

Short Resume

Dr. Olivier Christophe Barbier

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Dr. Olivier C. Barbier, 46, is a **full professor and researcher 3-C at the Department of Toxicology of the Cinvestav**, where he founded and directed the laboratory of renal toxicology since 2006 and assumed the position of Academic Coordinator of the Master and Ph.D. Programs of Toxicology (international level) during the period 2018-2022.

He is a member of the Mexican National Research System (SNI level 2), a member of the Mexican Academy of Sciences (MX), the Mexican Society of Toxicology (MX), the Child Environmental Health Network (MX), the Pesticide Toxicology Network (MX), the French Society of Toxicology (FR), the Society of Toxicology (USA), the Mexican Institute for Nephrological Research (MX) and MUFRAMEX Network (MX/FR).

He studied at the University of Nice (France), where he obtained his master's degree (2001) and his Ph.D. in science with honorary mention and special congratulations from the jury (2004). He completed a postdoctoral stay at the Department of Physiology of Cinvestav (2005-2006). He has also been a visiting professor at the Brigham and Women's Hospital Renal Division and the Harvard Medical School (2016-2017).

In recent years, Dr. Barbier and his research group have focused on the **early diagnosis of kidney disease and its association with environmental risk factors** in several states of the Republic (Chihuahua, Tlaxcala, Yucatán, Coahuila, San Luis Potosi, CDMX) by collaborating in a multidisciplinary dynamic oriented towards the **syndemic aspect of nephropathy**.

His main research areas are:

- Identification of early biomarkers of renal damage (peptides, microRNAs) induced by exposure to fluorides, metals, or mixtures of pollutants in experimental models and Mexican Mestizo populations (children, adolescents, adults, marginalized populations).
- Characterization of environmental risk factors for renal disease development in Mexican Mestizo populations (children, adolescents, and adults, marginalized populations).
- In vivo and in vitro study of molecular actors involved in tubular endocytosis of low molecular weight proteins during exposure to low doses of cadmium.
- Impact of xenobiotic exposure on the tubular epithelium's repair, regeneration, and adaptation processes (inflammation, apoptosis, oxidizing stress, autophagy, etc.)

He is an evaluator/auditor for national and international organizations (Register of Accredited Evaluators Conahcyt (RCEA) in Area III, Medicine, and Health – N° RCEA-03-15532-2008), responsible for research projects funded by Conahcyt (Basic Sciences, ECOS-ANUIES, PronaII 316004 and 321320), IPN, the CDMX Science Technology, and Innovation Ministry, the European Union, and the Gonzalo Rio Arronte Foundation.

As regards his scientific and academic production, he has published five chapters of scientific books and 49 articles in high-level international journals (average IF = 4,603), cited 3,005 times; he is a Ph.D. thesis supervisor (11), master's (19), and bachelor's (9); is responsible for Cinvestav courses in renal toxicology (International Master of Toxicology), renal physiology (International Master of Physiology) and renal pharmacology (International Master of Pharmacology).