

**KELLY J. KNUDSON, Ph.D.**

Center for Bioarchaeological Research  
School of Human Evolution and Social Change  
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**EDUCATION**

- 2004 Ph.D. University of Wisconsin at Madison (Anthropology)  
**Dissertation:** *Tiwanaku Residential Mobility in the South Central Andes: Identifying Archaeological Human Migration through Strontium Isotope Analysis*  
**Dissertation Advisor:** Dr. T. Douglas Price
- 2000 Committee on Institutional Cooperation (CIC) Traveling Scholar, Anthropology Department, University of Chicago
- 2000 M.S. University of Wisconsin at Madison (Anthropology)
- 1997 B.A. Beloit College, Beloit, WI (Chemistry, magna cum laude)

**ACADEMIC POSITIONS HELD**

**Arizona State University**

- 2005-present Assistant Professor and Director of the Archaeological Chemistry Laboratory, Center for Bioarchaeological Research, School of Human Evolution and Social Change (formerly the Department of Anthropology)  
**Courses Taught:** Andean Archaeology (ASB 494/591), The Bioarchaeology of Empires (ASB 591), Human Behavior through Bone Chemistry (ASM 494/591), The Bioarchaeology of Identity (ASM 591)

**University of Wisconsin at Fond du Lac**

- 2004-2005 Lecturer, Department of Anthropology and Sociology  
**Courses Taught:** Introduction to Physical Anthropology (ANTH 105), Archaeology and the Prehistoric World (ANTH 102), Indians of North America (ANTH 314)

**Ripon College**

- 2003 Lecturer, Department of Anthropology  
**Courses Taught:** Andean Archaeology (ANTH 334)

**University of Wisconsin at Madison**

- 2004-2005 Honorary Fellow, Department of Anthropology
- 2002-2003 Lecturer, Department of Anthropology  
**Courses Taught:** Evolution of the Human Species (ANTH 107), Human Biology Laboratory (ANTH 106)

**HONORS AND AWARDS**

- 2004 The Robert J. Miller Prize in Anthropology at the University of Wisconsin at Madison
- 2003-2004 University of Wisconsin at Madison Dissertator Fellowship
- 2003 The Outstanding Student Honor Society member
- 1999 Phi Beta Kappa Scholarship
- 1997-present Phi Beta Kappa member
- 1997 John H. Nair Award for Excellence in Chemistry
- 1996 American Chemical Society Junior Analytical Chemistry Award
- 1993-1997 Beloit College Presidential Scholarship

## PEER-REVIEWED PUBLICATIONS

- 2008 Kelly J. Knudson, "Tiwanaku Influence in the South Central Andes: Strontium Isotope Analysis and Middle Horizon Migration." *Latin American Antiquity* 19 (1): 3-23.
- 2007 Christina Torres-Rouff and Kelly J. Knudson, "Examining the Life History of an Individual from Solcor 3, San Pedro de Atacama: Combining Bioarchaeology and Archaeological Chemistry." *Chungara: Revista Andina* 39 (2): 235-257.
- 2007 Kelly J. Knudson and Jane E. Buikstra, "Residential Mobility and Resource Use in the Chiribaya Polity of Southern Peru: Strontium Isotope Analysis of Archaeological Tooth Enamel and Bone." *International Journal of Osteoarchaeology* 17(6): 563-580.
- 2007 Kelly J. Knudson and Tiffany A. Tung, "Using Archaeological Chemistry to Investigate the Geographic Origin of Trophy Heads in the Central Andes." In *Archaeological Chemistry: Analytical Techniques and Archaeological Interpretation*, edited by Michael Glascock, Robert J. Speakman, and Rachel Popelka-Filcoff, pages 99-113. American Chemical Society: Washington, D.C.
- 2007 Kelly J. Knudson, "La influencia de Tiwanaku en San Pedro de Atacama: Una investigación por los isótopos del estroncio (The Influence of Tiwanaku in San Pedro de Atacama: An Investigation using Strontium Isotope Analysis)." *Estudios Atacameños* 33: 7-24.
- 2007 Kelly J. Knudson, Arthur E. Aufderheide, and Jane E. Buikstra, "Seasonality and Paleodiet in the Chiribaya Polity of Southern Peru." *Journal of Archaeological Science* 34 (3): 451-462.
- 2007 Kelly J. Knudson and T. Douglas Price, "Utility of Multiple Chemical Techniques in Archaeological Residential Mobility Studies: Case Studies from Tiwanaku- and Chiribaya-Affiliated Sites in the Andes." *American Journal of Physical Anthropology* 132 (1): 25-39.
- 2005 Kelly J. Knudson, Tiffany A. Tung, Kenneth C. Nystrom, T. Douglas Price and Paul D. Fullagar, "The Origin of the Juch'uy pampa Cave Mummies: Strontium Isotope Analysis of Archaeological Human Remains from Bolivia." *Journal of Archaeological Science* 32 (6): 903-913.
- 2005 Kelly J. Knudson, T. Douglas Price, Jane Buikstra, and Deborah E. Blom. "Strontium Isotope Analysis and Migration in the South Central Andes: Tiwanaku Colonization of the Moquegua Valley." *Proceedings of the 33rd International Symposium on Archaeometry, 2002. (Geoarchaeological and Bioarchaeological Studies 3, Vrije Universiteit, Amsterdam)*, pages 477-482.
- 2004 Kelly J. Knudson, T. Douglas Price, Jane E. Buikstra, and Deborah E. Blom. "The Use of Strontium Isotope Analysis to Investigate Tiwanaku Migration and Mortuary Ritual in Bolivia and Peru." *Archaeometry* 46 (1): 5-18.
- 2004 David C. Meiggs and Kelly J. Knudson. "Resolution and Refinement: Recent Advances in Archaeological Chemistry: Introductory Comments." *Archaeometry* 46 (1): 1-4.
- 2004 Kelly J. Knudson, Lisa Frink, Brian Hoffman and T. Douglas Price. "Chemical Characterization of Arctic Soils: Activity Area Analysis in Contemporary Yup'ik Fish Camps Using ICP-AES." *Journal of Archaeological Science* 31 (4): 443-456.

