

NICOLE E. M. KINSMAN

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Curriculum Vitae
(February 2016)
Anchorage, AK

Education

- MARCH 2011 PhD in Earth & Planetary Sciences · University of California, Santa Cruz
THESIS: Artificial Retention of Beaches in California: Current Extent, Public Opinion and Influence on Backshore Morphology
ADVISOR: Gary Griggs
- MAY 2006 B.A. with Honors in Geology · Colgate University · Hamilton, New York
Minor in Environmental Studies · Summa cum Laude · GPA: 3.86/4.0
THESIS: Metamorphic Fluid Flow at a Strain Fringe Locality near Lourdes, France
ADVISORS: William Peck & Arthur Goldstein

Work & Research Experience

- 2015 - PRESENT National Geodetic Survey (NGS) · National Ocean Service · National Oceanic & Atmospheric Administration (NOAA) · Anchorage, Alaska
Regional Coastal & Geodetic Advisor (full time position)
Point of contact on NGS activities in Alaska and the U.S. Arctic, with an emphasis on geopositioning support for mapping and charting, navigation, flood risk determination, transportation, land use, and ecosystem management; NOAA subject matter expert on geodetic control, shoreline mapping, remote sensing, and Arctic-capable water level gauges; senior technical consultant to governmental, private, and academic partners.
- 2010 - 2015 Division of Geological & Geophysical Surveys · Alaska Department of Natural Resources · Fairbanks, Alaska
Geologist IV, Coastal Hazards (full time position)
Senior-level research scientist responsible for designing and implementing an applied coastal hazards program involving studies of coastal processes and geomorphology. Active manager of program grants and operational leader for geologic field projects throughout the state of Alaska. Preparation, review, and publication of maps and reports on natural hazards in Alaska, with a recognized expertise in the coastal environment.
- 2009 - 2011 U.S. Geological Survey · Western Coastal & Marine Geology · Santa Cruz, California
Graduate Student Researcher
PROJECT: Partition of Littoral Sand Transport Crossing a Submarine Canyon Head
PRINCIPAL INVESTIGATOR: Jingping Xu
Responsible for the development and implementation of a sand tracer experiment. Extensively involved in preliminary project planning, logistics and field work. Took a lead role in data analysis and dissemination.
- 2006 - 2010 Department of Earth & Planetary Sciences · University of California, Santa Cruz
Teaching Assistant
· Geologic Hazards (Fall 2009)
· Engineering Geology (Spring 2009)
· Introduction to Oceanography (Winter 2007, Winter 2008)
Graduate Student Researcher
Investigation of coastal processes with special emphasis on cliff morphology, coastal engineering structures and regional management. Long-term GIS work for the California Coastal Sediment Management Workgroup. Integration of community-based research.

2005 - 2006 Department of Geology · Colgate University · Hamilton, New York
Teaching Assistant
· Techniques of Field Geology, Off-Campus Program (Summer 2006)
· Mineralogy (Fall 2005)
Undergraduate Researcher
Experience with field sampling techniques and stable isotope geochemistry.

