Jennifer I. Schmidt, Ph.D.

1002 Lancaster Dr.
Anchorage, AK 99503
Email: jischmidt@alaska.com
Phone: 907-786-5497
Fax: 907-786-7739
Website: https://alaskanrm.com/

Education

Ph.D. — Wildlife Biology
Dissertation: Social and Ecological Influences on Genetic Structure of Moose in Alaska
University of Alaska – Fairbanks
Graduation: August 2007 with distinction
G.P.A. 3.79 (4.0 scale)

B.S. — Ecology, Evolution, and Behavior
B.S. — Genetics and Cellular Biology
University of Minnesota – Twin Cities
Graduation: June 1999
G.P.A 3.41 (4.0 scale)

Work History

Associate Research Professor of Remote Sensing (2026- present) – Geophysical Institute, University of Alaska Fairbanks (UAF), May 2026 - present

Associate Professor of Natural Resource Management and Policy (2022- present) – Institute of Social and Economic Research (ISER), University of Alaska Anchorage (UAA), February 2015-present. Tenured July 2025

Assistant Professor of Natural Resource Management and Policy (2015- 2022) – Institute of Social and Economic Research (ISER), University of Alaska Anchorage (UAA), February 2015-present

Visiting Scholar (2014-2015) – Institute of Social and Economic Research (ISER), University of Alaska Anchorage, August 2014 – January 2015

Researcher (2010- 2015) – University of Tromsø, Norway, September 2010 – January 2015

Wildlife Biologist III (April – May 2013) – Alaska Department of Fish and Game, Division of Wildlife Conservation, April 2013 – May 2013

Post-Doctoral Fellow (2007- 2013) – University of Alaska Fairbanks, September 2007 – September 2013

Teaching Experience

- **2024 Instructor:** Methods in Public Administration Analysis

- **2023 Instructor:** GIS for policy analysis and planning
- **2023 Co-Instructor:** Methods in Public Administration Analysis
- **2018 Instructor:** Environmental Field Methods
- **2018-2019 Instructor:** Environmental Applications of Geographic Information Systems (GIS)
- **2015-2017 Instructor**: Earth and Environment: the science and geography of the natural environment. University of Alaska Anchorage
- **2012 Guest Lecturer**: Ecosystem Management. University of Tromø, Tromsø, Norway
- **2010-2015 Guest Lecturer**: Research Methods for Interdisciplinary Research course. University of Alaska – Fairbanks
- **2009 Guest Lecturer**: Ecosystem Ecology. University of Alaska – Fairbanks
- **2007 Workshop Instructor**: Developed and presented a workshop entitled "MS Word to Format your Thesis/Dissertation" for the Graduate School at the University of Alaska – Fairbanks
- **2004-2006 Teaching Assistant**: Human Anatomy and Physiology, Genetics, Community Ecology (see Professional Experience for details)
- **1996-1997 Student Leader and Planner**: Introduced 10 to 13 incoming students interested in biology or related majors to various potential employment opportunities. Also planned weekly events such as arranging speakers, tours of labs, or other biology related events. University of Minnesota – Twin Cities.

Students

- Advisor for Winston Ajakaye: Masters Student at the University of Alaska Anchorage, "Electric Vehicles in the Arctic: sustainable energy transitions 2025-present, Master of Science in Artificial Intelligence, Data Science, and Engineering.
- Advisor for Caleb Yabes: Masters Student at the University of Alaska Anchorage, "Effects of Snowloads on Residents and Business in Anchorage", 2025-present, Master in Public Policy.
- Advisor for Clover Strickling: Masters Student at the University of Alaska Anchorage, "Effects of Snowloads on Residents and Business in Anchorage", 2025-present, Master in Public Policy.
- Advisor for Bella Block: Masters Student at the University of Alaska Anchorage, "Marine Shipping in the Bering Straits", 2022-2025, graduated with a Master in Public Policy.
- Advisor for Ridwan Akogun: Masters Student at the University of Alaska Anchorage, "Socio-economic assessment of Graphite One Mine", 2022-2024, graduated with a Master in Public Policy.
- Co-Advisor for Kylie Reese: Masters Student at the University of Alaska Anchorage, "Renewable Energy Policy in Fairbanks", 2022-2024, graduated with a Master in Public Policy.
- Co-Advisor for Emma Kimball and Karen Grosskreutz, Masters Student at the University of Alaska Anchorage, "Commercial Salmon Fishing Livelihoods and Environmental Change in Southcentral and Southeast Alaska", 2019-2022, graduated with a Master in Public Policy.
- Co-Advisor for Rachel Roberts, Masters Student at the University of Alaska Anchorage, "Effects and response to multiple environmental hazards by residents of the Arctic", 2019-2021, graduated with a Master in Public Policy.
- Co-Advisor for Daniel Schramm, Masters Student at the University of Alaska Anchorage, "Evaluation of Change in Physical Activity in Alaska Native Youth Through Enculturation", 2017-2018.

- Co-Advisor for Sara Conyers, Masters Student at the University of Alaska Anchorage, "Inventory and assessment of state food policy legislation with potential for adaptation to the Alaska food production and distribution systems", 2016-2017.

Recognitions

The Thirty-Fourth Alaska Legislature (2026) recognition and honor for outstanding contributions to community-engaged research, and dedication for advancing science in partnership with the people and communities of Alaska.

The R. Davilene Carter Presidential Prize for Best Paper Submitted "Cancer Education in the Northwest Arctic: Empowering Youth to Change the Story of Cancer in Rural Alaska" by the American Association for Cancer Education 2024 International Cancer Education Conference.

Funding Awarded

- **Department of War (DOW):** Ecosystem transformation by compounding disturbances of insect and fire under extreme and changing environmental conditions, 2026 – 2030, $2,446,754
- **Anchorage Fire Department**: Wildfire Interface Service Area (WISA) Evaluation, 2026, $31,680
- **Alaska Venture Fund (AVF)**: Alaska Venture Fund: Wildfire Resilience Research Partnership, $267,388, 2026 – 2027
- **Anchorage Fire Department**: Use of Wildfire Modeling within the Municipality of Anchorage for Planning and Community Resilience, 2025, $15,000
- **Alaska Venture Fund**: Wildfire Exposure: statewide update, $10,000
- **National Science Foundation (NSF)**: RAISE: CHIRRP: Urban Snow Modeling to Advance Resilience for Today and Tomorrow (USMARTT), 2025-2028, $1,000,000
- **National Science Foundation (NSF)**: Planning: FIRE-PLAN: Building Wildland Fire Science Capacity in Alaska Through The University of Alaska Fairbanks Rural Campuses, 2024 – 2026, $22,160/$200,000
- **Alaska Venture Fund (AVF)**: Wildfire Exposure and Risk Mapping with Igiugig and Dillingham, $227,849
- **National Science Foundation (NSF)**: NNA Track 1: Collaborative Research: Electric Vehicles in the Arctic (EVITA) - Interactions with Cold Weather, Microgrids, People, and Policy, 2021 – 2023, $923,057/$3,000,000
- **Bureau of Land Management (BLM)**: Collaborative effort to develop a statewide wildfire exposure map, 2022 – 2023, $100,204
- **National Science Foundation (NSF)**: **-** Collaborative Research: Sustainable management of human organic pollutant exposure (HOPE) at formerly used defense sites in the changing Arctic, 2023 – 2026, $419,144/$1,470,381.
- **State of Alaska/Municipality of Anchorage** - Advancing Wildfire Planning and Preparedness in Anchorage, 2022-2023, $40,000
- **National Science Foundation (NSF)**: NNA Track 1: Collaborative Research: Socio-ecological considerations for sustainAble Fuel treatments to Reduce wildfire Risk (SAFRR), 2021 – 2025, $825,241/$2,291,321.
- **National Science Foundation (NSF)**: NNA Planning: Collaborative Research: Electric Vehicles in the Arctic (EVITA) - Interactions with Cold Weather, Microgrids, People, and Policy, 2021 – 2023, $126,977/$299,771

