VADYM IVANCHUK

EDUCATION

TECHNICAL UNIVERSITY OF MADRID

Madrid, Spain

Master of Science in Biomedical Engineering

Jul/2020

TECHNICAL UNIVERSITY OF MADRID

Madrid, Spain

Bachelor of Engineering in Telecommunication Technologies and Services

Jul/2018

· Minor in Electronic Systems

WORK EXPERIENCE

KAROLINSKA INSTITUTET

Stockholm, Sweden

Bioinformatician at the Clinical Genomics Core Facility (SciLifeLab)

Jul/2021 - Oct/2024

· Development of bioinformatics solutions for identifying somatic mutations in cancer patients and interpreting genomic and transcriptomic clinical data

SPANISH NATIONAL CANCER RESEARCH CENTER

Madrid, Spain

Research Assistant at the Bioinformatics Group

Feb/2021 - Jun/2021

· Bioinformatics analysis and interpretation of biological and clinical single-cell RNA-seq data

Puerta de Hierro Majadahonda University Hospital

Madrid, Spain

Research Intern at the Liquid Biopsy Laboratory

Feb/2020 - Jul/2020

- · Molecular profiling of liquid biopsy samples from lung cancer patients
- · Development of a somatic variant filtering pipeline for next-generation sequencing data

BIOGIPUZKOA HEALTH RESEARCH INSTITUTE

San Sebastián, Spain

Research Assistant at the San Sebastián Oncology Hospital

Dec/2018 - Sept/2019

· Development of interoperable web, mobile, and server platforms to assist health professionals in designing personalized treatment plans and monitoring cancer patients

TECHNICAL UNIVERSITY OF MADRID

Madrid, Spain

Research Intern at the Life Supporting Technologies Research Group

Feb/2018 - Sept/2018

- · Development and integration of services in IoT devices of a Smart House Living Lab
- · Design of a facial expression recognition system using machine learning and computer vision

SKILLS

TECHNICAL

- · Computer Science: Python, R, Snakemake, Docker, Singularity, SQL, HPC
- · Machine learning and computer vision: Keras/TensorFlow, Google Cloud, OpenCV
- · Electronic systems: C, MATLAB, embedded systems, FPGAs, Raspberry Pi, Arduino
- · Web and mobile applications: Java, Angular, JavaScript, HTML, CSS, Android Studio
- · Wet lab: Nucleic acid isolation from liquid biopsy samples and NGS/dPCR library preparation

LANGUAGES

· English, Spanish, German (B1), Ukrainian, Russian

RESEARCH

PUBLICATIONS

- · Sánchez-Herrero, E., Serna-Blasco, R., **Ivanchuk, V.**, et al. (2021). NGS-based liquid biopsy profiling identifies mechanisms of resistance to ALK inhibitors: a step toward personalized NSCLC treatment. Molecular Oncology.
- · Fustero-Torre, C., Jiménez-Santos, M. J., García-Martín, S., Carretero-Puche, C., García-Jimeno, L., **Ivanchuk, V.**, et al. (2021). *Beyondcell: targeting cancer therapeutic heterogeneity in single-cell RNA-seq data*. Genome Medicine.

Conferences and Presentations

- · Foroughi-Asl, H., Jeggari, A., <u>Ivanchuk, V.</u>, et al. (2022). **Poster presentation**. *Balsamic: bioinformatic analysis pipeline for somatic mutations in cancer*. Cutting-Edge Implementation of Precision Medicine in Europe Symposium (Stockholm, Sweden).
- · Renevey, A., Caceres E., Jemt A., **Ivanchuk, V.**, et al. (2023). **Poster presentation**. *Implementation and validation of RNA-fusion detection in routine cancer diagnostics*. Cancer Research KI Retreat (Stockholm, Sweden)
- · Janvid, V., Nyrén K., **Ivanchuk, V.**, et al. (2023). **Poster presentation**. Enabling large-scale clinical sequencing through the automation of bioinformatic workflows and data management. European Human Genetics Conference (Glasgow, Scotland).
- · Maqbool, K., Foroughi-Asl, H., Jeggari, A., **Ivanchuk, V.**, et al. (2022). **Abstract presentation**. *Identification and Interpretation of Clinically Relevant Somatic Variants from Whole-Genome Sequencing Data*. 64th Annual Meeting of American Society of Hematology (New Orleans, United States).