BETH ALISON SCHULTZ SHOOK

Curriculum Vitae

Department of Anthropology

California State University, Chico 400 West First Street Chico, California 95929-0400 (530) 898-5711 bashook@csuchico.edu

EDUCATION

University of California, Davis Ph.D. Anthropology September 2005 Ancient DNA and the Biological History and Prehistory of Northeastern North America

University of California, Davis M.A. **Anthropology** *June 1999*

Cornell College, Mount Vernon, Iowa B.A. **Cultural Anthropology/Indigenous Peoples of the Americas** *May 1998* B.A. **Biochemistry/Molecular Biology** *May 1998*

AREAS OF RESEARCH SPECIALIZATION

Molecular Anthropology Ancient DNA Race, Ethnicity, and Identity Prehistory and History of the Americas Human Biological Variation Teaching Pedagogy Interactions of Genes, Culture, and History Anthropology of Science Contemporary Native North Americans Forensic DNA and Methodologies

TEACHING EXPERIENCE

Lecturer/Adjunct Professor, CSU Chico, 2004-2018. Teaching full (or nearly full) time at CSU Chico. Courses include: Survey of Physical Anthropology and Lab (ANTH 111), Human Cultural Diversity (ANTH 113), Power and Scarcity (ANTH 116), North American Indians (AIST/ANTH 261), Physical Anthropology and Lab (ANTH 301), Cultural Anthropology (ANTH 303) Cultural Concepts (Four Field Introduction to Anthropology; SOCS 303), Human Origins (ANTH 411), Human Variation (ANTH 412). Formal Methods for Anthropology (ANTH 485), Special Topics: Molecular Anthropology and Forensic Genetics (ANTH 498), Special Topics: Primates: Their Ecology and Behavior (ANTH 498), Graduate Seminar in Physical Anthropology (ANTH 601), Supervised College Teaching (ANTH 698), Graduate Group Study Topic: Molecular Anthropology (ANTH 697), and University Life (UNIV 101).

Beth A. S. Shook

Class sizes range from eight to 192. Additionally, serving on thesis committees, mentoring graduate students in teaching, supervising independent studies, and serving the department, college, and university on committees.

Associate Faculty, Butte College, 2005-2010.

Teaching Physical Anthropology (ANTH 2) and Cultural Anthropology (ANTH 4) at the Chico Campus.

Instructor and Designing Instructor for the First Year Experience (FYE) Program, CSU Chico, 2006-2007.

Teaching University Life (UNIV 101), a Fall semester course for incoming freshmen, assessing the current FYE program, and helping design a pilot program for Fall of 2007.

Representative for the Center for Excellence in Learning and Teaching (CELT), CSU

Chico, 2005-2006. Developing & diversifying CELT by offering teaching workshops, assisting new faculty, developing a graduate student instructor training program, writing for the CELT website, and updating the teaching library.

Chancellor's Teaching Fellow, UC Davis, 2003-2004.

Received one of four awards from Chancellor Larry Vanderhoef to graduate students in recognition of outstanding teaching and promise as a post-secondary educator.

Teaching Assistant Consultant, UC Davis, 2002-2004.

Served with a select group of eight graduate students to improve teaching campus wide. Trained new teaching assistants, provided consultation and evaluation services, read and conducted teaching related research, and collaboratively developed our professionalism as teachers.

Co-Instructor, UC Davis, Fall 2003.

Re-designed and co-taught Human Biological Variation (ANT 153) with Dr. David Glenn Smith for a course with 40 upper-division students.

Instructor, American River Community College, California, *Summer 2002*. Taught Physical Anthropology (ANT 1) for a six-week course.

Co-Instructor, Sonoma State University, California, *Fall 2001*. Co-taught Introduction to Biological Anthropology (ANT 201) with Dr. J. Lawrence Dew.

Training Coordinator for Anthropology Teaching Assistants, UC Davis, 2001-2002.

Developed and led the anthropology department teaching orientation. Planned workshops and offered evaluation opportunities for the department's teaching assistants. Supplemented by a grant from the Teaching Resources Center.

