Curriculum Vitae

Marvin K. Schulte, Ph.D.
P.O. Box 80834
Fairbanks, AK 99708
Office phone: 907 474-5237 Cell: 907 978-1256
Web Page: http://chem.uaf.edu/schulte
E-mail: mkschulte@alaska.edu

Education:

1982. **St. John's University**, Collegeville, Minnesota, B.S. degree

1989. **University of Minnesota,** Minneapolis, Minnesota
M.S. degree: Department of **Biochemistry**
Thesis title: *Characterization of an α-Linked Acidic Dipeptidase from Rat Brain*.
Thesis Advisor: Dr. James Koerner

1992. **University of Minnesota**, Minneapolis, Minnesota
Ph.D. degree: Department of **Biochemistry**, **Neuroscience** Minor
Thesis title: *The Mechanisms of Quisqualic Acid Induced Sensitization of Hippocampal Slices to Depolarization by L-2-amino-4-phosphonobutanoic acid*
Thesis Advisor: Dr. James Koerner

Experience:

05/04 - Present	**University of Alaska, Fairbanks.** Institute for Arctic Biology, Fairbanks, AK Associate Professor of Chemistry/Biochemistry. ***Tenured: July 2007.***
07/96 – 04/04	**The University of Louisiana at Monroe,** College of Pharmacy, Monroe, LA Assistant/Associate Professor of Medicinal Chemistry. ***Tenured: July 2002.***
01/93 - 06/96	**Medical College of Pennsylvania,** Philadelphia, PA 19129.Postdoctoral Fellow
8/87 - 12/92	**University of MN**, Minneapolis, MN. Graduate Research Assistant.
6/84 - 07/87	**United States Peace Corps,** Belmopan, Belize, Central America Physics and Computer Science Teacher.

Current Research Foci:

Biosensors for Ligand Gated Ion Channel ligands: The primary goal of this project is to engineer receptor proteins based on the soluble acetylcholine binding protein and human ligand gated ion channel receptors with the intent of producing biological sensors.

D*evelopment of sub-type selective modulators of neuronal nicotinic acetylcholine receptors.* The primary goal is to develop and characterize a new class of nAChR modulators as lead molecules for the treatment of diseases involving alterations in nicotinic tone in the CNS (Autism, Alzheimer's Disease, Schizophrenia). Our focus is on the $\alpha 4\beta 2$ subunit severely decreased in autistics.

Current and Pending Grants and Awards as PI:

1. **NIH, R01:** "Microcantilever Biosensors Based on Ligand-Gated Ion Channel Receptors." (NIH R01NS057366).
   Collaborator: Dr. Haifeng Ji, Drexel University.

2, **NIH Diversity Supplement** "Soluble analogs of α4 and β2 nicotinic subunits". (R01NS057366-01A2S109).
   Recipient: Maegan Weltzin

3. **NIH, R01:** "Novel, subtype selective potentiators of nicotinic acetylcholine receptors." (NIH 1R01NS066059)
   Collaborator: Dr. Richard Glennon, VCU.

Completed Grants:

1. **NIH: "**Expression of Soluble Binding Proteins Based on Ligand Gated Ion Channel Receptors." (NIH, 5P20RR016466)
   (Funded. June 2004 – March 2009)
2. **NSF CAREER, (PI)**. *Team based research as an integrative teaching tool for secondary, post-secondary and graduate education.* Submitted: July, 1999, (Funded Aug. 2000 – July 2005).
3. **Grant in Aid**, *Structure / function studies of the serotonin type3 receptor using site directed mutagenesis and synthetic molecular probes.* American Heart Association SE Affiliate (Funded July 2001-June 2003).
4. **Beginning Grant in Aid**, *A site directed mutagenesis/SAR approach to mapping the $5HT_3R$ binding sit*e. American Heart Association SE Affiliate (Funded: 1999-2001).
5. **Beginning Grant in Aid**, *Molecular mapping of the ligand binding domain of the serotonin type 3 receptor.* American Heart Association Louisiana Affiliate (Funded: 1998-1999).
6. **Post-Doctoral Training Grant (NRSA**), *Structural studies of the serotonin 5HT 3 receptor.* National Institute of Mental Health (Funded: 1994-1996).
7. **Small Projects Fund, U.S. Peace Corps.** *Development of computer assisted instruction at the Belmopan Comprehensive School.* U. S. Peace Corps. Belize, Central America. (Funded: 1985-1987).
8. **US Aid for International Developmen**t, *Development of a computer laboratory at the Belmopan Comprehensive School.* Belize, Central America (Funded: 1985-1987).

