

Tanel Tenson



Member of the IMI Scientific Committee

Professor of University of Tartu, Estonia.

Tanel Tenson received a bachelor's degree from the University of Tartu in 1992 and a master's degree in 1994. This research focused on the mechanisms of bacterial protein synthesis and the assembly of ribosomes.

He then visited the laboratory of Professor Alexander Mankin at the University of Illinois in Chicago from 1994 to 1996 where he continued researching mechanisms of bacterial protein biosynthesis. Because the bacterial ribosome is a major target for antibiotics, these studies also involved studying mechanisms of antibiotic action, with a focus on macrolide antibiotics. Tanel defended his PhD in 1997, based on this research.

Professor Tanel went on to work with Professor Måns Ehrenberg at Uppsala University where he used a combination of biochemistry, biophysics, and systems biology to study antibiotic action.

He received an international senior fellowship from The Wellcome Trust in 2003 to establish his research group at the University of Tartu. In 2007 he became a full professor in the technology of antimicrobial compounds. From 2009 to 2015 Tanel was head of the Centre of Excellence in Chemical Biology and is currently the head of the Centre of Excellence in Molecular Cell Engineering. Both programs have strong components of antibiotic action and antibiotic resistance.

From 2012 to 2014 Tanel coordinated a national program that monitored transfer routes of antibiotic resistance by analysing human samples, animal husbandry, companion animals, and waste water systems. His current research interests continue to include various aspects of antibiotic action and resistance and are pursued using a combination of biochemistry, biophysics, bacterial cell biology, and epidemiology.

Previous positions

- 1997 – 1998, Estonian biocenter, senior research fellow
- 1998 – 2004, University of Tartu, senior research fellow
- 2001, Uppsala University, visiting researcher

Fields of expertise

- Antibiotics
- Antibiotic resistance
- Protein biosynthesis