



Centre for Life's Origins and Evolution

June 2022

CLOE NEWSLETTER

MESSAGE FROM MAX

Dear all, there has been a bit of a gap since our last newsletter so this is a bumper edition. Thanks for all your contributions. I hope to see you all at the JGM on Tuesday the 5th.
Best wishes to all. Max.

RECENT PUBLICATIONS

[‘Metabolically diverse primordial microbial communities in Earth’s oldest seafloor-hydrothermal jasper’](#) in *Science Advance* is a news piece by Dominic Papineau

Ziheng Yang has a paper in *Systematic Biology* [‘Full-Likelihood Genomic Analysis Clarifies a Complex History of Species Divergence and Introgression: The Example of the erato-sara Group of Heliconius Butterflies’](#), another article in pre-print [‘Genome-scale data reveal deep lineage divergence and a complex demographic history in the Texas horned lizard \(*Phrynosoma cornutum*\) throughout the southwestern and central US’](#) and a final article with Thomas Floris in *Molecular Ecology*, [‘A simulation study to examine the impact of recombination on phylogenomic inferences under the multispecies coalescent model’](#)

Florencia Camus has a review article in *Heredity-Nature* [‘Inheritance through the cytoplasm’](#)

Hernan Burbano has two publication in pre-prints entitled [‘SNP calling parameters have minimal impact on population structure and divergence time estimates for the rice blast fungus’](#) and also a paper with Sergio Latorre [‘A pandemic clonal lineage of the wheat blast fungus’](#)

Ferdinand Marlétaz has two papers in pre-print [‘The little skate genome and the evolutionary emergence of wing-like fin appendages’](#) and [‘A single-cell atlas of bobtail squid visual and nervous system highlights molecular principles of convergent evolution’](#)

Bridget Wade has a research article entitled [‘Late Neogene evolution of modern deep-dwelling plankton’](#) in *Biogeosciences*

CONGRATULATIONS

Congratulations to Jon Bridle who has been appointed as the new Director of CBER, taking over from Richard Pearson, who has become Associate

Upcoming Events

29th June

Ben Collen Memorial Lecture- Prof Zoe Davies. 5:30pm

5th July

CLOE JGM. 10AM

September

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

WELCOME

Larry Bliss is a first-year LIDo PhD student completing his second and final rotation with the Greig and Shou Groups. His project is concerned with studying bet-hedging behaviour by inducing aneuploidy in yeast.

Rosie Phillips joins the Greig group from the Slade Art School. She focuses on time-lapses to capture the plasmodium’s pulsating, flocking movements and growth, dyes to create ‘paintings’, and photos that reflect the physarum’s tendrils and web-like network as a repeating pattern throughout nature to explore ecology and interconnectedness between different life forms (examples below). “I find the intersection between science and art to be a very exciting space and have been struck by the commonalities in respective discussions, and the creativity shared by both.”

Director, Research.

Michael Jardine successfully passed his viva, examined by Luke Holman (Napier University) and Jon Bridle. Michael did his PhD under the supervision of Max Reuter and Kevin Fowler. Michael is currently working on a digitisation project at the NHM.

Congratulations to Silvana Pinna from the Lane Group for successfully defending her PhD. Thank you to Dr Terrence Kee (Leeds University) and Lewis Dartnell for acting as examiners. Silvana is now working as a PostDoc at the University of Strasbourg in France.

Marco Colnaghi passed his viva and continues to work at UCL as a PostDoc Research Fellow with the Lane and Pominkowski groups looking at eukaryotic evolution and origins of sexual reproduction and supervising research on the origins of life and genetic coding.

Congratulations to Lucas Konecny who was supervised by Max Telford and his examiners were Duncan Greig and Aidan Emery (NHM). Also from the Telford group, Paschalis Natsidis successfully defended his thesis. His examiners were Andrew Pomiankowski and Tom Williams (University of Bristol).

Congratulations to Stuart Harrison our most recent student to pass their viva. Stuart was supervised by Nick Lane.

Congratulations to Sade Bates for being nominated for the Provost Postgraduate Teaching Assistant (PGTA) Award, recognising excellence in teaching.