## PEER-REVIEWED PUBLICATIONS IN PRESS

- In press Kelly J. Knudson and Christopher M. Stojanowski, "New Directions in Bioarchaeology: Recent Contributions to the Study of Human Social Identities." Manuscript accepted for publication in the *Journal of Archaeological Research* 16 (4).

### **PEER-REVIEWED PUBLICATIONS IN PRESS (continued)**

- In press Marta Diaz-Zorita Bonilla, A.J. Waterman, and Kelly J. Knudson, "Explorando la movilidad y los patrones dietarios durante la Edad del Cobre en el Suroeste de la Península Ibérica: Estudio Preliminar Bioarqueológico del Tholos de Palacio III (Almadén de la Plata, Sevilla) (Exploring Mobility and Dietary patterns in the Copper Age of the Iberian South-West: A Preliminary Bioarchaeological Study of the Palacio III Tholos Tomb (Almadén de la Plata, Sevilla, Spain)." Manuscript accepted for publication in *Actas del IX Congreso Nacional de Paleopatología. Morella (Els Ports, Castelló). 26-29 Noviembre de 2007*.
- In press Kelly J. Knudson and Christopher M. Stojanowski, "The Bioarchaeology of Identity." Manuscript accepted for publication in *Bioarchaeology and Identity in the Americas*, edited by Kelly J. Knudson and Christopher M. Stojanowski and to be published by the University Press of Florida.
- In press Kelly J. Knudson and Deborah E. Blom, "The Complex Relationship between Tiwanaku Mortuary Identity and Geographic Origin in the South Central Andes." Manuscript accepted for publication in *Bioarchaeology and Identity in the Americas*, edited by Kelly J. Knudson and Christopher M. Stojanowski and to be published by the University Press of Florida.
- In press Alicia K. Wilbur, Amy J. Farnbach, Kelly J. Knudson, and Jane E. Buikstra, "Diet, Disease and the Paleopathological Record." Manuscript accepted for publication in *Current Anthropology*.
- In press Tiffany A. Tung and Kelly J. Knudson, "Social Identities and Geographical Origins of Wari Trophy Heads from Conchopata, Peru." Manuscript accepted for publication in *Current Anthropology*.

### **VOLUMES EDITED**

- In press Kelly J. Knudson and Christopher M. Stojanowski, Co-Editors, *Bioarchaeology and Identity in the Americas*, to be published by the University Press of Florida.
- 2004 Kelly J. Knudson and David C. Meiggs, Co-Editors, with Advisory Editor Michael Richards, "Resolution and Refinement: Recent Advances in Archaeological Chemistry" published as a special section of five peer-reviewed papers in *Archaeometry*, volume 46.

