

CURRICULUM VITAE

Lawrence K. Duffy

October 2007

CURRENT POSITION:

Interim Dean Graduate School
Professor of Chemistry & Biochemistry
Department of Chemistry & Biochemistry
University of Alaska Fairbanks
Fairbanks, Alaska 99775-6160

BIOGRAPHICAL:

Date & Place of Birth: February 1, 1948
Brooklyn, New York

Marital Status & Children:

Wife: Geraldine A. Sheridan
Children: Anne Marie
Kevin Michael
Ryan Sheridan

Address: 2712 Tall Spruce, PO Box 80986
Fairbanks, AK 99708

Military Status: Lieutenant USNR
Active Duty: 1971-1973

EDUCATION:

Fordham University, Bronx, New York	1969	Chemistry	B.S.
University of Alaska, Fairbanks, Alaska	1971	Organic Chemistry	M.S.
University of Alaska Fairbanks, Institute of Arctic Biology	1977	Biochemistry	Ph.D.

HONORS:

Allied-Signal Corporation and ADRDA Faculty Scholar Award, 1987
ACS Analytical Chemistry Award, Fordham University, 1969
NSF Summer Traineeship, Department of Chemistry, University of Alaska, 1971
J.W. McLaughlin Fellow, 1980-82
Sigma Xi
Phi Lambda Upsilon
Who's Who in America (53rd Edition)
W.F. Milton Scholar, 1983
UAF Carol Feist Outstanding Advisor Award 1993-94, 1996-97, 2004-05
NIDCD Minority Research Mentoring Award 1996
Certified Professional Chemist, American Institute of Chemists, 1997
Fellow, American Institute of Chemists, 1998
US Army, Navy and Air Force's Faculty Award for Excellence in Scientific Instruction, 1998
North Star Borough School District Award for Outstanding Service, 1998
Member, Editorial Board "The Science of the Total Environment", 1999

UAF Alumni Award for Professional Achievement, 1999
 Associate Editor, Journal of Alzheimer's Disease, 2000
 Emil Usibelli Distinguished Research Award, 2002
 President-Elect, American Institute of Chemists, 2004
 Wildlife Society, Wildlife Publications Award – Outstanding Monography, 2004
 Who's Who in Science Higher Education (WWSHE), 2006
 Sigma Xi, Alaska Chapter, Exemplary Service Award, 2006
 Sven Ebbesson Award for Excellence in Neuroscience, 2007
 Fellow, Arctic Institute of North America, 2007

ADDITIONAL STUDIES:

FEBS Adv. Course in Protein Sequencing, Prague, Czechoslovakia (1980)
 Molecular Approaches to the Nervous System. Society for Neuroscience Short Course, Boston, MA (1983)
 LKB Workshop on Isoelectric Focusing, Framingham, MA (1984)
 Hybridomas in Biotechnology and Medicine, Harvard Medical School (1986)
 Beckman Amino Acid Workshop, Palo Alto, CA (1987)
 Chemical Challenges in Immunology, ACS Short Course (1992)
 Pharmacology for Chemists, ACS Short Course (1994)
 Toxicology for Chemists, ACS Short Course (1996)
 Workshop on Teaching Research Ethics, Indiana University (1997)
 Statistical Analysis of Laboratory Data, ACS Short Course (1998)
 Ethics of Research with Humans: Past, Present and Future (2000), UW Short Course
 Workshop on Teaching Survival Skills and Ethics (2001), Snowmass, CO
 Guidelines for the Assessment of Microbiological Contamination in Indoor Environments, AIHA, Fairbanks, AK (2002)
 How to Supervise People, Fred Pryor Seminars, Fairbanks, AK (2002)
 IRB 101 By Public Responsibility in Medicine and Research (2002)
 How to Edit, Fred Pryor Seminars (2003)
 IACUC Workshop, Fairbanks, AK (2004)
 Responsible Conduct in Research Workshop, Fairbanks, AK (2004)
 Ethical Issues in International Health Research, Harvard School of Public Health (2006)

RECENT ADMINISTRATIVE EXPERIENCE

As Department Head

Developed and initiated approval of an undergraduate minor in Biochemistry.
 Initiated and coordinated ACS approval of an undergraduate Environmental Chemistry Option for UAF Chemistry majors.
 Assumed direct responsibility for the staffing and offering of summer programs in Chemistry and Biochemistry.
 Coordinated the development of assessment protocols and standards for Chemistry and Biochemistry undergraduate majors.
 Managed Environmental Chemistry Ph.D. program. Approved by Board of Regents.
 Assumed responsibility and managed 5 year ACS re-accreditation for B.S. program in the Department of Chemistry and Biochemistry
 Broadened the Chemistry and Biochemistry Department's focus by hiring new faculty
 Increased private donations to the Department.

