Prof. Dr. Patrice D. Cani

Full Professor of Physiology, Metabolism & Nutrition, *Registered Dietitian (RD), Nutritionist*
Honorary Research Director at the FRS-FNRS, UCLouvain, Brussels, Belgium
Visiting Professor Imperial College London

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DOB: 26/12/1977
Italian, French, Belgian, Married, Two Children,
Languages: French (native speaker), Italian (Fluent), English (Fluent), Dutch (intermediate)

UCLouvain, Université catholique de Louvain
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Faculty of Medicine
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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

- **>380 Peer-Reviewed publications** *(http://www.ncbi.nlm.nih.gov/pubmed/?term=cani+pd)*
- **Scopus H-index: 125,** sum of times cited : >84 500 *(last update October 2026)*
- **Google Scholar H-index: 145,** sum of times cited : >121 000 *(last update October 2026)*
- **>10 Book chapters, 1 book (Bugs as Drugs, 2018)**
- **> 20 patents** (*https://patents.google.com/?inventor=Patrice+Cani*)

Academic appointments

Full Professor	(since 09/2023) **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 Associate	(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

Since 2016	**Clarivate Highly Cited Researcher (each year)**

2026 **Francqui-Collen Prize 2026**
2024 & 2025 **Stanford University Highly Cited Researcher**
2022 **Medal of the Royal Academy of Medicine of Belgium**
2022 **AstraZeneca Foundation Prize**
2021 Full member of the **Royal Academy of Medicine of Belgium**
2019 **Award for Excellence in Biomedical Research and Creativity** (Academies of Medicine of Belgium and France, and the Council of the JA DeSève Research Chair)
2018 **Prize of the National TV RTBF for "The ability of popularization Science work"**
2017 **Belgian Endocrine Society Award**
2017 **Francqui Chair** 2017 (ULiège)
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**
2013 Laureate of an **ERC Starting Grant** 2013, ENIGMO

Five most important publications over the last 10 years

1° Lee CH, Bui TPN, Petitfils C, Jian C, Wong GC, Puel A, Le Roy T, Bellais S, Ben Abdallah B, Nehlich M, Leicht T, Jia M, Hoyles L, Federici M, Fernández-Real JM, Burcelin R, Dumas ME, Delzenne NM, Clavel T, Boeren S, Troise AD, Scaloni A, Muccioli GG, De Vos WM, Van Hul M, **Cani PD.**
Novel myo-inositol to butyrate fermentation pathway in the prevalent human gut species Dysosmobacter welbionis, a bacterium associated with improved metabolic and liver health.
Gut. 2026 Jan 16:gutjnl-2025-336617. doi: 10.1136/gutjnl-2025-336617. Impact Factor: 26

2° Chilloux J, Brial F, Everard A, Smyth D, Andrikopoulos P, Zhang L, Plovier H, Myridakis A, Hoyles L, Moreno-Navarrete JM, Luque JL, Casagrande V, Menghini R, Ahmetaj-Shala B, Blancher C, Martinez-Gili L, Gencer S, Fearnside JF, Barton RH, Neves AL, Rothwell AR, Gérard C, Calderari S, Williamson MJ, Fuchs JE, Govada L, Boulangé CL, Patel S, Scott J, Thursz M, Chayen N, Glen RC, Gooderham NJ, Nicholson JK, Federici M, Fernández-Real JM, Gauguier D, Liu PP, **Cani PD***, Dumas ME*. co-last authors
Inhibition of IRAK4 by microbial trimethylamine blunts metabolic inflammation and ameliorates glycemic control.
Nature Metabolism. 2025 Dec;7(12):2531-2547. Impact Factor: 19

3° 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**.
Dysosmobacter welbionis 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

4° 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, **Cani PD.**
Supplementation with Akkermansia muciniphila in overweight and obese human volunteers: a proof-of-concept exploratory study.
Nature Medicine 2019, 25: 1096-1103 Impact Factor: 58

5° 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: 58

International visibility

Invited Speaker : > 400 invited conferences since 2008

Selected list of international meetings over the last 10 years: SFD Paris, 2025, 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*).

Organizer and co-organizer of > 15 national and international congresses since 2009.