### **OTHER PUBLICATIONS**

- 2006 Kelly J. Knudson and Jane E. Buikstra. "Combining Heavy and Light Stable Isotope Analyses in the Chiribaya Polity of Southern Peru" *Society for Archaeological Sciences Bulletin* 29 (4): 4-7.

### **EXTERNAL RESEARCH AND TRAVEL GRANTS RECEIVED**

- 2008 Social Science and Humanities Research Council of Canada Standard Research Grant proposal entitled *Isotopic Anthropology of Pilgrimage and Sacrifice in Ancient Andean Landscapes* (\$188,000 awarded to Christine White, Jane E. Buikstra, Kelly J. Knudson, Fred J. Longstaffe, Andrew J. Nelson, John W. Verano, and Lawrence S. Owens)
- 2007 National Science Foundation Physical Anthropology and Archaeology Sections proposal entitled *Collaborative Research: A Bioarchaeological Approach to Identity in the Middle Horizon to Late Intermediate Period Transition in San Pedro de Atacama, Chile* (\$108,151 and \$138,559 awarded to Christina Torres-Rouff and Kelly J. Knudson)
- 2007 National Science Foundation Arctic Sciences Division Office of Polar Programs Section proposal entitled *Activity Area Analysis in Western Alaska: Combining Soil Chemistry and Ethnoarchaeology at Tununak* (\$112,790 awarded to Kelly J. Knudson and Lisa Frink)

- 2006 National Science Foundation Physical Anthropology Section Small Grant for Exploratory Research entitled *Bioarchaeological Fieldwork and Exploratory Biogeochemical Testing at Gobero, Republic of Niger* (\$9,924 awarded to Christopher M. Stojanowski, Kelly J. Knudson, and Alicia Wilbur)
- 2002 National Science Foundation Doctoral Dissertation Improvement Grant entitled *Tiwanaku Residential Mobility and Archaeological Chemistry: Strontium and Lead Isotope Analyses in the South Central Andes* (\$12,000 awarded to T. Douglas Price and Kelly J. Knudson)
- 2001 The Geological Society of America Research Grant (\$2,400)
- 2000 American Chemical Society Women Chemists Committee Travel Grant (\$315)
- 2000 Nave Fund Latin American and Iberian Studies Field Research Grant (\$1,270)

#### **INTERNAL RESEARCH AND TRAVEL GRANTS RECEIVED**

- 2006 Arizona State University Institute for Social Science Research Catalyst Grant entitled *Combining Bioarchaeology and Geochemistry to Investigate Archaeological Migration* (\$15,000 awarded to Kelly J. Knudson, Ariel Anbar, and Everett Shock)
- 2006 Arizona State University School of Human Evolution and Social Change Research Award for Faculty entitled *Archaeological Chemistry and Residential Mobility in the Andes: Establishing Baseline Isotopic Data for Andean Regions* (\$1,500 awarded to Kelly J. Knudson)
- 2001 University of Wisconsin at Madison Anthropology Department Travel Grant (\$300)
- 2001 University of Wisconsin at Madison Graduate School Council Vilas Travel Grant (\$600)
- 2000 University of Wisconsin at Madison Anthropology Department Travel Grant (\$200)

#### **CONFERENCE SYMPOSIA ORGANIZED**

- 2001 “Resolution and Refinement: Leading Edge Research in Archaeological Chemistry”, sponsored by the Society for Archaeological Science and co-organized with David C. Meiggs, at the 66<sup>th</sup> Annual Society for American Archaeology Meeting, New Orleans, LA, April 18-22.

