Rick W. A. Smith, Ph.D.

CURRICULUM VITAE

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PROFESSIONAL APPOINTMENTS

2017- **Postdoctoral Fellow**, Neukom Institute, Department of Anthropology, Dartmouth College. Advisors: Drs. Zaneta Thayer, Deborah Nichols, and Brock Christensen.

EDUCATION

- 2017 **Ph.D.**, Anthropology, University of Texas at Austin. Advisor: Dr. Deborah Bolnick.
- 2013 M.A., Anthropology, University of Texas at Austin.
- 2007 M.S., Biology, Roosevelt University.
- 2004 **B.S.**, Biology, Abilene Christian University.

RESEARCH INTERESTS & EXPERTISE

Genetics, Epigenetics, Ancient DNA, Feminist and Queer STS, New Materialisms, Postcolonialism, Power.

RESEARCH FUNDING, FELLOWSHIPS, & AWARDS [\$108,645 total]

RESEARCH FUNDING [\$48,465]

- 2015-7 **Dissertation Fieldwork Grant –** Wenner-Gren Foundation [\$19,975]
- 2016-7 **Discovery Grant** –Tiffiny Tung and Amy Non (Pls), Vanderbilt University [sub-contract \$20,500]
- 2015-6 **Research Grant** Co-Investigator with Deborah Bolnick, University of Texas at Austin [\$6,000]
- 2015 Kuhn Family Graduate Research Stipend University of Texas at Austin [\$1,000]
- 2012 **Grant-in-aid of Research** Sigma Xi, Scientific Research Society [\$990]

FELLOWSHIPS [\$57,269]

- 2016-7 **Continuing Fellowship** Department of Anthropology, University of Texas at Austin [\$30,269]
- 2016 **Bruton Endowed Fellowship** Graduate School, University of Texas at Austin [\$1,000]
- 2015 **Wombwell Endowed Fellowship** Graduate School, University of Texas at Austin [\$3,500]
- 2010 Graduate Recruitment Fellowship Graduate School, University of Texas at Austin [\$22,500]

AWARDS [\$2,911]

- 2016 **Student Prize, Honorable Mention** American Anthropological Association, BAS.
- 2016 Graduate Student Assembly Travel Grant University of Texas at Austin [\$300]
- 2016 **Pollitzer Travel Award** American Association of Physical Anthropologists [\$500]
- 2015 Student Prize, Best Podium Presentation Texas Assoc. of Biological Anthropologists [\$60]
- 2015 Intellectual Entrepreneurship Travel Award University of Texas at Austin [\$200]
- 2012-6 **Professional Development Awards** University of Texas at Austin [5 awards totaling: \$1,701]
- 2012 **Student Travel Award** American Association of Anthropological Genetics [\$150]

PUBLICATIONS

PEER REVIEWED JOURNAL ARTICLES:

1. **Smith RWA**, Monroe C, and Bolnick DA. 2015. Detection of Cytosine Methylation in Ancient DNA from Five Native American Populations Using Bisulfite Sequencing. PLoS ONE 10(5): e0125344.

BOOK REVIEWS:

2. <u>Smith, RWA</u>. 2017. Monogamy Undone. Imaginations. [Review of Willey, Angela. 2016. Undoing Monogamy: The Politics of Science and the Possibilities of Biology. Durham, Duke University Press.] [in press]

IN PREPARATION:

- 3. <u>Smith RWA</u>, Mannriquez K, Mata-Miguez J, Smith DG, TallBear K, and Bolnick DA. In Cold Blood: Genetic Boundary-Making and the Production of Indigenous Histories. Social Studies of Science.
- 4. Tung T, Monroe C, <u>Smith RWA</u>, Bolnick DA, Kemp BM. Bioarchaeological and Genetic Evidence of Native Andean Health and Mortuary Traditions in the Colonial-era: The Vinchos Cave Mummies from Ayacucho, Peru. American Journal of Human Biology.

INVITED PRESENTATIONS

2017 <u>Smith RWA.</u> Using Ancient DNA to Reconstruct the Rise and Decline of Ancient Societies. Neukom Institute Fall Colloquium. Dartmouth College.

<u>Smith RWA</u>. Natures Colloquium Series. "Vital Debris: Ancient DNA, Ruined Matter, and the Reproduction of Biocolonial Natures." Department of Anthropology; University of Pennsylvania.

