

Short resume

Emmanuel PAUTHE

45 years, 4 children,
Ph.D University of Technology de Compiègne
Professor of Biochemistry & Biomaterial Science

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Academic qualifications

- Undergraduate, Univ. Paul Sabatier, Toulouse, France, Cell & Molecular Biology, 1989-1993.
- Graduate, Univ. de Technologie de Compiègne, France, Biological Engineering, 1994-1998.
- Post-doctoral fellow, Faculté de Pharmacie Amiens & Université de Reims, 1998-1999.

Appointments and positions held

- Full Professor, Dpt of Biology Univ. de Cergy-Pontoise, Biomaterial for Health Group, 2011-
- Visiting Professor, Dpt of Chemical Engineering, Yale University, USA, 2009-2011
- Adjunct Professor, Dpt of Biomaterial, Laval University, Canada, 2010-2014
- Associate Professor, Dpt of Biology Université de Cergy-Pontoise 2004-2009
- Assistant Professor, Dpt of Biology Université de Cergy-Pontoise 1999-2004

Synergistic Activities

- Dean of the Engineering Degrees in Humanity and Sciences at UCP, 10/16-present
- Chair, Department of Biology, University of Cergy-Pontoise (UCP), 03/13-present.
- Director of the Master of Engineering in Biomaterial for Health (UCP), 09/13-present

Major contributions

- Creator and director of the Master of Science Degree in Biomaterial Engineering. UCP, 07/9-present
- Seat on the boards of Directors of the Foundation of the UCP and Scientific Council, 10/06-present
- Creator and director of the chair in excellence in Biomaterial for Health, UCP, 06/10-present
- General chairman of the international Symposium on Biomaterial and Smart Systems, 10/14, France.

Honors

Laval University Adjunct Professor, Yale University Visiting Professor, Corning Lecturer Scholarship, French Society of Biophysics Award, National Comity of Biophysics Grant, Nord Interregional Project Postdoctoral Fellowship, French Research and Educational Minister Ph. D. Grant (3 years), Compiègne University of Technology Master Degree Fellowship.

40 publications, 1 international patent, >100 presentations at professional meetings

Collaborators

Diego Mantovani (University Laval, Quebec), Paul Santerre (University of Toronto, Canada), Hervé Petite (INSERM Paris), Didier Letourneur (INSERM Paris), Jean-Christophe Fricain (INSERM Bordeaux), Paul Van Tassel (Yale), Anjelica Gonzalez (Yale).

Postgraduate Sponsor and Thesis Advisor (2007-2017):

Postdoctoral: M. Hindié, M-C Degat, E. Casmand, L Bidault, J. Dubois, H. Morackchi, E. Lefebvre.

Thesis: Salima Patel (French Research Ministry, Cergy-Pontoise), Lucie Baujard-Lamotte (Corning SAS, Cergy-Pontoise), Céline Hoffmann (French Research Ministry, Cergy-Pontoise), Vanessa Montano (Mexican Government), Lucie Boisselier (French Research Ministry), Audrey Gossart (Chancellery des Universités).

REFERENCES (12 selected)

Interaction of phosphorylcholine with fibronectin coatings: Surface characterization and biological performances" V. Montañó-Machado, C. Noël, P. Chevallier, S. Turgeon, L. Houssiau, E. Pauthe, J.J. Pireaux, D. Mantovani. *App. Sur. Sci.* 2017, 396, 1613–1622.

A comparison of the behavior of adsorbed and grafted fibronectin coatings under static and dynamic constraints" V. Montañó-Machado, L. Hugoni, S. Díaz-Rodríguez, R. Tolouei, P. Chevallier, D. Mantovani, E. Pauthe. *Phys. Chem. Chem. Phys.*, 2016, 18, 24704—24712. doi: 10.1039/C6CP04527H

Fibronectin adsorption on surface-modified polyetherurethanes and their interaction with monocytes isolated from human blood" L. Hugoni, V. Montañó-Machado, P. Chevallier, M. Yang, E. Pauthe, D. Mantovani, J.P. Santerre. *Biointerphases* 2016, 1;11(2):029809. doi: 10.1116/1.4950887.

On the potential for fibronectin-phosphorylcholine coatings on PTFE substrates to jointly modulate endothelial cell adhesion and hemocompatibility properties, V. Montañó-Machado, P. Chevallier, D. Mantovani, E. Pauthe, *Biomatter*, 2015, 5:1, e979679.

Biomimetic inorganic–organic thin implant coatings deposited by lasers, F. Sima, P. Davitson, J. Dentzer, R. Gadiou, E. Pauthe, O. Gallet, I. Mihailescu, K. Anselme, *ACS Applied Materials and Interfaces*, 2015, 7, 911-920.

Time-controlled glucose releasing hydrogels and applications thereof, M. Deschepper, H. Petite, D. Logeart, J. Paquet, L. Bidault, E. Pauthe, V. Larreta Garde, 2014, Patent No: 14306700.7 – 1460.

Effects of human fibronectin and human serum albumin sequential adsorption on pre-osteoblastic cell adhesion, M. Hindié, E. Camand, R. Agniel, F. Carreiras, P.R. Van Tassel and E. Pauthe, *Biointerphases*, 2014, 2, 1-8.

Nanotemplated polyelectrolyte films as porous biomolecular delivery systems: Application to the growth factor BMP-2, A. Gand, M. Hindie, D. Chacon, P.R. Van Tassel, E. Pauthe, *Biomatter*, 2014, 4, 8231-8239.

Carbon nanotube bundling: influence on layer-by-layer assembly and antimicrobial activity, S. Aslan, J. Määttä, B. Haznedaroglu, L.D. Pfefferle, M. Elimelech, E. Pauthe, M. Sammalkorpi, and P.R. Van Tassel, *Soft Matter*, 2013, 9, 2136-2144.

Porous nanofilm biomaterials via templated layer-by-layer assembly ", C. Wu, S. Aslan, A. Gand, J.S. Wolenski, P.R. Van Tassel and E. Pauthe, *Advanced Functional Materials*, 2013, 23, 66-74.

Carbon nanotube-based antimicrobial biomaterials formed via layer-by-layer assembly with polypeptides ", S. Aslan, M. Deneufchatel, S. Hashmi, L. Pfefferle, M. Elimelech, E. Pauthe and P.R. Van Tassel, *J. of Colloid and Interface Science*, 2012, 388, 263-273.

Nanofilm Biomaterials: Localized Cross-Linking to Optimize Mechanical Rigidity and Bioactivity", J. A.Phelps, S. Morisse, M. Hindie, M.-C. Degat, E. Pauthe, and P. R. Van Tassel, *Langmuir*, 2011, 27, 1123-1130.