Proposals as Co-PI:

1. **NSF Undergraduate Research Mentoring**. "In from the cold; Undergraduate Research Mentoring in Alaska." PI: Dr. Tom Clausen. CoPIs: Marvin K. Schulte, Tom Kuhn, Tom Trainor and William Simpson. (**Funded:** July 2008 – June 2011**).**
2. **American Association of Colleges of Pharmacy. "**Structure-activity relationship studies of Lophotoxin, a nAChR antagonist." PI: Dr. Karen Kirschbaum (**Funded**: 1998-1999). Role on project: Electrophyisology and Molecular Biology.
3. **ULM Development Grants Program**. "EV-500 Presenter, LTD Inter-Disciplinary Active Learning Applications." Co-applicants: Bill Ross, Marvin K. Schulte, Dean Reardon, Lesa Lawrence. (**Funded** Dec. 1999).

Undergraduate proposals:

1. **American Heart Association, LA Affiliate,** Flavin metabolites as potential antagonists at glutamate receptors. – Marvin K. Schulte Sponsor, Dr. Ron Hill Co-sponsor (Funded: 1998-1999)
2. **American Heart Association, LA Affiliate,** Novel curariform analogs as potential ligands for the nAChR and the serotonin $5HT_3R$. – Marvin K. Schulte Sponsor (Funded: 1998-1999).
3. **American Foundation for Pharmacy Education,** Molecular mapping of the nitrogen binding domain of the $5HT_3R$. Marvin K. Schulte Sponsor (Funded: 1997 –1998).

Research Publications:

1. Weltzin, A.A. and Schulte MK (2010) "Pharmacological characerization of the allosteric modulator desformylflustrabromine and its interaction with a4b2 nAChR Orthosteric ligands. *JPET*, (epub)

2. Hazai E, Joshi P, Skoviak EC, Suryanarayanana A, Schulte MK and Bikadi Z. (2009) "A comprehensive study on the 5-hydroxytryptamine(3A) receptor binding of agonists serotonin and m-chlorophenylbiguanide". *Bioorg Med Chem*, **17**(16), 5796-5805.

3. Ji, H.F., Gao, H., Buchapudi, K.R., Yang, X., Xu X. and Schulte M.K. (2008) "Microcantilever biosensors based on conformational change of proteins." *Analyst*, **133**(4), 434-443.

4. Hongyan G., Buchapudi, K.R. Smyth, A., Schulte, M.K. and Ji, H-F. (2008) "An Improved Surface Modification Approach for Micromechanical Biosensors" *Lanmuir*, **24**(2), 345-349.

5. Kim J.S., Pandya A., Weltzin, M., Edmonds, B.W., Schulte, M.K. and Glennon R.A. (2007) "Synthesis of desformylflustrabromine and its re-evaluation as an alpha4/beta2 nACh receptor modulator." *Bioorganic and Med Chem Letters.* **17**(17):4855-60.

6. Schulte, M.K., Hill, R.A., Bikadi, Z., Maksay G., Parihar, H.S., Joshi, P. and Suryanarayanan, A. (2006) "The Structural Basis of Ligand Interactions in the 5-HT_3R." Biological and Biophysical Aspects of Ligand-Gated Ion Channel Receptor Superfamilies., Ed. Hugo Arias. Research Signpost, 127-154.

7. Joshi, P.R., Suryanarayanan, A., Hazai, E., Schulte, M.K., Maksay, G and Bikadi Z. (2006) "Interactions of granisetron with an agonist-free 5-HT3A receptor model." *Biochemistry* **45**(4):1099-105.

8. Suryanarayanan, A., Joshi, P. R., Bikadi, Z., Mani, M., Kulkarni, T. R., Gaines, C., and Schulte, M. K. (2005) "The loop C region of the murine 5-HT_3A receptor contributes to the differential actions of 5-hydroxytryptamine and *m*-chlorophenylbiguanide." *Biochemistry* **44**(25), 9140-9149.

9. Joshi, P. R., Suryanarayanan, A., and Schulte, M. K. "A vertical flow chamber for Xenopus oocyte electrophysiology and automated drug screening." (2004) *J Neurosci Methods* **132**(1), 69-79.

10. Zhang, Y., Venkatachalan, S. P., Xu, H., Xu, X., Joshi, P., Ji, H. F., and Schulte, M. "Micromechanical measurement of membrane receptor binding for label-free drug discovery." (2004) *Biosens Bioelectron* **19**(11), 1473-1478.

