



Date: April 9, 2015

To: UAA Faculty Senate

From: Fred A. Rainey, D.Phil., Director of Biological Sciences, University of Alaska Anchorage
Jerry Kudenov, Ph.D., Professor of Biological Sciences, University of Alaska Anchorage

Subject: Nomination for Distinguished Service to the University by a Faculty Member

We would like to nominate Dr. Khristyne Duddleston of the Department of Biological Sciences for a UAA Faculty Senate Distinguished Service Award, namely the award for Distinguished Service to the University by a Faculty Member. Since coming to UAA first as a Term Assistant Professor and later as a tenure track faculty member Dr. Duddleston has been heavily involved in service to the University. At this point in time Dr. Duddleston serves on a number of key University wide committees and task forces.

She is a currently a member of the University of Alaska General Education Requirement (GER) Task Force charged assessing and restructuring the GER offerings of the University of Alaska. Her selection to this University wide committee points to her experience in curriculum and general education matters.

Through her research expertise and experience with the handling of research animals Dr. Duddleston was appointed by the Vice Provost for Research to Chair the UAA Vivarium Users and Managers Committee. The UAA Vivarium is a University wide facility that is used by faculty in a number of Colleges on campus to house their experimental animals. This committee not only involves issues related to the day-to-day running of the UAA Vivarium, but includes compliance with Federal rules and regulations, as well as participation in unannounced site visit by Federal regulators and acting upon their findings. In 2010 and 2013, Dr. Duddleston Chaired the UAA Vivarium Search Committee charged with hiring a manager for the facility which is a critical position for animal research at UAA.

Faculty development at UAA is an important component of the mission of the University. The Center for Advancing Faculty Excellence (CAFÉ) is one of the units that facilitate faculty development on campus. Dr. Duddleston has played a critical role in shaping the faculty development activities of CAFÉ through her membership of the University Advisory Council for CAFÉ. She served on this council from 2009-2014.


Teaching is the main component of the workload of the majority of the faculty at UAA and methods and processes of evaluation of teaching are an important consideration for any institution of higher education. In 2008-2009, Dr. Duddleston served the Ad Hoc Committee on the Evaluation of Teaching for the UAA Task Force on the Evaluation of Faculty Work for Promotion, Tenure, Post-Tenure Review and Hiring.

Looking at the University wide committees that Dr. Duddleston has served on and the length of time she has served on some of them clearly demonstrates her dedication to University Service as well as the high level of confidence the University has in her abilities. These are committees that have shaped many important functions and roles of the University and its faculty. In addition, her contributions have facilitated research and research compliance, important components of a research active institution.

Service to the University involves more than just serving on University wide committees and task forces. Looking at the CV of Dr. Duddleston clearly demonstrates that she has provided service to her Department, her College and also to her Profession.

Her dedication to the University, the students, her faculty colleagues and her scientific research profession makes Dr. Duddleston an excellent candidate for this UAA Faculty Senate Distinguished Service Award.

Sincerely,



Fred A. Rainey, D. Phil



Jerry Kudenov, PhD.

Khrystyne N. Duddleston

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Anchorage, AK 99508
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Education

Ph.D. 1998, Microbiology, Oregon State University (OSU)
M.S. 1993, Biology, Virginia Polytechnic Inst. & State Univ. (Va. Tech)
B.S. (Cum Laude), 1990, Biology (Option: Microbiology). Va. Tech

Professional Experience

Associate Professor, July 2008-present, Dept. Biological Sciences, University of Alaska, Anchorage (UAA)
Assistant Professor, August 2005- May 2008, Dept. Biological Sciences, UAA
Term Assistant Professor, August 2000-May 2005, Dept. Biological Sciences, UAA
Postdoctoral Research Associate, September 1998-August 2002, Dept. of Biological Sciences, UAA. Anaerobic microbial biogeochemistry of northern wetlands
Advisor: Mark. E. Hines

Affiliations

Faculty Fellow, Environment and Natural Resources Institute (UAA-ENRI), Dec. 2013-present.
Faculty Affiliate, Alaska IDeA Network of Biomedical Research Excellence (AK-INBRE), Sep. 2011-present

