

April-June 2021

IHA NEWSLETTER

From Jürg & David

Welcome to IHA's first ever quarterly Newsletter! We hope that this will be a useful source of information and will help to generate a sense of community, also with our Associate groups. We thank Muslima Chowdhury for her efforts with putting this information together. Please send your suggestions and content for future issues to Muslima.

We thank you all for keeping the IHA on the road during the pandemic. Special thanks go to Hannah Chapman, Maria Rodriguez-Lopez, James Shilland, Tatiana Svermova and Rhianna Williams who have taken on more responsibility, and of course to Giovanna Vinti for her superb efforts in managing the restrictions and maintaining safe working conditions. Let's hope the worst is over by now and that we all can see each other more regularly.

Congratulations

Carina Kern was shortlisted as a finalist for the prestigious [Asian Women of Achievement Award, Science Category](#). Congratulations Carina!

Matias Fuentealba and Stephan Kamrad both successfully completed their PhD Vivas in June, many congratulations to you both! We wish you all the success for the future and look forward to working together again.

Farewell

Yuan Zhao completed her PostDoc earlier this year after more than five years in the lab. Yuan conducted a series of beautiful and highly original studies during her time at the IHA. She is much missed and we wish her good fortune in the future.

We said goodbye to Benjamin Aleyakpo from the Niccoli lab in June. He is moving onto work at Cambridge.

Welcome

Welcome to our summer and project students. We hope your time in the lab is a great learning experience and you enjoy your time at the bench!

Welcome to Joseph Chadwick who has joined our fly labs as a Research Technician.

Publications

'[Death happy: Adaptive ageing and its evolution by kin selection in organisms with colonial ecology](#)' by Evgeniy Galimov and David Gems added new elements to the theory of the evolution of adaptive programmed organismal death. *Philosophical Transactions of the Royal Society London*.

A second theory paper, '[Gross ways to live long: parasitic worms as an anti-inflammatory therapy?](#)' by Bruce Zhang and David Gems was published in *eLife*. The study attracted some press attention, including the Daily Telegraph and Mail Online. Bruce Zhang, who is an undergraduate volunteer in the Gems lab, subsequently spoke about the study in a [Naked Scientist interview](#).

A research paper '[Mutation of daf-2 extends lifespan via tissue-specific effectors that suppress distinct life-limiting pathologies](#)' by Yuan Zhao et al appeared in the journal *Aging Cell*.

Congratulations to Magda Atilano and Teresa Niccoli for their paper in *eLife* entitled '[Enhanced insulin signalling ameliorates C9orf72 hexanucleotide repeat expansion toxicity in Drosophila](#)'.

Teresa Niccoli and Fiona Kerr also have a paper in *Brain Communications* '[Activating transcription factor 4-dependent lactate dehydrogenase activation as a protective response to amyloid beta toxicity](#)'.

Nathan Woodling and former research fellow Ekin Bolukbasi have a paper in *PNAS*. The paper '[Cell type-specific modulation of health-span by Forkhead family transcription factors in the nervous system](#)' also gained [media coverage](#).

Catalina Romila, Stephan Kamrad, Maria Lopez and Jürg Bähler have a paper in *Microbial Cell* called '[Barcode sequencing and a high-throughput assay for chronological lifespan uncover ageing-associated genes in fission yeast](#)'.

LEAF

Laboratory based research is essential for advancing society but it is also extremely energy and resource intensive. The Laboratory Efficiency Assessment Framework (LEAF) is a standard for sustainable laboratory operations. LEAF contains guidance and actions which lab users can take to save plastics, water, energy, money and other resources.

This year the IHA has made a valiant team effort to aim for the Silver Award, having previously achieved bronze the year before. If successful, the IHA will

Upcoming Events

6th July 10am

[Molecular Genetics Seminar- Dr Judi Campisi. Cancer and ageing: Rival demons?](#)
(Registration needed)

8th July 12pm

[CDB Seminar- Dr F. Olfasdottir. Hippocampal-entorhinal circuits for spatial memory.](#)

8th July 4pm

[Neurodegeneration in Flies Virtual Symposium. Dr Cahir O'Kane. A neuron within a neuron-axonal endoplasmic reticulum and its links to hereditary spastic paraplegia.](#)

be presented with the Silver award at the UCL Sustainability Awards on Wednesday 14th July, starting from 12:45 until 15:00.

Some of the actions that have been implemented so far for LEAF are:

- LERN (London Evolutionary Research Network) and LEAF have collaborated to invite all to a Sustainability in Science seminar
- An IHA Teams group is being developed. The purpose of it is to be a central space for information and interaction.
- To improve chemistry management, chemical databases on Quartzly have been updated.
- A poster has been displayed about Green Chemistry.
- A visual reminder to turn off lights, fume hoods, Bunsen burners and switches has been made.

If anyone has an idea or suggestion related to the IHA Teams group or sustainability/lab efficiency, please contact Rhianna Williams (Rhianna.williams@ucl.ac.uk).

Art at the IHA

We will have new artwork at the IHA, a piece by Ryan Mosley called 'Bones of Time' next month, hope everyone enjoys the piece.

If you have artwork you may like to display at the IHA please contact Muslima with details.



'Bones of Time' by Ryan Mosley

Other News

In June, several members of the Gems lab attended the [23rd International C. elegans Conference](#). Carina Kern gave a platform talk in the session "Aging and stress I" entitled "*C. elegans* provide milk for their young", and Hannah Chapman, David Gems, Kuei Ching Hsiung and Aihan Zhang all presented posters.

Linda Partridge gave external talks including a [talk at the University of British Columbia](#).

David Gems also gave some external talks at University of Oslo, Paris Diderot University, and the University of Kent.

Covid Testing

Please take advantage of free Covid testing available both at UCL and with at home lateral flow tests. [Symptom free Covid testing is available at UCL](#) or you can order seven [home tests from the NHS](#).



Farewell to Stephan (top left) in the park

David Gems with Yuan Zhao