Prof. Dr. Patrice D. Cani

Full Professor of Physiology, Metabolism & Nutrition

Registered Dietitian (RD), Honorary Research Director from the FRS-FNRS

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

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

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DOB: 26/12/1977

Belgian, Married, Two Children,

Languages: French (native speaker), Italian (Fluent),

English (Fluent), Dutch (intermediate)

UCLouvain, Université catholique de Louvain

Faculty of Pharmacy and Biomedical Sciences. Louvain Drug Research Institute (LDRI),

Institute of Experimental and Clinical Research (IREC) Metabolism and Nutrition research group (MNUT). Av. E. Mounier, 73 B1.73.11, 1200 Brussels, Belgium.

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https://uclouvain.be/en/directories/patrice.cani http://www.academieroyale.be/n11456/Patrice D..Cani and Royal Academy of Medicine of Belgium http://www.researchgate.net/profile/Patrice Cani/

Imperial College London

Faculty of Medicine

https://profiles.imperial.ac.uk/p.cani/about

Exploring the interplay between nutrition, gut microbes, and host metabolism to understand and combat obesity, type 2 diabetes, cancer, and inflammatory diseases.

My Motto is "In Gut We Trust"

Track records

- **H-index: 119,** sum of times cited : >73 800 (Scopus) (last update August 2025)
- Google Scholar H-index: 139, sum of times cited : >104 400 (last update August 2025)
- >368 Peer-Reviewed publications (http://www.ncbi.nlm.nih.gov/pubmed/?term=cani+pd)

Academic appointments

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Full Professor	(since 09/2023) Université catholique de Louvain (UCLouvain), Faculty of
	Pharmacy and Biomedical Sciences (FASB), Health Science Sector (HSS), Brussels,
	Belgium
Visiting Professor	(since 2025) Imperial College London, Faculty of Medicine, U.K.
Visiting Professor	(2024-2024) University of Cagliari, Department of Scienze Biomediche, Italy
Professor	(09/2009-08/2023) UCLouvain , FASB, HSS, Brussels, Belgium
Research Director	(10/2021-08-2023) FRS-FNRS (Fonds de la recherche Scientifique, Belgium),
	UCLouvain, LDRI, Brussels, Belgium
Visiting Professor	(2010-2019) Imperial College London, Section of Biomolecular Medicine,
	Department of Surgery and Cancer, U.K. (Head: Prof. Jeremy K. Nicholson)
Visiting Professor	(in 2013) Université Paul Sabatier, INSERM, I2MC, Toulouse, France
Senior Research Asso	ciate (10/2017-9/2021) FRS-FNRS
Research Associate	(10/2009-9/2017) FRS-FNRS
Visiting Professor	(2000-2020) IPL (Leonard de Vinci), Brussels, Belgium

Academic degrees

Ph.D.	(2005) Biomedical Sciences (Metabolism and Nutrition), Faculty of Medicine, UCLouvain,
	Brussels, Belgium.
M.Sc.	(2005) Health Sciences, UCLouvain, Brussels, Belgium
M.Sc.	(2000) Biomedical Sciences (Human Nutrition), UCLouvain, Brussels, Belgium.
B.Sc.	(1998) Dietetics, Paul Lambin Institute, UCLouvain, Brussels, Belgium.

Scientific Awards/prizes

- 2024 Stanford University Highly Cited Researcher
- 2024 Clarivate Highly Cited Researcher
- 2023 Clarivate Highly Cited Researcher
- 2022 Clarivate Highly Cited Researcher
- 2022 Laureate of a WELBIO Advanced grant (Walloon Excellence in Lifesciences and BIOtechnology)
- 2022 Medal of the Royal Academy of Medicine of Belgium
- 2022 AstraZeneca Foundation Prize
- 2021 Clarivate Highly Cited Researcher
- 2021 Full member of the Royal Academy of Medicine of Belgium
- 2020 Clarivate Highly Cited Researcher
- 2019 Award for Excellence in Biomedical Research and Creativity from the joint scientific committee of the Academies of Medicine of Belgium and France, and the Council of the JA DeSève Research Chair
- 2019 Clarivate Highly Cited Researcher
- 2018 Clarivate Highly Cited Researcher
- 2018 Prize of the National TV RTBF for "The ability of popularization Science work"
- 2017 Clarivate Highly Cited Researcher
- 2017 Belgian Endocrine Society Award
- 2017 Laureate of a FRFS-WELBIO grant (Walloon Excellence in Lifesciences and BIOtechnology)
- 2017 Francqui Chair 2017 (ULiège)
- 2016 Clarivate Highly Cited Researcher
- 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 2016, 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 over the last 10 years

1° Toledo M, Martínez-Martínez S, Van Hul M, Laudo B, Eyre E, Pelicaen R, Puel A, Altirriba J, Gómez-Valadés AG, Inderhees J, Moreno-Indias I, Pozo M, Chivite I, Milà-Guasch M, Haddad-Tóvolli R, Obri A, Fos-Domènech J, Tahiri I, Llana SR, Ramírez S, Monelli E, Schwaninger M, <u>Cani PD</u>*, Nogueiras R*, Claret M*. co-last authors and co-corresponding authors

Rapid modulation of gut microbiota composition by hypothalamic circuits in mice.