<u>Smith RWA</u> and Raff, Jennifer A. "Little Green Men, Huge Angry People, and Across the Water Trips: Very Wrong Things People Say about Old Times in the New World." Part of special session – "Up Goer Five Anthro Edition: Communicate Your Science Using English's Ten Hundred Most Common Words." April, New Orleans, LA.

<u>Smith RWA</u>. Making Kin and Kindred in a Postgenomic World. "All my relations: Identity and Indigeneity", Daniels In and Beyond the Law Symposium. Faculty of Native Studies, University of Alberta. January, Edmonton, AB, CA.

2016 <u>Smith RWA</u>. Beyond Embodiment: Material Feminist and Queer Trash Ontogenies of Difference in a Postgenomic Age. American Anthropological Association Annual Meeting. November, Minneapolis, MN.

<u>Smith RWA</u>. Deeper than Bone: Assessing the Epigenetic Effects of Violence among Wari and Post-Wari Populations in the Ayacucho Basin, Peru. 9th World Congress on Mummy Studies. Lima, Peru.

<u>Smith RWA.</u> Genomes in Conflict: Investigating The DNA-level Effects of Violence in the Pre-Hispanic Andes. Archaeological Seminar Series; Department of Anthropology; University of Texas at Austin.

- 2015 <u>Smith RWA</u>. Renegotiating the Human: The Biopolitics of Identity in Contemporary Genomics. Christian Scholars' Conference. June; Abilene Christian University; Abilene, TX.
- 2014 <u>Smith RWA.</u> Epigenetics and the Embodiment of Social Inequalities. Summer Internship for Native Americans in Genomics 2014. University of Texas at Austin.

CONFERENCE PRESENTATIONS

- 2018 <u>Smith RWA</u>, Saboowala S, Non A, Tung T, and Bolnick DA. LINE-1 Methylation in Ancient DNA Reflects Sociopolitical Transformation in Peru. American Association of Physical Anthropology Annual Meeting. April, Austin, TX. [upcoming]
- 2017 <u>Smith RWA</u> and Bolnick DA. 2017. Gathering Molecules from Rubble: Ancient DNA and Biocolonial Durabilities. American Anthropological Association Annual Meeting. November, Washington, D.C. [upcoming]

Saboowala S, **Smith RWA**, and Bolnick D. Assessing Cytosine Methylation of LINE1 and Hormone Receptor Genes in Multiple Human Tissues: Implications for Paleoepigenetics. American Association of Physical Anthropology Annual Meeting. April, New Orleans, LA. Archer SM and **Smith RWA**. 2017. Undisciplining Academic Desire: Bisexual and Queer Epistemologies of Science. American Association of Physical Anthropology Annual Meeting. April, New Orleans, LA.

Archer SM and <u>Smith RWA</u>. Bodily knowledges: Toward a Queer Ethic of Postdisciplinarity. New Directions in Anthropology. April, Austin, TX.

2016 <u>Smith RWA</u>, Mallott EK, Lindo J, Rogers M, Bolnick DA, Non AL, Tung TA, and Malhi RS. Evaluating Deamination-based Approaches for Inferring Ancient DNA Methylation: Insights from Four Ancient Genomes. American Association of Physical Anthropology Annual Meeting. April, Atlanta, GA.

Archer SM, <u>Smith RWA</u>, Goodman A, Bolnick, DA. Ancient DNA from Mayan Tooth Offerings at Yakalche, Belize. American Association of Physical Anthropology Annual Meeting. April, Atlanta, GA.

Battillo JM, Lupo KD, Mata-Míguez J, <u>Smith RWA</u>, Bolnick DA, Lupe WD, Matson RG. Botanical and aDNA Analysis of the Dietary Contents of Human Paleofeces from Turkey Pen Ruin, Utah. Society for American Archaeology Annual Meeting.

- 2015 <u>Smith RWA</u> and Bolnick DA. In Cold Blood: Scientific Silence and the Constitution of an Indigenous Past. American Anthropological Association Annual Meeting. November, Denver, CO.
 - <u>Smith RWA</u>, Manriquez K, Mata-Miguez J, Smith DG, and Bolnick DA. The Genetic Correlates of the Colonial Encounter: Insights from Contemporary Native American Genetic Diversity. Texas Association of Biological Anthropologists Annual Meeting. October, Lubbock, TX. <u>Smith RWA</u> and Bolnick DA. How Indigenous Genetic Research Shapes History and Influences Who Counts as Native. New Directions in Anthropology. March, Austin, TX.
- 2014 <u>Smith RWA</u>, Manriquez K, Mata-Miguez J, Smith DG, and Bolnick DA. Genetic variation among Native North Americans with complex ancestries: implications for contemporary tribal diversity and recent population history. American Association of Physical Anthropology Annual Meeting. April, Calgary, AB.
- 2013 <u>Smith RWA</u>, Monroe C, and Bolnick DA. Preservation of Cytosine Methylation in Native American Ancient DNA: Implications for Paleoepigenetics. Texas Association of Biological Anthropologists Annual Meeting. November, Austin, TX.

