



Genealogies and Research Networks in Forensic Anthropology Hidden biases and Ethical Concerns

Francisca Alves Cardoso





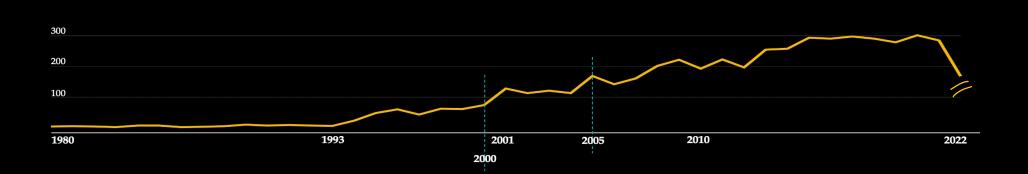


LABOH—Laboratório de Antropologia Biológica e Osteologia Humana, CRIA—Centro em Rede de Investigação em Antropologia, Faculdade de Ciências Sociais e Humanas, Universidade NOVA de Lisboa, Portugal.

Genealogies and Research Networks in Forensic Anthropology Hidden biases and Ethical Concerns

→ Scientific publications based on forensic anthropology have increased significantly in the last 15 years, testifying to the growing landscape of research agendas, scholarly research, methodological increments, and teaching developments...



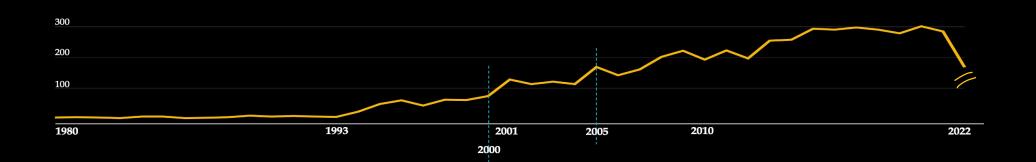




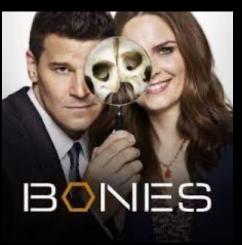
Genealogies and Research Networks in Forensic Anthropology Hidden biases and Ethical Concerns

→ Scientific publications based on forensic anthropology have increased significantly in the last 15 years, testifying to the growing landscape of research agendas, scholarly research, methodological increments, and teaching developments...

→ Forensic Anthropology (FA) has become <u>a buzzword</u> in higher education institutes, and amongst undergraduate and postgraduate students, with its impact expanding beyond academia...







Genealogies and Research Networks in Forensic Anthropology *Profiling*:



1) identify who is publishing in Forensic Anthropology (FA)

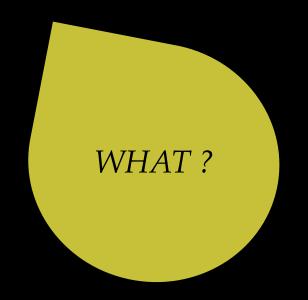


2) identify research agendas/topics and reviews



3) identify major funding bodies.





By WHOM €€€ ?

Genealogies and Research Networks in Forensic Anthropology *Methodological approach:*



1) identify who is publishing in Forensic Anthropology (FA)



2) identify research agendas/topics and reviews



3) identify major funding bodies.

Dimensions Database

- "Forensic Anthropology" OR "forensic anthropologists"
- Title and Abstracts
- Years 2020 2022 (September, 6th)

Descriptive Analysis

• Frequencies and geo-distribution

VOSviewer

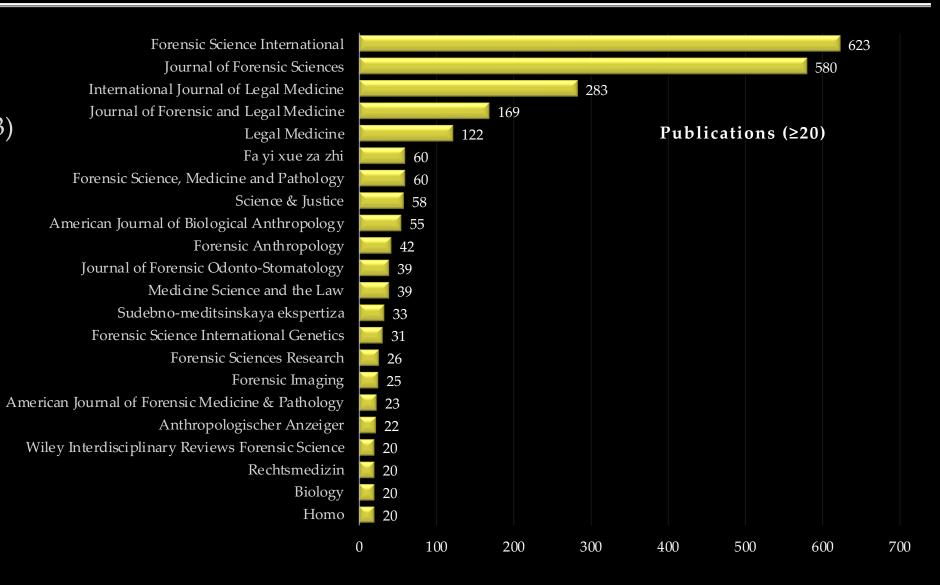
 Research networks: Funding, Co-Authorships & Genealogies, research topics

