 Neurosurgery Department Grievance Committee  
1983 Graduate School Faculty Committee in Neurosciences  
1983-1984 Alternate, University Faculty Senate

**Committees - Barrow Neurological Institute**

1984-2000 BNI Committee  
1984-2000 Chairman, Research Coordinating Committee  
1984-2000 Animal Welfare Committee, BNI  
1984-2000 Internal Review Board for Human Research, BNI  
1984-1985 Chairman, Neurobiology Search Committee  
1984-1986 Ad hoc committee for research space development and utilization  
1985-1987 Secretary, BNI Committee  
1986 Ad hoc Committee for External Evaluation of Neurology Division  
1986-1988 Member, Search Committee for Chairman of Neurology Division  
1986-1987 Coordinator, Student Summer Fellowship Program  
1986-1987 Member, Executive Committee of the Phoenix Educator's Alliance  
1986-1987 Vice Chairman, Phoenix Educator's Alliance

- 1986-1992 Education Committee, St. Joseph's Hospital  
1987-2000 Co-Director with Dr. Douglas Stuart, U. of Arizona - BNI Motor Control Training Program  
1988-2000 Vice Chairman, Internal Review Board for Human Research  
1989-2000 Member, Neuroscience Training Program, U. of Arizona  
1989-2000 Member, Physiological Sciences Training Program, U. of Arizona  
1990 Neuroprosthesis Center Initiative, BNI  
1990-1992 Joint ASU -BNI Neurocomputing Center initiative - planning committee  
1991-1992 Member, Search Committee for the Phoenix Associate Dean, University of Arizona Medical School  
1992-2000 Co-Director with Dr. George Stelmach, Flinn Foundation ASU-BNI Training Program in Sensorimotor Control

### **Committees – Iowa State University**

- 2000-2001 Chair, College of Veterinary Medicine Dean Search Committee  
2000-2001 Chair, Director of Laurence H. Baker Center for Bioinformatics and Biological Statistics Search Committee  
2000-2001 Chair, Arts and Humanities Advisory Committee  
2000-2005 Chair, Coordinating Council on Technology Transfer  
2000-2005 Chair, Council of University Research Institute Administrators  
2000-2005 Member, Iowa Energy Center Advisory Council  
2000-2005 Secretary, Iowa State University Research Foundation Board  
2000-2005 Member, Maintenance and Improvement Committee  
2001-2005 Member, University Library Committee  
2002-2005 Chair, Ad Hoc Committee on NRC Rankings  
2002-2005 Member, University Rankings Committee  
2005-present Chair, Department of Biomedical Sciences P & T Committee  
2005-2006 College of Veterinary Medicine Task Force  
2006-2007 Sigma Xi Nominating Committee  
2006-2007 Dean's Budget Task Force, College of Veterinary Medicine  
2006-present University Task Force on Non-Tenure Eligible Research Faculty Positions  
2006-present Implementation Steering Committee, College of Veterinary Medicine  
2006-present Director of Graduate Education, Biomedical Sciences Graduate Program  
2006-2007 Chair, Department of Biomedical Sciences Search Committee, BMS position  
2006-2007 Chair, Department of Biomedical Sciences Search Committee, Entrepreneurial Position  
2006-present Chair, BMS Research and Graduate Education Committee  
2006-2007 Member, Health and Human Performance Strategic Plan Committee  
2006-present Dual Degree Committee, College of Veterinary Medicine  
2007 Member, Search Committee for the Animal Wellbeing Specialist

### **Teaching Experiences - University of Minnesota**

1969-1970

Winter Quarter, 1969

Central Nervous System lectures in the Physiology Course for dental students. Physiology 101.

Spring Quarter, 1969

Responsible for the organization and most of the presentations for the Neurophysiology Laboratory section of Physiology 106.

Summer Quarter, 1969

Presented Central Nervous System lectures in Physiology 51.

1970-1971

Spring Quarter, 1971

Presented a significant number of lectures in the Phase B Neuroscience Course for medical students.

All four quarters, 1970-1971

Organized and presented a year-long seminar course designed to cover many topics in neurophysiology. This course was taught under Readings in Neurophysiology, Physiology 202, all four quarters to residents and graduate students.

1971-1972

Spring Quarter, 1972

In the capacity of chairman of the basic science unit for the Phase B Neuroscience Course, worked with Dr. Klassen and presented a total of approximately 38 hours of elective and core material to the Phase B students (approximately 8 core lectures and 30 hours of planned elective sessions).

Spring Quarter, 1972

Worked with Dr. R. Poppele in the preparation of two video tapes to be used in the instruction of Phase A students. One lecture was also given to Phase A students.

All four quarters, 1971-1972

Survey course in neurophysiology, Physiology 202, total of 4 credits.

1972-1973

Spring, 1973

Participation in Phase D Return to Basic Science.

All four quarters, 1972-1973

Survey course in neurophysiology, Physiology 202, total of 4 credits.

1973-1974

Summer, 1973

Several lectures (core and elective) were presented in the Phase B Neuroscience Course.

Fall, 1973

Special Readings course (Physiology 202) was given to a graduate student interested in the physiology of the lemniscal system.

Spring, 1974

Participation in Phase D Return to Basic Science.

1974-1975

Summer, 1974

Presented lectures in the Phase B Neuroscience Course.

All four quarters, 1974-1975

Survey course in neurophysiology, Physiology 202, total of 4 credits.

1975-1976

Initiated with Dr. H. Bantli a series of neurobiology courses taught in the Neurosurgery Department and made available to graduate students throughout the University (NSurg 8-324). Every other year, a survey course similar to the year-long seminar course (Physiology 202) will be presented which will be alternated with courses one quarter in duration dealing with specific areas of neurobiology. The first course of this series was presented by Dr. Bantli on the subject of neuronal modeling.

Spring, 1976

Presented a series of elective lectures in the Phase B Neuroscience Course.

1976-1977

All four quarters, 1976-1977

Survey course in neurophysiology (year-long) NSurg 8-324 (total of 4 credits) was presented to residents and graduate students.

Winter, 1977

Presented a series of elective lectures in Phase B Neuroscience Course.

Gave several lectures in a graduate course in the Anatomy Department (Anatomy 8111-Enrichment Session).

Summer, 1977

13 hours of lectures in Physiology 3-051.

1977-1978

Winter, 1978

Presented a series of elective lectures in Phase B Neuroscience Course.

Spring, 1978

Presented 3 laboratory sections in the Phase A Neurophysiology Course.

January, 1969-1984

Participated in and gave many presentations for the weekly Grand Rounds of the Department of Neurosurgery (Neurosurgery 8-318).

Participated in the Journal Club of the Department of Neurosurgery.

Occasional presentations were given in other courses:

Laboratory demonstrations for Physiology 102

Physiology 216

Seminar program of Physical Medicine and Rehabilitative Department

Neuroengineering Research Seminar - Neurobiology 8-240

1978-1979

All quarters

Survey course in neurophysiology (year-long) NSurg 8-324 (total of 4 credits).  
Presented to residents and graduate students.

Winter, 1979

Two lectures in Phase A Neurophysiology Course.

Four lab sections for Phase A Neurophysiology.

Two core lectures in Phase B Neuroscience.

Three elective lectures in Phase B Neuroscience.

1979-1980

Fall and Winter Quarters

Presented, together with Dr. T. Ebner, the lectures in a survey course to the residents in Neurology (Neurol. 8-222).

Winter Quarter

Two laboratory sessions in the Phase A Physiology Course for medical students.

Elective lectures and one core lecture in Phase B Neuroscience Course.

1980-1981

Summer Session and Part of Fall Quarter

Supervision of a medical student taking a research elective in the Department of Neurosurgery (Neurosurgery 5520).

Fall, Winter and Spring Quarters

Presented with Dr. T. Ebner a year-long course in Neurophysiology (Neurosurgery 8324-

Physiology 8202).

Fall Quarter

Elective lectures and one core lecture in Phase B Neuroscience Course.

Winter Quarter

Three laboratory sessions in Phase A Neurophysiology course for medical students.

Spring Quarter

Lecture presentation in Physiol. 8219 (Motor Systems).

1981-1982

Fall Quarter

Supervision of a medical student taking a research elective in the Department of Neurosurgery (Neurosurgery 5520).

Elective lectures and one core lecture in Phase B Neuroscience Course.

Winter Quarter

Laboratory sectionals in Phase A Neurophysiology Course.

1982-1983

Summer Quarter

Supervision of a medical student taking a research elective in the Department of Neurosurgery (NSurg 5520).

Summer-Spring Quarters

Year-long course in Neurophysiology (NSurg 8324, Physiol 8202).

Fall Quarter

One core and two elective lectures in Phase B Neuroscience Course.

1983-1984

Fall Quarter

Series of lectures, together with Dr. T. Ebner, reviewing principles of neuroanatomy and physiology for the neurosurgery residents. This was a new lecture series presented as part of the Neurosurgery grand rounds.

Three lectures in Pathophysiology II, Nervous System and Muscle Disorders.

Winter Quarter

Lecture in Neuroanatomy 8-111.

Teaching lecture to neurology and neurosurgery residents - Mayo Clinic.

Review sessions for Grand Rounds lecture series presented in the fall quarter.

**Teaching Experiences - Barrow Neurological Institute**

1984-1985

Neurobiology Seminar Course for postdoctoral and predoctoral students.  
Presentations in BNI seminar series.  
Guest lecturer in the neuroscience course at Johns Hopkins Medical School (2 lectures).  
Neurobiology course for BNI residents.

1985-1986

Neurobiology Seminar Course for postdoctoral and predoctoral students.  
Presentations in BNI seminar series.  
Neurobiology course for BNI residents.  
Guest lecturer in the neuroscience course at University of Arizona Medical School.  
Sponsor for BNI summer fellowship students: Steen Johnsen and Joseph Drazkowski.  
Lecturer in Neuroscience Nursing Course - BNI.

1986-1987

Lecturer in Neuroscience Nursing Course - BNI.  
Lecturer in Neuroscience Medical School Course at University of Arizona.  
Participating faculty in Motor Colloquium at University of Arizona: a one semester course in motor control.  
Neurobiology Seminar Course for postdoctoral and predoctoral students.  
Taught in a special Central High School program for advanced biology students.  
Sponsored special educational experience for McClintock High School student, Cindy Kadoo.  
Supervised Stony Brook medical student on a research clerkship, Peter Gasparo.

1987-1988

Sponsored Graduate Assistantship for Arizona State University student, Stephen Tillery.  
Lecturer in Neuroscience Nursing Course - BNI.  
Lecturer in Neuroscience Medical School Course at University of Arizona.  
Neurobiology Seminar Course for postdoctoral and predoctoral students.  
Neurobiology Course for BNI residents.

