

Professor István Tóth
The University of Queensland, Brisbane, Australia

Professor István Tóth is the Chair in Biological Chemistry and Professor of Pharmacy, an Affiliated Professorial Research Fellow and Group Leader at the Institute of Molecular Biosciences, and leads the medicinal chemistry research theme at the School of Chemistry and Molecular Biosciences, The University of Queensland, Brisbane, Australia.

Professor István Tóth is a Chemical Engineer who specialized in Medicinal Chemistry after graduating from the Technical University Budapest. His Ph.D. focused on alkaloid chemistry under the supervision of Professor Csaba Szántay and Professor Lajos Szabó. Initially his postdoctoral research focused on organic synthesis of reserpine alkaloids at the Central Research Institute of Chemistry, Hungarian Academy of Sciences, in Professor Szántay's group.

Istvan had fruitful collaborations on alkaloids with Professor Szilveszter Vizi at the Semmelweis Medical School, Budapest, where they had two research articles and two granted patents together at that time. Prof Tóth continued his research career at the Central Research Institute at Chemistry as a researcher, senior researcher then group leader where in 1979 he defended his candidature on alkaloid chemistry.

From 1975-1976 he was a postdoctoral fellow at the Carleton University, Ottawa, Canada in Professor John ApSimon's group where he worked on terpenes. In 1985 he moved to the School of Pharmacy, University of London and changed his research directions towards peptides, lipids and carbohydrate chemistry, with applications in drug, vaccine and gene delivery where István is now an internationally recognized expert in those fields.

At London he went through the normal career development steps where from Senior Research Fellow he was promoted to Senior lecturer (1989), Reader (1994) than Professor (1998). He had strong collaborations with Scientists, like Professor György Kéri from the Semmelweis University and many researchers including Dr Anikó Horváth who spent many years at his research group in London (and later in Australia).

After a "dream" sabbatical 6 months at the University of Queensland, Australia in 1994, he and his family relocated to there in 1998. At the University of Queensland, Professor Tóth has built up a strong, very productive research group (presently 30 members), where the research orientation well suited the direction of modern multidisciplinary pharmaceutical sciences (well-funded by government, academia and industry).

In 1994, he was awarded a DSc degree for his work on Drug Delivery from the Hungarian Academy of Science. Professor Toth is an elected Fellow of Royal Australian Chemical Institute and Fellow of the Queensland Academy of Art and Science and an elected Member (External) of the Hungarian Academy of Sciences.

Professor Tóth has a demonstrated track record in research commercialization as one of the key founders of Alchemia Ltd, Implicit Bioscience Pty Ltd, Neurotide Pty Ltd and TetraQ. He has obtained a Business/Higher Education Round Table Award: “Outstanding Achievement in International Collaborative R&D”, which recognizes his excellent research achievements in the area of liposaccharides in drug/vaccine delivery.

He has been appointed as a member of the ARC College of Experts and he has refereeing duties for many international scientific journals and for scientific granting bodies. For example, he was the founding Editor in Chief of Current Drug Delivery.

Professor Tóth has over 400 peer-reviewed publications (with over 500 citations per year) and 44 patents. He has demonstrated his capacity and excellence with the relative citation performance of his publications over the last six years outperforming the world by a factor of 3, based on subject categories and publication years.

The global reach of his research is by more than 1,100 institutions citing his work. According to the Web of Science, the world's first published and cited researcher in the field of vaccine development between 2003 and 2019. He regularly organizes national and international conferences and delivers invited plenary and keynote lectures. In the past 10 years, Professor Tóth's research has attracted about \$80 million in competitive granting schemes, research contracts and investment schemes.

His research is currently funded by an NHMRC Program Grant 2018-2022 entitled Tropical diseases: Translating Discoveries Into Better Health; which has been continuously funded since 2004 in addition to an NHMRC Project Grant 2017-2019 (Understanding the myometrial transition at term and preterm labour to guide tocolysis), and an Italian Government IZSM 2018-2019 on the Immuno-castration of wild bore.

He previously held a visiting professorship at the School of Pharmacy, University of London, UK from 1998-2003 and at the University of California, San Francisco, USA from 2011-2013.

He is engaged in ongoing research collaborations with many Universities and Institutions, importantly with the Semmelweis University, Budapest, Hungary and Budapest University of Technology and Economics. The Semmelweis University has several years of collaboration with research groups of Vizi E. Szilveszter, László Hársing, György Kéry, Imre Klebovich, etc.