\rightarrow 3.309 publications



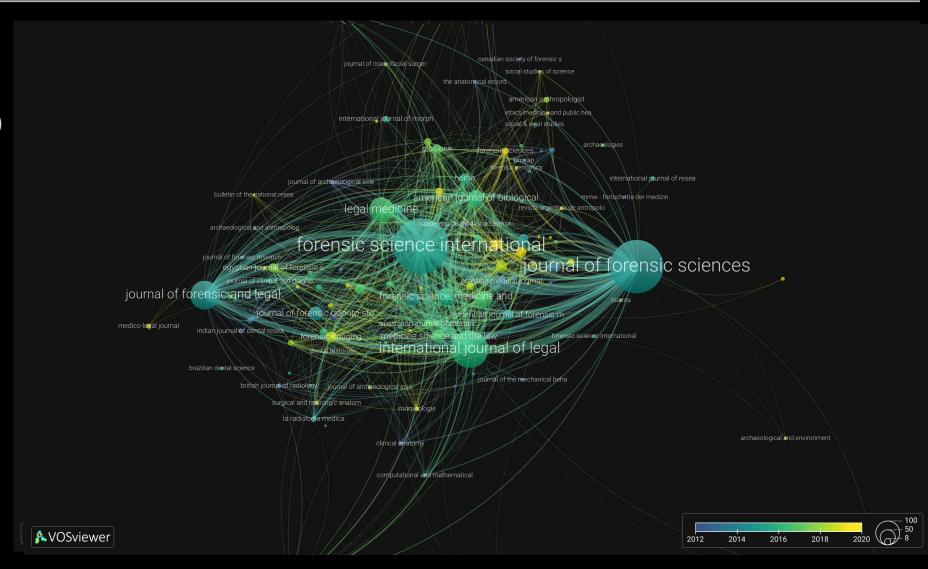
- * Lack of references on grey publications, edited books, books, others (...)
- Limited to the chronology
- Limited to the English language
- Cases of false positives

- \rightarrow 3.309 publications
- \rightarrow Main Journals (n=473)



- \rightarrow 3.309 publications
- \rightarrow Main Journals (n=473)

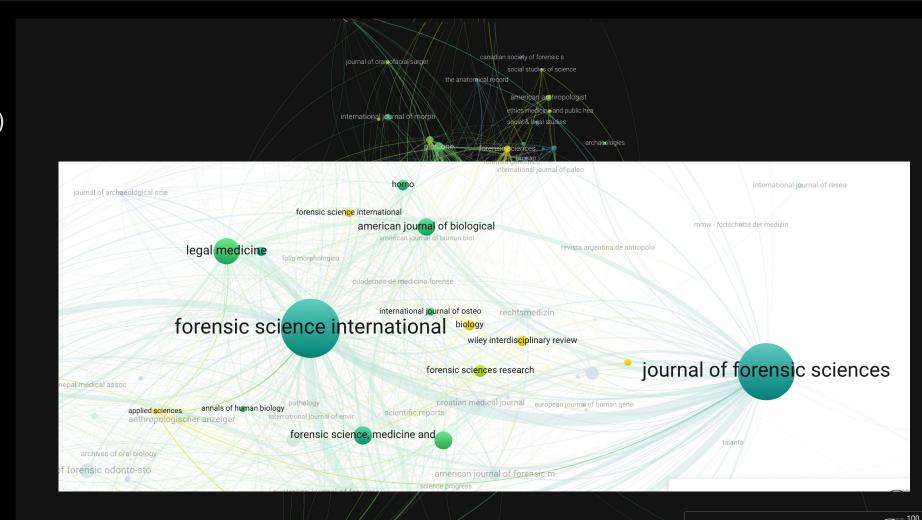




VOSviewer

- \rightarrow 3.309 publications
- \rightarrow Main Journals (n=473)





- \rightarrow 3.309 publications
- \rightarrow Main Journals (n=473)
- → Various fields of research

