

Curriculum Vitae

Josef Penninger Professor, Dr. med.
d.o.b. September 05th, 1964, in Gurten, Austria

University Education

2024 Doctorate, PhD, Medical Science, Tokyo Medical and Dental University, Japan
2008 Leadership course, Harvard Kennedy School of Government, USA
1994 Post-doctorate, Immunology, Ontario Cancer Institute, Canada
1990 Doctorate, MD, Medicine, University of Innsbruck, Austria
1986-1990 Doctoral Thesis in Immunology as part of Medical School: „*Phenotypical and functional analysis of intra-thymic nurse (TNC)-lymphocytes.*“ Institute for General and Experimental Pathology (Prof. Dr. G. Wick), University of Innsbruck, Medical School
1982-1990 University of Innsbruck, Medical School, Austria; graduated as Dr. med. Univ.

Scientific Career

Since 2023 Scientific Director, Helmholtz Centre for Infection Research, *Braunschweig, Germany*
Since 2023 Professor in Precision Medicine, *Medical University of Vienna, Austria*
Since 2018 Professor, Department of Medical Genetics, *University of British Columbia, Canada*
Since 2018 Canada 150 Research Chair in Functional Genetics,
University of British Columbia, Canada
Since 2004 Professor in Immunology (Status-only academic appointment),
University of Toronto, Canada

Since 2024 Honorary Professor, Technische Universität Braunschweig
2018-2023 Director, Life Sciences Institute, University of British Columbia, Canada
2004-2018 Honorary Professor in Genetics, University of Vienna, Austria
2002-2018 Founding Director, Institute of Molecular Biotechnology of the Austrian Academy of Sciences (IMBA), Vienna, Austria
2002-2004 Full Professor, Departments of Immunology and Medical Biophysics, University of Toronto, Canada
1994-2003 Associate Scientist, The Ontario Cancer Institute, Dept. of Molecular and Cellular Biology, Princess Margaret Hospital, Toronto, Canada
1999-2002 Associate Professor, Departments of Immunology and Medical Biophysics, University of Toronto, Canada
1994-2002 Principal Investigator, Amgen Institute, 620 University Avenue, Toronto, Canada
1994-1999 Assistant Professor, Departments of Immunology and Medical Biophysics University of Toronto, Canada
1990-1994 Postdoctoral fellow, The Ontario Cancer Institute, Princess Margaret Hospital, Toronto, Canada

Awards and Honors (Selected)

2021 Allen Distinguished Investigator
2020 Austrian of the Year, International Success category
2020 Chosen #30 by OOOM 100: The Most Inspiring People in the World
2019 Honorary Professor, Qingdao University, China
2018 Canada 150 Research Chair in Functional Genetics
2018 Austria Order of Merit for Arts and Sciences
2017 CEE Innovation Award (AtoS Austria)
2015 Among the 400 most influential Thought Leaders in the world
(#11 in German speaking countries <https://www.nachrichten.at/>)
2014 Wittgenstein Prize (highest Austrian Science Award)
2012 Innovator Award of the US Department of Defense (USD 7,400,000)

2009	Medal of The Australian Society for Medical Research (ASMR)
2009	ESCI Award by the European Society for Clinical Investigation
2008	Karl Landsteiner Prize of the Austrian Society of Immunology and Allergology
2008	Among 1000 most important Austrian immigrant/emigrants in politics, arts, sports, philosophy, business or music from 1900-2008
2008	Carus Prize of the City of Schweinfurt
2007	Ernst Jung Prize for Medicine
2006	Descartes Prize (the highest EU research prize)

Citation Record

Total life time publications: 1019; Total times cited: 187,089; h-index 186

(data from Google Scholar, updated on 13 January 2026)

