Stanford



Bridget F.B. Algee-Hewitt

Senior Associate Director of the Research Institute, Center for Comparative Studies in Race and Ethnicity (CCSRE)

CONTACT INFORMATION

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Bio

BIO

Bridget F.B. Algee-Hewitt is a biological anthropologist who studies how skeletal and genetic traits vary among contemporary peoples, across space and through time. She develops new computational methods, using machine learning/AI and geographic mapping algorithms, and hands-on DNA and osteology laboratory approaches to improve estimation of the personal identity parameters – like sex, ancestry, stature, and age – that are essential components of the biological profile used in forensic identification of unknown human remains and for the paleodemographic reconstruction of past population histories in bioarchaeology. As a practicing forensic anthropologist and geneticist, she provides forensic casework consultation to the medico-legal community. She also delivers expert testimony for asylum petitions and advocates for policy change in support of undocumented migrant and refugee rights. Her social justice work focuses on immigration, displacement, poverty, and violence in Latin America, addressing in particular the crisis of migrant deaths along the U.S.-Mexico border.

Read more on her CCSRE webpage (https://ccsre.stanford.edu/people/bridget-fb-algee-hewitt).

View a list of Dr. Algee-Hewitt's recent publications, grants and projects (https://ccsre.stanford.edu/algee-hewitt-selected-publications-current-projects-grants).
Visit her Publons (https://publons.com/researcher/1667208/bridget-fb-algee-hewitt/) and ORCID (https://orcid.org/0000-0002-3525-2131) profile pages.

See Dr. Algee-Hewitt's recent talk on Race, Rights and Facial Recognition at the Stanford Institute for Human Artificial Intelligence (HAI) conference on AI Ethics, Policy and Governance (https://www.youtube.com/watch?v=qPx9P1Mybu8&feature=youtu.be&t=15262).

Watch her speak at the Center for Latin American Studies on La vida no vale nada? The Crisis of Migrants Deaths along the U.S.-México Border (https://www.youtube.com/watch?v=WMGQ_XHqn_k&feature=youtu.be), or view an excerpt from her opening remarks for the Vigil for Missing Migrants on the International Day of the Disappeared (https://youtu.be/PRehspYmfO8).

CURRENT ROLE AT STANFORD

Senior Research Scientist

HONORS AND AWARDS

- Age-at-death in the Philippines: skeletal morphology, life-history and new methodologies, Wenner-Gren Foundation (2018-2019)
- New Methods In Skeletal Age-At-Death Estimation For Diverse Populations, Wenner-Gren Foundation (2017-2018)
- Modeling Surface Morphology Of The Pubic Symphysis, National Institute of Justice (2015-DN-BX-K010) (2015-2018)

LINKS

- ORCiD: <img src="https://orcid.org/sites/default/files/images/orcid_16x16.png" style="width:1em;margin-right:.5em;" alt="ORCID iD icon">orcid.org/0000-0002-3525-2131

Publications

PUBLICATIONS

- **Evaluating population affinity estimates in forensic anthropology: Insights from the forensic anthropology database for assessing methods accuracy (FADAMA).** *Journal of forensic sciences*
  Winburn, A. P., Algee-Hewitt, B.
  2021

- **Comparing genetic variation among Latin American migrants: implications for forensic casework in the Texas- and Arizona-Mexico Borderlands**
  New, B. T., Algee-Hewitt, B. F. B., Spradley, K., Fehren-Schmitz, L., Hughes, C., Anderson, B., Jasinski, M. E., Arciszewska, J., Zielinska, G., Szargut, M., Ossowski, A.
  WILEY.2020: 199–200

- **A computational framework for estimating ancestry and adult age-at-death from shape measures of the pubic symphysis**
  Algee-Hewitt, B. F. B., Kim, J.
  WILEY.2020: 5–6

- **Implications for Identifications: Exploring How Collaborative Efforts Mitigate Structural Vulnerabilities of Missing Migrants along the Arizona-Mexico Border**
  Hughes, C. E., Reineke, R. C., Algee-Hewitt, B. F. B., Anderson, B. E.
  WILEY.2020: 126–27