- **National Science Foundation (NSF)**: Collaborative Research: Complex Effects of Telecoupled Activities in the Changing Environment of the Arctic, 2021-2024, $644,459/$1,541,816
- **National Institute of Health (NIH)/IDeA Network of Biomedical Research Excellence (INBRE):** Engaging college students in culturally relevant cancer prevention and control. 2021 – 2022, $153,100
- **Bureau of Land Management (BLM)**: Multi-purpose fuel breaks and outreach to promote fire resilient communities, 2020-2025, $39,999
- **Department of Energy (DOE)**: The importance of power: valuation of electricity LVAT RADIANCE funding award # TE1104050-05300-3123820, FRONTIER funding award # PG0400000-05450-1005604, $50,765
- **National Renewable Energy Laboratory (NREL):** ETIPP Island and Remote Community Stakeholder Engagement Regional Project Partners$43,618/$331,227
- **Montana State University (CTRP program):** Piloting community engaged cancer education for Alaska Native youth, 2020 – 2021, $85,000.
- **National Science Foundation (NSF)**: NNA Track 1: Collaborative Research: Arctic Urban Risks and Adaptations (AURA): a co-production framework for addressing multiple changing environmental hazards, 2019 – 2023, $1,128,919/$2,252,214.
- **Montana State University (CTRP program):** Community engaged development of cancer education for Alaska Native Youth, 2019 – 2020, $49,500.
- **National Science Foundation (NSF)**: **Experimental Program to Stimulate Competitive Research (EPSCoR)**: Fire and Ice: Navigating Variability in Boreal Wildfire Regimes and Subarctic Coastal Ecosystems (F&I), 2019-2024, $20,000,000, award #OIA-1757348 and the State of Alaska
- **National Science Foundation (NSF)**: INFEWS/T3: Coupling infrastructure improvements to food-energy-water system dynamics in small cold region communities: MicroFEWs, 2018 – 2023 $146,705/ $2,488,121.
- **National Science Foundation (NSF)**: **Experimental Program to Stimulate Competitive Research (EPSCoR)**: Experimental Informed Decision Making: Effects of Management Decisions on Anglers in the Kenai River, 2016, $43,468.
- **North Pacific Research Council (NPRB)**: Adapting to Environmental Change: Shifts in Values, Beliefs and Practices in Three Aleutian Island Communities. 2015 – 2018, $89,477
- **Belmont Forum/National Science Foundation (NSF):** Global Connections and Changing Resource Use Systems in the Arctic, 2015 – 2020, $85,978.
- **Norwegian Research Council:** Funding to build a spatial database of mining in the Arctic. University of Tromsø, Norway, 2014 – 2015, $70,000.
- **National Science Foundation (NSF)**: DMS-0920828 Collaborative Research: Plant-herbivore interactions mediated by toxin-determined functional response, 2009 – 2012, $50,812.
- **U.S. Fish and Wildlife Service**: Population Dynamics of Moose Dispersal and Boreal Forest Fire: A Genetic Assessment Using Microsatellites and Single Nucleotide Polymorphisms (SNPs), 2005.
- **Natural Resources Fund Seed Grant:** A Genetic Assessment Using Microsatellites and Single Nucleotide Polymorphisms (SNPs), 2003.

Papers in Peer-Reviewed Journals

- **Schmidt J.I.,** Calef M.P., Larson O. Mair H., Delamere J. (submitted) Community wildfire vulnerability: a 40-year assessment in Alaska. Environmental Research Letters
- Schwoerer T., Ozer Green F., **Schmidt J.I.**, Zoe D.E., vonHippel F.A., and Yang Y. (submitted) Perceptions of Legacy Contamination and the Reconfiguration of Subsistence Practices on Unalaska Island, Alaska. International Journal of Circumpolar Health.
- Farquharson L., Nicolsky D., Varvak A., Calef M., **Schmidt J.I.**, and Romanovksy R.A. (in prep) Frozen below, fragile above: mapping ground ice distribution and projecting future thaw driven subsidence in an urban and warming permafrost landscape. Environmental Research Communications.
- Berman M., **Schmidt J**., Bieniek P., and Roberts R. (2026) Winter Rain and Urban Transportation Hazards: Evolving icing patterns and potential impacts in Anchorage, Alaska. Weather Climate * Society, e260030, https://doi.org/10.1175/WCAS-D-26-0030.1,
- Yang Y, Radakovich A. Timilsina A., Lokesh S., Shahriar A., Eleni Demitrack Z., Li Y., Albee N., Contreras E., Schwoerer T., **Schmidt J.,** Li L., Tanentzap A.J., von Hippel F.A. (submitted) Cold Case Chemicals: Tracing Organofluorine Compounds at Formerly Used Defense Sites in the Arctic. Environmental International.
- Watson B., **Schmidt J.I.** and Berman M. (2026) Capitalization of Bundled Amenities and Hazards in Home Prices: The Case of Wildfire Exposure in Southcentral Alaska. UAScholarworks https://scholarworks.alaska.edu/handle/11122/16284
- **Schmidt J.I.**, Ziel R., Calef M., Varvak A. (2026) Fueling fire-adapted communities through a rapid wildfire structure risk assessment. International Journal of Disaster Risk Science, 17: 351–362. https://doi.org/10.1007/s13753-026-00716-y
- Remer M.F., Block I.R., Perry E., **Schmidt J.I.,** Liu J. (2026) Alaska Visitors' Knowledge about Invasive Species in a Warming Arctic. Biological Invasion. 28: 117. https://doi.org/10.1007/s10530-026-03801-x
- Link N.T., Johnstone J.F., Walker X.J., Amundsen F., Berrios H.K., Bibeau L., Cooley D., Erickson Ann C., Johnston C., Little J.M., Lojewski N., Perrin A.D., Phillips C.A., Potter S., Rees D.C., Saperstein L.B., **Schmidt J.I.,** Sousa E.E., Spellman, K.V., Spring, A., Mack, M.C. 2026. Mitigating increasing wildfire risk through fuel break innovations. iScience, Volume 29, Issue 1, 114391, https://www.cell.com/iscience/fulltext/S2589-0042(25)02652-5.
- Cueva K., Rowles F., Gindt C., **Schmidt J.I. (2025)** Cancer Education in the Northwest Arctic: Empowering Youth on Cancer in Rural Alaska. Journal of Cancer Education. https://doi.org/10.1007/s13187-025-02719-7.
- Block I.R., Remer M.F., Kapsar K.E.**, Schmidt J.I.** (2025) Analysis on the effectiveness of International Maritime Organization's 'Areas to be Avoided' policy on vessel traffic in the Bering Strait (2015–2022). Marine Policy 181, 106849. https://doi.org/10.1016/j.biocon.2024.110797
- **Schmidt J.I.**, Wilber M., Schwoerer T., Bodony T., Sandersone B., Albertson L., Bergan M., (2025) Off the grid and on the fence: Unpacking electric vehicle adoption barriers in isolated microgrids. Energy Research & Social Science, 127, https://doi.org/10.1016/j.erss.2025.104281
- Wilber M., **Schmidt J.I.**, Schwoerer T., Bodony T., Bergan M., Groves J., Atkinson T., Albertson L. (2025) Are Electric Vehicles a Solution for Arctic Isolated Microgrid Communities? World Electric Vehicle Journal, 16(3):128. https://doi.org/10.3390/wevj16030128
- Brinkman T., **Schmidt J.**, Paragi T. (2024) Limited Immediate Effects of Wildfire on Alaska Moose Harvest. Canadian Journal of Forest Research, 18, https://doi.org/10.1139/cjfr-2024-0112

