

Prof. Dr. Patrice D. Cani

Research associate from the FRS-FNRS

Group leader in the Metabolism and Nutrition research group (MNUT), UCL, Brussels, Belgium

Co-director of the European Associated Laboratory "NeuroMicrobiota" Lab (INSERM/UCL), Toulouse, France

Visiting Professor [Imperial College London](http://www.imperial.ac.uk)

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DOB: 26/12/1977

Belgian, Married, Two Children,

Languages: French and Italian (native speaker), English (Fluent), Dutch (intermediate)

UCL, Université catholique de Louvain

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http://www.researchgate.net/profile/Patrice_Cani/

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Twitter : [@MicrObesity](https://twitter.com/MicrObesity)

My main interests are the investigation of the role of the gut microbiota in the development of metabolic disorders, such as obesity, type 2 diabetes and low grade inflammation. More specifically, I am investigating the interactions between the gut microbiota, the host and specific biological systems such as the endocannabinoid system and the innate immune system in the context of obesity, type 2 diabetes and metabolic inflammation.

My Motto is "[In Gut We Trust](#)"

Track records

- **H-index: 61**, sum of times cited : >15 750 (*Scopus*) (last update July 2017)
- **Google Scholar H-index: 71**, sum of times cited : >23 800 (last update July 2017)
- **>180 Peer-Reviewed publications** (<http://www.ncbi.nlm.nih.gov/pubmed/?term=cani+pd>)

Academic appointments

Visiting Professor	(2010-present) Imperial College London, Section of Biomolecular Medicine, Department of Surgery and Cancer, U.K. (Head : Prof. Jeremy K. Nicholson)
Visiting Professor	(2013) Université Paul Sabatier, INSERM, I2MC, Toulouse, France (Head : Prof. Angelo Parini)
Professor	(2009-Present) Université catholique de Louvain (UCL), Faculty of Pharmacy and Biomedical Sciences, Brussels, Belgium
Research Associate	(2009-Present) Research Associate FRS-FNRS (Fonds de la recherche Scientifique, Belgium), UCL, LDRI, Brussels, Belgium
Visiting Professor	(2000 > Present) IPL (Leonard de Vinci), Brussels, Belgium

Academic degrees

Professor	(2009-Present) Université catholique de Louvain (UCL), Faculty of Medicine, Brussels, Belgium
Ph.D.	(2005) Biomedical Sciences (Metabolism and Nutrition), UCL, Brussels, Belgium.
M.Sc.	(2005) Health Sciences, UCL, Brussels, Belgium
M.Sc.	(2000) Biomedical Sciences (Human Nutrition), UCL, Brussels, Belgium.
B.Sc.	(1998) Dietetics, Paul Lambin Institute, UCL, Brussels, Belgium.

Scientific Awards/prizes

- 2017 **Francoqui Chair 2017** (ULg)
2016 **Thomson Reuters Highly Cited Researcher** in Nutrition
2016 Elected Associate member of the **Royal Academy of Medicine of Belgium**
2016 Laureate of the **International Prize of Physiology “Lucien Dautrebande”** shared with N.Delzenne
2016 **Adrien Bauchau Chair 2016** (UNamur)
2016 Laureate of a **PoC ERC Grant 2015**, Microbes4U
2015 **Officer of the Walloon Merit (O.M.W.)**
2015 Laureate of the **Baillet Latour Grant for Medical Research 2015**
2015 Laureate of the **St Luc foundation Transatlantic Bank of Belgium prize**
2015 Laureate of a **FRFS-WELBIO** grant (Walloon Excellence in Lifesciences and BIOTEchnology)
2013 Laureate of an **ERC Starting Grant 2013**, ENIGMO
2013 Laureate of a **WELBIO** starting grant (Walloon Excellence in Lifesciences and BIOTEchnology)
2012 Laureate of the SFD (Société Francophone du Diabète) prize, « foreigner researcher »
2010 Danone Institute Human Nutrition Research program 12000 euros
2009 Laureate of the SFD (Société Francophone du Diabète) “Special Research Allocation” euros
2007 Young Scientist FENS Award “Federation of the European Nutrition Society”

