

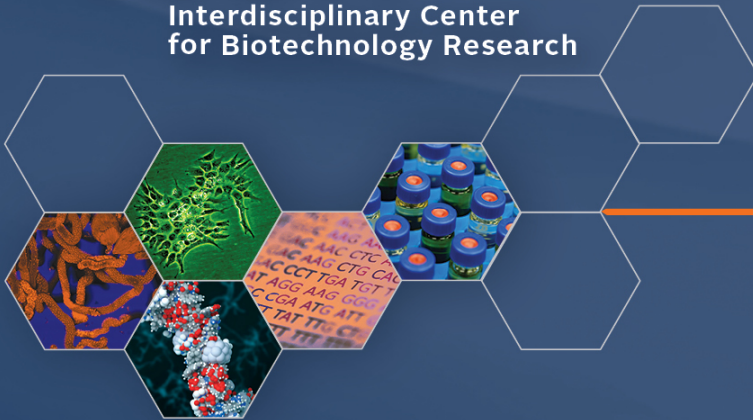
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for Biotechnology Research



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Development of a Bioinformatics Workshop by a Core Facility

Alberto Riva (ariva@ufl.edu)

Scientific Director, ICBR Bioinformatics Core

Introduction

- The **ICBR Bioinformatics Core** is part of the UF Interdisciplinary Center for Biotechnology Research.
- Most projects focus on analysis of Next-Generation Sequencing data: RNA-Seq, ChIP-Seq, etc. Expertise in genomics, statistics, software development, high-performance computing.
- **Fee-for-service** model, but we provide free consultations when necessary.
- Training is limited to one-on-one sessions.



Bioinformatics Training

- Classroom-style teaching is NOT a part of our duties. But...
- No other organization on campus offers practical bioinformatics training (only a few grad/undergrad courses). We regularly get asked to provide it.
- The recently established Biostatistics core of the UF Health Cancer Center created a “Biostats 101” workshop last fall – Bioinfo 101 was the logical followup.



Challenges

- Audience is very diverse, both in terms of scientific interests and of prior knowledge – hard to define a suitable curriculum.
- The workshop had to fit into eight one-hour lectures.
- Needed to find a source of support for the time required to develop and teach the workshop.

Overcoming these challenges required leveraging resources offered by our environment.



Opportunities

We partnered with the following organizations:

- UF Health Cancer Center – administrative support, partial funding, advertisement;
- UF Health Sciences Library – 50-seat computer lab;
- Faculty – two UF professors taught two lectures each (introduction to sequencing, advanced bioinformatics tools);
- Research Computing – practical sessions were performed on HiPerGator, UF's cluster computer, with a dedicated allocation of resources for the workshop.



Outcome

- The workshop was successful. The 50 available spots were filled in three days. Average attendance was 30+.
- 26 attendees were present at 6 or more lectures and received an attendance certificate.
- All lessons were videorecorded and the videos are publicly available.
- We were able to cover most of the planned curriculum, including some advanced topics (e.g., containers).
- A post-workshop survey provided mostly positive feedback (8 respondents). The most frequent criticism was lack of time for practical sessions.



Lessons

- Partnering with other on-campus organizations was essential to the success of the workshop.
- Practical sessions on HiPerGator simplified installation of required software and datasets.
- It always takes longer than you think – in the future, more time will be allocated for practical sessions.
- Workshop provided useful visibility for the Bioinformatics Core and for the UF Health Cancer Center.

