



## Curriculum Vitae (short overview)

**Patrick COUVREUR-Short CV H index: 81 and over 26,000 citations**

### Carreer

1972 : Pharmacist, Université Catholique de Louvain (UCL), Belgium  
1975 : PhD in Pharmaceutical Sciences, UCL  
1976-1977: Post doctoral research position, Eidgenössische Technische Hochschule, Zurich (ETH) (Switzerland)  
1978-1983: Associate Professor, UCL  
1980 : Agrégation of « Enseignement Supérieur », UCL  
Since 1984 : Full Professor of Pharmacy, Université Paris-Sud (France)  
2009-2010: Professor at the prestigious « Collège de France », holder of the chair of “Innovation Technologique Liliane Bettencourt”  
Since 2010: Senior Member of the “Institut Universitaire de France” (IUF)

### Positions

- 1998-2010: Director of the Department “Physico-Chemistry, Pharmaceutical Technology and Biopharmacy” (UMR CNRS 8612), a Multidisciplinary Research Institute specialized in drug delivery and targeting (110 researchers).
- 1999-2006: Director of the Doctoral School “Therapeutic Innovation”(300 PhD students)
- 2005-2010: Responsible for the “Drug Discovery” within the pole of competitiveness “MEDICEN”
- since 2010: PI of two ERC grants (ERC Advanced Grant and ERC Proof of Concept Grant)

### Research and main research achievements

*The research performed is aiming to discover and design new nanomedicines for the treatment of severe diseases in oncology, neurosciences and intracellular resistant infections. This research has let to:*

- Over 500 international publications, some of them in prestigious journals (1 Nature Nanotechnology, 2 Nature Materials, 1 PNAS, 2 Angewandte Chemie, 6 ACS Nano etc.),
- 110 review articles and book chapters,
- 91 patents,
- 300 plenary and invited lectures at international and national congress,
- the authorship of 7 books,
- as well as 72 PhD thesis

*H-index 81 and over 26,000 citations (ISI Web of Knowledge) and H-index 100 (Google Scholar)*

### Commercialization

P. Couvreur has been co-founder and President of the scientific board of BIOALLIANCE (currently ONXEO) which has been created to translate into clinic, the technology of doxorubicin-loaded polyalkylcyanoacrylate nanoparticles. Presently, this company has 65 employees and entered the stock market on 7<sup>th</sup> December 2005. A multicentric clinical trial phase III of doxorubicin loaded polyalkylcyanoacrylate nanoparticles (LIVATAG<sup>®</sup>) has started November 2012. To date, more than 50% of the patients have been randomized in the study. The DSMB has reviewed the safety data from these patients, totaling more than 500 infusions of Livatag<sup>®</sup> in the trial and for the eight time since study initiation, has unanimously recommended to continue the study without modification, based on

its positive assessment of the safety data of Livatag®. P. Couvreur is also the Founder of the start-up company MEDSQUAL which is aimed to lead to the clinic, the *squalenoyl* anticancer and antiviral nanomedicines.

### **Principal International Responsibilities (past and present)**

- Member of the Board of Governors of the Controlled Release Society (1989-1993)
- President of the «Award Committee» of the «Board of Pharmaceutical Sciences» of FIP (International Pharmaceutical Federation) (1994-2000)
- Member of the Board of the International Society of Drug Delivery Sciences and Technology (APGI) (1992-2002)
- Member of the «Board of Pharmaceutical Sciences» (BPS) of FIP (International Pharmaceutical Federation) (1994-2002)
- Member of the Executive Committee of the International Consortium ULLA (Universities of Uppsala, Leyden, Amsterdam, London, Copenhagen and Paris Sud) (1998-2002)
- Member of the Academic Scientific Committee for the evaluation of the Dutch universities (VCNU) (2002)
- Chair of several International Congresses and Symposium on Controlled Release
- President of the Committee for Academic Research and Relations (CARR) of the European Federation of Pharmaceutical Sciences (EUFEPS) (2003-2005)
- Field Editor of “Pharmaceutical Research” (2004-2009) and Editor for Europe of the “Journal of Nanoparticle Research” (2000-2008)
- Member of the Editorial Board of numerous other international journals
- Extraordinary Professor at the Université Catholique de Louvain (Belgium) (since 1985)
- Member of the Senate of the European Federation of Pharmaceutical Sciences (EUFEPS) (since 2009)
- Member of the ERC Life Sciences 7 panel of the European Research Council (ERC) (2014-2015)
- President of the ERC Life Sciences 7 panel of the European Research Council (ERC) (since 2016)

