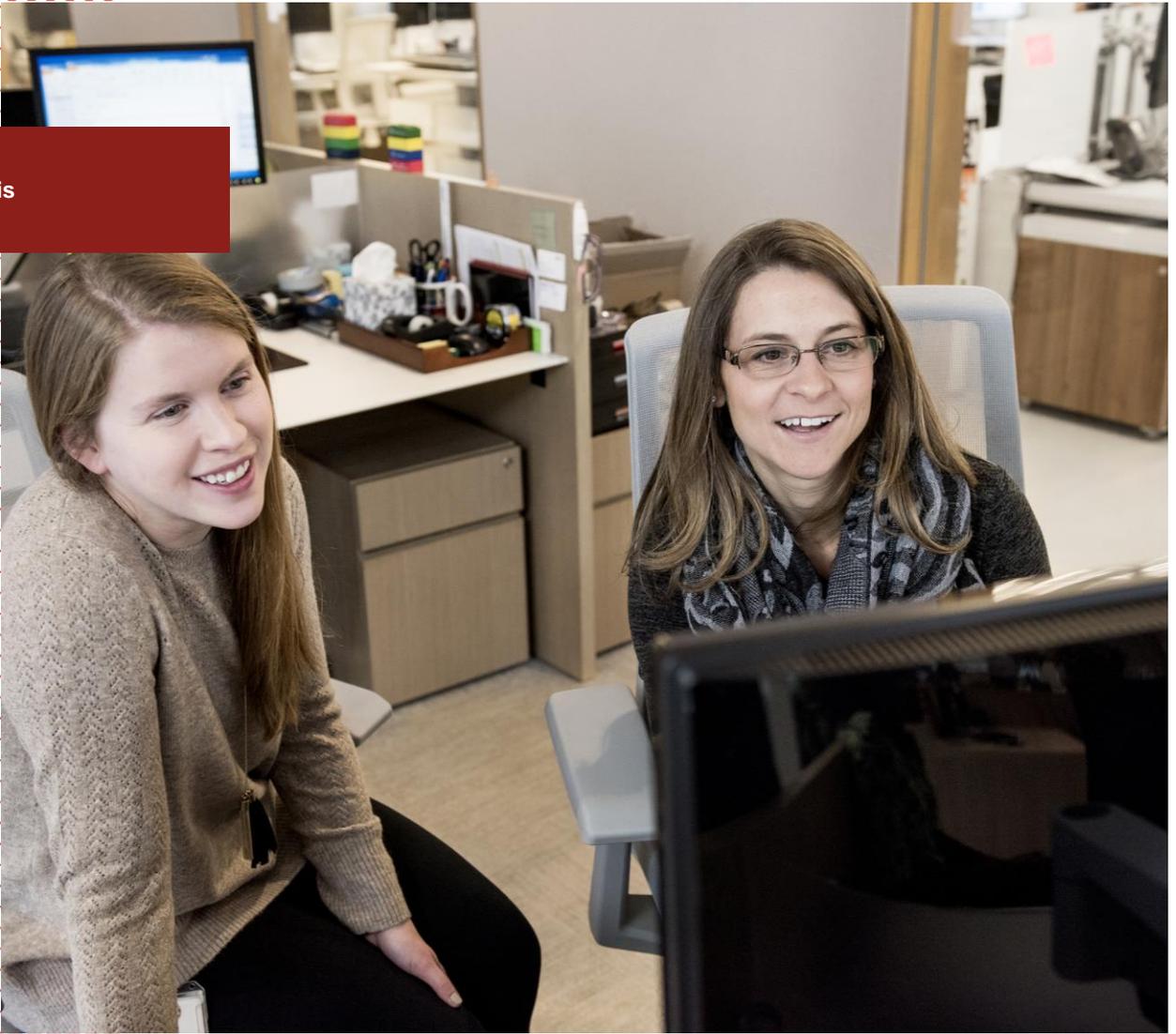# The Translational Medicine (TM) Data Science Academy

What is the TM DS Academy Fellowship?

The Translational Medicine (TM) Data Science Academy is a unique graduate program which introduces data scientists with diverse backgrounds to the world of Life Science and Drug Discovery at Translational Medicine in Novartis Institutes for Biomedical Research (NIBR).

This is a 2-year, full-time data science program, where fellows are given the opportunity to develop skills in various aspects of life sciences research through rotations between 3 departments in TM: Biomarker Development (BMD); Preclinical Safety (PCS) and Pharmacokinetic Sciences (PKS). The program not only offers graduates insights into how their skills contribute to reimagining medicine but helps to define the areas of work most of interest to them.

Program Content:

- Duration: 24 months

- Location: Novartis in Basel, Switzerland

- 3x rotations between 3 data science teams in 3 departments of Translational Medicine

- Be guided by an experienced data science/ML mentor (subject matter expert)

- Cutting-edge data science and machine learning projects pushing innovation boundaries at Translational Medicine

Outcomes:

- Develop a thorough understanding of how biomedical data is used to generate meaningful insights, accelerating research and development of new medicines

- Use artificial intelligence and machine learning to solve some of the hardest problems in life science research, biomarker discovery, preclinical safety, and clinical trial design.

- Design novel methodologies to combine multi-modal data such as discovery, clinical, imaging, omics, and digital health originating from clinical trials and other real-world data sources

- Opportunities to be involved in all aspects of our work, from conceptualization of research ideas to study design, programming and analysis, interpretation, and dissemination of results through presentations or publications

 NOVARTIS

Your profile:

- MSc with a few years of experience or recent PhD (you have defended your degree before your start date or have graduated no more than 36 months prior to starting)

- Graduate of a quantitative data science discipline passionate about data science and machine learning, and excited to apply your data skills to the frontiers of life sciences and help us to create better medicines for patients

- Statistical programming skills in Python, R; familiarity with deep learning frameworks (e.g. PyTorch, TensorFlow, Keras); good knowledge of statistics, machine learning, and deep learning algorithms

- Fluency in written and verbal English

- Collaborative, humble, great learner and can take ownership of tasks and get things done

The selection process:

Each year we look for 3 talented candidates to join the program. The start of the program is 1st of June. The call for the program opens at the end of January, interviews take place early March, and candidates are informed about the outcome in 2-3 weeks after the interviews.

U NOVARTIS