Increasing Diversity in Interdisciplinary Big Data to Knowledge (IDI-BD2K) in Puerto Rico

Patricia Ordóñez, University of Puerto Rico, Río Piedras; *José E. García-Arrarás, Department of Biology, University of Puerto Rico, Río Piedras; María E. Pérez, Department of Mathematics, University of Puerto Rico, Río Piedras; Humberto Ortiz-Zuazaga, Department of Computer Science, University of Puerto Rico, Río Piedras; Luis Pericchi, Department of Mathematics, University of Puerto Rico, Río Piedras*

Unprecedented advances in digital technology have produced a Big Data revolution that is transforming biomedical and clinical research. The IDI-BD2K Program at the University of Puerto Rico Río Piedras (UPR-RP) is focused on increasing the number of underrepresented researchers, both students and faculty, in Biomedical Big Data Science and increasing its application to biomedical research on the island. Four concrete aims were developed to achieve this goal:

1. Develop a biomedical big data curriculum,
2. Provide a cohort of undergraduate and graduate students with onsite research experiences in Interdisciplinary Biomedical Big Data projects,
3. Provide a cohort of at least 6 undergraduate students with summer research experiences at BD2K Centers every year, and
4. Offer opportunities for faculty and graduate students in Puerto Rico to train in areas of Big Data research, expand their expertise in Big Data, and thereby spur innovation in biomedical Big Data research on the island.

To achieve these aims, the UPR-RP partnered with researchers at BD2K Centers at Harvard University, the University of Pittsburgh, and the University of California Santa Cruz. This abstract describes the achievements of and the lessons learned in the first year of the implementation of the program.