Medical and Health Sciences

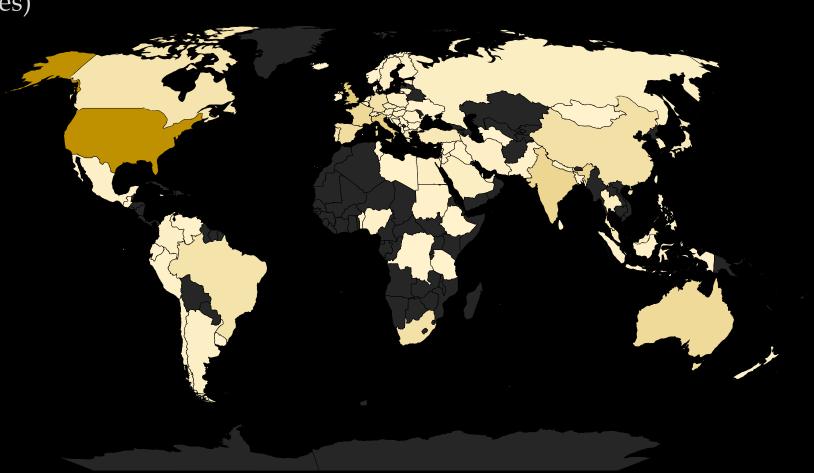
Clinical Sciences

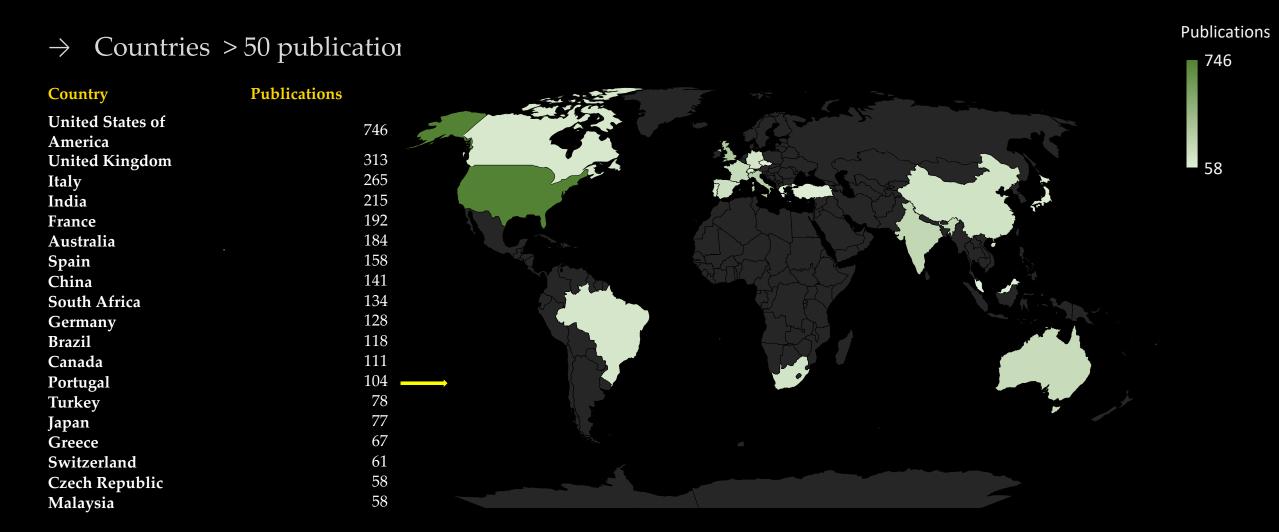
Biological Sciences

Chemical Sciences

Other Biological Sciences

→ 3.309 publications vorldwide (n=89 countries)

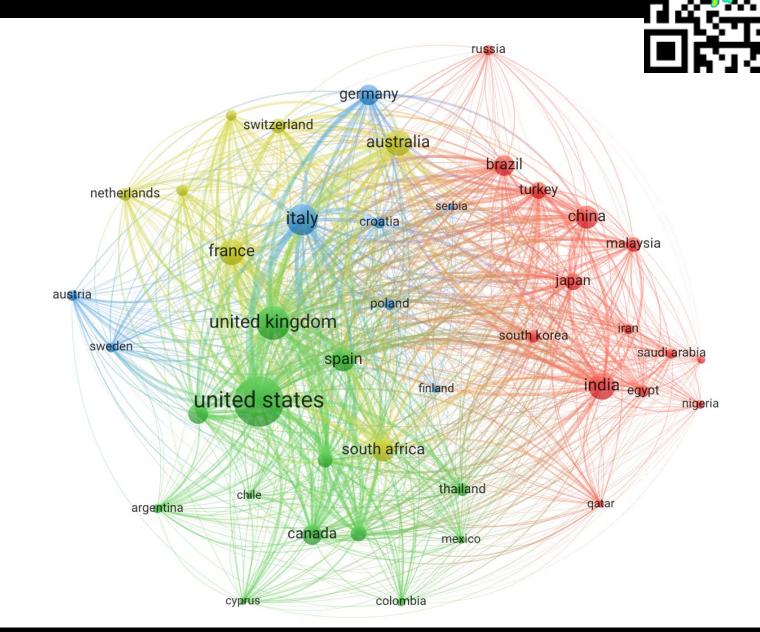


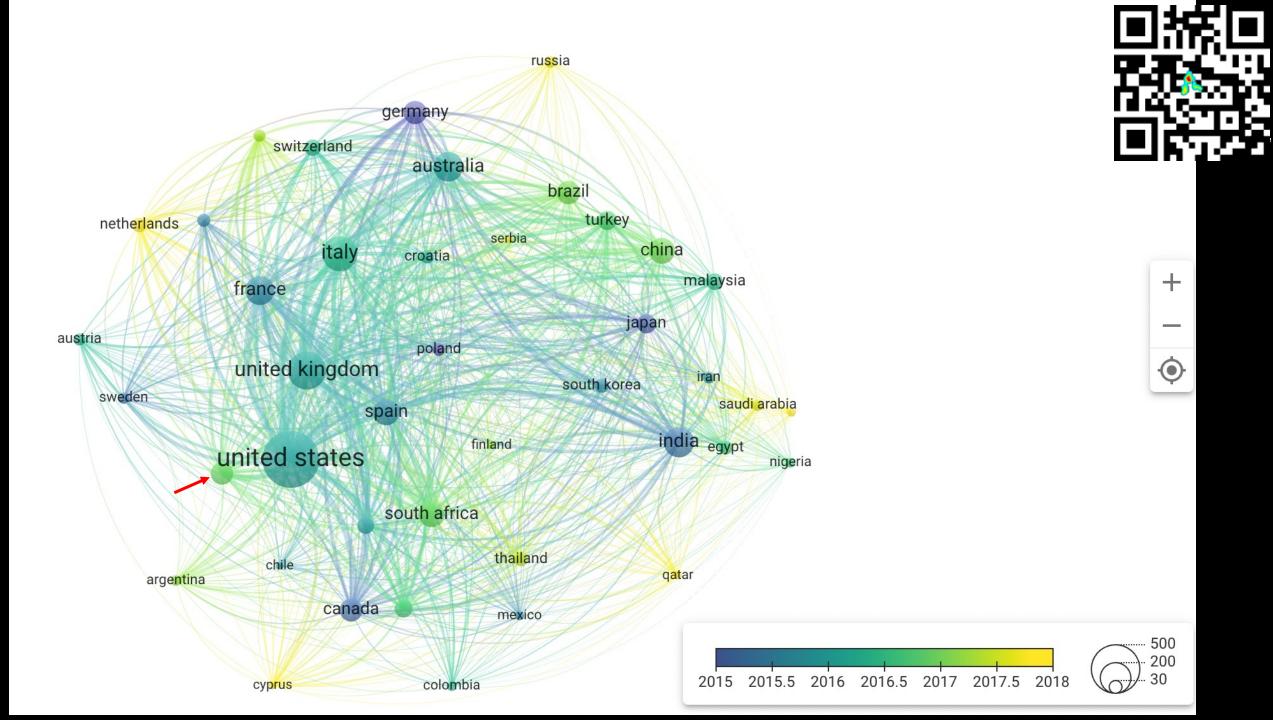


 $Results - \bar{d}ataset$:

