## RESEARCH ARTICLE

# On WEIRD Anthropologists and Their White Skeletons

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**ABSTRACT:** Most forensic anthropologists and the populations they study are WEIRD—that is, Western, educated, industrialized, rich, and democratic. In their interventions into the WEIRD, Clancy and Davis (2019) contend that WEIRD is a euphemism for white and that it is the white, Western European—derived scientists and subjects that skew the predominating narrative of the human condition. While they demonstrate how biological anthropology can decenter the WEIRD, it is fruitful to extend their framework specifically to forensic anthropology. We argue that the scientific enterprise of forensic anthropology is unique in that: (1) it is touted as an objective tool that must operate within medicolegal systems, (2) it involves board certification and accreditation standards, and (3) it holds ancestry and race as core to its practice. In a bibliometric survey of journal articles over the past five years (n = 793), we find that up to 79% of authors originate from WEIRD contexts. In articles specifically studying ancestry, European-derived populations are included 88% of the time as a category for comparison to other groups, while only 12% do not include Europeans. Furthermore, 49% of articles unrelated to ancestry use white subjects solely or in part, reinforcing a historic tendency to measure all human variation against one particular norm. We also find that WEIRD articles receive significantly more recognition than non-WEIRD counterparts. In this reflexive and positional exercise, we hope to make visible how whiteness as WEIRDness informs the history, values, and practices of forensic anthropology on a global scale.

**KEYWORDS:** forensic anthropology, race and ancestry, whiteness, diversity and inclusion, bibliometric survey, reflexivity

# Introduction

Is forensic anthropology WEIRD—that is, Western, educated, industrialized, rich, and democratic? Now a decade heretofore, Henrich et al. (2010a, 2010b, 2010c) introduced the WEIRD acronym to encapsulate the predominance of studies in the behavioral sciences (mainly in psychology and economics) that rely on data collected from university students attending Western institutions. They identify an implicit tendency to extend broad claims of cognitive and behavioral norms drawn from these WEIRD populations to the entirety of humankind. Ironically, the authors found that WEIRD subjects—especially U.S. undergraduates—are a niche, often outlying population compared to the rest of the world in measures of visual perception, fairness cooperation, spatial reasoning, categorization and inferential induction, moral reasoning, reasoning styles, self-concepts and related motivations, and the heritability of IQ (Henrich et al. 2010b). Their appraisal challenges often unchecked assumptions of

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universality in psychological findings despite the cultural imbalance in participant recruitment and demonstrable variability in experimental results. Cited over 7,000 times, the identification of WEIRD populations as the undeclared archetype in other disciplines has also been noted in neuroscience (Chiao & Cheon 2010), genomics (Bustamante et al. 2011; Popejoy & Fullerton 2016), education (Blum 2017), kinesiology (Karasik et al. 2010), computer science (Sturm et al. 2015), physics (Kanim & Cid 2017), primatology (Leavens et al. 2010, 2019), linguistics (Majid & Levinson 2010), medicine (Gurven & Lieberman 2020), public health (Senteio & Hauser 2019), and philosophy (Stich 2010), among others. Taken a step further, it is also evident that WEIRD scientists and researchers, and by extension their perspectives and biases, dominate these fields (Arnett 2008; Baumard & Sperber 2010; Johnson et al. 2018; Meadon & Spurrett 2010).

How WEIRD then is anthropology, especially juxtaposed against the backdrop of a racist and colonialist past and present? Some anthropologists may argue that the field explicitly champions the non-WEIRD. The original and historical domain of anthropology has been the "Other" and its basic tenet continues to focus on human cultural and biological variation. Indeed, since the inception of the acronym, some authors have used it as a point of contrast in their work (e.g., Amir et al. 2015; Barrett 2020; Clancy 2019; Röttger-Rössler 2014; Sear et al. 2019; Shattuck 2018; Van Esterik 2018; Veile 2018), while others have further problematized the term (Astuti & Bloch 2010; Clancy & Davis 2019). This, however, does not salve anthropological legacies of alterity

that marginalized and devalued cultures placed in direct contrast to Europe (Mudimbe 1994; Saïd 1978), with the discipline often acting as mediator to justify the West's imperialist domination over other groups (Malinowski 1922; Palladino & Worboys 1993). In truth, a focus on the "Other" pushed early biological anthropologists like Hrdlička, Broca, and Morton (considered then-luminaries in the field) to view nonwhite human remains for museum collections as theirs for the taking, or to display living peoples from non-Western societies in human zoos under the guise of modeling our 'primitive' ancestors (Athreya & Ackerman 2020).

Certainly, an appraisal of the prominence of the WEIRD in anthropology may vary by subfield and sub-subfield. Previous diversity and inclusion reports, most relating to gender issues but also race and citizenship, have focused on surveys of the demographic membership of its practitioners in professional associations, companies, graduate programs, or through authorship in the literature (Aitchison & Rocks-Macqueen 2013; Ánton et al. 2018; Bardolph 2014; Brodkin et al. 2014; Donlon 2016; Fulkerson & Tushingham 2019; Handly 1995; Heath-Stout 2020; Howes et al. 2014; National Science Foundation National Center for Science and Engineering Statistics 2020; Passalacqua & Pilloud 2018; Pilloud & Passalacqua 2020; Routman 2012; Setchell & Gordon 2018; Tallman & Bird 2020; Turner 1997, 2002; Turner et al. 2018; Wienker & Rhine 1989; Williams 2011). Fewer have evaluated the actual subjects of study (Barrett 2020; Bethard & DiGangi 2019; Winburn et al. 2020). In order to appraise the WEIRDness of forensic anthropology in particular, we must ask two questions in tandem. Whom do we study and who is doing the studying? Through a bibliometric survey, we examine the literature both in terms of authorship and subject matter to assess the pervasiveness of WEIRD perspectives in the discipline.

Who are we really talking about when we say Western, educated, industrialized, rich, and democratic? Clancy and Davis (2019) offer three interventions into the use of WEIRD by explicitly contextualizing each letter of the term (operationalization), turning the analytical lens inward towards the researcher (reflexivity), and seeing where such identities as professionals and as a profession fit within the broader context of studying human variation (positionality). They adeptly argue that WEIRD is a euphemism for white, whiteness, and white privilege, specifically invoking peoples with Western European ancestry from the United States, Canada, Europe and the British Isles, the Baltics, Scandinavia, and Australia and New Zealand. This explicit listing is necessary so as not to erase people of color, immigrants, and First Nations and other Indigenous people that also live in these areas and cannot be categorized as WEIRD. They call for the reflexive naming of whiteness (Harrison 1995) by white WEIRD researchers—that is, to make visible the invisibility of whiteness (Frankenberg 2001) and to underscore the prevalence and power of white supremacy (Mills 2007)—as a means to decolonize science and undo the harm that Eurocentric ways of knowing cause. Lastly, they question which studies, methodologies, and professional experiences in biological anthropology are valued above others or held as ideal and imitable models of success, and suggest strategies for better achieving our core goals of understanding human evolution, variation, and adaptation. Here, we follow their operationalization of WEIRD to mean white, but also to refer to the countries and contexts wherein white people reside, hold power, and exert influence.

While Clancy and Davis (2019) demonstrate how biological anthropology offers both promises and pitfalls to the study of human variation that decenters the WEIRD, it is fruitful to extend their framework specifically to forensic anthropology. As forensic anthropologists, we find these interventions useful to our own specific specialty as they apply to the idiosyncrasies that come with a field at the intersections of science and society, research and casework, and theory and praxis. We argue that the scientific enterprise of forensic anthropology is unique within biological anthropology in that: (1) it is touted as an applied, practical, and "objective" tool that must operate within medicolegal systems, (2) it is a subspecialty with board certification and accreditation standards, and (3) it holds ancestry and race as core to its practice.

# On the Issue of Objectivity

New and existing forensic anthropological methods continue to be devised, validated, and refined via the scientific method of careful observation, hypothesis testing, and peer reproduction, motivated in large part by major legal rulings and government reporting that sought to modernize evidentiary standards (i.e., Christensen & Crowder 2009; Committee on Identifying the Needs of the Forensic Sciences Community 2009; Grivas & Komar 2008; Lesciotto 2015; Wiersema et al. 2016). Our objectivity, as in devoid of emotional or personal influence, is seen as essential when the consequences of our conclusions are as high stakes as the identification of a missing family member or the documentation of potential criminal acts. We must also defend our conclusions as free from biases to judges, jurors, law enforcement, allied professionals, and family members. Many practitioners accomplish this by engaging in double blind reporting whereby analyses and peer reviews are conducted without contextual information about the case. But science itself, including the production, dissemination, and legitimization of knowledge and ways of knowing, is a Western European tradition steeped in subjectivity and cultural influence that steers the questions we ask, the methods we employ, and the interpretations we make. As

much as we aim to limit biases in our analyses, how might other biases be otherwise introduced and therefore built into our specific questions, datasets, variable selection, statistical modeling, and the like? For example, we may willfully avoid learning of any gendered clothing or presumptive name association when assessing skeletal sex, but how many of the sex estimation methods that we use consider non-WEIRD, non-binary definitions of sex? How many practitioners consider the samples used to construct such methods or the communities in which these methods are applied (cf., Hollimon 2011; Sofaer 2006; see Ainsworth 2015; Astorino 2019; Jones 2014; Schall et al. 2020)? What is then lost in the identification potential and process when non-WEIRD knowledge is ignored?