1988-89

Lecturer in Neuroscience Nursing Course - BNI.  
Lecturer in Neuroscience Medical School Course at University of Arizona.  
Neurobiology Course for BNI residents.  
Participant in Motor Control Colloquium, a graduate school course at the University of Arizona.  
Advisor and sponsor of graduate assistantship for Sandra Stewart, graduate student at Arizona State University.  
Lecturer in graduate course on cerebellar neurobiology presented by the Biology Department at Arizona State University.

Guest lecturer in Medical School Neuroscience Course, University of Texas, Dallas.

1989-90

Advisor for Ph.D. program of Sandra Stewart, Physiological Sciences Program, University of Arizona.  
Ph.D. Thesis Committee, Leslie Bevan.  
Ph.D. Thesis Committee, John Spielmann.  
Neurobiology Course for BNI Neurology Residents.  
Participant Motor Control Colloquium - University of Arizona.  
Lecturer in Neuroscience Nursing Course - BNI.  
Sponsor for BNI summer fellowship students: Caroline Hollnagle, Elizabeth Yoder, and Todd Trier.

1990-91

Advisor for Ph.D. program of Jin-Zi Wu, Neuroscience Program, University of Arizona.  
Sponsor for BNI summer fellowship students: Kristina Irwin and Paul Larson.  
Weekly Neurobiology Seminar Course for pre- and post-doctoral students in the Division of Neurobiology.  
Lectures in Neuroscience Nursing Course, BNI.  
Lectures in the Summer Neurobiology Course for the BNI Undergraduate Summer Fellowship Program.

1991-92

Weekly Neurobiology Seminar Course for pre- and post-doctoral students in the Division of Neurobiology.  
Assisted Dr. R. Hestenes and presented lectures in Arizona State University course "Modeling of Sensory-Motor Networks" - Psychology 591.  
Lectures in Neuroscience Nursing Course.  
Research sponsor for Arizona State University students: Scott Bartholomew, Noel Winters, and Tami Daugherty.  
Lecture in BME 591 Seminar Course at Arizona State University.  
Sponsor for Central High School student, Eben Gering, who received a first place award in the behavioral sciences division and a superior achievement award (second place from all divisions) from the U.S. Navy at the Central Arizona Regional Science Fair. He also received a superior award (second place) at the Arizona-Nevada Junior Academy of Science.  
Sponsor for BNI summer fellowship student, Michael Macabuhay.  
Initiated, supervised and presented in Neuroscience Course for Neurology Residents - year long course.

1992-93

Sponsor for BNI summer fellowship students: Sarah Keightley, Michael Macabuhay, and Sandeep Khandar.  
Weekly Neurobiology Seminar Course for pre- and post-doctoral students in the Division

of Neurobiology.  
Seminar Course for Postdoctoral Fellows and Students in the ASU-BNI Training Program.  
Lectures in Neuroscience Nursing Course.  
Research Sponsor for Arizona State University student, Scott Bartholomew.  
Continued sponsorship for Eben Gering.

1993-94

Weekly Neurobiology Seminar Course for pre- and post-doctoral students in the Division of Neurobiology.  
Research sponsor for Arizona State University student, Melissa Crosby.  
Lectures in Neuroscience Nursing Course.  
Sponsor for BNI summer fellowship students: Dustin Boyer, Sandeep Khandar, and Steve Morrissey.

1994-95

Weekly Neurobiology Seminar Course for pre- and post-doctoral students in the Division of Neurobiology.  
Organized and lectured in Neuroscience Course for Neurology Residents.  
Research sponsor for Arizona State University student, Susan Kersey.  
Lectures in Neuroscience Nursing Course.  
Sponsor for BNI summer fellowship students: Jay Alberts and Steve Morrissey.  
Lectures in the Motor Control Colloquium (Graduate Course at U of A).  
Conducted, together with George Stelmach, a weekly seminar in motor control for trainees on the ASU - BNI Flinn Foundation Training Program.

1995-96

Weekly Neurobiology Seminar Course for pre- and post-doctoral students in the Division of Neurobiology.  
Organized and lectured in Neuroscience Course for Neurology Residents.  
Sponsor for BNI summer fellowship students: Steve Morrissey and Dax Quelland.  
Lectures in the Motor Control Colloquium (Graduate Course at U of A).  
Conducted, together with George Stelmach, a weekly seminar in motor control for trainees on the ASU - BNI Flinn Foundation Training Program.

1996-97

Neurobiology Seminar Course for pre- and post-doctoral students in the Division of Neurobiology.  
Organized and lectured in Neuroscience Course for Neurology Residents.  
Lectures in the Motor Control Colloquium (Graduate Course at U of A).  
Sponsor for BNI summer fellowship student: Stacy Schmidt  
Initiated and sponsored research internship as part of curriculum of St. Olaf College, a research and tutorial experience. Supported two students: Kristi Kurzawa and Rebecca LaRue.

Conducted, together with George Stelmach, a biweekly seminar in motor control for trainees on the ASU - BNI Flinn Foundation Training Program.

1997-98

Weekly Neurobiology Seminar Course for pre- and post-doctoral students in the Division of Neurobiology.

Organized and lectured in Neuroscience Course for Neurology Residents.

Lectures in the Motor Control Colloquium (Graduate Course at U of A).

Conducted, together with George Stelmach, a biweekly seminar in motor control for trainees on the ASU - BNI Flinn Foundation Training Program.

Sponsored three students in the St. Olaf College interim internship program: Kirsten Roman, Jessica Haffner, and Sarah McNallie.

1998-1999

Weekly Neurobiology Seminar Course for pre- and post-doctoral students in the Division of Neurobiology.

Lectures in the Motor Control Colloquium (Graduate Course at U of A).

Conducted, together with George Stelmach, a biweekly seminar in motor control for trainees on the ASU - BNI Flinn Foundation Training Program.

Thesis Committee: Rachael Seidler, ASU graduate student in Exercise Science.

1999-2000

Weekly Neurobiology Seminar Course for pre- and post-doctoral students in the Division of Neurobiology.

Lectures in the Motor Control Colloquium (Graduate Course at U of A).

Conducted, together with George Stelmach, a biweekly seminar in motor control for trainees on the ASU - BNI Flinn Foundation Training Program.

Research training and thesis committee of Carl Saab, graduate student of Prof. W. Willis, Univ. of Texas – Galveston.

Thesis committee: Jay Alberts, ASU graduate student in Exercise Science

### **Teaching Experiences – Iowa State University**

2002

Honors Course on Neuroscience of Learning and Motor Behavior.

2005-2006

HCI 699 – Research Credits: One student

HHP 699 – Research Credits: One student

2006-2007

Presentation in HHP 615 – Seminar for PhD Students

HHP672X – Neuroscience of Motor Systems: Concepts and Controversies – 3 Credits

HCI 699 – Research Credits: One student

HHP 699 – Research Credits: One student

**Advisorships – University of Minnesota**

- 1) Ph.D. Program Advisorships (Physiology):  
William Litchy  
Timothy Ebner\*  
Edward Hames\*  
Carl Hansen  
Jau-Shin Lou\*  
\*Degrees completed  
<sup>1</sup>Degree completed under Dr. Ebner  
Jerrold Vitek\*  
Andrew Schwartz\*  
Chris McDevitt\*  
David Tam\*<sup>1</sup>
- 2) Ph.D. Thesis Advisor (Neurosurgery):  
Dr. Phudhiphorn Thienprasit\*  
Dr. Andrew Smith\*  
Dr. Gary Rea\* (Co-advisor with  
Dr. Ebner)  
\*Degrees completed  
Dr. Dennis Shubert\*  
Dr. John Godersky  
Dr. Mahmoud Naguib\*
- 3) Medical School Advisorships:  
William Litchy  
Timothy Ebner  
Edward Hames  
Carl Hansen  
Charles Griffin  
Gerald Vitek  
Mike Bahr  
Mike Anderson
- 4) Honors Advisor in College of Liberal Arts:  
2-3 students per year from 1971-1977
- 5) Supervision of student research projects:  
4 summer fellowships for medical students not working toward an advanced degree
- 6) Supervision of research projects of neurosurgery residents (non-degree candidates):  
Dr. Dick Gregory  
Dr. Steven Martin  
Dr. William Druckmiller  
Dr. John Mawk
- 7) Sponsorship through research grants of postdoctoral fellows:  
Dr. Douglas McCreery  
Dr. John Rowlands  
Dr. Luis Morillo  
Dr. Qi-Xiang Yu  
Dr. Teresa McMullen  
Dr. Gary King  
Dr. Chun-I Huang  
Dr. Jong Kim
- 8) Supervision of research, and co-sponsor with Dr. Heinrich Bantli, of Dr. Dan Tolbert, a recipient of an individual NIH postdoctoral grant.



Eric Gustason

Eben Gering

- 10) Supervision of summer fellowships (primarily undergraduate students):
- |                   |                    |
|-------------------|--------------------|
| Joseph Draskowski | Elizabeth Yoder    |
| Kathy Harrington  | Caroline Hollnagel |
| Steen Johnsen     | Dustin Boyer       |
| Qun Shen          | Kristina Irwin     |
| Paul Larson       | Sarah Keightley    |
| Michael Macabuhay | Jay Alberts        |
| Steve Morrisey    | Sandeep Khandar    |
| Dax Quelland      | Stacy Schmidt      |
- 11) Co-sponsor with Dr. E. Leonard of Dr. Maeve O'Sullivan, postdoctoral fellow, funded by Dr. Leonard's grant from the Arizona Disease Control Research Commission.
- 12) Visiting Scientists:
- Florian Kolb - Munich
  - Francisco Rubia - Madrid
  - Konstantin Baev - Kiev
  - Jian-Jun Wang – Nanjing

**Advisorships and Graduate Education Responsibilities – Iowa State University**

- 1) Visiting Scientists
  - Miya Rand – Arizona State University
  - Mihai Tarata – Romania
- 2) POS Committees - PhD
  - Krystal Detweiler (Neuroscience)
  - Svitlana Szbarska (Neuroscience)
  - Mandy Connors (Human Computer Interface) (Chair and PhD Advisor)
  - Tyler Streeter (Human Computer Interface)
  - Carlos Ariza (Chemical Engineering)
  - Wanda Gordon-Evans (Biomedical Sciences)
- 3) POS Committees - MA
  - Sumit Ranjan (Kinesiology)

## PUBLICATIONS

### Books and Reviews

Bloedel, J.R.: Cerebellar afferent systems: A review. Prog. in Neurobiol. Vol. II, Part 1, pp. 1-68, Pergamon Press: Oxford, England, 1973.

Bloedel, J.R.: A substrate for integration in central pain pathways. Clin. Neurosurg. 21: 194-228, 1974.

Bloedel, J.R. and McCreery, D.: The organization of peripheral and central pain pathways. Surg. Neurol. 4: 65-81, 1975.

Bloedel, J.R. and Courville, J.: A review of cerebellar afferent systems. In: Handbook of Physiology, Vol. II. Motor Control. V.B. Brooks (ed.) Baltimore: Williams and Wilkins, 1981. pp. 735-830.

Gilman, S., Bloedel, J.R. and Lechtenberg, R.: Disorders of the Cerebellum. Davis: Philadelphia, 1980.