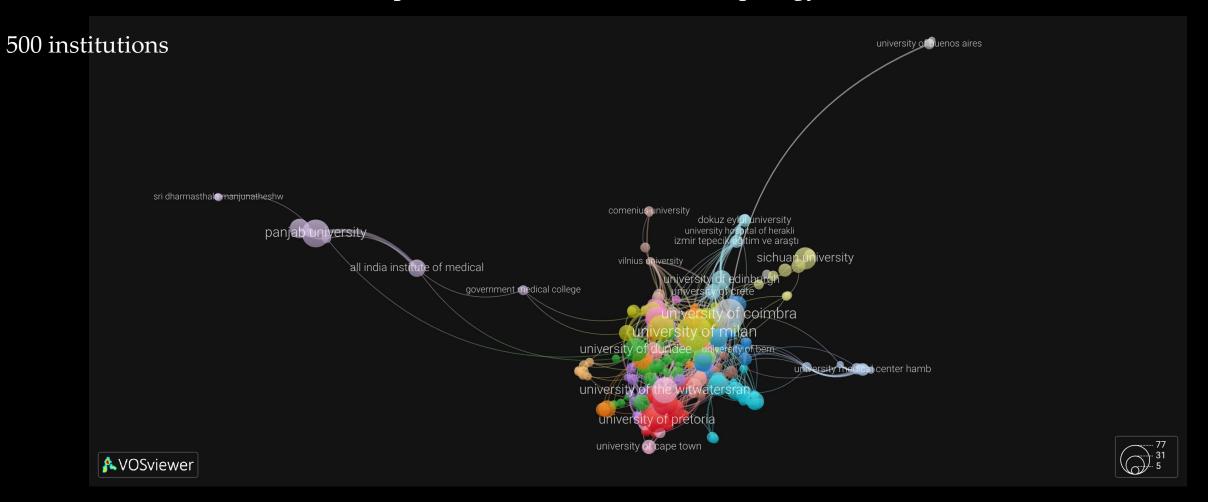
\rightarrow Countries > 50 publications

| Country | Publications |
|-----------------------------|---------------------|
| United States of America | 746 |
| United Kingdom | 313 |
| Italy | 265 |
| India | 215 |
| France | 192 |
| Australia | 184 |
| Spain | 158 |
| China | 141 |
| South Africa | 134 |
| Germany | 128 |
| Brazil | 118 |
| Canada | 111 |
| Portugal | 104 |
| Turkey | 78 |
| Japan | 77 |
| Greece | 67 |
| Switzerland | 61 |
| Czech Republic | 58 |
| Malaysia | 58 |
| | |





→ Research Networks – Who is published in Forensic Anthropology



university of adelaide

monash university

victorian institute of forensi

university of ampsterdam

| Name | Country | N |
|--|----------------|-----|
| University of Milan (UNIMI) | Italy | 115 |
| University of Coimbra | Portugal | 94 |
| Panjab University | India | 71 |
| University of the Witwatersrand (Wits) | South Africa | 61 |
| University of Granada (UGR) | Spain | 60 |
| University of Tennessee at Knoxville (UTK) | United States | 59 |
| University of Pretoria (UP) | South Africa | 57 |
| Universidade de São Paulo (USP) | Brazil | 56 |
| University of Dundee | United Kingdom | 51 |



