

## **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*

e-mail: [Patrice.cani@uclouvain.be](mailto:Patrice.cani@uclouvain.be)

Belgian, Married, Two Children

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

## **UCL, Université catholique de Louvain**

Faculty of Pharmacy and Biomedical Sciences.

Louvain Drug Research Institute,

Metabolism and Nutrition research group (MNUT).

Av. E. Mounier, 73 B1.73.11, 1200 Brussels, Belgium.

+32 2 764 73 97

+32 474 900 562

<http://www.uclouvain.be/en-269734.html>

[http://www.academieroyale.be/n11456/Patrice\\_D.Cani](http://www.academieroyale.be/n11456/Patrice_D.Cani)

[http://www.researchgate.net/profile/Patrice\\_Cani/](http://www.researchgate.net/profile/Patrice_Cani/)

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: 37**, sum of times cited : 5792 (*Scopus*)
- **Google Scholar H-index: 42**, sum of times cited : 8352 (*last update 17<sup>th</sup> January 14*)
- **115 Peer-Reviewed publications** (<http://www.ncbi.nlm.nih.gov/pubmed/?term=cani+pd>)
- **Average citation per item: 50**

---

## **Present Academic appointments**

---

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

---

## **Academic degrees**

---

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

---

## Scientific Awards/prizes

---

- 2013 Laureate of an **ERC Starting Grant** 2013, ENIGMO  
2013 Laureate of **WELBIO** starting grant (Walloon Excellence in Lifesciences and BIOTechnology)  
2012 Laureate of the 2012 **most promising scientist supportive grant for ERC grant application UCL** (health science sector, Belgium) (100 000 euros).  
2012 Laureate for the SFD (Société Francophone du Diabète) prize, « foreigner researcher » 30 000 euros  
2010 Danone Institute Human Nutrition Research program 12000 euros  
2009 Laureate for the SFD (Société Francophone du Diabète) “Special Research Allocation” 25 000 euros  
2007 Young Scientist FENS Award “Federation of the European Nutrition Society”
- 

## Five most important publications

---

1° 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*, I.F.: 9.68, 2013, 110, 9066-71

2° Everard A, Lazarevic, Derrien M, Girard M, Muccioli GG, Neyrinck AM, Possemiers S, Van Holle A, François P, de Vos WM, Delzenne NM, Schrenzel J, **Cani PD**

Responses of gut microbiota, glucose and lipid metabolism to prebiotics in genetic obese and diet-induced leptin-resistant mice

*Diabetes*, I.F.: 8.89, 2011, 60, 2775-86

3° Muccioli GG, Naslain D, Backhed F, Reigstad CS, Lambert DM, Delzenne NM, **Cani PD.**

The endocannabinoid system links gut microbiota to adipogenesis.

*Mol Syst Biol* I.F.: 12.3, 2010, 6, 392

4° **Cani PD**, Amar J, Iglesias MA, Poggi M, Knauf C, Bastelica D, Neyrinck AM, Fava F, Tuohy KM, Chabo C, Waget A, Delmée E, Cousin B, Sulpice T, Chamontin B, Ferrières J, Tanti JF, Gibson GR, Casteilla L, Delzenne NM, Alessi MC, Burcelin R. Metabolic endotoxemia initiates obesity and insulin resistance.

*Diabetes*, I.F.: 8.89, 2007, 56, 1761-1772

5° **Cani PD**, Possemiers S, Van de Wiele T, Guiot Y, Everard A, Rottier O, Geurts L, Naslain D, Neyrinck A, Lambert DM, Muccioli GG, Delzenne NM. Changes in gut microbiota control inflammation in obese mice through a mechanism involving GLP-2-driven improvement of gut permeability.