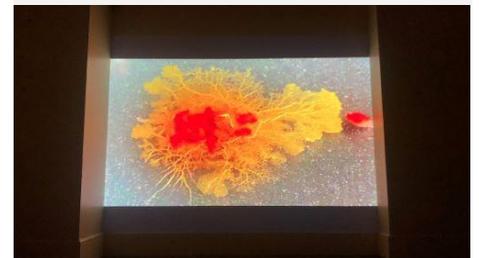
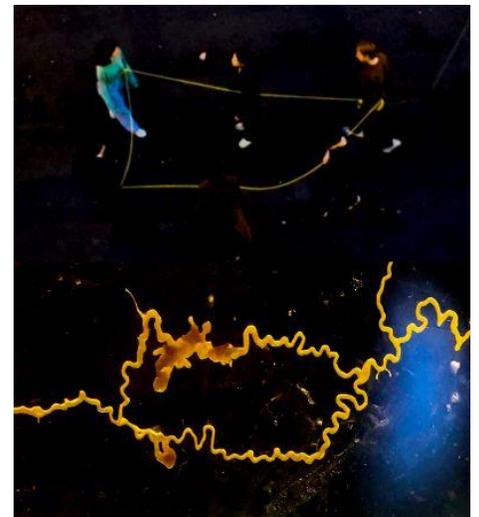
(Left: Sade Bates next to her PGTA Award nomination. Right: Lucas Konecny with Aidan Emery and Max Telford after his PhD viva)

Joana Xavier was selected among 30 participants from around the globe for the next prestigious [Templeton Ideas Lab](#). Participants will have stakes in up to \$5 million total funding for developing the ideas produced during the week. A [booklet on the previous ideas lab](#) is available.

Finally, Anjali Goswami has been elected President of the [Linnean Society](#), many congratulations.

OLIVER HARE ALTRUISM AWARD

The [Oliver Hare Altruism Award](#) is presented each year to a UCL student who has demonstrated great commitment to helping others in both the



(Top to bottom: Slime & performance combined, Blu agar slime, Slime film projected)

university community and the wider world. It recognises initiative, empathy and altruism to bring about positive change through volunteering and philanthropic ventures. You can nominate individuals on the website.

CLOE CBER SUMMER SYMPOSIUM

Jon Bridle and Paola Oliveri will be hosting the next CLOE quarterly Symposium 'The evolution of networks in changing worlds'. The event has been postponed until September and registration details will be sent out again closer to the time. The speakers are

- Phil Davidson, Indiana University, "Regulatory element evolution between and within species: exploring evolvability of gene networks using sea urchin larvae and beetle horns"
- James W. Clark University of Bristol [Gene networks, plasticity and fitness across environmental gradients]
- Daniel Montoya, Basque Centre for Climate Change, Bilbao [Ecological networks, productivity and resilience]

JOINT GROUP MEETING

The speakers for the will be

Raquel Nunes Palmeira: Modelling the origin of genetic heredity

Sonal: Deciphering a novel pathway of sulfide metabolism in budding yeast

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!

BEN COLLEN MEMORIAL LECTURE

[Reserve your place](#) for the 2022 Ben Collen memorial lecture this week (**Wednesday 29th June, JZ Young Lecture Theatre, 5.30pm**). It would be great to have as many people as possible from across the department to remember Ben and hear about the latest research on how biodiversity underpins human wellbeing. After the talk, there will be a drinks reception for everyone.

NICK LANE'S NEW BOOK

Nick Lane has a new book, published on May 19th: *Transformer: The Deep Chemistry of Life and Death* (Profile Books & WW Norton)

Hugely important ... a powerfully persuasive case for life being about energy flow, flux and change.

In *Transformer*, chemistry is quite literally brought to life -- Jim Al-Khalili

Hugely ambitious and tremendously exciting ... *Transformer* shows how a molecular dance from the dawn of time still sculpts our lives today -- Olivia Judson

Thrilling and highly persuasive ... This hugely important book is set to become a landmark, transforming our understanding of how life works -- Gaia Vince

His book launch was at the Royal Institution on Friday the 20th of May.

'LIFE: THROUGH THE LOOKING GLASS' EXHIBITION

Laura Piovani and Dearbhaille Casey have been involved in putting together a virtual exhibition as part of their work with the EvoCELL ITN.

The [online exhibition](#) was launched on the 24th of May. It tells eight captivating stories about the research journeys of young scientists focusing on animal evolution. It depicts the processual nature of science and the questions scientists pose as they research without an end in sight.

"The exhibition lets you dive into a realm filled with unknown elements, where you find yourself at the edge of visibility and understanding." Dearbhaille Casey

The work was funded via the EvoCELL ITN of [Marie Skłodowska-Curie Action](#) which is part of the EU Horizon 2020 funding scheme.

ORIGIN OF LIFE EARLY-CAREER NETWORK FROM OoLEN

OoLEN are holding its third annual meeting in Montreal, Canada on the 3rd-5th August. It will be an excellent networking opportunity and for discussions on the origins of life across various disciplines. For full details and registration visit the [website](#).

OTHER NEWS

Joana Xavier was interviewed for an article in National Geographic entitled [“Impossible’ chemistry may reveal origins of life on Earth’](#)

The Lane Group work is featured in the UKRI blog article [‘Understanding the origins of life helps address major challenges’](#)

We had our first public PhD celebration for Silvana Pinna and Marco Colnaghi. The recording of this will soon be up on the CLOE website.



CLOE Coffee Morning