Talks & Symposia

- FEB. 15-19, 2016 2016 ALASKA SURVEYING & MAPPING CONFERENCE · ANCHORAGE, ALASKA
Co-convener and Speaker · Denali Summit Elevation: 2015 Survey Results & History of Survey, *Moving Mountains...*
Co-convener and Speaker · Pinning Us Down to Earth: Survey Control for Remote Sensing in Alaska, *Pinning us down to earth...*
Invited Speaker · Statewide Mapping: Alaska Geospatial Council, *Framework Datasets: Geodetic control*
- FEB. 1, 2016 ALASKA HYDROGRAPHY TECHNICAL WORKING GROUP MEETING · ANCHORAGE, ALASKA
Invited Speaker · *Concept: Coordination of NOAA's Continually Updated Shoreline Product with AK Hydro*
- JAN. 19, 2015 FAIRBANKS SOCIETY OF PROFESSIONAL LAND SURVEYORS MEETING · FAIRBANKS, ALASKA
Invited Speaker · *Meet Alaska's NGS Advisor*
- DEC. 8, 2015 ALASKA OCEAN OBSERVING SYSTEM BRIEFING · ANCHORAGE, ALASKA
Invited Speaker · *Next Steps in Alaska Coastal Water Level Instrumentation*
- NOV. 16, 2015 ALASKA PLANNERS ASSOCIATION MEETING · ANCHORAGE, ALASKA
Speaker · *Understanding Rates of Shoreline Change: A Guide for Alaskans*
- OCT. 20, 2015 ANCHORAGE SOCIETY OF PROFESSIONAL LAND SURVEYORS MEETING · ANCHORAGE, ALASKA
Invited Speaker · *Meet Alaska's NGS Advisor*
- OCT. 13, 2015 2015 SHOREZONE PARTNERS MEETING · ANCHORAGE, ALASKA
Speaker · *Shorelines, Structure From Motion And ShoreZone*
- JUNE 23, 2015 FAIRBANKS SOCIETY OF PROFESSIONAL LAND SURVEYORS MEETING · FAIRBANKS, ALASKA
Invited Speaker · *2015 Denali Summit Survey*
- JUNE 11, 2015 ALASKA OCEAN OBSERVING SYSTEM SPRING 2015 BOARD MEETING · FAIRBANKS, ALASKA
Invited Speaker · *Coastal Data Gaps In Alaska*
- JUNE 3, 2015 ARCTIC ALASKA LANDSCAPE CONSERVATION COOPERATIVE STEERING COMMITTEE MEETING · FAIRBANKS, ALASKA
Invited Speaker · *Foundational Data Priorities*
- MAY 27-28, 2015 EXPLORING OPTIONS FOR AN INTEGRATED WATER LEVEL OBSERVATION NETWORK IN ALASKA · ANCHORAGE, ALASKA
Co-convener and Speaker
- MAY 12, 2015 2015 COASTAL SEDIMENTS · SAN DIEGO, CALIFORNIA
Speaker · *Relevant Science for Changing Coastlines: A Tribute to Gary Griggs, Vector Coastline Features From 'Structure From Motion'-Derived Elevation Data*
- APRIL 21, 2015 LOCAL ENVIRONMENTAL OBSERVER (LEO) NETWORK SEMINAR SERIES · ANTHC WEBINAR
Invited Speaker · *Building Our Toolbox: Community-Based Monitoring Of Coastal Hazards*
- MARCH 24, 2015 FAIRBANKS SOCIETY OF PROFESSIONAL LAND SURVEYORS MEETING · FAIRBANKS, ALASKA
Invited Speaker · *A Preview of the Upcoming 2022 Datum*
- MARCH 13, 2015 UNIVERSITY OF ALASKA, FAIRBANKS, GEOGRAPHY 339 LECTURE · FAIRBANKS, ALASKA
Invited Speaker · *Should I Stay or Should I Go? The Clash of coastal hazards in Alaskan Communities*
- FEB. 17-18, 2015 2015 ALASKA SURVEYING & MAPPING CONFERENCE · ANCHORAGE, ALASKA
Invited Short Course Instructor · *Alaska-Vertical-Datum-Palooza*

Invited Panelist · *Changes in the Geospatial Arena: Taking our Geoid to New Heights*

FEB. 12, 2015 ALASKA FORUM ON THE ENVIRONMENT · ANCHORAGE, ALASKA
Invited Speaker · *New Flood and Erosion Tools for Coastal Communities*

JAN. 22, 2015 LAKE AND PENINSULA BOROUGH EROSION MEETING · ANCHORAGE, ALASKA
Invited Speaker · *Contemporary Shoreline Retreat Rates at Meshik in Port Heiden, Alaska*

OCT. 30, 2014 COASTAL EROSION ON THE NORTH SLOPE OF ALASKA · ARCUS WEBINAR AND WORKSHOP
Invited Speaker · *Coastal Erosion and Shoreline Change Resources at DGGS*

OCT. 30, 2014 NWS COASTAL STORM SERVICES MEETING · ANCHORAGE, ALASKA
Speaker · *Color-indexed Elevation Maps for Flood-vulnerable Communities in Western Alaska*