university of macerata

university of granada

university of dundee

university of tennessee at kno

university of milan

university of the witwatersran

michigan state university

national and kapodistrian univ

university of evada reno

university of crete

charles university

university of edinburgh

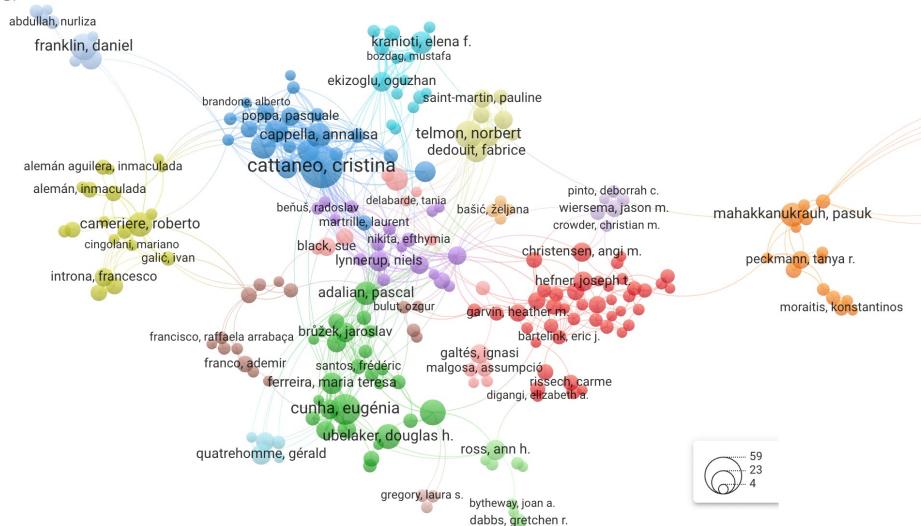
chiang mai university



→ Research Networks – Who is published in Forensic Anthropology



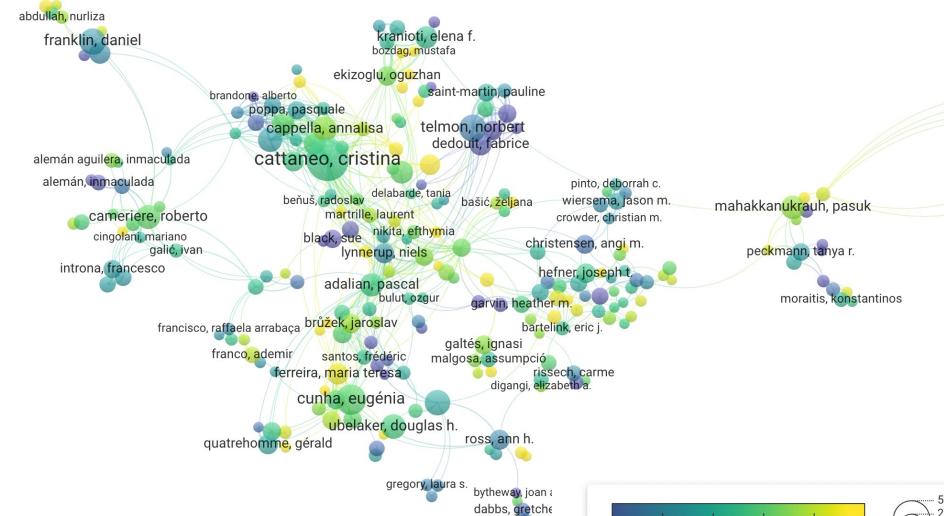
VOSviewer



yamaguchi, rutsuko hoshioka, yumi iwase, hirotaro torimitsu, suguru







2014

2015

2016

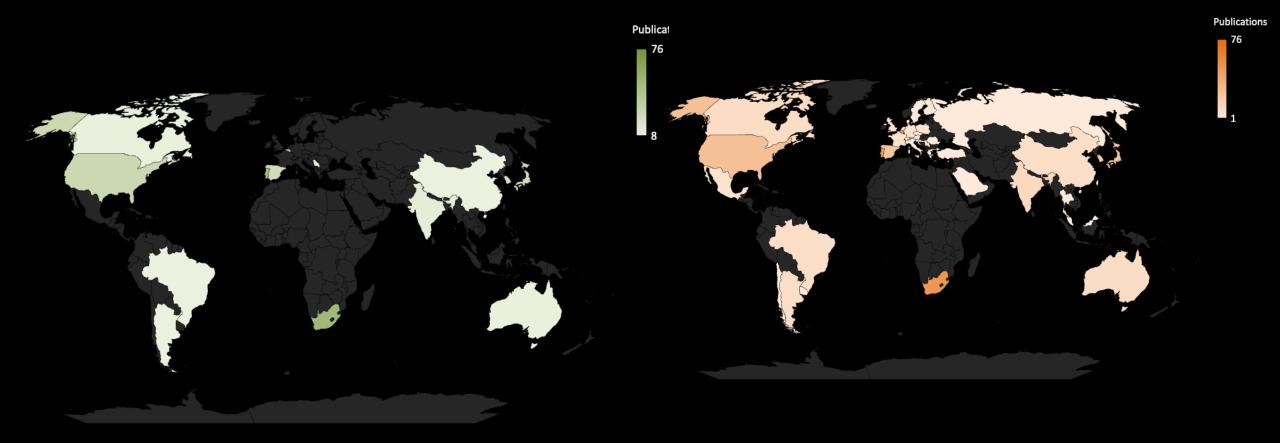
yamaguchi, rutsuko hoshioka, yumi iwase, hirotaro torimitsu, suguru

2018

2017

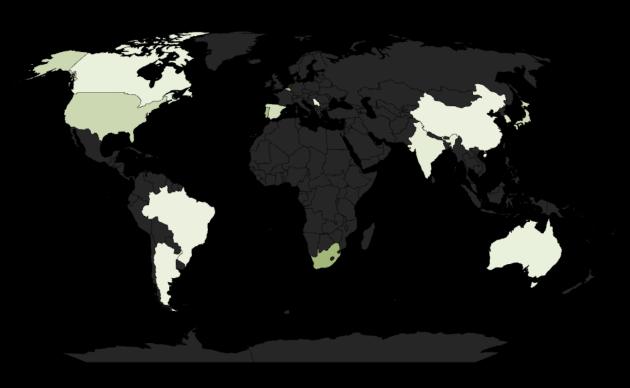
2019

 \rightarrow The funding bodies (n=219)