Teaching Assistant, UC Davis, 1999-2004

Taught Human Evolution (ANT 1) labs and Introduction to Archaeology (ANT 3) discussion sections and assisted the professor(s) in the corresponding lectures.

RESEARCH EXPERIENCE

Coordinating the National Missing Person DNA Database for Unidentified Victims Residing in the Chico State Human Identification Laboratory, 2010-2018.

Select and submit bone samples from CSU Chico and evaluate results in conjunction with the National Missing Person DNA Database.

Chico State Human Identification Laboratory Recovery Team, 2016-2017.

Assist the Chico State forensic anthropologists in recovering human remains from sites in Northern California for forensic identification.

Identification of a Historic Nevada Population, CSU Chico/UC Davis, 2007-2010.

Genetic analysis of a historic population from Eureka, Co., Nevada for ancestry identification in a collaborative project with Dr. Eric Bartelink, Dr. Turhon Murad, and graduate students.

Research Associate, Department of Anthropology, University of California, Davis, 2007-2013.

Forensic & ancient DNA methodological research, including scientifically testing preservation trends, sample preparation, and extraction methods, among others.

Artifact and Human DNA Analysis from Ora 83 & 85 Sites, UC Davis, 2007-2008.

Ancient DNA analysis of individuals and cogged stone artifacts from the Ora 83 and Ora 85 sites, Orange Co., California. A collaborative project with Paul Langenwalter, Heritage Resource Consultants, La Mirada, California.

Doctoral Research: Ancient DNA and the Biological History and Prehistory of Northeastern North America, UC Davis, *1998-2005*.

- Tested four published extraction protocols for use in forensics and other ancient DNA studies. Dr. Cristian Orrego, California Department of Justice DNA Laboratory, Richmond, California.
- Analyzed mitochondrial DNA extracted from four burial populations from the Central Illinois River Valley and Southern Ontario to address relationships between prehistoric cultures and with modern Algonquian speakers. Dr. David Glenn Smith, Department of Anthropology, UC Davis, Advisor.
- Analyzed mitochondrial DNA from extant Native Nations including Ojibwa, Cherokee, Siouan, and some Southwestern populations.
- Collaborated with the Bkejwanonj First Nation on Walpole Island, Ontario, as well as North American archaeologists and linguists.

Archaeological Field School, University of Idaho and University of Alberta, *Summer 1997*. Participated in five pre-historic excavations on the Salmon River from start to finish as part of a Bureau of Land Management Parks project. Conducted field laboratory cleaning, sorting, and data input of artifacts as well as obtained and measured samples for geological studies over an eight-week period. Dr. Loren Davis, supervisor.

Apprentice-in-Archaeology, Wallowa Whitman National Forest Service, *Summer 1993*. Awarded an Apprenticeship in Science and Engineering (ASE) through Saturday Academy, Oregon Graduate Institute. Excavated one historic and two pre-historic sites and conducted archaeological surveys. Conducted an analysis of Nineteenth Century Chinese-American purchasing habits in historic Granite, Oregon (Guy Marden, National Forest Service; Dr. Priscilla Wegars, University of Idaho; Dr. James Chatters; supervisors).

PUBLICATIONS

2018. **Shook, B.A.S.** *Biological Anthropology Lab Manual – an OER Resource*. Available from Chico Packet Pro <u>http://www.chicopacketpro.com/</u>.

2017. **Shook, B.A.S.** *Helping Students Synthesize Academic Literature: Development of an Excel Research Grid.* Teaching Anthropology: Society for Anthropology in Community Colleges.

2010. Dewar, G, J.K. Ginter, **B.A.S. Shook**, N. Ferris, and H. Henderson, F. *A bioarchaeological study of a Western Basin tradition cemetery on the Detroit River*. Journal of Archaeological Science 37:2245-2254.

2008. **Shook, B.A.S.** and D.G. Smith. *Using ancient mtDNA to reconstruct the population history of Northeastern North America*. American Journal of Physical Anthropology 137:14-29.

2004. Bolnick, D.A.W., **B.A.S. Shook**, L. Campbell, and I. Goddard. *Problematic use of Greenberg's linguistic classification of the Americas in studies of Native American genetic variation*. American Journal of Human Genetics 75:519-523.

