## 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>Dalmatia (NYU Abu Dhabi)</td>
</tr>
<tr>
<td>Transfering data to/from the clusters</td>
</tr>
</tbody>
</table>
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'