Nature Metabolism. 2025 Jun;7(6):1123-1135. Impact Factor: 19

2° Le Roy T, Moens de Hase E, Van Hul M, Paquot A, Pelicaen R, Régnier M, Depommier C, Druart C, Everard A, Maiter D, Delzenne NM, Bindels LB, de Barsy M, Loumaye A, Hermans MP, Thissen JP, Vieira-Silva S, Falony G, Raes J, Muccioli GG, **Cani PD**.

<u>Dysosmobacter welbionis</u> is a newly isolated human commensal bacterium preventing diet-induced obesity and metabolic disorders in mice.

Gut. 2022 71(3):534-543. Impact Factor: 24.8

3° Depommier C, Everard A, Druart C, Plovier H, Van Hul M, Vieira-Silva S, Falony G, Raes J, Maiter D, Delzenne NM, de Barsy M, Loumaye A, Hermans MP, Thissen JP, de Vos WM, <u>Cani PD.</u>

<u>Supplementation with Akkermansia muciniphila in overweight and obese human volunteers: a proof-of-concept exploratory study.</u>

Nature Medicine 2019, 25: 1096-1103 Impact Factor: 58

4° 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, <u>Cani PD</u>. 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: 58

5° Everard A, Plovier H, Rastelli M, Van Hul M, de Wouters d'Oplinter A, Geurts L, Druart C, Robine S, Delzenne NM, Muccioli GG, de Vos WM, Luquet S, Flamand N, Di Marzo V, <u>Cani PD.</u>
Intestinal epithelial N-acylphosphatidylethanolamine phospholipase D links dietary fat to metabolic adaptations in obesity and steatosis.

Nature Communications. 2019 Jan 28;10(1):457. Impact Factor: 14.7

International visibility

<u>Invited Speaker : > 380 invited conferences since 2008</u>

Selected list of international meetings: 15th International Mediterranean Meeting, 2024 (Rome, Italy), 3rd International World of Microbiome Conference, 2022 (Vienna, Austria), Invited 8 times to Keystone Meetings microbiota/immunity/metabolism (8 in total since 2009, in USA or Canada), Gordon Conference CNS Endocannabinoids 2019 (Spain), Academy of Medicine 2018 (France/Canada), 2 National Academy of Sciences of USA (2016), New-York Academy of Sciences (2013 and 2016), Harvard Medical School 2016 (USA), International Congress of Obesity ICO 2014 (Kuala Lumpur), American Diabetes Associated 2015 and 2016 (ADA, USA) IUNS (2017, Buenos Aires), World Congress of Pediatric Gastroenterology, Hepatology and Nutrition 2012 (Taiwan), International Liver Congress, EASL 2012 and 2019 (Spain), European Nutrition Conference FENS 2011/2014, International Fibers congress 2011 (Japan), International congress of Natural Medicine 2010 (Australia).

<u>Organizer and co-organizer of numerous national and international congresses since 2009</u>: Selected list: 2012 Stock conference Prague, (International Association for the Study of Obesity), Belgian Nutrition Society congresses (2010, 2011, 2012), Joint congress French/Canadian/Belgian medical academy of sciences (2016, 2017, 2018), International conference of the joint international research unit Italy/Québec (2017, 2018, 2019, 2021, 2022, 2023, 2024), Gut brain axis congress 2024 (Brussels).

Reviewer and Experts for international journals and Agencies

- **Reviewer** for Nature, Gut, Nature Medicine, Cell Metabolism, Science, Diabetes, Gastroenterology, Diabetologia, Nature Reviews, Science Translational, Medicine, PlosONE, Am. Journal Physiol, AJCN, J. Prot. Res., Int. J. Obesity, Obesity, Br J Nutr, PNAS...
- > 250 interviews and reportages on different media: *Television* (national: RTBF, RTL, TVcom, VRT, BBC, Euronews) and international (France2, RAIUno, EuroNews, TV5, TVSuisse, ARTE), on the *Radio* (nationals and internationals), *News Papers press*.
- Member of the jury of PhD thesis outside Belgium (20 PhD thesis), inside Belgium (>100 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), Welcome Trust (UK), ERC (European Research Council)

Memberships/Affiliation

- Associate Editor of GUT (since 2015) and Am J Endocrinol Metab (2016-2022)
- Member of the advisory board of <u>Nature reviews Gastroenterology & Hepatology</u> and <u>Gut Microbes</u>, past member of the editorial board of Am J Physiol Gastrointest Liver Physiol
- Funding member of the BNS (Belgian Nutrition Society) in 2008,
- Union Professionnelle des Diététiciens de Langue Française (UPDLF)
- Société Francophone du Diabète (SFD),
- 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)
- Full member of the Royal Academy of Medicine of Belgium (2016)