11. Venkataraman, P., Venkatachalan, S. P., Joshi, P. R., Muthalagi, M., and Schulte, M. K. "Identification of critical residues in loop E in the 5-HT3ASR binding site." (2002b) *BMC Biochem* **3**(1), 15.

12. Venkataraman, P., Joshi, P., Venkatachalan, S. P., Muthalagi, M., Parihar, H. S., Kirschbaum, K. S., and Schulte, M. K. "Functional group interactions of a 5-HT3R antagonist." (2002a) *BMC Biochem* **3**(1), 16.

13. Parihar, H. S., Suryanarayanan, A., Ma, C., Joshi, P., Venkataraman, P., Schulte, M. K., and Kirschbaum, K. S. "5-HT(3)R binding of lerisetron: an interdisciplinary approach to drug-Receptor interactions." (2001) *Bioorg Med Chem Lett* **11**(16), 2133-2136.

14. Yan, D., Schulte, M. K., Bloom, K. E., and White, M. M. "Structural features of the ligand-binding domain of the serotonin 5HT3 receptor." (1999) *J Biol Chem* **274**(9), 5537-5541.

15. Schulte, M. K., Roon, R. J., Chalmers, D. J., Sunter, D. C., and Koerner, J. F. "Utilization of the resolved L-isomer of 2-amino-6-phosphonohexanoic acid (L-AP6) as a selective agonist for a quisqualate-sensitized site in hippocampal CA1 pyramidal neurons." (1994) *Brain Res* **649**(1-2), 203-207.

16. Venkatraman, S., Roon, R. J., Schulte, M. K., Koerner, J. F., and Johnson, R. L. "Synthesis of oxadiazolidinedione derivatives as quisqualic acid analogues and their evaluation at a quisqualate-sensitized site in the rat hippocampus." (1994) *J Med Chem* **37**(23), 3939-3946.

17. Price, R. H., Jr., Schulte, M. K., Renno, W. M., Koerner, J. F., and Beitz, A. J. "Immunocytochemical evidence that quisqualate is selectively internalized into a subset of hippocampal neurons." (1994) *Brain Res* **663**(2), 317-325.

18. Schulte, M. K., Roon, R. J., and Koerner, J. F. "Quisqualic acid induced sensitization and the active uptake of L-quisqualic acid by hippocampal slices." (1993) *Brain Res* **605**(1), 85-92.

19. Schulte, M. K., Whittemore, E. R., Koerner, J. F., and Johnson, R. L. "Structure-function relationships for analogues of L-2-amino-4-phosphonobutanoic acid on the quisqualic acid-sensitive AP4 receptor of the rat hippocampus." (1992) *Brain Res* **582**(2), 291-298.

20. Subasinghe, N., Schulte, M., Roon, R. J., Koerner, J. F., and Johnson, R. L. "Quisqualic acid analogues: synthesis of beta-heterocyclic 2-aminopropanoic acid derivatives and their activity at a novel quisqualate-sensitized site." (1992) *J Med Chem* **35**(24), 4602-4607.

21. Subasinghe, N., Schulte, M., Chan, M. Y., Roon, R. J., Koerner, J. F., and Johnson, R. L. "Synthesis of acyclic and dehydroaspartic acid analogues of Ac-Asp-Glu-OH and their inhibition of rat brain N-acetylated alpha-linked acidic dipeptidase (NAALA dipeptidase)." (1990) *J Med Chem* **33**(10), 2734-2744.

22. Robinson, M. B., Schulte, M. K., Freund, R. K., Johnson, R. L., and Koerner, J. F. "Structure-function relationships for kynurenic acid analogues at excitatory pathways in the rat hippocampal slice." (1985) *Brain Res* **361**(1-2), 19-24.

Research Abstracts and Presentations (national meetings only):

1. Weltzin, MM and Schulte, MK "Allosteric modulation of alpha4beta2 nicotinic acetylcholine receptors by 4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid. Soc. For Neuroscience Abstracts Nov. 2010, San Diego CA.

2. Schulte, MK. "Allosteric modulation of neuronal nicotinic acetylcholine receptors" 28th Camerino-Cyprus-Noordwijkerhout Symposium Camerino, Italy, May 16-20, 2010.