*Gut* I.F.: 10.1, 2009, 58, 1091-1103

---

## Memberships/Affiliation

---

- Funding member of the **BNS** (Belgian Nutrition Society) in 2008
- Member of the **New York Academy of Sciences** (NYAS)
- Member of the **SFD** (Société Francophone du Diabète)
- **Alumni from the ENLP** (European Nutrition Leadership Platform) in 2008, programme accessible upon strict **selection and providing European certification**
- Member of the **ADA** (American Diabetes Association)
- Invited member and Alumni of the Belgian Royal Academy of Sciences (**Académie Royale de Belgique**, Collège des Alumni, Classe des Sciences)

---

## Patents

---

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

---

## Invited Speaker (since 2009)

---

### Total number of invited conferences in

2013: **14** (international) / **7** (national)  
2012: **16** (international) / **5** (national)  
2011: **17** (international) / **4** (national)  
2010: **9** (international) / **5** (national)  
2009: **13** (international) / **4** (national)

### Selected list of international meetings:

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*), DNSG/EASD 2009 (*Germany*).

---

## Teaching activities

---

- Nutrition et environnement [ WSBIM2234 ] 22.5h 6 ECTS credits. Co-titular
- Atelier informatique et de recherche bibliographique appliquée au médicament [ WFARM1239 ] 15h 2 ECTS credits. Titular
- Régulation hypothalamique de la prise alimentaire [Paul Lambin Institute]
- NutriBrain School 2012, Bordeaux
- Chairman of jury of the thesis presentations: Institut Paul Lambin (Bachelor in dietetics) since 2009

---

## Academic appointments

---

2013- Present: Vice-president of the Louvain Drug Research Institute

2013-Present: President of the ethical committee of the faculty for animal research

2013-Present: Academic substitute of the UCL commission patent management

2010-2013: Member of the ethical committee of the faculty for animal research

2009-present: Member of the “bureau” Louvain Drug Research Institute

2009-present: Member of the commission, M.Sc. Biomedical Sciences (Nutrition)

2009-present: Representing member of the LDRI for the “animal facility commission” at the Health Science Sector

2011-present: Representing member of the Health Science Sector at the “groupe de travail avenir des salles didactiques à l’UCL”.

2012-present Representing member of the LDRI and FASB faculty at the CSI (Informatic sectorial committee)

---

### Others

---

- **Reviewer** for Nature, Nature Medicine, Cell Metabolism, Gut, 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)
- **Reviewer or expert for international Agencies and grants** (e.g., France, Italy, Switzerland, The Netherlands, Denmark, U.K., ...); international agencies **ILSI Europe, ANR** (French National Agency for Research), **FRS-FNRS** (Fonds de la Recherche Scientifique), **AERES** (French agency for research and teaching evaluation). Consultancies: Metagenics Inc (USA), Biocodex (France).
- Member of the jury of PhD thesis outside Belgium (10 PhD thesis), inside Belgium (>20 PhD thesis).
- Several interviews and reportages on different media: Television (national: RTBF, RTL, TVcom) and international (France2, TV5, TVsuisse, ARTE), on the Radio (nationals and internationals).

---

### Main international collaborators

---

- **Prof. JA. Pospisilik:** Max Planck Institute of Immunobiology and Epigenetics, Freiburg, **Germany**
- **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**
- **Prof. N. Dhurandhar,** PBRC, Baton Rouge, **USA**
- **Dr. Jeff Leach,** Human Food Project, **USA** <http://humanfoodproject.com/the-people/collaborators/>
- **Prof. R. Knight,** Boulder University, Colorado, **USA** [http://americanagut.org/?page\\_id=51](http://americanagut.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. J. Nicholson and E. Holmes,** Imperial College London, Dpt of Surgery and Cancer, London, **UK**
- **Prof. D. Robertson,** Dpt of Nutrition and Metabolism, University of Surrey, **UK**
- **Prof. B. Vanhaesebroeck:** Barts Cancer Institute, Centre for Cell Signalling, , Queen Mary University of London, John Vane Science Centre, London, **UK**
- **Prof. G. Frost,** Imperial College London, Dpt of Medicine, London, **UK**
- **Dr. MP. Mollica,** University Federico II, Naples, **Italy**