> 300 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***. Webiste : **www.ingutwetrust.info**

Memberships/Affiliation

- **Full member of the Royal Academy of Medicine of Belgium** (2016)
- **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
- Associate Editor of eGastroenterology (since 01/01/2026) GUT (**1/01/2015-31/12/2025**), Am J Endocrinol Metab (2016-2022), advisory board : Nature reviews Gastroenterology & Hepatology and Gut Microbes,

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)
- Innovation and Research in Nutrition [WSBIM2138] (6h)
- Nutrition and Public health [WSBIM2239] (6h)
- Pharmaceutical Integration Seminar [WSBIM2259] and [WSBIM2249]
- Nutrition & 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 appointments at UCLouvain

2024-present:	Secretary of the Advanced Master in Nutrition and Food Transition
2024-present:	Elected 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:	Member of the Louvain Transfer 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 sectorial committee)

Leadership, Networking & Transdisciplinary collaboration

Prof. Cani has consistently built and steered complex, multi-partner research ecosystems spanning academia, industry, regulatory agencies, and policy bodies across Europe and North America, demonstrating exceptional capacity for transdisciplinary leadership:

- Coordinator of a major EOS Excellence of Science consortium (FWO/FRS-FNRS) uniting (10 Belgian/Canadian teams). Managed cross-linguistic governance structures and scientific coordination across institutions.

- **Work Package Coordinator** in the **H2020 MSCA ITN** European Training Network (Grant 814102) on glycan-microbiota-mucosal interface; WP bringing together 15 European academic and industrial partners focused on glycobiology and gut health.

- **Partner & Co-PI** of **ANR International Consortium** (SINFONI), large-scale Franco-Belgian-Canadian consortium integrating French teams, competitiveness clusters, Canadian universities, bridging academic research with industrial translation.

- **Academic Coordinator** of the **NutriMicrobiota** (**WAGRALIM / Walloon Region**), a public-private consortium involving UCLouvain, Université Laval (Québec, Canada), and 2 Walloon companies.

- **Principal investigator and coordinator of an ERC Starting Grant ENIGMO (2013) & PoC ERC Grant Microbes4U (2016)**: leading international collaborations and translational research.

- **WELBIO Investigator** (multiple cycles since 2013), WELRI, Walloon Region repeatedly funded investigator within this Walloon excellence network, engaging with regional ecosystems, life-science clusters (BioWin/Wagralim), and public health stakeholders.

- **Member of the multidisciplinary consortium HYGIEIA**, involved in a cross-disciplinary systems biology project at UCLouvain integrating infectiology, genomics, metabolism and epidemiology.

- **Former co-founder & scientific lead of The Akkermansia Company** (formerly A-Mansia), , driving international clinical studies, regulatory science dialogues with EFSA (European Food Safety Authority) and the FDA (USA), and the successful launch of the first pasteurized Akkermansia product worldwide.

Publication List of Patrice D. Cani

2026

Dysosmobacter: from a serendipitous discovery to a next-generation beneficial gut commensal linked to health.
Cani PD, Petitfils C, Van Hul M.eGastroenterology. 2026 Sep 22;4(3):e100574. doi: 10.1136/egastro-2026-100574. eCollection 2026.PMID: 42781545

Effect of pasteurized Akkermansia muciniphila MucT on insulin sensitivity, body composition, and GLP-1 production in subjects with metabolic syndrome: impact of low baseline gut Akkermansia levels.
Suenaert P, Segers A, Rymenans L, Devroye H, Moll JM, **Cani PD**, de Vos WM.Gut Microbes. 2026 Dec 31;18(1):2690689. doi: 10.1080/19490976.2026.2690689. Epub 2026 Jun 24.

Novel myo-inositol to butyrate fermentation pathway in the prevalent human gut species Dysosmobacter welbionis, a bacterium associated with improved metabolic and liver health.
Lee CH, Bui TPN, Petitfils C, Jian C, Wong GC, Puel A, Le Roy T, Bellais S, Ben Abdallah B, Nehlich M, Leicht T, Jia M, Hoyles L, Federici M, Fernández-Real JM, Burcelin R, Dumas ME, Delzenne NM, Clavel T, Boeren S, Troise AD, Scaloni A, Muccioli GG, De Vos WM, Van Hul M, **Cani PD**.
Gut. 2026 Jan 16:gutjnl-2025-336617. doi: 10.1136/gutjnl-2025-336617.