Davis, R. and Bloedel, J.R. (eds.) Cerebellar Stimulation for Seizures and Spasticity, CRC Press, 1984.

Bloedel, J.R. and Ebner, T.J.: Control of Spastic Motor Activity by Cerebellar Stimulation. Eng. Med. Biol. 2: 36-43, 1983.

Bloedel, J.R., Dichgans, J. and Precht, W. (eds.) Cerebellar Functions, Springer-Verlag: Berlin, Heidelberg, New York. 1985.

Bloedel, J.R.: Functional heterogeneity with structural homogeneity: How does the cerebellum operate? Behav. Brain Sci. 15: 666-678, 1992.

Bloedel, J.R. and Bracha, V.: On the cerebellum, cutaneomuscular reflexes, movement control and the elusive engrams of memory. Behav. Brain Res. 68: 1-44, 1995.

Bloedel, J.R., Ebner, T.J., and Wise, S.P. (eds.) The Acquisition of Motor Behavior in Vertebrates, MIT Press: Cambridge, 1996.

Haines, D.E., Mihailoff, G.A., and Bloedel, J.R. The cerebellum. In: Haines, D.E. (ed.) Fundamental Neuroscience, Churchill Livingstone: New York, pp. 379-398, 1997.

**Papers**

- \* 1. Bloedel, J.R., Gage, P.W., Llinas, R., and Quastel, D.M.J.: Transmission across the squid giant synapse in the presence of tetrodotoxin. *J. Physiol.* 188: 52, 1966.
- \* 2. Bloedel, J.R., Gage, P.W., Llinas, R., and Quastel, D.M.J.: Transmitter release at the squid giant synapse in the presence of tetrodotoxin. *Nature* 212: 49-50, 1966.
3. Bloedel, J.R.: An electrophysiological study of the interneuronal connections in the cerebellar cortex of the frog. Ph.D. Thesis, 1967.
- \* 4. Llinas, R. and Bloedel, J.R.: Climbing fiber activation of Purkinje cells in the frog cerebellum. *Brain Res.* 3: 299-302, 1967.
- \* 5. Llinas, R. and Bloedel, J.R.: Frog cerebellum: Absence of long term inhibition upon Purkinje cells. *Science* 155: 601-603, 1967.
- \* 6. Bloedel, J.R. and Roberts, W.J.: Functional relationship among neurons of the cerebellar cortex in the absence of anesthesia. *J. Neurophysiol.* 32: 75-84, 1969.
- \* 7. Llinas, R., Bloedel, J.R. and Hillman, D.E.: Functional characterization of neuronal circuitry of frog cerebellar cortex. *J. Neurophysiol.* 32: 847-870, 1969.
- \* 8. Llinas, R., Bloedel, J.R. and Roberts, W.J.: Antidromic invasion of Purkinje cells in the frog cerebellum. *J. Neurophysiol.* 32: 881-891, 1969.
- \* 9. Bloedel, J.R. and Llinas, R.: Neuronal interactions in frog cerebellum. *J. Neurophysiol.* 32: 871-881, 1969.
- \* 10. Bloedel, J.R. and Burton, J.E.: Electrophysiological evidence for a mossy fiber input to the cerebellar cortex activated indirectly by collaterals of spinocerebellar pathways. *J. Neurophysiol.* 33: 308-320, 1970.
11. Bloedel, J.R. and Llinas, R.: Discussion in Cerebellar Evolution and Development. AMA Education-Research Foundation, R.Llinas, editor, 1969, pp. 389-394.
12. Burton, J.E. and Bloedel, J.R.: Discussion in Cerebellar Evolution and Development. AMA Education-Research Foundation, R. Llinas, editor, 1969, pp. 71-721.
- \* 13. Bloedel, J.R. and Roberts, W.J.: The action of climbing fibers in the feline cerebellar cortex. *J. Neurophysiol.* 34: 17-31, 1971.
- \* 14. Burton, J.E., Bloedel, J.R. and Gregory, R.S.: Electrophysiological evidence for an input to the lateral reticular nucleus from collaterals of dorsal spinocerebellar and cuneocerebellar fibers. *J. Neurophysiol.* 34: 885-987, 1971.

- \* 15. Bloedel, J.R., Gregory, R.S. and Martin, S.H.: Action of interneurons and axon collaterals in cerebellar cortex of a primate. *J. Neurophysiol.* 35: 847-863, 1972.
- \* 16. Martin, S.H. and Bloedel, J.R.: The use of cortical evoked responses in evaluating "closed" spinal cord injury. *J. Neurosurg.* 39: 75-81, 1973.
- \* 17. Thienprasit, P., Bantli, H., Bloedel, J.R., and Chou, S.N.: Effect of delayed local cooling on spinal cord injury. *J. Neurosurg.* 42: 150-154, 1975.
- \* 18. Bantli, H., Bloedel, J.R., Long, D.M., and Thienprasit, P.: The distribution of activity in spinal pathways evoked by dorsal column stimulation. *J. Neurosurg.* 42: 290-295, 1975.
- \* 19. Bantli, H., Bloedel, J.R. and Thienprasit, P.: Supraspinal interactions resulting from dorsal column stimulation. *J. Neurosurg.* 42: 296-300, 1975.
- \* 20. McCreery, D. and Bloedel, J.R.: A quantitative approach to evaluating the effect of stimulating devices on the perception of noxious stimuli. *Med. Instrum. J.* 9: 205-208, 1975.
- \* 21. Bantli, H. and Bloedel, J.R.: The monosynaptic activation of a direct reticulo-spinal pathway by the dentate nucleus. *Pflug. Arch.* 357: 237-242, 1975.
- \* 22. McCreery, D. and Bloedel, J.R.: Reduction of the response of cat spinothalamic neurons to graded mechanical stimuli by electrical stimulation of the lower brainstem. *Brain Res.* 97: 151-156, 1975.
- \* 23. Bantli, H., Bloedel, J.R. and Tolbert, D.: Activation of neurons in the cerebellar nuclei and ascending reticular formation by stimulation of the cerebellar surface. *J. Neurosurg.* 45: 539-554, 1976.
- \* 24. Bantli, H. and Bloedel, J.R.: Characteristics of the output from the dentate nucleus to spinal neurons via pathways which do not involve the primary sensorimotor cortex. *Exp. Brain Res.* 25: 199-220, 1976.
- \* 25. Tolbert, D., Bantli, H. and Bloedel, J.R.: Anatomical and physiological evidence for a cerebellar nucleo-cortical projection in the cat. *Neuroscience* 1: 205-217, 1976.
- \* 26. McCreery, D.B. and Bloedel, J.R.: Effect of trigeminal stimulation on the excitability of cat spinothalamic neurons. *Brain Res.* 117: 136-140, 1976.
- 27. Bloedel, J.R., McCreery, D.B. and Erickson, D.L.: Analysis of the action of implanted stimulating devices using signal detection theory. *Adv. in Pain. Res. and Ther.* 1: 433-437, 1976.
- 28. Bantli, H. and Bloedel, J.R.: Interactions between the dentate nucleus and the spinal cord via infratentorial nuclei. *Exp. Brain Res. Suppl. I.*, 84-89, 1976.

- \* 29. Bantli, H. and Bloedel, J.R.: Spinal input to the lateral cerebellum mediated by infratentorial structures. *Neuroscience* 2: 555-568, 1977.
- \* 30. Bantli, H., Bloedel, J.R., Anderson, G.R., McRoberts, R., and Sandberg, E.: Effects of stimulating the cerebellar surface on the activity in penicillin foci. *J. Neurosurg.* 48: 69-84, 1978.
- \* 31. Tolbert, D.L., Bantli, H. and Bloedel, J.R.: The intracerebellar nucleo-cortical projection in a primate. *Exp. Brain Res.* 30: 425-434, 1977.
- \* 32. McCreery, D.B. and Bloedel, J.R.: Evaluation of transcutaneous electrical stimulation using signal detection theory. *Sensory Processes* 2: 38-57, 1978.
- \* 33. Tolbert, D.L., Bantli, H. and Bloedel, J.R.: Multiple branching of cerebellar efferent projections in cats. *Exp. Brain Res.* 31: 305-316, 1978.
- \* 34. Smith, A.J.K., McCreery, D., Bloedel, J.R., and Chou, S.N.: Hyperemia, CO<sub>2</sub> responsiveness and loss of autoregulation in the white matter following experimental spinal cord injury. *J. Neurosurg.* 48: 239-251, 1978.
- \* 35. Bloedel, J.R. and Bantli, H.: A spinal action of the dentate nucleus mediated by descending systems originating in the brain stem. *Brain Res.* 153: 602-607, 1978.
- \* 36. McCreery, D., Hames, E. and Bloedel, J.R.: Effects of stimulating in raphe nuclei and in reticular formation on responses of spinothalamic neurons to mechanical stimuli. *J. Neurophysiol.* 42: 166-182, 1979.
- \* 37. Tolbert, D.L., Bantli, H., Hames, E.G., Ebner, T.J., McMullen, T., and Bloedel, J.R.: A demonstration of the dentato-reticulospinal projection in the cat. *Neuroscience* 5: 1479-1488, 1980.
- \* 38. Tolbert, D.L., Bantli, H. and Bloedel, J.R.: Organizational features of the cat and monkey cerebellar nucleocortical projection. *J. Comp. Neurol.* 182: 39-56, 1978.
- \* 39. McCreery, D., Bloedel, J.R. and Hames, E.G.: The responses of spinothalamic neurons to low-intensity mechanical stimulation of the face. *Brain Res.* 177: 253-263, 1979.
- \* 40. Hames, E.G., Ebner, T.J. and Bloedel, J.R.: Electrophysiological demonstration of a dentato-rubrospinal projection in the cat. *Neuroscience* 6: 2603-2612, 1981.
- 41. Ebner, T.J., Bantli, H. and Bloedel, J.R.: Effects of cerebellar stimulation on unitary activity within a chronic epileptic focus in a primate. *Electroencephal. and Clin. Neurophysiol.* 49: 585-599, 1980.
- \* 42. Ebner, T.J. and Bloedel, J.R.: Temporal patterning in the simple spike discharge of Purkinje cells and its relationship to climbing fiber activity. *J. Neurophysiol.* 45: 933-

947, 1981.