CONFERENCE PRESENTATIONS [continued]

2013 <u>Smith RWA</u>, and Bolnick DA. Analysis of cytosine methylation in Native American ancient DNA. American Association of Physical Anthropology Annual Meeting. April, Knoxville, TN.

ORGANIZED SYMPOSIA

- 2017 "Summoning the Past: Contestations of Matter, Space, and Time in the Reproduction of State Power." Executive Session co-organized with Vasilina Orlova. American Anthropological Association Annual Meeting. November, Washington, D.C. [accepted]
- 2017 "Beyond Visibility: How Academic Diversity is Transforming Scientific Knowledge." Invited Symposium co-organized with Deborah Bolnick. American Association of Physical Anthropologists Annual Meeting. April, New Orleans, LA.
- 2015 "Identity, Belonging, and the Biopolitics of DNA in Colonial Modernity Part I". Executive Session co-organized with Deborah Bolnick. American Anthropological Association Annual Meeting. November, Denver, CO.
- 2015 "Identity, Belonging, and the Biopolitics of DNA in Colonial Modernity Part II". Biological Anthropology Sponsored Session co-organized with Deborah Bolnick. American Anthropological Association Annual Meeting. November, Denver, CO.

ORGANIZED WORKSHOPS

- Love and Knowledge: Fostering Queer Identities in Science part of Living with Pride Student Research Event Series. Co-Organized with Samantha Archer. Gender and Sexuality Center, University of Texas at Austin. October, Austin, TX.
- 2015 Hart High School STEM Workshop. Co-organized with Robert O'Connor. University of Texas at Austin. October, Austin, TX.

We received Title I funding from Hart ISD to bring 12 students to the University of Texas for a 3-day STEM workshop. Hart is a rural town in the Texas Panhandle, and our participants were Hispanic, prospective first generation college students interested in pursuing science. Students received hands-on training in genetics laboratory techniques, and attended presentations from leading researchers in computer science and mechanical engineering.

TEACHING & ADVISING

COURSES TAUGHT:

Dartmouth College ANTH 50.23: DNA, Identity, and Power

TEACHING ASSISTANTSHIPS:

University of Texas at Austin ANT360K: Civilization of the Maya

ANT349C: Human Variation

ANT349D: Anthropological Genetics ANT 346L: Primate Social Behavior

ANT301: Introduction to Physical Anthropology

STUDENT MENTORING:

Undergraduate Samantha Archer (Women's and Gender Studies, Anthropology)

Sana Saboowala (Mellon Mays scholar, Anthropology, Biology)

Caroline Godfrey (Anthropology)

TEACHING & ADVISING [continued]

GUEST LECTURES:

- 2017 *Genetic Genealogies and Genetic Ancestry Testing;* in: ANTH 6 Introduction to Biological Anthropology. Dartmouth College.
- 2016 *Material Feminisms;* in: ANT 392S Introduction to Graduate Feminist Anthropology. University of Texas at Austin.
 - Paleoepigenetics; in: ANT304 Introduction to Archaeology. University of Texas at Austin.
- 2014-5 *Neanderthals, Denisovans, and the Origins of Modern Humans*; in: CORE 340.01 The Search for Meaning. Abilene Christian University.
- 2013-4 *Human Biological Variation and Race;* in ANT301 Introduction to Physical Anthropology. University of Texas at Austin.
- Folk Heredity and The Early Eugenics Movement; in: ANT349D Anthropological Genetics.
 University of Texas at Austin.
 Fundamentals of Bioarchaeology; in: ANT304 Introduction to Archaeology. University of Texas at Austin.