As Associate Dean

Assisted in the development of the CSEM Partners in Science Component of the Rural Systemic Initiative.
 Initiated the siting of the Howard Luke Science Fair at CSEM, UAF.
 Assisted in the development of the CSEM Summer Science Camp, ASRA.
 Developed a Survival Skills and Ethics Program for CSEM and UAF

Directed initiation of Alaska Basic Neuroscience Program
 Established Outstanding Graduate Student Advisor Awards
 Developed CSEM Graduate Student Dismissal Policy
 Led development of CSEM TA training and orientation program
 Director Engineering, Science and Technology Experiment Station (ESTES), 2004-2007
 Director, Special Neuroscience Research Project (SNRP), 2000-present

As Interim Dean of the Graduate School

Revised the strategic plan for the growth of the graduate school including international partnerships

TEACHING EXPERIENCE:

1. University of Alaska Fairbanks

1987-89	Fall	General Biochemistry (Chem 451) 3 credits
95,97,98,99, 01,02,03	Fall	General Biochemistry (Chem 451) 3 credits
1988-1989	Spring	Biochemistry Lab. (Chem 452) 1 hr lecture with 6 hours lab. 4 credits.
1993-1996	Spring	Biochemistry Lab. (Chem 452) 1 hr lecture with 6 hours lab. 4 credits.
1998-2000	Spring	Biochemistry Lab. (Chem 452) 1 hr lecture with 6 hours lab. 4 credits.
1989	Spring	Advanced Biochemistry Course (Chem 652) 3 credits. 15 lectures on proteins.
1989	Fall	General Chemistry (Chem 105) 4 credits
1998	Spring	General Chemistry (Chem 105) 4 credits
2007	Summer	General Chemistry (Chem 106) 4 credits
1990-96, 01, 02, 06	Spring	Introduction to Biochemistry (Chem 104) 4 credits.
2000	Summer	Introduction to Biochemistry (Chem 104) 4 credits.
1990,92,94	Fall	Protein Structure and Function (Chem 654) 3 credits
1991-96, 00, 01	Fall	Basic General Chemistry (Chem 103) 4 credits.
2000	Summer	Basic General Chemistry (Chem 103) 4 credits.
1993	Spring	Comparative Biochemistry (Chem 693) 1 credit
1994, 95, 97	Spring	Environmental Biochemistry and Biotechnology
00, 02, 04	Fall	Environmental Biochemistry and Biotechnology (Chem 655) 3 credits. Also as independent study
1996, 97, 98, 03, 04, 05, 06	Spring	Chemistry and Society (Chem 100) 4 credits.
1998, 99, 02, 03,05	Fall	
1996	Fall	Introduction to Toxicology (Chem 293) 1 credit
1997	Spring	Research Ethics (Biol 493) 3 credits
1998	Spring	Research Ethics (Chem 300) 3 credits
2001, 03, 05	Fall	Research Ethics (Chem/Biol 300) 3 credits
2004, 05, 07	Fall, Summer	Natural Resources, Environment (Chem 393, BCS 312, LAS 393) 3 credits

2. Harvard Medical School

1983-1986 Medical School Advanced Biochemistry Course (700B) 1 Conference Section/week.

3. Roxbury Community College (Evening Division)

1984 Fall Organic Chemistry (Chem 210) 3 hours of lecture and 2 hours of lab/week.
 1985-1987 Fall Organic Chemistry (Chem 210) 3 hours of lecture and 2 hours of lab/week.