2004. Malhi, R.S., K. Breece, **B.A.S. Shook**, F.A. Kaestle, J.C. Chatters, S. Hackenberger, and D.G. Smith. *Patterns of mtDNA diversity in Northwestern North America*. Human Biology 76(1):33-54.

2002. Malhi, R.S., J.A. Eshleman, J.A. Greenberg, D.A. Weiss, **B.A. Schultz Shook**, F.A. Kaestle, J.G. Lorenz, B.M. Kemp, J.R. Johnson, and D.G. Smith. *The structure of diversity within Native North American mitochondrial DNA haplogroups: Implications for the prehistory of North America*. American Journal of Human Genetics 70:905-919.

2001. Malhi R.S., **B.A. Schultz**, and D.G. Smith. *Distribution of maternal lineages among Native American tribes of Northeastern North America*. Human Biology 73(1):17-55.

2001. **Schultz, B.A.**, R.S. Malhi, and D.G. Smith. *Examining the Proto-Algonquian migration: Analysis of mtDNA*. In <u>Papers of the 32st Algonquian Conference</u>, ed. by J.D. Nichols (Manitoba: University of Manitoba Press), pp. 470-492.

2000. Smith, D.G., J.G. Lorenz, B.K. Rolfs, R.L. Bettinger, B. Green, J. Eshleman, **B.A.** Schultz, and R.S. Malhi. *Implications of the distribution of albumin Naskapi and albumin Mexico for New World prehistory*. American Journal of Physical Anthropology 111:557-572.

In preparation

2019. Shook, B.A.S., K. Aguilera, K. Nelson, and L. Braff. *An Open Invitation to Biological Anthropology*. This is a peer-reviewed open-access textbook that will be available for downloading as a pdf or as EPub. Society for Anthropology in Community Colleges.

2018. **Shook, B.A.S**. *Genetic Analysis of Individuals Buried in an Unmarked Cemetery in Eureka County, Nevada*. In: Forensic and genetic analysis of a historic population from Palisades, Nevada. Monograph.

2018. E.J. Bartelink, **Shook**, **B.A.S.**, and T.A. Murad. *Introduction*. In: Forensic and genetic analysis of a historic population from Palisades, Nevada. Monograph.

SELECTED PAPERS, POSTERS, AND PRESENTATIONS

2017. **Shook, B.A.S.** "Helping Students Synthesize Academic Literature: The Development of an Excel Research Grid". Poster presented at the CELT conference, CSU Chico.

2017. **Shook, B.A.S.** "Engaging Students in the Academic Writing Process" at the Society for Anthropology in Community College (SACC) Meetings in Boise, ID.

2017. **Shook, B.A.S.,** Eric Bartelink, and Dwight Simons. "The Forgotten Cemetery: Using Bioarchaeology to Reconstruct Past Lives in a Nevada Ghost Town". Anthropology Forum, CSU Chico.

2014. **Shook, B.A.S.** "What DNA Reveals about Race and Human Variation". Anthropology Forum, CSU Chico.

2012. **Shook, B.A.S.** "Ancient DNA for Archaeologists". An Invited talk to Kevin Dalton's Archaeology course.

2012. **Shook, B.A.S.** "The First Americans-The Genetic Evidence". An Invited talk to Dr. Schaefer's North American Indians course.

2011. **Shook, B.A.S.** "Human Populations and Genetics: Past, Present, and Future". An Invited talk to the Community of Auburn, California for the Placer Nature Center.

2011. **Shook, B.A.S.** "Considering DNA: Introduction to Genetic Testing and Implications for Tribal Enrollment". An Invited talk to DCI America's 16^a Annual Mid-Year Conference, Seattle, WA.

2011. **Shook, B.A. S.** Discussant for the session "DNA Research and Its Contributions to Understanding Prehistory and History in California and Adjacent Regions", at the Society for California Archaeology Meetings in Rohnert Park, California.

2010. **Shook, B.A.S.** "Neanderthals and Ancient DNA". Invited talk to Butte College Honors Course, Oroville, California.

