# **Research in Action Podcast Instructor Guide**

Use the following episode description, learning objectives, guiding questions and activity suggestions to more easily include "Research in Action" podcast episodes as a supplemental resource for your course.



ecampus.oregonstate.edu/podcast

Research in Action - Episode 31

# **Podcast and Episode Information**

"Research in Action" is a weekly podcast about topics and issues related to research in higher education featuring experts across a range of disciplines.

On this episode of the podcast, the guest Dr. Tracy Teal, the Executive Director of Data Carpentry and adjunct professor in the BEACON Center for the Study of Evolution in Action at Michigan State University. Her research background in is microbial ecology and bioinformatics, and she's been a developer and contributor to several open source bioinformatics projects. Tracy has a Ph.D. in Computation and Neural Systems from Cal Tech; a Master's Degree from UCLA in Organismal Biology, Ecology, and Evolution; and a Bachelor's from UCLA in Cybernetics.

Segment One [00:00-09:56] - In this segment, Tracy shares about the mission of Data Carpentry and how the organization came to be.

Segment Two [09:57-21:44] - In this segment, Tracy talks about some of the specific skills in the Data Carpentry curriculum and how workshops are created.

Segment Three [21:45-33:20] - In this segment, Tracy shares more about the Data Carpentry instructors and how the organization is working to create a researcher community.

*Bonus Clip #1* [00:00-03:10]: What's Next for Data Carpentry?

*Bonus Clip #2* [00:00-02:30]: Logistics of Collaborative Lesson Development

Show notes and a transcript for this episode can be found at:

http://ecampus.oregonstate.edu/research/podcast/e 31/

#### **Learning Outcomes**

By listening to this episode, students will be able to:

- Describe the role and purpose of Data Carpentry
- Explain the need for researcher skill development and training
- List resources for becoming involved with Data Carpentry and Software Carpentry
- Describe the purpose of building a "local capacity" of instructors
- Discuss benefits of a researcher community
- Identify resources for Data Carpentry and Software Carpentry lesson materials

# **Guiding Questions for Listening**

- What is computation and how might it be utilized in the analysis of data?
- What is the purpose of the Data Carpentry organization?
- According to Dr. Tracy Teal, what type of need is there for researchers to further develop data skills?
- According to Dr. Teal, how does she describe Data Carpentry's role of "training in the gaps"?
- What is mentioned about the learning environment of Data Carpentry workshops?
- According to Dr. Teal, how is building a local capacity the "most effective way for people to learn the skills"?
- What appear to be some of the benefits of working with research communities?
- According to Dr. Teal, where does there seem to be reluctance with skill development?
- What is a Creative Commons license?
- What are some of the opportunities available through Data Carpentry and Software Carpentry?
- According to Dr. Teal, why might it be helpful to teach researchers within a domain in which they are familiar? (See also, Bonus Clip #1)
- How is a version control system utilized for collaboration in lesson development/management? (See also, Bonus Clip #2)

#### **Possible Activities**

- Have students visit the Data Carpentry workshop website and review some materials from the workshops (or incorporate a Data Carpentry lesson plan into your course).
- Ask students to visit the show notes for this episode (<u>http://ecampus.oregonstate.edu/research/podcast/e31/</u>) and look at an additional resource that is linked in connection with this episode. Students can write a short review of that resource to share with their peers
- Ask students to visit the show notes for this episode (<u>http://ecampus.oregonstate.edu/research/podcast/e31/</u>) and post an additional resource connected to the content of the episode in the comments section.
- Have students share questions that are raised for them based on the content of this episode. What would they ask Dr. Tracy Teal if they could?

# Suggested Citation (APA, 6th edition)

Linder, K. (Producer/host). (2016, October 31). *Dr. Tracy Teal on Data Carpentry* [Audio podcast]. Retrieved from <u>http://ecampus.oregonstate.edu/research/podcast/e31/</u>

Notes

"Research in Action" (RIA) is a podcast about topics and issues related to research in higher education featuring experts across a range of disciplines. Episodes are posted weekly and include guest interviews and occasional solo episodes. Guests are from a range of higher education institutions and share their expertise on qualitative, quantitative and mixed methods as well as their personal experiences as researchers, research and writing practices, organizational and productivity strategies, and much more. Some weeks, bonus content will also be posted.

"Research in Action" is hosted by <u>Dr. Katie Linder</u>, research director for Oregon State University Ecampus.

Visit the podcast website to view <u>show notes and transcripts</u> <u>for each episode</u>, explore our <u>episode guide</u>, learn more about how to <u>contact us</u>, or <u>suggest a future guest or topic</u>.

You may subscribe to the <u>"Research in Action" RSS feed</u> or access the podcast via <u>iTunes</u>, <u>Soundcloud</u> or <u>Stitcher</u>. "Research in Action" is also listed on <u>MERLOT</u>.

The "Research in Action" podcast is a resource funded by Oregon State University Ecampus – ranked top ten in the nation for online education two years running by U.S. News & World Report. OSU Ecampus has more than 45 degree programs and more than 1,000 classes online.

#### Contact

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