

NLM Curriculum Plan for Postdoctoral Trainees

The NLM requires that postdoctoral trainees also have a curriculum plan. All postdocs must include # 3-8 in their curriculum plan, as well as a clear timeline for fulfilling them (e.g. first year Fall semester courses X and Y). The timeline should reflect the actual semesters when the courses are offered; see the separate attachment "Courses offered at" each institution for links to course catalogs and schedules. Contact the NLM program administrator for details on how to attend classes as a postdoc.

Trainees are expected to complete at least one course per semester. Courses in the Responsible Conduct of Research and introductory classes in biomedical informatics (e.g. UTH's HI 5310) must be taken in the first semester possible, and definitely completed during the trainee's first year of appointment.

Timely progress towards completion of curriculum requirements is part of the evaluation process during a trainee's annual progress review.

Each trainee will receive advising and specific recommendations about coursework appropriate to their background and research interests during their initial interview and subsequent annual progress reviews with the Program Director and NLM Steering Committee. Changes made to the trainee's curriculum are binding.

In specifying that program, the NLM Steering Committee will consider previous graduate-level coursework in informatics. Please select 2 Foundation courses (one each from Groups 1 & 2) and 3 electives. In your curriculum plan, list any informatics graduate courses you took that you wish to have counted as having fulfilled a required course (course name, number, institution, date taken).

Together, these courses should define a coherent curriculum (not just a series of random courses) that reflects both the NLM domain in which an applicant's project falls, and our training grant's central emphasis of training in data-driven discovery and machine learning.

In addition:

1. **Applicants who have a doctorate in informatics or a closely related field such as computer science may be required to audit selected courses** as determined by the NLM Steering Committee, in order to support the nature of the postdoc's research project, or to get an introduction to the broad field of biomedical informatics (e.g. HI 5310 Foundations of Health Information Sciences I, UTHSC-H). Include # 3-8 in your curriculum plan, as well as a clear timeline for fulfilling them.
2. **Applicants who do NOT have a doctorate in informatics or a closely related field such as computer science, e.g. an M.D., must audit a program of approved courses** to provide training in the methods and applications of biomedical informatics most relevant to their project. Include # 1-8 in your curriculum plan, along with a timeline for completion, and list any informatics graduate courses you took that you wish to have counted as having fulfilled a required course (course name, number, institution, date taken).

Elements of the curriculum plan

1. Two approved Foundation Courses, one from Group 1 COMP, one from Group 2 STAT.

Trainees wishing to have previous-taken graduate-level coursework counted towards Foundations or electives should clearly state this in their curriculum plan in their application. Include course name, number, institution, and term and year taken, and the name and number of the Foundation or elective course for which you would like credit. Any previous coursework proposed at a later time will not be considered for "credit."

An adequate number of approved courses must still be listed in the curriculum plan, in case the proposed retroactive "credit" is not approved.

2. Three electives (advanced courses) related to one of the three domains of biomedical informatics into which your project fits: healthcare/clinical informatics, translational bioinformatics, and clinical research informatics.

If a trainee wishes to have a course considered for adding to the list of approved electives, the trainee should provide a course description and syllabus to the NLM program administrator well in advance of the application deadline.

An adequate number of approved courses must still be listed in the curriculum plan, in case the proposed course is not approved.

3. A plan for taking an approved Responsible Conduct of Research (RCR) course during your first year of appointment or the course name/number/institution/semester/year of an approved course completed within the past four years at the postdoctoral level, and submission of a transcript showing completion as part of your application. Online-only courses such as CITI are of themselves insufficient to fulfill the NIH requirements. See the separate list of approved RCR courses.

If you took a course within the past 4 years but it was taken while you were a graduate student, you must complete another course. These are NIH requirements for receiving federal funding.

4. Attendance of the Professional Development for Biomedical Informatics Professionals seminar, Rice University's COMP 573. Dr. Kavraki's permission as instructor is required to enroll. This course will next be offered in Spring 2018. All graduate students from all institutions must enroll for credit for this course. Non-Rice students enroll using the inter-institutional course registration form (see separate attachment); trainees are responsible for finding the course registration deadlines and for gathering signatures from both institutions.

5. Attendance at the weekly Keck Seminars Fridays during the academic year at 4:00 pm, officially Rice University course BIOS 592 "Topics in Quantitative Biology and Biomedical Informatics." **Enrollment for course credit is required for Rice trainees**, optional for trainees at other institutions (using the inter-institutional course registration form).

6. Attendance and self-organization of monthly NLM trainee meetings, held the 2nd Friday of the month (Sept. - May) at 3:00 pm in the BRC.

7. Attendance and poster presentation on your fellowship project at the Keck Annual Research Conference (held Oct. or Nov. in the BRC).

8. Attendance and, if selected, presentation of your fellowship project at the annual NLM Informatics Training Conference held in June at various locations. Travel funds are provided by this fellowship.