3. Pandya, AA, Weltzin MM and Schulte MK. "A comparison between the modulatory actions of desformylflustrabromine and other common allosteric modulators of the alpha4 beta2 neuronal nicotinic receptor." Soc. for Neuroscience Abstracts. Nov. 2009, Chicago, IL. 228.5

4. Weltzin, AA, and Schulte MK. "Investigating allosteric potentiation of the alpha4beta2 neuronal nicotinic acetylcholine receptor subtypes." Soc. for Neuroscience Abstracts. Nov 2009, Chicago, IL. 228.6.

5. Schulte MK. "Mechanisms of Des-formylflustrabromide Potentiation of Neuronal Nicotinic Acetylcholine Receptors." Soc. for Neuroscience Abstracts. Nov. 2008, Washington, DC.

6. Pandya, AA, Kim, J, Weltzin, M, Edmonds, B, Schulte, MK and Glennon, R. (2007) "Desformylflustrabromine synthesis and action on neuronal nicotinic receptors." Society for Neuroscience Abstracts. 39.3.

7. Harms-Smyth, A, Kusina, J and Schulte MK (2007) "Binding of Serotonergic Ligands to an Acetylcholine Binding Protein. Society for Neuroscience Abstracts. 782.20.

8. Joshi PR, Suryanarayanan A, Bikadi Z, Muthalagi M and Schulte MK (April 2-6, 2005) "Investigation Of Amino Acids In The Loop B Region Of The Mouse 5-HT_{3A}R By Site Directed Mutagenesis," in Experimental biology, San Diego, CA."

9. Joshi, P. R., Suryanarayanan, A., Bikadi, Z., and Schulte, M. K. (2004) "Mutations at loop E tyrosine residues differentially modulate gating of the murine 5-HT_3A receptor." Society for Neuroscience Abstracts. 626.622.

10. Suryanarayanan, A., Joshi, P. R., Bikadi, Z., Muthalagi, M., Kulkarni, T. R., Gaines, C., and Schulte, M. K. (2004) "Characterization of Residues in the Loop C Region of Murine 5-HT_{3A}R by Alanine Scanning Mutagenesis." Society for Neuroscience Abstracts. 626.621.

11. Suryanarayanan, A., Muthalagi, M., and Schulte, M. K. (2002) "Properties of Chimeric Constructs of Human 5-HT_3 A and B Receptor Subunits." Society for Neuroscience Abstracts.

12. Joshi, P., Suryanarayanan, A., and Schulte, M. K. (2002) "A Conical Recording Chamber for Xenopus Oocyte Electrophysiology." Society for Neuroscience Abstracts.

13. Parihar, H. S., Joshi, P. R., Han, J., Schulte, M. K., and Kirschbaum, K. S. (2001) "2-substituted-N-benzylimidazole analogs as molecular probes to investigate the amino interaction at the 5-HT3R antagonist binding site." American Chemical Society Abstracts, 222nd annual meeting.

14. Parihar, H. S., Suryanarayanan, A., Joshi, P. R., Venkataraman, P., Schulte, M. K., and Kirschbaum, K. S. (2000) "SAR study of N-substituted-2-piperazinylbenzimidazoles as

5-HT3R antagonists." Southwest/Souteast Regional American Chemical Society Abstracts.