#### **INVITED CONFERENCE PAPERS AND POSTERS PRESENTED**

- 2008 “Oxygen Isotope Analysis in a Land of Environmental Extremes: The Advantages and Disadvantages of Isotopic Work in the Andes” by Kelly J. Knudson. Invited paper presented in the symposium “Oxygen Isotopes as Tracers of Human Mobility” organized by James H. Burton and T. Douglas Price at the 73<sup>rd</sup> Annual Society for American Archaeology Meeting, Vancouver, British Columbia, March 26-30.
- 2008 “Exploring the Relationship between Biological and Cultural Identity in Northern Chile: Biogeochemical and Bioarchaeological Research in San Pedro de Atacama” by Christina Torres-Rouff and Kelly J. Knudson. Invited paper presented in the symposium “Advances in Andean Isotopic Research: Movement and Subsistence through Space and Time” organized by Barbara Hewitt, Nicole Slovak and Bethany Turner at the 73<sup>rd</sup> Annual Society for American Archaeology Meeting, Vancouver, British Columbia, March 26-30.
- 2008 “Isotopic Insight into Middle Horizon Urbanism: Dietary Resource Distribution and Residential Mobility at Tiwanaku” by Carrie Anne Berryman, Kelly J. Knudson, Deborah E. Blom, and Robert H. Tykot. Invited paper presented in the symposium “Advances in Andean Isotopic Research: Movement and Subsistence through Space and Time” organized by Barbara Hewitt, Nicole Slovak and Bethany Turner at the 73<sup>rd</sup> Annual Society for American Archaeology Meeting, Vancouver, British Columbia, March 26-30.
- 2008 “Using Ethnoarchaeology and Soil Chemistry to Examine Herring and Salmon Fisheries on the Arctic Alaskan Coast” by Lisa Frink and Kelly J. Knudson. Invited paper presented in the symposium, “Red Fish (Salmon), White Fish (Cod), Big Fish (Halibut),

- Small Fish (Herring): The Archaeology of North Pacific Fisheries” organized by Madonna Moss and Aubrey Cannon at the 73<sup>rd</sup> Annual Society for American Archaeology Meeting, Vancouver, British Columbia, March 26-30.
- 2008 “Identifying Maya Elite Residential Mobility through Strontium Isotope Analyses at Late Classic Copan, Honduras” by Katherine Miller, Jane E. Buikstra, Jennifer Piehl, E. Wyllys Andrews V, and Kelly J. Knudson. Invited paper presented in the symposium “Beyond Status: Meaning, Metaphor, and Identity in Mortuary Practices” organized by Stephanie M. Whittlesey and Joseph A. Ezzo at the 73<sup>rd</sup> Annual Society for American Archaeology Meeting, Vancouver, British Columbia, March 26-30.
- 2007 “The Relationship between Tiwanaku Mortuary Behavior and Geographic Origins at Chen Chen (Moquegua, Peru)” by Deborah E. Blom and Kelly J. Knudson. Invited paper presented in the symposium “Seated Flexed, East and West: New Research on Mortuary Practice in Cochabamba, Bolivia, and Moquegua, Peru” organized by Paul Goldstein and Karen Anderson at the 72<sup>nd</sup> Annual Society for American Archaeology Meeting, Austin, Texas, April 24-29.
- 2007 “Residential Mobility in the Lake Titicaca Basin: Strontium Isotope Analysis at Khonkho Wankane” by Kelly J. Knudson. Invited paper presented in the symposium “Khonkho Wankane and Beyond: Recent Research in the Machaca Region of Bolivia” organized by Arik Ohnstad and Scott C. Smith at the 72<sup>nd</sup> Annual Society for American Archaeology Meeting, Austin, Texas, April 24-29.
- 2007 “Social Marginalization among the Chiribaya: The *Curandero* of Yaral, Southern Peru” by Maria Cecelia Lozada Cerna, Kelly J. Knudson, Rex Haydon, and Jane E. Buikstra. Invited poster presented in the session “Personal Guides to Life in Antiquity: The Bioarchaeology of Individuals” organized by Ann Stodder and Ann Palkovich at the 76<sup>th</sup> Annual American Association of Physical Anthropologists Meeting, Philadelphia, Pennsylvania, March 28-31.
- 2006 “Identifying Archaeological Human Migration using Biogeochemistry: Case Studies from the South Central Andes” by Kelly J. Knudson. Invited paper presented in the session “Ancient Migration: Biological Correlates” in the Cross-Disciplinary Approaches to Migration Conference organized by Graciela S. Cabana and Jeffrey J. Clark at Arizona State University, Tempe, Arizona, October 12-13.
- 2006 “Transitions and Archaeological Chemistry: An Illustration from the South Central Andes” by Kelly J. Knudson. Invited paper presented in the symposium “Transitions: Beyond Origins in Archaeological Research. Papers in Honor of T. Douglas Price” organized by Tina Thurston and Lisa Frink at the 71<sup>st</sup> Annual Society for American Archaeology Meeting, San Juan, Puerto Rico, April 26-30.
- 2006 “Using Archaeological Chemistry to Identity the Geographic Origins of Trophy Heads in the Central Andes” by Kelly J. Knudson and Tiffany A. Tung. Invited paper presented in the symposium “Archaeological Chemistry: Analytical Techniques and Archaeological Interpretations”, organized by Michael Glascock, Jeff Speakman, and Rachel Popelka-Filcoff at the 231<sup>st</sup> Annual American Chemical Society Meeting, Atlanta, Georgia, March 26-30.
- 2005 “Migration and Bone Chemistry: Case Studies from the South Central Andes” by Kelly J. Knudson. Invited paper presented in the symposium “Migration and Anthropology: New Perspectives for a New Millennium”, organized by Graciela S. Cabana and Jeffrey J. Clark at the 104<sup>th</sup> Annual American Anthropological Association Meeting, Washington, D.C., November 30-December 4.

