# Quad Chart for:

CC* Compute: High Performance Campus Computing for Institutional Research at the American Museum of Natural History (Award 1925590)

Challenges Project Seeks to Address :

- Provide AMNH researchers with access to expanded local computational resources required for their work in astrophysics, genomics, biology, and associated disciplines.
- Expand researcher access to available computational resources at other institutions and in the cloud.

Deliverables:

- Increase computational capacity through the addition of new local HPC resources.
- Expand the computational capabilities of AMNH researchers and provide resources to the broader research community by connecting AMNH with the Open Science Grid.
- Migrate existing AMNH clusters to the Museum's Science DMZ.
- Increased adoption of open source HPC/HTC tools and methodologies for sustainability and interoperability.
- Provide "cloud bursting" capabilities to AWS and other cloud providers.
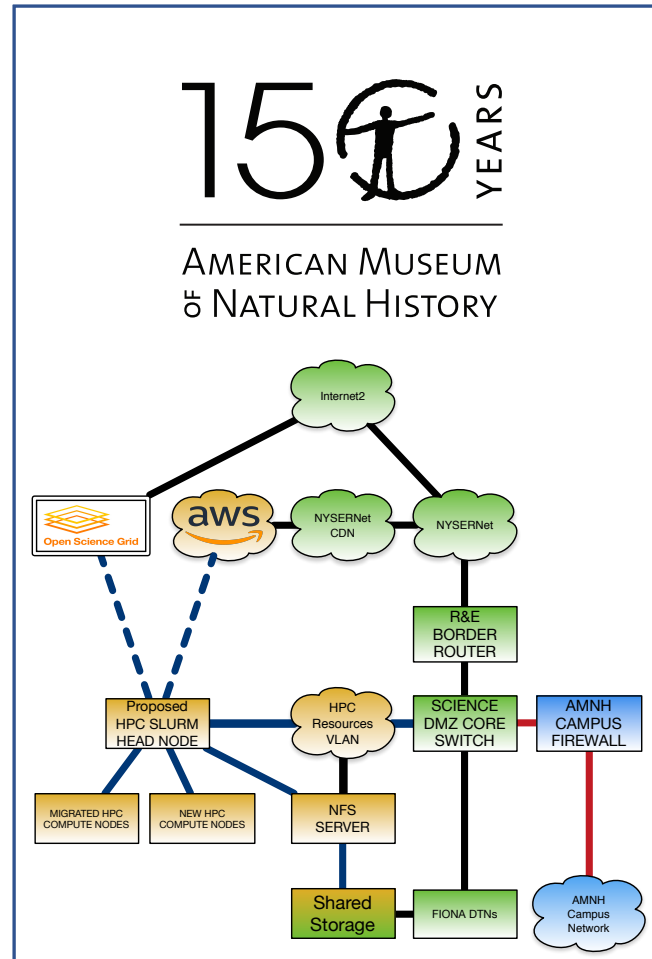
Scientific Impact :

- Increased local HPC/HTC resources will decrease runtime for complex computations.
- Execute complex proof of concept computational runs allowing code to be tested on a small scale before applying or using time on larger/ external systems.
- Open Science Grid access will greatly expand amount of computing available to AMNH researchers while allowing AMNH resources to be used by the wider R&E community.
- Alignment with open source standards and tools enables easier integrations and collaboration with wider R&E community.

Metadata tag:

- <Museums>
- <High Performance Computing>
- <Science Engagement>
- <Open Science Grid>
- <Cloud Computing>
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