- \* 43. Morillo, L., Ebner, T.J. and Bloedel, J.R.: The effects of cerebellar stimulation on alpha motoneuron excitability and the stretch reflex in the cat. *Electroencephal. and Clin. Neurophysiol.* 51: 339-352, 1981.
- \* 44. Ebner, T.J., Vitek, J.L., Schwartz, A.B., and Bloedel, J.R.: Effects of cerebellar stimulation on abnormal proprioceptive reflexes in spastic primates. *Exp. Neurol.* 70: 721-725, 1980.
- \* 45. Ebner, T.J. and Bloedel, J.R.: Correlation between the activity of Purkinje cells and its modification by natural peripheral stimuli. *J. Neurophysiol.* 45: 948-961, 1981.
- 46. Ebner, T.J. and Bloedel, J.R.: The action of climbing fibers on Purkinje cell responsiveness to mossy fiber inputs. *Adv. in Physiol., Vol. 2, Regulatory Functions of the CNS. Subsystems*, J. Szentagothai, J. Hamori, M. Palkovits (eds.), pp. 141-144, 1980.
- \* 47. Ebner, T.J. and Bloedel, J.R.: Role of climbing fiber afferent input in determining the responsiveness of Purkinje cells to mossy fiber inputs. *J. Neurophysiol.* 45: 962-971, 1981.
- \* 48. Morillo, L.E., Ebner, T.J. and Bloedel, J.R.: The early involvement of subcortical structures during the development of a cortical seizure focus. *Epilepsia* 23: 571-585, 1982.
- \* 49. King, G.W., Ebner, T.J. and Bloedel, J.R.: The effects of noxious heat on responses of spinocervical units to low intensity cutaneous stimuli. *Brain Res.* 222: 144-149, 1982.
- \* 50. Ebner, T.J., Bloedel, J.R., Vitek, J.L., and Schwartz, A.B.: The effects of cerebellar stimulation on the stretch reflex in the spastic monkey. *Brain* 105: 425-442, 1982.
- 51. Bloedel, J.R., Ebner, T.J., Godersky, J.C., and Huang, C.: Physiological mechanisms underlying the effects of cerebellar stimulation. In: Davis, R. and Bloedel, J.R. (eds.), Cerebellar Stimulation for Seizures and Spasticity, CRC Press, pp. 35-52, 1984.
- \* 52. McDevitt, C.J., Ebner, T.J. and Bloedel, J.R.: The changes in Purkinje cell simple spike activity following spontaneous climbing fiber activity. *Brain Res.* 237: 484-491, 1982.
- 53. Ebner, T.J., Bloedel, J.R., Vitek, J.L., and Schwartz, A.B.: Modification of the stretch reflex in spastic monkeys by cerebellar stimulation. In: Davis, R. and Bloedel, J.R. (eds.), Cerebellar Stimulation for Seizures and Spasticity, CRC Press, pp. 89-104, 1984.
- \* 54. Huang, C.-I., Ebner, T.J. and Bloedel, J.R.: Effects of stimulating the surface of the principal cerebellar sagittal zones on the stretch reflex in the cat. *Journal of the Formosan Medical Assoc.* 81: 1348-1356, 1982.

- \* 55. Bloedel, J.R., Ebner, T.J. and Yu, Q.X.: Increased responsiveness of Purkinje cells associated with climbing fiber inputs to neighboring neurons. *J. Neurophysiol.* 50: 220-239, 1983.
- \* 56. Ebner, T.J., Yu, Q.X. and Bloedel, J.R.: Increase in Purkinje cell gain associated with naturally activated climbing fiber input. *J. Neurophysiol.* 50: 205-219, 1983.
- \* 57. Kajander, K.C., Ebner, T.J. and Bloedel, J.R.: Effects of stimulating in the periaqueductal gray and nucleus raphe magnus on the responses of spinocervical and spinoreticular cells to nonnoxious cutaneous stimuli. *Brain Res.* 291: 29-37, 1984.
- 58. Bloedel, J.R.: Concluding remarks: Scientific perspectives in cerebellar stimulation. In: R. Davis and J.R. Bloedel (eds.), Cerebellar Stimulation or Seizures and Spasticity, Boca Raton: CRC Press, pp. 335-338, 1984.
- \* 59. Bloedel, J.R. and Ebner, T.J.: Rhythmic discharge of climbing fibre afferents in response to natural peripheral stimuli. *J. Physiol.* 352: 129-146, 1984.
- 60. Bloedel, J.R.: A book review of The Cerebellum: New Vistas, S.L. Palay and V. Chan-Palay (eds.). *IBRO News* 12: 9-10, 1984.
- 61. Ebner, T.J. and Bloedel, J.R.: Rhythmic properties of climbing fiber afferent responses to peripheral stimuli. In: Bloedel, J.R., Dichgans, J., Precht, W. (eds.), Cerebellar Functions, Springer-Verlag: Berlin, Heidelberg, New York, pp. 259-262, 1985.
- \* 62. Ebner, T.J. and Bloedel, J.R.: Climbing fiber action on the responsiveness of Purkinje cells to parallel fiber inputs. *Brain Res.* 309: 182-186, 1984.
- 63. Bloedel, J.R. and Ebner, T.J.: Climbing fiber function: Regulation of Purkinje cell responsiveness. In: Bloedel, J.R., Dichgans, J. and Precht, W. (eds.), Cerebellar Functions, Springer-Verlag: Berlin, Heidelberg, New York, pp. 247-259, 1985.
- \* 64. Yu, Qi-Xiang, Ebner, T.J. and Bloedel, J.R.: Electrophysiological study of the corticonuclear projection in the cat cerebellum. *Brain Res.* 237: 121-134, 1985.
- 65. Bloedel, J.R.: Basic Neuroscientist in a Neurosurgical Department - Is the Experiment Working? *Minn. Med.* 68: 518-519, 1985.
- \* 66. Kim, J.H., Ebner, T.J. and Bloedel, J.R.: Comparison of response properties of dorsal and ventral spinocerebellar tract neurons to a physiological stimulus. *Brain Res.* 369: 125-135, 1986.
- 67. Bloedel, J.R.: The physiological basis for conjugate eye movements. *Am. J. Oto.* (Nov.), Suppl.: 35-38, 1985.
- 68. Ebner, T.J. and Bloedel, J.R.: Climbing fiber afferent system: intrinsic properties and role in cerebellar information processing. In: King, J.S. and Courville, J. (eds.), New

Concepts in Cerebellar Neurobiology, Alan R. Liss: New York, pp. 371-386, 1987.

- \* 69. Lou, J.S. and Bloedel, J.R.: The responses of simultaneously recorded Purkinje cells to perturbations of the step cycle in the walking ferret: a study using a new analytical method - the real time postsynaptic response (RTPR). *Brain Res.* 365: 340-344, 1986.
- \* 70. McElligott, J.G., Ebner, T.J. and Bloedel, J.R.: Reduction of cerebellar norepinephrine alters climbing fiber enhancement of mossy fiber input to the Purkinje cell. *Brain Res.* 397: 245-252, 1986.
- \* 71. McDevitt, C.J., Ebner, T.J. and Bloedel, J.R.: Relationship between simultaneously recorded Purkinje cells and nuclear neurons. *Brain Res.* 425: 1-13, 1987.
- \* 72. McDevitt, C.J., Ebner, T.J. and Bloedel, J.R.: Changes in the responses of cerebellar nuclear neurons associated with the climbing fiber response of Purkinje cells. *Brain Res.* 425: 14-24, 1987.
- \* 73. Schwartz, A.B., Ebner, T.J. and Bloedel, J.R.: Comparison of responses in dentate and interposed nuclei to perturbations of the locomotor cycle. *Exp. Brain Res.* 67: 323-338, 1987.
- 74. Bloedel, J.R. and Lou, J.S.: The relation between Purkinje cell simple spike responses and the action of the climbing fiber system in unconditioned and conditioned responses of forelimb to perturbed locomotion. In: Glickstein, M., Stein, J. and Yeo, C. (eds.), Cerebellum and Neuronal Plasticity. Plenum: New York, pp. 261-276, 1987.
- \* 75. Rea, G.L., Ebner, T.J. and Bloedel, J.R.: Evaluations of combined premotor and supplementary motor cortex lesions on a visually guided arm movement. *Brain Res.* 418: 58-67, 1987.
- 76. Bloedel, J.R.: Cerebellum and Memory Storage. Technical comments. *Science* 238: 1728-1729, 1987.
- \* 77. Lou, J.-S. and Bloedel, J.R.: A new conditioning paradigm: conditioned limb movements in locomoting decerebrate ferrets. *Neurosci. Lett.* 84: 185-190, 1988.
- \* 78. Lou, J.-S. and Bloedel, J.R.: A study of cerebellar cortical involvement in motor learning using a new avoidance conditioning paradigm involving limb movement. *Brain Res.* 445: 171-174, 1988.
- 79. Bloedel, J.R. and Zuo, C.-C.: Heterosynaptic action of climbing fibers in the cerebellar cortex. In: Strata, P. (ed.), The Olivocerebellar System in Motor Control. Springer-Verlag: Berlin, Heidelberg, New York. *Experimental Brain Res.* 17: 246-264, 1989.
- \* 80. Kelly, T.M., Zuo, C.-C. and Bloedel, J.R.: Classical conditioning of the eyeblink reflex in the decerebrate-decerebellate rabbit. *Behav. Brain Res.* 38: 7-18, 1990.
- 81. Bloedel, J.R. and Kelly, T.M.: The dynamic selection hypothesis: a proposed function for

cerebellar sagittal zones. In: Llinas, R. and Sotelo, C. (eds.), The Cerebellum Revisited. Springer-Verlag: New York, pp. 267-282, 1992.

82. Bloedel, J.R., Bracha, V., Kelly, T.M., and Wu, J.-Z.: Substrates for motor learning: Does the cerebellum do it all? In: Wolpaw, J.R. and Schmidt, J.T. (eds.), Activity-Driven Changes in Learning and Development. New York Acad. Sci. 627: 305-318, 1991.
83. Bloedel, J.R.: Evolving concepts of climbing fiber function. In: Henatsch, H.-D., Windhorst, U, Laouris, Y., and Meyer-Lohmann, J. (eds.), Perspectives in Motor Control: Brainstorming on the State of Affairs and Future Developments. AIM Verlag, Gottingen, pp. 26-30, 1989.
84. Bloedel, J.R. and Helms Tillery, S.I.: Effect of practice on the kinematics of reaching movements made to moving targets. In: Requin, J. and Stelmach, G.E. (eds.), Tutorials in Motor Neuroscience, pp. 109-120, 1991.
- \* 85. Bracha, V., Wu, J.-Z., Cartwright, M., and Bloedel, J.R.: Selective involvement of the spinal trigeminal nucleus in the conditioned nictitating membrane reflex of the rabbit. *Brain Res.* 556: 317-320, 1991.
86. Bloedel, J.R. and Helms Tillery, S.I.: Effects of practice on reaching movements made to moving targets. In: Requin, J. and Stelmach, G.E. (eds.), Tutorials in Motor Behavior II, pp. 357-369, 1992.
- \* 87. Lou, J.-S. and Bloedel, J.R.: Responses of sagittally-aligned Purkinje cells during perturbed locomotion. Synchronous activation of climbing fiber inputs. *J. Neurophysiol.* 68(2): 570-580, 1992.
- \* 88. Lou, J.-S. and Bloedel, J.R.: Responses of sagittally-aligned Purkinje cells during perturbed locomotion. Relation of climbing fiber activation to simple spike modulation. *J. Neurophysiol.* 68(5): 1820-1833, 1992.
89. Bloedel, J.R.: Concepts of cerebellar integration: Still more questions than answers (Commentary). *Behav. Brain Sci.* 15: 833-838, 1992.
90. Bloedel, J.R., Bracha, V. and Larson, P.S.: Real time operations of the cerebellar cortex. *Can. J. Neurosci.* 20 (Suppl. 3): S7-S18, 1993.
- \* 91. Irwin, K.B., Craig, A.D., Bracha, V. and Bloedel, J.R.: Distribution of c-fos expression in brainstem neurons associated with conditioning and pseudo-conditioning of the rabbit nictitating membrane reflex. *Neurosci. Lett.* 148: 71-75, 1992.
- \* 92. Bracha, V., Stewart, S.L. and Bloedel, J.R.: The temporary inactivation of the red nucleus affects performance of both conditioned and unconditioned nictitating membrane responses in the rabbit. *Exp. Brain Res.* 94: 225-236, 1993.
- \* 93. Bracha, V., Webster, M.L., Winters, N.K., Irwin, K.B. and Bloedel, J.R.: Effects of

muscimol inactivation of the cerebellar interposed-dentate nuclear complex on the performance of the nictitating membrane response in the rabbit. *Exp. Brain Res.* 100: 453-468, 1994.