### **INVITED CONFERENCE PAPERS AND POSTERS PRESENTED (continued)**

- 2004 “The Bioarchaeology of Identity: Case Studies from the South Central Andes” by Kelly J. Knudson, Deborah E. Blom and Jane E. Buikstra. Invited paper presented in the symposium “Tensions, Theory and Directions in Bioarchaeology”, organized by Kenneth C. Nystrom at the 103<sup>rd</sup> Annual American Anthropological Association Meeting, Atlanta, Georgia, December 16-19.
- 2004 “Migration in the Middle Horizon: Bone Chemistry and the Nature of the Tiwanaku Polity in the South Central Andes” by Kelly J. Knudson, T. Douglas Price, Jane E. Buikstra and Deborah E. Blom. Invited paper presented in the symposium “Uncovering Social Organization in the Andes: Recent Developments in Bioarchaeology”, organized by Deborah E. Blom and Julie Farnum at the 69<sup>th</sup> Annual Society for American Archaeology Meeting, Montreal, Canada, March 31-April 4.
- 2001 “Tiwanaku Residential Mobility as Determined by Strontium and Lead Isotope Analyses” by Kelly Knudson, T. Douglas Price, Jane Buikstra and Deborah Blom. Invited paper presented in “Resolution and Refinement: Leading Edge Research in Archaeological Chemistry” organized by Kelly J. Knudson and David C. Meiggs at the 66<sup>th</sup> Annual Society for American Archaeology Meeting, New Orleans, Louisiana, April 18-22.

### **CONTRIBUTED CONFERENCE PAPERS AND POSTERS PRESENTED**

- 2008 “Geographic Origins and Residential Mobility at the Pilgrimage Center of Pachacamac, Peru” by Kelly J. Knudson, Martha Palma Málaga, Izumi Shimada, and Rafael Segura Llanos. Paper presented at the 77<sup>th</sup> Annual American Association of Physical Anthropologists Meeting, Columbus, Ohio, April 9-13.
- 2008 “Dental Decoration and Residential Mobility in 8<sup>th</sup> Century Pamplona, Northern Spain” by Eleni Anna Prevedorou, Marta Diaz-Zorita Bonilla, Jane E. Buikstra, M. Paz de Miquel Ibáñez, and Kelly J. Knudson. Poster presented at the 77<sup>th</sup> Annual American Association of Physical Anthropologists Meeting, Columbus, Ohio, April 9-13.
- 2007 “Explorando la movilidad y los patrones dietarios durante la Edad del Cobre en el Suroeste de la Península Ibérica: Estudio preliminar bioarqueológico del Tholos de Palacio III (Almadén de la Plata, Sevilla),” by Marta Diaz-Zorita Bonilla, A. J. Waterman and Kelly J. Knudson. Poster presented at the IX Congreso Nacional de Paleopatología Meeting, Morella, Spain, September 26-29.
- 2007 “Acculturation and Geographic Origins: Integrative Bioarchaeological and Archaeological Chemical Analyses of an Individual from Solcor 3, North Chile” by Christina Torres-Rouff and Kelly J. Knudson. Paper presented at the 76<sup>th</sup> Annual American Association of Physical Anthropologists Meeting, Philadelphia, Pennsylvania, March 28-31.
- 2007 “Diet, Disease, and the Paleopathological Record” by Alicia K. Wilbur, Amy W. Farnbach, Kelly J. Knudson, and Jane E. Buikstra. Poster presented at the 76<sup>th</sup> Annual American Association of Physical Anthropologists Meeting, Philadelphia, Pennsylvania, March 28-31.
- 2006 “Residential Mobility and Resource Use in the Chiribaya Polity of Southern Peru” by Kelly J. Knudson and Jane E. Buikstra. Paper presented at the 2<sup>nd</sup> Biannual Archaeological Sciences of the Americas Symposium, Tucson, Arizona, September 13-16.
- 2006 “The Life History of an Inka Sacrifice Using Archaeological Chemistry” by Kelly J. Knudson, Jason Yaeger, and Deborah E. Blom. Paper presented at the 75<sup>th</sup> Annual American Association of Physical Anthropologists Meeting, Anchorage, Alaska, March 5-12.