4. Middlesex Community College (Continuing Education Division)

1983 Fall . General Chemistry I and Laboratory (Chem SC150). 3 hours of lecturer and 3 hours of lab/week.

5. University of Texas Medical Branch

1980 - 1982		Interdisciplinary laboratory for first year medical students: Human Genetics Counseling lab. 2 lectures.
1981	Spring	Graduate Course BIOC 6305. Advance Amino Acids and Proteins. 2 Lectures/Course.
1981- 1982	Fall	Medical School Biochemistry Course. 3 Lectures/Course.
1982	Fall	Biochemical Methods BIOC 6304. Supervised one week of experiments

6. Galveston College

1982	Fall	General Chemistry and Laboratory. 3 hours of lecture and 3 hours of lab per week.
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7. University of Alaska

1969 - 1976		Laboratory Sections in General Chemistry, Contemporary Chemistry, Organic Chemistry and Biochemistry.
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Graduate Students Supervised:

Lars Ebbesson	MS	1994
Joe Boger	MA	1994
Xiaohong Zhao	PhD	1994
Sandip Vyas	PhD	1995
Sherri Smith	MS	1996
Yancy Bodenstein	MS	1997
Ying Xu	MA	1998
Jon Menough	MS	1998
Christopher Taylor	MS	1999
Kim Clapp-Lilly	PhD	2000
Jane LeBlond	MS	2000
Peggy Crane	MAT	2000
Janet Ricker	MS	2000
Kerrie Beckett	MA	2000
Margaret Isbell	PhD	2000
Xiaoming Zhang	MS	2001
Lars Hansen	MAT	2002
Shelli Stewart	MS	2003 (co-Chair)
Anna Godduhn	MA	2003
Kriya Dunlap	MS	2003
Catherine Humphries	MS	2003 (co-Chair)
Nicole South	MA	2003
Anne Whitehead	MA	2004
Bing Shi	PhD	2004 (co-Chair)
Scott Kemp	MS	2005
Roger Rothschild	MS	2005
Kryia Dunlap	PhD	2007

PROFESSIONAL EXPERIENCE:

1969 - 1971	Laboratory Instructor, Department of Chemistry, University of Alaska, Fairbanks, Alaska. Research: Photochemistry of organic pesticides. Supervisor, Dr. G. W. Smith.
1974 - 1976	Research Assistant, Institute of Arctic Biology, University of Alaska Fairbanks, Fairbanks, Alaska. Research: Function and Structure of Hemoglobins from Arctic Animals. Supervisors, Dr. C. T. Genaux and Dr. P R. Morrison.

- 1977 - 1978 Post-doctoral Fellow, Boston University, Boston, Massachusetts with Dr. R. A. Laursen.
Research: Structure of EF-Tu.
- 1978 - 1980 Post-doctoral Fellow, Department of Physiological Chemistry, Roche Institute of Molecular Biology, Nutley, New Jersey with Dr. C. Y. Lai. Research: Chemical Modification of Cholera Toxin.
- 1980 - 1981 James W. McLaughlin Fellow, Department of Human Biological Chemistry and Genetics, The University of Texas Medical Branch, Galveston, Texas.
- 1982 - 1983 Research Assistant Professor, Department of Biological Chemistry and Genetics, The University of Texas Medical Branch, Galveston, Texas.
- 1983 - 1984 Instructor of Chemical Sciences, Middlesex Community College, Division of Continuing Education.
- 1983 - 1985 Assistant Biochemist, McLean Hospital, Belmont, MA.
- 1983 - 1987 Assistant Professor of Biochemistry (Neurology), Harvard Medical School.
- 1984 - 1987 Science and Organic Chemistry Instructor, Roxbury Community College, Division of Continuing Education.
- 1985 - 1987 Associate Biochemist, Brigham and Women's Hospital.
- 1986 - 1987 Research Associate, Duke University Center for the Study of Primate Biology and History.
- 1987 - Present Professor of Chemistry and Biochemistry, University of Alaska Fairbanks.
- 1987 - 1990
1992 - 1993 Coordinator, Program in Biochemistry and Molecular Biology.
- 1988 - 1998 Coordinator, Summer Undergraduate Research Intern Program in Chemistry and Biochemistry, University of Alaska Fairbanks.
- 1987 - 1990 Adjunct Researcher, Center for Neurologic Diseases, Brigham and Women's Hospital, Boston, MA.
- 1995 - 1998 Affiliate Professor, Center for Alcohol Addiction Studies, UAA
- 1994 - 1999 Head, Department of Chemistry and Biochemistry.
- 1996 - Present Coordinator of the RSI Scientist-in-Residence Program (CSEM)
- 1999 (Summer) Instructor, Rural Alaska Honors Institute (RAHI)
- 2000 – 2007 Assoc. Dean for Graduate Programs and Outreach (CSEM/CNSM)
- 2000 – Present Director, Alaska Basic Neuroscience Program
- 2004 – 2007
2007 Director, CNSM Engineering, Science and Technology Experiment Station
Interim Dean, Graduate School, University of Alaska Fairbanks