## On the Issue of Certification and Accreditation

While landmark legal rulings demanded more rigorous methodologies, they expressed in a similar vein the necessary qualifications needed by subject matter experts to employ and interpret such methods. An increasing number of practitioners are seeking board certification in conjunction with more laboratories seeking accreditation. The number of regional certifying bodies has also increased; whereas the American Board of Forensic Anthropology had stood alone for decades, now the anthropologists of Latin America, Europe, and the United Kingdom have their own respective venues. With regards to licensing anthropologists more generally, Wax (1963) argues that anthropology is a science beholden to the truth, while models for licensure such as medicine and law are professional arts beholden to their clients. He warns that proposals to shift the roles of the anthropologist closer to that of the physician or lawyer risk weakening dedication to truth and discovery. Forensic anthropology and cultural resource management are the only two anthropological subspecialties that offer some form of licensure for practice. Contrary to Wax (1963), we agree that certification is good for the discipline as forensic anthropologists work within medicolegal systems and do provide a public service beyond pursuing knowledge for knowledge's sake. However, given the incredibly wide variation and little oversight in the curricula of graduate programs that produce such professionals (Bethard 2017; Bethard & DiGangi 2020; Passalacqua & Garvin 2018; Passalacqua & Pilloud 2020), licensing examinations can serve as a standardized measure that an individual has the requisite knowledge and skills to successfully accomplish the tasks required by their clients (see Langley & Tersigni-Tarrant 2020), whether that be the medical examiner, next of kin, or employing NGO or government agency. Notwithstanding this system, the trajectory of attending higher education institutions, attaining advanced degrees, and sitting for board certification is a specifically

white, Western notion of education and competency. It has been well documented that women, minorities, and other underrepresented scientists suffer from higher rates of attrition than white cis males as one moves up the professional ladder (Antón et al. 2018; Thomas & Hollenshead 2001; Turner et al. 2018). We must ask how privileges tie into success and poise someone to qualify for certification in the first place, to include necessary access to study paywalled journal articles and museum collections in order to pass examination. How do race, gender, class, and accessibility prevent women, people of color, and non-WEIRD individuals from acquiring the necessary requirements to be a certified forensic anthropologist, and how might the push for more stringent minimum qualifications deter these folks from pursuing a career?

## On the Issue of Race and Ancestry

While all cultures create folk taxonomies under their own knowledge structures (Hirschfeld 1996; Prentice & Miller 2007), the Western race concept in particular conflates society with biology (Baker 1998; Caspari 2010). The scientific practice to identify clusters of gene and trait variants in specific populations is itself laden with socially mediated decisions by the scientist, and the sociopolitical origins of race lead to the search for biological pseudo-analogues (Morning 2014a, 2014b). While pre-existing population categories may have certain frequencies of gene variants, "the ways in which individuals are grouped together determine the genetic frequencies that are attributed to such populations, not that genetic frequencies determine how to group individuals into populations" (Foster & Sharp 2004:792). Many, if not most, forensic anthropologists use the term ancestry, which supposedly correlates more strongly with population history and geography and euphemizes race, as a core component of the biological profile (İşcan 1988; Standards, Forensic Anthropology Subcommittee 2021; SWGANTH 2013). The ostensible paradox of race as biological fiction while acknowledging that observable biological variation exists has thoroughly been discussed elsewhere (i.e., Brace 1995; Konigsberg et al. 2009; Ousley et al. 2009; Sauer 1992;). Yet, as evinced by Bethard and DiGangi (2020), DiGangi and Bethard (2021), and the response by Stull and colleagues (2021), as well as many of the articles in this special issue, the debates over whether to continue estimating ancestry or what ancestry actually means remain alive and well. If ancestry estimation is indeed the probabilistic translation of biological traits that may serve as inclusion criteria for social racial categories, and if we accept that self- or peer-identified racial categories are useful and meaningful in the identification process, then we must also be cognizant that the WEIRD vantage point of what race is, which races exist, and who belongs to what race,

although pervasive and the basis for our current methods, are constructs that are not universally shared. To use an example from one of our own positionalities, Filipinos in the Philippines generally identify themselves as racially Asian, Southeast Asian, Austronesian, Malay, or Filipino, as well as specifically to one or more of the hundreds of ethnolinguistic groups in the country (Aguilar 2005; CuUnjieng Aboitiz 2020; Mulder 2013; Rehal 2016; Zialcita 2005; Zulueta 2015). Yet, many Filipino Americans vis-à-vis the United States context move between the lines of Asian, Pacific Islander, Latino, Hispanic, Yellow, and Brown identities (Camacho 2016; Hogan 2006; Ignacio 1976; Ocampo 2013, 2014, 2016; Pisares 2006; Rondilla 2002); the terminological incongruence speaks to differing sociohistorical trajectories in racial formation and comprehension. Indeed, the U.S. Census Bureau categorizes Filipinos as a specific option under the Asian race, but the forensic Macromorphoscopic Databank (Hefner 2018) groups their geographic ancestry as Pacific Island—a racial category in and of itself according to the Census. Again, we must ask how culturally situated knowledge production creates a myopic practice that only aligns with a sliver of our stakeholders, and how such myopia affects the identification process.

Once more we ask, is forensic anthropology WEIRD or, put more bluntly, white? To shift answers to this question from the anecdotal to the empirical, we conduct a survey of the literature that examines trends in authorship affiliation and sample selection. For some of us whose positionalities have been conceived to contrast the hegemony, the answer needs no empirical confirmation. Yet, we hope this exercise creates a starting point for more reflexive thought into the biases, limitations, and opportunities for improvement in our methodological and theoretical approaches as a field, especially for those whose privileges have shielded them from the

need to confront such uncomfortable and often invisible dimensions of their research and practice, thereby limiting their scientific endeavors and efficacy. We approach this issue from our own unique experiences and acknowledge that we do not represent nor universally share the perspectives of all non-white stakeholders.

## **Materials and Methods**

A bibliometric survey of forensic anthropology articles in six English-language journals was conducted. The journals were selected based on the authors' own qualitative assessment of the impact and reputation these journals have within the field. These flagship venues are also where the most widely taught and used methods are published and where pressing issues are discussed. Articles were compiled using the advanced search feature available through each respective journal's webpage and used specific search criteria to isolate those articles related specifically to forensic anthropology that were published in a five-year period from 2015 to 2019 (Table 1). Each article was then individually evaluated on their primary relevance to forensic anthropology. In total, 793 articles were collated in this manner and represent 56 countries across six continents using sole, first, corresponding, and last author affiliations (Figure 1). No countries from the following subregions were represented (as defined by the United Nations geoscheme): East Africa, Middle Africa, the Caribbean, Central Asia, Melanesia, Micronesia, and Polynesia.

From these articles, data were gleaned from the title, author details, abstract, and from within the text. Variables collected included the specific area of forensic anthropology the article focused on (e.g., sex estimation, taphonomy, trauma), the country affiliation(s) of single, first, last, and

Journal Name	Publishing Society	Publisher	CiteScore/ Impact Factor <sup>a</sup>	Years Searched	Keyword Searched <sup>b</sup>	n
American Journal of Physical Anthropology (AJPA)	American Association of Physical Anthropology	Wiley	4.4 / 2.414	2015–2019	forensic	83
Forensic Anthropology (FAJ) <sup>c</sup>	_	UF Press	_/_	2018-2019	_	56
Forensic Science International (FSI)	_	Elsevier	3.7 / 2.108	2015-2019	anthropology	269
International Journal of Legal Medicine (IJLM)	International Academy of Legal Medicine	Springer	4.0 / 2.222	2015–2019	anthropology	140
Journal of Forensic Sciences (JFS)	American Academy of Forensic Sciences	Wiley	2.8 / 1.441	2015–2019	anthropology	222
Science & Justice (SJ)	The Chartered Society of Forensic Sciences	Elsevier	3.3 / 2.075	2015–2019	anthropology	23

TABLE 1—Journals and number of articles evaluated in this study.

<sup>&</sup>lt;sup>a</sup>CiteScore is based on the number of Scopus-indexed citations received by a journal in a current year for all items published in the preceding four years, divided by the number of all items published in the preceding four years. Impact Factor uses Web of Science indexed citations in a current year for all items published in the preceding two years, divided by the number of articles and reviews published in the preceding two years.

<sup>&</sup>lt;sup>b</sup>Keyword searched includes its appearance in the title, abstract, and/or author-supplied keywords.
<sup>c</sup>FAJ was inaugurated in 2018 and is too recent to be given a CiteScore or Impact Factor. Because the journal is specific to forensic anthropology and archaeology, no keywords were searched and all items were included.

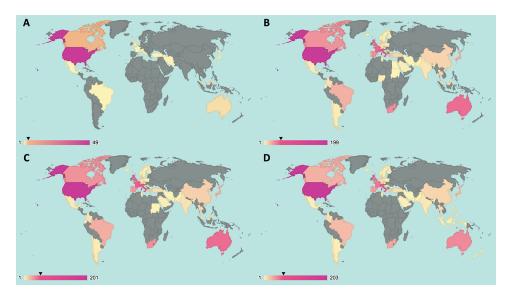


FIG. 1—Country affiliation counts of (A) single authored publications (n = 68) and, in the case of multiple authors, by (B) first author, (C) corresponding author, and (D) last author (n = 725). The United States had the greatest number of publications in all four cases. The black arrowheads over the heat gradients show the positions of countries with the second highest counts after the United States— Canada in Case A and Italy in Cases B-D. See online copy for color at journals.upress.ufl.edu/fa/.

corresponding authors, the population samples used, and the number of times cited according to Google Scholar as of 12 September 2020. In the case of multiple country affiliations for an author, all were recorded but only the first one listed was used in analyses.

The citation h-index for each country was also calculated, whereby a country has index h if h of a country's number of articles over n years  $(N_p)$  have at least h citations each and the other  $(N_p - h)$  articles have  $\leq h$  citations each (Hirsch 2005:16569). The h-index is useful here beyond a total publication or citation count in obtaining a focused snapshot of the research performance of countries over a similar length of time within similar fields in the same journals. The total number of publications cannot account for the quality of each article such that many can receive few to no citations. Likewise, the total number of citations can be disproportionately affected by a single highly cited publication, such as a article describing a widely used method. The h-index attempts to simultaneously measure both the quality and quantity of research output. However, it is not appropriate to use the h-index of a given country outside the parameters of this study, given that it was ascertained using a specific set of journals over a five-year window that excluded authorship positions outside the four stated above.