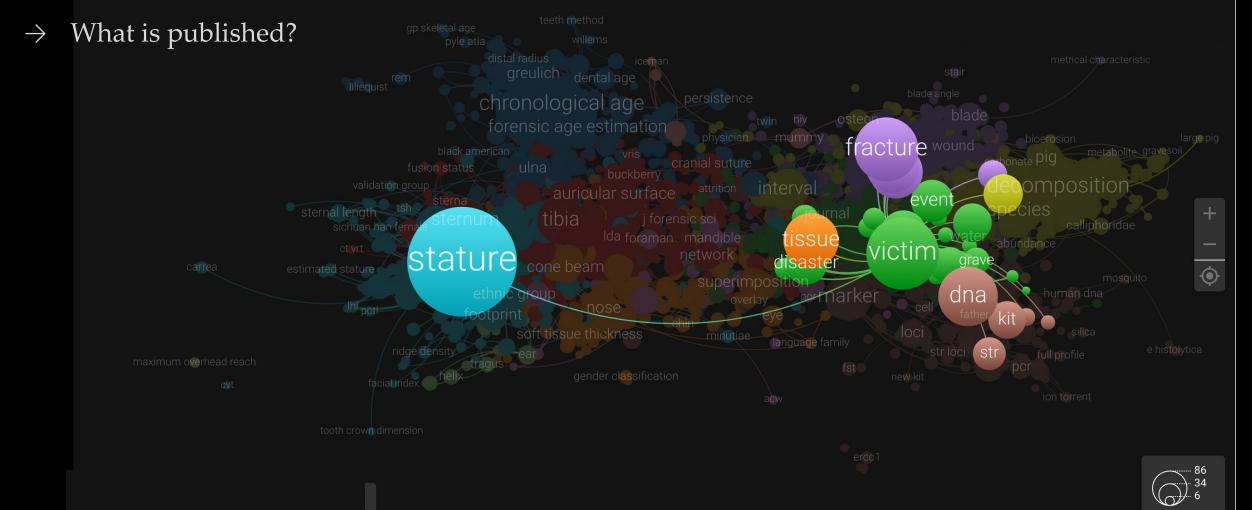
Publicatio

→ The funding bodies (>7 Pub)

