

Curriculum vitae

PERSONAL INFORMATION

Family name, First name: Leroux, Jean-Christophe
Nationalities: French and Canadian
Date of birth: 27/04/1969
URL for web site: www.galenik.ethz.ch

• EDUCATION

1995 Ph.D., Pharmaceutical Sciences
Faculty of Sciences, School of Pharmacy, University of Geneva, Switzerland
1992 B. Pharm.
Faculty of Pharmacy, University of Montreal, Canada

• CURRENT POSITION(S)

2008 - Full Professor, Drug Formulation and Delivery
Institute of Pharmaceutical Sciences, ETH Zürich, Switzerland

• PREVIOUS POSITIONS

2018 Visiting scientist (6 mo),
University Health Network, Toronto, Canada
2014 – 2016 Chair
Institute of Pharmaceutical Sciences, ETH Zürich, Switzerland
2010 – 2013 Adjunct Professor
Faculty of Pharmacy, University of Montreal, Canada
2007 – 2010 Full Professor
Faculty of Pharmacy, University of Montreal, Canada
2007 – 2008 Visiting Professor
Department of Chemistry, McGill University, Canada
2002 – 2007 Associate Professor
Faculty of Pharmacy, University of Montreal, Canada
1997 – 2002 Assistant Professor
Faculty of Pharmacy, University of Montreal, Canada
1996 – 1997 Postdoctoral Fellow
School of Pharmacy, University of California at San Francisco, USA

• FELLOWSHIPS AND AWARDS (EXCERPT)

2020 ERC Advanced Grant
2019 Fellow, American Association of Pharmaceutical Scientists
2018 Highly Cited Researcher 2018 - Clarivate Analytics
2017 Highly Cited Researcher 2017 - Clarivate Analytics
2016 AAPS Lipid Based Drug Delivery Outstanding Research award
2016 Finalist, Spark award (best ETH invention)
2016 Venture – best business plan (3rd position, Inositec AG)
2015 Phoenix Prize, Pharmaceutical Technology
2015 Thomson Reuters Highly Cited Researcher: <http://highlycited.com>
2014 Fellow, Controlled Release Society
2014 Thomson Reuters Highly Cited Researcher: <http://highlycited.com>
2014 APV Research Award for Outstanding Achievements in Pharmaceutical Sciences
2014 “Venture” 2014 Business idea
2012 ETH Golden Owl Award (teaching)
2011 Gattefossé Canada CSPS Award in Lipid-Based Drug Delivery
2010 Debiopharm Life Sciences Award
2010 Gattefossé Canada CSPS Award in Lipid-Based Drug Delivery
2009 Gattefossé Canada CSPS Award in Lipid-Based Drug Delivery
2008 Steacie Fellowship

- 2001 – 2007 Canada Research Chair
- 2007 Best Paper Award, *European Journal of Pharmaceutics and Biopharmaceutics*
- 2004 Controlled Release Society Young Investigator Award
- 2003 Astra Zeneca – AFPC Young Investigator Award
- 2003 CRS-Capsugel award (innovative aspects of controlled drug release)
- 2002 Pfizer – Actualités Pharmaceutiques award (research)

- **RESEARCH OUTPUT**

h-index: 79 (Google scholar, >24,200 citations), 65 (web of science, >16,550 citations).

241 peer-reviewed articles, 14 book chapters, 23 patents/patent applications, 121 invited lectures, 341 abstracts and presentations. Since 1997, more than €15.5 M and €23 M in research funding as PI and co-PI, respectively.

- **SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**

- 1997 – 37 graduated Ph.D. students, currently 12 Ph.D. students
39 postdoctoral fellows, currently 5 postdoctoral fellows
20 former lab members now professors/lecturers in academic/research institutions

- **CURRENT TEACHING ACTIVITIES**

- 2009 – Drug delivery and Drug Targeting, ETH Zurich
- 2008 – Pharmaceutical Technology 1 & 2, ETH Zurich

- **RECENT INSTITUTIONAL RESPONSIBILITIES (EXCERPT)**

- 2015 – Member, ETH Research Commission, ETH Zürich
- 2014 – 2016 Chair, Institute of Pharmaceutical Sciences, ETH Zurich
- 2009 – 2015 Admission Committee, Master Medicinal and Industrial Pharm. Sciences, ETH Zurich
- 2010 – 2012 Search Committee, Department of Pharmaceutical Sciences, University of Basel
- 2011 Accreditation Program Committee, Institute of Pharmaceutical Sciences, ETH Zurich
- 2010 Search Committee, Institute of Biochemical Engineering, ETH Zurich

