Computational Resources at UW-Madison

Computation in Biology

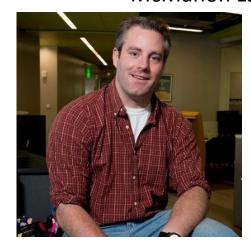
- Biology is often very data heavy
- Most biologists aren't trained in computation/ programming (yet)
- But most of you will need some of these skills
- Your PI/labmates might not be able to help you but...
- You don't have to struggle through this alone!

ComBEE

- Computational Biology, Ecology, and Evolution Group
- Student organized group
- Monthly Meetings about Computational Biology or Theoretical Ecology/Evolution
 - Social gathering Sept. 15th @ 4pm in 6201 MSB
- Bi-weekly R/python study groups
- https://combee-uwmadison.github.io
 - Sign up for our listserv to get updates!



Elizabeth McDaniel MDTP Student McMahon Lab



Marc Chevrette
Genetics Student
Currie Lab

ComBEE R/Python Study Groups

- These groups meet on opposite weeks
- Generally informal discussion of topics
- Topics decided on based on group interests
- Meet on Thursdays at 2pm in MSB 5503
- Python Study Group website
 - Starts on Sept. 21st
- R Study Group website
 - Starts on Sept. 28th
 - Different format this semester
- Sign up for their individual listservs if you are interested

What are Software and Data Carpentry?



Two formal

organizations* +

international

community of

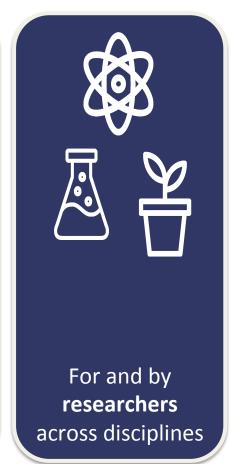
volunteers



that develop lessons, train instructors + organize workshops



in data
management and
software
development
best practices



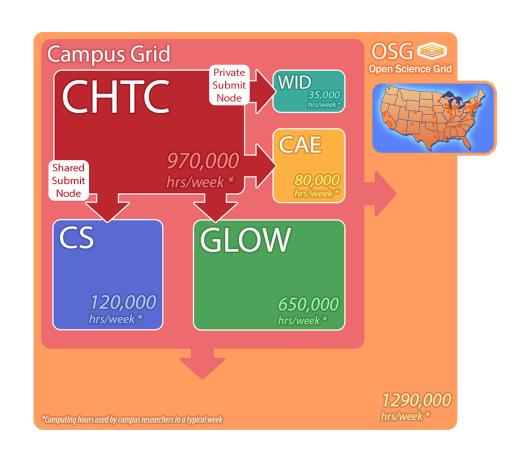
^{*} soon to be restructured into a combined organization

Software/Data Carpentry

- 2 workshops hosted at beginning of each semester
 - Next workshops probably January 2018
- Large local community of instructors
- If interested you can help out or instruct these workshops
 - Professional Development/Teaching opportunity
- For updates about registration (and other computational events on campus) sign up for ACI (advanced computing initiative) listserv
 - aci.wisc.edu

Center for High Through-put Computing (CHTC)

- Campus resource
- Scale up your computational work
- Can run more analyses (and bigger jobs) using their resources
- Facilitators who can help you get started



Quantitate Biology Initiative

- Initiative to bring together quantitative biology on campus
 - https://qbi.wisc.edu/
- New minor available!
 - https://qbi.wisc.edu/education/phd-minor/
- Weekly Seminar Series
 - https://wid.wisc.edu/seminars/qbio/

Other courses

- MICROBIO 875: Bioinformatics for Microbiologists (Might change numbers for Spring 2018)
- BMI 541 Introduction to biostatistics
- BMI 576 Introduction to bioinformatics
- BMI 776 Advanced bioinformatics
- CS301 Introduction to Data Programming

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