



UF UNIVERSITY of
FLORIDA
Information Technology

RESEARCH COMPUTING
Faculty Brochure 2013

DATA STORAGE

CONSULTING

SOFTWARE

TRAINING

PROPOSAL SUPPORT

Through infrastructure, facilities, and staff resources, UF Research Computing provides the means to compete for research funding and to collaborate with peers nationally and internationally in support of high-impact research.

The UF Research Computing department is currently supporting \$175 million in externally funded projects. Let us assist you in developing your next proposal.

ATMOSPHERIC SIMULATIONS
 GENOMICS CLIMATE AND CROP SIMULATIONS BIOPHYSICS
 BIOPHYSICS BIOMEDICAL ENGINEERING GENOMICS
 ELECTRONIC STRUCTURE THEORY QUANTUM MECHANICS

RESEARCH COMPUTING SERVICES

Computation **Training**
Data Storage **Consulting**
Proposal Support **Software Installation and Support**

UF Research Computing has installed and supports a significant number of widely-used applications. Our staff is happy to evaluate and research additional applications for the research needs of UF.

UFIT Research Computing can support options that will make your proposal more competitive.

Using the existing infrastructure provided by the university with support from the Office of the Provost, the VP for Research, and the VP and Chief Information Officer will allow your budget to stretch further.

PROPOSAL SUPPORT

There are four components in a proposal that can benefit from partnering with Research Computing:

- 1:** Proposal budgets require the costs of the service or hardware acquisition on the budget form.
- 2:** Research Computing can provide a commitment letter for proposals.
- 3:** Research Computing can provide documentation of the facilities provided for a proposal's facilities section.
- 4:** The inclusion of an explicit data management plan is now required by most funding agencies, including the National Science Foundation and the National Institutes of Health.

Additionally, justification in the proposal description or proposal narrative for the requested acquisition of services is now required. Research Computing provides examples of proposal justifications. Learn more:

www.hpc.ufl.edu/research/proposal-support

Do not hesitate to contact the Research Computing staff with questions about writing a proposal. It is our mission to help make your proposal as competitive as possible.



My research is about complications after surgery. The data is not just large but very complex and multidimensional. Algorithms that run on that type of data require a lot of computational power. The collaborative research partnership includes five UF colleges with multiple PIs from each college working on this. There aren't a lot of schools that have the large patient population, advanced medical practice, and extremely strong computational science power. We have it at UF.

Azra Bihorac
 Assistant Professor of Anesthesiology, Medicine and Surgery

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INVESTMENT OPTIONS

Research Computing offers several options to meet your computational objectives while remaining within your project computing budget. These options can accommodate a wide-range of needs while still allowing for differences in funding requirements:

- ◆ Short-Term ◆ Billed ◆ Hosted
- ◆ Long-Term ◆ Limited

EVENTS & OUTREACH

UFIT sponsors a Research Computing Day each fall and spring term. 'RC Day' focuses on the computing and storage needs of faculty research.

Research Computing staff participate in numerous faculty outreach events. Departments are encouraged to invite a Research Computing representative to your faculty meeting or departmental seminar series.

The University of Florida is linked by software and advanced networks to the Florida LambdaRail and the National LambdaRail. Through the Sunshine State Education & Research Computing Alliance (<http://sserca.org>), faculty have access to advanced scientific computing communication and educational resources.

RESEARCH COMPUTING MATCHING PROGRAM

The Research Computing Matching Program provides funding to match faculty investments on a dollar-for-dollar basis. This effectively doubles the buying power of the faculty who use Research Computing to meet their computing needs. Through the Spring 2013 term, more than \$800,000 has been distributed through the program. Learn more:

www.hpc.ufl.edu/about/matching-program/

CONSULTING & TRAINING

The Research Computing staff provides support at no additional charge for:

- ◆ Installing software
- ◆ Writing and optimizing complex submission scripts
- ◆ Analyzing performance problems with software or job flows

Research Computing staff provides advanced support and training. The full training schedule is available on the department Wiki:

<http://wiki.hpc.ufl.edu>

Several graduate courses use Research Computing facilities to prepare students to use the clusters and selected applications for thesis research.



UF Research Computing provides us with enormous facilities that we would not be able to commandeer so easily. We could, of course, get our computing done at other facilities around the world, but it would take us a far longer period of time because we wouldn't have the priority or the ability to even learn how to run it at those centers. So by having these resources actually located here we can get things done on a much faster time scale, and timing is everything.

Paul Avery
 Professor of Physics
 Institute for High Energy Physics and Astrophysics



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SHIPPING ADDRESS

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DIRECTIONS

From Interstate 75:

- ◆ Exit 384 Turn East onto Archer Road
- ◆ Drive approximately three miles on Archer Road Turn North (left) onto Gale Lemerand Drive
- ◆ Continue approximately 1/4 mile through the first stoplight
- ◆ The New Physics Building (NPB) is on the right, across from a large parking garage just before the second stoplight

SOFTWARE INSTALLATION

DATA STORAGE

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The Foundation for The Gator Nation

An Equal Opportunity Institution