### **CONTRIBUTED CONFERENCE PAPERS AND POSTERS PRESENTED (continued)**

- 2006 “Identifying the Origin of Wari Trophy Heads in the Ancient Andes using Bioarchaeology and Archaeological Chemistry” by Tiffany A. Tung and Kelly J. Knudson. Paper presented at the 75<sup>th</sup> Annual American Association of Physical Anthropologists Meeting, Anchorage, Alaska, March 5-12.
- 2005 “Identifying Archaeological Residential Mobility in the Andes: The Utility of Multiple Chemical Techniques” by Kelly J. Knudson and T. Douglas Price. Paper presented at the UK Archaeological Science Conference, Bradford, United Kingdom, April 13-16.
- 2005 “Residential Mobility and Archaeological Chemistry in the South Central Andes: Trace Element and Strontium Isotope Data from Tiwanaku and Chiribaya Sites” by Kelly J. Knudson. Paper presented at the 33<sup>rd</sup> Annual Midwest Conference on Andean and Amazonian Archaeology and Ethnohistory, Columbia, Missouri, February 26-27.
- 2004 “Fish Heads, Fish Heads: Activity Area Analysis in Contemporary Yup’ik Fish Camps in Western Alaska through Chemical Characterization of Soils” by Kelly J. Knudson, Lisa Frink, Brian Hoffman and T. Douglas Price. Paper presented at the 1<sup>st</sup> Annual Archaeological Sciences of the Americas Symposium, Tucson, Arizona, September 23-26.
- 2003 “Tiwanaku Residential Mobility, Migration and Ritual Behavior as Determined by Archaeological Chemistry” by Kelly J. Knudson, T. Douglas Price, Jane Buikstra and Deborah Blom. Paper presented at the 31<sup>st</sup> Annual Midwest Conference on Andean and Amazonian Archaeology and Ethnohistory, Chicago, Illinois, February 22-23.
- 2002 “Strontium Isotope Analysis and Migration in the South Central Andes: Tiwanaku Colonization of the Moquegua Valley” by Kelly J. Knudson, T. Douglas Price, Jane Buikstra and Deborah Blom. Paper presented at the 33<sup>rd</sup> International Symposium on Archaeometry, Amsterdam, The Netherlands, April 22-26.

### **INVITED WORKSHOPS ATTENDED**

- 2006 Participated in the Cross-Disciplinary Approaches to Migration Conference organized by Graciela S. Cabana and Jeffrey J. Clark at Arizona State University, Tempe, Arizona, October 12-13.
- 1996 Participated in Shaping the Future: Strategies for Revitalizing Undergraduate Education conference sponsored by the National Science Foundation and the National Research Council, Washington, D.C., July 11-13.

### **ANTHROPOLOGICAL FIELD AND LABORATORY RESEARCH**

- 2007-present Director, Archaeological Chemistry Laboratory, Arizona State University, Tempe, Arizona, USA
- 2007 Laboratory Research for Discovery Channel television series “Bone Detective”, Archaeological Chemistry Laboratory and W.M. Keck Foundation Laboratory for Environmental Biogeochemistry, Arizona State University, Tempe, Arizona, USA
- 2007 Ethnoarchaeological and Archaeological Field Research, Coastal Alaska Soils Project co-directed by Drs. Kelly J. Knudson and Lisa Frink, Tununak, Alaska, USA
- 2006-present Laboratory Research, W.M. Keck Foundation Laboratory for Environmental Biogeochemistry, Arizona State University, Tempe, Arizona, USA
- 2005 Laboratory Research, Elemental Analysis Facility and the Isotope Geochemistry Laboratory at the Field Museum of Natural History, Chicago, IL, USA
- 2005 Project Archaeological Chemist, Proyecto Jacha Machaca excavations directed by Dr. John W. Janusek, Khonkho Wankane, Bolivia
- 2005 Archaeological Field Research, Arequipa, Peru, and San Pedro de Atacama, Chile
- 2004 Laboratory Research for Discovery Channel television series “Mummy Autopsy”, Laboratory for Archaeological Chemistry, University of Wisconsin at Madison, USA

