

# VADYM IVANCHUK

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Stockholm, Sweden

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## 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 Department of Microbiology, Tumor and Cell Biology *Jul/2021 – Present*  
· Development of bioinformatics solutions for the identification of somatic mutations in cancer and clinical interpretation of genomic data

SPANISH NATIONAL CANCER RESEARCH CENTER *MADRID, SPAIN*  
**Research Assistant** at the Bioinformatics Unit *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*  
**Intern** at the Liquid Biopsy Laboratory of the Oncology Department *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  
· Coordination of the software development and collaboration with the Medical Oncology Department

TECHNICAL UNIVERSITY OF MADRID *MADRID, SPAIN*  
**Research Assistant** 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, Ukrainian, and 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., **Ivanchuk, V.**, 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).