

Training and Mentoring Plans for Postdoctoral Researchers at Purdue Bioinformatics Core:

The Bioinformatics Core considers the training and mentoring of postdoctoral researchers as one of its main pathways to support biological research on-campus, to establish a deep pool of technical expertise in bioinformatics, and to attract top tier researchers to campus. The training and mentoring of postdoctoral researchers is therefore integral to the mission of the bioinformatics core. Some of the envisioned training and mentoring opportunities are elaborated upon below.

Consultation: Individual consultation will be provided to postdoctoral researchers to ensure that the experimental protocols adopted are consistent with project goals. Emphasis will be on considerations such as replications, depth of sequencing, and validation through post processing experiments to facilitate bioinformatics data analysis and meaningful interpretation. Experienced postdoctoral researchers will also be given an opportunity to work as consultants for other researchers on the campus.

Seminars: Postdoctoral researchers from various departments are encouraged to attend the campus seminars on bioinformatics and to learn about the resources and services available for data analysis. Postdoctoral researchers will be provided with opportunities to meet and interact with invited speakers. The postdoctoral researchers will also be invited to present their research involving bioinformatics analysis.

Workshops: Postdoctoral researchers will have the opportunity to participate in the workshops conducted by Bioinformatics Core. These workshops are in depth discussion of data analysis for an application, followed by hands-on training with real data. The duration of the workshops may be a day long for a given application and may develop into a week long course over time, depending on the resources and interest of campus research community.

Teaching Experience: Postdoctoral researchers who have background in bioinformatics or who develop experience through attending our workshops, and/or by analyzing the data, will be given an opportunity to participate in conducting the Core's workshops. This provides an avenue to develop communication skills, gain teaching experience and at the same time be part of curriculum development.

Resource Support: The Bioinformatics Core will provide hardware and software support to postdoctoral researchers who plan to conduct preliminary data analysis for hypothesis development and testing as part of grant proposal writing. The Bioinformatics Core will also provide them with necessary guidance to include data analysis plans in their grant proposals.