We acknowledge that this data has serious limitations, particularly in making invisible the intersectional identities of the various authors. It is clear that race and ethnicity, but also gender, sexual orientation, ableness, class, citizenship, and other axes of privilege, largely empower who writes, participates in, and perpetuates narratives of science. Membership

in these categories cannot be assumed simply by country of affiliation, nor by the limits of using given names, surnames, pronouns, personal familiarity, or looking up faculty profiles as others have done (e.g., Bardolph 2014, Fulkerson & Tushingham 2019; Handly 1995). Yet at the same time, it may be obvious to anyone who has attended professional meetings, such as those of the American Academy of Forensic Sciences or the American Association of Physical Anthropologists, what types of people are doing the majority of the writing and presenting. Aspiring students in WEIRD countries may also look to their tenured faculty members and get a sense in whose hands the power lies. In stark, admirable contrast, Heath-Stout (2020) in her own efforts to document archaeology's status manually sent out surveys to 5,645 authors across 21 journals from over a decade of publishing. We have shamefully not done similar tremendous legwork. We, therefore, preface that this work is imperfect and something to be improved upon, not necessarily emulated or replicated without critique.

We also acknowledge that research is often collaborative and involves multiple individuals. By recording single, first, corresponding, and last authors only, we do not intend to exclude the participation of other authors or contributors. Rather, we recognize that author positions hold conventional, albeit inconsistent, meaning and prestige where the first author is recognized as the primary mover of a work and holds the most citational visibility, the corresponding author has the most contact with editors and readers, and the last author may be the head, director, or principal investigator of the lab, field site, or agency where majority of the work was conducted (Sauermann & Haeussler 2017). While division of

labor can sometimes be explicitly noted in typographical marks, footnotes, or acknowledgements, this has not become the norm in forensic science or anthropology publishing. Because one of our intentions is to investigate which voices are more dominant over others, we believe conventions of prestige with author positions provide useful insight not only with who is recognized by their peers as the main researcher, but also who benefits most come hiring, funding, and promotion evaluations.

#### Results

Reiterating the definition outlined by Clancy and Davis (2019), the following countries were classified as WEIRD: the United States, Canada, Australia, New Zealand, those of Europe (as defined by the United Nations geoscheme), the British Isles, the Baltics, and Scandinavia. Of the 56 countries represented, 27 (48.2%) were considered WEIRD contexts and 29 (51.8%) were considered non-WEIRD. The United States leads significantly over all other countries across all metrics (Figure 2).

Using only sole, first, corresponding, and last author positions, 74.9% of articles were produced exclusively by authors affiliated with WEIRD countries (n = 594), while 18.3% of articles were produced exclusively by authors affiliated with non-WEIRD countries (n = 145). The remaining 6.8% of articles were co-authored between WEIRD and non-WEIRD countries (n=54), 38.9% of which had WEIRD affiliated countries as first author (n=21), 37.0% as corresponding author (n=20), and 63.0% as last author (n=34). Authors primarily affiliated with the United States contributed to 34.0% of all articles evaluated (n = 270). In contrast, Italy, with the second greatest number of authors, contributed 8.6% of the articles (n = 68), followed by the United Kingdom (7.9%; n = 63), and France (6.8%; n = 54). Taken together, these four countries, constituting only 7% of all countries represented, contributed more than half of all articles. Succeeding these countries in terms of article number are Australia, Canada, Spain, South Africa, Portugal, and Brazil, in descending order. Canada had the second greatest number of sole authored publications after the United States at four out of 68 articles. Italy had the second greatest number of multiauthored publications after the United States at 53, 53, and 63 out of 725 first, corresponding, and last authored articles, respectively (Fig. 1).

The cumulative number of total citations for all articles was 10,110 citations. The United States received the greatest number at 26.0% of all citations (n = 2626). The United Kingdom received the second greatest number of citations at 7.8% (n = 793), followed by Italy (6.8%; n = 684), France (5.6%; n = 563), and Australia (5.2%; n = 529). Taken together, these five countries received more than half of all

citation counts. Succeeding these countries in terms of citation count are Canada, Spain, Portugal, South Africa, and Czechia in descending order. The total and average citation counts for WEIRD countries were 7,809 and 289, respectively, while for non-WEIRD countries were 2,301 and 79, respectively.

Rankings for the *h*-index, which can simultaneously measure both the productivity and citation impact of the publications for a given country, are likewise dominated by the United States at 26. The United Kingdom ranked second with an *h*-index of 16, followed by Italy and Australia with 14 each, France, Canada and Spain with 13 each, and Portugal, South Africa, and Japan with 11 each. All 56 countries received an *h*-index of at least one, meaning there was no country in this study that received zero citations. The average *h*-indices for WEIRD and non-WEIRD countries were seven and four, respectively.

Turning to topics of study, publications relating to one or more aspects of skeletal biological profile estimation were the most commonly encountered of all articles at 52.0% (n=412), followed by those relating to taphonomy or the postmortem interval (11.0%; n=87) and skeletal trauma analysis (8.1%; n=64) (Table 2). Of the 412 publications on biological profile estimation, 44.9% discussed age (n=185), 37.6% discussed sex (n=155); 13.8% discussed ancestry (n=57), and 8% discussed stature (n=33). An additional 10 articles discussed biological profile estimation using nonosseous evidence such as hair, fingerprints, footprints, and soft tissue. Over 90% of forensic anthropology related articles reviewed here were published in either FSI (33.9%; n=269), JFS (28.0%; n=222), IJLM (17.7%; n=140), or the AJPA (10.5%; n=83).

In assessing the ancestral composition of the samples used in these studies, articles were split between those that relate to or discuss ancestry estimation (7.3%; n = 58) and those unrelated to ancestry (92.7%; n = 735) (Table 3). In articles specifically studying ancestry, European-derived or descended populations are included 87.9% of the time as a category for comparison amongst themselves (6.9%; n=4) or to other ancestral groups (81.0%; n=47), while only 12.1% do not include Europeans in their comparisons. Furthermore, in articles unrelated to ancestry for which the ancestral composition of the samples used are reported, the majority of these studies only use European-derived samples in their analyses (52.6%; n = 274), 16.5% use Europeans and at least one other ancestral group (n=86), and 30.9% do not use European samples (n = 161). Two hundred and fourteen studies unrelated to ancestry estimation either did not report the ancestral demographics of their samples or sample ancestry was not applicable; for example, with studies focusing on field methods, review articles, or where only non-human bone, non-osseous, or archaeological material were used, among others.

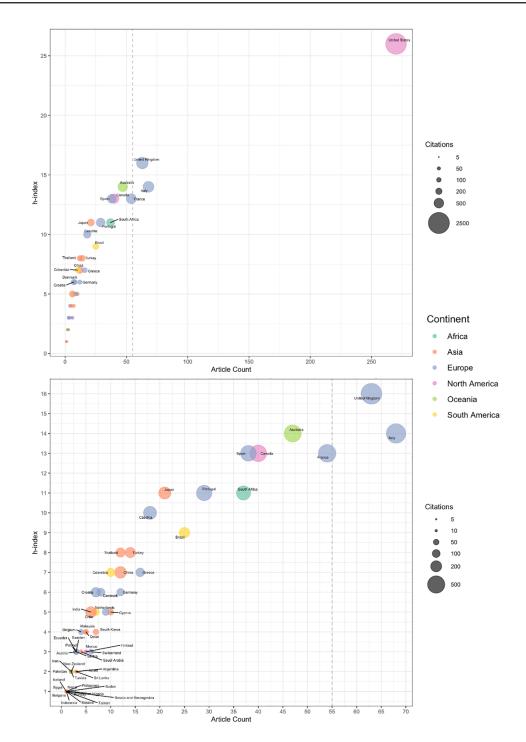


FIG. 2—Countries by article number and h-index with the outlying United States included (top) and excluded (bottom). Sizes of circles are scaled by area and indicate total number of citations. Dashed line approximates the 50% cutoff mark between the total number articles, meaning half of all papers belong to one of the four countries to the right of the line and the other half to all other countries to the left of the line. See online copy for color at journals.upress.ufl.edu/fa/.

Focusing on all U.S.-authored publications for which sample ancestry was reported, Table 4 provides the ancestral demographics of the samples used, following closely the definitions of race and ethnicity used by the U.S. Census Bureau and the Office of Management and Budget (OMB).

White individuals are the most often-used sample in U.S.-authored studies (69.1%; n = 105), followed by Black individuals or African Americans (48.0%; n = 73), Hispanics or Latinos (32.2%; n = 49), Asians (28.3%; n = 43), and American Indians and Alaska Natives (14.5%; n = 22). Native

TABLE 2—Topical breakdown of forensic anthropology related articles across six journals from 2015 to 2019.

Percentages are in parentheses.