- **Schmidt J.I.** and Berman M. (2024) Avoid getting burned: lessons from the McKinley wildfire in rural Alaska. International Journal of Wildland Fire, 33, https://doi.org/10.1071/WF24014
- Wilber M.M. and **Schmidt J.I.** (2024) Knowledge is power: Electric vehicle calculator for cold climates. Fuel Communications, 20, 100124. https://doi.org/10.1016/j.jfueco.2024.100124
- Schwoerer T., Martin A.E., **Schmidt J.I.** (2024) Human-connected wild lands: how network analysis can inform biodiversity conservation. Biological Conservation, 299, https://doi.org/10.1016/j.biocon.2024.110797
- Jordan-Ward R., von Hippel F.A., **Schmidt, J.I.** and Verhougstraete M.P. (2024) Formerly used defense sites on Unalaska Island, Alaska: Mapping a legacy of environmental pollution. Integrated Environmental Assessment and Management, 20 (5) 1420-1431. https://doi.org/10.1002/ieam.4902
- **Schmidt J.I.**, Calef M., Varvak A., and Ziel R. (2024) Spatial Distribution of Wildfire Threat in the Far North: Exposure Assessment in Boreal Communities. Natural Hazards, 120, 4901–4924. https://doi.org/10.1007/s11069-023-06365-4
- Schwoerer T., **Schmidt J.I.,** Berman M. Bienik P., Farquharson L.M, Nicolsky D., Powell J., Roberts R., Thoman R., Ziel R. (2024) Nordic homeowners' mitigation response to multi-hazard climate risk. Ambio, 53, 389–405 https://doi.org/10.1007/s13280-023-01951-z
- Waloven S., Kapsar K., Schwoerer T., Berman M., **Schmidt J.I.**, Vina A., Liu J.G. (2023) Global gateways as telecoupled human and natural systems: The emerging case of the Bering Strait. Ambio, **52**, 1040–1055 (2023). https://doi.org/10.1007/s13280-023-01835-2
- Calef M.P., **Schmidt J.I.**, Varvak A., and Ziel R. (2023) Predicting the Unpredictable: Predicting Landcover in Boreal Alaska and the Yukon Including Succession and Wildfire Potential. Forests, 14(8), 1577. https://www.mdpi.com/1999-4907/14/8/1577
- Cueva, K., **Schmidt J.I.** (2023) Cancer Education for High School Students in the Northwest Arctic Increases Knowledge and Inspires Intent to Share Information and Reduce Cancer Risk. Journal of Cancer Education. doi:10.1007/s13187-023-02269-w
- Waloven, S., Kapsar, K., Schwoerer, T., Berman, M., **Schmidt J. I.,** Vina, A., & Liu, J. G. (2023) Global gateways as telecoupled human and natural systems: The emerging case of the Bering Strait. Ambio. doi:10.1007/s13280-023-01835-2
- Rashedin M., Johnson B., Dev S., Whitney E., **Schmidt J.I.**, Madden D., Aggarwal S. (2022) Rural Alaska Water Treatment and Distribution Systems Incur High Energy Costs: Identifying Energy Drivers Using Panel Data Analysis for 78 Communities. Acs Es&T Water 2, 2668-2676.
- Khan Z, Abraham E, Aggarwal S, Ahmad Khan M, Arguello R, Babbar-Sebens M, et al. **Schmidt J.**, (2022) Emerging Themes and Future Directions of Multi-Sector Nexus Research and Implementation. Frontiers in Environmental Science 10, https://doi.org/10.3389/fenvs.2022.918085
- **Schmidt J.I.**, Huntington, H.P, Whitney E., Huang D., Wies R.W. Jr., Aggarwal S., (2022) From Metrics to Action: A Framework for Identifying the Limiting Factors, Underlying Causes, and Possible Solutions in Food-Energy-Water Security. Frontier in Climate: Climate Law and Policy 4(903855) https://doi.org/10.3389/fclim.2022.903855
- **Schmidt J.I.**, Huntington, H.P, Whitney E., Huang D., Wies R.W. Jr., Aggarwal S., (2022) A framework for assessing food-energy-water security: a FEW case studies from rural Alaska. Science of the Total Environment 821 (153355) DOI: 10.1016/j.scitotenv.2022.153355