Link between ultra-processed foods and drinks intake, gut microbiota and inflammation: an exploratory analysis in adult volunteers.
Lengelé L, Autuori M, Bosteels E, Neyrinck AM, Rombaux M, **Cani PD**, Dormal V, Deldicque L, Bindels LB, Delzenne NM.Nutr J. 2026 May 22;25(1):88.

The effects of a powdered meal replacement intake on inflammation, gut microbiota, and metabolism compared to habitual diet in people with excess body weight - results from a randomized controlled trial.
Montenegro J, Oliveira CLP, Nguyen NK, Armet AM, Berg A, Sharma AM, Mereu L, Cominetti C, Ghosh S, **Cani PD**, Richard C, Walter J, Prado CM.
J Nutr. 2026 May 15:101595. doi: 10.1016/j.tjnut.2026.101595. Online ahead of print.

Breath volatilome analysis reveals new gut microbiome-related metabolites that discriminate high versus low dietary fibre intake.
Autuori M, Neyrinck AM, Lengelé L, Olivera EV, Rombaux M, Rodriguez J, **Cani PD**, Walter J, Bindels LB, Delzenne NM.
Clin Nutr. 2026 Apr 14;61:106662. doi: 10.1016/j.clnu.2026.106662. Online ahead of print

The lipid transfer protein STARD7 controls intestinal tumor development in a context-dependent manner.
Shostak K, Chen Y, Maurizy C, Rademaker G, Xu X, Blomme A, Close P, Renson O, Van Hul M, **Cani PD**, Klein S, Florin A, Büttner R, Cataldo D, Delvenne P, Nemazanyy I, Wathieu C, Hego A, Ormenese S, Peulen O, Thiry M, Krishnankutty R, Marques J Jr, von Kriegsheim A, Chariot A.
EMBO Mol Med. 2026 Mar 30. doi: 10.1038/s44321-026-00409-5.

Association of nasopharyngeal *Dolosigranulum pigrum* and *Corynebacterium*species with post-acute sequelae of SARS-CoV-2 in a longitudinal cohort.
Ward B, Bindels LB, Balligand J-L, Bearzatto B, Bommer G, **Cani PD**, De Greef J, Dewulf JP, Gatto L, Haufroid V, Jodogne S, Kabamba B, Pyr Dit Ruys S, Vertommen D, Yombi JC, Belkhir L, Elens L.
Microbiol Spectr. 2026 Mar 17:e0231325. doi: 10.1128/spectrum.02313-25. Online ahead of print.

Akkermansia muciniphila modulates intestinal mucus composition to counteract high-fat diet-induced obesity in mice.
Paone P, Petitfils C, Puel A, Latousakis D, de Vos WM, Delzenne NM, Juge N, Van Hul M, **Cani PD**.
Gut Microbes. 2026 Dec 31;18(1):2612580. doi: 10.1080/19490976.2025.2612580. Epub 2026 Jan 9.

From microbiome to metabolism: Bridging a two-decade translational gap.
Van Hul M, **Cani PD**.
Cell Metab. 2026 Jan 6;38(1):14-32. doi: 10.1016/j.cmet.2025.10.011.

2025

Inhibition of IRAK4 by microbial trimethylamine blunts metabolic inflammation and ameliorates glycemic control.
Chilloux J, Brial F, Everard A, Smyth D, Andrikopoulos P, Zhang L, Plovier H, Myridakis A, Hoyles L, Moreno-Navarrete JM, Luque JL, Casagrande V, Menghini R, Ahmetaj-Shala B, Blancher C, Martinez-Gili L, Gencer S, Fearnside JF, Barton RH, Neves AL, Rothwell AR, Gérard C, Calderari S, Williamson MJ, Fuchs JE, Govada L, Boulangé CL, Patel S, Scott J, Thursz M, Chayen N, Glen RC, Gooderham NJ, Nicholson JK, Federici M, Fernández-Real JM, Gauguier D, Liu PP, **Cani PD***, Dumas ME*. (co-last)
Nat Metab. 2025 Dec;7(12):2531-2547. doi: 10.1038/s42255-025-01413-8. Epub 2025 Dec 8

The gut microbiome and cancer: from tumorigenesis to therapy.
Nobels A, van Marcke C, Jordan BF, Van Hul M, **Cani PD.**
Nat Metab. 2025 May;7(5):895-917. doi: 10.1038/s42255-025-01287-w. Epub 2025 May 6.

