

We welcome three new MSCA fellows who are joining the GIAP group this September

Three brilliant postdoctoral researchers joined the GIAP research group at the ICAC this September with an MSCA fellowship.

We are glad to finally be able to welcome our new team members to Tarragona! Skyscapes, religion, plants, and ancient irrigation are some of the themes to be investigated by the three successful postdoctoral MSCA fellows.

Let's see a little information about their profiles and research projects:

Efrosyni Boutsikas



Dr Boutsikas is an established scholar and with this fellowship aims to amplify her analytical toolkit with cutting-edge techniques on advanced 3D modeling and landscape analyses, while delving into current theoretical approaches to the cognitive formation of space and experience in ritual performance.

This will be achieved through **applied research on ancient Greek ritual practice** in collaboration with and guided by **Dr Hèctor A. Orengo** at GIAP and also by **Dr. Schjødt's** team at the Department of the Study of Religion at Aarhus University (Denmark), where **Boutsikas** will have a short stay of about 2 months.

Boutsikas' research project **STAR-AGESS** aims to recreate immersive environments that incorporate ancient sky and astronomical simulations, horizons, detailed topography, and architectural 3D models of the sanctuaries at Sounion, Aegina, and Perachora in Greece.

A brief biography:

Dr. Boutsikas is a Senior Lecturer in Classical Archaeology at the University of Kent and a member of the Council of the International Society for Archaeoastronomy in Culture (ISAAC). Her research focuses on ancient Greek religious experience, memory, myth, and the role of time, space, and landscape in ritual performance.

Boutsikas has written and co-authored papers on the role of astronomy and catasterism myths in shaping ancient religious experience and ritual practice. She has directed research projects in Greece, Cyprus, Sicily, and Turkey funded by the British Academy, the Society of Antiquaries (London), and the Royal Society of New Zealand. Her research has been published in a range of classical, archaeological, and archaeoastronomical journals.

Efrosyni Boutsikas is currently also a member of the editorial boards of the *Journal of Astronomy in Culture* i *Journal of Skyscape Archaeology*, and a co-director of the University of Kent's Centre Interdisciplinary Centre in Spatial Studies (KISS). She is the author of *The Cosmos in Ancient Greek Religious Experience: Sacred Space, Memory, and Cognition* (Cambridge University Press, 2020) and a co-editor of *Studies in Cultural Astronomy in Honor of Clive Ruggles* (Springer, 2021).

More information:

<https://www.kent.ac.uk/european-culture-languages/people/1750/boutsikas-efrosyni>

<https://kent.academia.edu/EfrosyniBoutsikas>

Charlotte Diffey



Dra. Diffey is a talented early career researcher specializing in archaeobotany and stable isotope analysis, having been trained in one of the best research teams in the field led by Prof. Amy Bogaard at the University of Oxford, UK.

Diffey has a very strong field, laboratory, and publication record. She has relevant working

experience in Europe, Asia, and the Americas, including research at the iconic sites of Catalhöyük in Turkey and Knossos in Greece.

Diffey is joining the GIAP group at the ICAC with the research project DarkSeeds under the guidance of **Dr Alexandra Livarda**.

The **research project DarkSeeds** aims to provide a new explanatory model of the economic changes observed during the Late Bronze and Early Iron Age in the Aegean, a period often referred to as *the Dark Ages*, through the application of standard archaeobotanical and stable isotope analyses alongside newly developed methods at GIAP that combine 3D photogrammetry and Machine Learning-aided Geometric Morphometrics (GMM).

A brief biography:

Charlotte Diffey completed her PhD in 2018 and since then she held two post-doctoral positions. First at the University of Oxford and then at the University of Reading where she currently continues working. In her current position **Diffey** is working on the ERC-funded 'Middle East Neolithic Transition: Integrated Community Approaches' (MENTICA) project. This research focuses primarily on the establishment of early farming practices and communities at several Neolithic and Chalcolithic sites in Iraq and Iran.

Her previous research has focused on large-scale Bronze Age farming and politics in the Eastern Mediterranean and Northern Mesopotamia, working on archaeobotanical assemblages from the major urban centres of Hattusha (Turkey) and Tell Brak (Syria).

More information: https://www.researchgate.net/profile/Charlotte_Diffey

Nazarij Buławka



Dr. Buławka is an early career researcher specializing in GIS and computational methods in the archaeology of the Ancient Near East, Central Asia, and Iran. He is joining the GIAP research group at the ICAC with the project UnderTheSands, under the guidance of **Dr Hèctor A. Orengo**.

His main research topics are irrigation networks, landscape archaeology, ancient economy, settlement pattern, and Iron Age in Central Asia and northeastern Iran. He is co-creator of the **Mobile GIS SIG** group in the **Computer Association Applications and Quantitative Methods in Archeology (CAA)**, an international organization bringing together archaeologists, mathematicians, and computer scientists aiming to encourage

communication between these disciplines.

The **research project UnderTheSands** aims to develop a novel workflow for the large-scale analysis of irrigation networks in the Near East, combining advanced remote sensing and hybrid Machine/Deep Learning methods.

A brief biography:

Buławka completed his PhD in 2020 at the Faculty of Archaeology (University of Warsaw). He gained much experience managing field survey projects in Turkmenistan and Poland through digital documentation methods and using local relief models and CORONA imagery to study irrigation networks of alluvial plains. Nazarij's previous research under his doctoral thesis focused on changes in settlement patterns and the irrigation of three oases in Turkmenistan during the Iron Age: Serakhs oasis, Tedjen, and Murghab alluvial fans.

More information: <https://www.researchgate.net/profile/Nazarij-Bulawka>



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