CAB newsletter 17 May 2023

You are receiving this as a member of the Centre for Applied Bioinformatics (CAB)

Not yet joined CAB? Well if you are receiving this you already have joined, but if you know anyone who would like to join, then please forward this message and they can now sign up using a simple web form from the members page at https://www.appliedbioinformatics.com.au/Members.php

News:

CAB continues to extend applied bioinformatics training with increasing numbers of students undertaking the Master of Bioinformatics and with the recent launch of the first UWA microcredential in bioinformatics. We would like to extend this training by offering specific workshops in subjects of interest such as population genetic analysis, R or gene expression analysis. If you are interested in presenting such a workshop, please contact dave.edwards@uwa.edu.au

Interesting papers:

Title: A draft human pangenome reference

Summary: The pangenome contains 47 phased, diploid assemblies from a cohort of genetically diverse individuals, capturing the diversity that is missing when using single reference genome assemblies.

Link: https://www.nature.com/articles/s41586-023-05896-x#:

Title: Legume-wide comparative analysis of pod shatter locus PDH1 reveals phaseoloid specificity, high cowpea expression, and stress responsive genomic context.

Summary: Comparative analysis of a gene responsible for retaining seeds in pods during harvest, an important trait for the domestication of crops.

Link: http://doi.org/10.1111/tpj.16209

Conferences and Presentations:

UWA Data Institute. The Program and Registration for our upcoming (13June) **Data-Driven Decisions (D3) Conference : Al In The Wild** are both now available at https://www.uwadatainstitute.org.au/conference

EMBO workshop: Predicting evolution 11 – 14 July 2023, EMBL Heidelberg and Virtual. More details at https://tinyurl.com/yc2mshh8

EMBL Symposium: **The non-coding genome** 11 – 14 October 2023, EMBL Heidelberg and Virtual For more information, click: The non-coding genome

NCI are co-organising the **Australasian Leadership Computing Symposium** once again in 2023. ALCS will be a unique interdisciplinary gathering for our computational science community in Canberra on 14-16 June. For more information, click: Australasian Leadership Computing Symposium

EMBO | EMBL Symposium: **The human microbiome** 20 – 23 September 2023, EMBL Heidelberg and Virtual See https://tinyurl.com/umxfzcjh for more details

EMBL **Proteomics in cell biology and disease mechanisms** 25 – 27 October 2023, at EMBL Heidelberg and Virtual See https://tinyurl.com/24j4j2fk for more details

Cold Spring Harbor Laboratory: **Plant Genomes, Systems Biology & Engineering** November 29 - December 02, 2023 See https://meetings.cshl.edu/meetings.aspx?meet=plants&year=23 for details

Australian Bioinformatics And Computational Biology Society (ABACBS) annual conference will be held 4 – 8 December in Brisbane, for the first time in collaboration with the International Society of Computational Biology. Save the date!

EMBO workshop: Computational structural biology, 6 – 9 December 2023, EMBL Heidelberg and Virtual. Details available at https://tinyurl.com/ynm7s5wd

Infrastructure:

How to apply for Nimbus servers:

Would you like some free Linux servers with up to 16 cores and 64 GB RAM through Pawsey? Dr Sarah Beecroft has helpfully provided a 'how to apply' video available at https://www.youtube.com/watch?v=mpFQC5sXSHQ Users have full access to these machines and we have prepared an image that supports many standard bioinformatics tasks that can run on this scale of machine.

Training:

Agricultural Genome to Phenome Initiative. The next AG2PI virtual Training Workshop, "Using Remote Sensing to Monitor Nitrogen Stress and Yield in Alfalfa (Medicago sativa L.)" is May 23 from 10am to 12pm CDT (UTC-5). In this workshop, Drs. Anju Biswas and Esteban Rios will demonstrate an image processing pipeline for nitrogen/abiotic stress detection in crops. For additional details and to register for this virtual event go to https://www.ag2pi.org/workshops-and-activities/workshop-2023-05-23/.

Cold Spring Harbor Laboratory: **Advanced Bacterial Genetics**June 6 - 25, 2023. See https://meetings.cshl.edu/index.aspx for details

EMBO Practical Course: **Quantitative proteomics: strategies and tools to probe biology** 11 – 16 June 2023, EMBL Heidelberg. See https://tinyurl.com/5n8y32f4

EMBL Course: **Deep learning for image analysis** 5 – 9 June 2023, EMBL Heidelberg. See https://tinyurl.com/5c44rc8v

Earlham Institute: Advanced Python for biologists 26 June - 07 July, Online (via Zoom). Short online morning sessions developing bigger or more complicated programs and increasing skills. More details at https://tinyurl.com/3upymctn

Postdoc Fellowship:

Forrest Research Foundation Post-doc Fellowships. Applications now open, closing 31 May, 2023. See https://www.forrestresearch.org.au/fellowship/ for more details

Potential PhD student:

Paolo Maroma (paolomaroma17@gmail.com) studied a bachelors in Biomedical science with a double major in Biochemistry and Microbiology/Immunology. He has completed an honours degree in health and medical sciences with a focus in medicine where he achieved a first class, first band grade. Currently working as a Microbiologist for the company Biomebank. Looking to move to Perth to start a PhD in Bioinformatics.

Professor Dave Edwards
Director UWA Centre for Applied Bioinformatics
School of Biological Sciences
University of Western Australia
Perth, 6009
Australia

www.appliedbioinformatics.com.au

<u>Dave.Edwards@uwa.edu.au</u> Mobile: <u>+61 (0)423 826 042</u>