



**Molecular Geneticist (m/f/d) (80-100%)**

**Location:** Zürich, Switzerland

**Employment:** Contract for 3 years with the option to convert to permanent employment with excellent performance.

The **Swiss Plant Breeding Center (SPBC)** is seeking an experienced and versatile **Molecular Geneticist**. In this role, you will establish and optimize lab methodology for translating genomic data into actionable insights and act as the bridge between laboratory analyses and breeding decisions at Swiss private and public breeding organizations. Your primary objective is to leverage genomics to accelerate the development of resilient and high-quality crop varieties that are well-adapted to Switzerland. This is a unique opportunity to contribute to the building of the SPBC and to be a positive force for the Swiss agriculture and food system.

**Key Responsibilities**

- **Support in molecular plant breeding and resistance screenings** towards biotic and abiotic stresses across multiple crops to drive breeding program success and increase genetic gain
- **Molecular Marker Development:** Design cost-efficient markers and validation experiments with breeders to enable routine marker-assisted selection in breeding pipelines.
- **Lab Infrastructure:** Design and maintain efficient lab workflows, including scoping and acquiring specialized lab equipment.
- **Lab Management and Reporting:** Design and execute complex experiments, ensuring all protocols meet stringent quality control (QC) and quality assurance (QA) standards. Prepare detailed technical reports and standard operating procedures.
- **Genomic Analysis:** Perform high-throughput DNA extraction and sequencing (NGS), PCR, and genotyping analysis with fast turnarounds.
- **Bioinformatics:** Build and maintain automated bioinformatics pipelines for processing genomics data, such as high-throughput genotyping (SNP Chips, KASP) and genome sequencing (targeted approaches, WGS, RNA-Seq), including creating genome assemblies.
- **Stakeholder Engagement and Training:** Effective communication with stakeholders and training of others.
- **Innovation:** Stay at the forefront of genetic technology (e.g., cost-effective genotyping, sequencing) to improve internal methodologies.
- **Decision Support:** Translate complex genomic data into actionable insights for breeding decisions

**Who you are**

- You enjoy lab work, developing and optimizing innovative methods and tools to solve practical scientific challenges in diverse plant species in a complex network of breeding organizations
- You are an effective communicator that can interact with a wide variety of stakeholders
- You are motivated by the application of new technologies and methods in practical breeding programs and understand that publishing papers is not the main emphasis for this role
- You enjoy developing efficient lab processes and workflows that can be applied routinely
- You enjoy sharing your expertise freely and openly
- You enjoy working in a small team where everyone supports each other



### Technical Requirements

- **Education:** PhD (or MSc with >6 years of experience) in Molecular Genetics, Molecular Biology, Molecular Plant Breeding, Bioinformatics or related field.
- **Laboratory Management:** Broad knowledge of efficient laboratory workflows and ability to coordinate lab equipment acquisition. Experience in good laboratory practice, lab information management software (LIMS) and leading team members in a laboratory setting.
- **Genomics:** Experience with generating sequencing libraries, genome assembly, alignment and variant calling. Expertise in molecular cloning, primer design, and cell culture.
- **Marker design:** Experience in designing genetic markers to enable marker-assisted selection for important traits.
- **Scientific computing:** Experience with R and high-performance computing (HPC), including Linux environments and cloud computing (AWS/GCP).
- **Languages:** English and German or French.

### The Swiss Plant Breeding Center

The Swiss Plant Breeding Center (SPBC) is the newly founded, independent competence and innovation center for plant breeding in Switzerland supported by the Federal Office for Agriculture (FOAG). Its aim is to strengthen Swiss plant breeding and increase breeding efficiency. Its main tasks are to network the players in breeding and research and to transfer research results into practical breeding programs. The SPBC provides breeders with technical support, know-how and expertise and plays an active role in the planning and implementation of innovations. It aligns its services to customer needs, is open to all crop types, cultivation systems and methods, covers broad areas of expertise through network partnerships and is active in the acquisition of customer and third-party funding.

Our competencies include molecular genetics, genomics, bioinformatics, quantitative genetics, data analytics, trial design, breeding program design, and digital phenotyping. In all these areas, we focus on supporting breeding organizations to translate research results into routine applications.

More info at [Swiss Plant Breeding Center - SPBC](#)

Please send your electronic application (incl. letter of motivation, CV, list of publications, 3 references) in German or English with the subject "**MolecularGeneticist\_SPBC**" to [daetwyler@spbc-plantbreeding.ch](mailto:daetwyler@spbc-plantbreeding.ch). For further information please contact Hans Dätwyler via email or phone, +41 062 865 04 10.