	AJPA	FAJ	FSI	IJLM	JFS	SJ	Total
Biological profile estimation							
Age	24	3	70	43	34	3	177 (22.3)
Sex	15	6	48	25	29	6	129 (16.3)
Ancestry	5	9	8	3	14	0	39 (4.9)
Stature	2	1	17	4	2	2	28 (3.5)
Body mass	5	0	2	0	3	0	10 (1.3)
Secular change	1	0	0	0	0	0	1 (0.1)
Two or more of the above							
Age + Sex	0	0	2	0	1	0	3 (0.4)
Age + Sex + Ancestry	1	0	1	0	0	0	2 (0.3)
Age + Sex + Ancestry + Stature	0	0	0	0	1	0	1 (0.1)
Age + Sex + Ancestry + Body mass	0	0	0	1	0	0	1 (0.1)
Age + Secular change	1	0	0	0	0	0	1 (0.1)
Sex + Ancestry	3	0	5	1	3	0	12 (1.5)
Sex + Stature	0	0	1	1	0	0	2 (0.3)
Sex + Stature + Body mass	1	0	0	1	0	0	2 (0.3)
Sex + Parturition	0	0	0	0	1	0	1 (0.1)
Sex + Secular change	0	0	0	1	1	0	2 (0.3)
	1	0	0	1	0	0	2 (0.3)
Ancestry + Secular change	4	4	20	17	37	5	()
Taphonomy/Postmortem interval	0	8	20 17	17	24	0	87 (11.0)
Skeletal trauma analysis	0	0	24	15	13	0	64 (8.1) 38 (4.8)
Facial approximation	0	2	12	4	8	2	
Positive identification	6	2	6	4	9	0	,
Laboratory procedures and methodology	3	4	9	2	2	0	. ( )
History/Collections/Resources/Surveys	0	10	2	$\frac{2}{2}$	5	0	20 (2.5) 19 (2.4)
Commingled human remains	2	0	4	0	3 11	1	19 (2.4)
Isotopes/Elemental composition	2	0	1	4	7	0	16 (2.3)
Skeletal pathology Human rights/Humanitarian issues	0	0	6	1	1	3	11 (1.4)
Field methods/Forensic archaeology	1	4	2	0	4	0	( ' )
DNA analyses	0	1	3	1	3	1	11 (1.4) 9 (1.1)
Bone anatomy/identification	2	1	4	2	0	0	9 (1.1)
Histology	1	0	1	4	2	0	8 (1.0)
Legal issues/Medicolegal significance	0	1	0	0	2	0	3 (0.4)
Bias/Cognition/Psychology	0	0	0	0	3	0	3 (0.4)
Gait analysis	0	0	0	0	1	0	1 (0.1)
Non-osseous	U	U	U	U	1	U	1 (0.1)
Age (Soft tissue)	1	0	1	2	0	0	4 (0.5)
	0	0	1	0	0	0	()
Age + Sex (Hair)	0 1	0				0	
Sex (Facial soft tissue)	0	0	1	0	0 1	0	2 (0.3) 1 (0.1)
Sex (Fingerprints)	0 1	0	0	0		-	()
Sex + Ancestry (Fingerprints)	-				0	0	1 (0.1)
Sex + Stature + Body mass + Gait (Footprints)	0	0	1	0	0	0	1 (0.1)
Total	83	56	269	140	222	23	793
							(100.0)
	(10.5)	(7.1)	(33.9)	(17.7)	(28.0)	(2.9)	(100.0)

TABLE 3—Representation of samples with European ancestry in articles directly related to ancestry (n = 58) and in articles unrelated to ancestry (n = 735).

	Related Papers		Unrelated Papers	
	n	%	n	%
Europeans only	4	6.9	274	37.3
Europeans with some other group	47	81.0	86	11.7
No Europeans represented	7	12.1	161	21.9
Ancestry of sample not reported	0	0.0	106	14.4
Ancestry not applicable	0	0.0	108	14.7

Hawaiian or other Pacific Islanders only appear in 2.6% of U.S. studies (n=4). The three studies listed under "Some other race" identified Aboriginal Australians in their samples, which is a group that is not well-defined under U.S.

TABLE 4—Number of U.S. publications using a certain population ancestry for which sample ancestral composition was reported (n = 152).

	n	%
White	105	69.1
Black or African American	73	48.0
Hispanic or Latino	49	32.2
Asian	43	28.3
American Indian and Alaska Native	22	14.5
Native Hawaiian or Other Pacific Islander	4	2.6
Some other race	3	2.0
Two or more races	6	3.9

Census Bureau or OMB guidelines. The category "Two or more races" refers to individuals that identify with more than one of the other listed races, which in this context were samples that are specifically noted, known, or defined to be

admixed such as with the terms South African Coloured, Mixed, and the like.

## **Discussion**

Forensic anthropology is demonstrably WEIRD and white. Our results show that both the producers of knowledge and their subjects of study are predominantly situated in WEIRD contexts and belong to white populations. Although we approach this study from our own unique positionalities and do not represent all POC, we quantify here only a sliver of what we believe are long-held, yet perhaps inhibited or undervalued, sentiments of minorities and POC (to include BIPOC, BAME, QPOC, URM, and all other acronyms that stand for people of color)<sup>1</sup> discontent with the lack of diversity and inclusion in biological anthropology. Scholars of color in and out of WEIRD settings have much to contribute. Yet, despite numerous studies showing the important contributions of diversity and inclusion to the quality, growth, and, indeed, survival of disciplines (Apfelbaum et al. 2014; Freeman & Huang 2014; Hong & Page 2004; Page 2008; Smith-Doerr et al. 2017), current structures of power remain in the field—along axes of race, ethnicity, gender, nation, educational background, class, and more—often to the exclusion of others. We recognize that the current study design is not able to delve deeper into these other axes of power, but do want to reiterate their importance in the dynamics of power. Likewise, the continued focus on using European samples inaccurately represents global human variation, impeding our practice from serving all peoples equitably.

# **Knowledge Production by Whom**

WEIRD countries dominate the academic landscape of forensic anthropology. Our findings show that greater than three-fourths of all articles and of all citations are credited to authors at WEIRD institutions. Indeed, the most widely used methods in forensic anthropology have emerged from scholarship in the United States, Canada, and Western European countries (see Juarez et al. 2021). Admittedly, our survey only uses English language journals. However, those who publish in non-English journals are not being read, cited, or

used in the wider scope of the discipline. This reality may echo the greater issue of holding U.S. and other English-dominant academic institutions as the model for successful scholarship (Dedoussis 2007). Reinforced by English becoming the *lingua franca* of research and knowledge (Baker 2011; Tietze & Dick 2009), conforming to such models is a common instance of academic colonialism where Westernized ideals act as the hubs of knowledge production and impose such systems on universities outside the West (Friedman 1965; Sengupta 2021; Shih 2010).

In our analysis, Japan, Brazil, and South Africa stand as notable exceptions to the dominance of the WEIRD, exhibiting relatively high article counts, citations, and *h*-indices. Although not immediately related to WEIRDness, Japan's participation in forensic anthropology publishing may stem not only from boasting one of the world's highest investments in research and development by percentage of GDP (UNE-SCO Institute for Statistics 2020), but perhaps also from a historically well-developed physical anthropology discipline driven by imperialist and nationalist agendas seeking the origins of a homogeneous Japanese identity (Low 2012). For Brazil and South Africa on the other hand, it may be worth noting who is leading research efforts in these more racially heterogeneous countries where white privilege in academia remains prevalent (Heleta 2016; Hlatshwayo 2015; Lima 2006).

Perhaps one of the most dangerous impediments to a diverse and inclusive roster of professionals is the myth of a meritocracy. Universities, agencies, or offices can easily justify recruiting the "best" candidate with a proven record of success, experience, and ability. Often in forensic anthropology, these are measured through the number of publications and their subsequent citation scores, a history of successful funding acquisitions, participation in field schools and internships, advanced degrees from elite institutions, and, conceivably, connections to well-known panjandrums. When such a culture is bought into, those who are successful can more easily attribute their success to talent and hard work while ignoring the role privilege plays. For instance, the works of POC anthropologists in the United States, specifically Black scholars, have been repeatedly excluded from citations (Bolles 2013), while on a global scale, our findings indicate that articles authored by scholars from Western countries garner disproportionately higher citations than from non-WEIRD counterparts. Moreover, funding success is heavily tied to social connections (Ebadi & Schiffauerova 2015) and runaway success (Bol et al 2018). Students of color, those from lower socioeconomic classes, and women are far less likely to pursue graduate studies due to various structural inequalities and the hostile environments fostered by and tolerated in academia (Antón et al. 2018, National Academies of Science, Engineering, and Medicine 2018; Thomas & Hollenshead 2001; Turner et al. 2018). Field school costs are prohibitive, and field work is differentially accessible or

<sup>1.</sup> BIPOC stands for Black, Indigenous, and people of color, and is used prominently in the United States to emphasize the specific injustices affecting Black and Indigenous people. BAME stands for Black, Asian, and Minority Ethnic, and originated in the United Kingdom as a collective term for all non-British white populations. QPOC stands for Queer people of color, and highlights the specific challenges non-white members of the LGBTQIA+ community face. URM stands for underrepresented minority, and commonly refers to the low level of participation of Native American, Alaskan Native, Black, Hispanic, and Pacific Islander groups in U.S. higher education relative to the general population. These collective terms have been criticized for aggregating the unique circumstances of each constituent group.

welcoming to different social identities (Nelson et al. 2017). Academic communities are often informally framed as friendship-based, where inclusion depends on one's ability to fit in and garner a "good feeling" from others, which inadvertently reproduces Euro-American white upper-class heteronormativity (Leighton 2020). In addition, white scholars may be ignorant of or find mundane the very real struggles that scholars of color must endure to reach the same highly regarded career-advancing opportunities, such as the discriminatory policies of visa acquisition in attending academic conferences (Anonymous 2020; Garvalov 2004), of publishing in esteemed journals (le Roux 2015; Salager-Meyer 2008), or of having educational degrees and work experiences accredited when transferred to the "First World" (Boyd 2013; Guo & Andersson 2005).

Forensic anthropologists are unique in their training and positions as researcher-practitioners. We are molded within academia before joining the workforce, the majority of which is comprised of academic positions but also those that conduct casework and steer policy. Further, as a discipline that is tightly intertwined with the medicolegal system, forensic anthropology operates within the bounds of objectivity, board certification, and accreditation standards. Currently, these factors are mostly fueled by WEIRD perspectives. As a result, this creates multiple, superimposed layers that potentially filter out diversity from our ranks with each subsequent level, but especially so in the presence of laissez-faire complacency by those in privileged positions. Any scientific inference, including those in forensic anthropology, is shaped by the lived experiences of its members. In such "situated knowledges" (Haraway 1988), there is great opportunity. Without a diverse body of knowledge and experience to draw from, we succumb to increased rates of bias, limit ourselves in the questions we ask, and, ultimately, prevent advancements in the field.