94. Bloedel, J.R., Bracha, V. and Milak, M.S.: Role of the cerebellar nuclei in the learning and performance of forelimb movements in the cat. In: Mano, N., Hamada, I. and DeLong, M.R. (eds.) Role of the Cerebellum and Basal Ganglia in Voluntary Movements, Elsevier: Berlin, pp. 21-31, 1993.
95. Bloedel, J.R.: 'Involvement in' versus 'Storage of', Commentary on the manuscript of H.C. Leiner, A.L. Leiner, and R.S. Dow, Cognitive and language functions of the human cerebellum. *Trends in Neurosci.* 16: 451-452, 1993.
- \* 96. Milak, M.S., Bracha, V. and Bloedel, J.R.: Relationship of simultaneously recorded cerebellar nuclear neuron discharge to the acquisition of a complex, operantly conditioned forelimb movement in cats. *Exp. Brain Res.* 105(2): 325-330, 1995.
- \* 97. Timmann, D., Shimansky, Yu., Larson, P.S., Wunderlich, D.A., Stelmach, G.E., and Bloedel, J.R.: Visuomotor learning in cerebellar patients. *Behav. Brain Res.* 81: 99-113, 1996.
98. Bloedel, J.R., Bracha, V., Shimansky, Y., and Milak, M.S.: The role of the cerebellum in the acquisition of complex, volitional forelimb movements. In: Bloedel, J.R., Ebner, T.J., and Wise, S.P. (eds.) The Acquisition of Motor Behavior in Vertebrates, MIT Press: Cambridge, pp. 319-342, 1996.
99. Bracha, V. and Bloedel, J.R.: The multiple pathway model of circuits subserving the classical conditioning of withdrawal reflexes. In: Bloedel, J.R., Ebner, T.J., and Wise, S.P. (eds.) The Acquisition of Motor Behavior in Vertebrates, MIT Press: Cambridge, pp. 175-204, 1996.
- \* 100. Timmann, D., Stelmach, G.E., and Bloedel, J.R.: Grasping component alterations and limb transport. *Exp. Brain Res.* 108: 486-492, 1996.
101. Bloedel, J.R., Milak, M., and Bracha, V.: Role of the cerebellum in the acquisition and performance of motor tasks. In: Motor Control VII. D. Stuart, G. Gantchev, V. Gurfinkel, and M. Wiesendanger (eds.) Motor Control Press: Tucson, pp. 183-186, 1996.
- \* 102. Rand, M.K., Alberts, J.L., Stelmach, G.E., and Bloedel, J.R.: The influence of movement segment difficulty on movements with two stroke sequence. *Exp. Brain Res.* 115: 255-270, 1997.
103. Bloedel, J.R. and Bracha, V.: The duality of cerebellar motor and cognitive functions. In: J.D. Schmahmann (ed.) Cerebellum and Cognition, Academic Press: San Diego, pp. 613-634, 1997.
- \* 104. Kolb, F.P., Irwin, K.B., Bloedel, J.R., and Bracha, V.: Conditioned and unconditioned

forelimb reflex systems in the cat: Involvement of the intermediate cerebellum. *Exp. Brain Res.* 144: 255-270, 1997.

105. Bloedel, J.R., Bracha, V., Milak, M., and Shimansky, Y.: Cerebellar contributions to the acquisition and execution of learned reflex and volitional movements. In: De Zeeuw, C.I. (ed.) The Cerebellum: From Structure to Control, Progress in Brain Research, Vol. 114, Elsevier: Amsterdam, pp. 499-509, 1997.
- \* 106. Milak, M., Shimansky, Yu., Bracha, V., and Bloedel, J.R.: Effects of inactivating individual cerebellar nuclei on the performance and retention of a complex, operantly conditioned forelimb movement. *J Neurophysiol.* 78: 939-958, 1997.
107. Haines, D.E., Mihailoff, G.A., and Bloedel, J.R.: The cerebellum. In: Haines, D.E. (ed.) Fundamental Neuroscience, Churchill Livingstone: New York, pp. 379 - 398, 1997.
- \* 108. Bracha, V., Zhao, L., Wunderlich, D.A., Morrissy, S.J., and Bloedel, J.R.: Patients with cerebellar lesions cannot acquire but are able to retain conditioned eyeblink reflexes. *Brain.* 120: 1401-1413, 1997.
- \* 109. Shimansky, Y., Saling, M., Wunderlich, D., Bracha, V., Stelmach, G., and Bloedel, J.R.: Impaired capacity of cerebellar patients to perceive and learn two-dimensional shapes based on kinesthetic cues. *Learning and Memory.* 4: 36-48, 1997.
- \* 110. Wang, J.-J., Shimansky, Y., Bracha, V., and Bloedel, J.R.: Effects of cerebellar nuclear inactivation on the learning of a complex forelimb movement in cats. *J. Neurophysiol.* 79: 2447-2459, 1998.
- \* 111. Bracha, V., Irwin, K.B., Webster, M.L., Wunderlich, D.A., Stachowiak, M.K., and Bloedel, J.R.: Microinjections of anisomycin into the intermediate cerebellum during learning affect the acquisition of classically conditioned responses in the rabbit. *Brain Res.* 788: 169-178, 1998.
- \* 112. Rand, M.K., Wunderlich, D.A., Martin, P.E., Stelmach, G.E., and Bloedel, J.R.: Adaptive changes in responses to repeated locomotor perturbations in cerebellar patients. *Exp. Brain Res.* 122: 31-43, 1998.
- \* 113. Kagerer, F.A., Bracha, V., Stelmach, G.E., and Bloedel, J.R.: Ataxia reflected in the simulated movements of patients with cerebellar lesions. *Exp. Brain Res.* 121: 125-134, 1998.
- \* 114. Bracha, V., Kolb, K.P., Irwin, K.B., and Bloedel, J.R.: Inactivation of interposed nuclei in the cat: classically conditioned withdrawal reflexes, voluntary limb movements and the action primitive hypothesis. *Exp. Brain Res.* 126: 77-92, 1999.
- \* 115. Zhao, L., Irwin, K.B., Bloedel, J.R., and Bracha, V.: The kinesthetic threat eyeblink: a new type of anticipatory eyeblink response. *Brain Res.* 839: 100-108, 1999.
- \* 116. Rand, M.K., Shimansky, Y., Stelmach, G.E., Bracha, V., and Bloedel, J.R.: Effects of

accuracy constraints on reach-to-grasp movements in cerebellar patients. *Exp. Brain Res.* 135: 179-188, 2000.

- \* 117. Bracha, V., Zhao, L., Irwin, K.B., and Bloedel J.R.: The human cerebellum and associative learning: dissociation between the acquisition, retention and extinction of conditioned eyeblinks. *Brain Res* 3:860: 87-94, 2000.
- \* 118. Bracha, V., Zhao, L., Irwin, K.B., and Bloedel, J.R.: Intermediate cerebellum and conditioned eyeblinks: parallel involvement in the eyeblink and tonic eyelid closure. *Exp. Brain Res.* 136: 41-49, 2001.
- 119. Bloedel, J.R.: Judging Research Productivity on an Entrepreneurial Campus. *Proceedings of the Merrill Center 2001 Annual Research Policy Retreat*, 2001.
- 120. Bloedel, J.R.: Impact of September 11<sup>th</sup> on Funding Priorities and Campus Programs. *Proceedings of the Merrill Advanced Studies Center Annual Retreat*, 2002.
- 121. Bloedel, J.R.: Carlo, The Cerebellum, and Me. *Archives Italiennes de Biologie* 140: 165-174, 2002.
- 122. Bloedel, J.R.: Movements and the Plastic Brain: Determinants of Motor Learning. *Journal of Nanjing University (Natural Sciences)* 38: 50-57, 2002.
- 123. Bloedel, J.R. Task-dependent Role of the Cerebellum in Motor Learning. *Brain Mechanisms for the Integration of Posture and Movement*, edited by Shigemi Mori, Douglas G. Stuart and Mario Wiesendanger. *Progress in Brain Research* 143: 313-323, 2003.
- 124. Tarata, M.T. and Bloedel, J.R. MTT\_SYS – An Original Real Time Windows Oriented System to Address Complex Experimental Paradigms. *Proceedings of The 1<sup>st</sup> MEDINF International Conference on Medical Informatics & Engineering, MEDINF' 2003.* *Craiova Medical Journal* 5, Sup. 3: 429-433, 2003.
- \* 125. Shimansky, Y., Wang, J.-J., Bauer, R.A., Bracha, V., and Bloedel, J.R.: On-line compensation for perturbations of a reaching movement is cerebellar dependent. *Exp. Brain Res.* 155(2): 156-72, 2004.
- \* 126. Rand, M.K., Shimansky, Y., Stelmach, G.E., and Bloedel, J.R.: Adaptation of Reach-To-Grasp Movement in Response to Force Perturbations. *Exp. Brain Res.* 154:50-65, 2004.
- \* 127. Aksenov D, Serdyukova N, Bloedel J, Bracha V. Glutamate neurotransmission in the cerebellar interposed nuclei: Involvement in classically conditioned eyeblinks and neuronal activity. *J. Neurophysiol.* 93:44-52, 2005.

- \*128. Rand MK, Smiley-Oyen AL, Shimansky YP, Bloedel JR, & Stelmach GE. Control of aperture closure during reach-to-grasp movements in Parkinson's disease. *Experimental Brain Research* 168:131-142, 2006.
- 129. Haines DE, Mihailoff GA, Bloedel, JR. The Cerebellum. In: Fundamental Neuroscience for Basic and Clinical Applications. Third Edition. Elsevier, Philadelphia, 2006. pp. 431-452.
- 130. Zbarska, S., Holland, E.A., Bloedel, J.R., Bracha, V. Inferior olivary inactivation abolishes conditioned eyeblinks: extinction or cerebellar malfunction? *Behav. Brain Res.* 178:128-138, 2007.