Honors and Awards

Faculty Exemplar Award. UAA Honors College and Office of Undergraduate Research and Scholarship award recognizing outstanding mentorship of undergraduates in research and creative activity. 2012
Biology Scholar-in-Residence. Biology Scholars Transitions Residency: From Science Education Research to Publication. One of 12 chosen from a nationwide pool of applicants to participate in a 2-day institute on publishing in the Scholarship of Teaching and Learning literature. 2011
American Society for Microbiology Scholar-in-Residence, Institute on the Scholarship of Teaching and Learning. One of 16 individuals chosen from a nationwide applicant pool to participate in a 4 day workshop to learn how to conduct research on teaching and learning. 2007
UAA Faculty Writing Fellow, UAA Writing Across the Curriculum Initiative. One of 8 faculty from a campus wide applicant pool to participate in a 3 day workshop on incorporating writing into classes to enhance student learning. 2006

Peer Reviewed Publications (*denotes undergraduate*)

- Lupfer, Gwen, Eric S. Murphy, Zoe Mercurieff, Kori Radcliffe and **Khrystyne N. Duddleston**. 2015. Adapting to alcohol: Dwarf hamster (*Phodopus campbelli*) ethanol consumption, sensitivity, and hoard fermentation. Behavioural Processes. 115:19-24.
- Stevenson, Timothy J., **Khrystyne N. Duddleston** and C. Loren Buck. 2014. Effects of season and host physiological state on the diversity, activity and density of the arctic ground squirrel cecal microbiota. Appl. Environ. Microbiol. 80(18):5611-5622. DOI: 10.1128/AEM.01537-14. **This paper was chosen by the editors of AEM for inclusion in "Spotlight"**.
- Carey, Hannah V. and **Khrystyne N. Duddleston**. 2014. Animal-microbial symbioses in changing environments. Journal of Thermal Biology. 44:78-84. <http://dx.doi.org/10.1016/j.jtherbio.2014.02.015>. PMCID: PMC4121565; PMID: 25086977.
- Stevenson, Timothy J., C. Loren Buck and **Khrystyne N. Duddleston**. 2014. Temporal dynamics of the cecal gut microbiota of juvenile arctic ground squirrels: a strong litter effect across the first active season. Appl. Environ. Microbiol. 80(14):4260-4268. <http://doi:10.1128/AEM.00737-14>. PMCID: PMC4068674; PMID: 24795380.
- Schnabel, W. E., *T. Wilson, *R. Edwards, *G. Stahnke, M. Maseko, D. C. Maddux and **K. N. Duddleston**. 2010. Variability, Seasonality, and Persistence of Fecal Coliform Bacteria in a Cold-Region, Urban Stream. Journal of Cold Regions Engineering. 24(2):54-75.
- Hines, M. E., **K. N. Duddleston**, J. N. Rooney-Varga, D. Fields and J. P. Chanton. 2008. Uncoupling of acetate degradation from methane formation in Alaskan wetlands: Connections to vegetation distribution. Global Biogeochem. Cycles. 22, GB2017, doi:10.1029/2006GB002903.
- Rooney-Varga, J. N., M. W. Giewat, **K. N. Duddleston**, J. P. Chanton and M. E. Hines. 2007. Links between Archaea community structure, vegetation type, and methanogenic pathways in Alaskan peatlands. FEMS Microbiology Ecology. 60(2): 240-251.
- Duddleston, Khrystyne N.**, Monica A. Kinney, Ronald P. Kiene and Mark E. Hines. 2002. Anaerobic microbial biogeochemistry in a northern bog: acetate as a dominant metabolic end product. Global Biogeochem. Cycles. 16(4):1063, doi:10.1029/2001GB001402,2002.
- Duddleston, Khrystyne N.**, Daniel J. Arp and Peter J. Bottomley. 2002. Biodegradation of monohalogenated alkanes by soil NH₃- oxidizing bacteria. Appl. Microbiol. Biotechnol. 59:535-539.
- Hines, Mark E., **Khrystyne N. Duddleston**, and Ronald P. Kiene. 2001. Carbon flow to acetate and C₁ compounds in northern wetlands. Geophys. Res. Lett. 28:4251-4254.
- Duddleston, Khrystyne N.**, Peter J. Bottomley, Angela J. Porter, and Daniel J. Arp. 2000. Effects of soil and water content on methyl bromide oxidation by the ammonia-oxidizing bacterium, *Nitrosomonas europaea*. Appl. Environ. Microbiol. 66:2636-2640.
- Duddleston, Khrystyne N.**, Peter J. Bottomley, Angela J. Porter, and Daniel J. Arp. 2000. New insights into methyl bromide cooxidation by *Nitrosomonas europaea* obtained from experimenting with moderately low density cell suspensions. Appl. Environ. Microbiol. 66:2726-2731.
- Duddleston, Khrystyne N.** 1998. Ph.D. thesis. Oregon State University. Properties of methyl bromide cooxidation by ammonia-oxidizing bacteria.