15. Venkataraman, P; Joshi, PR; Kirschbaum KS and Schulte MK. (2001). **"**The role of Tyrosine Residues in the Binding of Lerisetron to the 5-HT_3R."
16. Venkataraman, P and Schulte MK. (2000) "Site directed mutagenesis of Y140 - K153 of the serotonin type 3 receptor binding site supports a □ configuration**."** Society for Neuroscience Abstracts.
17. Swaffar V., Dhawan, V. and Schulte MK. (2000) "Increased nuclear content of Topo IIb after prolonged exposure of MCF-7 cells to taxol." American Association for Cancer Research.
18. Venkataraman, P; C, Ma; Kirschbaum, KS and Schulte, MK. (1999) "Tryptophan 89 of the 5HT3 receptor forms a cation-pi interaction with the amino group of 5HT_3R antagonists." Society for Neuroscience Abstracts.
19. Wen, X; Zuo, X; Nguyen, Q; Schulte, MK and Kirschbaum, KS. (1998) "Fragments of d-tubocurare as Molecular Probes of the 5HT_3 Receptor Binding Site." Society for Neuroscience Abstracts. 435.18.
20. Venkataraman, P; Nguyen, Q; Kirschbaum, KS and Schulte, MK. (1998) "The Use of 2-piperazinyl Benzimidazoles and Site Directed Mutagenesis to Probe the Aromatic Binding Domain of the 5HT3 receptor." Society for Neuroscience Abstracts. 434.18.
21. Schulte, MK; Bloom, KE and White, MM, (1995) "Evidence for the Involvement of Tryptophan in the Binding of Curare to 5HT3 Receptors." Society for Neuroscience Abstracts.
22. Schulte, MK; Roon, RJ; Venkatraman, S; Johnson, RJ and Koerner, JF. (1994) "Utilization of Quisqualic Acid Analogs to Define the Specificity of the Quis Sensitization Site in Rat Hippocampus." Society for Neuroscience Abstracts.
23. Price, RH Jr.; Schulte, MK; Koerner, JF; Renno, WM and Beitz, AJ. (1993) "Immunocytochemical Identification of Quisqualate Uptake Sites in Hippocampal Slices; Possible Relationship to GABAergic Neurons." Society for Neuroscience Abstracts. 497.
24. Schulte, MK; Roon, RJ; Sunter, DC and Koerner, JF. (1993) "Utilization of L-AP6 as a Selective Agonist for a Unique Quisqualate-Sensitized Receptor." Society for Neuroscience Abstracts. 923.
25. Roon, RJ; Schulte, MK; Koerner, JF; Subasinghe, NL and Johnson, RL. (1992) "Synthesis of Quisqualic Acid Analogues as Possible Selective Ligands at Quisqualic Acid Receptors." Society for Neuroscience Abstracts. 649.
26. Schulte, MK; Roon, RJ and Koerner, JF. (1992) "Time Dependence of Quisqualate Induced Sensitization of Hippocampal Slices to L-AP5." Society for Neuroscience Abstracts. 1511.
27. Schulte, MK and Koerner, JF. (1991) "Retention of Quisqualic Acid by Hippocampal Slices Following Quisqualic Acid Induced Sensitization to L-AP4." Society for Neuroscience Abstracts 71.
28. Subasinghe, N; Schulte, MK; Roon, RJ; Koerner, JF and Johnson, R.L. (1990) "Synthesis of Acyclic and Dehydropeptide Analogues of Ac-Asp-Glu-OH and Their Inhibition of Rat Brain N-Acetylated □□□linked Acidic Dipeptidase", Am. Chem. Soc., 200th Annual Meeting Abstracts, 47a,.

Teaching Publications and Abstracts:

1. Ross, W. H., Lawrence, L. W., Reddy, I. K., Dick, R. M., Roan, D. S., Schulte, M. K., Kahn, M. A., Olivier, K. J., and A., S. L. "Implementation of a New Course with a Focus on Active Learning Through an Integrated Curricular Approach; Pharmacy Care Laboratory I." (1998) *Journal of Pharmacy Teaching* **7**(2), 15-35.
2. Schulte, M. K. (1998) "Utilization of an Instructional WWW site for the teaching of Biochemistry." American Association of Colleges of Pharmacy Annual Meeting Abstracts.

Teaching Responsibilities:

1. **Chem674 (UAF). Membrane Biochemistry** (3cr) Offered alternate years. New Course Offering, Spring Semester. (2006, 2009).
2. **Chem654 (UAF). Structure and Function of Proteins** (3cr) Offered alternate years. Fall Semester. (2005,2007, 2008, 2010).
3. **Chem452 (UAF); Biochemistry Laboratory.** (3cr, writing intensive). Spring Semester. (2005)
4. **Chem451 (UAF); Introduction to Biochemistry.** (3 cr) Offered annually. (2004-2010).
5. **PHA407 (ULM); Medicinal Chemistry I; The Biochemical Basis of Drug Action. (3cr)** Required for all PharmD students, Offered annually; fall semester. (1996-2003).
6. **PHA527 (ULM); Neuropharmacology. (3cr)** Offered alternate years; summer session. (summer 1997).
7. **PHA500 (ULM); Molecular Structure and Function of Proteins. (3cr)** Required course for Medicinal Chemistry students. 42 contact hours. (Taught summer 1998 and 1999 and spring 2002).
8. **PHA522 (ULM); Advanced Pharmacology Laboratory. (2cr)** Laboratory course in pharmacological and molecular biology methods. Offered annually, fall semester. (Taught 1998-1999).
9. **PHA321 (ULM); Pharmacy Care Laboratory. (1cr)** Required experiential learning course for first year PharmD students. Offered annually, fall semester. (Taught 1997-1999).
10. **PHA419 (ULM): Biotechnology (3Cr)** Dual level undergraduate and graduate course introducing students to Molecular Biology and recombinant DNA techniques. (Taught spring 2000).

