Bioinformatics & Omics Data Science Platform at a glance

All you need to know about resources, services & collaboration opportunities provided

Bioinformatics & Omics Data Science Platform

Bioinformatics infrastructure

Platform provides computational and software resources for computational and wetlab biologists

What: shiny server for interactive R applications
For whom: drylab (developing the app) + Wetlab (using the app)
Links: http://shiny.mdc-berlin.de
How to get help: https://itsupport.mdc-berlin.net/

What: In-house mirror of UCSC genome Browser
For whom: drylab + Wetlab
Links: http://genome.mdc-berlin.de
How to get help: https://itsupport.mdc-berlin.net/

What: In-house instance of instance of Galaxy Server
For whom: all MDC users
Links: https://galaxy.mdc-berlin.net
How to get help: https://itsupport.mdc-berlin.net/

What: Reproducible scientific software for linux desktops & HPC
For whom: People who need to install scientific software
Links: http://guix.mdc-berlin.de/documentation
How to get help: https://itsupport.mdc-berlin.net/

40+ Linux WS
What: App servers, Workstations, all running a Linux Distribution (Ubuntu or RedHat based)
For whom: BIMSB users
How to get help: https://itsupport.mdc-berlin.net/

compute servers
What: Dedicated computational servers (assistance on deciding what to buy → support until the server is retired)
For whom: Groups who needed powerful dedicated machines
How to get help: bimsb_itsupport@mdc-berlin.de

Virtual machines
What: High resource Virtual Machines for running scientific tools, webtools (with public access)
For whom: All BIMSB Users
How to get help: bimsb_itsupport@mdc-berlin.de

Training System
What: up to 25 training laptops preinstalled with the requested tools
For whom: all training participants
How to get help: bimsb_itsupport@mdc-berlin.de

What: data sharing over https
For whom: All BIMSB/MDC Users
Links: https://bimsbstatic.mdc-berlin.net / .de
How to get help: bimsb_itsupport@mdc-berlin.de

Consultation, Mentorship & Training

Platform provides know-how for research and software projects in different formats

Bioinformatics Consultation
What: Consultation related to bioinformatics and data analysis related questions
For whom: Researchers who are looking for advice on how to proceed on data analysis
How to get access: http://iris.mdc-berlin.de

Bioinformatics Mentorship
What: one-2-one mentorship to develop computational skills
For whom: People who have some computational skills and want to improve them with a mentor
How to get access: http://iris.mdc-berlin.de

Computational Genomics
What: Yearly computational genomics course
For whom: People who want to improve skills
How to get access: http://compgen.mdc-berlin.de , follow @AltunaAkalin to get updates

Learning resources maintained by the platform:
✔ Linux+HPC tutorial:
http://bioinformatics.mdc-berlin.de/intro2UnixandSGE/
✔ Computational Genomics with R book:
http://compgenomr.github.io/book
✔ biostars forum for MDC (Q&A forum):
http://biostar.mdc-berlin.net/
✔ PiGx pipeline manuals (Genomics pipelines):
http://bioinformatics.mdc-berlin.de/pigx_docs/
http://bioinformatics.mdc-berlin.de/pigx

Research Collaboration

Platform provides multiple avenues for research collaboration

Large-Scale collaboration
What: These are projects have large-scale data and/or complex analysis requirements. Needs significant time investment.

How to get access: consultation request
http://iris.mdc-berlin.de

Small-Scale collaboration
What: These are small-scale projects where someone in the lab has specialized expertise, set of existing scripts or established pipelines such as PiGx
https://bioinformatics.mdc-berlin.de/pigx .

How to get access: consultation or small-scale project request http://iris.mdc-berlin.de