



## GENOMICS' MOST VERSATILE TOOLKIT

Next Generation Sequencing (NGS) is one of the game-changing technologies in biomedical research. The inherently flexible approach enables researchers to target any nucleic acid of interest with a specific protocol, providing invaluable information to academics and applied researchers.

The NGS unit boasts 13 years of experience in this area of technology, contributing to hundreds of projects and publications and enabling key discoveries by researchers on and off site. Since its introduction, NGS has methodically evolved to serve a diversity of specialized research purposes. Our continuously expanding portfolio of cutting-edge services testifies to our commitment to remain at the forefront of the technically possible.

Nanopore and SMRT sequencing, single-cell and spatial transcriptomics, small- and large-scale Illumina sequencing platforms, base modifications and epigenomics; there are few developments that haven't been established by our outstanding sequencing specialists and our team always welcomes researchers to get in touch to develop our portfolio further.

The NGS team is closely embedded with the researchers at the Vienna BioCenter (VBC) and has extensive experience to adapt and optimize protocols in collaboration with the most ambitious users of our facility. We are proud of the numerous novel sequencing protocols (e.g. STARR-seq, SARSseq, SLAM-seq), which are the tangible result of this close interaction.

To maintain this ambitious vision of the NGS facility as partner for advancing current sequencing technologies, we constantly expand our capacity and capabilities by standardized workflows suitable for the use of robotics.

The NGS activities are leveraged by IT experts, which are embedded in the facility. Our bioinformaticians maintain and develop computational tools to manage, analyze and access information and data during all steps of the sequencing process: from request submission to data download.

Overall, our team thrives on the close interactions with some of the most outstanding researchers at the VBC. We offer a diverse workplace at the forefront of sequencing technology for experts with a mindset for technical support.

## VBCF NGS TEAM



## SERVICES AND METHODOLOGIES

- Selected library preparation protocols including single cell techniques
- Sequencing on Illumina sequencing platforms
- Sequencing on PacBio Sequel system
- Nanopore Sequencing
- Standardized bioinformatic analyses
- Expertise and advice on project strategy and analysis
- Access to state-of-the-art technology
- High quality and cost-effective services

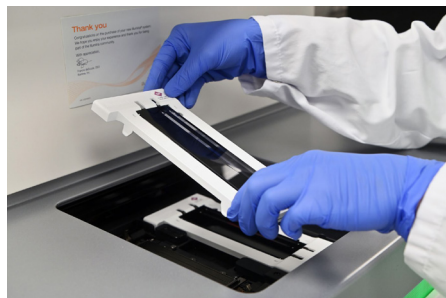
## EQUIPMENT

We are committed to offer our users the best suitable equipment to meet their sequencing needs. Currently, we apply different platforms covering a broad range of throughput, read length, flexibility and scalability options:

- Illumina NovaSeq, NextSeq, MiSeq, iSeq
- PacBio Sequel II (in collaboration with MPI-CBG Dresden)
- ONT MinION, PromethION



Robot Beckman Coulter



Illumina NovaSeq Flowcell



ONT PromethION

## CONTACT

Next Generation Sequencing

Vienna BioCenter Core Facilities [VBCF]

<https://www.viennabiocenter.org/vbcf/next-generation-sequencing/>

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