- **ADVISORY BOARDS, REVIEW PANELS (EXCERPT)**

- 2018 – Editorial Board Member, *Journal of Controlled Release*
- 2018 – Mperia Therapeutics Inc., Canada, Scientific Advisory Board, Member
- 2015 – Editorial Board Member, *Molecular Pharmaceutics*
- 2014 – 2016 Scientific Advisory Board Member, Midatech, UK
- 2013 – *Journal of Controlled Release* Best Paper Award Committee
- 2013 Review Expert, AERES, Galien Institute UMR 8612, CNRS, France
- 2013 – Editorial Board Member, *Biomacromolecules*
- 2013 – 2014 Review Expert, LabEX NanoSaclay, France
- 2013 – 2014 Scientific Advisory Board Member, Flamel Technologies, France
- 2012 – 2017 Associate Editor, *Journal of Controlled Release*
- 2012 Review Panel Member, Bulgarian-Swiss Research Program, SNSF
- 2010 – Scientific Advisory Board Member, Carlina Technologies, France
- 2008 Review Panel Member, Young Investigator Award, Controlled Release Society
- 2006 – 2012 Associate Editor, *European Journal of Pharmaceutics and Biopharmaceutics* (IF 3.77)
- 2005 – 2016 Editorial Board Member, *Journal of Pharmaceutical Sciences*
- 2005 – 2011 Editorial Board Member, *Journal of Controlled Release*
- 2002 – Editorial Board Member, *Journal of Drug Delivery Science and Technology*
- 1998 – 2006 Editorial Board Member, *European Journal of Pharmaceutics and Biopharmaceutics*

- **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

- 2013 – Swiss Society of Pharmaceutical Sciences
- 2012 – American Association of Pharmaceutical Scientists
- 1999 – American Chemical Society
- 1994 – Controlled Release Society

- **SERVICE AS A REFEREE**

Major chemical, pharmaceutical and medical journals: *Nature Chemistry*, *Nature Medicine*, *Nature Nanotechnology*, *Nature Communications*, *JACS*, *Angewandte Chemie*, *Advanced Materials*, etc.

Major funding agencies: Natural Sciences and Engineering Research Council of Canada, Foundation, Canadian Institutes of Health Research, SNSF, ERC starting grants, KAUST-ICL, ANR (France), Swiss Cancer League, etc.

- **RECENT REPRESENTATIVE PUBLICATIONS (complete list at www.galenik.ethz.ch)**

1. Schantl AE, Verhulst A, Neven E, Behets G, D’Haese PC, Maillard M, Mordasini D, Phan O, Burnier M, Spaggiari D, Decosterd LA, MacAskill MG, Alcaide-Corral CJ, Tavares AAS, Newby DE, Beindl VC, Maj R, Labarre A, Hegde C, Castagner B, Ivarsson ME and **Leroux JC**. Inhibition of vascular calcification by inositol phosphates derivatized with ethylene glycol oligomers. *Nat Commun* 2020; 11:721.
2. Liang K, Carmone S, Brambilla D and **Leroux JC**. 3D printing of a wearable personalized oral delivery device: a first-in-human study. *Sci Adv* 2018; 4:eaat2544.
3. Schulz JD, Patt M, Basler S, Kries H, Hilvert D, Gauthier MA and **Leroux JC***. Site-specific polymer conjugation stabilizes therapeutic enzymes in the gastrointestinal tract. *Adv Mater* 2016; 28:1455-1460.
4. Forster V, Signorell RD, Roveri M, **Leroux JC***. Liposome-supported peritoneal dialysis for detoxification of drugs and endogenous metabolites. *Sci Transl Med* 2014; 6:258ra141. (IF 16.26).
5. Fuhrmann G, Grotzky A, Lukic R, Matoori S, Luciani P, Yu H, Zhang B, Walde P, Schlüter D, Gauthier MA and **Leroux JC***. Sustained gastrointestinal activity of dendronized polymer–enzyme conjugates. *Nat Chem* 2013; 5:582-589.
6. Brülisauer L, Kathriner N, Prenrecaj M, Gauthier MA and **Leroux JC**. Tracking the bio-reduction of disulfide-containing cationic dendrimers. *Angew Chem Int Edit* 2012; 51:12454-12458. (IF 11.71)
7. Wu C, **Leroux JC*** and Gauthier MA*. Twin disulfides for orthogonal disulfide pairing and the directed folding of multi-cyclic peptides. *Nat Chem* 2012; 4:1044-1049.
8. Fuhrmann G and **Leroux JC***. *In vivo* fluorescence imaging of exogenous enzyme activity in the gastrointestinal tract. *Proc Natl Acad Sci USA* 2011; 108:9032-9037.
9. Leblond J, Gao H, Petitjean A and Leroux JC. pH-responsive molecular tweezers. *J Am Chem Soc* 2010; 132:8544-8545.
10. Pinier M, Verdu E, Nasser-Eddine M, David CS, Vézina A, Rivard N and **Leroux JC***. Suppression of gliadin-induced toxicity on the intestinal epithelium by polymeric binders. *Gastroenterology* 2009; 136:288-298.

- **LEADERSHIP IN INDUSTRIAL INNOVATION OR DESIGN**

ETH Spin-off companies

Versantis AG (co-founder), 03/2015, www.versantis.ch (Clinical Phase 1b ongoing)

Inositec AG (co-founder), 12/2015, www.inositec.com

Technologies previously developed in collaboration with pharmaceutical companies

Nano-Delivery System™ (oral and parenteral polymeric micelles), Altus Formulation Inc.

Depolip® (*in situ* forming parenteral organogels), Ethypharm SA.

BL-7010 (oral polymeric binder for celiac disease), BiolineRx Ltd, Clinical Phase 1b completed.