MEMBERSHIP IN SCIENTIFIC SOCIETIES:

American Society of Biological Chemists & Molecular Biologists
American Chemical Society
American Society of Zoologists (1977-1987)
American Society for Circumpolar Health
New York Academy of Sciences
International Society of Toxicology
Massachusetts Association of Adult and Continuing Education (1985-1987)
Fellow, American Institute of Chemists
American Society for Neurochemistry
Academie M.I.D.I.
International Society for the Study of Xenobiotics (ISSX) (1998-2000)
Society of Environmental Toxicology and Chemistry (1998-2001)
American Aging Association

PROFESSIONAL SERVICE:

Program Committee, American Chemical Society, Southeastern Section (1982)
Membership Committee, ACS, Northeastern Section (1983)
Chairman, Membership Committee, ACS, Northeastern Section (1985)
ACS Congressional Advisor, District 5, MA (1983)
Chemical Education Committee (Norris Summer Scholars), ACS, Northeastern Section (1984)
Public Affair Committee, ACS, Northeastern Section (1985)
Fellow, Professional Program Committee, American Institute of Chemists (1988)
Secretary/Treasurer, Sigma Xi Alaska Club (1988-90, 1994-01) President, Sigma Xi Alaska (1991-92)
Counselor, Alaska Section, American Chemical Society (1989-1990)
AIC-Non AIC Award Nomination Committee (1991)
OxyFuel Task Force, Fairbanks North Star Borough (1992)
Program Chair, 1994 Northwest Regional ACS meeting, Anchorage, AK.
AFAR National Scientific Advisory Council (1995-present)
Member, Regional Sigma Xi Nominating Committee (1998-2001)
Member, Board of Directors, American Society for Circumpolar Health (1999-00, 2003)
National Chemistry Olimpiad Alaska Coordinator (2000-01)
Associate Regional Director, Sigma Xi Board of Governors (2000-03)
AIC Ethics Committee, Chair (2001)
AIC Board of Directors (2001-); Board Secretary (2003); President-Elect (2004)
North Star Borough Schools Curriculum Advisory Committee (2002-04)
AMAP METALS Working Group (2001-03)
Amchitka Stewardship Policy Oversight Committee (CRFSP) (2003)
AIC Representative to AAAS Section on Societal Impacts of Science and Engineering (2004)
North Star Borough, Pollution Control Committee (2003-05)
Program Chair, 60th Northwest Regional ACS Meeting (2005)
Co-Chair of Ethics Committee, Council of Science Society Presidents (2006)

UNIVERSITY SERVICE AND GOVERNANCE:

UAF Faculty Senate, Representative (1988-21, 1993-95, 1997-01)
UAF Faculty Senate Curriculum Affairs Committee (1989-92)
UAF Faculty Senate Curriculum Review Committee, chair (1991-92)
UAF Faculty Senate Graduate Council, Chair (1993-94)
UAF Faculty Senate Administrative Committee, chair (1999-01)
Graduate Admissions Committee, Department of Chemistry, UAF (1988-89)
UAF Human Experimentation Review Committee (1988-89), IRB (1999-01)

