# 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>Gentle Introduction to using HPC</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>Brooklyn (OpenStack)</td>
</tr>
</tbody>
</table>
Dalmia (NYU Abu Dhabi)

Transferring data to/from the clusters

Transferring data to/from Prince cluster using Globus

Submitting jobs with sbatch

Available software

Licensed Software Available on the HPC Cluster

Building Software

Slurm Tutorial

Tutorials

FAQs

Scratch Area Cleanup

Programming for Biologists
# 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
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
  - Use `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`