Five most important publications

- 1° Plovier H, Everard A, Druart C, Depommier C, Van Hul M, Geurts L, Chilloux J, Ottman N, Duparc T, Lichtenstein L, Myridakis A, Delzenne NM, Klievink J, Bhattacharjee A, van der Ark KCH, Aalvink S, Martinez LO, Dumas ME, Maiter D, Loumaye A, Hermans MP, Thissen JP, Belzer C, de Vos WM, **Cani PD**. [A purified membrane protein from *Akkermansia muciniphila* or the pasteurized bacterium improves metabolism in obese and diabetic mice.](#)
Nature Medicine 2017, 23:107-113 Impact Factor: 30.35
- 2° Duparc T, Plovier H, Marrachelli VG, Van Hul M, Essaghir A, Ståhlman M, Matamoros S, Geurts L, Pardo-Tendero MM, Druart C, Delzenne NM, Demoulin JB, van der Merwe SW, van Pelt J, Bäckhed F, Monleon D, Everard A, **Cani PD**. [Hepatocyte MyD88 affects bile acids, gut microbiota and metabolome contributing to regulate glucose and lipid metabolism.](#)
Gut. 2016 May 5. [Epub ahead of print] Impact Factor: 14.9
- 3° Everard A, Geurts L, Caesar R, Van Hul M, Matamoros M, Duparc T, Denis RGP, Cochez P, Pierard P, Castel J, Bindels LB, Plovier H, Robine R, Muccioli GG, Renaud JC, Dumoutier L, Delzenne NM, Luquet S, Bäckhed F, **Cani PD**
[Intestinal epithelial MyD88 is a sensor switching host metabolism towards obesity according to nutritional status](#)
Nature Communications. 2014, 5;5:5648 Impact Factor: 11.3
- 4° Geurts L, Everard A*, Van Hul M*, Essaghir A, Duparc T, Matamoros S, Plovier H, Castel J, Denis RGP, Bergiers M, Druart C, Alhouayek M, Delzenne NM, Muccioli GG, Demoulin JB, Luquet S, **Cani PD**. [Adipose tissue NAPE-PLD controls fat mass development by altering the browning process and gut microbiota](#)
Nature Communications. 2015, 6:6495 Impact Factor: 11.3
- 5° Everard A, Belzer C, Geurts L, Ouwerkerk JP, Druart C, Bindels LB, Guiot Y, Derrien M, Muccioli GG, Delzenne NM, de Vos WM, **Cani PD**. [Cross-talk between *Akkermansia muciniphila* and intestinal epithelium controls diet-induced obesity.](#)
Proc Natl Acad Sci U S A. 2013, 110, 9066-71 Impact Factor: 9.8

Memberships/Affiliation

- Associate Editor of [GUT](#) and [Am J Endocrinol Metab.](#)
- Member of the editorial board of [Am J Physiol Gastrointest Liver Physiol](#) and of the advisory board of [Nature reviews Gastroenterology & Hepatology](#)
- Funding member of the **BNS** (Belgian Nutrition Society) in 2008, Member of the **New York Academy of Sciences** (NYAS), Société Francophone du Diabète (**SFD**) and **ADA** (American Diabetes Association), **Alumni from the ENLP** (European Nutrition Leadership Platform) in 2008, programme accessible upon strict **selection and providing European Certification** Alumni of the Belgian Royal Academy of Sciences (**Académie Royale de Belgique**), Collège des Alumni, Classe des Sciences)

Patents

Cani PD, Everard A, de Vos W, Belzer C. Use of Akkermansia for treating metabolic disorders. PCT/EP2013/073972 WO2014076246 A1

Cani PD, Everard A, Plovier H, Druart C, de Vos W., Belzer C. Use of pasteurized Akkermansia for treating metabolic disorders PCT/EP2016/071327 WO2017042347 A1

de Vos W, Belzer C, **Cani PD**. Use of a polypeptide for effecting immune signalling and/or affecting intestinal barrier function and/or modulating metabolic status WO2016177797

Delzenne NM, **Cani PD**, Fripiat A. Composition for prevention, inhibition and treatment of obesity and related diseases. 2005, PCT/EP2004/010907, WO 2005/036990

Neyrinck AM, Delzenne NM, **Cani PD**. Arabinoxylans for modulating the barrier function of the intestinal surface 2010, PCT/EP2009/060669, WO 2010/020639

