# Core Facility Computational Bioanalytics



> MedBioNode HPC Infrastructure

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Med Uni Graz

## Organigram O-FIS





\*Quality Management \*\*Science-Technology Interface: Structural Biology \*\*\* Management of lab equipment and research space located at ZMF I and ZMF II (incl. coordination of central radioisotope labs)



# **Core Facility Computational Bioanalytics** (CF-CB) - Services



### Consulting

- Definition of user needs
- Experimental design
- Sample size



### Individual Training

• Learn to analyze your data



### galaxy.medunigraz.at

- User support (> 300 user)
  Workflow development
- Workflow development
- Galaxy administration



### MedBioNode Cluster

- User support (> 130 user)
- Cluster administration
- R server



#### Data analysis

Sample size / power analysis Data preprocessing & visualization High level downstream analysis



### Medical Research Academy

Linux and command line data analysis Working with MedBioNode Cluster Galaxy trainings

Medical Research Academy | (medunigraz.at)

### Data Analysis is done by





\* User can book single services or packages

# **Collaboation Possibilities**



- 1. Med Uni Graz CF-CB is primarily open to internal scientists
- 2. Members of BioTechMed-Graz (research alliance of the University of Graz, the Graz University of Technology, and the Medical University of Graz)
- 3. External Partners



# CF-CB HPC-Infrastructure: MedBioNode



https://forschungsinfrastruktur.bmbwf.gv.at/en

# HPC MedBioNode - Modalities of access



# Galaxy Server web-based platform <a href="https://galaxy.medunigraz.at/">https://galaxy.medunigraz.at/</a>

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### Galaxy for FAIR data analysis at Med Uni Graz

- 1. Web-based, open-scoure platform
- 2. Easy to use without programming experience
- 3. Standardized workflows
- 4. Manage data by sharing and publishing results, workflows and visualizations
- 5. Results are accessible and reproducible



# Thank you!

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