JULY 24, 2014 YAKUTAT TLINGIT TRIBE COMMUNITY SEMINAR · YAKUTAT, ALASKA
Invited Speaker · *What Does Global Sea Level Rise Mean to Alaskans?*

JUNE 4, 2014 WESTERN ALASKA LANDSCAPE CONSERVATION COOPERATIVE ANNUAL PI MEETING · ANCHORAGE, ALASKA
Speaker · *Nearshore Bathymetric Data Collection and Reconnaissance Static Occupation of Tidal Benchmarks in Western Alaska*

MAY 20, 2014 FAIRBANKS SOCIETY OF PROFESSIONAL LAND SURVEYORS MEETING · FAIRBANKS, ALASKA
Invited Speaker · *Hunting for Sea Levels in Alaska*

MAY 15, 2014 WESTERN ALASKA LANDSCAPE CONSERVATION COOPERATIVE MONTHLY WEBINAR
Invited Speaker · *How Deep are those Shoals? Nearshore bathymetric data collection in the vicinity of western Alaska communities*

APRIL 10, 2014 NATIONAL GEODETIC SURVEY MONTHLY HEIGHT MODERNIZATION MEETING · NGS WEBINAR
Invited Speaker · *The Reality of Sea Levels in Alaska*

MARCH 14, 2014 ALASKA OCEAN OBSERVING SYSTEM SPRING 2014 BOARD MEETING · FAIRBANKS, ALASKA
Invited Speaker · *Tidal Datums & Coastal Profiles*

NOV. 7, 2013 22ND BIENNIAL CONFERENCE OF COASTAL AND ESTUARINE RESEARCH FEDERATION · SAN DIEGO, CALIFORNIA
Speaker · *Relative Sea Level Change and Coastal Inundation in Alaska - monitoring strategies for a data sparse region*

MARCH 19, 2013 LOCAL ENVIRONMENTAL OBSERVER (LEO) NETWORK SEMINAR SERIES · ANTHC WEBINAR
Invited Speaker · *Alaska Local Tidal Datums: An Introduction for Non-Experts*

MARCH 13, 2013 AMERICAN WATER RESOURCES ASSOCIATION, ALASKA SECTION SEMINAR SERIES · FAIRBANKS, ALASKA
Invited Speaker · *Documenting Storm Surges and Demystifying Local Tidal Datums in Alaska*

FEB. 7, 2013 ALASKA FORUM ON THE ENVIRONMENT · ANCHORAGE, ALASKA
Invited Speaker · *Update on Geohazard Evaluation & Geologic Mapping for Coastal Communities*

NOV. 29, 2012 2012 SHOREZONE PARTNERS MEETING · ANCHORAGE, ALASKA
Speaker · *Geohazard Evaluation & Geologic Mapping for Coastal Communities in 2013*

OCT. 16, 2012 WESTERN ALASKA LANDSCAPE CONSERVATION COOPERATIVE ANNUAL PI MEETING · ANCHORAGE, ALASKA
Speaker · *Nearshore Bathymetric Data Collection in the Vicinity of Western Alaska Communities*

MAY 30-31, 2012 ALASKA CLIMATE SCIENCE CENTER · ANCHORAGE, ALASKA
Invited Participant · *Biennial Alaska Coastal Hazards Workshop*

FEB. 8, 2012 ALASKA FORUM ON THE ENVIRONMENT · ANCHORAGE, ALASKA
Invited Speaker · *Coastal Impact Assistance Program: Geohazard Evaluation & Geologic Mapping for Coastal Communities*

DEC. 8, 2011 UNIVERSITY OF ALASKA, FAIRBANKS, ENVIRONMENTAL SEMINAR · FAIRBANKS, ALASKA
Invited Speaker · *Should I Stay or Should I Go? The Clash of coastal hazards in Alaskan Communities*