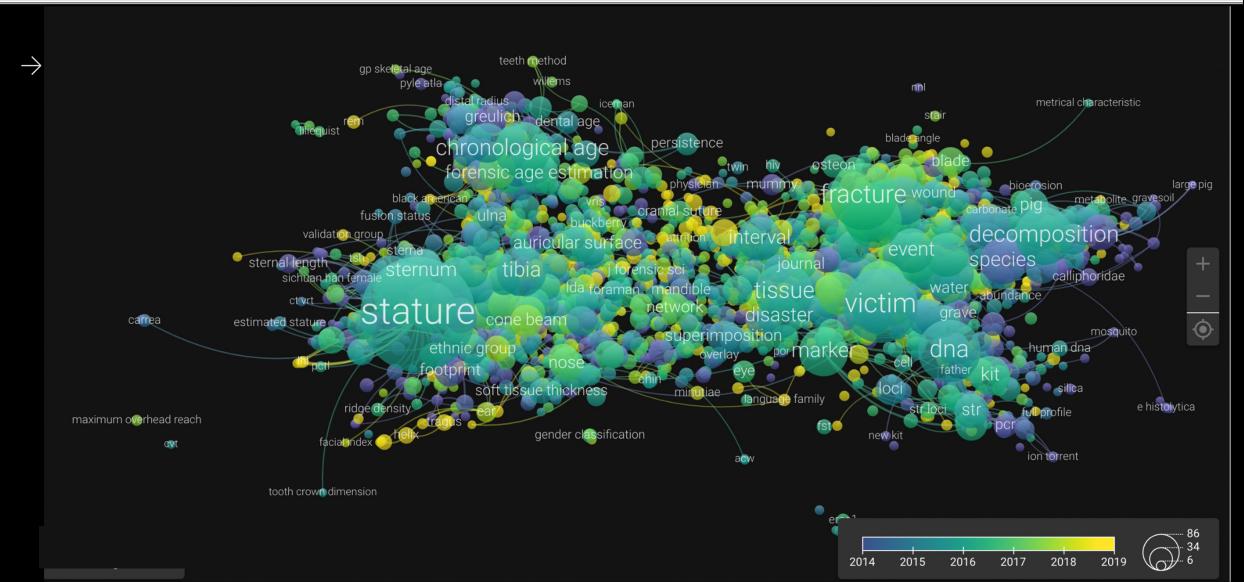


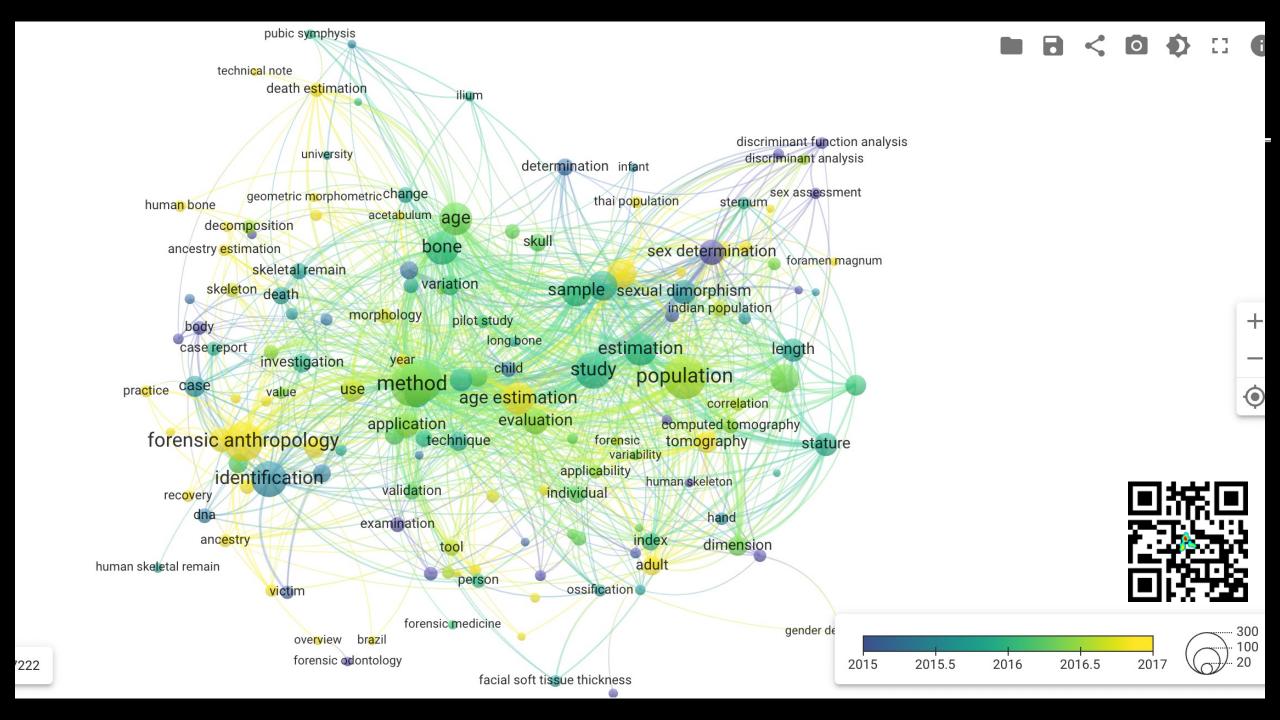
| Name | Country | Publications | Citations |
|---|----------------------|--------------|-----------|
| National Scientific and Technical Research Council (CONICET) | Argentina | 8 | 44 |
| Department of Education, Skills and Employment (DET-Au) | Australia | 9 | 58 |
| Australian Research Council (ARC) | Australia | 18 | 715 |
| European Commission (EC) | Belgium | 47 | 777 |
| São Paulo Research Foundation (FAPESP) | Brazil | 8 | 76 |
| National Council for Scientific and Technological Development (CNPq) | Brazil | 15 | 162 |
| Coordenação de Aperfeicoamento de Pessoal de Nível Superior (CAPES) | Brazil | 23 | 221 |
| Social Sciences and Humanities Research Council (SSHRC) | Canada | 9 | 137 |
| State Council of the People's Republic of China | China | 8 | 54 |
| National Natural Science Foundation of China (NSFC) | China | 40 | 418 |
| Ministry of Science and Technology of the People's Republic of China (MOST) | China | 11 | 132 |
| Department of Science and Technology (DST) | India | 11 | 209 |
| Japan Society for the Promotion of Science (JSPS) | Japan | 25 | 322 |
| Fundação para a Ciência e Tecnologia (FCT) | Portugal | 46 | 496 |
| ivilnistry of Education, Science and Technological Development | Serbia | 8 | 29 |
| National Research Foundation (NRF) | South Africa | 50 | 615 |
| National Research Foundation of Korea (NRF) | South Korea | 18 | 309 |
| Ministry of Economy, Industry and Competitiveness (MINECO) | Spain | 23 | 497 |
| Government of Catalonia | Spain | 9 | 227 |
| United States Department of Justice (DOJ) | United States | 26 | 346 |
| United States Department of Energy (DOE) | United States | 31 | 392 |
| Oak Ridge Associated Universities (ORAU) | United States | 11 | 89 |
| National Institute of Justice (NIJ) | United States | 76 | 1106 |
| Directorate for Social, Behavioral & Economic Sciences (NSF SBE) | United States | 8 | 99 |
| | | | |











\rightarrow What is published?

An overview of age estimation in forensic anthropology: perspectives and practical considerations

Nicholas Márquez-Grant

2015, Annals of Human Biology - Article

Pedagogical Access and Ethical Considerations in Forensic Anthropology and Bioarchaeology

Micayla C. Spiros, Amber M. Plemons, Jack A. Biggs

2022, Science & Justice - Article

The (Mis)appropriation of Biological Anthropology in Race Science and the Implications for Forensic Anthropology

Donovan Adams, Marin Pilloud

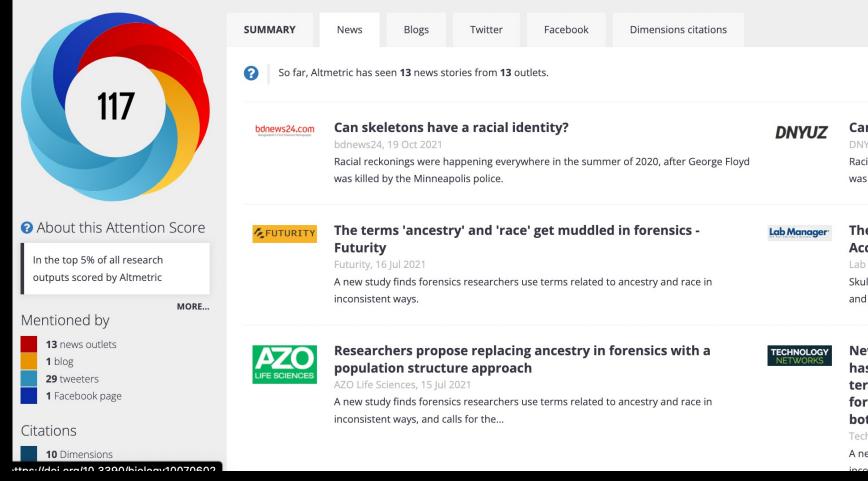
2021, Forensic Anthropology - Article

Age estimation for forensic purposes in Italy: ethical issues

Martina Focardi, Vilma Pinchi, Federica De Luca, Gian-Aristide Norelli 2014, International Journal of Legal Medicine - Article

Ancestry Studies in Forensic Anthropology: Back on the Frontier of Racism

Overview of attention for article published in Biology, June 2021



Can Skeletons Have a Racial Identity?

DNYUZ. 19 Oct 2021

Racial reckonings were happening everywhere in the summer of 2020, after George Floyd was killed in Minneapolis by the police.

The Term 'Ancestry' Needs to Be Replaced with Something More Accurate

Skulls in the lab of Ann Ross at NC State University. Ross is a biological anthropologist and forensic science researcher.

