



CLOE

Centre for Life's Origins and Evolution

January-February 2022

CLOE NEWSLETTER

MESSAGE FROM MAX

We are recruiting! Please make time in your diaries to attend the lectures of the applicants for the Invert Palaeo post which will be held 2-5 pm on 24th March. And please make yourselves available to talk to the candidates on 25th. We have some great applicants and need to impress THEM with how great we are.

And see you all on 8th March for our first IN PERSON JGM in two years. 10 am Room 731 of the IoE Bedford Way.

RECENT PUBLICATIONS

Congratulations to Sandra Alvarez-Carrestero on her Nature paper entitled '[A species-level timeline of mammal evolution integrating phylogenomic data](#)'

A collaborative paper from Mark Thomas in Nature was published in December. '[Large-Scale Migration into Southern Britain During the Middle to Late Bronze Age](#)'

A [News and Views](#) by Dan Bradley highlights the article and there is [Commentary in Science](#) by Ann Gibbons.

Julia Day's paper entitled '[How to date a crocodile – estimation of neosuchian divergence dates and a comparison of the performance of four time-scaling methods](#)' was published in *Palaeontology*

Joana Xavier has a paper in Frontiers in Microbiology '[Energy at Origins: Favorable Thermodynamics of Biosynthetic Reactions in the Last Universal Common Ancestor \(LUCA\)](#)'

The paper also features in [Science](#).

Jon Bridle is a co-author on three papers in a two-part special issue of Philosophical Transactions of the Royal Society B on '[Species ranges in the face of changing environments](#)'; including one closing review/commentary. One paper is on butterflies, the second on [butterflies and fruit flies](#), and the [third on is a overview of most systems](#)

Upcoming Events

8th March

CLOE JGM. 10AM

24th & 25th March

Invertebrate Paleontology Lecturer Seminars

31st March

CLOE Quarterly Symposium. 4pm-6pm, followed by drinks reception

WELCOME

[Marion Bonneau](#) joins Kevin Fowler's group as a Post Doc. Her research interests include mito-nuclear interactions in evolution using *Drosophila* as a model and the role of mitochondria in neurodevelopmental disorders.

Aidan Pierce has joined Nick Lane's group as PhD student and will be working predominately on a computational project.

Bridget Wade has a paper in Global and Planetary Change called '[Dextral to sinistral coiling switch in planktic foraminifer Morozovella during the Early Eocene Climatic Optimum](#)'

Ferdinand Marlétaz has a joint paper in preprint entitled '[Annelid functional genomics reveal the origins of bilaterian life cycles](#)'

RECENT GRANTS AND AWARDS

Congratulations to [Jasmine Ono](#) who was awarded a BBSRC Discovery Fellowship. Jasmine is originally from Canada but came to CLOE on an EMBO Long-Term Fellowship to study speciation in yeast with Duncan Greig. She will continue this work in her fellowship at the University of Exeter where she will use three species of yeast to investigate the genetic reasons why adaptation to external factors (temperature) can lead to sterile offspring.

Jon Bridle and Flo Camus were awarded £135 K by UCL CEF4 fund to support the establishment of a 'Limits to Adaptation across Genomes and Environments' (LAGE) facility in the Ground Floor of the Darwin building. This facility will include a respirometer (for measuring metabolic rate), two microscopes and associated cameras, four incubators, and a precision microbalance, and will improve GEE and Biosciences ability to measure traits and fitness across cells, genotypes, phenotypes and environments.

Alex Pigot, Jon Bridle and Richard Gregory along with collaborators at the University of Connecticut, University of Exeter and National Museum of Natural Sciences of Madrid have been awarded a NERC Standard Grant 'Predicting sudden and widespread biodiversity loss on a rapidly warming planet: when and where does biology change things?'. The project starting this summer will seek to understand the resilience of species to abrupt climate driven collapses and how this is mediated by evolutionary history, ecology and the abiotic environment. The project will test these questions using a range of techniques from global scale modelling, to analysis of long-term data on responses of birds to historical climate change, to fieldwork to characterise how individual butterflies utilise thermal heterogeneity in the landscape.

