**PATC: Simulation Environments for Life Sciences**

**Objectives**

The course will make the attendants familiar with simulation technologies used in Life Sciences and their specific adaptation to HPC environment

**Detailed outline:**
- Introduction to biomolecular simulation
- Coarse-grained and atomistic simulation strategies
- Automated setup for simulation

**HPC specifics:** Large scale parallelization, use of GPU’s
- Storage and strategies for large scale trajectory analysis

**Learning Outcomes:** Setup, execute, and analyze standard simulations in HPC environment

**Requirements**

**Prerequisites:** Basic knowledge of structural bioinformatics Basic knowledge of parallelization strategies. Material will be provided during the course, students are welcome to provide their own use cases.

**Academic Staff**

**Course Convener:**

Josep Gelpi
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• For further details, please contact BSC?CNS patc [at] bsc [dot] es

Further information

Registration for this course will be opened at a later date.

Please bring your own laptop.

Note: PATC courses do not charge fees

Recommended Accommodation: Please follow the link for map of some local hotels.

Contact us for further details about MSc, PhD, Post Doc studies, exchanges and collaboration in education and training with BSC.

For further details about Postgraduate Studies in UPC - Barcelona School of Informatics (FiB), visit the website.

Sponsors: BSC and PRACE 4IP project are funding the PATC @ BSC training events.

If you want to learn more about PRACE Project, visit the website.

Barcelona Supercomputing Center - Centro Nacional de Supercomputación