- Schwoerer T., Dial R.J., Little J.M., Martin A.E., Morton J.M., **Schmidt J.I.**, et al. (2022) Flight plan for the future: floatplane pilots and researchers team up to predict invasive species dispersal in Alaska. Biological Invasions, DOI: 10.1007/s10530-021-02712-3
- **Schmidt J.I.**, Monz C., and Hausner V. (2021) Building adaptive capacity in a changing Arctic by use of technology. Ecology and Society. https://www.ecologyandsociety.org/vol26/iss4/art1/
- Berman M., **Schmidt J. I.**, and Kofinas, G. (2021) Adaptive capacity and resilient communities: theory and evidence from Alaska's North Slope. Ecology and Society, Vol 26:3 https://www.ecologyandsociety.org/vol26/iss3/art22/
- Cueva K., **Schmidt J.I.**, and Cueva M. (2021) Learning Together: Sharing Circles in Rural Alaska on Cancer Education Priorities for Youth. Journal of Cancer Education. Jul 27: 1–8. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8314025/
- Huntington H.P., **Schmidt J.I.**, Loring P.A., Whitney E., Aggarwal S., Byrd A.G., Dev S., Dotson A.D., Huang D., Johnson B., Karenzi J., Penn H.J.F., Salmon A., Sambor D.J., Schnabel W.E., Wies R.W. Jr, and Wilber M. (2021) Applying the food–energy–water nexus concept at the local scale. Nature Sustainability https://doi.org/10.1038/s41893-021-00719-1
- Bhatt, U. Lader R.T., Bieniek P.A., Walsh J.E., Thoman R., Berman M., Borries-Strigle C., Kulock K., Chriest J., Hahn M., Hendricks A., Jain P., Jandt R., Little J, Moore C., Rupp T.S., **Schmidt J.I.**, Stevens E., Strader E., York A., Ziel R. (2021) Emerging Anthropogenic Influences on the Southcentral Alaska Temperature and Precipitation Extremes and Related Fires in 2019. Land 10(1), 82; https://doi.org/10.3390/land10010082
- **Schmidt, J.I** Byrd, A., Curl, J., Brinkman, T.J., and Heeringa, K. (2021) Stoking the flame: subsistence and wood energy in rural Alaska, United States. Energy Research & Social Science: 71. https://doi.org/10.1016/j.erss.2020.101819.
- **Schmidt, J. I.,** V. H. Hausner, and C. Monz. 2021. Building adaptive capacity in a changing Arctic by use of technology. Ecology and Society 26(4):1. https://doi.org/10.5751/ES-12605-260401
- Hahn, M.B, Kemp C., Ward-Waller C., Donovan D., **Schmidt J.I.**, and Bauer S. (2020) Collaborative climate mitigation and adaptation planning with university, community, and municipal partners: a case study in Anchorage, Alaska, Local Environment, DOI: 10.1080/13549839.2020.1811655
- Schwoerer, T., **Schmidt J. I.,** and Holen, D. (2020) Predicting the Food-Energy Nexus of Wild Food Systems: Informing Energy Transitions for Isolated Indigenous Communities. Ecological Economics 176:106712. https://doi.org/10.1016/j.ecolecon.2020.106712
- Berman M., Loeffler B. and **Schmidt J.I**. (2020) Long-Term Benefits to Indigenous Communities of Extractive Industry Partnerships: Evaluating the Red Dog Mine. Resources Policy. https://doi.org/10.1016/j.resourpol.2020.101609
- Schwoerer, T. Little, J. **Schmidt, J.I.**, and Borash, K. (2019) Hitchhikers on floats to Arctic freshwater: Private aviation and recreation loss from aquatic invasion. Ambio:49(8):1364-1376. doi.org/10.1007/s13280-019-01295-7
- Sisneros-Kidd, A.M., Monz, C., Hausner, V., **Schmidt, J.I.**, and Clark, D. (2019) Nature-based tourism, resource dependence, and resilience of Arctic communities: Framing complex issues in a changing environment. Journal of Sustainable Tourism, 27 (8). https://doi.org/10.1080/09669582.2019.1612905
- Whitney, E. Schnabel, W.E., Aggarwal, S., Huang, D., Wies, R.W., Karenzi, J., Huntington, H.P., **Schmidt, J.I.**, and Dotson, A.D. (2019) MicroFEWs – A Food-Energy-Water (FEW)

Systems Approach to Renewable Energy Decisions in Islanded Microgrid Communities in Rural Alaska. Environmental Engineering Science, 36 (7) https://doi.org/10.1089/ees.2019.0055

- Berman M. and **Schmidt J.I.** (2019) Economic effects of climate change in Alaska. Weather, Climate and Society. 11(2): 245-2583 https://doi.org/10.1175/WCAS-D-18-0056.1
- **Schmidt J.I.**, Clark D., Lokken N., Lankshear J., Hausner V. (2018) The Role of Trust in Sustainable Management of Land, Fish, and Wildlife Populations in the Arctic. Sustainability, 10(9), 3124; https://doi.org/10.3390/su10093124
- Fauchald P., Hausner V.H., **Schmidt J.I.,** and Clark D.A. (2017) Transitions of social-ecological subsistence systems in the Arctic. International Journal of the Commons, 11.
- **Schmidt J.I.**, Kellie K.A. and Chapin III F.S (2015) Detecting, estimating, and correcting for biases in harvest data: moose hunting in Alaska. Journal of Wildlife Management, 79:1152-1162.
- **Schmidt J.I.**, Aanesen M., Klokov K., Khrutschev S., and Hausner V.H. (2015) Demographic and economic disparities among Arctic regions. Polar Geography. doi.org/10.1080/1088937X.2015.1065926
- **Schmidt J.I.**, (2015) Adapting to Environmental Change: Shifts in Values, Beliefs and Practices in Three Aleutian Island Communities, 2015-2016. Northern Pacific Research Board Report. https://search.dataone.org/view/10.24431/rw1k45s
- Beaman J., Vaske J., **Schmidt J.I.**, and Huan T.C. (2015) Measuring and correcting response heaping arising from the use of prototypes. Human Dimensions of Wildlife, 20:167-173.
- **Schmidt J.I.** and Chapin III F.S. (2014) Relationship of Community Characteristics to Harvest Reporting: Comparative Study of Household Surveys and Harvest Tickets in Alaska. Human Dimensions of Wildlife 19:334-346.
- Gustine D., Brinkman T., Lindgren M., **Schmidt J.I.**, Rupp T., and Adams L. (2014) Simulated climate-driven effects of fire on winter habitat for migratory tundra caribou in the Alaskan-Yukon Arctic. PLOS ONE, 9:1-11.
- Feng Z., Alfaro-Murillo J.A., DeAngelis D.L., **Schmidt J.I.,** Barga M., Zheng Y., Ahmad Tamrin M.H.B, Olson M., Glaser, T., Kielland K., Chapin III, F.S., and Bryant, J. (2012) Plant toxins and trophic cascades alter fire regime and succession on a boreal forest landscape. Ecological Modeling, 244:79-92.
- Kofinas G.P., Chapin F.S. III, BurnSilver S., **Schmidt J.I**., Fresco N.L., Kielland K., Martin S., Springsteen A., Rupp T.S. (2010) Resilience of Athabascan subsistence systems to Interior Alaska's changing climate. Canadian Journal of Forest Research, 41:1347-1359.
- **Schmidt J.I.**, Hundertmark K.J., Bowyer R.T., and McCracken K.G. (2009) Population structure and genetic diversity of moose in Alaska. Journal of Heredity, 100:170-180.
- **Schmidt J.I.**, Ver Hoef J.M., and Bowyer R.T. (2007) Antler size of Alaskan moose: effects of population density, hunter harvest, and use of guides. Wildlife Biology, 13:53-65.
- **Schmidt J.I.**, Ver Hoef J.M., Maier J.A.K., and Bowyer R.T. (2005) Catch per unit effort for moose: a new approach using Weibull regression. Journal of Wildlife Management, 69:1112-1124.

