Kristina Gagalova, Ph.D.

Research scientist

I am a Ph.D. graduate in Bioinformatics and I have pursued two Master's degrees in science. My research is focused in plant and evolutionary genomics. I have +3 years of work experience in industry and startups

Summary

- Double academic curriculum with Master's degrees in Bioinformatics and Biotechnology. Solid basics in molecular biology and genetics
- Deep understanding of bioinformatics algorithms and omics data analysis and multi-omics data analysis
- Knowledge of classical and modern machine learning algorithms
- Successfully completed a research-based Ph.D. in genomics, delivered with the publication of several peer-reviewed papers
- Extensive collaboration with researchers from different scientific backgrounds
- Successful project delivery in the context of omics research and data analysis

Education and training

2017-2022 **Ph.D. doctorate - Bioinformatics**, *University of British Columnbia*, Vancouver, Canada.

2013-2015 **Master of science - Bioinformatics**, *Vrije University*, Amsterdam, The Netherlands.

2010-2013 **Master of science - Biotechnology**, *University of Bologna*, Bologna, Italy.

2007-2010 **Bachelor of science - Biotechnology**, *University of Bologna*, Bologna, Italy.

Work experience

Sep 2020 - Oct 2022 **Research scientist**, *Willow Biosciences Inc.*, Burnaby, Canada.

Sep 2018 - Aug 2020 **Data analyst**, *BC Childrens Hospital*, Vancouver, Canada.

Mar 2016 - Dec 2016 **Bioinformatician**, *GenomeScan*, Leiden, The Netherlands.

Oct 2015 - Feb 2016 **Data analyst**, *MIMETAS*, Leiden, The Netherlands.

Awards and Fellowships

2018 ECOSCOPE graduate trainee fellowship. NSERC CREATE Graduate Training Program provides UBC graduate students with the skills needed to translate academic research into commercial and entrepreneurial activities

2017 4YF - 4 years fellowship. Four Year Doctoral Fellowship to support outstanding international students

2015 Max Planck Institute and Erasmus+ fellowship. Master's degree fellowship for international internship

2013 VUFP-VU. Vrije University fellowship for talented international students

2013 University of Bologna: Mathematical, Physical, and Natural science traveling grant - in collaboration with the Rijksuniversiteit Groningen. Master's degree fellowship for international internship

2013 FindAMasters fellowship. Biological Sciences Scholarship

2007 ER.GO education grant. Bachelor and Master's fellowship

Publications

1. Gagalova, K., Warren, R., Coombe, L., Wong, J., Nip, K., Yuen, M., & .... (2022). Spruce giga-genomes: Structurally similar yet distinctive with differentially expanding gene families and rapidly evolving genes. *The Plant Journal*.
2. Gagalova, K., Whitehill, J., Culibrk, L., Lin, D., L'evesque-Tremblay, V., & .... (2022). The genome of the forest insect pest pissodes strobi reveals genome expansion and evidence of a wolbachia endosymbiont. *G*.
3. Nip, K., Hafezqorani, S., Gagalova, K., Chiu, R., Yang, C., Warren, R., & Birol, I. (2022). Reference-free assembly of long-read transcriptome sequencing data with RNA-Bloom2. *bioRxiv*.
4. Gagalova, K. (2022). Annotation of complex genomes for comparative genomics. *University of British Columbia*.
5. Stephenson, M., Nip, K., HafezQorani, S., Gagalova, K., Yang, C., & .... (2021). RNA-scoop: Interactive visualization of transcripts in single-cell transcriptomes. *NAR Genomics and Bioinformatics*.
6. Teng, M., Gagalova, K., Portales-Casamar, E., & Gorges, M. (2021). Pilot implementation of a clinical research data warehouse linking intra-operative physiological data with post-operative outcomes. *ANESTHESIA AND ANALGESIA*.
7. Gagalova, K., Elizalde, M., Portales-Casamar, E., & Görges, M. (2020). What you need to know before implementing a clinical research data warehouse: Comparative review of integrated data repositories in health care institutions. *JMIR Formative Research*.
8. Shvetsova, E., Sofronova, A., Monajemi, R., Gagalova, K., Draisma, H., & .... (2019). Skewed x-inactivation is common in the general female population. *European Journal of Human Genetics*.
9. Lai, J., Gagalova, K., Kuenne, C., El-Brolosy, M., & Stainier, D. (2019). Induction of interferon-stimulated genes and cellular stress pathways by morpholinos in zebrafish. *Developmental Biology*.

10. Jadhav, B., Monajemi, R., Gagalova, K., Ho, D., Draisma, H., & .... (2019). RNA-seq in 296 phased trios provides a high-resolution map of genomic imprinting. *BMC Biology*.
11. Lin, D., Coombe, L., Jackman, S., Gagalova, K., Warren, R., Hammond, S., & .... (2019). Complete chloroplast genome sequence of a white spruce (picea glauca, genotype ws77111) from eastern canada. *Microbiology Resource Announcements*.
12. Lin, D., Coombe, L., Jackman, S., Gagalova, K., Warren, R., Hammond, S., & .... (2019). Complete chloroplast genome sequence of an engelmann spruce (picea engelmannii, genotype Se404-851) from western canada. *Microbiology Resource Announcements*.
13. Lai, J., Gagalova, K., & Stainier, D. (2018). Induction of interferon-stimulated genes and cellular stress pathways by morpholinos. *bioRxiv*.
14. van Dijk, F., de Klein, N., Claringbould, A., Deelen, P., Vosa, U., Verlouw, J., & .... (2018). Pathogenic SNPs with allelic imbalance show higher expression in the major allele. *EUROPEAN JOURNAL OF HUMAN GENETICS*.
15. Vermeulen, C., Sørensen, P., Gagalova, K., & Loeschcke, V. (2014). Flies who cannot take the heat: Genome-wide gene expression analysis of temperature-sensitive lethality in an inbred line of drosophila melanogaster. *Journal of Evolutionary Biology*.
16. Vermeulen, C., Pedersen, K., Beck, H., Petersen, J., Gagalova, K., & .... (2013). Proteomic characterization of inbreeding-related cold sensitivity in drosophila melanogaster. *PLOS One*.