# Danang Crysnanto

08.01.1992 Citizen of Indonesia Hoffeld 24 8057 Zurich danangcrysnanto@gmail.com

## 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

### **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*
- 2. 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

# $Co\mbox{-}author\ publications$

- 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
- 6. 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

CIGENE Seminar Series	March 2021
Talk title: Bovine pangenomics	$NMBU\ Norway$
International Virtual Animal Breeding Journal Club	Sept 2020
Talk title: Bovine pangenomics	$USDA\ USA$
Plant and Animal Genome Conference (PAG)	Jan 2020
Talk title: Bovine pangenome graph enables unbiased genetic variants discovery	San Diego USA
Livestock Genomics session - Genome Informatics	Sept 2018
Talk title: Development of graph-based genotyping pipelines for bovine whole-genome data	$Cambridge\ UK$
Population Genetics (PopGroup) Conference	Jan 2018
Talk title: Widespread gene duplications in <i>Drosophila</i> immune system pathways	$Oxford\ UK$

## 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 Douglas Falcone Prize

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

Bronze Medalist 21st International Biology Olympiad

Winning a medal on a highly prestigious International bioscience Olympiad

The Genetics Society
Oct 2017
The University of Edinburgh
Aug 2010

International Biology Olympiad