

# COLLEEN STRAWHACKER

Associate Program Director • Arctic Sciences Section • Office of Polar Programs • National Science Foundation •  
ORCID: 0000-0002-3939-8445 • www.colleenstrawhacker.com

**MARCH 2020**

## EXPERTISE SUMMARY

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Leading international, interdisciplinary, collaborative teams on research on human ecodynamics, vulnerability, and resilience • Managing program budgets of over \$10 million dollars • Creating and implementing quantitative and qualitative social science research and data analysis on risk and vulnerability of communities to environmental change • Coordinating the peer review process for hundreds of scientific proposals at the National Science Foundation • Building large international and collaborative teams of stakeholders for international and convergence research • Developing and leading social science projects with budgets of over \$1,500,000

## PROFESSIONAL POSITIONS AND EDUCATION

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8/20/18 -present Associate Program Director  
Arctic Sciences Section, Office of Polar Programs, National Science Foundation

Steward the peer review process for hundreds of scientific proposals • Lead a scientific program (Arctic Social Sciences) to manage and distribute \$7 million of grants and cooperative agreements based on the peer review process • Co-lead programs totaling over \$60 million per year on socioecological research, including Navigating the New Arctic and Coastlines and People • Mentor hundreds of scientists on successful proposal submissions • Serve as Federal Lead for the Interagency Arctic Research and Policy (IARPC) Coastal Resilience Collaboration Team • Founded the IARPC Diversity and Inclusion Team • Designed and implemented two new programs, including a cooperative agreement for a coordination office for a \$30 million per year program

5/11/2018-present Research Scientist II (on leave while on detail at NSF)  
National Snow and Ice Data Center, University of Colorado Boulder

9/1/2013 -5/10/2018 Postdoctoral Fellow and Research Scientist I  
National Snow and Ice Data Center, University of Colorado Boulder

Led multiple international social science research and cyberinfrastructure projects • Developed short and long-term strategies for project budgets totaling over \$1 million • Received over \$5 million in grants • Performed and directed socioecological quantitative data analysis • Collaborated closely with Arctic coastal communities on multiple research projects • Coached social scientists on social science data collection and management strategies

2008-2013 Ph.D. in Anthropology (Minor in Ecology), Arizona State University, Tempe, AZ

Independently developed and led social science and socioecological research in multiple regional contexts, including international settings • Created data management and archival strategies for a multi-million dollar socioecological research project • Performed quantitative socioecological modeling of vulnerability of communities to climate change • Performed field and laboratory work to collect data for dissertation and independent research projects • Developed rigorous social science and socioecological data collection and analysis methods

2006-2008 M.A. in Anthropology (Minor in Ecology), Arizona State University, Tempe, AZ

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2001-2005 B.A. with Highest Distinction and with Honors in Anthropology  
Pennsylvania State University, Schreyer Honors College, University Park, PA  
*Minors: Geographic Information Science, Spanish, International Studies*

## ACADEMIC FELLOWSHIPS, GRANTS, AND AWARDS

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*13 External Grants, Fellowships, and Awards, totaling over \$6 million dollars as PI and co-PI, plus tuition and benefits for graduate education, including but not limited to:*

National Science Foundation Navigating the New Arctic Research Coordination Network #1745499 (\$499,006) Convergence NNA: Networking Indigenous Arctic and U.S. Southwest Communities on Knowledge Co-Production in Data Sciences (Lead PI: Strawhacker)

National Science Foundation Resource Implementation for Data Intensive Research Grant #1637076 (\$1,099,981) RIDIR: Building Cyberinfrastructure to Enable Interdisciplinary Research on the Long-Term Human Ecodynamics of the North Atlantic (Lead PI: Strawhacker)

National Science Foundation Polar Programs Grant #1513438 (\$1,480,806) Collaborative Research: ELOKA Phase IV: Optimizing Data Management Support for Community-Based Research and Observations Contributing to Arctic Science (Co-PI: Strawhacker)

## SELECTED FIELD AND RESEARCH EXPERIENCE

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Created and coordinated the dataARC Project (supported by two awards from the National Science Foundation totaling \$1.5 million) from 2014 - 2018

dataARC's (<https://www.data-arc.org/>) central aim is to foster interdisciplinary, collaborative research on long-term human ecodynamics of the North Atlantic through the development of digital resources and tools. I led an international, interdisciplinary team of scientists, practitioners, and software developers to prototype digital tools to integrate diverse datasets, organized in-person meetings in international settings, guided short and long-term goals while managing the project budget, and supervised socioecological research by graduate students.

Created the Indigenous Foods and Knowledges Network (IFKN, supported by one award from the NSF) IFKN ([ifkn.org](http://ifkn.org)) is a network of Indigenous leaders, community practitioners, and scientists who are focused on research and community capacity related to food security and data integration. The network builds connections among Indigenous communities in the Arctic and the US Southwest. I led team members in project development, developed and implemented short and long-term goals for IFKN, organized multiple in-person meetings, guided socioecological research practices, and managed the project budget.

Over 26 months of archaeological field experience in Alaska, Iceland, Arizona, New Mexico, Guatemala, Colorado, the Orkney Islands, and Peru; Over 30 months of archaeological and ecological related laboratory research and statistical analysis on soil samples from Arizona, New Mexico, and Peru; Over 24 months of socioecological quantitative modeling based on resilience theory for the Long Term Vulnerability and Transformation Project at Arizona State University

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### **PUBLICATIONS, PROFESSIONAL PRESENTATIONS, AND ORGANIZED SYMPOSIA**

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15 peer-reviewed publications (5 as lead author), including a recently accepted article, titled *A Landscape Perspective on Climate-Driven Risks to Food Security: Exploring the Relationship between Climate and Social Transformations in the Prehispanic U.S. Southwest*

12 Organized Symposia at International and National Conferences, including *The Role of Data Management in Enhancing Research and Policymaking for Sustainability in the Arctic* and *Linking Data from Archaeology, the Humanities, and Ecology: Testing Tools to Encourage Data-Driven Interdisciplinary Research*

4 invited keynotes, 9 panel discussions, and 45 professional presentations at international and national scientific conferences, including the dissemination of results on comparative socioecological modeling on community vulnerability to environmental change in the U.S. Southwest and the North Atlantic

\* For more information, refer to full curriculum vitae at [www.colleenstrawhacker.com](http://www.colleenstrawhacker.com) \*

### **REFERENCES (AVAILABLE UPON REQUEST)**

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