

Postdoctoral Position in PK/PD Modeling and Systems Pharmacology

A postdoctoral position in PK/PD Modeling and Systems Pharmacology is available in Prof. Oleg Igoshin's group (<http://igoshin.rice.edu/>) in the Department of Bioengineering at Rice University for a collaborative project with the experimental labs working on the continuous production of biologic drugs (e.g., antibodies, hormones, growth factors, and cytokines) in cell factories. The work is supported by several recent grants (e.g., <https://arpa-h.gov/explore-funding/awards/3311> <https://news.rice.edu/news/2026/rice-led-research-develop-first-regenerative-therapy-lymphedema-receives-182m-federal>). The researcher would also be welcome to develop their own research direction in systems pharmacology.

BRIEF PROJECT DESCRIPTION: Biologics (e.g., antibodies, hormones, growth factors, and cytokines) are injectable large-molecule drugs derived from living cells. Cell-based therapeutics, an emerging treatment for challenging diseases, have shown significant success but face broader application and commercialization hurdles. Development of these technologies requires the formulation of PK/PD models that include biologic production, transport, and clearance, as well as their interactions with cells and tissues.

QUALIFICATIONS AND RESPONSIBILITIES: PhD in science or engineering is required for this position. Ideal candidate will have experience in Pharmacometrics in their PhD We strongly prefer candidates with (1) training both in mathematical modeling and in biological sciences, (2) experience or a strong interest in PK/PD Modeling and Systems Pharmacology, and (3) publications in the field of mathematical modeling or systems biology. Passion for interdisciplinary collaboration and English proficiency are also expected. (4)

ABOUT RICE: Rice University is consistently ranked among the best teaching and research universities. Rice is committed to cutting-edge interdisciplinary biological research. It is home to the Center for Theoretical Biophysics (<http://ctbp.rice.edu>) and a PhD Program in Systems, Synthetic and Physical Biology (<http://sspb.rice.edu>). The Department of Bioengineering is ranked among the nation's top 10 bioengineering undergraduate and graduate programs. Rice is situated in the Museum District of Houston, Texas – the fourth largest city in the US. Rice University is an equal opportunity employer and offers competitive postdoctoral salaries and benefits. The position is open from May 1, 2026, until it is filled. The initial appointment is for 1 year, with renewal upon satisfactory performance.

APPLICATION PROCEDURE: Applicants should submit their CV, contact information for 3 professional references, and a short (less than 2 pages) research interest statement justifying their interest in the position and explaining their relevant experience to igoshin@rice.edu. Shortlisted applicants will be invited to apply.