### **ANTHROPOLOGICAL FIELD AND LABORATORY RESEARCH (continued)**

- 2003 Dissertation Laboratory Research, Isotope Geochemistry Laboratory, University of North Carolina at Chapel Hill, USA
- 2003 Laboratory Research, Laboratory for Archaeological Chemistry at the University of Wisconsin at Madison, USA
- 2003 Dissertation Field Research, Museo Contisuyo, Moquegua, Peru
- 2002 Dissertation Laboratory Research, Laboratory for Archaeological Chemistry, University of Wisconsin at Madison, USA
- 2001 Dissertation Field Research, San Pedro de Atacama, Chile, and Tiwanaku, Bolivia
- 2001 Field Supervisor, Proyecto Arqueológico Pumapunku-Akapana excavations directed by Drs. Alexei Vranich and Jason Yaeger, Tiwanaku, Bolivia
- 2001 Field Supervisor, Proyecto Bioarqueológico de Beringa excavations directed by Dr. Tiffany Tung, Majes Valley, Peru
- 2000 Dissertation Field Research, Ilo and Ayacucho, Peru
- 1999 Dissertation Field Research, Department of Arequipa, Peru
- 1999 Field Volunteer, CIARQ (Centro de Investigaciones Arqueológicas de Arequipa) survey directed by Lic. Augusto Cardona and Dr. Karen Wise, Arequipa, Peru
- 1999 Field Volunteer, Proyecto Cotahuasi excavations directed by Dr. Justin Jennings, Cotahuasi Canyon, Peru
- 1995 Field School Participant, Beloit College Field School directed by Drs. Mario Rivera and Daniel Shea, Ramaditis, Atacama Desert, Chile

### **INVITED PRESENTATIONS**

- 2008 “State Expansion and Collapse in the Andes through Biogeochemistry and Bioarchaeology,” Department of Anthropology, University of Western Ontario (January 23)
- 2007 “Andean Bioarchaeology of Empires” ASB 191: Civilizations of Antiquity, Arizona State University (December 3)
- 2007 “Ancient Andean Empires” ASB 191: Civilizations of Antiquity, Arizona State University (November 26)
- 2007 “Assessing Migration and Identity through Archaeological Chemistry” ASM 450: Bioarchaeology, Arizona State University (November 14)
- 2007 “Human-Environment Interactions during the Middle Horizon (AD 500-1100): A Tiwanaku Case Study,” ASB 326: Human Impacts on the Environment, Arizona State University (November 7)
- 2007 “Andean State Expansion and Collapse: Combining Biogeochemistry and Bioarchaeology,” School of Human Evolution and Social Change Archaeology and Bioarchaeology Brown Bag Lecture Series, Arizona State University (October 19)
- 2007 “Bioarchaeological Approaches to Migration and Mobility,” ASM 301: Peopling of the World, Arizona State University (April 6)
- 2006 “Empires and Ideology: The Andean Middle Horizon,” ASB 223: Buried Civilizations of the Americas, Arizona State University (October 20)
- 2006 “Bioarchaeology and the Andes,” Undergraduate Anthropology Association Brown Bag Lecture Series, Arizona State University (October 19)
- 2006 “Andean Ritual Activity and Archaeological Residential Mobility,” Center for Bioarchaeological Research Brown Bag Lecture Series, Arizona State University (October 6)
- 2006 “Identifying Archaeological Residential Mobility in the Andes: Tiwanaku Political Integration and Expansion,” Ancient Urbanism Group, Arizona State University (April 14)