Associations between weight gain, integrase inhibitors antiretroviral agents, and gut microbiome in people living with HIV: a cross-sectional study.
De Greef J, Nguyen KN, Van Hul M, Puel A, Yombi JC, Vandercam B, Vincent A, Elens L, Belkhir L, Haufroid V, **Cani PD.**Sci Rep. 2025 Jul 2;15(1):22603. doi: 10.1038/s41598-025-06500-0.

Rapid modulation of gut microbiota composition by hypothalamic circuits in mice.
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, **Cani PD***, Nogueiras R*, Claret M*.
Nat Metab. 2025 Jun;7(6):1123-1135. doi: 10.1038/s42255-025-01280-3. Epub 2025 Apr 22. **(Co-Senior and Co-corresponding author)**

The gut microbiome and cancer: from tumorigenesis to therapy.
Nobels A, van Marcke C, Jordan BF, Van Hul M, **Cani PD.**
Nat Metab. 2025 May;7(5):895-917. doi: 10.1038/s42255-025-01287-w. Epub 2025 May 6.

Fecal Dysosmobacter spp. concentration is linked to plasma lipidome in insulin-resistant individuals with overweight, obesity and metabolic syndrome.
Petitfils C, Depommier C, Delzenne NM, Everard A, Van Hul M, **Cani PD.**Lipids Health Dis. 2025 Jun 6;24(1):203. doi: 10.1186/s12944-025-02629-z.

Gut microbiota composition differences are associated with geographic location and age in malaria-endemic regions of Rwanda.
Mutoni JD, Van Hul M, Uwimana A, Petitfils C, Wong GC, Puel A, Everard A, Alexiou H, Mutesa L, Coutelier JP, Rujeni N, **Cani PD.**PLoS One. 2025 Jun 3;20(6):e0320698. doi: 10.1371/journal.pone.0320698. eCollection 2025.

Exploring the prevalence and association between nutritional status and asymptomatic malaria in Rwanda among under-5 children: a cross-sectional analysis.
Uwimana A, Robert A, Ahmed A, Alexiou H, Rujeni N, **Cani PD**, Coutelier JP, Mutesa L, Everard A.
Malar J. 2025 May 13;24(1):152. doi: 10.1186/s12936-025-05370-1.

Maternal high-fat diet during lactation reduces sialylated milk oligosaccharides and shapes early-life microbiota in rat offspring.
Marousez L, Verce M, Dubernat L, Rakza T, **Cani PD**, Gottrand F, Ley D, Everard A, Eberlé D, Lesage J.Food Funct. 2025 Jun 16;16(12):5123-5132. doi: 10.1039/d5fo00559k.

Fecal transplantation from humans with obesity to mice drives a selective microbial signature without impacting behavioral and metabolic health.
Neyrinck AM, Ahmed H, Leyrolle Q, Leclercq S, Amadieu C, Meuronen T, Layé S, **Cani PD**, Kärkkäinen O, Bindels LB, Hanhineva K, Delzenne NM.
Sci Rep. 2025 May 2;15(1):15455. doi: 10.1038/s41598-025-99047-z.

Interest of inulin in obesity: comparison of the prebiotic effect of edible-food sources versus purified inulin from chicory root.
Neyrinck AM, Rodriguez J, Sánchez CR, Autuori M, **Cani PD**, Bindels LB, Bindelle J, Delzenne NM.
Eur J Nutr. 2025 Apr 5;64(4):148. doi: 10.1007/s00394-025-03640-x.

Intestinal Microbiota Contributes to the Development of Cardiovascular Inflammation and Vasculitis in Mice.
Jena PK, Wakita D, Gomez AC, Carvalho TT, Atici AE, Aubuchon E, Narayanan M, Lee Y, Fishbein MC, Takasato Y, Kurashima Y, Kiyono H, **Cani PD**, de Vos WM, Underhill DM, Devkota S, Chen S, Shimada K, Crother TR, Arditi M, Noval Rivas M.
Circ Res. 2025 Apr 11;136(8):e53-e72. doi: 10.1161/CIRCRESAHA.124.325079. Epub 2025 Mar 3.