- **How is identity reflected in the human face?**
  Afra, K., Algee-Hewitt, B. F. B., Hamilton, M. D.
  WILEY.2020: 2–3

- **Cadaveric blood cards: Assessing DNA quality and quantity and the utility of STRs for the individual estimation of trihybrid ancestry and admixture proportions.** *Forensic Science International (Online)*
  West, F. L., Algee-Hewitt, B. F.
  2020; 2: 114–22

- **Age Indicators Reveal Population Information: A New Computational Framework for Estimating Ancestry from Pubic Symphyseal Shape**
  Algee-Hewitt, B. F. B., Kim, J.
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- **A Study on the Asymmetry of the Human Left and Right Pubic Symphyseal Surfaces Using High-Definition Data Capture and Computational Shape Methods** *JOURNAL OF FORENSIC SCIENCES*
  Stoyanova, D. K., Algee-Hewitt, B. F. B., Kim, J., Slice, D. E.
  2019; 64 (2): 494–501

- **Understanding (Mis)classification Trends of Latin Americans in Fordisc 3.1: Incorporating Cranial Morphology, Microgeographic Origin, and Admixture Proportions for Interpretation**
  Hughes, C. E., Dudzik, B., Algee-Hewitt, B. F. B., Jones, A., Anderson, B. E.
  WILEY.2019: 353–66

- **Testing Reliability of the Computational Age-At-Death Estimation Methods between Five Observers Using Three-Dimensional Image Data of the Pubic Symphysis**

Kim, J., Algee-Hewitt, B. F. B., Stoyanova, D. K., Figueroa-Soto, C., Slice, D. E.
WILEY.2019: 507–18

- **Testing the applicability of shape-based computational age-at-death estimation methods using pubic symphyseal surface scans of Asian Origin**
  Kim, J., Algee-Hewitt, B. F. B., Stoyanova, D. K., Figueroa-Soto, C., Slice, D. E.
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- **Statistical Detection of Relatives Typed with Disjoint Forensic and Biomedical Loci** *CELL*
  Kim, J., Edge, M. D., Algee-Hewitt, B. F. B., Li, J. Z., Rosenberg, N. A.
  2018; 175 (3): 848-+
- **Statistical Detection of Relatives Typed with Disjoint Forensic and Biomedical Loci.** *Cell*
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  Algee-Hewitt, B. F. B., Hughes, C. E., Go, M. C., Dudzik, B.
  2018; 90 (3): 177–95
- **Population Identifiability from Forensic Genetic Markers: Ancestry Variation in Latin America** *HUMAN BIOLOGY*
  Hughes, C. E., Algee-Hewitt, B. F. B., Konigsberg, L. W.
  2018; 90 (3): 161–75
- **Age-at-Death Estimation for Modern Populations in Mexico and Puerto Rico through the Use of 3D Laser Scans of the Pubic Symphysis** *HUMAN BIOLOGY*
  Soto, C., Algee-Hewitt, B. F. B., Bravo Morante, G., Slice, D. E., Steadman, D. W.
  2018; 90 (3): 213–29
- **Matching CODIS genotypes to SNP genotypes using linkage disequilibrium**
  Edge, M. D., Algee-Hewitt, B. F. B., Kim, J., Pemberton, T., Li, J. Z., Rosenberg, N. A.
  WILEY.2018: 75–76
- **Age-at-death estimation based on the female pubic symphysis using computational methods and 3D laser scans**
  Stoyanova, D. K., Kim, J., Figueroa-Soto, C., Slice, D. E., Algee-Hewitt, B. F. B.
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- **Understanding population variability in age-at-death estimation for modern populations in Mexico and Puerto Rico through the use of 3D laser scans of the pubic symphysis**
  Figueroa-Soto, C., Kim, J., Stoyanova, D., Slice, D. E., Algee-Hewitt, B. F. B.
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- **Elucidating ancestry variation in the Philippines via mixture analysis**
  Algee-Hewitt, B., Go, M. C., Dudzik, B., Hughes, C. E.
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- **Computing Ancestry and Race: narrative and semantic patterns in the forensic language of identity**
  Algee-Hewitt, M. A., Algee-Hewitt, B.
  WILEY.2018: 8
- **Temporal, Geographic and Identification Trends in Craniometric Estimates of Ancestry for Persons of Latin American Origin** *Forensic Anthropology*