# **Knowledge Production for Whom**

In conjunction with knowledge production, we must also be conscious of our stakeholders for whom much of this knowledge serves, including the unidentified, their families, and the medicolegal professional community. Our data demonstrate a bias in the use of European-derived samples not only in ancestry estimation publications, but also in all other areas of forensic anthropology research. In articles specifically studying ancestry, European-derived populations are included 87.9% of the time as a category for comparison to other groups, while only 12.1% do not include Europeans in their comparisons. Furthermore, 49.0% of articles where ancestry estimation is not the main focus use white subjects solely or in part, reinforcing a historic tendency to measure all human variation against one particular norm. What percentage remains is split among numerous non-European groups, in which most of the diversity is actually

represented. A methodological bias towards a white norm is also represented in sample justification. Some researchers may find that they are asked to justify their choice to specifically study non-white populations, yet the use of white samples remains largely unquestioned. This hypocrisy is not lost on us. Future studies may also more deeply investigate whether white skeletons are more often chosen even in reference collections that house multiple populations.

Most people are not WEIRD, and our research should reflect as much. As communities become more heterogeneous in a globalizing world, the need for greater diversity in our samples and methodologies continues to become more apparent. So, why are forensic anthropologists not studying more diverse groups? While it remains true that Europeanderived samples have been the most abundant and accessible "samples of convenience" (Kemkes 2007), we no longer view this as an acceptable excuse precisely because such collections were the product of WEIRD priorities and initiatives. With technological advancements, a trend to establish and publish local skeletal samples outside of Europe and their rich former colonies (e.g., Bosio et al. 2012; Chi-Keb et al. 2013; Cunha et al. 2018; de Carvalho et al. 2020; Go et al. 2017; Salceda et al. 2012; Sanabria-Medina et al. 2016; Techataweewan et al. 2017), and an increasing willingness for data-sharing, we argue that using the same homogeneous samples over and over again reifies structures that disproportionately harm non-WEIRD groups but are not felt by the WEIRD majority (Hill Collins 2015; Watkins 2020).

Focusing on the United States as a case study, European and European-derived samples represent 69.1% of all published studies in this bibliometric analysis (see Table 4). Previously, sample demographics from the Forensic Anthropology Data Bank have been compared to contemporaneous census data, showing relatively close proportions (Algee-Hewitt 2016). While this information is useful, there is a disconnect here that does a great disservice to our discipline: census data is not reflective of our stakeholders, especially considering the demographics of marginalized populations and those that enter the forensic context (e.g., Kochanek et al. 2019; Lauritsen et al. 2014; Tillyer & Tillyer 2016). In fact, white Americans are substantially more likely to will their bodies to skeletal collections than people of color and are significantly more represented in the William M. Bass Donated Skeletal Collection than in the U.S. Census (Winburn et al. 2020). This imbalance in representation is often reflected in both method creation and application in forensic anthropology. Therefore, when considering representation and diversity, we should be less concerned with proportions based on the U.S. Census, and strive for equal representation of samples. Only by increasing the inclusion of diverse samples and actually studying them to the same level as has been historically true for the most widely used Europeanderived collections can we begin to ameliorate such a problematic disconnect.

# **Moving Forward**

For the WEIRD, white anthropologist there is little incentive to change the status quo. Taking advantage of positionalities of white privilege will continue to secure them funding, tenure, status, and recognition. Yet, if their interest in pursuing and applying anthropological inquiry stems from a desire to improve the field as a whole, then this call for reflexive introspection and action provides that incentive for change. How can our professional societies, departments, research institutes, field schools, and universities be pushed to change the reward systems? Raising candid discussions on the problems perpetuated by current reward systems that disproportionately favor WEIRD anthropologists and acknowledging racial hierarchies and WEIRD dominance in the field are only the first few steps to addressing the issue of representation in forensic anthropology. When considering who is producing the knowledge for whom in forensic anthropology, we must also think about who these individuals are training and working with. To create a more inclusive discipline, we must focus our attention on recruitment, retention, and active collaboration.

Increasing diversity must be conducted from the ground up with particular attention dedicated to fostering early interest in forensic anthropology. Anthropology in general is still a relatively unfamiliar field to the public. Consequently, anthropology requires a more intentional introduction to potential students. Guest lectures and workshops, high school and undergraduate courses, participation in STEM fairs, and social media are tools that are becoming more commonly employed by our peers. While recruitment of a diverse body of students at the earliest academic stages is important, it holds no meaning without the ability to retain these students. Resources and opportunities at the undergraduate level increase the likelihood of retention to the graduate level (Barbera et al. 2020; Nagda et al. 1998; Wilson et al. 2012). Opportunities may manifest as research assistantships or individual research projects. Funding opportunities or recognition for one's research also tend to be the greatest incentives for further pursuit in the field (Quarterman 2008; Williams 2007; Xu & Webber 2018). We suggest adapting and targeting such initiatives to POC in WEIRD countries and internationally to scholars in non-WEIRD countries as well. We also encourage the forensic anthropology community to view these efforts as measures of success on par with traditional rubrics like publications and grants.

Recruitment within diverse settings is essential, but has been dismal. In the United States, students at minority-serving institutions such as community colleges, tribal colleges and universities, and Hispanic-serving institutions are significantly disadvantaged in pursuing careers in forensic anthropology, either because of the unavailability of departmental faculty and programs at these institutions, or being outcompeted by well-trained students from historically white

colleges and universities (Antón et al. 2018). To press this point further, there are, disappointingly, no anthropology departments with a sufficient focus on biological, let alone forensic, anthropology among historically Black colleges and universities (HBCUs). To our knowledge, only Lincoln University and Spelman College have undergraduate majors in anthropology (Spelman's major is named sociology and anthropology), and only Morgan State University offers a forensic anthropology course in their catalog under an anthropology track within their sociology major. Howard University was unique among HBCUs in the strength of its four-field program, yet its department was closed in 2011 (Bugarin et al. 2010; Dominguez 2011). Howard's remaining strength in biological anthropology is dispersed among its medical school, biology, and anatomy programs, and the now independent W. Montague Cobb Research Laboratory. No graduate programs in biological anthropology exist at HBCUs. Many students at HBCUs interested in forensic anthropology must pursue circuitous paths in biology, anatomy, criminal justice, sociology, or cultural anthropology, thereby placing the burden on Black students as they attempt to navigate their career trajectories.

Mentorship is identified as one of the main ways to increase diversity, not just in the presence of a more diverse pool of mentors, but also in the methods of mentoring that help retain diverse students (Winburn et al. 2021). The current structures of academia in the West create additional barriers to diversity by making it inherently more difficult for members of underrepresented groups to succeed and stay in the field. It also quashes new perspectives and ingenuity that is paramount to good science (see Antón et al. 2018). POC and members of other underrepresented groups are expected to assimilate to an inflexible, WEIRD-dominated environment to succeed. Even scholars operating in non-WEIRD contexts must adapt to Western standards to gain respect and recognition. Further, when scholars do participate under the current academic structure and succeed through publications, their work is often underappreciated, underrepresented, and under-cited (Bolles 2013; Watkins 2020). If we are to improve diversity in our students and future colleagues, mentors cannot and should not perpetuate or enforce antiquated views of WEIRD success in academia that encourage competition, publish-or-perish mentalities, or individualistic indicators (Lewis & Olshanksy 2016). In addition, mentors, colleagues, and peers must be aware of their own everyday privileges, which may be easily forgotten, and be cognizant not to project those same privileges on others (Chugh 2018).

Our study found that only 6.8% of articles were coauthored by scholars from both WEIRD and non-WEIRD countries, meaning either these instances are truly rare, non-WEIRD authors are more often relegated to less coveted author positions, collaborations are published in less impactful journals, or all three. To reduce inequality by recognizing—and changing—hierarchies of race, nation, and socioeconomic position, active collaboration is crucial. By active, we do not mean simply providing co-authorships or acknowledgements to non-WEIRD and POC collaborators for the use of local collections, local access, or local labor, nor do we mean leaving less desirable, less citable research topics for non-WEIRD researchers to take on and have consigned to predatory journals (Xia et al. 2015) after highimpact studies have been investigated by visiting WEIRD researchers. We mean using power and privilege to bolster local capacity in sustainable, respectful ways that build up forensic anthropology in non-WEIRD countries. Concrete actions can include: training students and professionals; funding degree and exchange programs, laboratories, and lobbying efforts; supporting local initiatives such as organized symposia and the formation of professional associations; yielding prestige such as first author and principal investigator positions; and sharing power in grounded research direction and design, to name a few.

In this reflexive and positional exercise, we hope to make visible how whiteness in the form of WEIRDness informs the history, values, and practices of forensic anthropology on a global scale. Our data make undeniable that forensic anthropology researchers in the United States, Canada, Europe, and Australia are thriving. Conversely, WEIRD scholarship is so well-funded and well-cited that it can overshadow, dictate, co-opt, or, at times, undermine the efforts of non-WEIRD and POC scholars. Instead, we challenge our white and WEIRD colleagues to shed neocolonial practices of what has traditionally been the treatment of non-WEIRD and POC collaborators as assistants rather than partners on equal footing who possess different but nonetheless valuable perspectives. We also call on our WEIRD colleagues to acknowledge their white privilege and to use their power to advocate for a more inclusive and representative field—advancing forensic scientific inquiry itself—now and moving forward.

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## References

Aguilar FV Jr. Tracing origins: *Ilustrado* nationalism and the racial science of migration waves. *The Journal of Asian Studies* 2005; 64(3):605–637.

Ainsworth C. Sex redefined. Nature 2015;518(7539):288-291.

Aitchison K, Rocks-Macqueen D. Archaeology Labour Market Intelligence: Profiling the Profession 2012-13. Sheffield, UK: Landward Research; 2013.

Algee-Hewitt BFB. Population inference from contemporary American craniometrics. *American Journal of Physical Anthropology* 2016; 160:604–624.