Obesity phenotype and gut microbiota alterations are not associated with anxiety-like behaviour in high-fat diet-fed mice.
Wong GC, Bearzatto B, Gala JL, Delzenne NM, Van Hul M, **Cani PD.**
Food Funct. 2025 Jan 2;16(1):268-281. doi: 10.1039/d4fo04461d

Multifunctional dietary approach reduces intestinal inflammation in relation with changes in gut microbiota composition in subjects at cardiometabolic risk: the SINFONI project.
Hornero-Ramirez H, Morisette A, Marcotte B, Penhoat A, Lecomte B, Panthu B, Lessard Lord J, Thirion F, Van-Den-Berghe L, Blond E, Simon C, Caussy C, Feugier N, Doré J, Sanoner P, Meynier A, Desjardins Y, Pilon G, Marette A, Cani PD, Laville M, Vinoy S, Michalski MC, Nazare JA.
Gut Microbes. 2025 Dec;17(1):2438823. doi: 10.1080/19490976.2024.2438823. Epub 2024 Dec 22.

Maternal probiotic exposure enhances CD8 T cell protective neonatal immunity and modulates offspring metabolome to control influenza virus infection.
Valentin C, Brito Rodrigues P, Verce M, Delbauve S, La Palombara L, Demaret F, Allard J, Salmon I, Cani PD, Köhler A, Everard A, Flamand V.
Gut Microbes. 2025 Dec;17(1):2442526. doi: 10.1080/19490976.2024.2442526. Epub 2024 Dec 22.

2024

Smart control lipid-based nanocarriers for fine-tuning gut hormone secretion.
Xu Y, Michalowski CB, Koehler J, Darwish T, Guccio N, Alcaino C, Domingues I, Zhang W, Marotti V, Van Hul M, Paone P, Koutsoviti M, Boyd BJ, Drucker DJ, Cani PD, Reimann F, Gribble FM, Beloqui A.
Sci Adv. 2024 Dec 13;10(50):eadq9909. doi: 10.1126/sciadv.adq9909. Epub 2024 Dec 13.

International consensus statement on microbiome testing in clinical practice.
Porcari S, Mullish BH, Asnicar F, Ng SC, Zhao L, Hansen R, O'Toole PW, Raes J, Hold G, Putignani L, Hvas CL, Zeller G, Koren O, Tun H, Valles-Colomer M, Collado MC, Fischer M, Allegretti J, Iqbal T, Chassaing B, Keller J, Baunwall SM, Abreu M, Barbara G, Zhang F, Ponziani FR, Costello SP, Paramsothy S, Kao D, Kelly C, Kupcinskas J, Youngster I, Franceschi F, Khanna S, Vehreschild M, Link A, De Maio F, Pasolli E, Miguez AB, Brigidi P, Posteraro B, Scaldaferri F, Stojanovic MR, Megraud F, Malfertheiner P, Masucci L, Arumugam M, Kaakoush N, Segal E, Bajaj J, Leong R, Cryan J, Weersma RK, Knight R, Guarner F, Shanahan F, Cani PD, Elinav E, Sanguinetti M, de Vos WM, El-Omar E, Dorè J, Marchesi J, Tilg H, Sokol H, Segata N, Cammarota G, Gasbarrini A, Ianiro G.
Lancet Gastroenterol Hepatol. 2024 Dec 5:S2468-1253(24)00311-X. doi: 10.1016/S2468-1253(24)00311-X. Online ahead of print.

TLR4-dependent neuroinflammation mediates LPS-driven food-reward alterations during high-fat exposure.
Huwart SJP, Fayt C, Gangarossa G, Luquet S, Cani PD, Everard A.
J Neuroinflammation. 2024 Nov 23;21(1):305. doi: 10.1186/s12974-024-03297-z.

Protocol for the preclinical evaluation of gut barrier function and immune interaction in an HT-29/PBMC co-culture model.
Astre G, Créchet L, Pomié N, Pereira O, Cani PD, Knauf C, Abot A.STAR Protoc. 2024 Nov 1;5(4):103416. doi: 10.1016/j.xpro.2024.103416. Online ahead of print.

The lipooligosaccharide of the gut symbiont Akkermansia muciniphila exhibits a remarkable structure and TLR signaling capacity.
Garcia-Vello P, Tytgat HLP, Elzinga J, Van Hul M, Plovier H, Tiemblo-Martin M, Cani PD, Nicolardi S, Fragai M, De Castro C, Di Lorenzo F, Silipo A, Molinaro A, de Vos WM.
Nat Commun. 2024 Sep 27;15(1):8411. doi: 10.1038/s41467-024-52683-x.

What defines a healthy gut microbiome?
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