

Prof. Giovanni TOSI

Since November 2005, Dr. Giovanni Tosi is researcher in the scientific field of Pharmaceutical Technology at the University of Modena and Reggio Emilia (PI at the department of Pharmaceutical Sciences, which belongs to the faculty of Pharmacy). Since 2015, he is associate professor in the same field. He got certificate for Full professor in 2017, and now he is full Professor since 2020.

He was born in 1977 (March, 2nd) in Bologna, Italy, and got his degree in Pharmacy in 2002 with 110/110. He got his PhD in Pharmaceutical Sciences in 2005 at the University of Modena and Reggio Emilia, Italy. He was Coordinator of "Applied Technology" curricula for the PhD school in Health Products, member of Instruments Commission of Dep.Pharm.Sci., Contact Person ILO of Dep.Pharm.Sci, Research products, Representative of the Dep.Pharm.Sci. in the Central Board of Animal House and Committee for Research of University of Modena and Reggio Emilia. He now director of Hospital Pharmacy Specialization Programme and coordinator of KETs National Center for RNA drugs in Rare Diseases Spoke.

He is scientific delegate for international cooperation and coordinator of UNIMORE Nanomedicine Platform since 2017 and vice-chair of WG Nanotherapeutics in European Technology Platform for Nanomedicine since 2019 and now secretary of ETPN.

The research activity is based on the development of lipid and polymeric systems for the delivery and the targeting of drugs to diseased tissues or cells.

His works on nanomedicine for drug and gene delivery and targeting were honored with national prizes and awards (La Manna Prize for Student Thesis he drove), Jorge Heller Outstanding Paper Award, 2005) and Innovation price (AFI2005, AFI 2006). His work on Nanoparticles for CNS drug delivery has been recently awarded as one of the Hot Topic (150 selected research over 19.000 proposals) at the World Neuroscience Meeting (Society for Neuroscience) in Washington DC, November 2011 and World Neuroscience Meeting (Society for Neuroscience) in New Orleans, November 2012.

He is author or co-author of more than 100 publications in international journals and gave over 200 presentations (invited speaker, oral presentations and posters) in international and national congresses.

He participated as collaborator or project leader in several Italian and International projects supported by the Italian Research Ministry, IMI project, Euronanomed grant, Ministry of International Cooperation Projects and POR FESR project. He is now collaborating with a broad network of scientists in the field confirmed by the international participation to publications and many national and international industries (Chiesi, Pfizer, Sanofi, Gilead Sciences, Biomarin). He currently acts as referee for the top journals in nanotechnology and nanomedicine such as Journal of Controlled Release, Biomaterial, Nanomedicine and many other journals dealing with Nanotechnology, Drug Delivery and Nanomedicine. He is Member of the Editorial Advisory Board of a number of International Journals.

Last 5 years projects

- 2017-2022 Telethon grant: Targeting neurons with cholesterol. How can it change the future of **Huntington Disease patients**

- 2017- 2022 Cariparo Grant Paedriatic research: Pediatric **neurodegenerative disorders**: optimizing nanoparticle-mediated strategy for brain treatment.
- 2018-2023 IMI EU Grants: Investigating Mechanisms and Models predictive of accessibility of **therapeutics (IM2PACT) Into the Brain**.
- 2019-2023 PROGETTI DI RICERCA SCIENTIFICA E TECNOLOGICA DI GRANDE RILEVANZA, Ministero degli Esteri, Progetti Italy-USA, Nanomedicine for BBB-crossing in **CNS oncologic pathologies**.
- 2019-2022 Progetti PORFERS: Mat2Rep, Multifunctional Biomaterials for Regeneration in **Traumatic Brain Injury**
- 2020-2023 EuroNanoMed Grant: Silk-fibroin interventional nano-trap for the **treatment of glioblastoma**.
- 2020-2023 Vinci PhD Grant on Nanomed for **Glioblastoma Treatment**
- 2021-2023 -Creutzfeldt-Jakob Disease Foundation: Optimization of nanoparticle-mediated brain delivery of a tetracationic porphyrin with **potent anti-prion activities**
- 2022-2025: CN3 Centro Nazionale, **National Center for Gene Therapy and Drugs based on RNA Technology, Spoke 1, Genetic Diseases**
- 2022-2025: CN3 Centro Nazionale, **National Center for Gene Therapy and Drugs based on RNA Technology, Spoke 2, Cancer**
- 2022-2025: Health Extended ALLiance for Innovative Therapies, Advanced Lab-research, and Integrated Approaches of Precision Medicine - HEAL ITALIA, Spoke 6, **Development of innovative devices for precision diagnosis and personalized therapy**

Modena, 22.7.2024

