OUR MISSION

The West German Genome Center (WGGC) is one of four national Next Generation Sequencing (NGS) Competence Centers funded by the DFG, the national research council. The WGGC takes a leading role in harmonizing standards to serve the scientific community by providing excellent NGS services.

The WGGC is a collaborative network of universities and institutes located in the west of Germany and activities started in January 2019. The WGGC has three production sites where sequencing is performed, located in Cologne, Bonn and Düsseldorf and counts on additional expertise on NGS technologies from the universities in Aachen, Duisburg/Essen, Saarbrücken as well as the DZNE, BIARM and MPIPZ. Centralized NGS services are complemented with existing decentralized NGS- and bioinformatics expertise of the WGGC partners. Such expertise covers most aspects of NGS research, encompassing strong capabilities in human and medical genetics as well as onco- and plant genomics. Thus, you can connect with our network of WGGC experts working on a wide range of topics and with different organisms, from bacteria to plants to humans. To identify the expert you are looking for, please have a look at our profiles’ page on our website.

If you are interested in starting a sequencing project with the WGGC, please contact us!

CONTACT INFORMATION

West German Genome Center

Prof. Dr. Peter Nürnberg
Speaker WGGC, Cologne
+49 221 478 96957 (Office)

Dr. Janine Altmüller
Core facility leader, Cologne
+49 221 478 96819
kontakt@wggc.de

Prof. Dr. Joachim Schultze
Co-Speaker WGGC, Bonn

Dr. André Heimbach
Core facility leader, Bonn
+49 211 81 12350 (Office)
heimbach@uni-bonn.de

Prof. Dr. Dagmar Wieczorek
Co-Speaker WGGC, Düsseldorf
+49 211 81 12350 (Office)

Prof. Dr. Karl Köhrer
Core facility leader, Düsseldorf
WGGC_Consulting@hhu.de

The WGGC experts work in five Special Interest Groups that focus on key topics relevant to NGS technology. Their goal is to tackle common and pressing issues and develop solutions that will benefit NGS users and service providers alike.
Based on its long lasting expertise in using NGS technologies, the CCG has been selected as a major production site of the WGGC. The additional funding provided by the DFG has been used not only to reach a competitive level of capacity, throughput and cost effectiveness but also to further expand CCG’s wide portfolio of all kinds of NGS applications, including single-cell genomics.

The GTL functions as the WGGC production site specializing in Long-read NGS technology. For this purpose, a Sequel I and a Sequel II system from Pacific Biosciences (PacBio) as well as both, a GridION Mk1 and a PromethION 24 platform from Oxford Nanopore Technologies (ONT) are available.

The NGS Core Facility Bonn is the WGGC production site in Bonn and provides services for short-read based sequencing projects. This is guaranteed by state-of-the art technologies for QC, sample preparation and sequencing.

At the University of Bonn and the German Center for Neurodegenerative Diseases (DZNE) the PRECISE Platform for Single Cell Genomics and Epigenomics has been established. PRECISE is also the overflow facility for the NGS Core Facility Bonn.

Special Research Areas
- Cancer Genomics
- Neuro- and Nephrogenetics
- Plant Genomics
- RNA Biology
- Method Development (cDNA and ultra-low-input protocols)

Key Technology
- NovaSeq 6000 (Illumina)
- GridION XS (Oxford Nanopore Technologies)
- Chromium Controller (10x GENOMICS)
- TaKaRa’s ICELL8 Single-Cell System

Special Research Areas
- Human Genetics
- Single Cell Omics technologies for clinical and translational research

Key Technology
- NovaSeq 6000 (Illumina)
- Chromium Controller (10x GENOMICS)
- BD Rhapsody, Smart-Seq2/3, spatial transcriptomics

Special Research Areas
- Plant Genetics
- Human Genetics
- Microbiology

Key Technology
- GridION Mk1, PromethION 24 (Oxford Nanopore Technologies)
- Sequel I and II (Pacific Biosciences)
- Chromium Controller (10x GENOMICS)
- Saphyr (Bionano Genomics)