

GRADUATE FACULTY SEEK TO

inspire undergrads to pursue bioinformatics

UNMC graduate faculty members were looking for ways to help Institutional Development Award Program (IDeA) Networks of Biomedical Research Excellence (INBRE) Scholars and undergrads across Nebraska understand the world of bioinformatics and how it is utilized in research.

Developed with funding from the NE-INBRE program, “Introduction to Bioinformatics” is a 15-hour online course housed in NU Advance, the University of Nebraska Canvas platform, that students can take at their leisure that walks them through how to find data, how to access it and how to use it in research.

The program was created by **Babu Guda, PhD**, director of the Bioinformatics and Systems Biology Core and professor and vice-chair for bioinformatics research and training in the UNMC Department of Genetics, Cell Biology and Anatomy, and **Jordan Rowley, PhD**, assistant professor and co-director of the bioinformatics and systems biology graduate program subplan in the same department.

“We redesigned a graduate level course that we teach, leveled the content, and gave it enough of an introduction so a college level junior or senior can take this course,” Dr. Guda said. “We built each module on a specific topic that builds on the last, and in them we talk about different databases and tools in the public domain that are available for use.”

The online format shows students how to dig deeper into the data sets, how to do a power search using variables and the meaning behind each variable to customize their search in an efficient way to get the most out of the data, as well as how to manage the variable database. The interactive modules included quizzes and flashcards at the end of each module to enhance retention of the material, as well as feedback on how well the students learned.

The course was developed using the Articulate Rise 360 software with the help of **Avinash Veerappa, PhD**, and **Sahil Sethi**, members of Dr. Guda’s research laboratory, in collaboration with UNMC’s Office of Interactive E-Learning.



“Our intent for putting the course on NU Advance was to facilitate easy access to the training and make access to the information equitable. The goal is to reach interested participants from all educational institutions in the state of Nebraska and encourage them to take this course.”

- BABU GUDA, PHD
Director, Bioinformatics Core

INTRODUCTION TO BIOINFORMATICS

- 7 modules within the course
- 29 students enrolled in the pilot
- 100 enrollments anticipated each year
- \$0 cost for students
- Open to students across Nebraska