PROFESSIONAL DEVELOPMENT

- 2017 Course Design Institute. Dartmouth Center for the Advancement of Learning. Dartmouth College. Hanover, NH.
- 2016 Supervised Teaching Course. University of Texas at Austin. Austin, TX.
- AAAG Workshop: "The Analysis of Whole Genome Data". Texas Biomedical Research Institute. San Antonio, TX.
- Next Generation Sequencing Bioinformatics Workshop. Division of Statistics and Scientific Computation. University of Texas at Austin.
- AAAG Workshop: "Application of Genomics to Anthropological Research". Texas Biomedical Research Institute. San Antonio, TX.

ACADEMIC SERVICE

2015-present	Journal Reviewer	Molecular Biology and Evolution, Trends in Ecology and
		Evolution, American Journal of Physical Anthropology,
		Human Biology.
2014	Volunteer	Native American and Indigenous Studies Association
		(NAISA) Annual Meeting, Austin, TX.
2013	Conference Participant	Assessing Racial/Ethnic Health Disparities: Best Practices
		for Clinical Care and Medical Education in the 21st Century.
		University of Texas at Austin.
2012-3	Graduate Representative	Extended Budget Counsel, Anthropology Graduate Student
		Association. University of Texas at Austin.

INDUSTRY EXPERIENCE

2007-10 Associate Study Director – Life Technologies, Inc., ADME/Tox Division, Austin, TX.

Project manager for high-throughput gene induction research. My work focused on screening novel pharmaceutical compounds for upregulation of CYP450 genes and possible drug-drug interactions in liver microsomes from humans, non-human primates, and other mammals.

OUTREACH [selected]

2016 Social Media Team - American Association of Physical Anthropologists Annual Meeting 2015 **Mentor** – Intellectual Entrepreneurship pre-Grad Internship, UT Austin 2015 Science Fair Judge - Doss Elementary Science Fair; Austin, TX 2013-4 Event Organizer – Explore UT, "The Amazing Archaeology Race!" 2010-2 Volunteer – Explore UT, "Leaping Lemurs of Madagascar". 2010-2 Advisory Board Member – Urban Connection Austin. Austin, TX. 2008-0 Site Representative for Charitable Giving – Life Technologies, Inc., Austin, TX. 2006-7 Lab Coordinator - Summer Biotechnology Institute. Roosevelt University; Chicago, IL. 2003-4 **Social Justice Campaign Leader** – Abilene Christian University. Abilene, TX. 2002 Student Counselor for Upward Bound. Abilene Christian University. Abilene, TX.

MEDIA COVERAGE [selected]

2000

- 2016 Wade L. August "The Wari's grisly end the fall of a South American empire." Science Magazine.
- Jabr F. "The Secret, Stressful Stories of Fossils: A new field called paleoepigenetics is probing how evolution responds to sudden stress." Nautilus Magazine.

Contact Leader for International Students. Abilene Christian University. Abilene, TX.

Griess R. Small Town Students See Big Potential at UT Austin. University of Texas at Austin.

Choi C. Epigenetic marks may reveal how the environment affected ancient societies. PNAS Blog.

Griess R. "Ancient DNA May Provide Clues into How Past Environments Affected Ancient Populations." University of Texas at Austin Press Release.

- 2014 Native America Calling (Radio Broadcast). "Epigenetics". Koahnic Broadcast Corporation.
- 2013 Reardon S. "Historic human remains yield epigenetic tags". New Scientist 2913:12.

OTHER COVERAGE: Phys.org, ScienceDaily, GenomeWeb, Archaeology.org, United Press

International [UPI], New Historian, Huffington Post Science.

PROFESSIONAL AFFILIATIONS

American Anthropological Association [AAA, Biological Anthropology Section]
American Association of Anthropological Genetics [AAAG]
American Association of Physical Anthropology [AAPA]
Society for Social Studies of Science [4S]

PROGRAMMING LANGUAGES

Unix Bash Shell, [R]

PROFESSIONAL REFERENCES

Dr. Deborah A. Bolnick, Department of Anthropology, University of Texas at Austin, SAC 4.102, 2201 Speedway Stop C3200, Austin, TX 78712, (512) 471-7532, deborah.bolnick@austin.utexas.edu.

Dr. Kimberly TallBear, Faculty of Native Studies, University of Alberta, 2-31 Pembina Hall, Edmonton, Alberta, Canada T6G 2H8. tallbear@ualberta.ca.

Dr. Maria Franklin, Department of Anthropology, University of Texas at Austin, SAC 4.102, 2201 Speedway Stop C3200, Austin, TX 78712, mfranklin@austin.utexas.edu.