Papers in Review (*denotes undergraduate*)

Tomco, Patrick L., **Khrystyne N. Duddleston**, Emily Jo Schultz, Birgit Hagedorn, Timothy J. Stevenson and Steven S. Seefeldt. *In Review*. Persistence of Aminopyralid and Clopyralid in subarctic Alaskan soils: Field degradation and microbial effects. Environmental Science and Technology.

Book Chapters

Duddleston, K. and D. Pfeiffer. 2008. Undergraduate Mentoring in the Biological Sciences. *In* K. Mock and E. Murphy (eds). Mentoring Undergraduates in Research and Scholarship. University Honors College Office of Undergraduate Research, University of Alaska Anchorage. **Not Peer Reviewed**

Funding

External

- 2013 "REU Site: Ecology and Physiological Ecology at the University of Alaska Anchorage". Principal Investigator. NSF-DBI-1263415. \$349,720. Mar, 2013-Mar, 2016
- 2012 "Interrelationships between host physiology and the gut microbial community: discoveries in an extreme phenotype". Principal Investigator. NIH-MIGMS-1R15TGM098938-012012 (R15 Area Award). \$284,412. April, 2012-March, 2015.
- 2010 "REU Site: Ecology and Physiological Ecology in Alaska". Co-Principal Investigator (PI: David C. Pfeiffer, UAA Biology), NSF-DBI-1005210. \$307,039. Jan, 2010-Dec, 2012
- 2008 "Montana Creek Water Quality Monitoring". Co-Principal Investigator (Daniel Bogan (Project Manager) and Daniel Rinella, UAA ENRI). The Alaska Department of Environmental Conservation-Alaskan Clean Water Action Grant. \$65,035. Jul. 2008-Jun. 2009
- 2007 "REU Site: Research Experiences in Ecology and Physiological Ecology in Alaska". Co-Principal Investigator (PI: David C. Pfeiffer, UAA Biology), NSF-DBI-0647672. \$300,377. Feb., 2007-Dec., 2009
- 2005 "Sources and Dynamics of Fecal Coliform Bacteria in University Lake". Co-Principal Investigator (PI: William Schnabel, UAA Engineering). The Alaska Department of Environmental Conservation-Alaskan Clean Water Action Grant. \$88,023. July 2005-June 2006
- 2004 "Spatial, Temporal, and Phase Distributions of Fecal Coliform Bacteria in Chester Creek". Co-Principal Investigator (PI: William Schnabel, UAA Engineering). The Alaska Department of Environmental Conservation-Alaskan Clean Water Action Grant. \$108,571. July, 2004-July 2005
- 2001 "Collaborative Research: Acetate Biogeochemistry in Northern Wetlands: Implications for Methane Formation During Climate Change". Co-Principal Investigator (PI: M. E. Hines). National Science Foundation-Arctic Natural Sciences. \$300,000. Feb. 1, 2001-January 31, 2003

Internal

- 2014 "Influence of Temperature and Prolonged Oxygen Deprivation on the Composition and Diversity of the Turtle Gut Microbiota: A Novel Model for

