

Zimbabwean archaeologist, Shadreck Chirikure, says having access to diverse expertise and advanced technologies under one roof offers a distinct edge



Shadreck Chirikure is a Zimbabwean archaeologist renowned for his work on African archaeology and ancient technologies. He is currently the Director of the Research Laboratory for Archaeology and the History of Art at the University of Oxford and the Edward Hall Professor of Archaeological Science at the School of Archaeology at Oxford. His project, "New Bantu Mosaics," supported by an ERC grant, aims to enhance the understanding of the historical migration patterns of Bantu-speaking people across Southern Africa between approximately 300 BCE and 1500 CE.

The project employs high-resolution scientific analyses on metals, pottery, seeds, and bones to enhance the understanding of historical population movements and their impact. The goal is not only to advance academic knowledge but also to offer practical lessons for addressing contemporary migration challenges and to contribute to the reconstruction of Africa's historical narrative, particularly in light of past colonial misrepresentations.

What motivated you to come back to Europe to carry out your research?

After obtaining my PhD from University College London, where I specialised in archaeometallurgy - a branch of archaeology that studies ancient metallurgical practices - I moved to Cape Town to work as a lecturer in this field. The interdisciplinary nature of archaeological science, which combines chemistry, anthropology, and history, made returning to Europe, particularly to the University of Oxford, an ideal choice for my research. The unparalleled concentration of resources and talent, along with proximity to experts and advanced laboratories, provides a significant advantage for conducting cutting-edge research.

What made you decide to apply for an ERC grant?

I was encouraged to apply for an ERC grant when I joined Oxford, due to the institution's high regard for the programme. On a personal level, I was driven by the opportunity to conduct research at the highest possible level. Europe is a top destination for scientific research, and the ecosystem provided by the ERC and Oxford supports an environment where interdisciplinary research can thrive, enabling innovative discoveries and advancements in the field.

How did you grow your research idea into a concrete proposal?

In 2017, I began to conceptualise a large-scale, high-risk project during a conversation where I was asked about my ten-year goals. Although I initially set the idea aside, it lingered in my mind. At the time, I was in South Africa and aware of the substantial funding that ERC grants provide for ambitious ideas.

When I was encouraged to apply by Oxford, I focused on studying large-scale migration in Southern Africa, a topic that aligned with my interests. Upon reviewing the necessary facilities and resources, I realised that Oxford's world-class facilities would enable me to take calculated risks and conduct innovative research.

What it is like to carry out research in an international environment?

Conducting research in an international environment offers the advantage of diverse perspectives and creativity. Collaborating with colleagues from various backgrounds strengthens innovative thinking and fosters a robust research process. In the field of large-scale migration studies, having access to a diverse set of expertise, facilities, and advanced technologies under one roof is invaluable. For example, understanding the migration patterns of Shona speakers in Zimbabwe involves combining scientific techniques with cultural insights, offering a unique perspective on historical population movements.

When it comes to the study of large-scale migration in the past, the field can seem overcrowded with many researchers contributing to the discourse. However, having access to expertise, and advanced technologies offers a distinct edge. In such an environment, research is not limited to the confines of a single discipline or technique, like DNA analysis or X-ray imaging alone, but rather encompasses a comprehensive, interdisciplinary approach. This collaborative setting encourages the integration of various methodologies - anthropology, material science, history - enabling researchers to ask and answer out-of-the-box questions.

How international is your own team?

My team consists of members from the US, Europe, and Africa, each bringing unique insights and expertise. This international collaboration enriches our research, pushing the boundaries of each discipline involved. The diversity of backgrounds and interdisciplinary collaboration provides a deeper understanding of complex issues like migration.

Does the African scientific community benefit from international collaboration such as this?

Yes, it can significantly contribute to capacity development in Africa. European institutions often have advanced research facilities and a wealth of resources. By sharing these and collaborating with African institutions, we can help build local capacities. One way to do this is by encouraging more African researchers to apply for grants such as the ERC. This not only benefits individual researchers but also strengthens Africa's overall research infrastructure. Additionally, focusing on capacity building in areas like managing and preserving collections is crucial. European institutions can provide training and support to ensure that African collections are well-maintained and accessible for future research. Ultimately, it's a win-win situation. This collaborative approach fosters a global scientific community that is more inclusive and innovative.

Could you explain your research in lay terms?

My research falls under archaeometry, which uses scientific techniques to learn about the past to address current challenges. One of the major issues we face globally is migration, which is a hot topic in many elections. Other pressing issues include climate change and food security. We aim to develop new methods and theories that allow us to understand historical migration patterns, environmental changes, and agricultural practices. By studying these aspects of the past, we hope to gain insights that can inform and improve decision-making in the present. For example, understanding how ancient communities adapted to climate change can offer valuable lessons for our current efforts to address global warming and ensure food security.

In southern Africa, Bantu speakers make up the largest linguistic group, especially in Malawi, Zambia, Mozambique, Zimbabwe, South Africa, Eswatini, Namibia, Botswana, and Angola. Our project examines how these populations spread across a vast region, using state-of-the-art techniques like stable isotope analysis, materials analysis, and ancient DNA studies. By understanding the interactions between Bantu and pre-existing hunter-gatherer populations, we

can gain a culturally grounded understanding of historical movements and their contemporary implications.

Would you encourage African researchers to consider joining ERC teams in Europe and applying for an ERC grant?

Absolutely! I strongly encourage African researchers to apply for ERC grants or join ERC teams in Europe. Writing an ERC grant proposal is challenging and requires rethinking research ideas, it forces researchers to organise their thoughts and articulate their projects in ways they may never have done before. Successfully completing an application is a significant accomplishment.

If successful, researchers gain invaluable experience and resources and working in a collaborative European department provides an excellent environment for developing and refining ideas. Even if the application isn't successful, the process is incredibly beneficial for future research directions. The key is to come up with a strong idea and take advantage of the support systems in place.

So, take the initiative and apply—you have nothing to lose and everything to gain.

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If you would like to learn more about ERC funding opportunities for researchers in Africa, you can watch dedicated webinars [here](#) (include hyperlink). These information sessions are organised in conjunction with EURAXESS Africa, an EU backed initiative supporting researchers working outside of Europe who wish to connect with Europe.