Graduate Students:

Student	Attended	Degree (date received)
Padma Venkataraman	Sept 1996 – Sept 2001	Ph.D. (Sept, 2001) - ULM
Asha Suryanarayanan	Sept 2000 – May 2005	Ph.D. (May, 2005) - UAF
Prasad Joshi	Jan 2001 – May 2005	Ph. D. (May, 2005) - UAF
Abraham Harms-Smyth	Jan 2005 - Dec 2008	M.S. (Dec, 2008) - UAF
Anshul Pandya	Sept 2004 - present	Ph.D. (May 2010) - UAF
Maegan Weltzin	Jan 2007 – present	Ph.D. candidate
Yeganeh Ataian	Jan 2008 – present	Ph.D. candidate
Chelsea Paskvan	Sept 2005 - present	M.S. candidate (Currently attending Medical School)

Undergraduate and High School Research Opportunities:

Undergraduates:

Sitara Chauhan	Supported by Alaska INBRE (Summer 2010)
Stephen Wall	Supported by NIH R01NS057366 (Summer 2010)
Kelsi Evans	Supported by NIH R01NS057366 (Summer 2009)
Dawn Holt	Supported by NSF URMA (2009)
Hilary Schwafel	Supported by Alaska INBRE (Summer 2008)
Loren Schmidt	Supported by Alaska INBRE (Summer 2008)
Brittany Karns (UAF)	Supported by Alaska INBRE (Spring 2007)
Shoshana Wilson (UAF)	Supported by Alaska INBRE (Fall 2006)
Angie Larken (UAF)	Supported by Alaska INBRE (Fall 2005)
Chelsea Paskvan (UAF)	Supported by Alaska INBRE (Spring 2005)
Tania Deisher (UAF)	Supported by Alaska INBRE (Spring 2005)
Abraham Tsigonis (UAF)	Supported by Alaska INBRE (Spring 2005)
Quyen Nguyen (ULM)	Supported AFPE award (1997-1998)
Tara Spalding (ULM)	Supported by AHA student award (1998-1999)
Georgia Fruge (ULM)	Supported by AHA student award (1998-1999)
Ryan Harper (ULM)	Supported by AHA BGIA (Summer 1999,2000)
Bihn Chu (ULM)	Supported by the NSF (Summer 2001)
Chandra Gaines (ULM)	Supported by the NSF (Summer 2001 & 2002)
Vera Wainwright (ULM)	Supported by the NSF (Summer 2002)
April Reed (ULM)	Supported by the AHA (Spring – Summer 2002)

High School Students and Teachers:

Wenjie Fei	Lathrup High School	Fall 2009
Brian Guritz (UAF)	West Valley High School	Fall 2005
Katya Ellson (UAF)	West Valley High School	Fall 2005
Charlie Stark (UAF)	West Valley High School	Fall 2005
Liz Tsigonis (UAF)	Lathrup High School	Summer 2005
Jordon Kadel (UAF)	West Valley High School	Fall 2004 – Spring 2005
Debbie Lee (ULM)		Summer 2001
Alex Theis (ULM)		Summer 2001, 2002
Dontrell Thomas (ULM)		Summer 2002
Lillian Robertson (ULM)		Summer 2002

University Service:

University of Alaska Statewide Biomedical and Health Planning Group (2010)

Alaska Allied Health Consortium – Pharmacy Education in Alaska (2007-2009).

Co-Coordinator, UAF Biochemistry and Molecular Biology Program (2004-Present).

Program Coordinator, Alaska INBRE (2005- 2009).

Chemistry Faculty Search Committees. (2005-2007).

Community Health Program Review. (2007).

Pre-Pharmacy Advisor (2005-present).

Meeting coordinator and Founder of the University of Alaska Biomedical Research Conference (2005-present.)

Chairman, ULM Department of Basic Pharmaceutical Sciences Equipment Committee. (2000).

Coordinator, ULM School of Pharmacy Cell Culture Facility. 1996-1998.

Web Master, ULM Department of Basic Pharmaceutical Sciences website. 1998 -2001.

Chairman, ULM Department of Basic Pharmaceutical Sciences Graduate Student Recruitment Committee. (1999-2000)

Awards:

Sven Ebbesen Award for Excellence in Neuroscience. UAF Alaska Basic Neuroscience Program, 2009.