- Understanding the Role of Gut Microbiota in Normal Physiology and Disease". Co-PI (PI: Stecyk). UAA-INNOVATE award. \$10,000. Jan., 2014-Dec., 2014.
- 2013 "Obesity and the gut microbiota of arctic ground squirrels: linking microbial community structure to function using community transcriptomics." Principal Investigator. AK-INBRE Faculty Seed Grant. \$25,000. March, 2013-Feb., 2014.
- 2013 "Importance of the microbial community as a driver of tree performance and treeline position in northwest Alaska." Principal Investigator. UAA-INNOVATE award. \$10,000. Jan., 2013-Dec., 2013.
- 2012 "The gut microbial community of arctic ground squirrels: implications for obesity. Principal Investigator. AK-INBRE Faculty Seed Grant. \$25,000. March, 2012-Feb., 2013.
- 2012 "Host-gut microbiome interactions in the arctic ground squirrel: investigations in an extreme hibernator. Principal Investigator. UAA-INNOVATE Award. \$25,000. Jan., 2012-Dec., 2012.
- 2010 "Gut microbial diversity in Arctic ground squirrels and Alaska marmots". Principal Investigator. EPSCoR Faculty Mini Grant in Landscape Genetics. \$5,000. Feb. 2010-June, 2010.
- 2008 "Antibiotic Resistant Bacteria in Chester Creek, Anchorage Alaska: Toward Elucidating the Factors Affecting Abundance and Distribution". Chancellor's Fund for Research and Scholarship. \$17,500. Jan. 2008-Jan. 2009.
- 2004 "Bacterial Source Tracking: Discovering the Source of Fecal Contamination in an Anchorage Waterway" Chancellor's Fund for Research and Scholarship. \$9,786.00
- 2004 "Characterizing Sources and Growth Potential of Indicator Bacteria in Cold Region Streams". Co-Principal Investigator (PI: William Schnabel, UAA Engineering). University of Alaska Fairbanks, Water and Environmental Research Center: USGS State Water Resources Research Institute Program. \$41,690. Jan. 2005-Jan. 2006
- 2002 "Request for Travel Funds to a Scientific Meeting to Disseminate Results from Microbiological Assessment of Chester Creek in Biol. 340, General Microbiology". Faculty mini-grant for a community-based, service-learning course. \$2000

Invited Talks

- 2012 *Biological rhythms and gut microbial ecology: investigations of an extreme hibernation phenotype*. Loren Buck and **Khrys Duddleston**. University of Wisconsin-Madison. Nov. 15, 2012. Host: Dr. Hannah V. Carey.
- 2009 *Mentoring Undergraduates in the Biological Sciences*. D. Pfeiffer and **K. Duddleston**. Center for Advancing Faculty Excellence (CAFÉ) Workshop on Mentoring Undergraduates in the Natural Sciences. April 2, 2009.

Selected Abstracts, Presentations, Reports (*denotes graduate, denotes undergraduate)

Wilson, C. D., T. J. Stevenson, J. A. Stecyk and **K. N. Duddleston**. 2015. Influence of cold temperature and anoxia on the Red-eared Slider Turtle gut microbiota. Abstracts of the Annual Meeting of the Society for Integrative and Comparative Biology, Jan. 3-7. 2015, West Palm Beach, Fla.

Duddleston, K. N., and P. F. Sullivan. 2014. Composition of soil microbial communities at the Arctic treeline in Northwest Alaska. Abstracts of the 114th meeting of the American Society for Microbiology. May 16-20, 2014. Boston, MA.