- SEPT. 22, 2011 2011 ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS MEETING · ANCHORAGE, ALASKA
Speaker · *Developing an Approach to Coastal Hazard Mapping for Alaskan Communities*
- APRIL 28, 2011 UNIVERSITY OF ALASKA, FAIRBANKS ENGINEERING GEOLOGY DEPARTMENT · FAIRBANKS, ALASKA
Invited Speaker · *Coastal Erosion & Engineered Solutions*
- JUNE 28, 2011 2011 AMERICAN SOCIETY OF CIVIL ENGINEERS CONFERENCE, SOLUTIONS TO COASTAL DISASTERS · ANCHORAGE, ALASKA
Speaker · *Coastal Morphodynamics in the Vicinity of Kivalina, Alaska*
- JUNE 25, 2009 CALIFORNIA SHORE AND BEACH PRESERVATION ASSOCIATION WORKSHOP · PACIFICA, CALIFORNIA
Invited Speaker · *California Sand Retention Structures, Existing and Future Potential*
- MAY 15, 2008 UNIVERSITY OF CALIFORNIA, SANTA CRUZ
Speaker · *Future California Sand Nourishment: Retention Structures and the Relationship between Coastal Cliff Slopes and Fronting Beach Widths*
- MARCH 12, 2008 U.S. GEOLOGICAL SURVEY · SANTA CRUZ, CALIFORNIA
Invited Speaker · *An Investigation of the Relationship between Coastal Cliff Slopes and Fronting Equilibrium Beach Widths*

Peer-Reviewed Publications and Products

- Holmes, Simon, Xiaopeng Li, and **N.E.M. Kinsman** [*in preparation*], Evaluation of geoid refinement in the Alaska region.
- Zimmermann, M., G.T. Ruggerone, J. T. Freymueller, and **N.E.M. Kinsman** [*submitted for peer review*], Assessing inshore habitat loss from the 1920s to the 1990s in the Chignik area of the Alaska Peninsula, *Journal of Continental Shelf Research*.
- DeRaps, M.R., **N.E.M. Kinsman**, D.S.P. Stevens and J.R. Smith [*submitted for peer review*], Surficial-geologic Map of Shaktoolik, Norton Bay Quadrangle, Alaska: Alaska Division of Geological & Geophysical Surveys Report of Investigation, 1 sheet.
- Griggs, G.B., and **Kinsman, N.E.M.** [*accepted for publication*], 2016, Beach Widths, Cliff Slopes, and Artificial Nourishment along the California Coast: Shore & Beach.
- Kinsman, N.** and G.B. Griggs, 2016, Beach Users' Perceptions and Knowledge of Engineered Retention Structures in California, USA: in *Coastal Management: changing coast, changing climate, changing minds*, Alison Baptiste Ed. ICE Publishing, 10 p., 760 p.
- Overbeck, J.R., **Kinsman, N.E.M.**, and Misra, Debasmita, 2015, Coastal vulnerability of a populated arctic spit: A case study of Golovin, Alaska USA: *Shore & Beach*, v. 83, n. 4, pg. 35-47.
- Kinsman, N.E.M.**, Gibbs, A. and Nolan, M., 2015, Evaluation of Vector Coastline Features Extracted from 'Structure from Motion'-Derived Elevation Data: *Proceedings of Coastal Sediments 2015*, 14 p.
- Kinsman, N.E.M.**, and Gould, A.R., 2014, Contemporary Shoreline Retreat Rates at Old Meshik in Port Heiden, Alaska: Alaska Division of Geological & Geophysical Surveys Preliminary Interpretive Report 2014.
- Jones, Benjamin M., Jason M. Stoker, Anne E. Gibbs, Guido Grosse, Vladimir E. Romanovsky, Thomas A. Douglas, **Nicole E.M. Kinsman** and Bruce M. Richmond, 2013, Quantifying landscape change in an arctic coastal lowland using repeat airborne LiDAR: *Environmental Research Letters*, v. 8, 045025, 10 pp. doi:10.1088/1748-9326/8/4/045025
- Kinsman, N.E.M.**, DeRaps, M.R., and Smith, J.R., 2013, Preliminary evaluation of coastal geomorphology and geohazards on 'Kigiqtam Iglua', an island northeast of Shishmaref, Alaska: Alaska Division of Geological & Geophysical Surveys Preliminary Interpretive Report 2013-3, 15 p.

