The effect of network structure and dynamics on social behaviour in humans

About the awards  Applications are invited for two fully-funded Oxford–Calleva Graduate Scholarships, supported by the University of Oxford and the Calleva Research Centre at Magdalen College, Oxford. The successful applicants will be part of an interdisciplinary team working on a 4-year project funded by the Calleva Research Centre at Magdalen College, to begin in October 2018. General information about the Centre is available at http://www.magd.ox.ac.uk/research/calleva-research-centre/.

The project will bring together two research groups based at the University of Oxford, working on a range of topics relating to human social behaviour, including cultural evolution, the evolution of cooperation, and the social psychology of inter-group contact. The project's Principal Investigator, Laura Fortunato, is Associate Professor of Evolutionary Anthropology, a Fellow of Magdalen College, and an External Professor at the Santa Fe Institute (see www.santafe.edu/~fortunato). The Co-Principal Investigator, Miles Hewstone, is Professor of Social Psychology, a Fellow of New College, and Director of the Oxford Centre for the Study of Inter-Group Conflict (see https://www.psy.ox.ac.uk/oxcsic).

The two doctoral scholarships will begin in October 2018. One scholarship (DPhil Anthropology) will be based at the Institute of Cognitive and Evolutionary Anthropology (https://www.icea.ox.ac.uk/), the other (DPhil Experimental Psychology) will be based in the Department of Experimental Psychology (https://www.psy.ox.ac.uk/).

Each scholarship will cover tuition fees (UK/EU rate) and an annual tax-free stipend (2017/2018 rate: £14,553), for up to 4 years full-time. Overseas (i.e. non-UK/EU) applicants are welcome to discuss additional funding opportunities to cover the difference between overseas and UK/EU tuition fees.

The scholarships will be awarded on the basis of merit. Applicants who belong to groups that are under-represented in STEM disciplines are especially encouraged to apply.

About the project  Why do humans cooperate, often in large groups of unrelated individuals? Why do individuals frequently engage in behaviour that benefits others at a cost to themselves? These are among the most compelling questions about what makes us human. Yet, despite a growing body of theoretical and empirical work, the factors driving cooperative behaviour in our species remain debated. A point of contention is the role of competition between groups. Some argue that our propensity to behave cooperatively goes hand-in-hand with our tendency to favour the in-group over the out-group. In our evolutionary past, then, this suite of traits emerged as the result of widespread inter-group conflict.

In recent years, researchers studying human cooperative behaviour have turned their attention to the social structure of groups, and specifically to the networks of interactions underlying it. The general idea is that individuals do not operate in isolation from others. Thus, explaining human social behaviour requires consideration of the multiple networks that individuals are embedded in.

Merging these two lines of enquiry, the project aims to investigate the network structure and dynamics of intra- and inter-group interactions in humans, with a focus on cooperation and competition.

Application procedure  The scholarships provide scope to pursue research in a variety of topics linked to cooperation, inter-group relations, cultural transmission (in both adults and children), and social networks (both real-world and online), including opportunities to conduct fieldwork in Italy. The specific focus of the doctoral research will be determined by the mutual interests of students and supervisors.
Students interested in, and with experience of, one or more of the above topics are encouraged to apply. The ideal candidates will have (i) training in anthropology, biology, psychology, economics, or related subjects, (ii) an excellent academic record, (iii) strong quantitative/computational skills, and (iv) excellent interpersonal skills, including the ability to work as part of an interdisciplinary team. Desirable skills include (v) familiarity with experimental approaches in anthropology, psychology, or economics, and (vi) knowledge of Italian, but these skills are not required.

All eligible applicants to the relevant courses will be considered for the scholarships. Further details on eligibility and on the official application procedures are available at:

- **DPhil Anthropology** (closing date: 2018-01-19)
  https://www.ox.ac.uk/admissions/graduate/courses/dphil-anthropology
- **DPhil Experimental Psychology** (closing date: 2018-01-08)
  https://www.ox.ac.uk/admissions/graduate/courses/dphil-experimental-psychology
- **standard scholarship selection terms**
  https://www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-funding-and-scholarship-search/standard-scholarship-selection-terms

Potential applicants who meet the eligibility criteria are invited to submit an informal expression of interest well ahead of the official closing dates, and ideally before 2017-12-15, via email to Laura Fortunato (see www.santafe.edu/~fortunato/contact/). Send a single PDF document, including:

- a letter of application outlining your interest in the project and in the research topics, any previous research experience, and your suitability for either of the scholarships;
- a brief *curriculum vitae*;
- a sample of your written work.