

# JEAN-DENIS DOCQUIER, PH. D.

## RÉSUMÉ

### EDUCATION

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1995: B. Sc. in Chemistry, University of Liège, Belgium.

1998: M. Sc. in Biochemistry, University of Liège, Belgium.

2002: Ph. D. in Biochemistry, University of Liège, Belgium (Ph. D. funded by an EU mobility grant at the University of Siena) with high honors.

### TRAINING, ACADEMIC CAREER AND EXPERTISE

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2003- 2004: Post-doc fellow and Assistant Professor (temporary position, Department of Molecular Biology, University of Siena)

2004-2007: Post-doc fellow of the Belgian National Fund for Scientific Research (University of Liège)

2008: Permanent Researcher and Assistant Professor of Microbiology at the University of Siena (Department of Medical Biotechnology).

2015: Associate Professor of Microbiology (Department of Medical Biotechnology, University of Siena).

In 2014, Dr. Docquier obtained the National Scientific Habilitation for the title of Full Professor of Microbiology and Clinical Microbiology (MED/07, 06/A3).

### TEACHING ACTIVITY

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Dr. Docquier has been teaching various aspects of Microbiology (including microbiology and epidemiology, molecular microbiology, applied and pharmaceutical microbiology, microbiology for drug discovery) for over 15 years, prevalently in the M. Sc. in Pharmaceutical Chemistry and Technology, M. Sc. in Pharmacy, M. Sc. in Biotechnology for Human Health, and M.Sc. in Pharmaceutical Biotechnology, as well as in the Schools of Specialization in Microbiology and Virology and in Hospital Pharmacy.

He also taught various aspects of microbiology and biochemistry of antibiotic resistance in different Ph. D. and Master Degrees at the University of Siena, the University of Liège (Belgium, Socrates Programme) and the University of Paris (France) and he is the local coordinator of the Erasmus Bilateral Agreement between the University of Siena and the University of Liège, Belgium.

### SCIENTIFIC ACTIVITY

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#### Main areas of research:

- 1) Clinical aspects and molecular epidemiology of bacterial resistance to antibiotics;
- 2) Functional and structural characterization of  $\beta$ -lactamases, most importantly metallo- $\beta$ -lactamases and serine- $\beta$ -lactamases showing carbapenemase activity, as effectors of  $\beta$ -lactam resistance in clinically-relevant bacterial Gram-negative pathogens and as targets for enzyme inhibitors
- 3) Study of metallo- $\beta$ -lactamases and structurally-related proteins (the metallo- $\beta$ -lactamase superfamily) as a paradigm of molecular evolution
- 4) Discovery, optimization and characterization of novel compounds with antimicrobial properties

### **Publications:**

Authorship or co-authorship of 85 original articles published in international peer-reviewed journals (ISI h-index, 31), 6 reviews and two book chapters published by the American Society for Microbiology (ASM) and Nova Publishing (NY, USA). He actively participated to 66 scientific meetings and conferences, at which he globally authored over 100 communications.

Dr. Docquier is inventor in 8 patent applications.

### **Referring activities:**

Dr. Docquier performs reviewing activity for >15 peer-reviewed international journals, and was or currently is a member of the editorial board of Antimicrobial Agents and Chemotherapy, Biochemical Pharmacology, the European Journal of Microbiology and Immunology, ISRN Microbiology and Frontiers in Microbiology. He acted as a guest Editor of Current Opinion of Pharmacology, Elsevier (Anti-Infectives Issue, Oct 2014). He is also a reviewer for the “Agence Nationale de la Recherche”, one of the major public funding agency in France.

### **Awards:**

- ESCMID Research Fellowship 2004, European Society of Clinical Microbiology and Infectious Diseases,
- ICAAC Young Investigator Award 2005, American Society for Microbiology,
- Prize “Agathon De Potter” 2006 for Microbiology, Royal Academy of Sciences, Belgium.

Dr. Docquier is a Corresponding Member of the Royal Society of Sciences of Liège, Belgium.

### **Consultancy and collaboration with Industry:**

He was a consultant for Protez Pharmaceuticals (Malvern, USA; now part of Novartis Pharma) and had several contracts with industrial partners active in anti-infective research and development (Novoxel SA, Romainville, France; Astra Zeneca, Waltham, USA, Meiji Seika Kaisha Ltd, Tokyo, Japan; Antabio SAS, Labège, France; Basilea Pharmaceutical Intl. Ltd., Basel, Switzerland; Da Volterra, Paris, France; VenatoRx Pharmaceuticals, Malvern, USA). He is a member of the scientific advisory board of Antabio Sas, Labège, France. He is a member of the Board of Directors of Lead Discovery Siena S.r.l. (Italy).