Online Mapping Applications

- Wildfire Directionality Vulnerability Assessment - https://bit.ly/wildfiredirectionality
- Wildfire Exposure and Risk in Anchorage, Alaska – https://bit.ly/MOAwildfireexposure
- Wildfire Exposure and Risk in Fairbanks, Alaska – https://bit.ly/fairbankswildfireexposure
- Wildfire Exposure and Risk in Whitehorse, Yukon - https://bit.ly/Whitehorsewildfireexposure

- Wildfire Exposure Alaska – https://bit.ly/alaskawildfireexposure
- Multi-hazard risk in Anchorage, Alaska - https://bit.ly/moahazards
- Multi-hazard risk in Fairbanks, Alaska - https://bit.ly/faipermafrost
- Rain-in-winter in Anchorage, Alaska - https://bit.ly/moaraininwinter
- Statewide fuel treatment database – https://bit.ly/AKfueltreatment
- Participatory Mapping on Egress issues and Wildfire Vulnerability - https://bit.ly/moawildfireppgis

Book Chapters, Videos, Technical Reports, Infographics

- **Schmidt J.I.,** Huang D., Johnson B. (2026) Water-Energy-Food Nexus in the Arctic: Energy is Power and Cooperatives Are Fuel in *Routledge Handbook of Arctic Energy Transition*, Eds. Noble B., Poelzer G., Holdmann G., Biswas S., Hirsberg D. https://www.routledge.com/Routledge-Handbook-of-Arctic-Energy-Transition/Noble-Poelzer-Holdmann-Biswas-Hirshberg/p/book/9781032785424
- **Schmidt J.I.,** Davis K., Link N., Little J. Public perceptions regarding fire and fuel mitigation. ISER Reports. 1856, https://scholarworks.alaska.edu/uaa_iser_reports/1856/
- Greenbaum E., McFarland H., Plumb E., **Schmidt J.**, Shah A. (2026) Policy brief: Winter rain in Interior Alaska https://uaf-accap.org/projects/policy-brief-interior-winter-rain/
- Bhatt U., Delamere J., **Schmidt J.**, Waigl C., Jenkins J., Strader H. (2026) Arctic Observation Storylines: Wildfires DOI: 10.5281/zenodo.20330619 https://zenodo.org/records/21400865
- Ziel R., **Schmidt J.I.**, Calef M., Varvak A. (2024) Mapping the wildfire threat to boreal communities. Available at https://www.frames.gov/catalog/69574
- **Schmidt J.I.** and Larson O. (2023) Report for AK PANOCESU Collaborative Effort to Develop a Statewide Wildfire Exposure Map (L22AC00566) https://alaskanrm.com/wildfire-exposure/
- **Schmidt J.I.** and See J. (2023) Advancing Wildfire Preparedness and Planning in Anchorage: Wildfire Exposure and Egress Study https://drive.google.com/file/d/1iMeh-E6yf1Bq80XHaWWs-__8jC71vI8F/view
- Arctic Urban Risks and Adaptation story map https://storymaps.arcgis.com/stories/f8471ac173014ad4bd349b79559b5baa
- Eagen P., **Schmidt J.I.**, Whitney R., Wilber M. (2021) Solar Photovoltaic, infographic, https://ine.uaf.edu/microfews/blog
- Eagen P., **Schmidt J.I.**, Whitney R. Wilber M. (2021) Wind, infographic, https://ine.uaf.edu/microfews/blog
- Eagen P., **Schmidt J.I.**, Whitney R. Wilber M. (2021) Hydro-electric, infographic, https://ine.uaf.edu/microfews/blog
- **Schmidt J.I** and Grabinski Z. (2020) McKinley Wildfire Lessons Learned, infographic, https://www.frames.gov/afsc/mckinley-infographic
- Byrd A. **Schmidt J.I**., Hutchquist N. and Phillips C. (2020) The McKinley Fire: rebuilding and lessons learned, video, https://www.youtube.com/watch?v=no8dvnjbdHY&t=4s
- **Schmidt J.I**. (2019) Energy Use and Biomass in Tanana, infographic

- **Schmidt J.I**. (2019) Survey results: Technology in Noatak, Noorvik, and Brevig Mission, infographic
- **Schmidt J.I**. (2019) Winter Moose Browse JBER, United States Air Force Joint Elmendorft-Richardson, Anchorage, AK.
- **Schmidt J.I.**, Kofinas G. P., Brinkman T. J., O'Neal N. 2018. Local Knowledge and Science: Observations of Landscape Change in the Nuiqsut Homelands. Northern Test Case of Alaska EPSCoR. University of Alaska. Fairbanks, AK. Pp 28. Posted at: http://www.alaska.edu/epscor/files/epscor/NTC/Nuiqsut-Community-Report.pdf
- **Schmidt J.I.** and Berman M. (2018) Adapting to Environmental and Social Change: Subsistence in Three Aleutian Communities.
- Loeffler B. and **Schmidt J.I.** (2017) Local Jobs and Income from Mineral Exploration. January 2017.
- **Schmidt J.I.** (2015) Land use in the Arctic. TUNDRA project final report. The Norwegian Research Council, (#S192040/S30).
- **Schmidt J.I.** (2015) Mining in the Arctic. TUNDRA project final report. The Norwegian Research Council, (#S192040/S30).
- **Schmidt J.I.** (2015) Community Dynamics in the Arctic. TUNDRA project final report. The Norwegian Research Council, (#S192040/S30).
- **Schmidt J.I.** (2015) Wildlife Management in Rural Alaska. TUNDRA project report. The Norwegian Research Council, (#S192040/S30).

