

Curriculum Vitae, Tim Tolker-Nielsen

EDUCATION:

1991: MSc in chemical engineering from the Technical University of Denmark.
1995: PhD in molecular microbiology from the Technical University of Denmark
2015: DMSc in medical molecular microbiology from the University of Copenhagen

EMPLOYMENT:

2012- : Professor of Medical Molecular Microbiology at the Costerton Biofilm Center, Department of Immunology and Microbiology. University of Copenhagen.
2008-2012: Associate Professor of Biomedical Microbiology at the Department of International Health, Immunology, and Microbiology. University of Copenhagen.
2001-2008: Associate Professor of Molecular Microbiology at the Department of Systems Biology. Technical University of Denmark.
1995-2001: Postdoc in Professor Søren Molin's research group at the Department of Microbiology. Technical University of Denmark.

RESEARCH AREA: Molecular Biofilm Biology and Chemical Biology.

PUBLICATIONS: Currently 177 peer-reviewed articles, 13 book chapters, 4 patent applications, and 1 patent licenced by a company. Corresponding/last author on 69 articles. The articles are published in high-ranking journals, as well as in numerous specialised microbiology journals. About 40% of the publications involve international collaboration.

CITATIONS/H-INDEX (MAR 2023):

According to ISI Web of Science: Citations: ~17.100, H-index: 67

According to Google Scholar: Citations: ~27.300, H-index: 78

ORAL PRESENTATIONS AT INTERNATIONAL CONFERENCES AND MEETINGS:

45 invited-speaker presentations. 61 oral presentations in total.

RESEARCH FUNDING AND PROJECT MANAGEMENT:

2001: 9.0 mill DKK from the Danish Research Council. "DABIC - Danish Biotechnological Research Program". Co-PI
2002: 1.3 mill DKK from the Danish Technical Research Council. "Microbial biofilms: Programmed transition of bacteria from the sessile state to the planktonic state". PI
2003: 1.3 mill DKK from Technical University of Denmark. "Roles of flagella and type IV pili in Pseudomonas aeruginosa biofilm development". PI
2003: 23.7 mill DKK from the Danish Research Council (Større Tværgående Forskergrupper) "Microbial Opportunistic Pathogens – a severe problem to human health". Co-PI
2004: 1.8 mill DKK from The Danish Council for Independent Research | Technical Sciences. "Molecular characterization of, and protection strategies against, Pseudomonas aeruginosa biofilm infections". PI
2006: 0.85 mill DKK from the Lundbeck Foundation. "c-di-GMP signalling, a common denominator to biofilm formation". PI
2006: 1.4 mill DKK from the Technical University of Denmark. "Extracellular DNA in microbial biofilms". PI
2007: 14.0 mill DKK from the Danish Strategic Research Council. "Food constituents and impact on chronic infections." Co-PI
2008: 2.4 mill DKK from the Danish Council for Independent Research | Natural Sciences. "Regulation of microbial biofilm formation". PI
2009: 27.5 mill DKK from the Danish Strategic Research Council. "Center for Antimicrobial Research (CAR)." Co-PI
2009: 0.93 mill DKK from the Lundbeck Foundation. "Extracellular DNA in microbial biofilms". PI
2009: 2.5 mill DKK from the Danish Council for Independent Research | Technical Sciences. "Computer-based development of anti-pathogenic drugs". PI
2011: 2.0 mill DKK from Novo Seeds. "Identification of compounds that inhibit c-di-GMP synthesis in Pseudomonas aeruginosa." Co-PI
2012: 0.8 mill DKK from Tamlæggefonden. "Antimikrobiel tolerance i orale mikrobielle biofilm". PI
2012: 1.5 mill DKK from the University of Copenhagen. "Molecular mechanisms that control the transition between acute and chronic bacterial infections." PI
2013: 5.3 mill DKK from the Danish Council for Independent Research | Natural Sciences. "Mechanisms involved in bacterial biofilm formation and antimicrobial tolerance". PI
2013: 1.0 mill DKK from the University of Copenhagen. "Identification of biofilm-dispersing compounds". PI
2014: 0.17 mill DKK from the Carlsberg Foundation. "Molekylær biofilm biologi". PI
2016: 3.8 mill DKK from the Danish Council for Independent Research | Technical Sciences. "Antimicrobials designed to dismantle antibiotic resistant biofilms". Co-PI
2016: 10.0 mill DKK from the Lundbeck Foundation. "Identification of antimicrobials that can eliminate biofilm infections". Co-PI
2017: 2.4 mill DKK from the Danish Council for Independent Research | Medical Sciences. "Response of immune cells to bacterial biofilms" PI

2018: 3.5 mill DKK from Novo Seeds. "A therapeutic approach to dismantle and eradicate bacterial biofilm infections" Co-PI
2019: 2.9 mill DKK from the Danish Council for Independent Research | Natural Sciences. "Tn-seq analysis of biofilm-associated antibiotic resistance" PI
2021: 0.8 mill DKK from the company Kemira. "Molecular target(s) and mechanism of action of B11". Co-PI
2022: 3.2 mill DKK from the Leo Foundation. "Chemical compounds that impede the pathogenic effects of Staphylococcus aureus in atopic dermatitis." PI
2022: 1.6 mill DKK from HORIZON-MSCA (postdoc Shahab Shahryari) "AB-Biofilm." PI
2022: 2.4 mill DKK from the Novo Nordisk Foundation "The mechanistic basis of biofilm-associated antibiotic tolerance" PI

EXTERNAL COLLABORATION PARTNERS:

The collaboration with external scientists is extensive. Some of the scientists from foreign universities, with whom collaboration is documented in recent joint publications, are listed below:

- Paul Williams, University of Nottingham, England.
- Leo Eberl, University of Zürich, Switzerland.
- Matthew Parsek, University of Washington, Seattle, USA.
- Staffan Kjelleberg, Nanyang Technological University, Singapore.
- Dianne Newman, California Institute of Technology, Pasadena, USA.
- Liang Yang, Southern University of Science and Technology, China.
- Paola Cescutti, University of Trieste, Italy.
- Joanne Engel, University of California, San Francisco, USA.

TEACHING AND TRAINING:

Responsible for the course "Immunology and Microbiology" which is compulsory for Human Biology students at the University of Copenhagen. Lecturer at two MSc courses, one BSc course, and one PhD course. Supervised 12 postdocs, 13 PhD students, 25 MSc students, and 26 BSc students.

OTHER COMMITMENTS:

2023: Member of the organizing committee for EUROBIOPILMS-2024
2017-2020: Member of the Novo Nordisk Foundation Committee on Bioscience and Basic Biomedicine in a 4-year period.
2018-present: Member of the editorial board of Biofilm.
2015-present: Member of the editorial board of npj Biofilms and Microbiomes.
2013-present: Member of the editorial board of Microorganisms
2007-2011: Member of the editorial board of Applied and Environmental Microbiology.
2008-2011: Member of the advisory board for the NABIIT research program "Nano- and bio-functionalized surfaces for biofilm prevention".
2004-2007: Member of the PhD study council at the Technical University of Denmark.
2004-2007: Member of the PhD program committee at BioCentrum-DTU.
2016: Member of the scientific advisory board for the ICAR2016 conference.
2010: Member of the organizing committee for EUROBIOPILMS-2011.
Referee for numerous scientific journals, including Nature, Science, and PNAS.