Patents

<u>Cani PD</u>, Everard A, de Vos W, Belzer C, Use of Akkermansia for treating metabolic disorders. PCT/EP2012/073011 WO/2014/075745

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

de Vos W, Belzer C, <u>Cani PD</u>, Use of a polypeptide for effecting immune signalling and/or affecting intestinal barrier function and/or modulating metabolic status PCT/EP2016/060033 WO2016177797

Delzenne NM, <u>Cani PD</u>, Frippiat A, Composition for prevention, inhibition and treatment of obesity and related diseases. PCT/EP2004/010907, W0 2005/036990

Neyrinck AM, Delzenne NM, <u>Cani PD</u>, Arabinoxylans for modulating the barrier function of the intestinal surface PCT/EP2009/060669, W0 2010/020639

<u>Cani PD</u>, Le Roy T, Dysosmobacter, a novel bacterial genus of the gastrointestinal microbiota and uses thereof PCT/EP2019/068539 WO/2020/011856

Beloqui A, Xu Y, Préat V, <u>Cani PD</u>, Lipid nanocapsules charged with incretin mimetics PCT/EP2020/064766 WO/2020/254083

<u>Cani PD</u>, Brochot A, Composition comprising Akkermansia muciniphila and green tea extract BE1028339B1 US20230405076A1 EP4208180A1

<u>Cani PD</u>, Brochot A, Composition comprising Akkermansia muciniphila and camu camu extract BE20205801A

<u>Cani PD</u>, Brochot A, Composition comprising pasteurized Akkermansia muciniphila for the treatment or prevention of gut contractility disorders, in particular duodenal contraction amplitude disorder PCT/EP2022/071707 WO2023020831A1

Everard A, de Wouters d'Oplinter A, Mallaret G, <u>Cani PD</u>, Prevention and/or treatment of reward dysregulation disorders PCT/EP2021/070303 WO2023001934A1

Everard A, <u>Cani PD</u>, de Wouters d'Oplinter A, Huwart S, Akkermansia for preventing and/or treating reward dysregulation disorders PCT/EP2023/054478 WO2023161303A1

<u>Cani PD</u>, Jordan B, Moens de Hase E, Yelek C, Dysosmobacter for the treatment of breast cancer PCT/EP2023/071660 WO2024028479A1

+ several others

Teaching activities

Teaching activities

- From Nutrients to Food [WSBIM1206] (30h)
- Physiopathology of Nutrition [WSBIM2134] (14h)
- Introduction to Human Nutrition [WSBIM1305] (10h)
- Clinical Nutrition [WSBIM2136] (30h)
- Molecular and cellular aspects of Nutrition [WSBIM2181] (30h). Titular (2014-present)
- Innovation and Research in Nutrition [WSBIM2138] (6h)
- Nutrition and Public health [WSBIM2239] (4h)
- Pharmaceutical Integration Seminar [WSBIM2259] and [WSBIM2249]
- Nutrition et environment [WSBIM2234] 22.5h. Co-titular (2006-2017)
- Atelier informatique et de recherche bibliographique appliquée au médicament [WFARM1239] 15h 2 ECTS credits. Titular (2009-2018)
- Régulation hypothalamique de la prise alimentaire [Paul Lambin Institute] (2000-2020)
- Master in Nutrition and Digestive Health (University Paul Sabatier, Toulouse 10h/year (4h magistral and 6h practice) (2015-2021)
- Chairman of jury of the thesis presentations: Institut Paul Lambin (Bachelor in dietetics) (2008-2014)

Academic	apı	pointments	at	UCLouvain
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2024-present:	Secretary of the Advanced Master in Nutrition and Food Transition
2024-present:	Member of the Research Council of UCLouvain
09/2022-present:	Elected Vice president of the Louvain Drug Research Institute
01/2015-12/2020:	Elected president of the council of the Louvain Drug Research Institute
09/2013-09/2016:	Elected Vice-president of the Louvain Drug Research Institute
2013-2016:	President of the ethical committee of the faculty for animal research
2013-Present:	Academic substitute of the UCL commission patent management (CGB)
2010-2013:	Member of the ethical committee of the faculty for animal research
2009-2016:	Member of the "bureau" Louvain Drug Research Institute
2009-present:	Member of the commission, M.Sc. Biomedical Sciences (Nutrition)
2009-2022:	Representing member of the LDRI for the "animal facility commission" at the
	Health Science Sector
2011-2012:	Representing member of the Health Science Sector at the "groupe de travail
	avenir des salles didactiques à l'UCL".
2012-2022	Representing member of the LDRI and FASB faculty at the CSI (Informatic