

Masayuki Amagai M.D., Ph.D.
Biographical Profile



Current Appointments

Director
RIKEN Center for Integrative Medical Sciences

1992-1995	Subchief, Division of Dermatology, Tokyo Electric Power Hospital
1996	Instructor, Department of Dermatology, Ehime University School of Medicine
1996-2005	Assistant Professor, Department of Dermatology, Keio University School of Medicine
2005-present	Professor and Chair, Department of Dermatology, Keio University School of Medicine
2007-2013	Vice Director, Keio University Hospital
2013-2017	Vice Dean, Keio University School of Medicine
2013-present	Team Director, Laboratory for Skin Homeostasis, RIKEN Center for Integrative Medical Sciences
2017-2021	Dean, Keio University School of Medicine
2021-2025	Vice President for Research, Keio University
2025-present	Director, RIKEN Center for Integrative Medical Sciences

Awards and Honors

- 1991 The Minami Prize from Japanese Dermatological Association
- 2000 The JSID Award from Japanese Society for Investigative Dermatology
- 2002 Alfred Marchionini Award at World Congress of Dermatology, Paris
- 2005 CE.R.I.E.S Research Award
- 2006 JSPS Prize from Japan Society for the Promotion of Science
- 2006 JSI Award from Japanese Society for Immunology
- 2010 Honorary membership of the Austrian Society of Dermatology and Venerology
- 2012 Erwin von Bälz Award (1st prize)
- 2013 The 2013 Research Achievement Award from American Skin Association
- 2014 Ogawa-Seiji Memorial Award from Lydia O'Leary Memorial Pias Dermatological Foundation
- 2015 Honorary membership of the European Society for Dermatological Research
- 2015 Honorary membership of the German Dermatology Society
- 2016 International honorary member of American Dermatological Association
- 2016 International Member of the National Academy of Medicine (USA)
- 2018 Council Member of Science Council of Japan
- 2019 Honorary membership of the Society for Investigative Dermatology
- 2023 George W. Hambrick Award from American Skin Association
- 2024 American Academy of Dermatology's Presidential Citation
- 2024 Certificate of Appreciation from International League of Dermatological Societies
- 2024 Gijuku Award from Keio University
- 2025 Nakatomi Health Science Promotion Award
- 2025 Honorary membership of the Japanese Society for Investigative Dermatology

Named Lectures

- 2002 Morris H. Samitz Lecture at University of Pennsylvania, Department of Dermatology
- 2003 William Montagna Lecture at the Society for Investigative Dermatology
- 2015 Arthur Rook Oration at British Association of Dermatologists
- 2017 Rudi Cormane Lecture at the European Society for Dermatological Research
- 2018 Sven Hellerström Lecture at Karolinska Institutet, Sweden
- 2018 Kung Sun Oh Memorial Lecture at Yonsei University, Korea
- 2020 Yau-Chin Lu Lecture at Taiwanese Dermatological Association
- 2021 Aaron Lerner Discovery Lecture at Yale University
- 2022 KP Chen Memorial Lecture in Public Health at National Taiwan University

Medical Societies:

- International Society for Investigative Dermatology (founding Board of Directors, 2014-; Secretary General, 2019-2024; President, 2024-2029)
- Japanese Dermatological Association (Board of Director 2011-2016, Vice President 2016-2018, President 2018-2024)
- Japanese Society for Investigative Dermatology (Board of Director 1999-2010, Secretary-Treasurer 2010-2011, President 2011-2014)
- Japanese Society for Immunology (Councilor 2008-)
- Japanese Society of Inflammation and Regeneration (Board of Directors 2013-)
- Japanese Society for Cell Biology

Society for Investigative Dermatology
European Society for Dermatological Research
American Academy of Dermatology
International Eczema Council (Councilor 2015-)

Editors and Editorial boards

Fitzpatrick's Dermatology 9th and 10th edition (Editor, 2014-)
The Journal of Clinical Investigation (Consulting Editor 2007-)
The Journal of Investigative Dermatology (Section Editor 2002-2017, Editorial Consultants 2018-2020)
British Journal of Dermatology (Editorial Advisory Board 2001-)
Faculty of 1000 Medicine (Section Head 2006-)
The Journal of American Academy of Dermatology (Editorial Board 1998-2008)
JAAD International (Editorial Board 2020-)
Journal of Dermatological Science (Editorial Board 2001-2018)
Experimental Dermatology (Editorial Board 2003-2014)
Der Hautarzt (Editorial Board, 2007-)
Journal of Cutaneous Immunology and Allergy (Editorial Board 2018-)