Top-10 selected Publications

1. Kong YY, Yoshida H, Sarosi I, Tan HL, Timms E, Capparelli C, Morony S, Oliveira-dos-Santos AJ, Van G, Itie A, Khoo W, Wakeham A, Dunstan CR, Lacey DL, Mak TW, Boyle WJ, **Penninger JM**. OPGL is a key regulator of osteoclastogenesis, lymphocyte development and lymph-node organogenesis. *Nature*. 1999 Jan 28;397(6717):315-23. (2428 citations, Publons) <https://www.nature.com/articles/16852>
2. Kong YY, Feige U, Sarosi I, Bolon B, Tafuri A, Morony S, Capparelli C, Li J, Elliott R, McCabe S, Wong T, Campagnuolo G, Moran E, Bogoch ER, Van G, Nguyen LT, Ohashi PS, Lacey DL, Fish E, Boyle WJ, **Penninger JM**. Activated T cells regulate bone loss and joint destruction in adjuvant arthritis through osteoprotegerin ligand. *Nature*. 1999 Nov 18;402(6759):304-9. (1415 citations, Publons) <https://www.nature.com/articles/3500552>
3. Fata JE, Kong YY, Li J, Sasaki T, Irie-Sasaki J, Moorehead RA, Elliott R, Scully S, Voura EB, Lacey DL, Boyle WJ, Khokha R, **Penninger JM**. The osteoclast differentiation factor osteoprotegerin-ligand is essential for mammary gland development. *Cell*. 2000 Sep 29;103(1):41-50. (532 citations, Publons) [https://www.cell.com/fulltext/S0092-8674\(00\)00103-3](https://www.cell.com/fulltext/S0092-8674(00)00103-3)
4. Crackower MA, Sarao R, Oudit GY, Yagil C, Kozieradzki I, Scanga SE, Oliveira-dos-Santos AJ, da Costa J, Zhang L, Pei Y, Scholey J, Ferrario CM, Manoukian AS, Chappell MC, Backx PH, Yagil Y, **Penninger JM**. Angiotensin-converting enzyme 2 is an essential regulator of heart function. *Nature*. 2002 Jun 20;417(6891):822-8. (1087 citations, Publons) <https://www.nature.com/articles/nature00786>
5. Kuba K, Imai Y, Rao S, Gao H, Guo F, Guan B, Huan Y, Yang P, Zhang Y, Deng W, Bao L, Zhang B, Liu G, Wang Z, Chappell M, Liu Y, Zheng D, Leibbrandt A, Wada T, Slutsky AS, Liu D, Qin C, Jiang C, **Penninger JM**. A crucial role of angiotensin converting enzyme 2 (ACE2) in SARS coronavirus-induced lung injury. *Nat Med*. 2005 Aug;11(8):875-9. (1530 citations, Publons) <https://www.nature.com/articles/nm1267>
6. Imai Y, Kuba K, Rao S, Huan Y, Guo F, Guan B, Yang P, Sarao R, Wada T, Leong-Poi H, Crackower MA, Fukamizu A, Hui CC, Hein L, Uhlig S, Slutsky AS, Jiang C, **Penninger JM**. Angiotensin-converting enzyme 2 protects from severe acute lung failure. *Nature*. 2005 Jul 7;436(7047):112-6. (1257 citations, Publons) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7094998/>
7. Wimmer RA, Leopoldi A, Aichinger M, Wick N, Hantusch B, Novatchkova M, Taubenschmid J, Hämmerle M, Esk C, Bagley JA, Lindenhofer D, Chen G, Boehm M, Agu CA, Yang F, Fu B, Zuber J, Knoblich JA, Kerjaschki D, **Penninger JM**. Human blood vessel organoids as a model of diabetic

vasculopathy. *Nature*. 2019 Jan;565(7740):505-510. (149 citations, *Publons*)
<https://www.nature.com/articles/s41586-018-0858-8>

8. Cronin SJF, Seehus C, Weidinger A, Talbot S, Reissig S, Seifert M, Pierson Y, McNeill E, Longhi MS, Turnes BL, Kreslavsky T, Kogler M, Hoffmann D, Ticevic M, da Luz Scheffer D, Tortola L, Cikes D, Jais A, Rangachari M, Rao S, Paolino M, Novatchkova M, Aichinger M, Barrett L, Latremoliere A, Wirnsberger G, Lametschwandtner G, Busslinger M, Zicha S, Latini A, Robson SC, Waisman A, Andrews N, Costigan M, Channon KM, Weiss G, Kozlov AV, Tebbe M, Johnsson K, Woolf CJ, **Penninger JM**. The metabolite BH4 controls T cell proliferation in autoimmunity and cancer. *Nature*. 2018 Nov;563(7732):564-568. (63 citations, *Publons*)
<https://www.nature.com/articles/s41586-018-0701-2>
9. Stadlmann J, Taubenschmid J, Wenzel D, Gattinger A, Dürnberger G, Dusberger F, Elling U, Mach L, Mechtler K, **Penninger JM**. Comparative glycoproteomics of stem cells identifies new players in ricin toxicity. *Nature*. 2017 Sep 28;549(7673):538-542. (51 citations, *Publons*)
<https://www.nature.com/articles/s41586-018-0701-2>
10. Elling U, Wimmer RA, Leibbrandt A, Burkard T, Michlits G, Leopoldi A, Micheler T, Abdeen D, Zhuk S, Aspalter IM, Handl C, Liebergesell J, Hubmann M, Husa AM, Kinzer M, Schuller N, Wetzel E, van de Loo N, Martinez JAZ, Estoppey D, Riedl R, Yang F, Fu B, Dechat T, Ivics Z, Agu CA, Bell O, Blaas D, Gerhardt H, Hoepfner D, Stark A, **Penninger JM**. A reversible haploid mouse embryonic stem cell biobank resource for functional genomics. *Nature*. 2017 Oct 5;550(7674):114-118. (31 citations, *Publons*)
<https://www.nature.com/articles/nature24027>