News Replacement Needed for "Ancestry" in Forensics A study has found that forensics researchers are inconsistent in using terms related to ancestry and race. The researchers have called for the discipline to adopt a new approach to better account for bot

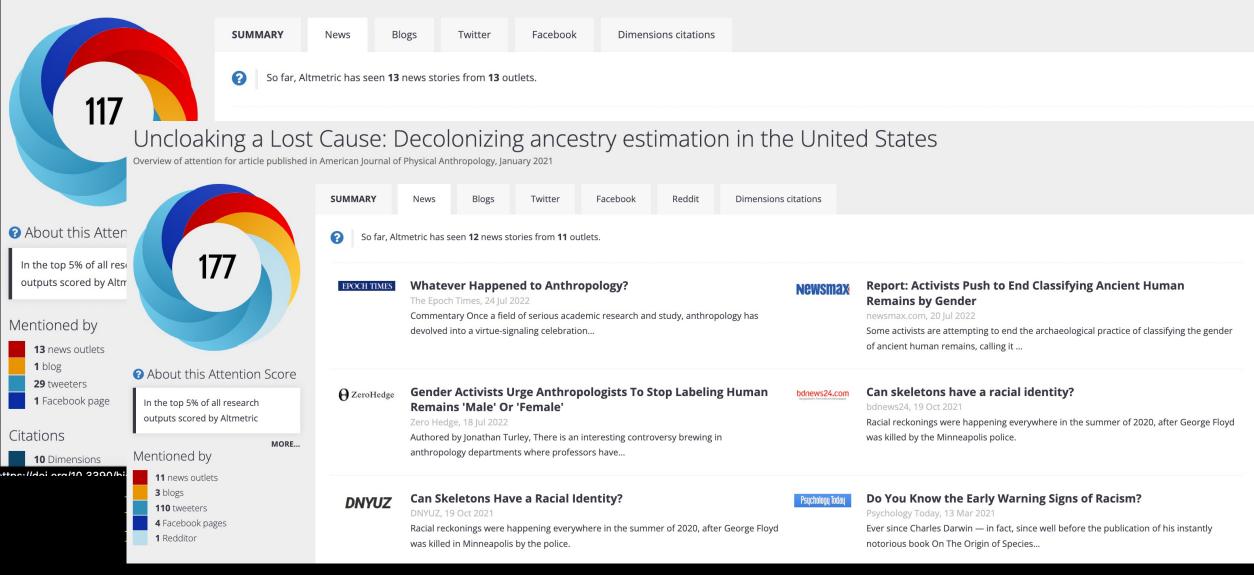
Technology Networks, 15 Jul 2021

A new study finds forensics researchers use terms related to ancestry and race in

Ross, A. H., & Williams, S. E. (2021). Ancestry studies in forensic anthropology: Back on the frontier of racism. Biology, 10(7), 602.

Ancestry Studies in Forensic Anthropology: Back on the Frontier of Racism

Overview of attention for article published in Biology, June 2021

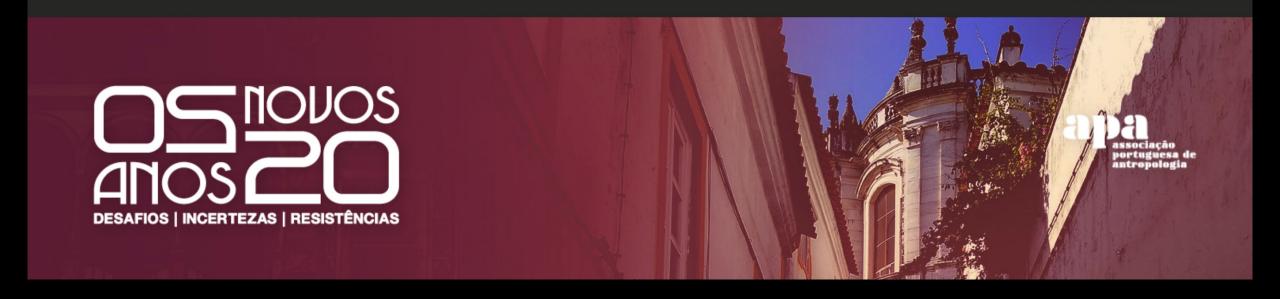


DiGangi, E. A., & Bethard, J. D. (2021). Uncloaking a lost cause: Decolonizing ancestry estimation in the United States. *American journal of physical anthropology*, 175(2), 422-436.

Genealogies and Research Networks in Forensic Anthropology *Commentaries and conclusions:*

Hidden biases and Ethical Concerns

- → Results will highlight singular scholars, research networks, and institutions mostly USA and European based – although research is becoming worldwide. BUT – it is important to include research based on non-represented countries, research institutions
- → There is a significant level of co-authorship, although there continues to cluster around major institutions and people but new *names* may highlight future trends
- → Consistency on research topics overall: which raises the question related with population based studies and/or research designs repetition (different populations, methods = topic)
- → Necessary to dive deep into the articles' content to flesh out issues related to ethical concerns, and studies repetitions, and methodological accuracy which may dictate future research agendas and funding policies.



Funding:

Francisca Alves Cardoso is supported by Fundação para a Ciência e Tecnologoa (FCT) within the scope of CRIA - Centro em Rede de Investigação em Antropologia (UIDB/04038/2020) Strategic Development Plan & Research project *Life After Death: Rethinking Human Remains and Human Osteological Collections as Cultural Heritage and Biobanks* (2020.01014.CEECIND / funded by FCT/Portugal).

© 2022 by the authors. This article is an open access paper presentation distributed under the terms and conditions of the Creative Commons Attribution (<u>CC BY NC ND</u>) license.





















Francisca Alves Cardoso

LABOH—Laboratório de Antropologia Biológica e Osteologia Humana, CRIA—Centro em Rede de Investigação em Antropologia, Faculdade de Ciências Sociais e Humanas, Universidade NOVA de Lisboa, Portugal.