IAB Safety Committee (1992), Chairman, IAB Research Advisory Committee (1992)
 UAF Student Success Committee (1992)
 CSEM, New College Administration Organization Committee (1995)
 UAF Student Support Services Advisory Board (1996)
 UAF Graduate Student Travel Committee, Chairman (1997)
 UAF Graduate School Advisory Committee, Chairman (1998-99)
 UAF Center for Global Change Steering Committee (1998)
 UAF Faculty Senate, President (2000-01)
 UA Faculty Alliance, Chair (2000-03)
 CSEM Accreditation Writing Team (2000-01)
 UAF Standard Four (Faculty) Accreditation Working Group, Chair (2000-01)
 Task Force on Department Chairpersons, Chair (1989-91)
 Ad Hoc Committee on Compensation & Workload (1994-95)
 Committee to Nominate Commencement Speaker & Honorary Degree Recipients (1996-2004)
 Chair, UAF Biosafety Committee (2001-)
 Chair, UAF Chemical Safety Committee (2002-04)
 UAF Task Force on Joint PhD degrees between MAUs (2001)
 College of Fellows of the University of Alaska Foundation (2001)
 Science Steering Committee, Center for Global Change (2000-2004)
 UAF University of Arctic Steering Committee (2004-05)
 UAF Interdisciplinary Programs Review Committee (2003-2004)
 UAF BICS User Committee (2001)
 UAF BIRT Research/Teaching User Committee (2004)
 UAF Chair Faculty Senate Appeals and Oversight Committee (2005)
 UAF Search Committee for Vice Chancellor for Research (2006)

RESEARCH FUNDING:

Over 30 years in research, funding for both research and students has been obtained from NSF, NIH, NOAA, various foundations and industry, totaling over 15 million dollars.

RESEARCH ACTIVITIES (Selected):

Principal Investigator

"Characteristics of Alaskan *Microtus* Hemoglobins," Grant by U.S. Center for Disease Control (administered by the University of Alaska, 1976)

James W. McLaughlin Foundation. "Bacterial Toxins and their Mechanism of Action," 9/1/80-8/31/82

American Cancer Society Institutional Research Grant. "Monoclonal Antibodies to Vinculin as a Probe to the Interaction of Fibronectin and Vinculin," 6/15/82-12/14/82

American Philosophical Society. "Structure of Lemur Hemoglobins," 12/1/82-12/1/83

William F. Milton Fund. "Antigenic Structure of Alzheimer Brain 200K Neurofilament," 2/1/84-2/1/85

RO-1, NIH Grant, "Structural Studies of Alzheimer 200K Neurofilament," 8/1/84-7/31/87

American Federation for Aging Research Grant. "Monoclonal Antibodies to Age Related Abnormal Proteins," 7/1/86-6/31/87

NSF Grant. "Aging & Biochemistry of a New Receptor Protein in the Brain," 3/1/88-2/27/90

Whitehall Foundation. "Molecular Investigation of the Phylogenetic Position of the Cheirogaleidae," 1988-89

NSF Grant. "A Chemistry and Biochemistry Summer Undergraduate Intern Program in Alaska," 5/1/88-4/30/93.

NSF Grant. "Purchase of an Amino Acid Analyzer for Research in Alaska," 7/1/89

WRC-UAF. "Environmental Biotechnology Studies on the Use of Monoclonal Antibodies to Detect Toxins and Pollutants in Water Systems," 7/1/89-8/30/91

NIH Grant. "Aging and Alzheimer Amyloid Protein Chemistry." 4/1/90 - 3/31/93

Murdock Charitable Trust. "Biopolymer Facility." 5/1/91 - 4/30/92

UAF Mellon Faculty Development Award "Rural Science Education." 10/1/92-5/1/92

ACS Project Seed. Biochemistry Research for High School Students. 6/1/92

Monitoring Oxyfuel in Fairbanks, OFA, 9/1/93-6/30/94

Biomonitoring of Environmental Pollution, CMI-MMS, 6/1/94-5/30/96

NSF Grant, "Environmental Chemistry and Biochemistry in Alaska." 5/1/95-4/30/98

K-12, NIDCD Grant, "Olfactory Degeneration: A Salmon Model." 9/1/96-8/30/99

NIEHS Grant, "Mercury Analysis laboratory Equipment." 10/1/97-9/30/98

AZUR Grant, "Linkage of Microtox Chronic Toxicity Assay to Heat Shock protein in Grayling Eggs after Fertilization" 8/1/98-8/30/99