Professional and Community Talks/Posters

- Numerous Community Council Meetings in Anchorage (> 30), "Wildfire Hazard Assessment and Modeling", 2020 – present
- Alaska Arc User Group, "Assessing wildfire exposure and risk in Anchorage: methods and lessons learned", Anchorage, August 20, 2025
- Global Wildfire Collective Webinar- Fire in Boreal Ecosystems, "Lessons learned from McKinley Wildfire", July 9, 2025
- Anchorage Unitarian Universalist Fellowship's weekly Forum, "Living with Wildfire: Anchorage's Wildland Urban Interface", May 25, 2025.
- IARPC Terrestrial Disturbances & Interactions Workshop, Anchorage, AK, May 6-8, 2025
- IARPC Workshop Wildfire Panel, Anchorage, AK, May 6, 2025
- Alaska Forum on the Environment, "Are Electric Snow Machines Ready for Alaska?", February 2025
- Alaska Forum on the Environment, "Wildfire Vulnerability in Alaska", February 2025
- Agency presentation, "Wildfire Exposure Course: wildfire exposure explained", February 2025
- Anchorage Municipal League Infrastructure Symposium, "Assessing wildfire hazards in Alaska", Anchorage, AK, April, 23, 2025
- Alaska Fire Science Consortium Spring Workshop, "Directionality and exposure products/SAFRR project update", Fairbanks, AK, March 19, 2025
- Alaska Fuels Management Committee, "Wildfire Vulnerability and Fuel Treatment Modeling", Fairbanks, AK, February 2025
- Community wildfire protection plan meetings for Anchorage, Fairbanks, Delta Junction, Dillingham, and Aleknagik (10/30/2024, 11/13/2024, 1/14/2025, 3/1/2025, 5/6/2025)

- Alaska Fire Science Consortium Webinar, “Wildfire Risk Assessment in Alaska”, November 21, 2024
- US Forest Service, “Alaska Wildfire Exposure Assessment and Fuels Planning in R10”, Anchorage, AK, October 15, 2024
- Kenai All Hands All Lands, “A Novel Approach to Wildfire Structure Risk in Alaska and Data Delivery”, April 2024
- Alaska Wildlife Society, “Immediate Effects of Wildfire on Moose Harvest”, with Todd Brinkman as lead, Anchorage, AK, March 2024
- Alaska Fuels Management Committee, “SAFRR: Socio-ecological considerations for sustainAble Fuel treatments to Reduce wildfire Risk”, February 2024
- Interior Fire Chiefs, “Wildfire Exposure”, Fairbanks, AK, January 2024
- Alaska Fuels Management Committee, “Statewide Exposure and Fuels Treatment Webmap”, Anchorage, AK, February 2024
- Alaska Marine Science Symposium, “Hotspot Analysis of Bering Sea and Strait Vessel Traffic in IMO ‘Areas to be Avoided”, with Bella Block as lead, Anchorage, AK, January 2024
- American Geophysical Union, “Is Wildfire Management a Moral Hazard Impeding Community Resilience?”, with Matt Berman as lead, American Geophysical Institute, San Francisco, CA, December 2023
- American Geophysical Union, “Advancing Wildfire Preparedness and Planning in Anchorage: community-engaged egress planning”, San Francisco, CA, December 2023
- American Geophysical Union, “Wildfire risk assessment in the Arctic: the challenge of sprawl”, San Francisco, CA, December 2023
- American Geophysical Union, “Wildfire Management a Moral Hazard Impeding Fire Resilience? Investigating the Spatial Mismatch Between Expenditures and Finance”, with Matt Berman as lead, San Francisco, CA, December 2023
- American Geophysical Union, “Hazard mapping in the discontinuous permafrost zone of Fairbanks, Alaska, USA”, San Francisco, CA, December 2023
- American Geophysical Union, “Is Wildfire Management a Moral Hazard Impeding Fire Resilience? Investigating the Spatial Mismatch Between Expenditures and Finance in the Wildland-Urban-Interface of Alaska's Boreal Forest” with Matt Berman as lead, San Francisco, CA, December 2023
- American Geophysical Union, “Predicting Future Landcover in Interior Alaska Based on a Refined ABoVE Landcover, Fire Modeling With FlamMap, and Succession Rules” with Monika Calef as lead, San Francisco, CA, December 2023
- American Geophysical Union, “Hazard mapping in the discontinuous permafrost zone of Fairbanks, Alaska, USA”, with Louise Farquharson as lead, San Francisco, CA, December 2023
- American Geophysical Union, “Increasing multi-hazard climate risk and financial and health impacts on northern homeowners”, with Toby Schwoerer as lead, San Francisco, CA, December 2023
- Alaska Fall and Spring Wildfire Operations, “SAFRR: Socio-ecological considerations for sustainAble Fuel treatments to Reduce wildfire Risk”, March and October, 2023
- Wildfire Exposure Assessment for Mixed Conifer and Deciduous Forest Landscapes, October 2023, Invited speaker for LANDFIRE Open Office Hours through The Nature Conservancy
- Alaska Tree Forum, “Wildfire Hazards and Modeling”, October 2023
- Anchorage Tree Forum, “Wildfire Exposure”, Anchorage, AK, September 2023

- Alaska Forum on the Environment, “Electric Vehicles: Charging up Across Alaska”, March 2023
- 6th European Conference on Permafrost, “Hazard mapping in the discontinuous permafrost zone of Fairbanks, Alaska, USA” with Louise Farquharson lead, Puigcerdà, Catalonia, Spain, June 2023
- Alaska Society of American Foresters, “SAFRR: Socio-ecological considerations for sustainAble Fuel treatments to Reduce wildfire Risk”, May 2023
- American Geophysical Union, “McKinley Wildfire: Socio-ecological Factors and Structure Survival in a Rural WUI Area”, Chicago, IL, December 2022
- American Geophysical Union, “Winter Rain, Surface Icing, and Urban Transportation Hazards: Using Weather Station Data and Traffic Networks to Map Evolving Icing Hazards and Travel Risks in Anchorage, Alaska”, with Matt Berman as lead, Chicago, IL, December 2022
- American Geophysical Union, “Spatial Distribution of Wildfire Threat in the Far North: Exposure Assessment in Boreal Communities”, Chicago, IL, December 2022
- American Geophysical Union, “The 2019 McKinley Fire in South-Central Alaska: burn severity and fire effects from high-resolution aerial imaging spectroscopy”, with Chris Waigl as lead, Chicago, IL, December 2022
- Alaska Spring Wildfire Operations, “Wildfire Exposure”, March 25, 2022
- Faculty Research & Creative Activity Seminar, “Preparing for Disasters: natural hazards in Alaska”, February 2022
- American Geophysical Institute, “Goldilocks meets Smokey the Bear: assessing wildfire hazards and communication”, New Orleans, LA, December 13th, 2021
- American Geophysical Union, Invited IGNITE talk, “FEW and Far Between: food, energy, and water security in rural Alaska”, New Orleans, LA, December 15th, 2021
- American Geophysical Union, “A framework for assessing food, energy, and water (FEW) security: a FEW case studies from rural Alaska”, New Orleans, LA, December 15th, 2021
- American Geophysical Union, Poster “Predicting the Unpredictable: Future Vegetation Near Fairbanks, Alaska, Taking Into Account Succession and Wildfire” with Monika Calef as lead, New Orleans, LA, December 13th, 2021.
- American Geophysical Union, New Orleans, LA, Poster “Permafrost hazard mapping in the discontinuous permafrost zone of Alaska” with Dmitry Nicolsky as lead, December 15th, 2021
- American Geophysical Union, Poster “Evaluating possible future rain in winter hazards for major communities in Alaska and the Yukon Territory” with Peter Bieniek as lead, New Orleans, LA, December 13th, 2021
- 13th Western Alaska Interdisciplinary Conference, May 14, 2021. “A framework for assessing food, energy, and water security: a FEW case studies from rural Alaska”.
- UAA STEM talk: Living with wildfire. University of Alaska Anchorage, March 31st, 2021.
- Alaska Fire Science Consortium, “Arctic Urban Risks and Adaptations (AURA): a co-production framework for addressing multiple changing environmental hazards”, April 1st, 2020.
- Community forum on wildfire prevention in Anchorage, entitled “Wildfire risk in Alaska”, March 5th, 2020.
- American Geophysical Union, “Getting out of our comfort zones: understanding the food-energy-water (FEW) nexus in remote Alaska communities”, San Francisco, CA, December 13th, 2019.
- American Geophysical Union, “Fire breaks in a wildland urban interface (WUI): friend or foe”, San Francisco, CA, December 9th, 2019

