ELIXIR Officer Profile

Name: Dr. Sebastian Beier
Based in: Forschungszentrum Jülich, Jülich
PI: Prof. Dr. Björn Usadel
Function: ELIXIR Officer of Crop Plant (Green) Bioinformatics Services
Topic: Crop Plant (Green) Bioinformatics

Activities in ELIXIR

Platforms

- ELIXIR Data Platform
- ELIXIR Interoperability Platform
- ELIXIR Training Platform

Communities

- Plants Sciences:
- **Elected Community Co-Lead**
  Organization of:
- Plant community workshops
- ELIXIR BioHackathons
- Plant community monthly calls

Publications

- **Beier et al.** Recommendations for the formatting of VCF files to make plant genotyping data FAIR. F1000Research, 2022.
- Mayer et al. Implementing FAIR data management within the German Network for Bioinformatics Infrastructure (de.NBI) exemplified by selected use cases. Briefings in Bioinformatics, 2021.
- Pommier et al. ELIXIR Plant sciences 2020-2023 Roadmap. F1000Research, 2020.
- König et al. BRIDGE - a visual analytics web tool for barley genebank genomics. Front. Plant Sci., 2020.
- **Beier et al.** Kmasker plants - a tool for assessing complex sequence space in plant species. Plant J., 2020.

Participation in ELIXIR Service Provision

- Help maintain and further develop FZJ/GCBN services:
- Mercator
- MapMan
- MISA-web
- BRIDGE
- e!DAL-PGP
- BARLEX

Current Tasks

Platform Tasks

- ELIXIR Training Platform:
- Write guidelines on RDM for plants
- Develop online and F2F training for plant genomics

Implementation Studies

- 2019-Plants(FONDUE):
  Introduction of a standard for plant genotyping metadata and persistent global identifiers for linking genotyping and phenotyping results and studies according to the FAIR principles.
  Role: Principal Investigator

- 2021- Plants (Increasing):
  Creation of Service Bundles and matching training material from ELIXIR Plant Services.
- Linking of different aggregation databases and standard collections in a European Plant Data Portal.
- Increase interoperability of community tools through validation and use of common APIs.
- Role: Collaborator (WP1)

Participation in EU Projects

- CONVERGE:
  WP3: RDMKit
  WP5: Demonstrator projects
- FAIRplus: Cookbook
- AGENT: Data publication workflow

Collaboration with others

- DataPlant as part of NFDI4plants
- NFDI4Biodiversity
- FAIRagro as part of NFDI4Agri
- AgroServ
- Usadellab projects