\* Reviewed articles

### Abstracts

1. Bloedel, J.R., Burton, J.E. and Gregory, R.S.: An input to the lateral reticular nucleus from collaterals for the dorsal spinocerebellar and cuneocerebellar pathways. *Proc. XXV Congress Physiol. Sci.*, 1971.
2. Bloedel, J.R., Gregory, R.S. and Martin, S.H.: Electrophysiology of the cerebellar cortex of a primate. *Proc. Soc. Neuroscience*, 1971.
3. Martin, S.H. and Bloedel, J.R.: Evaluation of spinal cord injury using cortical evoked potentials. *Proc. Soc. Neuroscience* 156, 1972.
4. Bloedel, J.R.: The spinal action of the dentate output projecting via the "extrapyramidal" nuclei. *Proc. Soc. Neuroscience*, 1973.
5. Bantli, H. and Bloedel, J.R.: Direct relationship of the dentate nucleus with the spinal cord. *Neuroscience Abst.* 1: 171, 1975.
6. Bloedel, J.R. and McCreery, D.B.: Inputs from the brainstem onto spinothalamic and spinobulbar neurons of the lumbosacral cord of the cat. *Neuroscience Abst.* 1: 123, 1975.
7. McCreery, D. and Bloedel, J.R.: The effect of stimulating trigeminal afferents on the response of spinothalamic neurons to mechanical stimuli. *Neuroscience Abst.* 2: 943, 1975.
8. Bloedel, J.R., Bantli, H. and Tolbert, D.: Cerebellar nucleo-cortical projection in the rhesus monkey. *Neuroscience Abst.* 2: 106, 1976.
9. Tolbert, D.L., Bantli, H. and Bloedel, J.R.: Evidence for the branching of cerebellar efferent axons. *Neuroscience Abst.* 2: 118, 1976.

10. Tolbert, D.L., Bantli, H. and Bloedel, J.R.: A cerebellar nucleocortical projection in the cat. *Anat. Rec.* 184: 547, 1976.
11. Bantli, H. and Bloedel, J.R.: Stimulation of the cerebellar surface and its effect on the activity in penicillin foci. *Neuroscience Abst.* 3: 137, 1977.
12. Tolbert, D.L., Bantli, H. and Bloedel, J.R.: The topological organization of the cat cerebellar nucleocortical projection. *Anat. Rec.* 187: 731-732, 1977.
13. McCreery, D.B. and Bloedel, J.R.: Changes in the parameters of signal detection theory produced by suggestion and transcutaneous electrical stimulation. *Neuroscience Abst.* 3: 487, 1977.
14. Bantli, H. and Bloedel, J.R.: Indirect peripheral inputs to the neocerebellum. *Proc. Int. Union Physiol. Sci.* 13: 50, 1977.
15. McCreery, D.B., Hames, E.G. and Bloedel, J.R.: Effects of reticulospinal and raphe-spinal projections on the responses of spinothalamic neurons to mechanical stimuli. *Physiologist* 20: 62, 1977.
16. Tolbert, D.L., Bantli, H. and Bloedel, J.R.: The organization of the cerebellar nucleocortical projection in the monkey. *Anat. Rec.* 190: 562, 1978.
17. Ebner, T.J. and Bloedel, J.R.: Two modes of integration occurring in the cerebellar cortex. *Neuroscience Abst.* 4: 64, 1978.
18. Bloedel, J.R., Hames, E.G., Bantli, H., and Rowlands, J.R.: The organization of descending projections from the brain stem activated by the output of the dentate nucleus. *Neuroscience Abst.* 4: 63, 1978.
19. Hames, E.G., Tolbert, D.L. and Bloedel, J.R.: Evidence for a new spinocerebellar projection from the nucleus dorsalis (Clarke's column) in the cat. *Neuroscience Abst.* 4: 65, 1978.
20. Hames, E.G. and Bloedel, J.R.: Effects of descending systems on exteroceptive responses of spinocerebellar neurons to mechanical stimuli. *Physiologist* 21: 49, 1978.
21. Ebner, T.J. and Bloedel, J.R.: The relationship between the firing pattern of Purkinje cells, their responsiveness to natural stimuli, and the action of climbing fibers. *Physiologist* 22: 32, 1979.
22. McMullen, T. and Bloedel, J.R.: Effects of bulbospinal systems activated from the dentate nucleus on the stretch reflex. *Neuroscience Abst.* 5: 104, 1979.
23. Ebner, T.J., McMullen, T. and Bloedel, J.R.: A comparison of the responses of mossy fibers and Purkinje cells to the time-variant cutaneous inputs. *Neuroscience Abst.* 5: 99, 1979.

24. Ebner, T.J. and Bloedel, J.R.: The effect of climbing fibers on the responses of Purkinje cells to mossy fiber inputs. Proc. XXVIII Int. Cong. Physiol. Sciences, 1980.
25. Morillo, L., Ebner, T.J. and Bloedel, J.R.: Effects of cerebellar surface stimulation on segmental reflexes in cats. Neurology 30: 412-413, 1980.
26. Vitek, J.L., Ebner, T.J., Schwartz, A.B., and Bloedel, J.R.: Improvement of abnormal proprioceptive reflexes in spastic monkeys by cerebellar stimulation. Neuroscience Abst. 6: 512, 1980.
27. Ebner, T.J. and Bloedel, J.R.: Effect of natural peripheral stimuli on the patterning of simple spike activity in Purkinje cells. Neuroscience Abst. 6: 511, 1980.
28. King, G.W., Ebner, T.J. and Bloedel, J.R.: Effects of temperature on responses of spinocervical units to low-intensity cutaneous stimuli. Neuroscience Abst. 6: 436, 1980.
29. Ebner, T.J., Bantli, H. and Bloedel, J.R.: Effects of cerebellar surface stimulation on neurons in a chronic epileptic focus. American Association of Neurological Surgeons, Scientific Manuscripts, pp. 109-111, 1978.
30. Ebner, T.J., Vitek, J.L. and Bloedel, J.R.: Effects of cerebellar stimulation on EMG activity during passive movements in spastic primates. American Association of Neurological Surgeons, Scientific Manuscripts, pp. 90-92, 1980.
31. Morillo, L., Ebner, T.J. and Bloedel, J.R.: Early independent involvement of subcortical structures in the generalization of a focal cortical seizure. American Epilepsy Society Abstracts, 1980.
32. Godersky, J.C., Ebner, T.J. and Bloedel, J.R.: Modification of segmental inputs to dorsal horn neurons by cerebellar stimulation. American Association of Neurological Surgeons Program, p. 156, 1981.
33. Huang, C.I., Ebner, T.J. and Bloedel, J.R.: Effects of stimulating the surface of the three principal cerebellar zones on the stretch reflex. American Association of Neurological Surgeons Program, p. 145, 1981.
34. Thienprasit, P., Bloedel, J.R. and McDevitt, C.J.: Functional identification of peripheral nerve fascicles in the cat. American Association of Neurological Surgeons Abstract, p. 124, 1981.
35. Bloedel, J.R. and Ebner, T.J.: Effects of spontaneously occurring climbing fiber inputs to one Purkinje cell on the responses of neighboring cells to mossy fiber inputs. Neuroscience Abst. 7: 640, 1981.
36. McDevitt, C.J., Ebner, T.J. and Bloedel, J.R.: Excitability changes in simple spike Purkinje cell activity following a climbing fiber input. Neuroscience Abst. 7: 75, 1981.

37. Ebner, T.J. and Bloedel, J.R.: Alterations in the responses of Purkinje cells to mossy fibers when an associated climbing fiber is evoked by peripheral stimuli. *Neuroscience Abst.* 7: 640, 1981.
38. Kajander, K.C., Tam, D.C., Ebner, T.J., and Bloedel, J.R.: Properties of a long latency response evoked in dorsal horn neurons by noxious thermal stimuli in decerebrate cats. *Neuroscience Abst.* 7: 532, 1981.
39. Vitek, J.L., Ebner, T.J. and Bloedel, J.R.: The effect of descending projections activated by dentate efferent pathways on the stretch reflex. *Neuroscience Abst.* 7: 75, 1981.
40. Godersky, J.C., McDevitt, C.J., Ebner, T.J., Yap, J.C., and Bloedel, J.R.: Effects of field of Forel lesions on the generalization of seizure activity in cats with alumina cream foci. *American Association of Neurological Surgeons Abst.* 117, 1982.
41. Tam, D.C., Ebner, T.J. and Bloedel, J.R.: The response properties of DSCT cells to periodic mechanical cutaneous stimuli. *Neuroscience Abst.* 8: 806, 1982.
42. Kajander, K.C., Ebner, T.J. and Bloedel, J.R.: Reduction by electrical brainstem stimulation of non-noxious cutaneous inputs to spinocervical and spinoreticular neurons. *Neuroscience Abst.* 8: 806, 1982.
43. Kim, J.H., King, G.W., Ebner, T.J., and Bloedel, J.R.: Evidence for motoneuron collateral input to VSCT neurons. *Neuroscience Abst.* 8: 725, 1982.
44. Yu, Q.X., Ebner, T.J. and Bloedel, J.R.: Electrophysiological study of the corticonuclear projection in the cat cerebellum. *Neuroscience Abst.* 8: 445, 1982.
45. Bloedel, J.R., Ebner, T.J. and Yu, Q.X.: Relation between correlation of climbing fiber inputs to neighboring Purkinje cells and the cross-conditioning of their responses to mossy fiber inputs. *Neuroscience Abst.* 8: 829, 1982.
46. Hames, E.G., Schwartz, A.B., Ebner, T.J., and Bloedel, J.R.: The effects of dentate and interposed nuclei stimulation on voluntary movements in spastic primates. *Neuroscience Abst.* 8: 956, 1982.
47. Ebner, T.J., Yu, Q.X. and Bloedel, J.R.: Preferred timing of climbing fiber afferent discharge evoked by natural peripheral stimuli. *Neuroscience Abst.* 8: 829, 1982.
48. Ebner, T.J., Vitek, J.L., Schwartz, A.B., and Bloedel, J.R.: Cerebellar stimulation: Effects of charge density, stimulus frequency and stimulus location on passive reflexes in spastic primates. 7th International Congress of Neurological Surgery, 1981.
49. McDevitt, C.J., Ebner, T.J. and Bloedel, J.R.: The relationship between simultaneously recorded responses of anatomically related anterior interpositus neurons and Purkinje cells in natural peripheral stimuli. *Neuroscience Abst.* 9: 609, 1983.
50. Ebner, T.J., Yu, Q. and Bloedel, J.R.: The relationship between simple and complex