- Schultz, Emily and **Khrystyne Duddleston. 2014.** The effects of Aminopyralid treatment on microbial diversity in Alaskan soils. The 10th Annual Undergraduate Research & Discovery Symposium, UAA, Anchorage AK, April, 2014.
- Michele, M. D., J. E. Mellish, and **K. N. Duddleston. 2013.** Characterization and changes in gut flora with acute stress in endangered Steller Sea Lions. The 9th Annual Undergraduate Research & Discovery Symposium, UAA, Anchorage AK, April, 2013.
- Duddleston, K.**, *T. Stevenson and C. Loren Buck. **2012.** Dynamics of the gut-microbial communities in arctic ground squirrels: effects of development and hibernation. Abstracts of the 14th International Symposium on Microbial Ecology. Aug. 18-24, 2012. Copenhagen, Denmark. Poster
- Buck, C.L., *T. Stevenson and **K. Duddleston. 2012.** Dynamics of the gut-microbial communities in arctic ground squirrels: effects of development and hibernation. 14th International Hibernation Symposium. Aug. 8-14, 2012. Semmering, Austria. Poster
- Sinnott, D., B. Quinlan, *T. Stevenson, **K. Duddleston. 2012.** Effects of diet change and antibiotics on the gut microflora diversity of arctic ground squirrels. 6th Annual Symposium of the REU: Ecology and Physiological Ecology in Alaska. Aug. 3, 2012. Anchorage, AK.
- Duddleston, K. N.**, *T. J. Stevenson, B. A. Quinlan, C. L. Buck. **2012.** Analysis of the cecal microbiota of an extreme hibernator, the arctic ground squirrel. Abstracts of the 112th General Meeting of the American Society for Microbiology. June 16-19, 2012. San Francisco, CA.
- *Stevenson, T., L. Buck, B. Quinlan and **K. Duddleston. 2012.** Dynamics of the cecal microbial community of an extreme hibernator, the arctic ground squirrel. Experimental Biology 2012 Meeting Abstracts. April 21-25, 2012, San Diego, CA. FASEB J. 26:1155.7.
- Quinlan, B. A., *T. J. Stevenson, C. L. Buck and **K. N. Duddleston. 2012.** Post-weaning dynamics of fecal microbial communities of arctic ground squirrels. Abstracts of the Society for Integrative and Comparative Biology Annual Meeting. Jan. 3-7, 2012. Charleston, SC.
- Dufva, Melanie, B. Quinlan, *T. Stevenson and **K. Duddleston. 2011.** Analysis of the gut microbiota of arctic ground squirrels and Alaska marmots: Development of 16S rRNA clone libraries. 5th Annual Symposium of the REU: Ecology and Physiological Ecology in Alaska. August 5, 2011, Anchorage, AK.
- Quinlan, B. A., *T. J. Stevenson, C. L. Buck and **K. N. Duddleston. 2011.** Gut microbial community analysis of arctic hibernators. Abstracts of the 111th General Meeting of the American Society for Microbiology. May 21-21, 2011. New Orleans, La.
- Duddleston, K.**, *T. Stevenson, B. Quinlan and L. Buck. **2011.** The gut microbial community of arctic ground squirrels. Annual meeting of the Alaska Branch of the American Society for Microbiology. April 23, 2011, Anchorage, AK.
- Quinlan, B., *T. Stevenson, L. Buck and **K. Duddleston. 2010.** Comparative analysis of the gut microbiota of arctic ground squirrels and Alaska marmots. 4th Annual Symposium of the REU: Ecology and Physiological Ecology in Alaska. August 6, 2010, Anchorage, AK.
- Duddleston, K. 2009.** Antibiotic Resistant Bacteria in Chester Creek, Anchorage, Alaska: Toward Elucidating the Factors Affecting Abundance and Distribution. Final Report to the Office of the Vice Provost for Research and Graduate Studies, University of Alaska, Anchorage.
- Hamilton, T., R. Reeves and **K. Duddleston. 2009.** Assessment of the distribution and source of antibiotic resistant bacteria in an urban waterway. Abstracts of the 109th General Meeting of the American Society for Microbiology. May 17-21, 2009, Philadelphia, Pa.