- Kinsman, N.** and M.R. DeRaps, 2012, Coastal Hazard Field Investigations in Response to the November 2011 Bering Sea Storm, Norton Sound, Alaska: Alaska Division of Geological & Geophysical Surveys Report of Investigation 2012-2, 51 p., 1 sheet. Online at DGGs Publications Catalog: <http://dggs.alaska.gov/pubs/id/24484>
- Kinsman, N.** and Xu, J.P., 2012, The Fluorescent Tracer Experiment on Holiday Beach near Mugu Canyon, Southern California: U.S. Geological Survey Open-File Report 2012-1131, 23 p. Online at USGS Publications Warehouse: <http://pubs.er.usgs.gov/publication/ofr20121131>
- Xu, J.P., E. Elias and **N. Kinsman**, 2011. Does Littoral Sand Bypass the Head of Mugu Canyon? - A Modeling Study. Proceedings of the International Symposium on Coastal Sediments 2011, v. 3, p. 2,075–2,087.
- Kinsman, N.** and G.B. Griggs, 2010. California Coastal Sand Retention Today: Attributes of Effective Structures. Shore & Beach, v. 78/79, n. 4/1, p. 64-74

Other Publications and Data Products

- Kinsman, N.E.M.** [*in preparation*], 2016, Coastal & Nearshore Water Level Instrumentation in Alaska.
- Overbeck, J., and **Kinsman, N.E.M.** [*in preparation*], 2016, Digital Surface Models for Communities in Western Alaska: Alaska Division of Geological & Geophysical Surveys Raw Data File.
- Gould, A.I., **Kinsman, N.E.M.**, and Hendricks, M.D., 2015, Guide to projected shoreline positions in the Alaska shoreline change tool, in DGGs Staff, Alaska shoreline change tool: Alaska Division of Geological & Geophysical Surveys Miscellaneous Publication 158, 11 p. doi:10.14509/29503
- DGGs Staff, 2015, Alaska shoreline change tool: Alaska Division of Geological & Geophysical Surveys Digital Data Series 9, <http://dx.doi.org/10.14509/shoreline>. doi:10.14509/29504
- Kinsman, N.E.M.**, 2015, Single-beam bathymetry data collected in shallow-water areas near Gambell, Golovin, Hooper Bay, Savoonga, Shishmaref, and Wales, Alaska, 2012-2013: Alaska Division of Geological & Geophysical Surveys Raw Data File 2015-2, 15 p. doi:10.14509/29348
- Southerland, L.E., and **Kinsman, N.E.M.**, 2014, Lidar data for the community of Golovin, Alaska, in DGGs Staff, Lidar Datasets of Alaska: Alaska Division of Geological & Geophysical Surveys Raw Data File 2014-20, 23 p. doi:10.14509/29127
- Tschetter, T.J., **Kinsman, N.E.M.**, and Fish, A.M., 2014, Color-indexed elevation maps for flood-vulnerable coastal communities in western Alaska: Alaska Division of Geological & Geophysical Surveys Miscellaneous Publication 154, 20 p., 20 sheets, scale 1 inch = 500 feet. doi:10.14509/29129
- DGGs Staff, 2014, Alaska Coastal Profile Tool (ACPT): Alaska Division of Geological & Geophysical Surveys Digital Data Series 7, <http://maps.dggs.alaska.gov/acpt/>. doi:10.14509/27359
- Southerland, L.E., and **Kinsman, N.E.M.**, 2014, Lidar data for Unalakleet, Alaska, collected in October 27, 2005: Alaska Division of Geological & Geophysical Surveys Raw Data File 2014-2, 12 p. doi:10.14509/27121
- Kinsman, N.E.M.**, and Gould, A.I., 2014, Coastal vulnerability mapping in Alaska: strategies for small populations in data-sparse regions (poster): Ocean Sciences Meeting, Honolulu, Hawaii, February 23-28, 2014: Alaska Division of Geological & Geophysical Surveys, 1 sheet. doi:10.14509/27202
- Gould, A.R. and **N.E.M. Kinsman**, 2013. Spatially Referenced Oblique Aerial Photography of the Port Heiden Shoreline, August 2013: Alaska Division of Geological & Geophysical Surveys Raw Data File 2013-10, 2 p.
- Smith, J.R., **Kinsman, N.E.M.**, and Misra, Debasmita, 2013, Using WorldView-2 multispectral bands for shallow water bathymetric survey near Wales, Alaska (poster): American Society of Photogrammetry and Remote Sensing Annual Meeting, Baltimore, Maryland, March 24-28, 2013: Alaska Division of Geological & Geophysical Surveys, 1 sheet. Online at DGGs Publications Catalog: <http://dggs.alaska.gov/pubs/id/25159>
- Kinsman, N.**, January 2013. Alaska Tidal Datum Portal [Online Tool and Information Resource]. Alaska Department of Natural Resources, Division of Geological & Geophysical Surveys, Online at www.dggs.alaska.gov/tidalportal

