# Translating biology into medicine [1]

Discovery [2]

Over a lifetime, most of us learn to accept the physical decline that comes with aging. We slow down, our eyesight and hearing deteriorate, we're more prone to illness and injury. And, yes, there's the gray hair and wrinkles. But many aging people face the loss of normal, independent living as a result of their reduced mobility and sensory ability. Might we be able to intervene – through potential new medicines – in the biological pathways involved in aging?

Video of Translating biology into medicine

It's a biomedical mystery that has long fascinated former academic researcher and hospital physician Joan Mannick. But it was only after making the switch to the pharmaceutical industry and then joining the Translational Medicine group at the Novartis Institutes for BioMedical Research (NIBR) in 2010 that she was able to begin a serious pursuit of the answer.

"I got to Novartis and said to my boss: 'How about we work on aging?'," recalls Mannick, now Executive Director of NIBR's New Indications Discovery Unit. "A lot of people in the field have talked about how great it would be if someone did a clinical trial, but no-one had the resources to do it. We were given resources to do one of the first clinical trials ever to see if we could impact the rate of aging in humans. Novartis supported me and we did it."

Mannick's pioneering clinical trial is an example of the autonomy and the scientific and financial resources granted to NIBR's Translational Medicine scientists to advance the understanding of neglected diseases and change how they are treated. "There's really a lot of freedom you are given to push boundaries and do the most exciting innovative research you can," adds Mannick. "It's very rare."

The 360-strong global Translational Medicine group brings research advances made in the lab into the clinic, where investigational treatments are tested in patients for the first time. And it's this opportunity to make an immediate impact that Mannick's Translational Medicine colleague and infectious disease researcher Florencia Pereyra Segal most likes about working in the translational space.

"I always wanted to do something that was meaningful for patients," she says. "I realized that advancing knowledge in the lab, although very valuable, was not going to translate into a direct benefit to patients. I started looking at where I could have the most impact but still be very close to the science, which was what took me to medical school in the first place."

Meanwhile, Chinweike Ukomadu, an expert in hepatology, values the learning and intellectual stimulation on offer in Translational Medicine. He says: "To be able to walk into a team meeting and know there are 11 other people there who know infinitely more than I do about

what they do and I can learn from them – that makes coming to work really amazing every day."

Learn more about career opportunities at NIBR. [3]

**Tags:**
Novartis Institutes for BioMedical Research [4]
Scientific Discoveries [5]
Careers [6]
Clinical Trials [7]

---



**Links**
[1] https://www.novartis.com/stories/discovery/translating-biology-medicine
[2] https://www.novartis.com/stories/discovery
[3] https://www.novartis.com/careers/career-search#division=NIBR
[4] https://www.novartis.com/tags/novartis-institutes-biomedical-research
[5] https://www.novartis.com/tags/scientific-discoveries
[6] https://www.novartis.com/tags/careers
[7] https://www.novartis.com/tags/clinical-trials