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

**PLEASE BRING YOUR OWN LAPTOP.**

**NOTE:** PATC courses do not charge fees

**Recommended Accomodation:** Please follow [the link](https://bsc.es/ca/education/training/patc-courses/patc-course-simulation-environments-life-sciences-2) 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](https://www.bsc.es/ca/education/training/patc-courses/patc-course-simulation-environments-life-sciences-2).

**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](https://www.bsc.es/ca/education/training/patc-courses/patc-course-simulation-environments-life-sciences-2).

Barcelona Supercomputing Center - Centro Nacional de Supercomputación