DeRaps, M.R. and N. **Kinsman**, 2012. Spatially Referenced Oblique Aerial Photography of the Golovin Shoreline, July 2012: Alaska Division of Geological & Geophysical Surveys Raw Data File 2012-4, 2 p. Online at DGGS Publications Catalog: <http://dggs.alaska.gov/pubs/id/24465>

Smith, J., G. Gray and N. **Kinsman**, 2012, Annotated Bibliography Series in Support of Coastal Community Hazard Planning – Northwest Alaska: Alaska Division of Geological & Geophysical Surveys Miscellaneous Publication 147. Online at DGGS Publications Catalog: <http://dggs.alaska.gov/pubs/id/24084>

DeRaps, M.R. and N. **Kinsman**, 2012. Spatially Referenced Oblique Aerial Photography of the Eastern Norton Sound Shoreline, July 2011: Alaska Division of Geological & Geophysical Surveys Raw Data File 2011-5, 3 DVDs. Online at DGGS Publications Catalog: <http://dggs.alaska.gov/pubs/id/23143>

Kinsman, N., 2009. California Sediment Retention Structures [GIS Shapefile]. Coastal Sediment Management Workgroup, Online at California Spatial Data Website: <http://coastalsediment.resources.ca.gov/>

Kinsman, N., and G.B. Griggs, 2008. California Shoreline Sand Retention: Existing Structure Performance and Future Potential. EOS Transactions AGU, v. 89, n. 53, Fall Meeting Supplement, Abstract (with poster) OS23C-1274.

Kinsman, N., A. Goldstein, W. Peck, and B. Selleck, 2006. Stable Isotopes of Strain Fringes In Aptian Slates Near Lourdes, France. Geological Society of America Abstracts with Programs, v. 38, n. 2, p. 26

Graduate Students

UNIVERSITY OF ALASKA FAIRBANKS	Richard Buzard · MSc Geosciences <i>2015-present · Co-advisor with Dr. Chris Maio</i> Thesis: Shoreline Change and Coastal Erosion Monitoring in SW Alaska
UNIVERSITY OF ALASKA FAIRBANKS	Kimberly DeGrandpre · MSc Geology & Geophysics <i>2013-2015 · Co-advisor with Dr. Jeff Freymueller</i> Thesis: A Synthesis of Relative Sea Level Trends in Western Alaska Subsequent Employment: PhD candidate, Southern Methodist University
UNIVERSITY OF ALASKA FAIRBANKS	Jacquelyn Smith · MSc Geological Engineering <i>2012-2014 · Co-advisor with Dr. Debasmita Misra</i> Thesis: Patterns and Potential Solutions to Coastal Geohazards at Golovin, Alaska Subsequent Employment: USGS St. Petersburg Coastal and Marine Science Center; Alaska Division of Geological & Geophysical Surveys

Other Students & Advisees

NOAA HOLLINGS SCHOLAR	Andrew Moore · B.S. Meteorology, University of Oklahoma <i>2015</i> Pursuing MSc in Meteorology
UAF/DGGS INTERN	Lauren Southerland · B.S. Engineering Geology, UAF <i>2013-2015</i> Pursuing MSc in Engineering Geology
UAF/DGGS INTERN	Tim Tschetter · MSc Engineering Geology, UAF <i>2014-2015</i> Graduate Research Assistant at University of Alaska Fairbanks
DGGS INTERN	Drew Lindow · B.S. Environmental Science, Western Washington University <i>2014</i> Subsequent Employment: · Fairbanks North Star Borough GIS