Amir D, Ellison PT, Hill KR, Bribiescas RG. Diurnal variation in salivary cortisol across age classes in Ache Amerindian males of Paraguay. *American Journal of Human Biology* 2015; 27:344–348.

Anonymous. Personal perspective on inequality: Conference attendance as an Iranian citizen. *FEMS Microbiology Letters* 2020; 367(17):fnz244.

Antón SC, Malhi RS, Fuentes A. Race and diversity in U.S. biological anthropology: A decade of AAPA initiatives. *American Journal of Physical Anthropology* 2018; 165:158–180.

Apfelbaum EP, Phillips KW, Richeson JA. Rethinking the baseline in diversity research. *Perspectives on Psychological Science* 2014; 9(3):235–244.

Arnett JJ. The neglected 95%: Why American psychology needs to become less American. *American Psychologist* 2008; 63(7):602–614.

Asad T. *Anthropology and the Colonial Encounter*. London: Ithaca Press; 1973.

Astorino CM. Beyond dimorphism: Sexual polymorphism and research bias in biological anthropology. *American Anthropologist* 2019; 121(2):489–490.

Astuti R, Bloch M. Why a theory of human nature cannot be based on the distinction between universality and variability: Lessons from anthropology. *Behavioral and Brain Science* 2010; 33:83–84,123–135.

- Athreya S, Ackerman RR. Colonialism and narratives of human origins in Asia and Africa. In: Porr M, Matthews JM, eds. *Interrogating Human Origins: Decolonisation and the Deep Past*. Abingdon, UK: Routledge; 2020:72–95.
- Baker LD. From Savage to Negro: Anthropology and the Construction of Race, 1896-1954. Berkeley, CA: University of California Press; 1998.
- Baker W. English as an academic lingua franca and intercultural awareness: Student mobility in the transcultural university. *Language and Intercultural Communication* 2016; 16(3):437–451.
- Barbera SA, Berkshire SD, Boronat CB, Kennedy MH. Review of undergraduate student retention and graduation since 2010: Patterns, predictions, and recommendations for 2020. *Journal of College Student Retention: Research, Theory & Practice* 2020; 22(2):227–250.
- Bardolph DN. A critical evaluation of recent gendered publishing trends in American archaeology. *American Antiquity* 2014; 79:522–540.
- Barrett HC. Deciding what to observe: Thoughts for a post-WEIRD generation. *Evolution and Human Behavior* 2020; 41(5):445-453.
- Baumard N, Sperber D. Weird people, yes, but also weird experiments. *Behavioral and Brain Sciences* 2010; 33:80–81.
- Bethard JD. Historical trends in graduate research and training of diplomates of the American Board of Forensic Anthropology. *Journal of Forensic Sciences* 2017; 62(1):5–11.
- Bethard JD, DiGangi EA. From the laboratory to the witness stand: Research trends and method validation in forensic anthropology. In: Fulginiti LC, Hartnett-McCann K, Galloway A, eds. *Forensic Anthropology and the United States Judicial System*. Hoboken, NJ: Wiley; 2019:41–52.
- Bethard JD, DiGangi EA. Moving beyond a lost cause: Forensic anthropology and ancestry estimates in the United States. *Journal of Forensic Sciences* 2020; 65(5):1791–1792.
- Blum SD. Unseen WEIRD assumptions: The so-called language gap discourse and ideologies of language, childhood, and learning. *International Multilingual Research Journal* 2017; 11:23–28.
- Bol T, de Vaan M, van de Rijt A. The Matthew effect in science funding. *Proceedings of the National Academy of Sciences* 2018; 115(19):4887–4890.
- Bolles L. Telling the story straight: Black feminist intellectual thought in anthropology. *Transforming Anthropology* 2013; 21(1):57–71.
- Bosio LA, García Guraieb S, Luna LH, Aranda C. Chacarita. Project: Conformation and analysis of a modern and documented human osteological collection from Buenos Aires City—theoretical, methodological, and ethical aspects. HOMO 2012; 63:481–492.
- Boyd M. Accreditation and the labor market integration of internationally trained engineers and physicians in Canada. In: Triadafilopoulos T, ed. *Wanted and Welcome? Policies for Highly Skilled Immigrants in Comparative Perspective*. New York; NY: Springer; 2013:165–197.
- Brace CL. Region does not mean "race"—reality versus convention in forensic anthropology. *Journal of Forensic Sciences* 1995; 40:171–175.
- Brodkin K, Morgen S, Hutchinson J. Anthropology as white public space? *American Anthropologist* 2014; 113:545–556.
- Bugarin FT, King EM, Mack M, Payne-Jackson A. An impending death for anthropology at Howard University. *Anthropology News* 2010;51(8):28.

Bustamante CD, De La Vega FM, Burchard EG. Genomics for the world. *Nature* 2011; 475:163–165.

- Camacho KL. Filipinos, Pacific Islanders, and American empire. In: Yoo DK, Azuma E, eds. *The Oxford Handbook of Asian American History*. New York, NY: Oxford University Press; 2016:13–29.
- Caspari R. Deconstructing race: Racial thinking, geographic variation, and implications for biological anthropology. In: Larsen CS, ed. *A Companion to Biological Anthropology.* West Sussex, UK: Blackwell Publishing; 2010:104–122.
- Chi-Keb JR, Albertos-González VM, Ortega-Muñoz A, Tiesler VG. A new reference collection of documented human skeletons from Mérida Yucatan, Mexico. HOMO 2013; 64:366–376.
- Chiao JY, Cheon BK. The weirdest brains in the world. *Behavioral and Brain Science* 2010; 33:88–90,123–135.
- Christensen AM, Crowder CM. Evidentiary standards for forensic anthropology. *Journal of Forensic Sciences* 2009; 54(6): 1211–1216.
- Chugh D. Use your everyday privilege to help others. Harvard Business Review. September 18, 2018. http://hbr.org/2018/09/use-your-everyday-privilege-to-help-others. Accessed November 16, 2020.
- Clancy KBH. The perils and promise of the WEIRD: Contextualizing results from WEIRD and non-WEIRD populations. Presented at the 88th Annual Meeting of the American Association of Physical Anthropologists, March 27–30, 2019; Cleveland, OH.
- Clancy KBH, Davis JL. Soylent is people, and WEIRD is white: Biological anthropology, whiteness, and the limits of the WEIRD. *Annual Review of Anthropology* 2019; 48:169–186.
- Committee on Identifying the Needs of the Forensic Sciences Community. *Strengthening Forensic Science in the United States: A Path Forward.* Washington, DC: The National Academies Press: 2009.
- Cunha E, Lopez-Cap TT, Inojosa R, Marques SR, Moraes LOC, Liberti E, et al. The Brazilian identified human osteological collections. *Forensic Science International* 2018; 289:449.e1– 449.e6.
- CuUnjieng Aboitiz N. Asian Place, Filipino Nation: A Global Intellectual History of the Philippine Revolution, 1887–1912. New York, NY: Columbia University Press; 2020.
- de Carvalho MVD, Lira VF, do Nascimento EA, Kobayashi SBT, de Araújo LF, de Almeida AC, et al. New acquisitions of a contemporary Brazilian identified skeletal collection. *Forensic Science International: Reports* 2020; 2:100050.
- Dedoussis EV. Issues of diversity in academia: Through the eyes of 'third-country' faculty. *Higher Education* 2007; 254:135–156.
- DiGangi EA, Bethard JD. Uncloaking a lost cause: Decolonizing ancestry estimation in the United States. *American Journal of Physical Anthropology* 2021;Early View. doi: 10.1002/ajpa.24212.
- Dominguez VR. Letter by President Dominguez in response to the decision of Howard University to close the anthropology program. American Anthropological Association. February 8, 2011. https://www.americananthro.org/ParticipateAndAdvocate/AdvocacyDetail.aspx?ItemNumber=12853. Accessed January 19, 2021.
- Donlon D. The development and current state of forensic anthropology: An Australian perspective. In: Blau S, Ubelaker DH, eds. *Handbook of Forensic Anthropology and Archaeology*. New York, NY: Routledge; 2016:126–139.
- Ebadi A, Schiffauerova A. How to receive more funding for your research? Get connected to the right people! *PLoS ONE* 2015; 10(7):e0133061.
- Foster MW, Sharp RR. Beyond race: Towards a whole-genome perspective on human populations and genetic variation. *Nature Reviews Genetics* 2004; 5:790–796.