- Mitchell, A., D. Bogan and **K. Duddleston**. **2009**. Effect of a sport fishery on water quality of Montana creek in Talkeetna, Alaska. Abstracts of the 109th General Meeting of the American Society for Microbiology. May 17-21, 2009, Philadelphia, Pa.
- Duddleston, K. N.**, *R. K. Edwards, M. B. Maselko, H. M. Chambers and W. E. Schnabel. **2007**. Temporal and spatial distribution of fecal coliforms in an urban Alaskan lake. Abstracts of the 107th General Meeting of the American Society for Microbiology. May 21-25, 2007, Toronto, Canada.
- Stevenson, T. J., D. J. Jorgensen and **K. N. Duddleston**. **2007**. Determination of the prevalence and distribution of antibiotic resistant bacteria in Chester creek, Anchorage, Alaska. Abstracts of the 107th General Meeting of the American Society for Microbiology. May 21-25, 2007, Toronto, Canada.
- Duddleston, K. N.** **2006**. Bacterial Source Tracking: Discovering the source of fecal contamination in an Anchorage waterway. Final Report to the Office of the Vice Provost for Research and Graduate Studies, University of Alaska Anchorage.
- Schnabel, W., **K. Duddleston**, R. Edwards, D. Nyman, A. Demske, L. Gamble, G. Stahnke. **2006**. Sources and dynamics of fecal coliform bacteria in University Lake. Final Report to the AK. Dept. Environ. Cons. Project # ACWA-06-R03
- Duddleston, K. N.**, H. M. Chambers, R. K. Edwards, M. B. Maselko, G. R. Stahnke, T. L. Wilson and W. E. Schnabel. **2006**. An evaluation of fecal contamination of an Alaskan waterway. Abstracts of the 106th General Meeting of the American Society for Microbiology. May 21-25, 2006, Orlando, FL.
- Hines, M. E., **K. N. Duddleston**, J. N. Rooney-Varga and J. P. Chanton. **2006**. Uncoupling of terminal decomposition in wetland peats. Abstracts of the International Conference on Alpine and Polar Microbiology, Innsbruck, Austria. March 27-31, 2006.
- Schnabel, W., **K. Duddleston**, D. Maddux, D. Nyman, C. McCauley, T. Wilson and G. Stahnke. **2005**. Spatial, temporal and phase distributions of fecal coliform bacteria in Chester creek. Final Report to the AK. Dept. Environ. Cons. Project # ACWA-05-R03.
- Wilson, T. L., G. Stahnke, W. Schnabel, and **K. Duddleston**. **2005**. Seasonal variation in fecal coliform bacteria in a cold region stream. World Water and Environmental Resources Congress 2005. Anchorage, AK.
- Stahnke, Graham R., William Schnabel, **Khrys Duddleston**, and Tammie Wilson. **2005**. Antibiotic resistance analysis of enterococci in Chester creek. World Water and Environmental Resources Congress 2005. Anchorage, AK
- Eckert, T. L., E. B. Major, F. von Hippel and **K. N. Duddleston**. **2003**. An analysis of fecal coliforms in Chester creek, Anchorage, Alaska. Abstracts of the 103rd General Meeting of the American Society for Microbiology. May 18-22, 2003, Washington, D.C.

Advisees

Graduate students

Karen Carlson (*current*, MS Biological Sciences, Advisor)
 Natalie Rouse (*current*, MS Biological Sciences, Advisor)
 Jasmine Hatton (*current*, M.S. Biological Sciences, Advisor)
 Sarah Merrill (*current*, M.S. Biological Sciences, Committee member)
 Timothy Stevenson (M. S. 2014, Biological Sciences, Advisor)
 Edda Mutter (Ph.D. 2014, UAF Interdisciplinary studies, Committee member)
 Joel Gottschalk (M.S. 2011, Biological Sciences, Advisor)
 Shawn Freitas (M.S. 2009, Engineering, Committee member)

Ryon Edwards (M.S. 2007, Engineering, Committee member)
Graham Stahnke (M.S. 2006, Engineering, Committee member)
Tammie Wilson (M.S. 2006, Engineering, Committee member)

Undergraduate students

Catheryn Wilson, (REU, 2014)	Alyssa Mitchell (B.S. 2009)
Sarah Cain (current)	Tiffany Hamilton (B.S. 2009)
Chloe Cayabyab (current and REU, 2014)	Elizabeth Percak-Dennett (B.S. 2008, Honors Thesis)
Emily Schultz (B.S., 2014)	Anne Baker (B.S.2008)
Alexandria Dyer (REU, 2013)	Timothy Stevenson (B.S. 2007)
Matthew Wonchala (B.S. 2013)	Drew Jorgensen (B.S. 2007)
Melissa Michele (2012-2013)	Heather Chambers (B.S. 2006)
Devinn Sinnott (REU, 2012)	Maciej Maselko (B.S. 2006)
Brian Quinlan (B.S., 2012, Honors Thesis)	Tammy Eckert (B.S. 2005)
Melanie Dufva (REU, 2011)	Melissa Meade (B.S. 2004)
David Abel (B.S. 2010)	Julia Polinski (B.S. 2004)
Raymond Reeves (B.S. 2009)	Mark McCoy (B.S. 2002)
	Sandra Fleming (B.S. 2002)

Education Outreach Activities

Mentor, Aleah Kennedy, Service High. ASD Gifted Mentorship Program, spring, 2013.
Mentor, Reynalda De Jesus, Junior High school science fair participant, 2009. Project title: "Antimicrobial activity of tea and potential synergistic effect with antibiotics". 2nd place winner AK State Science Fair.
Mentor, John Catano, High school science fair participant. 2004. Project title: "Bacteria on soda cans" Winner, AK Branch ASM award for best microbiology project
Mentor, John Catano, Junior high school science fair participant, 2003. Project title: "Do gloves prevent the spread of bacteria?" Winner, AK Branch ASM award for best microbiology project
Judge, Alaska State Science and Engineering Fair, 2003. FAA Hanger, Anchorage, AK
Mentor, Ian Minton, Junior high school science fair participant, 2002. Project title: "Bacteria on Hair."
Judge, Alaska State Science and Engineering Fair, March, 2000.