2008. **Shook, B.A.S.** "500 years of Ojibwa history: lessons from and insight into using mitochondrial DNA". A talk presented at the American Association of Physical Anthropologists meeting in Columbus, Ohio.

2008. **Shook, B.A.S.** "What can we learn about Neanderthals from Ancient DNA?" Invited talk to the Anthropology Forum, CSU Chico.

2008. McCormick, K., K. Kolpan, K. Smith Gardner, E.J. Bartelink, **B. Shook**, T.A. Murad. "An Assessment of Biological Ancestry in an Unmarked Cemetery from Nevada: An Integrated Approach." A poster presented at the American Academy of Forensic Sciences meetings, Washington D.C.

2008, 2007, and 2006. **Shook, B.A.S.** "Ancient DNA 101: A guide for archaeologists." Invited talk to the Comparative Osteoarchaeology Workshop sponsored by California Department of Transportation (CalTrans).

2007. **Shook, B.A.S.** "A synthetic approach to Ojibwa history: Examining language, culture, and mtDNA." Invited talk to the Anthropology Forum, CSU Chico.

2006. **Shook, B.A.S.** "Anthropology and a liberal arts education." Invited talk to Oxford College of Emory University.

2005. **Shook, B.A.S.** "Genetic variation across time and space in northeastern North America." A talk presented at the American Anthropological Association meetings, Washington D.C.

2005. **Shook, B.A.S.** and D.A. Weiss. "Prehistoric change and continuity in the Illinois and Ohio Valleys." A poster presented at the American Association of Physical Anthropologists meetings, Milwaukee, Wisconsin.

2005. **Shook, B.A.S.** "*Jurassic Park*, A fascinating story but how accurate is it?" Invited talk to an anthropology class, Eastern Illinois University.

2005. **Shook, B.A.S.** "Tracing the past of Native Americans with ancient DNA." Invited talk to the anthropology department, California Polytechnic State University, San Luis Obispo.

2004. **Shook, B.A.S.** "Tracing the past of Native Americans with ancient DNA." Invited talk to the Anthropology Forum, CSU Chico.

2004. **Shook, B.A.S.** "Detecting Relationships in the Northeast using Ancient DNA." A paper presented at the American Association of Physical Anthropologists meetings, Tampa, Florida.

2004. **Shook, B.A.S.** "Ancient DNA: Investigating the Prehistory of Northeastern North America." Invited talk to the Anthropology Department, University of California, Berkeley.

2003. **Shook, B.A.S.** "Using mitochondrial DNA to examine pre-contact biological relationships in the Central Illinois River Valley: Migration, biological continuity, or genetic drift?" A paper presented at the American Anthropological Association meetings, Chicago, Illinois.

2003. Henderson, H., G. Dewar, J. Ginter, **B.A. Shook**, and S. Pfeiffer. 2003. "Analysis of a Western Basin Tradition burial site on the Detroit River." A paper presented at the Ontario Archaeological Society Annual Conference.

2003. **Shook, B.A.S.** "Ancient DNA: Methodology and applications in anthropology." Invited talk to a DNA Users meeting, California Department of Justice, Richmond, California.

2002. **Shook, B.A.S.** "The Algonquian homeland: Using mitochondrial DNA to examine migrations in the Great Lakes Region." A paper presented at the American Anthropological Association meetings, New Orleans, Louisiana.

2001. **Schultz, B.A.** "The Proto-Algonquian homeland: A preliminary analysis of mtDNA genetic diversity in the prehistoric Great Lakes." A paper presented at the Algonquian conference, Berkeley, California.

2001. Greenberg, J.A., R.S. Malhi, **B.A. Schultz**, J.A. Eshleman, D.A. Weiss and B.M. Kemp. "Mapping Native American Haplogroup Frequencies Using Geographic Information System (GIS) Techniques." Poster presented at the American Association of Physical Anthropology meetings, Kansas City, Missouri.

2000. **Schultz, B.A.**, R.S. Malhi, and D.G. Smith. "Using Mitochondrial DNA to Examine Migrations in the Great Lakes Region." A paper presented at the Algonquian Conference, Montreal, Canada.

