

NANOSCIENCE AND NANOTECHNOLOGY PROGRAM

Fernando Navarro-Garcia, PhD



Research Interests

- **Cellular Microbiology**
- Bacterial pathogenic factors
- Bacterial Secretion Systems
- Mucosal immune response
- **Cell Biology**
- Cell death
- Actin cytoskeleton
- Intercellular junctions
- Proinflammatory cytokines
- Vesicular trafficking
- Cell Biology of membrane

Dr. Navarro García is a professor in the Department of Cell Biology at CINVESTAV-IPN, Mexico. He is a member of the Mexican Academy of Sciences and the National System of Researchers (SNI), Level 3. He is a member of the editorial board and *ad hoc* reviewer of several journals of international circulation specialized in Microbiology, Cell Biology and Immunology of infectious diseases. He is a reviewer of scientific proposals from Mexico, France, Argentina, Sweden, USA, Colombia, Israel, Uruguay, etc. He has published more than 80 articles in international journals and 9 book chapters; the impact of his scientific work is reflected in the more than 3,900 citations or references to his publications (h-index: 29; Scopus). He has been invited to 30 National Conferences; 19 International Conferences and 6 Plenaries. He has supervised 6 bachelor's theses and graduated 20 master in science and 15 doctor in science students.

Selected Honours and Awards

- Honorary mention in exam for Biologist
- Head of the Department of Cell Biology
- President, Mexican Association of Microbiology
- Honorary mention, 9^o Prize "Lola e Igo Flisser"

Selected Funding

- Conacyt, SEP-Cinvestav

Dr. Navarro-García' work focuses on the role of the barrier function of the intestinal epithelium in pathogen infections (pathogenesis and immunity of the mucosa). He is a specialist in interaction epithelial cell-enteropathogen, with emphasis in epithelial membrane receptors, cytoskeleton, intracellular trafficking of bacterial effectors and toxins, mucosal antibodies, cytokines and cells from the immune system. Our studies include cellular microbiology, mucosal immune response against intestinal pathogens, mechanism of action of toxins from diarrheagenic *E. coli*, pathogenic factors secreted by bacteria, secretion mechanisms of proteins (mainly, type III, V and VI secretion systems), cell biology of membrane, vesicular trafficking, cytoskeleton and cell death.

More cited papers (showing only 5 papers):

1. Type V Protein Secretion Pathway: the Autotransporter Story (Cited by 616 documents)
DOI: 10.1128/MMBR.68.4.692-744.2004
2. The great escape: structure and function of the autotransporter proteins (Cited by 428 documents)
DOI:10.1016/S0966-842X(98)01318-3
3. Aggregative adherence fimbria II, a second fimbrial antigen mediating aggregative adherence in enteroaggregative *E. coli* (Cited by 214 documents). DOI: 10.1128/iai.65.10.4135-4145.1997
4. Phylogenetic analysis of enteroaggregative and diffusely adherent *Escherichia coli* (Cited by 206 documents). DOI: 10.1128/iai.67.6.2692-2699.1999
5. Pet, an autotransporter enterotoxin from enteroaggregative *Escherichia coli* (Cited by 204 documents). DOI: 10.1128/iai.66.7.3155-3163.1998. (Update: 08/2021)