

AG2PI SEED GRANT - PROJECT FINAL REPORT

PROJECT NAME	Identifying educational resources and gaps in AG2P data science across plant and animal agriculture genomics
--------------	--

PROJECT PRINCIPAL INVESTIGATOR	TODAY'S DATE	PROJECT START DATE	DATE OF COMPLETION
Breno Fragomeni	8/29/2022	01-06-2021	07-30-2022
TEAM MEMBERS (co-PI, co-I, personnel)	COLLABORATORS		
Dodd, Gabriella; Gondro, Cedric; Kendrick, Tasia; Young, Margaret			

ACCOMPLISHMENTS

In this project, we identified several gaps in educational resources in AG2P data science in the United States by surveying 220 students, Faculty, and professionals in the USA. The two main gaps are undergraduate education and accessibility to specific training from graduate students. Graduate students have plenty of training on specific subjects related to their area of expertise but not much training in general coding or statistics. Undergraduate students have very little data analysis training besides introductory statistics courses. Faculty and professionals recognize the importance of the field. They believe most students are competent in data analysis upon completing graduate school. The number of answers for undergraduates was much lower than expected, most likely due to the survey not reaching the audience. It reflects that undergraduate education in data analysis in agriculture could be overlooked.

Products

ACTIVITY / PRODUCT	DESCRIPTION (include URL, if applicable)	OUTCOME / METRICS
Paper manuscript	We are working on a submission of a manuscript to include our results. The paper will be submitted to Plos One this Fall after approval of all investigators.	We expect the manuscript to be published before the end of the year.
Educational Resources Page	We compiled all the educational resources available in AG2P in a webpage that will soon be available at https://agdata.cahn.uconn.edu/	We will count the number of visits and click on the educational resource pages, and plan to write a white paper report in the next year.

Audience

Our main audience for the Educational Resources page is graduate students in agriculture. Those students can access courses related to their area of expertise once the page is online. In addition, Faculty in the field can also learn what should be taught to help close the gaps identified. Finally, administrators could learn from our results and assist Faculty and students in implementing programs in such an important field.

CHALLENGES

Lack of survey answers from undergraduate students: We only had responses from students from 3 universities for undergraduate students. We used that as an important result that reflected the lack of commitment to undergraduate education in the field.