2000. Smith, D.G., R.S. Malhi, J.A. Eshleman, and **B.A. Schultz**. "An update of mtDNA of early Holocene North American skeletons." A paper presented at the Great Basin Conference and the American Association of Physical Anthropologists Meetings, San Antonio, Texas.

1999. Malhi R.S., **B.A. Schultz**, J.A. Eshleman, J. Peterson, J.G. Lorenz, and D.G. Smith. "Latitudinal trends among Native North Americans: Examination of mtDNA diversity in the Northeast." Poster presented at the American Society of Human Genetics, San Francisco, California.

*Name was changed from Beth Alison Schultz to Beth Alison Schultz Shook in 2002.

PROFESSIONAL DEVELOPMENT

Academy e-Learning 9.1 – Teaching With Help CSU Chico, 2017.

This Academy took place in five full days in the Summer of 2017 to explore ways of working with advanced undergraduates and graduate students as Learning Support providers (TAs, SIs, etc.). Information learned and plans were written to advance the Teaching Associate, Supplemental Instructor, and Supervised College Teaching programs in Anthropology.

Textbook Alternative Program (TAP), CSU Chico, 2015-2017.

Participating in the TAP program, part of CSU Chico's Affordable Learning Solutions (ALS) campaign to "to enable faculty to choose and provide quality educational content that is more affordable for their students." Focus on looking for textbook and lab book alternatives to teach effectively and save students money.

Academy e-Learning 8 CSU Chico, 2016.

Participating in the Academy e-Learning which includes an intensive collaborative three-week Academy in the Summer of 2016 to learn explore new technologies, discuss and experiment with diverse teaching pedagogies, in an cross-disciplinary environment with the intent to redesign courses in an engaging and intellectually challenging way. Continuing to meet with the faculty of Cohort 8 through the 2016-2017 year and revise, at minimum ANTH 301: Physical Anthropology.

Hispanic Serving Institution (HIS) – Faculty Learning Community CSU Chico, 2016.

Participating in a cross-disciplinary faculty community to research, discuss, and plan what CSU Chico can to do to better facilitate learning and serve our students after recently being designated a Hispanic Serving Institution.

Diversity Academy, CSU Chico, July 2012.

Participated in an intensive (full-time) two-week seminar with 23 other Chico State faculty and staff to develop a shared understanding of diversity, increase diversity efforts at Chico State, and improve ways of teaching diversity in the classroom.

Center for Excellence in Learning and Teaching Conference & Workshops, CSU Chico, 2004-2016. Led and participated in teaching and advising workshops.

Blackboard Training, CSU Chico, Summer 2012.

DNA: Why Molecular ID Matters, Dialogues in Forensic Science, Syracuse University, *August 2010.* Participated in a three-day workshop to discuss methods in recovering DNA from skeletal and degraded remains.

Blackboard/WebCT Training, Butte College, *Summer 2006-Winter 2007*. Trained over forty hours on the Blackboard (WebCT6) or Vista and in on-line instruction pedagogy. Completed the Certified Online Instructor Training (COIT) for those who teach fully on-line or hybrid courses.

Workshop in Applied Phylogenetics, Bodega Marine Laboratory, California, *Spring 2003*. Discussed and used phylogenetic trees, methods of analysis of character evolution, coalescent methods for inferring migration rates and patterns, estimation of divergence times from sequence analysis, comparative methods, and perspectives on biodiversity and conservation biology. Sponsored by the Center for Biosystematics, Bodega Marine Laboratory, and Center for Population Biology, UC Davis.

New England Biolabs Molecular Biology Workshop, Smith College, *Summer 2001*. Learned and applied methods to construct genomic and cDNA libraries, conduct PCR, RT-PCR, PCR subcloning, Southern and Northern transfer and hybridization, label and sequence DNA in two weeks.

Summer Institute on Technology in Teaching, UC Davis Teaching Resources Center, *Summer 2003*. Participated in a week-long series including speakers, seminars, and technology workshops.

Seminar in College Teaching, UC Davis Teaching Resources Center, *Winter 2002*. Participated in a ten-week seminar on teaching in higher education.