Cani PD, Everard A, Geurts L, Fargier E, Verleye M, Le Guern ME. Pharmaceutical composition for reducing body fat PCT/EP2014/074109 WO2015067788 A1

International visibility

Invited Speaker (since 2009)

Total number of invited conferences in

2016:	20 (international) / 16 (national)
2015:	18 (international) / 5 (national)
2014:	19 (international) / 5 (national)
2013:	14 (international) / 7 (national)
2012:	16 (international) / 5 (national)
2009-2011>	40 (international) / >15 (national)

Selected list of international meetings:

National Academy of Sciences of USA 2016, Harvard Medical School 2016 (*USA*), Keystone Meeting Gut microbiota modulation of host physiology 2015 (*USA*), Keystone Meeting Obesity and Diabetes 2014 (*Canada*), International Congress of Obesity, ICO 2014 (*Kuala Lumpur, Malaysia*), New York Academy of Sciences 2013 (*USA*), Keystone Meeting Innate Immunity and the Microbiome 2012 (*USA*), World Congress of Pediatric Gastroenterology, Hepatology and Nutrition 2012 (*Taiwan*), 3rd International Congress of Abdominal Obesity 2012 (*Canada*), International Liver Congress, EASL 2012 (*Spain*), International Cardio Event 2012 (*Italy*), International Congress of Endocrinology 2012 (*Italy*), European Nutrition Conference FENS 2011 (*Spain*), International Fiber congress 2011 (*Japan*), ISAAP 2009 (*USA*), NuGOWeek 2010 (*UK*), International congress of Natural Medicine 2010 (*Australia*)

Reviewer and Experts for international journals and Agencies

- **Reviewer** for Nature, Nature Medicine, Cell Metabolism, Gut, Science, Diabetes, Gastroenterology, Diabetologia, Nature Reviews, Science Translational, Medicine, PlosONE, Am. Journal Physiol, AJCN, J. Prot. Res., Int. J. Obesity, Obesity, Br J Nutr, Cell Metabolism, PNAS... (Max 4 accepted/month)
- > **150 interviews and reportages** on different media: **Television** (national: RTBF, RTL, TVcom, VRT, BBC, Euronews) and international (France2, TV5, TVSuisse, ARTE), on the **Radio** (nationals and internationals), **News Papers press**.
- Member of the jury of PhD thesis outside Belgium (16 PhD thesis), inside Belgium (>25 PhD thesis).
- **Reviewer or expert for international Agencies and grants** (e.g., France, Italy, Switzerland, The Netherlands, Denmark, UK, USA, ...); **ILSI Europe**, **ANR** (French National Agency for Research), **FRS-FNRS** (Fonds de la Recherche Scientifique), **FNRS** (Switzerland), **AERES** (French agency for research and teaching evaluation), **Wellcome Trust** (UK), **ERC** (European Research Council)

Main international collaborators

- **Prof. J. Nicholson, M. Dumas and E. Holmes**, Imperial College London, Dpt of Surgery and Cancer, London, **UK**
- **Prof. A. Marette**, Université Laval, Québec, **Canada**
- **Prof. F. Backhed**: Sahlgrenska Center for Cardiovascular and Metabolic Research, Goteborg University, **Sweden**
- **Prof W. de Vos**: University of Helsinki, Finland, and Wageningen University, laboratory of Microbiology, **The Netherlands**
- **Dr. Jeff Leach**, Human Food Project, **USA** <http://humanfoodproject.com/the-people/collaborators/>
- **Prof. R. Knight**, Boulder University, Colorado, **USA** http://americangut.org/?page_id=51
- **Profs C. Knauf and P. Valet**: INSERM, I2MC, Toulouse, **France**
- **Profs C. Magnan and S. Luquet**: CNRS, Paris Diderot University, Paris, **France**
- **Profs J Schrenzel, P. François and V. Lazarevic**: Genomic Research Lab, Geneva University, Genève, **Suisse**
- **Prof. D. Robertson**, Dpt of Nutrition and Metabolism, University of Surrey, **UK**
- **Prof. G. Frost**, Imperial College London, Dpt of Medicine, London, **UK**
- **Prof. MP. Mollica**, University Federico II, Naples, **Italy**