DGGS INTERN Alexander Busk
 2012
 Employed by Alaska Division of Geological & Geophysical Surveys

USGS/DGGS INTERN Karin Ohman · MSc Earth & Planetary Sciences, UCSC
 2011-2012
 Subsequent Employment:
 · USGS Pacific Coastal and Marine Science Center
 · Michael Baker International

Awards & Honors

2014 Honorable Mention, Governor's 2014 Denali Peak Performance Award (Exceptional Performance - Individual) · State of Alaska

2011 DNR Nomination, Governor's 2012 Denali Peak Performance Award (Crisis Responder) · State of Alaska

2009 University of California Marine Council Graduate Fellowship

2009 WingUp Aviation Scholarship · Marin County Ninety-Nines

2008 Center for the Dynamics and Evolution of the Land-Sea Interface & Center for Remote Sensing Graduate Student Research Award · Institute of Geophysics and Planetary Physics, University of California

2007 Friends of Long Marine Lab Student Research and Education Award · Santa Cruz Institute of Marine Sciences

2007 Robert L. Wiegel Scholarship for Coastal Studies · California Shore and Beach Preservation Association

2006 University of California Regents Fellowship

2006 Norma Vergo Prize for Excellence in Geology · Colgate University Department of Geology

Proficiencies & Certifications

COMPUTING ESRI ArcGIS · MathWorks MATLAB · BAE Systems SOCET SET · ENVI Image Analysis Software · USGS Digital Shoreline Analysis System · IVS 3D Fledermaus · Golden Software Surfer/Grapher · Autodesk AutoCAD · Microsoft Office Suite · LaTeX · Google Earth KML · Basic HTML

INSTRUMENTATION AND SKILLS RTK & PPK GNSS · LiDAR · Traditional and "Structure from Motion" Photogrammetry · Ground Penetrating Radar · Mass Spectrometry · Scanning Electron Microscopy · Field Methods · Grant Management · Technical and Scientific Writing

OTHER FAA Private Pilot (Single Engine, Land) · Red Cross Certification: Wilderness First Aid, CPR & AE · Helicopter Egress Training · Bear and Firearm Safety Certification · FEMA Social Media in Emergency Management · ATV Safety

Synergistic Involvement

2016 - PRESENT NOAA Arctic Team
Member in support of Resilient Communities & Economies, and Partnerships

2016 - PRESENT Alaska Geospatial Council Technical Advisory Group
NOAA Representative and Chair of the Geodetic Technical Working Group

2015 - PRESENT Alaska Mapping Executive Council Technical Subcommittee
NOAA Representative

2015 - PRESENT Alaska Hydrography Technical Working Group
NOAA Alternate Member

2015 - PRESENT Alaska Shore Zone Steering Committee
NOAA Member (former Alaska DNR Partnership Representative[2011-2015])

2015 - PRESENT Western Alaska Landscape Conservation Cooperative Steering Committee
NOAA Member

2014 - PRESENT National Weather Service · Weather Ready Nation
Ambassador

2012 - PRESENT Department of Geosciences· University of Alaska, Fairbanks
Affiliated Faculty Member; Guest Lecturer in Erosion Mechanics, Environmental Decision Making, Geological Engineering, Coastal Processes

2015 Alaska Silver Jackets Flood Risk Management Team
Alaska Department of Natural Resources Representative

2013 - 2015 DGGS · Field Safety Operations Committee
Committee Member

2013, 2015 Proposal Review Cycle · Sea Grant
Research Proposal Reviewer

2012 - 2015 WHPacific · Anchorage, Alaska
Kivalina Evacuation Route Agency Advisory Group Representative

2007 - 2010 University of California, Santa Cruz Graduate Student Association
Earth & Planetary Sciences Department Representative, Travel Grant Committee Chair

2008 Philip Williams & Associates, Ltd. · “California Coastal Erosion Response to Sea Level Rise”
Technical Review Team Member