UrbNet 2022 Highlights







UrbNet Mission Statement

Centre for Urban Network Evolutions (UrbNet) explores the archaeology and history of urban societies and their networks from the Ancient Mediterranean to medieval Northern Europe and to the Indian Ocean World.

We are an interdisciplinary research initiative, which integrates new methods from contextual cultural studies rooted in the humanities with the natural sciences.

Approaching urbanism as a network dynamic, we aim to develop a high-definition archaeology to determine how urban networks catalyzed societal and environmental expansions and crises in the past.

Solar Event Sheds Light on Trade

In a study published in the leading international journal *Nature*, new astronomical knowledge about the past activity of the sun was used to establish an exact time anchor for the arrival of trade goods from the Middle East to Viking Age Scandinavia.

The expansion of Afro-Eurasian trade networks, characterized by the arrival of large numbers of Middle Eastern beads in Ribe, can then be dated to AD 790±10. However, imports brought by ship from Norway were arriving as early as AD 750.

Philippsen, B., Feveile, C., Olsen, J. & Sindbæk, S. M. (2022). "Single-Year Radiocarbon Dating Anchors Viking Age Trade Cycles in Time", *Nature* 601, 392–396. DOI: <u>10.1038/s41586-021-04240-5</u>.

Comparing Urban Heterogeneity

In June, UrbNet hosted the conference *Comparing Urban Heterogeneity*.

Recent years have seen a profound transformation in the way archaeology approaches early urbanism. This conference asked how we may reframe comparative archaeological studies of early urban societies to focus on the evolution of heterogeneity.

The Viking Town

Professor Søren M. Sindbæk and the *Northern Emporium* project team curated the exhibition *The Viking Town* at the museum Ribes Vikinger.

The exhibition is based on the results from the highdefinition excavations in the heart of Ribe, conducted in collaboration with Museum of Southwest Jutland.

Statistics

Conferences and workshops	18
Invited talks	91
PhD defences	1
PhD courses	4
Press and media appearances	33
Publications	132

Food Security in Palmyra's Hinterland

In an article published in *PLOS ONE* a formal model of agricultural productivity for Palmyra's hinterland, taking into account factors such as soils, rainfall, and irrigation possibilities, has been developed. This made it possible to evaluate the evolution of the hinterland carrying capacity over time.

The results suggest that food security would have been a crucial issue for third-century AD Palmyra, and that the deteriorating food-security levels could be one of the deep causes that also called for the gradually growing militarization of the city.

Campmany Jiménez, J., Romanowska, I., Raja, R. & Seland, E. H. (2022). "Food Security in Roman Palmyra (Syria) in Light of Paleoclimatological Evidence and its Historical Implications", *PLOS ONE* 17:9. DOI: 10.1371/journal.pone.0273241.

International Research Award

The Alexander von Humboldt Stiftung has awarded Professor Rubina Raja the *Friedrich Wilhelm Bessel Research Award* – one of Germany's most prestigious research awards –

funded by the German Federal Ministry of Education and Research.

Legacy Data from Palmyrc

The *Archive Archaeology* project completed its main aim of publishing the full archive of Harald Ingholt on Palmyra.

Furthermore, an open-access virtual exhibition about Ingholt, his archive, and Palmyra went online 14 June 2022: Excavating Archives: Narratives from 20th-Century Palmyra.

Bobou, O., Miranda, A. C., Raja, R. & Yon, J.-B. (2022). *The Ingholt Archive: The Palmyrene Material, Transcribed with Commentary and Bibliography*, Archive Archaeology 2, 4 vols., Turnhout: Brepols.

