FOOTPRINTS OF IRELAND: HERITAGE AND LANDSCAPE

Globally and nationally, we seem to be faced with significant challenges; climate change/sea level rise, environmental degradation, disease and health, conflicting social identities, ethnic and religious strife, potential economic and energy crises. A long-term perspective reveals that change is the normal state of affairs in human society and that all of the challenging aspects of modern life mentioned above are identifiable over the long course of the human inhabitation of the island of Ireland. The environment itself – often thought of as the backdrop to modern society and economy, has actually been created, altered and intensively exploited by people over the last 10,000 years. Our island's societies have also experienced waves of significant ethnic, cultural, religious and economic changes across time.

Archaeological, historical and scientific research often reveals how people manage such environmental and social change, evolving local, regional and island-wide strategies to cope with it. Through multidisciplinary tracking of past changes, we gain a deeper insight into how landscape and environmental change and the potential options and solutions taken to ameliorate their human impact. A long-term perspective informs the choices to be faced in making Irish society sustainable into the future.

Within the long-term story of ongoing change, it is also recognised that there are key moments, periods or 'tipping points' in the past when change was sudden, dramatic and significantly altering. Understood against long-term rhythms, these times of sudden change can also be considered cumulatively to understand long-term social and environmental trends. Disparate disciplines have often individually focused on these times of change, without particularly being aware of or integrating different strands of evidence. A multidisciplinary perspective can both challenge perceived wisdoms, identify and interrogate the causal factors behind such critical social and environmental changes.

- The initial focus in the strand will be on two such turning points; the **Mesolithic/Neolithic** transition at around 4000 BC and the development of

Neolithic society and the major social, technological and economic transformations associated with the **early medieval period**, beginning around AD 600. Both were periods of immense social, ideological, environmental and economic change in Ireland and key to the foundations and creations of Irish identities in the modern era (e.g. the traditionally central role of farming in Irish society and culture; the role of early medieval antiquities in the construction of modern Irish identities) A multidisciplinary research programme on environment, climate, society, economy, animals and landscape aims to understand when, why and how these changes occurred.

Applications for the post-doctoral research positions are invited from scholars who have recently completed a PhD in archaeology or related disciplines in the humanities and social sciences or in the geosciences or biological sciences. Candidates must have experience and interest in carrying out research relevant to the theme. An outline of the broad research topics which the applicant would wish to pursue and how their qualifications and experience to date equip them to do so should accompany the application.

Applications froth the doctoral scholarships are invited from graduates in archaeology or related disciplines in the humanities and social sciences or in the geosciences or biological sciences that wish to undertake research leading to a doctorate on a topic directly related to the theme. An outline of the broad area of research envisaged at this stage should accompany the application.

Applications are particularly welcome that clearly demonstrate a multi-disciplinary perspective and/or that involve collaborative work drawing on and developing the research potential of data from the new archaeological evidence uncovered as a result of development-led projects over the last decade. Applications are equally wclcome for candidates taking a comparative, international perspective.

Job description

Post-doctoral Fellow

The primary task of the Postdoctoral Fellow is to contribute research of international publishable standard on topics connected with the theme under which they are appointed. This work may be a continuation of existing research that the Fellow was engaged in prior to appointment or may consist of new projects. The Fellow may work as sole researcher on project(s), as a member of a research team, or a combination of the two. The Fellow will report to a team leader with whom the schedule of work to be carried and working relationships with other relevant researchers will be negotiated and agreed. The Fellow may be required to contribute to the administration of activities related research on the theme (e.g. organising conferences and seminars) and/or to contribute to either undergraduate or postgraduate teaching. Administration and teaching together will not exceed 20 per cent of the Fellow's working time.

Doctoral scholars

The primary tasks of doctoral scholars will be to participate in course-work and carry out supervised research such as will lead to an award of a PhD in accord with UCD regulations. Doctoral scholars will also normally be required to contribute 20 per cent of their time to teaching.

UCD Researchers in the Area

Note: The following list is not exhaustive and confines descriptions of research interests to those in this thematic area

Tom Bolger ((School of Biology and Environmental Science); Professor of Biology and Head of School; research interests in Decomposition and Nutrient Fluxes in Ecosystems - the importance of biota, nutrient inputs and climate in determining rates of decomposition Bio-diversity - Enumeration, community assembly and establishment of ecosystem function. Effects of land use and climate change on biodiversity and nutrient fluxes.

Joanna Brück (School of Archaeology): materiality and identity in past societies, with a particular emphasis on the Bronze Age and on settlement and burial practices. Dr Brück co-ordinates the College of Arts and Celtic Studies research strand on material culture.

Gabriel Cooney (School of Archaeology): early prehistoric societies in Ireland and Britain, with a particular interest in landscapes, the archaeology of death, Neolithic society, monuments and stone axes.

Prof. Cooney is a P.I. of the Footprints strand.

Stephen Davis (School of Archaeology); environmental archaeology and the study of insect remains in the reconstruction of past habitats, environments and living conditions.

Charles Doherty (School of History and Archives): Early and medieval Irish history, 400-1600; Irish hagiography; settlement history; anthropology and the urban form; Kingship; economic history; Palaeography and the history of the book.

Tom Hayden (School of Biology and Environmental Science); genetics and Irish faunal populations; red deer in Ireland.

Elva Johnson (School of History and Archives) Early medieval Irish history; literacy and the creation of identity in early medieval Ireland; Late Antique Christianity and Christian controversy; history of sexuality; medieval travel literature.

Helen Lewis (School of Archaeology); geoarchaeology and environmental archaeology; study of soil processes on prehistoric and Viking Age archaeological sites; early human occupation in caves, and S.E. Asian archaeology

Frank McDermott (School of Geological Sciences), Head of School and leads the Palaeoclimate Research Group focussing on late Pleistocene climate variability, and is involved in an interdisciplinary research project on geomicrobiology.

John O Neill (School of Archaeology); Research focus on Irish prehistory with particular interests in landscape approaches, settlement and ceremonial activity in the Neolithic and Bronze Age, the archaeology of burnt mounds.

Aidan O'Sullivan (School of Archaeology); social identities, landscapes and material culture of early medieval Britain and Ireland; maritime and wetland archaeology; P.I. of Early Medieval Archaeology Project (EMAP) disseminating information on early medieval archaeological discoveries, 1930-2007.

Muiris O'Sullivan (School of Archaeology); Head of School; research interests in Neolithic Britain and Ireland and megalithic art in Atlantic Europe. Co-author of *Archaeology Foresight 2020* study.

Alan Peatfield (School of Archaeology); The archaeology of Bronze Age Aegean and Crete and the archaeology of conflict and warfare.

Pat Shannon (School of Geological Sciences) Petroleum exploration, basin analysis and marine geology. Basin modelling, sequence stratigraphy, sedimentology and petroleum prospectivity of the sedimentary basins of the North Atlantic.
Prof. Shannon is a P.I. of the Footprints strand.

Emma Teeling (School of Biology and Environmental Science) Molecular phylogenetics and evolution Comparative genomics of mammals Bat sensory ecology, evolution and biogeography. Molecular evolution of sensory perception in mammals. Viral Phylogenetics and evolution.

Jonathan Turner (School of Geography, Planning and Environmental Policy); research interests in Holocene environmental change, with a particular focus on geomorphology of river systems and fluviatile processes.

Graeme Warren (School of Archaeology); archaeology of Mesolithic Britain and Ireland, transformations from hunter-gatherers to earliest farmers; stone tool production and use in early prehistoric societies.

Julia Sigwart (School of Biology and Environmental Science) Collections Researcher with Collections-based Biology in Dublin (CoBID)