## Summary of the tutorial

<table>
<thead>
<tr>
<th>Quick Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPC Home</td>
</tr>
<tr>
<td>Getting an account</td>
</tr>
<tr>
<td>Getting started on Prince</td>
</tr>
<tr>
<td>Prince How-to Articles</td>
</tr>
<tr>
<td>Logging in</td>
</tr>
<tr>
<td>Windows</td>
</tr>
<tr>
<td>Mac / Linux</td>
</tr>
<tr>
<td>Clusters and Storage</td>
</tr>
<tr>
<td>Prince (HPC)</td>
</tr>
<tr>
<td>Dumbo (Hadoop)</td>
</tr>
<tr>
<td>Dalm a (NYU Abu Dhab i)</td>
</tr>
<tr>
<td>Transferri ng data to/from the clusters</td>
</tr>
</tbody>
</table>
Transferri
ng data
to/from
Prince
cluster
using
Globus
Submitten
g jobs
with
sbatch
Available
software
Licensed
Software
Available
on the
HPC
Cluster
Building
Software
Slurm
Tutorial
Tutorials
FAQs
Scratch
Area
Cleanup
Programming for
Biologist
s
Acknowledgment
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'