Water Research Center, "Mercury Levels in Alaskan Rivers" 3/1/00-8/1/01

NINDS Grant, "Alaska Basic Neuroscience Program" 8/30/00-9/01/05; 9/01/05-8/30/10

University of Alaska Foundation Lecturer Funding 3/1/02-3/10/02 and 5/1/04-9/1/04

DOE Subcontract, "CRESP II Research on Amchitka" 3/1/04-2/15/05

Burroughs Wellcome Fund, "6th Annual Special Neuroscience Research Conference" 1/1/06-12/30/06

Murdock Charitable Trust "Partners in Science" 4/1/06-3/30/07

Co-Investigator

Grant GM19039 NIH. "Human Fibronectin. Structure and Function." A. Kurosky - Principal Investigator, 4/1/81-3/31/82

Alzheimer Society Grant. "Monoclonal Antibodies to PHF". D. Selkoe - Principal Investigator - 6/1/83-6/1/84

NIH Grant. "Molecular Pathology of Alzheimer Disease". D. Selkoe - Principal Investigator - 12/1/83-11/30/85

NIH Grant. "Measurement of A Brain Protein by A Novel Microsensor". G. Bastians - Principal Investigator - 4/1/86

Whitaker Health Science Fund, "Alzheimer Amyloid and Plasma Proteins". Vernon Ingram - Co-Investigator

NIH Grant. Biopolymer Facility Equipment. E. Braunwald - Principal Investigator - 4/1/88

U of A Siberian/Alaskan Medical Research Program. "Addictive Behavior and Genetic Predisposition". Bernard Segal, Principal Investigator - 09/01/89

American Society for Biochemistry and Molecular Biology "High School Science Teacher Summer Research". Terry Krohe - Principal Investigator - 6/1/92

EVOS, "Nearshore Vertebrates". D. Roby - Principal Investigator - 7/1/95

"Nearshore Vertebrates." L. Duffy - Principal Investigator - 1996-97

"Responses of River Otters to Oil Contamination". Merau Ben-David – Principle Investigator – 11/1/97-9/30/99

Research Corporation. "Benzene and Carbon Monoxide as Air Pollutants in Fairbanks, AK". D. Jaffe – Principal Investigator – 3/3/97-9/30/98

CIFAR, "Human and Chemical Ecology of Arctic Pathways by Marine Pollutants". David W. Norton – Principal Investigator – 3/3/98-3/2/00

North Pacific Marine Research Program. "Concentrations of Mercury and Its Pathways in Marine Organisms of Eastern Bering Sea." A. Sathy Naidu – Principal Investigator – 7/1/99-6/30/02.

Natural Resources Fund. "Wetlands as Sources of Toxic Hg Compounds." Mark Hines - Principal Investigator – 5/1/2000 – 4/30/2002.

Natural Resources Fund. "Noninvasive Environmental Monitoring of natural resources development in Alaska." 5/1/2001-4/30/2002.

NIH Minority Supplemental Grant. "The Function of AVP and PKC beta1 in the SCN of Mice." 4/1/2001-5/1/2002.

NSF "Sustainability and Stewardship in Alaska" C. Gerlack – Principal Investigator - 09/01/04-08/31/05.

NSF "Subsistence Choices, Mercury Bioaccumulation and Ecosystem Change" M. Murray – Principal Investigator – 9/01/05-08/31/07.

USDA "AK Blueberries Bioassay Development" C. Lewis – Principal Investigator – 9/01/05-08/31/07

Consultant:

Integrated Chemical Sensors, 1985-86

Athena Neurosciences, 1986-87

Interior Alaska Beekeepers Association, 1989

Alaska Biotechnology Consultants, 1989
 Jenson, Harris and Ross, 1989
 Neuromedical Inc., 1991
 North Coast Natural Resources Consultants Inc, 1998

Reviewer:

Journals:

Biochemistry
 The Chemist
 Neuroscience
 Journal of Chemical Education
 Archives of Biochemistry and Biophysics
 Journal of Mammology
 Proceed. 8th International Cold Regions Eng.
 Journal of Neurochemistry
 Journal of Neuroscience Research
 Comparative Biochemistry and Physiology
 Dirasat, a medical research journal
 Science of the Total Environment