- Alaska Tribal Conference on Environmental Management (ATCEM), "How do existing and potential renewable energy projects affect food, energy, and water security in rural Alaska?", November 18-21, 2019, Anchorage, Alaska.
- Alaska Food Festival and Conference, "Planting the Seeds to Examine Food Security Challenges in the Alaska Food-Energy-Water Nexus", Homer, Alaska, March 8th – 9th, 2019
- Arctic Frontiers, "Fuel, Wood Use, and Subsistence", Tromso, Norway, January 24th, 2019
- Arctic Frontiers, "Can my GPS lead me to a sustainable future? The role of technology and lessons from three remote Arctic communities", Tromso, Norway, January 24th, 2019.
- Community meeting, "Renewable Energy, Community, and Culture: Tanana", Tanana, Alaska, October 8th, 2018
- International Congress of Arctic Social Sciences (ICASS), "Adaptation to Environmental Change in Three Aleutian Island Communities", Umea, Sweden, June 5th, 2017.
- International Congress of Arctic Social Sciences (ICASS), "Village Income, Jobs, & Mineral Exploration: A case study of the Pebble Exploration Project", Umea, Sweden, June 8th, 2017
- Alaska Marine Science Symposium, "Adaptation to Environmental Change in Three Aleutian Island Communities", Anchorage, Alaska, January 23rd –27th 2017
- Alaska Fish and Game managers, Fairbanks, Alaska November 2016, "Influence of society, climate, and landscape on moose harvests: case study north of Fairbanks", Fairbanks, AK
- Alaska Chapter of The Wildlife Society, "Biases in Human Survey Data: ways to assess and correct" Anchorage, Alaska, March 30th – March 31st 2016
- Arctic AAAS, "Mining in the Arctic: A Social License Perspective", Anchorage, Alaska October 2nd – October 3rd 2015
- Arctic AAAS, "Harvest and Land Use in the Arctic: What is the Role of Governance and Socio-Economic Conditions?". Anchorage, Alaska October 2nd – October 3rd 2015
- Invited speaker to a UAA Campus Bookstore "Addressing Local Needs amid Global Attention to the Changing Arctic", September 1st, 2015
- Invited speaker to a lecture series at the University of Alaska Anchorage "Understanding Alaska". Title of the talk "TUNDRA: drivers of change in circumpolar tundra ecosystems", January 30th 2014
- Alaska Chapter of The Wildlife Society, "Relationship of community characteristics to harvest reports by Alaskan moose hunters", Fairbanks, AK April 3rd – April 5th 2013.
- Alaska Chapter of The Wildlife Society, AK. "Future climate change impacts on boreal forest habitat for three resident birds in Alaska", April 3rd – April 5th 2013
- 46th Annual Moose Conference, "Effects of landscape characteristics on population connectivity of Alaskan moose", Jackson Hole, Wyoming. May 23rd - 26th, 2011
- 46th Annual Moose Conference, "Relationship of Community Characteristics to Harvest Reports by Alaskan Moose Hunters", Jackson Hole, Wyoming. May 23rd - 26th, 2011
- LTER monthly meeting entitled "Ecosystem Services" "Trends of Interior Alaska Moose Hunters and Hunts", November 13th 2008.
- Alaska Chapter of The Wildlife Society, Juneau, AK. April 22nd – April 24th 2008. entitled, "Moose Hunting in Alaska: Statewide Trends in Hunter Travel and Access"
- Alaska Chapter of The Wildlife Society, "Population Genetics of Moose in Alaska", Juneau, AK. April 16th – April 19th 2007
- American Indian Science & Engineering Society, "Population Dynamics and Hunter Harvest Characteristics for Moose in interior Alaska", Fairbanks, AK. October 24th 2007

- The Wildlife Society 13th Annual Conference, "Effects of Capture Method on Blood Parameters in Caribou: Evaluation of Physical and Chemical Immobilization Techniques", Anchorage, AK September 23rd – September 27th 2006.
- 84th American Society of Mammalogists Annual Meeting, "Success of moose hunters: A new approach for assessing CPUE", Arcata, CA, June 12th – June 16th 2004
- International Congress of Arctic Social Sciences (ICASS V), "Success of moose hunters: A new approach for assessing CPUE" Fairbanks, AK May 19th – May 23rd 2004
- 39th Annual North American Moose Conference & Workshop, "Effects of effort and motivation on success in interior Alaska moose hunters", Jackson Hole, WY May 18th – May 22nd 2003
- Joint and Annual Northwest Section and Alaska Chapter of The Wildlife Society, "Success of moose hunters: A new approach for assessing CPUE", Girdwood, AK, May 1st – May 3rd 2003

Committees

- Member of the Anchorage Rabbit Creek Community Resilience Committee, 2018-present.
- Lead for the Urban Forest and Watershed team on the Anchorage Climate Action Plan, 2018-2019.
- Graduate School Academic and Advisory Committee – University of Alaska Fairbanks, November 2009 – August 2010.
- Review and approve graduate courses, curriculum and graduate degree requirements, and other academic matters related to instruction and mentoring of graduate students.
- Advise the Dean of the Graduate School and the Provost on administrative matters pertinent to the operation and growth of graduate studies at the University of Alaska Fairbanks.

