# Summary of the tutorial

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Transferri ng data to/from Prince cluster using Globus

Submittin g jobs with sbatch

Available software

Licensed Software Available on the HPC Cluster

Building Software

Slurm Tutorial

Tutorials

FAQs

Scratch Area Cleanup

Programming for Biologists

Acknowledg e Statement

Research Gallery

HPC People

HPC Policies
Running jobs on the Prince Cluster

Accessing the Prince Cluster
- From Windows workstation
- From Mac workstation

Software and Environment Module

Job script and resource request
- Introduction to job scheduling
- Submitting jobs with sbatch
- Requesting resources
- Using computing nodes interactively

Monitoring batch jobs
- Monitoring batch jobs - squeue
You can compile, edit scripts and view results on the login nodes, but **computational work should be run on the compute nodes**

You can access compute nodes with `srun`
- Either via a job script, or interactively
- Compute nodes are allocated to jobs by the scheduler, so your job might not start immediately
- Jobs must request resources, but mostly need not specify a queue.
- Requesting just slightly more than when you expect to need is generally the best practice
- **Short jobs get higher priority, and short or small jobs are easier to schedule quickly**

You can monitor your job's progress with `squeue`, `sstat`, `sacct`, `scontrol` or `slurmtop`

Software is managed by Environment Modules
- Use `module avail` to find software packages
- And `module load` to load them into your environment
  - including within job scripts!
- Use `module purge` to return to a clean environment before loading a new set of modules
- Other useful commands are `module list` and `module show`