Teaching Assistant Training Workshops, UC Davis, *1999-2004*. Attended workshops on teaching methods, ethics, grading, technology, and teaching in other sub-disciplines.

PROFESSIONAL SERVICE

Leading Faculty Learning Communities: Finding low/no cost resources for Students (via AB798) (2017-2018) Affordable Learning Solutions (AL\$) Advisory Board (2017-2018) Anthropology and Native American Relations Committee (2004-2018) American Indian Studies Program Redesign Committee (2017-2018) Campus Dialogue (GE Pathways): Bringing Theory to Practice (2017) Department Student Outcomes Assessment Committee (2005-2008) Committee on Instructional Resource Sharing Using Vista in GE Area B2 (2007-2008) Anthropology Curriculum Committee (2007-2008) University First Year Experience Committee (2006-2007) Human Subjects Review Committee (2006-2007) University General Education Program Assessment: Writing Task Force (2006) Anthropology Department Scholarship Committee (2005-2006) Summer Advising for Incoming Freshmen (2005-2007) Graduate Student Representative to the UC Davis Anthropology Undergraduate Program Committee (2002-2004 School Year)

UC Davis Teaching Assistant Consultants Selection Committee (*Spring 2004*) UC Davis Chancellor's Teaching Fellowship Selection Committee (*Winter 2004*) UC Davis President's Undergraduate Fellowship Selection Committee (2002-2003) Cornell College Peer Advocate-First Year Student Experience Program (1997)

PROFESSIONAL TRAININGS

CSU: Preventing Discrimination and Harassment (October 2017) Eliminate Campus Sexual Violence (October 2017) CPR/AED Training (July 2017) Defensive Driver Training (March 2017) Dossier Prep for Lecturers (February 2017) Data Security & Privacy (January 2017) Active Shooter Training: 19 Seconds (2016) Mental Health First Aid (November 2014)

MA THESIS COMMITTEES

Aoife Kilmartin (2017) Rebecca George (2015) Brenna Blanchard (2010) Carrie Ann Brown (2009, Winner of the CSU Chico Outstanding MA Thesis Award) Mangan Hanahan Pulford (2007)

PROFESSIONAL AFFILIATIONS

American Anthropological Association (AAA), member (2002-2018) Biological Anthropology Section (BAS), member (2002-2018) Society for Anthropology in Community Colleges (2017-2018)
American Association of Physical Anthropologists (AAPA), member (2000-2018)
American Academy of Forensic Science, (2011- 2012)
National Science Teachers Association (NSTA), member (2005-2007)

HONORS AND AWARDS

Selection to Academy eLearning – California State University Chico (2017) CSU Chico, College of Behavioral and Social Science Strategic Performance Funds (2016) Selection to Academy eLearning – California State University Chico (2016) Lecturer Teaching Award Finalist (Top Three) - California State University Chico (2014) Center for Excellence in Learning and Teaching (CELT) Impact Grant (2009) CSU Chico, College of Behavioral and Social Science Travel Grants (2004, 2005, 2006, and 2007) American Association of Anthropological Genetics Student Award-Runner Up (2004) Chancellor's Teaching Fellowship (2003-2004) Teaching Assistant Consultant Grant (2002-2004) National Science Foundation Dissertation Improvement Grant (2002-2004) UC Davis Block Grant (2001-2004) UC Davis Graduate Studies Travel Award (2004) Consortium for Women and Research Travel Award (2003) Research Assistantships (1999, 2002, 2003) UC Davis Humanities Graduate Research Award (2002) Teaching Assistant Training Program Grant (2001-2002) UC Davis Summer Research Fellowship (2001) UC Davis Graduate Opportunities Fellowship (1998-1999) Graduated Magna Cum Laude, Cornell College (1998)

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Molecular Biology/Biochemistry Departmental Award (1998) Anthropology Departmental Award (1998) Mortar Board Honors Society, Secretary (1997-1998) Beta Beta Beta Biological Honors Society (1997-1998) M/M Arthur E. Chase Memorial Scholarship (1995-1998) Natural and Physical Science Scholarship (1994-1998) Bausch & Lomb Science Award (1993)