Professional Organizations

- The American Geophysical Union, 2019 - present
- The Wildlife Society member, 2007- 2019

GIS and Analytical Coursework

- ESRI "Introduction to Space-Time Analysis." (April 25, 2023).
- ESRI "Mapping Clusters: Hot Spot and Cluster and Outlier Analysis." (February 14, 2023).
- ESRI "Using the R-ArcGIS Bridge" (December 23, 2020)
- ESRI "Building Geoprocessing Models Using ArcGIS" (December 18, 2020)
- ESRI "Getting started with GIS" (April 9, 2020)
- Wildlife Society 2020 Google Earth Engine workshop (Spring 2020)
- ESRI "Going Places with Spatial Analysis" (October 16, 2019)
- Digital Image Processing in the Geosciences (Audited Fall 2019, UAF)
- ESRI Field Data Collection and Management Using ArcGIS (Spring 2019)
- ESRI Transitioning to ArcGIS Pro (Spring 2019)
- ESRI in person training: Migration to ArcGIS Pro Mapping workshop
- ESRI Creating and Sharing GIS Content Using ArcGIS Online (Spring 2019)
- ESRI Cartography (Spring 2019)
- ESRI ArcGIS Pro Basics (Spring 2019)
- Geoscience Applications of Remote Sensing (Audited Spring 2019)

- Natural Resource Applications of Remote Sensing (Audited Spring 2018, UAF)ESRI Geoprocessing with ArcGIS Desktop
- UAA Python (Fall 2017, UAA)
- ESRI Distance Analysis Using ArcGIS
- ESRI Creating and Integrating Data for Natural Resource Applications
- Using Python in ArcGIS Desktop 10
- Summer School on the "Modeling of Arctic Climate" at the International Arctic Research Center (IARC), University of Alaska Fairbanks
- ESRI Introduction to ArcView 3.2
- ESRI Basics of Geostatistical Analysis
- ESRI Learning ArcGIS I (for ArcView 8, ArcEditor 8, and ArcInfo 8)
- ESRI Creating and Maintaining Metadata Using ArcGIS Desktop
- ESRI Creating, Editing, and Managing Geodatabases for ArcGIS Desktop (for ArcGIS 9.0-9.1)
- ESRI Basics of the Geodatabase Data Model
- ESRI Understanding Map Projections and Coordinate Systems
- ESRI Cartographic Design Using ArcGIS 9
- ESRI Exploring the VBA Environment
- ESRI Introduction to ArcGIS 9 Geostatistical Analyst
- "GIS Programing" course at UAF, 2009
- "Experimental Design" statistical course at UAF, 2008
- Attendance at the Geostat course in Bergen, Norway, 2015. Geostats is a series of summer schools organized by R and OS GIS developers and enthusiasts. GEOSTAT aims at PhD students and R-sig-geo enthusiasts in a range of environmental and GIS sciences, with a special focus on analyzing spatio-temporal gridded data in R and connected OS GIS software.

NOTE: To calculate the credit hours for ESRI courses, 1 credit semester hour is defined as 1 hour per week for a semester. At UAF semesters are 10 weeks so 10 hours of training would be the equivalent to 1 credit semester hour.

Workshops Attended & Additional Coursework

- One Health, University of Alaska Fairbanks, March 2019.
- Greening and browning of the Arctic, Proceedings of the National Academy of Science, Washington, D.C., December 2018.
- 2018 Data Science Training for Arctic Researchers, August 13th – 17th, 2018, Santa Barbara, CA. NSF Arctic Data Center.
- Alaska Fire Science Consortium Remote Sensing, University of Alaska Fairbanks, April 2017.
- The Food-Energy-Water Nexus in Islanded Communities and High Latitudes: Issues, Pathways and Implications, University of Alaska Fairbanks, September 2016.
- Completed an online statistical course entitled "Statistical Learning" through Stanford University, April 2015.
- Web Map API training, January 2010
- Analyzing Animal Space Use: New Approaches to Studies of Home Range, Habitat Selection and Movements. June 28 29, 2009
- Scientific Teaching, May 2009

- Participated in a climate change workshop in Venetie, AK in the winter of 2008.
- Moose Management Workshop at the Alaska Chapter of The Wildlife Society meeting, Juneau, AK. April 18th 2007.
- Conservation Genetics Workshop at the Alaska Chapter of The Wildlife Society meeting, Juneau, AK. April 16th 2007.

Community Outreach and Service

Team Red, White, and Blue (RWB), April 2021 – present
- Participate in fitness activities, social gatherings, and community events to support veterans and the Anchorage community.

Anchorage Running Club Board Member, March 2022 – present
- Participate in fitness activities, social gatherings, and community events to support running activities in Anchorage, April 2022 - present

Anchorage Community Protection Plan Committees, Summer 2025
- GIS team, Community Engagement, Fire History, Behavior, & Probability

Anchorage Community Protection Plan Work Session, October 20, 2025
- Firefighting Capabilities, Water Supplies Plan Alignment

Becoming an Outdoors Woman (BOW) volunteer, August 2009 – November 2023
- Assist instructors teaching workshops and logistics.
- Volunteer at local community banquets and fundraisers.

Annual Alaska Department of Fish and Game Kids Fun Day volunteer, May 2009 – 2013
- Taught children and their parents how to identify animal tracks and pelts.

Educator at Wood River Elementary School, September 2010- January 2011
- Conducted snowshoe hare feeding trials with 5th graders,
- Teach the students about snowshoe hare biology and assist them as they actively participate in field work, data collection and analysis.

Tutor for the Alaska Literacy Council, September 2009 – September 2011
- Teach English as a second language which involves lesson planning and preparing materials.
- Act as a mentor and help familiarize them with local culture and info structure.

Emergency Medical Technician (EMT) Volunteer, Steese Area Volunteer Fire Department, May 2004-March 2007
- Worked weekly shifts and attended weekly training sessions.

Moose Hunter Check Station Volunteer at Ella's Cabin, September 2004, 2005, & 2008
- Spent a week each fall at a remote cabin in Western interior Alaska and issued hunting licenses and harvest tickets.
- Checked in and out hunters, answered their questions, and if an animal was harvested checked to ensure requirements of the hunt were met and collected biological data on the animal.

Volunteer Pharmacy and Computer Technician – Tabaka, Kenya, Africa, February 2005 – March 2007
- Helped dispense medicine and catalog current medicines the hospital possessed. Statistically analyzed various hospital data and helped local hospital employees with their computer skills.

Teacher's Assistant – Stowe Elementary School, Duluth, Minnesota, January 2002 –August 2002
- Conservation is a main theme of this elementary school. I helped a graduate student teach watershed conservation to mentally and physically challenged children.

Youth Mentor – Duluth YMCA, Duluth, Minnesota, February 2001 –August 2002

- This is the YMCA's version of a Big Brother/Sister program. Spend time with my child at least once a week doing various activities such as playing chess, racquetball, or anything exciting and/or educational.

Teacher's Aide –Y-Tutors, University of Minnesota – Twin Cities, September 1999 – January 2000

- Acted as a teacher's aide for a 9th grade biology class.

Youth Mentor – Y-Scholars, University of Minnesota - Twin Cities, September 1998 – June 1999

- Met with a group of inner-city middle school children once a week. Providing children a place to be after school and a chance to learn about the college.

Academic Tutor – Ronald McDonald House, Minneapolis, Minnesota, September 1998 – December 1998

- Tutored a child with leukemia once a week.