Danang Crysnanto

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Education

ETH Zurich

Doctoral in Animal Genomics

The University of Edinburgh

Msc in Quantitative Genetics and Genome Analysis with Distinction

Bandung Institute of Technology

Bsc in Biology (Genetics) with Cum Laude

Dec 2017 – Present Zurich, Switzerland Aug 2016 – Aug 2017 Edinburgh, UK Oct 2010 – Oct 2014

Bandung, Indonesia

March 0001

Jan 2018

Oxford UK

Publications

First-author publications

- 1. **Crysnanto D.**, A. S. Leonard, Z. H. Fang, and H. Pausch, 2021. Novel functional sequences uncovered through a bovine multi-assembly graph. Accepted *Proceedings of the National Academy of Sciences USA*
- Crysnanto D., and H. Pausch, 2020. Bovine breed-specific augmented reference graphs facilitate accurate sequence read mapping and unbiased variant discovery. Genome Biology. 21:184
- 3. **Crysnanto D.**, C. Wurmser, and H. Pausch, 2019. Accurate sequence variant genotyping in cattle using variation-aware genome graphs. *Genetics Selection Evolution* 51:21
- 4. **Crysnanto D.**, and D. J. Obbard, 2019 Widespread gene duplication and adaptive evolution in the RNA interference pathways of the *Drosophila obscura* group. *BMC Evolutionary Biology* 19:1

Co-author publications

- 5. Nosková A., M. Bhati, N. K. Kadri, and **D. Crysnanto** et al., 2021 Characterization of a haplotype-reference panel for genotyping by low-pass sequencing in Swiss Large White pigs. *BMC Genomics* 1–30
- Nosková A., C. Wurmser, D. Crysnanto, A. Sironen, P. Uimari, et al., 2020 Deletion of porcine BOLL is associated with defective acrosomes and subfertility in Yorkshire boars. Animal Genetics 51: 945–949
- 7. Fang Z. H., A. Nosková, **D. Crysnanto**, S. Neuenschwander, P. Vögeli, et al., 2020 A 63-bp insertion in exon 2 of the porcine KIF21A gene is associated with arthrogryposis multiplex congenita. *Animal Genetics* 51: 820–823
- 8. Hiltpold M., G. Niu, N. K. Kadri, **D. Crysnanto**, Z. H. Fang, et al., 2020 Activation of cryptic splicing in bovine WDR19 is associated with reduced semen quality and male fertility. *PLoS Genetics*. 16: 1–27
- 9. Bhati M., N. K. Kadri, **D. Crysnanto**, and H. Pausch, 2020 Assessing genomic diversity and signatures of selection in Original Braunvieh cattle using whole-genome sequencing data. *BMC Genomics* 21(1)

Invited Talks

CICENE Comings Corios

Talk title: Bovine pangenomics	NMBU Norway
International Virtual Animal Breeding Journal Club Talk title: Bovine pangenomics	Sept 2020 <i>USDA USA</i>
Plant and Animal Genome Conference (PAG) Talk title: Bovine pangenome graph enables unbiased genetic variants discovery	Jan 2020 <i>San Diego USA</i>
Livestock Genomics session - Genome Informatics Talk title: Development of graph-based genotyping pipelines for bovine whole-genome data	Sept 2018 <i>Cambridge UK</i>

Population Genetics (PopGroup) Conference

Talk title: Widespread gene duplications in *Drosophila* immune system pathways

Awards

Sir Kenneth Mather Memorial Prize

Jan 2018

Annual award for a MSc or PhD student of any UK University or Research Institutions which shown an outstanding performance in the area of quantitative and population genetics.

The Genetics Society

The Douglas Falcone Prize

Oct 2017

Annual award for the best master's thesis in Quantitative Genetics and Genome Analysis

The University of Edinburgh

Bronze Medalist 21st International Biology Olympiad

Aug 2010

Winning a medal on a highly prestigious International bioscience Olympiad

International Biology Olympiad