### **Principal National Responsibilities (past and present)**

- Expert for the French Ministry of Industry, the Ministry of Education and Research, the National Agency for Innovation (OSEO ANVAR), the French “Agence Nationale de la Recherche” (ANR) and the French “Agence d’Evaluation de la Recherche et de l’Enseignement Supérieur” (AERES)
- Member of the National Council of the Universities (CNU) (1987 – 1995)
- Member of the Bureau of the National Committee for Sciences (CNRS) (2000-2002)
- Member of the Scientific Council of the “Centre d’Etudes Pharmaceutiques” (Chatenay-Malabry, Université Paris-Sud) (since 1985)
- Member of the Scientific Committee of the “Region Centre” (since 2005-2011)
- Member of the Scientific Council of “Ecole Normale Supérieure de Cachan” (2007-2011)
- Member of the Council of the “Observatoire des Micro et Nanotechnologies” (OMNT) (2008-2012)
- Founder President of the “Research Group on Drug Delivery and Targeting” (GTRV)
- Scientific Adviser and member of the Scientific Committee of the French National Institute “Technologies pour la Santé” (ITS) (since 2009)
- One of the founder members of MEDICEN, one of the ten French “Pôles de compétitivité mondiaux”
- Elected Member of the Senate of the new University Paris Saclay (since 2013)
- Member of the Board of Directors of the Senate of the new University Paris Saclay (2013-2016)
- Member of INNABIOSANTE scientific committee (Toulouse, France) (since 2013)
- Member of the “Collège Scientifique” of the Institut Pasteur (Paris, France) (since 2013)
- Elected Member of the Departement of “Sciences de la Vie” of the new Paris Saclay University

### **Academies**

- Member of the “Académie des Sciences” (France)
- Member of the “Académie des Technologies” (France)
- Member of the “Académie de Pharmacie” (France)
- Member of the “Académie de Médecine” (France)
- Foreign Member of the United States National Academy (Institute of Medicine) (USA)

- Foreign Member of the United States National Academy of Engineering (USA)
- Foreign Member of the Royal Academy of Medicine of Belgium (Belgium)
- Foreign Member of the Spanish Academy of Pharmacy (Spain)

### **Scientific Awards**

- Winner of the « Concours Universitaire Belge » (1977)
- Winner of the « Prix des Assurances Générales de France » (1981)
- «Alvarenga Prize » of the «Académie Royale de Médecine de Belgique » (1983)
- Awardee of the « Association des Enseignements de Pharmacie Galénique de Langue Française » for the best thesis.
- Winner of the «Prix Quinquennal (1984-1989) des Sciences Pharmaceutiques et Thérapeutiques » of the « Académie Royale de Médecine de Belgique ».
- Forcheimer Fund of Israël (1990).
- 1990 winner of the «Young Investigator Award for Excellence in Research» of the «Controlled Release Society» (Reno, USA)
- Vinci of Excellence of the Award «Science pour l'Art» of LVMH (Paris, 1993).
- «Pharmaceutical Scientist of the Year 1996» award of the Fédération Internationale Pharmaceutique (FIP) (Jérusalem, 1996).
- 1998 Glaxo Wellcome International Achievement Award.
- « Prix de l'Innovation et du Transfert de Technologie » given by «Paris Ile-de-de France-Capitale Economique» for the creation of the «start-up» BIOALLIANCE (1999).
- « Barré 2003 Award » of the University of Montréal (Canada).
- Winner of the “2004 Pharmaceutical Sciences World Congress Award” (Kyoto, Japon)
- Awardee of the «8ème concours national d'aide à la création d'entreprises de technologies innovantes » (Emergence) (Paris, 2006)
- “Host Madsen Medal”, the most prestigious award in pharmaceutical sciences, given by the International Federation of Pharmacy in Beijing (China), September 2007
- « Grand Prix de l'Innovation » de « L'USINE NOUVELLE »
- Winner of the “Marie-Maurice Janot Award lecture” given at the 6th World Congress of Pharmaceutics and Biopharmaceutics in Barcelona (Spain), April 2008
- Awardee of the «11ème concours national d'aide à la création d'entreprises de technologies innovantes » (Création) (Paris, 2009)
- Prix Galien (Paris, 2009)
- European Pharmaceutical Scientist Award 2011
- Médaille de l'Innovation du CNRS 2012
- European Inventor Award 2013 (Office Européen des Brevets)
- Speiser Award for Excellence in Pharmaceutical Sciences 2014 (ETH Zürich)
- Principal Investigator of an ERC Advanced Grant (TERNANOMED)
- Principal Investigator of an ERC Proof of Concept Grant (SQUALAC)
- Takeru & Aya Higuchi Award 2016 (Japan)