- Frankenberg R. The mirage of unmarked whiteness. In: Rasmussen BB, Klinenberg E, Nexica IJ, Wray M, eds. *The Making and Unmaking of Whiteness*. Durham, NC: Duke University Press; 2001:72–96.
- Freeman HB, Huang W. Collaboration: Strength in diversity. *Nature* 2014; 513:305.
- Friedman NL. New orders and old: Historians, educationists, and the dynamics of academic imperialism. *The American Behavioral Scientist* 1965;9(2):24–29.
- Fulkerson TJ, Tushingham S. Who dominates the discourse of the past? Gender, occupational affiliation, and multivocality in North American archaeology publishing. *American Antiquity* 2019; 84:379–399.
- Garvalov BK. Struggling to attend U.S. meetings. *Science* 2004; 306:609.
- Go MC, Lee AB, Santos JAD, Vesagas NMC, Crozier R. A newly assembled human skeletal reference collection of modern and identified Filipinos. *Forensic Science International* 2017; 271:128.e1–128.e5.
- Grivas CR, Komar DA. *Kumho*, *Daubert*, and the nature of scientific inquiry: Implications for forensic anthropology. *Journal of Forensic Sciences* 2008; 53:771–776.
- Guo S, Andersson P. Non/recognition of foreign credentials for immigrant professionals in Canada and Sweden: A comparative analysis. PCERII Working Paper Series Working Paper No. WP04-05. University of Alberta, Edmonton; 2005.
- Gurven MD, Lieberman DE. WEIRD bodies: Mismatch, medicine and missing diversity. *Evolution and Human Behavior* 2020; 41(5):330-340.
- Handly JM. A gendered review of the *Canadian Archaeological Association Bulletin* (1969–1976) and the *Canadian Journal of Archaeology* (1977–1993). *Canadian Journal of Archaeology* 1995; 19:61–78.
- Haraway D. Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies* 1988; 14(3):575–599.
- Harrison FV. The persistent power of "race" in the cultural and political economy of racism. *Annual Review of Anthropology* 1995; 24:47–74.
- Heath-Stout LE. Who writes about archaeology? An intersectional study of authorship in archaeological journals. *American Antiquity* 2020; 85(3):407–426.
- Hefner JT. The macromorphoscopic databank. *American Journal of Physical Anthropology* 2018; 166:994–1004.
- Heleta S. Decolonisation of higher education: Dismantling epistemic violence and Eurocentrism in South Africa. *Transformation in Higher Education* 2016;1(1):a9.
- Henrich J, Heine SJ, Norenzayan A. Most people are not WEIRD. *Nature* 2010a; 466:29.
- Henrich J, Heine SJ, Norenzayan A. The weirdest people in the world? *Behavioral and Brain Science* 2010b;33:61–83,123–135.
- Henrich J, Heine SJ, Norenzayan A. Beyond WEIRD: Towards a broad-based behavioral science. *Behavioral and Brain Science* 2010c; 33:111–135.
- Hill Collins P. Science, critical race theory and colour-blindness. *British Journal of Sociology* 2015;66(1):46–52.
- Hirsch JE. An index to quantify an individual's scientific research output. *Proceedings of the National Academy of Sciences* 2005; 102(46):16569–16572.
- Hirschfeld LA. Race in the Making: Cognition, Culture, and the Child's Construction of Human Kinds. Cambridge, MA: MIT Press; 1996.
- Hlatshwayo M. White power and privilege in academic and intellectual spaces of South Africa: The need for sober reflection. Politikon 2015; 42(1):141–145.

- Hogan T. In but not of Asia: Reflections on Philippine nationalism as discourse, project and evaluation. *Thesis Eleven* 2006; 84(1):115–132.
- Hollimon SE. Sex and gender in bioarchaeological research: Theory, method, and interpretation. In: Agarwal SA, Glencross BA, eds. *Social Bioarchaeology*. Chichester, UK: Wiley-Blackwell; 2011:149–182.
- Hong L, Page SE. Groups of diverse problem solvers can outperform groups of high-ability problem solvers. *Proceedings of the National Academy of Sciences* 2004; 101:16385–16389.
- Howes C, Brodkin K, Codrington R. Report to the AAA Executive Board: Task Force on Race and Racism Survey of the Membership. Arlington, VA: American Anthropological Association; 2014.
- Ignacio LF. Asian Americans and Pacific Islanders (Is There Such an Ethnic Group?). San Jose, CA: Pilipino Development Associates, Inc.; 1976.
- İşcan MY. Rise of forensic anthropology. *Yearbook of Physical Anthropology* 1988; 31:203–230.
- Johnson R, Watkinson A, Mabe M. The STM report: An overview of scientific and scholarly publishing. International Association of Scientific, Technical and Medical Publishers; 2018.
- Jones G. Not a Yes or No Question: Critical Perspectives on Sex and Gender in Forensic Anthropology [MA thesis]. Windsor, ON: University of Windsor; 2014.
- Juarez CA, Hughes CE, Yim A-D. Technical note: A report on the Forensic Anthropology Database for Assessing Methods Accuracy. American Journal of Physical Anthropology 2021; 174(1):149–150.
- Kanim S, Cid XC. The demographics of physics education research. *arXiv*:1710.02598 [physics.ed-ph]; 2017.
- Karasik LB, Adolph KE, Tamis-LeMonda CS, Bornstein H. WEIRD walking: Cross-cultural research on motor development. *Behavioral and Brain Science* 2010; 33:95–96,123–135.
- Kemkes A. The unknown female from Cologne: Science at a dead end? In: Brickley M, Ferllini R, eds. Forensic Anthropology: Case Studies from Europe. Springfield, IL: Charles C. Thomas; 2007:120–136.
- Kochanek KD, Murphy SL, Xu J, Arias E. Deaths: Final data for 2017. National Vital Statistics Reports 2019; 68(9):1–77.
- Konigsberg LW, Algee-Hewitt BFB, Steadman DW. Estimation and evidence in forensic anthropology: Sex and race. *American Journal of Physical Anthropology* 2009; 139:77–90.
- Langley NR, Tersigni-Tarrant M. Core competencies in forensic anthropology: A framework for education, training, and practice. Forensic Anthropology 2020; 3(2):75–80.
- Lauritsen JL, Rezey ML, Heimer K. Violence and economic conditions in the United States, 1973-2011: Gender, race, and ethnicity patterns in the National Crime Victimization Survey. *Journal of Contemporary Criminal Justice* 2014; 30(1):7–28.
- le Roux E. Discrimination in scholarly publishing. *Critical Arts* 2015;29(6):703–704.
- Leavens DA, Bard KA, Hopkins WD. BIZARRE chimpanzees do not represent "the chimpanzee". *Behavioral and Brain Science* 2010; 33:100–101,123–135.
- Leavens DA, Bard KA, Hopkins, WD. The mismeasure of ape social cognition. *Animal Cognition* 2019; 22:487–504.
- Leighton M. Myths of meritocracy, friendship, and fun work: Class and gender in North American academic communities. *American Anthropologist* 2020; 122(3):444–458.
- Lesciotto KM. The impact of *Daubert* on the admissibility of forensic anthropology expert testimony. *Journal of Forensic Sciences* 2015; 60(3):549–555.
- Lewis C, Olshansky E. Relational-cultural theory as a framework for mentoring in academia: Toward diversity and growth-fostering

- collaborative scholarly relationships. *Mentoring & Tutoring: Partnership in Learning* 2016; 24(5):383–398.
- Lima A. Blacks as study objects and intellectuals in Brazilian academia. Latin American Perspectives 2006;33(4):82–105.
- Low M. Physical anthropology in Japan: The Ainu and the search for the origins of the Japanese. *Current Anthropology* 2012; 53(S5):S57–S68.
- Majid A, Levinson SC. WEIRD languages have misled us, too. *Behavioral and Brain Science* 2010; 33:103,123–135.
- Malinowski B. Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea. London: G. Routledge & Sons; 1922.
- Meadon M, Spurrett D. It's not just the subjects—There are too many WEIRD researchers. *Behavioral and Brain Science* 2010; 33:104–105,123–135.
- Mills CW. White ignorance. In: Sullivan S, Tuana N, eds. *Race and Epistemologies of Ignorance*. Albany, NY: State University of New York Press; 2007:11–38.
- Morning A. And you thought we had moved beyond all that: Biological race returns to the social sciences. *Ethnic and Racial Studies* 2014a; 37:1676–1685.
- Morning A. Does genomics challenge the social construction of race? *Sociological Theory* 2014b; 32:189–207.
- Mudimbe VY. *The Invention of Africa*. Bloomington: Indiana University Press; 1994.
- Mulder N. Filipino identity: The haunting question. *Journal of Current Southeast Asian Affairs* 2013; 32(1):55–80.
- Nagda BA, Gregerman SR, Jonides J, von Hippel W, Lerner JS. Undergraduate student-faculty research partnerships affect student retention. *The Review of Higher Education* 1998; 22(1):55–72.
- National Academies of Science, Engineering, and Medicine. Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine. Washington, DC: The National Academies Press; 2018.
- National Science Foundation National Center for Science and Engineering Statistics. Survey of Graduate Students and Postdoctorates in Science and Engineering: Fall 2018. http://ncsesdata.nsf.gov/gradpostdoc/. Created March 2020. Accessed August 30, 2020.
- Nelson RG, Rutherford JN, Hinde K, Clancy KBH. Signaling safety: Characterizing fieldwork experiences and their implications for career trajectories. *American Anthropologist* 2017; 119(4):710–722.
- Ocampo AC. "Am I really Asian?": Educational experiences and panethnic identification among second-generation Filipino Americans. *Journal of Asian American Studies* 2013; 16(3): 295–324.
- Ocampo AC. Are second-generation Filipinos 'becoming' Asian American or Latino? Historical colonialism, culture and panethnicity. *Ethnic and Racial Studies* 2014;37(3):425–445.
- Ocampo AC. *The Latinos of Asia: How Filipino Americans Break the Rules of Race.* Stanford, CA: Stanford University Press; 2016.
- Ousley S, Jantz R, Freid D. Understanding race and human variation: Why forensic anthropologists are good at identifying race. *American Journal of Physical Anthropology* 2009; 139(1):68–76.
- Page SE. The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies. Princeton, NJ: Princeton University Press; 2008.
- Palladino P, Worboys M. Science and imperialism. *Isis* 1993; 84:91–102.
- Passalacqua NV, Garvin HM. Experiences in applying to and attending biological anthropology programs focused on human skeletal biology. *Forensic Anthropology* 2018; 1(4):201–214.

Passalacqua NV, Pilloud MA. Ethics and Professionalism in Forensic Anthropology. San Diego, CA: Academic Press; 2018.