- spike responses of cerebellar Purkinje cells located in identified corticonuclear zones. *Neuroscience Abst.* 9: 607, 1983.
51. Bloedel, J.R. and Ebner, T.J.: Increased responsiveness of Purkinje cells to parallel fiber stimuli associated with spontaneous climbing fiber inputs. *Neuroscience Abst.* 9: 607, 1983.
  52. Schwartz, A.B., Ebner, T.J. and Bloedel, J.R.: Modulation of dentate neurons during the perturbed and unperturbed step cycle in decerebrate cats. *Neuroscience Abst.* 9: 358, 1983.
  53. Kajander, K.C., Tam, D.C., Ebner, T.J., and Bloedel, J.R.: Signal detection analysis of the response properties of dorsal horn neurons to noxious thermal stimuli. *Neuroscience Abst.* 9: 2, 1983.
  54. Kim, J.H., Ebner, T.J. and Bloedel, J.R.: Comparison of response properties of DSCT and VSCT neurons to the same physiological hindpaw stimuli. *Neuroscience Abst.* 9: 225, 1983.
  55. Naguib, M., Bergman, T., Ebner, T.J., and Bloedel, J.R.: The effect of early excision versus medical therapy on the generalization of seizure activity from an alumina cream induced seizure focus. *Congress of Neurological Surgeons*, 1982.
  56. Hames, E.G., Schwartz, A.B., Ebner, T.J., and Bloedel, J.R.: Stiffness as a quantification of spasticity in the primate. *American Association of Neurological Surgeons*, 1983.
  57. McDevitt, C.J., Godersky, J.C., Hames, E.G., Vitek, J.L., Ebner, T.J., and Bloedel, J.R.: The effects of cerebellar dentate nuclear stimulation on alpha and gamma motoneuron excitability. *Proc. American Association of Neurological Surgeons*, 1983.
  58. Bloedel, J.R., Ebner, T.J., Vitek, J.L., McDevitt, C.J., and Hames, E.G.: The action of descending brainstem pathways activated by dentate efferents on muscle spindle and EMG responses to muscle stretch. *Neurosci. Letters, Suppl.* 14: 532, 1983.
  59. Rea, G.L., Ebner, T.J., Hames, E.G., III, and Bloedel, J.R.: Deficits in learned movements following cortical lesions in primates. *American Association of Neurological Surgeons*, 1984.
  60. Hames, E.G., III, Ebner, T.J. and Bloedel, J.R.: New proposal for the organization of the dorsal spinocerebellar tract. *Proc. American Association of Neurological Surgeons*, 1984.
  61. McElligott, J.G., Ebner, T.J. and Bloedel, J.R.: Reduction of cerebellar norepinephrine alters climbing fiber enhancement of mossy-parallel fiber input to the Purkinje cells. *Neuroscience Abst.* 10: 752, 1984.

62. Schwartz, A.B., Ebner, T.J. and Bloedel, J.R.: A comparison of the responses of dentate and interposed neurons during perturbed and unperturbed locomotion. *Neuroscience Abst.* 10: 537, 1984.
63. McDevitt, C.J., Ebner, T.J. and Bloedel, J.R.: Changes in the responses of anatomically related nuclear neurons and Purkinje cells associated with the activation of the climbing fiber input. *Neuroscience Abst.* 10: 539, 1984.
64. Bloedel, J.R. and Lou, J.: The responses of simultaneously recorded Purkinje cells to perturbations of the step cycle and their relationship to the climbing fiber input. *Neuroscience Abst.* 11: 1035, 1985.
65. Lou, J. and Bloedel, J.R.: The real time postsynaptic response (RTPR): a new approach for analyzing the responses of several simultaneously recorded neurons and its application to the corticonuclear system of the cerebellum. *Neuroscience Abst.* 11: 1036, 1985.
66. Lou, J.S. and Bloedel, J.R.: A study of cerebellar cortical involvement in motor learning using a new avoidance conditioning paradigm involving limb movement. *Neuroscience Abst.* 12: 579, 1986.
67. Lou, J.S. and Bloedel, J.R.: Lack of relationship of climbing fiber responses to successive perturbations of the step cycle during the acquisition of an avoidance response. *Proc. Int. Union of Physiol. Sciences* 16: 135, 1986.
68. Lou, J.S. and Bloedel, J.R.: Properties of synchronous climbing fiber inputs to sagittally oriented Purkinje cells evoked by step cycle perturbations applied intermittently and during acquisition of a conditioned avoidance response. *Neuroscience Letters, Suppl.* 26: S229, 1986.
69. Bloedel, J.R., Lou, J.-S., Gasparo, P., and C.-C. Zuo: The effects of restricted cerebellar lesions on the performance of a conditioned forelimb movement in a new motor learning paradigm. *Neuroscience* 22 (Suppl.): S630, 1987.
70. Bloedel, J.R., Zuo, C.-C., Ferguson, R., and Lou, J.-S.: Modifications in the character of a conditioned response produced by extensive cerebellar lesions in the decerebrate ambulating ferret. *Neurosci. Abst.* 13: 232, 1987.
71. Zuo, C.-C. and Bloedel, J.R.: Short-term enhancement of simple spike responses by climbing fibers evoked by corneal air puff stimuli. *Neurosci. Abst.* 13: 233, 1987.
72. Bloedel, J.R., Tillery, S.I. and Pellionisz, A.J.: Experimental-theoretical analysis of the intrinsic geometry of limb movements. *Neurosci. Abst.* 14: 952, 1988.
73. Tillery, S.I. and Bloedel, J.R.: Effects of repetition on arm trajectories directed towards moving targets. *Neurosci. Abst.* 14: 952, 1988.
74. Kelly, T.M., McAluff, J.D. and Bloedel, J.R.: Presence of eyeblink conditioning in the

- decerebrate decerebellate rabbit. *Neurosci. Abst.* 14: 169, 1988.
75. Bracha, V., Stewart, S.L. and Bloedel, J.R.: Temporary blockade of red nucleus in the rabbit affects performance of conditioned and unconditioned nictitating membrane responses. *Neurosci. Abst.* 15: 507, 1989.
  76. Stewart, S.L., Bracha, V. and Bloedel, J.R.: Laterality of the classically conditioned nictitating membrane response in the rabbit. *Neurosci. Abst.* 15: 82, 1989.
  77. Kelly, T.M., McAlduff, J.D. and Bloedel, J.R.: Regulation of simple spike responses of Purkinje cells by the climbing fiber system in cerebellar sagittal zones. *Neurosci. Abst.* 15: 179, 1989.
  78. Bracha, V., Wu, J.-Z., Cartwright, M., and Bloedel, J.R.: Selective effects of lidocaine microinjections in the region of the spinal trigeminal nucleus on the conditioned and unconditioned responses of the rabbit nictitating membrane reflex. *Neurosci. Abst.* 16: 474, 1990.
  79. Kelly, T.M., Rubia, F.J., Kolb, F., McAlduff, J.D., and Bloedel, J.R.: Comparison of simple and complex spike activity in identified sagittal zones of the cat cerebellum during perturbation of the locomotor cycle using a multiunit recording technique. *Neurosci. Abst.* 16: 637, 1990.
  80. Bracha, V., Webster, M., and Bloedel, J.R.: Multi-channel single unit recording in the brainstem during acquisition of the conditioned nictitating membrane response in the rabbit. *Neurosci. Abst.* 17: 324, 1991.
  81. Pellionisz, A.J. and Bloedel, J.R.: Functional geometry of Purkinje cell population responses as revealed by neurocomputer analysis of multi-unit recordings. *Neurosci. Abst.* 17: 920, 1991.
  82. Bracha, V., Cartwright, M., and Bloedel, J.R.: Multiple single unit recording during the conditioning of the nictitating membrane reflex in the rabbit. *Proc. Third IBRO World Congress*, p. 173, 1991.
  83. Bracha, V., Milak, M.S., Webster, M.L., and Bloedel, J.R.: The effects of the nucleus interpositus inactivation on nictitating membrane reflexes in the rabbit and on the locomotor and reaching forelimb movements in the cat. *Eur. J. Neurosci., Suppl.* 5, p. 152, 1992.
  84. Bloedel, J.R., Bracha, V., Milak, M.S., Bartholomew, S., and McAlduff, J.D.: Activity of simultaneously recorded neurons in the cerebellum and brain stem during two different motor learning tasks. *Eur. J. Neurosci., Suppl.* 5, p. 17, 1992.
  85. Bloedel, J.R., Bracha, V., Milak, M.S., Kolb, F. and McAlduff, J.D.: Differences in the properties of simultaneously recorded responses in the cerebellar nuclei during the acquisition and performance of sequential forelimb movements in the cat. *Neurosci. Abst.* 18: 407, 1992.

86. Milak, M.S., Bracha, V., Kolb, F., McAlduff, J.D. and Bloedel, J.R.: Selective effects of muscimol microinjections into cerebellar nuclei in cats performing both a locomotor and a reaching task. *Neurosci. Abst.* 18: 1550, 1992.
87. Bracha, V., Webster, M.L. and Bloedel, J.R.: Performance of unconditioned nictitating membrane responses in the intact rabbit is affected by muscimol inactivation of the nucleus interpositus. *Neurosci. Abst.* 18: 1560, 1992.
88. O'Sullivan, M.C., Leonard, E.L., Farley, G.B. and Bloedel, J.R.: Infant stepping: a longitudinal study of locomotor development. *Neurosci. Abst.* 18: 1554, 1992.
89. Kolb, K.B., Bloedel, J.R., Bracha, V., Wiedemann, E., and Fischer, W.H.: Changes of cat cerebellar field potentials evoked by conditioned limb movements following injection of botulinum toxin type A into the triceps muscles. *Neurosci. Abst.* 19: 979, 1993.
90. Milak, M.S., Bracha, V., and Bloedel, J.R.: Effects of temporary inactivation of the specific cerebellar nuclei on the organization of EMG activity during a complex forelimb movement. *Neurosci. Abst.* 19: 979, 1993.
91. Winters, N.K., Webster, M.L., Irwin, K.B., Bracha, V., and Bloedel, J.R.: Involvement of the cerebellar nuclei and the red nucleus in the control of the eyeblink reflex in the rabbit: The role of GABA-A receptor mediated neurotransmission. *Neurosci. Abst.* 19: 1005, 1993.
92. Porter, C.M., van Kan, P.L.E., Horn, K.M., Bloedel, J.R., and Gibson, A.R.: Functional divisions of cat rMAO. *Neurosci. Abst.* 19: 1216, 1993.
93. Bloedel, J.R., Bracha, V., and Milak, M.S.: Progressive changes in the modulation of cerebellar nuclear neurons during the learning of a complex forelimb movement. *Neurosci. Abst.* 19: 1278, 1993.
94. Baev, K.V., Bloedel, J.R., Milak, M.S., and Shimansky, Yu.: Modulation of ascending inputs to cerebellar cortical neurons during fictive scratching in the cat. *Neurosci. Abst.* 19: 1588, 1993.
95. Bloedel, J.R. (Chairperson), Donegan, N.H., Thompson, R.F., Bracha, V., Disterhoft, J.F., and Evinger, C.: Symposium. View of a neural system in the blink of an eye. The eyeblink reflex: Control, learning, and cellular mechanisms. *Neurosci. Abst.* 19: 1681, 1993.
96. Bloedel, J.R., Milak, M.S. and Bracha, V.: Cerebellar nuclear role in the acquisition of skilled movements: does it relate to strategy specifications? *Eur. J. Neurosci. (Suppl. 6)*, p. 126, 1993.
97. Bracha, V., Winters, N.K., Webster, M.L., Irwin, K.B., and Bloedel, J.R.: The control of the conditioned and unconditioned eyeblink reflex in the rabbit: Involvement of GABA-

