NOVARTIS

Translational Medicine Academy fellow for Pharmacokinetics Sciences Modeling & Simulaton

Job ID
REQ-10077029

5月 04, 2026

Switzerland

摘要

At Translational Medicine (TM), we are committed to bringing breakthrough medicines to patients and bridging the gap between research and clinical application. TM plays a pivotal role in bringing innovative medicines to patients, by building on research advances to develop new therapies, and bridging drug discovery and clinical application. At TM, our work directly impacts patients worldwide.

During this intense 2-year program, you will receive training and mentorship, with the empowerment to learn and work in a diverse, multicultural, global and inclusive environment where innovation and revolution in medicine become a reality. If you are ready for a transformative experience and want to make a real impact on the lives of millions, then this is the opportunity for you!

About the Role

This advert is exclusively for Pharmacokinetics Sciences Modeling & Simulaton within the TM Academy. Other TM Academy roles are advertised separately under:

- **REQ-10076855** -TM Academy Clinical Science & Innovation (CS&I)
- **REQ - 10077055** TM Academy Preclinical Safety - Data Science
- **REQ - 10077246** TM Academy Fellow in Biomarker Development
- **REQ - 10076845** TM Academy Biomarker Development Laboratory Excellence and Operations (BMD LEO)

Location: Basel, Switzerland
Duration of program: 24 months
Program start: 01 September 2026

Applications are open until May 17 2026 included.

By submitting your application, you confirm that you would be available to begin the program on 01-September, with final selection decisions expected to be communicated by end of June.

Please note that we can only accept applicants who are eligible to work in Switzerland.

TM Academy is designed for individuals with diverse backgrounds and experiences:

- **Career starters:** recent university degree graduate within the past 2 years
- **Career changers:** professionals with experience from a different field
- **Career relaunches:** professionals wanting to return to work after a career break

JOB DESCRIPTION

Your journey begins with a basecamp: 4-week immersive blended experience designed to introduce you to our organization, the drug development process, the various departments in Translational Medicine, the clinical trial process and the tools and technical platforms needed for your work.

Throughout the program, fellows reunite for continuous learning focused on soft skills, cross-functional exposure, and thematic introduction series - broadening your perspective beyond your immediate team and function.

As a **TM Academy fellow in PKS Modeling & Simulation**, you will apply your quantitative modeling expertise to advancing translational immunology. In this position, you will join our translational modeling & simulation team to develop a mechanistic, quantitative framework for B cell driven indications. With state-of-the-art mechanistic modeling, including physiologically-based pharmacokinetic (PBPK) and quantitative systems pharmacology (QSP) methods, you will help generate actionable insights for immune reset diseases, inform dose/schedule optimization, and translation from preclinical systems to patients.

During the TM Academy you will

- Develop and implement a physiology-based PK/PD modeling framework that links drug exposure and target engagement to B-cell and plasma cell differentiation, trafficking, and turnover kinetics across blood, lymphoid tissues, and disease-relevant tissues
- Integrate translational evidence from *in vitro*/*in vivo*/early clinical data to estimate parameters and quantify uncertainty, and to connect tissue depletion depth/duration/recovery kinetics to immune-reset biomarkers to enable decision making across B-cell depleting modalities
- Communicate results in cross-functional settings through presentations, reports, and manuscripts; partner closely with immunology, translational, and modeling stakeholders
- Own an end-to-end, production-ready modeling platform and expand expertise at the interface of quantitative pharmacology and immunology, with opportunities for strong internal and external visibility
- Experience the impact of translational modeling for drug development in an industrial setting by inform dose and schedule optimization across a large portfolio of B-cell depleting therapies and indications

Role requirements

Candidates should have:

- PhD in quantitative pharmacology/pharmacometrics, bioengineering, systems biology, applied mathematics, biostatistics, computational biology, or a related discipline
- Hands - on experience in building and evaluating mechanistic models (e.g., ODE/PDE, compartmental, systems pharmacology, PK/PD)
- Programming proficiency in at least one scientific language (e.g., Python, R, MATLAB SimBiology); ability to write reproducible, modular, well - documented code
- Experience working with biological datasets (preclinical and/or clinical) including data cleaning, visualization, model fitting, and interpretation
- Strong communication and collaboration skills; ability to translate complex quantitative findings into clear biological and project implications

These additional skills would be a plus:

- Background in immunology, particularly B - cell biology, lymphoid tissue organization, or immune cell trafficking
- Experience modeling biologics and/or cell therapies, including target engagement and cell - killing dynamics
- Familiarity with physiology - based or multi - compartment modeling of immune-cell dynamics in cell-based and T - cell-redirecting therapies (CAR - T cell therapy / T-cell engaging antibodies)
- Familiarity with PBPK concepts and software (e.g., mrgsolve, nlmixr2, NONMEM, Monolix, SimBiology, Stan, or comparable platforms)
- Coding portfolio related to mechanistic modelling or systems biology

Accessibility and accommodation:

Novartis is committed to working with and providing reasonable accommodation to all individuals. If, because of a medical condition or disability, you need a reasonable accommodation for any part of the recruitment process, or in order to receive more detailed information about the essential functions of a position, please send an e-mail to diversity.inclusionch@novartis.com, and let us know the nature of your request and your contact information. Please include the job requisition number in your message.

Why Novartis: Helping people with disease and their families takes more than innovative science. It takes a community of smart, passionate people like you. Collaborating, supporting and inspiring each other. Combining to achieve breakthroughs that change patients ' lives. Ready to create a brighter future together? https://www.novartis.com/about/strategy/people-and-culture

Benefits and Rewards: Learn about all the ways we ' ll help you thrive personally and professionally. Read our handbook (PDF 30 MB)

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Biomedical Research

Business Unit
Research

地点
Switzerland

站点
Basel (City)

Company / Legal Entity
C028 (FCRS = CH028) Novartis Pharma AG

Functional Area
Others

Job Type
Full time

Employment Type
Early Career (Befristet)

Shift Work
No

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