Textbooks:

Chemistry 2004, a high school text (published by Holt)

Proposals:

Alzheimer Society
 American Federation of Aging Research
 Alaska Science and Technology Foundation
 NSF - OSTI/ARI Facilities Panel, also Arctic Division/Contaminants Proposals
 Center for Indoor Air Research
 Philip Morris External Research Program
 NSF – Biocomplexity Program
 International FSU Research Proposals
 Global Change Center, UAF Student Proposals

INVITED LECTURES:

1. Roche Institute of Molecular Biology, Nutley, NJ, May, 1981
2. IV International Conference on Methods in Protein Sequence Analysis, Brookhaven National Laboratory September, 1981
3. LaFayette College, Department of Chemistry, Easton, PA, April, 1982
4. Mini-Symposium on HPLC Applications at UTMB, Galveston, TX, May, 1982
5. FEBS "Hemoglobin Symposium," Brussels, Belgium, July, 1983
6. University of Alaska, Institute of Arctic Biology, Fairbanks, AK, October, 1984
7. Harvard Medical School, Department of Biochemistry, Boston, MA, October, 1985
8. Boston Glycoprotein Group, Boston, May, 1987
9. Southeastern Mass. Univ., Department of Chemistry, Fall River, January 26, 1988
10. Alaskan-Siberian Exchange, Inst. of Clinical and Experimental Medicine, Novosibirsk, USSR, October, 1988
11. Palmer Agricultural Research Station, UAF, March, 1989

12. Institute of Marine Science, UAF, September, 1989
13. Alzheimer Society Workshop, September, 1990
14. Department of Chemistry, University of Alaska Anchorage, March, 1991
15. Regional Center for Alcoholism, Fairbanks, AK, July, 1991
16. Department of Chemistry and Biochemistry, Cal. State Fullerton, March, 1992
17. Workshop on Arctic Contamination, IARPC, Anchorage, AK, May, 1993
18. Symposium on Human Ecology in Extreme Environments, Vladivostok, September, 1994
19. NIDCD Partnership Program for Research in Human Communication, Rockville, MD, September, 1996.
20. Community Forum on Environmental Research, YKHC Bethel, AK. August, 1997.
21. "Research Ethics" to Polaris Group: Project on Leading Alaska Restructuring in Science, October 3-4, 1997, Anchorage, AK.
22. Kachemak Bay Conference, "Developing Sentinel Species and Biomarkers for Kachemak Bay" April 25, 1998, Homer, AK.
23. "Mercury and Health Risks in Western Alaska" to Y-K Health Corp., OEHE and Hospital Staff, March 31, 1999.
24. Pathways to Aging Meeting. "The Role of Amyloid Beta Protein in Progressive Neurodegeneration" April 22-23, 1999, Egan Convention Center, Anchorage, AK.
25. 1999 Fall Forum for Alzheimer's Disease. "Alaska's Role in Current Alzheimer's Disease Research," Nov 1999, Juneau, Fairbanks and Anchorage.
26. "A Case Study of Community Directed Research on Mercury in Western Alaska," Alaska Pacific University, Dec. 8, 1999.
27. Arctic Council Panel on "Contaminants in the North," April 2000.
28. US EPA International workshop on "Trends and Effects of Heavy Metals in the Arctic," McLean, VA June 2001.
29. NOAA Workshop on Steller Sea Lions, Anchorage, AK September 2001
30. AISES, Alaska Chapter "Salmon, Mercury and Neurobiology" November 2001
31. YKHC Bethel Hospital Grand Rounds "Antioxidants, Mercury and Nutrition", July 2003
32. UA Leadership Seminar Series: "The Art of Leadership Exercised by Department Chairs", Oct 2003
33. ADAK Community Meeting "Radioactivity and Amchitka," June 2004
34. Chemical Heritage Foundation, "Robert McNeil, Jr. and Tylenol," June 2005
35. AKDPH Subsistence Foods and Contaminants Meeting, "Mercury in Wildlife", May 2006
36. Alaska, Food, Mercury and Neurogenesis, Univ. of Rochester Environ Health Seminar, Nov. 2006
37. Monitoring for Changes in Environmental and Human Health, NPRB Contaminants Panel, Jan 2007