- Passalacqua NV, Pilloud M. Education and training in forensic anthropology. *Forensic Anthropology* 2020; 3(2):65–74.
- Pilloud MA, Passalacqua NV. "Why are there so many women in forensic anthropology?": An evaluation of gendered experiences in forensic anthropology. *Forensic Anthropology* 2020; doi: 10.5744/fa.2020.3002.
- Pisares EH. Do you (mis)recognize me: Filipino Americans in popular music and the problem of invisibility. In: Tiongson AT Jr, Gutierrez EV, Gutierrez RV, eds. *Positively No Filipinos Allowed: Building Communities and Discourse.* Philadelphia: Temple University Press; 2006:172–198.
- Popejoy AB, Fullerton SM. Genomics is failing on diversity. *Nature* 2016; 538:161–164.
- Prentice DA, Miller DT. Psychological essentialism of human categories. *Current Directions in Psychological Science* 2007; 16:202–206.
- Quarterman J. An assessment of barriers and strategies for recruitment and retention of a diverse graduate student population. *College Student Journal* 2008; 42(2):947–967.
- Röttger-Rössler B. Bonding and belonging beyond WEIRD worlds: Rethinking attachment theory on the basis of cross-cultural anthropological data. In: Otto H, Keller H, eds. *Different Faces of Attachment: Cultural Variations on a Human Universal Need*. Cambridge, UK: Cambridge University Press; 2014:141–168.
- Rehal S. Blood boundaries in a national soccer team: Contesting the racial and national identities of the Philippine Azkals. *Philippine Sociological Review* 2016; 64:109–138.
- Rondilla JL. The Filipino question in Asia and the Pacific: Rethinking regional origins in diaspora. In: Spickard P, Rondilla JL, Wright DH, eds. *Pacific Diaspora: Island Peoples in the United States and Across the Pacific*. Honolulu: University of Hawai'i Press; 2002:56–66.
- Routman AE. Who gets published in *American Antiquity? SAA Archaeological Record* 2012; 12:25–26,30.
- Saïd EW. Orientalism. New York: Pantheon Books; 1978.
- Salager-Meyer F. Scientific publishing in developing countries: Challenges for the future. *Journal of English for Academic Purposes* 2008; 7(2):121–132.
- Salceda SA, Desántolo B, García Mancuso R, Plischuk M, Inda AM. The 'Prof. Dr. Rómulo Lambre' collection: An Argentinian sample of modern skeletons. *HOMO* 2012; 63:275–281.
- Sanabria-Medina C, González-Colmenares G, Osorio Restrepo H, Guerrero Rodríguez JM. A contemporary Colombian skeletal reference collection: A resource for the development of population specific standards. *Forensic Science International* 2016; 266:577.e1–577.e4.
- Sauer N. Forensic anthropology and the concept of race: If races don't exist, why are forensic anthropologists so good at identifying them? Social Science and Medicine 1992; 34:107–111.
- Sauermann H, Haeussler C. Authorship and contribution disclosures. Science Advances 2017;3(11):e1700404.
- Schall JL, Rogers TL, Deschamps-Braly JC. Breaking the binary: The identification of trans-women in forensic anthropology. *Forensic Science International* 2020; 309:110220.
- Sear R, Sheppard P, Coall DA. Cross-cultural evidence does not support universal acceleration of puberty in father-absent households. *Philosophical Transactions of the Royal Society B* 2019; 374:20180124.
- Sengupta P. Open access publication: Academic colonialism or knowledge philanthropy? *Geoforum* 2021; 118:203–206.
- Senteio C, Hauser E. The legacy of WEIRD theory: Challenges for health impact research with underrepresented populations.

- Poster presented at the 15th Annual Social Informatics Research Symposium at the 82nd Annual Meeting of the Association for Information Science and Technology, October 19, 2019; Melbourne, Australia.
- Setchell JM, Gordon AD. Editorial: Editorial practice at the *International Journal of Primatology*: The roles of gender and country of affiliation in participation in scientific publishing. *International Journal of Primatology* 2018; 39:969–986.
- Shattuck EC. Ecological context and human variation: Applying the principles of biological anthropology to psychoneuroimmunology. In: Yan Q, ed. *Psychoneuroimmunology: Methods and Pro*tocols, Second Edition. Totowa, NJ: Humana Press; 2018:55–76.
- Shih CF. Academic colonialism and the struggle for indigenous knowledge systems in Taiwan. *Social Alternatives* 2010; 29(1):44–47.
- Smith-Doerr L, Alegria S, Sacco T. How diversity matters in the US science and engineering workforce: A critical review considering integration in teams, fields, and organizational contexts. *Engaging Science, Technology, and Society* 2017; 3:139–153.
- Sofaer JR. Gender, bioarchaeology and human ontogeny. In: Gowland R, Knüsel C, eds. *Social Archaeology of Funeral Remains*. Oxford, UK: Oxbow Books; 2006:155–167.
- Standards, Forensic Anthropology Subcommittee. The Organization of Scientific Area Committees for Forensic Science, National Institute of Science and Technology. https://www.nist.gov/osac/forensic-anthropology-subcommittee. Created July 9, 2014, Updated January 19, 2021. Accessed January 28, 2021.
- Stich S. Philosophy and WEIRD intuition. *Behavioral and Brain Science* 2010; 33:110–111.
- Stull KE, Bartelink EJ, Klales AR, Berg GE, Kenyhercz MW, L'Abbé EN, et al. Commentary on: Bethard JD, DiGangi EA. Letter to the editor—Moving beyond a lost cause: Forensic anthropology and ancestry estimates in the United States. *Journal of Forensic Sciences* 2021; 66(1):417–420.
- Sturm C, Oh A, Linxen S, Abdelnour-Nocera J, Dray S, Reinecke K. How WEIRD is HCI? Extending HCI principles to other countries and cultures. In: Proceedings of the 33rd Annual Association for Computing Machinery Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '15), April 18–23, 2015; Seoul, ROK.
- SWGANTH Ancestry Assessment. https://www.nist.gov/system/files/documents/2018/03/13/swganth\_ancestry\_assessment.pdf. Created June 12, 2013. Accessed January 28, 2021.
- Tallman SD, Bird C. Diversity and inclusion in forensic anthropology: Where we stand and prospects for the future. *Forensic Anthropology* 2020; doi: 10.5744/fa.2020.3001.
- Techataweewan N, Tuamsuk P, Toomsan Y, Woraputtaporn W, Prachaney P, Tayles N. A large modern Southeast Asian human skeletal collection from Thailand. *Forensic Science International* 2017; 278:406.el–406.e6.
- Thomas GD, Hollenshead C. Resisting from the margins: The coping strategies of Black women and other women of color faculty members at a research university. *Journal of Negro Education* 2001; 70(3):166–175.
- Tietze S, Dick P. Hegemonic practices and knowledge production in the management academy: An English language perspective. *Scandinavian Journal of Management* 2009; 25(1):119–123.
- Tillyer MS, Tillyer R. Race, ethnicity, and adolescent violent victimization. *Journal of Youth and Adolescence* 2016; 45(7): 1497–1511.
- Turner TR. Brief communication: The 1996 American Association of Physical Anthropology membership survey. *American Journal of Physical Anthropology* 1997; 103(4):565–569.

- Turner TR. Changes in biological anthropology: Results of the 1998 American Association of Physical Anthropology membership survey. *American Journal of Physical Anthropology* 2002; 118(2):111–116.
- Turner TR, Bernstein RM, Taylor AB. Participation, representation, and shared experiences of women scholars in biological anthropology. *American Journal of Physical Anthropology* 2018; 165(S65):126–157.
- UNESCO Institute for Statistics. How Much Does Your Country Invest in R&D? http://uis.unesco.org/apps/visualisations/research-and-development-spending/. Accessed November 21, 2020.
- Van Esterik P. Foreword: Translating conversations: Bridging biological and social approaches to breastfeeding. In: Breastfeeding: New Anthropological Approaches. Tomori C, Palmquist AEL, Quinn EA, eds. New York: Routledge; 2018:xv-xxiii.
- Veile A. Hunter-gatherer diets and human behavioral evolution. *Physiology & Behavior* 2018; 193:190–195.
- Watkins R. An alter(ed)native perspective on historical bioarchaeology. *Historical Archaeology* 2020; 54:17–33.
- Wax M. On licensing anthropologists. *Anthropology News* 1963;4(8):2.
- Wienker C, Rhine SJ. A professional profile of the Physical Anthropology Section membership, American Academy of Forensic Sciences. *Journal of Forensic Sciences* 1989; 34:647–658.
- Wiersema J, Love JC, Naul LG. The influence of Daubert guidelines on anthropological methods and scientific identification in the medical examiner setting. In: Steadman DW, ed. *Hard Evidence: Case Studies in Forensic Anthropology.* 2nd ed. New York, NY: Routledge; 2016:80–90.
- Williams A. Femme fetales: Why do women dominate the discipline of forensic anthropology? In: Proceedings of the 63<sup>rd</sup> Annual Meeting of the American Academy of Forensic Sciences, February 21–26, 2011; Chicago, IL.
- Williams DA. Achieving inclusive excellence: Strategies for creating real and sustainable change in quality and diversity. *About Campus* 2007;12(1):8–14.
- Wilson ZS, Holmes L, deGravelles K, Sylvain MR, Batiste L, Johnson M, et al. Hierarchical mentoring: A transformative strategy for improving diversity and retention in undergraduate STEM disciplines. *Journal of Science Education and Technology* 2012; 21:148–156.
- Winburn A, Jennings A, Steadman D, DiGangi E. Ancestral diversity in skeletal collections: Perspectives on African-American body donation. Forensic Anthropology 2020; doi: 10.5744/fa 2020 1023
- Winburn AP, Tallman, SD, Scott, AL, Bird, CE. Changing the mentorship paradigm: Survey data and interpretations from forensic anthropology practitioners. Forensic Anthropology 2021; doi: 10.57444/fa.2020.4028.
- Xia J, Harmon JL, Connolly KG, Donnelly RM, Anderson MR, Howard HA. Who publishes in "predatory" journals? *Journal* of the Association for Information Science and Technology 2015;66(7):1406-1417.
- Xu YJ, Webber KL. College student retention on a radically diverse campus: A theoretically guided reality check. *Journal of College Student Retention: Research, Theory & Practice* 2018; 20(1):2–28.
- Zialcita FN. Authentic Though Not Exotic: Essays on Filipino Identity. Quezon City, Philippines: Ateneo De Manila University Press; 2005.
- Zulueta J. Identifying "Filipino identity." Sabangan Academic Journal 2015;1(1):49–53.