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- **Thinking Computationally about Forensics: Anthropological Perspectives on Advancements in Technologies, Data, and Algorithms** *HUMAN BIOLOGY*
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- **Testing inter-observer reliability of the Transition Analysis aging method on the William M. Bass forensic skeletal collection.** *American journal of physical anthropology*
  Fojas, C. L., Kim, J., Minsky-Rowland, J. D., Algee-Hewitt, B. F.
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- **Population inference from contemporary American craniometrics.** *American journal of physical anthropology*
  Algee-Hewitt, B. F.
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- **Better together: Thinking anthropologically about genetics** *AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY*
  Algee-Hewitt, B. F., Goldberg, A.
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- **The reality of virtual anthropology: Comparing digitizer and laser scan data collection methods for the quantitative assessment of the cranium.** *American journal of physical anthropology*
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- **Individual Identifiability Predicts Population Identifiability in Forensic Microsatellite Markers.** *Current biology*
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- **An enhanced computational method for age-at-death estimation based on the pubic symphysis using 3D laser scans and thin plate splines** *AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY*
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- **The Myth of Race. The troubling persistence of an unscientific idea (Book Review)** *AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY*
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  Slice, D. E., Algee-Hewitt, B. F.
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- **Validation of a Non-destructive DNA Extraction Method Applied to Forensic Samples**
  Steadman, D. W., Pack, F. L., Algee-Hewitt, B. F. B., Hulsey, B. I., Cabana, G. S.
  WILEY-BLACKWELL.2015: 296
- **Population Structure in the United States: Using Forensic Data Bank Cases to Link Craniometric, Genetic and Social Information**
  Algee-Hewitt, B. F. B.
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- **A Multi-Component Analysis of Mexican Variation with Forensic Implications**
  Hughes, C. E., Algee-Hewitt, B. F. B.
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- **The reality of virtual anthropology: testing the utility of computer generated models for the quantitative assessment of the cranium.**

Wheat, A. D., Algee-Hewitt, B. F. B.
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- **Finding the place of race in anthropological discourse: a digital textual analysis.**
  Algee-Hewitt, M. A., Algee-Hewitt, B. F. B.
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- **Crania, coordinates, and clusters: testing a finite mixture modeling approach for the detection of population structure in modern America using high-dimensional data.**
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- **Assessing damages: Testing the assumptions of a non-destructive protocol for DNA extraction from modern human teeth**
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- **A structured approach to human population variation: the application of model-based clustering to world-wide craniometric data**
  Algee-Hewitt, B. F. B.
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- **Getting better with age? Testing the utility of Transition Analysis methods for forensic skeletal material of Hispanic origin**
  Algee-Hewitt, B. F. B., Taylor, R. J.
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- **The reality of aging virtually: A test of transition analysis on pelvic laser scans.**
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- **Getting better with age? Testing the utility of transition analysis methods for forensic skeletal material of Hispanic origin.**
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- **Estimation and Evidence in Forensic Anthropology: Sex and Race** *AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY*
  Konigsberg, L. W., Algee-Hewitt, B. F., Steadman, D. W.
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- **[Inter]Facing age: a test of the ADBOU age estimation software in a forensic context**
  Wilson, R. J., Algee-Hewitt, B. B.
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- **The quantitative genetics of frontal curvature: evolutionary implications.**
  Algee-Hewitt, B. B., Carson, E. A.
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- **Modeling mortality in the forensic anthropology center's body donation program.**
  Wilson, R. J., Algee-Hewitt, B. B., Jantz, L.
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- **Age is subjective: a non-traditional method of age estimation for the adult skeleton**
  Algee-Hewitt, B. B., Weisensee, K. E., Milner, G. R.
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- **Demographic trends within the Forensic Anthropology Center's body donation program.**
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