Community Activities:

Civil Defense Coordinator, Warren County, NJ, 1979
 Youth Commission, Treasurer, Town of Acton, 1984
 Community Education Advisory Committee, Town of Acton, 1986
 Fairbanks Alzheimer Support Group, 1988-1998
 Institutional Review Board, Fairbanks Memorial Hospital Foundation, 1990
 Board of Directors, Alzheimer's Disease Association of Alaska (Vice President - 1993; President-1994-1995, 99; 00-present).
 Regional Delegation to Alzheimer Society 1995
 Member, Ft. Wainwright Restoration Advisory Board, 1998-2000
 Corp of Engineers Working Group on Dredging Standards in Alaska, 2000-2003
 AMAP Working Group on Metals in the Arctic, 2000-03
 NSB Board of Education Curriculum Advisory Committee (2002-04)
 NSB Pollution Control Commission (2004-)

BIBLIOGRAPHY:

A. Theses:

1. Duffy, L.K. 1972. Photo-hydrolysis of chlorophenoxyacetic acid compounds, M.S. Thesis. University of Alaska Fairbanks, AK.
2. Duffy, L.K. 1977. A comparison of the primary structure of hemoglobins from two microtine tribes. Microtini and Lemnini, Ph.D. Dissertation. Institute of Arctic Biology, University of Alaska Fairbanks, AK.

B. Articles in Journals: (peer reviewed; superscript 1 indicates undergraduate or high school author))

1. Stratton, L.P. and Duffy, L.K. 1976. Hemoglobin polymorphism in *Microtus pennsylvanicus*. *Comp. Biochem. Physiol.* 54B:413-419.
2. Duffy, L.K., Genaux, C.T. and Stratton, L.P. 1976. Amino acid differences between the β -chains from two hemoglobins of the yellow-cheeked vole. *Biochem. Genetics.* 14:809-821.
3. Stratton, L.P., Duffy, L.K. and Porchet, A.L. 1977. Comparative solubilities and electrophoresis of microtine hemoglobin. *Comp. Biochem. Physiol.* 56B:321-327.
4. Duffy, L.K. and Genaux, C.T. 1977. The primary structure of the hemoglobin β -chain of *Microtus xanthognathus*. *Comp. Biochem. Physiol.* 56B:143-146.
5. Morrison, P.R., Duffy, L.K., Ramakrishnan, P. and Genaux, C.T. 1977. Comparison to the tryptic peptides from two cricetid genera. *Peromyscus* and *Calomys*. *Biochem. Systematics and Ecology.* 5:309-317.
6. Duffy, L.K., Genaux, C.T. and Morrison, P.R. 1978. Amino acid differences between major and minor hemoglobins from lemmings (*Lemmus* and *Dicrostonyx*). *Comp. Biochem. Physiol.* 61B:521-532.
7. Laursen, R.A. and Duffy, L.K. 1978. The evolution of elongation factors Tu and G by gene duplication. *FEBS Lett.* 92:200-202.

8. Duffy, L.K. and Lai, C.Y. 1979. Involvement of arginine residues in the binding site of cholera toxin subunit B. *Biochem. Biophys. Res. Commun.* 91:1005-1010.
9. Ara, K., Clark, B.F.C., Duffy, L., Jones, M.D., Kaziro, Y., Laursen, R.A., L'Italien, J., Miller, D.L., Nagarkatti, S., Nakamura, S., Nielson, K.M., Peterson, T.E., Takahasis, K. and Wade, M. 1980. Primary structure of elongation factor Tu from *Escherichia coli*. *Proc. Natl. Acad. Sci. USA.* 77:1326-1330.
10. Duffy, L.K., Gerger, L., Johnson, A.E. and Miller, D.L. 1981. Identification of a histidine residue near the amino acyl-tRNA binding site of elongation factor Tu. *Biochemistry.* 20:4663-4666.
11. Duffy, L.K., Kurosky, A. and Peterson, J.W. 1981. Characterization of cholera toxin precursor. *FEBS Lett.* 126:187-190.
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