NERC DISCOVERY SCIENCE FUNDING STREAMS

There will be a town hall webinar to outline the strategic rationale for the recent changes to the Discovery Science portfolio and for the community to raise questions and to discuss the changes with the NERC Discovery Science team. The webinar will provide an overview of the Pushing the Frontiers and Exploring the Frontiers calls, including a summary of the objectives, scope, eligibility and assessment process.

Webinar 2: 11:15 – 12:45 on Wednesday 9 March 2022 - [Register here](#)

The deadline for registration is 16:00 on 7 March 2022

For more information see [here](#).

CLOE SYMPOSIUM

Nick Lane and Joel Dacks are hosting our next CLOE symposium on the 31st of March 4pm-6pm. Our first in person event in just over two years, there will be a drinks reception following the talks. The symposium will be held in the J Z Young Lecture Theatre and reception in Haldane Room.

The speakers are

[Dr Joana Xavier](#), (University College London, joana.xavier@ucl.ac.uk).

'Earth's first bioreactors: the origin of life meets bioengineering'

'THE FUTURE OF LIFE'

Science meets art in [a poem by Dearbhaile Casey](#) published in a journal called. Consilience. The journal describes itself as "the online journal exploring the spaces where the sciences and the arts meet."

OBITUARY: URSULA MITTWOCH

Nick Lane's [obituary for Ursula Mittwoch](#) is published in the Annals of Human Genetics.

"Ursula Mittwoch who died at 97 last year, was a luminary of this department, doing what I think was very important work on the evolution of two sexes (I still teach it on Pom's course). She continued to come to the departmental coffee mornings almost up to pandemic. She started out under Lionel Penrose, JBS Haldane and Hans Kalmus in the old Galton laboratory."



[Dr Laura Mascotti](#), (University of Groningen, m.l.mascotti@rug.nl). 'How the first enzymes worked: on the evolution of nucleotide-dependent enzymes at the origin of life'

[Dr Sergio Munoz Garcia](#), (Université Paris Saclay, Sergio.Munoz@dal.ca). 'Insights into the nature of the mitochondrial ancestor'

Muslima Chowdhury will be emailing the registration details soon. Please share and encourage people to register!

MARCH JOINT GROUP MEETING

Our next JGM will be in-person on the 8th of March at **10am in room 731 of the IoE Bedford Way**. Our speakers will be

Sadé Bates: 'OMA genome annotation pipeline'

Duncan Greig: 'How do genes flow through the anti-recombination barrier between species?'

If you want to join the next CLOE JGM online, you will be able to access the Zoom room with [this link](#).

Meeting ID: 955 8208 3274

Passcode: 081611

Please ask Sandra to book you into the timetable if you wish to practice a presentation for an upcoming event or assessment and you can be given feedback one to one or as a general discussion. We have many amazing PIs who are more than happy to advise and this should be taken advantage of!

INVERTEBRATE PALEONTOLOGY LECTURER SEMINARS

Please join the seminars for the Invertebrate Paleontology Lecturer candidates to be held on the 24th and 25th of March. Fiona Williamson and Muslima Chowdhury will be emailing the final details and times.

CONGRATULATIONS

Julia Day has been made a member on the 'Expert Panel on the Treatment of Digital Sequence Information in the post-2020 Global Biodiversity Framework' run by DEFRA/[CAPE](#).

Congratulations to [Christophe Dessimoz for being appointed the Joint Executive Director of the Swiss Institute of Bioinformatics \(SIB\)](#).

Anjali Goswami has been awarded the [President's Medal from The Palaeontology Association](#), congratulations!



Many congratulations to Marco Colnaghi (pictured left). His thesis entitled is "The impact of deleterious mutations on the transition to meiotic sex and the structure of the germline". Marco's examiners were Prof Franjo Weissing (Uni [Groningen](#)) and Chris Barnes (UCL Dep for Cell and Developmental Biology). Marco carried out his PhD research under the supervision of Andrew Pomiankowski and Nick Lane.

Michael Jardine successfully passed his viva, examined by Luke Holman (Napier University) and Jon Bridle (GEE CBER). Michael did his PhD under the supervision of Max Reuter and Kevin Fowler. His thesis, entitled "The maintenance of genetic variation by balancing selection" explored how antagonistic pleiotropy and sexual antagonism contribute to the maintenance of genetic variation in populations of fruit flies. Michael is currently working on a digitisation project at the NHM while securing a postdoc for the next step of his career.