Professional Societies

American Association for the Advancement of Science
American Society for Microbiology
Alaska Branch of the American Society for Microbiology
International Society for Microbial Ecology
Society for Integrative and Comparative Biology

Service Activities

University Service

University of Alaska General Education Requirement (GER) Task Force (2015)
Vivarium Users and Managers Committee, 2009-present (Chair from 2012)
Vivarium Manager Search Committee (Chair) 2012, 2013

Advisory Council, Center for Advancing Faculty Excellence (CAFÉ), 2009-2014
UAA Task Force on the Evaluation of Faculty Work for Promotion, Tenure, Post-Tenure
Review and Hiring: *Ad Hoc* Committee on the Evaluation of Teaching, 2008-
2009

University Service to Students

Faculty Advisor, National Society of Collegiate Scholars, UAA
Chapter, 2005-2011
Faculty Advisor, UAA Shred Club (student ski and snowboard club), 2009
Co-Faculty Advisor, UAA Campus, Student Chapter of the Alaska Branch of the
American Society for Microbiology, 2007-2008
Faculty Advisor, BIOSA, the biology club for undergraduates at UAA, 2005-2010

College Service

Promotion and Tenure Committee-Natural Science/Biological Sciences, UAA College of
Arts and Sciences, 2010-2012
Integrated Sciences Building Space Committee, UAA College of Arts and Sciences,
2007-present
Task Force for Undergraduate Research and Scholarship, UAA University Honors
College, 2007-2011
Associate of Arts Assessment Committee, UAA College of Arts and Sciences, 2009-
2011
Subcommittee for Undergraduate Research in the Curriculum, Task Force for
UR&S, UAA University Honors College, 2009
College of Arts and Sciences Academic Dispute Committee, 2011

Departmental Service

Curriculum Committee, Dept. Biological Sciences, 2006-present (Chair from 2010)
Faculty Individual Mentoring Committee (Chair): Dr. Eric Bortz. 2012-present
Director, NSF-REU Summer Research Experience, 2014-present
Executive Committee, Dept. Biological Sciences, 2010-present
Faculty Mentoring Committee, Dept. Biological Sciences, 2008-present
Search Committees, Dept. Biological Sciences: Pathogenic Bacteriologist (Chair);
Applied and Environmental Microbiologist (Chair); Plant-Microbe Interactions Ecologist
(Chair), Microbiology Laboratory Coordinator (Chair), Cell Biology and Genetics
Laboratory Coordinator (Chair). Dept. Psychology: Clinical Psychologist (member).
Co-Director, NSF-REU Summer Research Experience, 2007-2013

Professional Service

Study Section Review, National Institutes of Health-Gastrointestinal Mucosal
Pathobiology. June 18-20, 2014; Feb. 19-20th, 2015.
Ad hoc Manuscript Review, *Environmental Microbiology and Environmental Microbiology*
Reports, *PLoS ONE*, *Applied and Environmental Microbiology*, *Journal of*
Experimental Marine Biology and Ecology, *Wetlands*

Editorial Board, *Journal of Microbiology & Biology Education*, 2012-present
Councilor, Alaska Branch of the American Society for Microbiology, 2008-present
Proposal Review, American Society for Microbiology Undergraduate Research
Fellowships, 2012-present
Proposal/Panel Review, UAF Center for Global Change Student Research
Grant Competition, 2009-2012
Curriculum Review, MicrobeLibrary, American Society for Microbiology, 2006-2011
Book Review, *Microbiology for the Health Sciences* by Strelkauskas. 2006
Webmaster, Alaska Branch of the American Society for Microbiology, 2005-
2008
Class Tester, Chapter 3: Cell Structure and Function. *In* Microbiology by Bauman,
Robert W., Pearson Benjamin Cummings, San Francisco, CA.
2004
President, Alaska Branch of the American Society for Microbiology 2002-2003