## **INVITED PRESENTATIONS (continued)**

- 2006 “Andean Urbanism: Case Studies from the Wari and Tiwanaku Polities,” ASB 591: Perspectives on Mesoamerican Urbanism, Arizona State University (February 21)
- 2006 “Identifying Archaeological Residential Mobility,” W.M. Keck Foundation Laboratory for Environmental Biogeochemistry, Arizona State University (February 16)
- 2004 “Empires and Ideology: The Andean Middle Horizon,” ANTH 102: Archaeology and the Prehistoric World, University of Wisconsin at Washington County (November 10)
- 2002 “Water and Ritual in the Andes: Archaeological, Ethnohistoric and Ethnographic Examples,” Beloit College First Year Initiatives Program (November 7)
- 2002 “Anthropological Approaches to Migration: An Andean Case Study,” to ANTH 210: Technique and Theory in Archaeology, Beloit College (November 7)
- 2002 “Biomaterials and Bone Chemistry,” ANTH 112: Principles of Archaeology, University of Wisconsin at Madison (July 3)
- 2002 “Introduction to Archaeometry,” ANTH 112: Principles of Archaeology, University of Wisconsin at Madison (July 2)
- 2001 “Investigating Wari Residential Mobility in the South Central Andes: Excavations at Beringa, Majes Valley, Peru,” University of Wisconsin at Madison AnthroCircle Presentation Series (November 20)
- 2001 “Water and Ritual in the Andes: Archaeological, Ethnohistoric and Ethnographic Examples,” Beloit College First Year Initiatives Program (October 11)
- 2001 “Treks, Trade and Trace Elements: Recent Advances in Archaeological Chemistry,” Beloit College Chemistry Club (October 11)
- 1999 “Archaeology in Arequipa: Survey, Excavation and *Cuy* Collecting in Southern Peru,” University of Wisconsin at Madison AnthroCircle Presentation Series (December 1)

## **PUBLIC OUTREACH**

- 2002 “How Archaeologists Know What They Know,” Madison East High School (September 13)
- 2001 “How Archaeologists Know What They Know,” Madison LaFollette High School (March 16)
- 2000 “How Do They *Know* That?: An Introduction to Survey, Excavation and Laboratory Analysis,” Madison LaFollette High School (January 5)
- 1999 “How Do They *Know* That?: An Introduction to Survey, Excavation and Laboratory Analysis,” Madison LaFollette High School (May 17)

## **PROFESSIONAL ACTIVITIES**

### **Professional Service**

- 2007 Consultant for Discovery Channel television series, “Bone Detective”
- 2006 Reviewer for Springer (Social Sciences Program)
- 2006 Reviewer for the American Chemical Society Publications Division
- 2006-present Reviewer for the National Science Foundation
- 2004-present Reviewer for the following publications: *American Antiquity*, *American Journal of Physical Anthropology*, *Chungara: Revista de Antropología Chilena*, *Current Anthropology*, *Geoarchaeology*, *International Journal of Osteoarchaeology*, *Journal of Archaeological Science*, *Latin American Antiquity*, *Maya Archaeology*
- 2004 Consultant for Discovery Channel television series, “Mummy Autopsy”

### **Professional Associations**

- 2007-present Sigma Xi, Arizona State University Chapter
- 2007-present Association for Women in Science, Central Arizona Chapter
- 2003-present American Association of Physical Anthropologists

**Professional Associations (continued)**

- 2002-present American Anthropological Association, Biological Anthropology and Archaeology Divisions, Society for Anthropological Sciences Interest Group
- 2002-present Dental Anthropology Association
- 2001-present Geological Society of America
- 2000-2004 Sigma Delta Epsilon Graduate Women in Science University of Wisconsin at Madison
- 1999-present Society for Archaeological Sciences
- 1999-present Society for American Archaeology

**Departmental Service, Arizona State University**

- 2008-present School of Human Evolution and Social Change Temporary Hiring Search Committee Member
- 2008-present School of Human Evolution and Social Change Hiring Search Committee Member
- 2008-present Center for Bioarchaeological Research Long-Term Planning Committee
- 2006-present Affirmative Action Committee
- 2005-present Ruppé Prize Committee Member
- 2005-present Center for Bioarchaeological Research Website Design Committee Member
- 2005-2006 Center for Bioarchaeological Research Hiring Search Committee Member
- 2005-2006 Center for Bioarchaeological Research Curriculum Committee Member
- 2005-2006 Undergraduate Curriculum Redesign Committee Member
- 2005-2006 Graduate Curriculum Implementation Committee Member

**Departmental Service, University of Wisconsin at Madison**

- 2001-2002 AnthroCircle Presentation Committee Chair
- 2000-2001 Department of Anthropology Sexual Harassment Committee Student Representative
- 1997-1998 Archaeology Brown Bag Lecture Series Co-Organizer