- A receptor mediated neurotransmission in the nucleus interpositus and in the red nucleus. *Eur. J. Neurosci. (Suppl. 6)*, p. 222, 1993.
98. Bracha, V., Topolski, B., Wunderlich, D.A., Kolb, F.P., and Bloedel, J.R.: Are deficits in the acquisition of conditioned responses in cerebellar patients related to their perception of the temporal order of stimuli? *Neurosci. Abst. 20*: 360, 1994.
  99. Kolb, F.P., Irwin, K.B., Winters, N.K., Bloedel, J.R., and Bracha, V.: Involvement of the cat cerebellar interposed nucleus in the control of conditioned and unconditioned withdrawal reflexes. *Neurosci. Abst. 20*: 1746, 1994.
  100. Shimansky, Yu., Wang, J.-J., Bloedel, J.R., and Bracha, V.: Effects of inactivating the deep cerebellar nuclei on the learning of a complex forelimb movement. *Neurosci. Abst. 20*: 21, 1994.
  101. Bartholomew, S.A., Webster, M.L., Bloedel, J.R., and Bracha, V.: Functional localization and neuroanatomical connectivity of neural substrates within the anterior interposed nucleus involved in expression of the nictitating membrane reflex. *Neurosci. Abst. 20*: 1011, 1994.
  102. Timmann, D., Shimansky, Yu., Larson, P.S., Wunderlich, D.A., Stelmach, G.E., and Bloedel, J.R.: Visuomotor learning in cerebellar patients. *Neurosci. Abst. 20*: 21, 1994.
  103. Milak, M.S., Bracha, V., and Bloedel, J.R.: Context-dependent modulation of cerebellar nuclear neurons related to the performance of specific movement segments. *Neurosci. Abst. 20*: 1746, 1994.
  104. Bracha, V., Kolb, F.P., Bartholomew, S.A., Irwin, K.B., Winters, N.K., Webster, M.L., and Bloedel, J.R.: The classically conditioned flexion reflexes: Response-specific representation within the cerebellar nucleus interpositus. *Eur. Neurosci. Assoc. Abst. 17*: 13, 1994.
  105. Bracha, V., Webster, M.L., Stachowiak, M.K., and Bloedel, J.R.: Injections of anisomycin into the interposed nuclear regions affect consolidation of the conditioned eyeblink response. *Neurosci. Abst. 21*: 1222, 1995.
  106. Milak, M.S., Kozicki, M., Bracha, V., and Bloedel, J.R.: Effect of cerebellar inactivation on the acquisition and retention of prism adaptation during goal-directed reaching in cats. *Neurosci. Abst. 21*: 914, 1995.
  107. Rand, M.K., Wunderlich, D.A., Martin, P.E., Stelmach, G.E., and Bloedel, J.R.: Responses to repeated locomotor perturbations in cerebellar patients. *Neurosci. Abst. 21*: 917, 1995.
  108. Shimansky, Yu., Wang, J.-J., Bracha, V., and Bloedel, J.R.: Cerebellar inactivation abolishes the capability of cats to compensate for unexpected but not expected

- perturbations of a reach movement. *Neurosci. Abst.* 21: 914, 1995.
109. Winters, N.K., Irwin, K.B., Kolb, F.P., Bloedel, J.R., and Bracha, V.: Involvement of the cerebellar interposed nucleus in reflexive and voluntary forelimb movements. *Neurosci. Abst.* 21: 915, 1995.
  110. Contreras-Vidal, J.L. and Bloedel, J.R.: A network model of the sagittal olivocerebellar complex. *Neurosci. Abst.* 21: 916, 1995.
  111. Saling, M., Alberts, J., Bloedel, J.R., and Stelmach, G.: Modification of prehension kinematics when avoiding an obstacle. *Neurosci. Abst.* 21: 1919, 1995.
  112. Kagerer, F.A., Bloedel, J., and Stelmach, G.: Learning of visuomotor coordination with rotated visual feedback. *Neurosci. Abst.* 21: 1443, 1995.
  113. Rand, M.K., Alberts, J.L., Bloedel, J.R., and Stelmach, G.E.: The influence of movement segment difficulty on movements with two stroke sequence. *Neurosci. Abst.* 22: 1640, 1996.
  114. Kagerer, F.A., Bracha, V., Stelmach, G.E., and Bloedel, J.R.: Timing of mentally simulated movements in patients with cerebellar disorders. *Neurosci. Abst.* 22: 1628, 1996.
  115. Shimansky, Yu., Saling, M., Wunderlich, D.A., Bracha, V., Stelmach, G.E., and Bloedel, J.R.: Perception of kinesthetic cues required for assessing the shape of two-dimensional irregular profiles is impaired in cerebellar patients. *Neurosci. Abst.* 22: 500, 1996.
  116. Milak, M.S., Bracha, V., and Bloedel, J.R.: Evidence for dentate nuclear involvement in motor preparation. *Neurosci. Abst.* 22: 1090, 1996.
  117. Irwin, K.B., Bloedel, J.R., and Bracha, V.: Cerebellar interposed nucleus and the classically conditioned and avoidance limb withdrawal responses in the cat. *Neurosci. Abst.* 22: 1645, 1996.
  118. Bracha, V., Wunderlich, D.A., Zhao, L., Brachova, L., and Bloedel, J.R.: Is the human cerebellum required for the storage of conditioned eyeblink memory traces? *Neurosci. Abst.* 22: 280, 1996.
  119. Rand, M.K., Stelmach, G.E., and Bloedel, J.R.: Accuracy demand influences movement smoothness in Parkinson's patients. *Neurosci. Abst.* 23: 470, 1997.
  120. Milak, M.S., Wunderlich, D.A., Bracha, V., and Bloedel, J.R.: Acquisition of prism adaptation in cerebellar patients with a deficit in eye-blink conditioning. *Neurosci. Abst.* 23: 749, 1997.
  121. Shimansky, Yu., Wunderlich, D., Bracha, V., and Bloedel, J.R.: On-line compensation for an elastic load imposed during reach is impaired in cerebellar patients. *Neurosci. Abst.* 23: 18, 1997.

122. Zhao, L., Irwin, K.B., and Bloedel, J.R.: Human naturally acquired anticipatory eyeblinks: The kinesthetic threat response. *Neurosci. Abst.* 24: 163, 1998.
123. Shimansky, Yu., Timmann, D., Kolb, F.P., Diener, H.C., and Bloedel, J.R. Acquisition of temporal patterns of auditory and visual cues is impaired in cerebellar patients. *Neurosci. Abst.* 24: 1407, 1998.
124. Bracha, V., Zhao, L., Irwin, K.B., Bloedel, J.R. and Hamm, T.M. Retention of conditioned responses in patients with cerebellar lesions: The kinesthetic threat eyeblink response. *Neurosci. Abst.* 24: 1409, 1998.
125. Bloedel, J.R., Bracha, V., and Wunderlich, D.A. Evolution of activity in small populations of neurons in the cerebellar cortex and nuclei during acquisition of the conditioned eyeblink reflex in the rabbit. *Neurosci. Abst.* 24: 1522, 1998.
126. Rand, M.K., Shimansky, Y., Stelmach, G.E., Bracha, V., and Bloedel, J.R. Effects of accuracy constraints on reach-to-grasp movements in cerebellar patients. *Neurosci. Abst.* 25: 369, 1999.
127. Bracha, V., Zhao, L., Irwin, K.B., and Bloedel, J.R. Inactivation of the interposed nucleus in the rabbit affects instrumental tonic eyelid closure. *Neurosci. Abst.* 25: 790, 1999.
128. Shimansky, Yu., Bauer, R., Bracha, V., and Bloedel, J.R. Modulation of simultaneously recorded cerebellar cortical and nuclear cells during adaptation to expected and unexpected perturbations of reaching movements in cats. *Neurosci. Abst.* 25: 1560, 1999.
129. Zhao, L., Bracha, V., Irwin, K.B., and Bloedel, J.R. Eyeblink conditioning in cerebellar patients: The active conditioning paradigm. *Neurosci. Abst.* 25: 2069, 1999.
130. Zhao, L., Irwin, K.B., Bloedel, J.R., and Bracha, V. Effects of activation and inactivation of the interposed nucleus on tonic eyelid closure in the rabbit: The hybrid hypothesis of intermediate cerebellar function. *Neurosci. Abst.* 26: 720, 2000.
131. Shimansky, Y., Bauer, R., Islas, A., Bracha, V., and Bloedel, J.R. Effects of inactivating different areas of sensorimotor cortex on the performance of goal-directed voluntary movements in cats. *Neurosci. Abst.* 26: 1578, 2000.
132. Bracha, V., Danielek, K.A., Irwin, K.B., and Bloedel, J.R. Motor programs during adaptation to rotated visual feedback: Rote learning or generalized maps? *Neurosci. Abst.* 26: 1846, 2000.
133. Rand, M.K., Shimansky, Y., Stelmach, G.E., Bracha, V., and Bloedel, J.R. Adaptation of Reach-to-Grasp Movement in Response to Force Perturbations. *Society for Neurosci. Abst.* 27: 792, 2001.

134. Zbarska, S., Holland, E.A., Irwin, K.B., Bloedel, J.R., Bracha, V. Inactivation of inferior olive: extinction of conditioned eyeblinks or performance deficit? *Neurosci. Abst.* 29: 38, 2003.
135. Tarata, M.T. and Bloedel, J.R. Insight into the Reach and Grasp. The 1<sup>st</sup> MEDINF International Conference on Medical Informatics & Engineering: 38, 2003.
136. Aksenov, D.P., Serdyukova, N.A., Bloedel, J.R., Bracha, V. Cerebellar cortical injections of muscimol, picrotoxin and DGG on the activity of Purkinje cells in classically conditioned rabbits. *Society for Neurosci. Abst.* 31, 2005.
137. Zbarska, S., Bloedel, J.R., Bracha, V. Blocking GABAA receptors in the inferior olive affects expression of classically conditioned eyeblinks. *Society for Neurosci. Abst.* 31, 2006.
138. Smiley-Oyen, A.L., Lowry, K.A., Bloedel, J.R. Motor learning and retention after extensive practice in people with Parkinson's disease. *North American Society for Sport and Physical Activity, Supplement to the Journal of Sport and Exercise Psychology* 28, S7.