## **Who We Are…**

We bring to Penn State faculty our RISE team’s collective experiences with designing and implementing complex research computing systems. Our approach considers all researcher requirements: from research networking to systems development, equipment integration, automated analysis pipelines, data management and data dissemination, software engineering, storage and HPC compute requirements. We work to implement sustainable and affordable computing workflows that include feedback systems (whenever possible) for continuous quality improvement.We will assist with the entire project lifecycle, from grant proposals to end of data lifecycle concerns, utilizing and not duplicating other Penn State resources.

­­

## **Research Faculty Onboarding Questions:**

### **Description**

* Who is the researcher and or college/institute?
* Where is the researcher connected? Any instruments?
* What are the funding agencies involved?
* Can you describe your current research workflow?

### **Software**

* What software do you use for accomplishing your research? What versioning requirements to you have?
* Do you typically run your software on your own workstations, local servers or HPC clusters? How long does the analysis run before completion ?
* Do you also build, test and distribute your own software for your research analysis?
* What common software packages do you need for publications/presentations? MSOffice/Adobe Illustrator/Acrobat, etc?

### **Networking**

* What are your network latency or data transfer expectations?
* What is a typical data set size?
* What could you do differently if you had unlimited bandwidth?
* Would you be willing to discuss your of research workflow so we can capture Network path of data transfer?

### **Systems**

* What operating systems are you using on workstations? Servers? equipment?
* What is a typical CPU time for individual experiments? A subset of analysis? Overall analysis for 1yr? 3years?
* What types of systems are you currently using or would like to leverage for your work? Workstations? Servers? Application platforms? Science Gateways? Virtual/cloud hosting or bringing hardware to be house on premise?

### **Personnel Support**

* Are you providing IT professional support from your own lab to support your research? Do you need to utilize PSU support, sysadmins or programs or help with grant funding?
* What sort of training will your lab members need? What external training will be required?
* Are you writing or planning to write proposals that may change your current compute/storage/staffing needs?

### **Data Management**

* Where is your data generated?
* Where is your data processed?
* Where is your data stored?
* Where is your data archived?
* What are the data storage estimates for 1 year? 3 yrs? 5?

### **Transfer Requirements?**

* How is the data transferred?
* What application is used?
* What are your existing transfer rates?
* Does your research require datasets coming into Penn State? Going out from here?

### **Security**

* What is the risk category of your data?
* Do you receive data from or collaborate with anyone outside of Penn State?
* Do you have a data management plan from your grant?
* Do you use or operate a data management portal?