Selected publications from >500 Publications

ORCID 0000-0003-3314-7052; Researcher ID K-5325-2013
total citation 29,007; h-index 85 on July 1, 2025, by [Elsevier Pure](#)

1. Amagai M, Klaus-Kovtun V, Stanley JR. Autoantibodies against a novel epithelial cadherin in pemphigus vulgaris, a disease of cell adhesion. **Cell** 67 (5): 869-877, 1991.
2. Amagai M, Karpati S, Prussick R, Klaus-Kovtun V, Stanley JR. Autoantibodies against the amino-terminal cadherin-like binding domain of pemphigus vulgaris antigen are pathogenic. **J Clin Invest** 90 (3): 919-926, 1992.
3. Amagai M, Hashimoto T, Shimizu N, Nishikawa T. Absorption of pathogenic autoantibodies by the extracellular domain of pemphigus vulgaris antigen (Dsg3) produced by baculovirus. **J Clin Invest** 94 (1): 59-67, 1994.
4. Amagai M, Nishikawa T, Nousari HC, Anhalt GJ, Hashimoto T. Antibodies against desmoglein 3 (pemphigus vulgaris antigen) are present in sera from patients with paraneoplastic pemphigus and cause acantholysis in vivo in neonatal mice. **J Clin Invest** 102 (4): 775-782, 1998.
5. Amagai M, Matsuyoshi N, Wang ZH, Andl C, Stanley JR. Toxin in bullous impetigo and staphylococcal scalded-skin syndrome targets desmoglein 1. **Nat Med** 6 (11): 1275-1277, 2000.
6. Amagai M, Tsunoda K, Suzuki H, Nishifuji K, Koyasu S, Nishikawa T. Use of autoantigen-knockout mice in developing an active autoimmune disease model for pemphigus. **J Clin Invest** 105 (5): 625-631, 2000.
7. Stanley JR, Amagai M. Pemphigus, bullous impetigo, and the staphylococcal scalded-skin syndrome. **N Engl J Med** 355 (17): 1800-1810, 2006.
8. Kubo A, Nagao K, Yokouchi M, Sasaki H, Amagai M. External antigen uptake by Langerhans cells with reorganization of epidermal tight junction barriers. **J Exp Med** 206 (13): 2937-2946, 2009.
9. Takahashi H, Kouno M, Nagao K, Wada N, Hata T, Nishimoto S, Iwakura Y, Yoshimura

- A, Yamada T, Kuwana M, Fujii H, Koyasu S, Amagai M. Desmoglein 3-specific CD4+ T cells induce pemphigus vulgaris and interface dermatitis in mice. **J Clin Invest** 121 (9): 3677-3688, 2011.
10. Kawasaki H, Nagao K, Kubo A, Hata T, Shimizu A, Mizuno H, Yamada T, Amagai M. Altered stratum corneum barrier and enhanced percutaneous immune responses in filaggrin-null mice. **J Allergy Clin Immunol** 129 (6): 1538-1546, 2012.
 11. Nagao K, Kobayashi T, Moro K, Ohyama M, Adachi T, Kitashima DY, Ueha S, Horiuchi K, Tanizaki H, Kabashima K, Kubo A, Cho YH, Clausen BE, Matsushima K, Suematsu M, Furtado GC, Lira SA, Farber JM, Udey MC, Amagai M. Stress-induced production of chemokines by hair follicles regulates the trafficking of dendritic cells in skin. **Nat Immunol** 13 (8): 744-752, 2012.
 12. Someya T and Amagai M. Toward a new generation of smart skins. **Nat Biotechnol** 37(4), 382-388, 2019.
 13. Kasperkiewicz M, Ellebrecht CT, Takahashi H, Yamagami J, Zillikens, Payne AS, Amagai M. Pemphigus. **Nat Rev Dis Primers** 3(1):1-18, 2017.
 14. Matsui T, Kadono-Maekubo N, Suzuki Y, Furuichi Y, Shiraga K, Sasaki H, Ishida A, Takahashi S, Okada T, Toyooka K, Sharif J, Abe T, Kiyonari H, Tominaga M, Miyawaki A, and Amagai M. A unique mode of keratinocyte death requires intracellular acidification. **Proc Natl Acad Sci USA** 118 (17) e2020722118; <https://doi.org/10.1073/pnas.2020722118>, 2021.
 15. Takahashi H, Nomura H, Iriki H, Kubo A, Isami K, Mikami Y, Mukai M, Sasaki T, Yamagami J, Kudo J, Ito H, Kamata A, Kurebayashi Y, Yoshida H, Yoshimura A, Sun H, Suematsu M, O'Shea JJ, Kanno Y, and Amagai M. Cholesterol 25-hydroxylase is a metabolic switch to constrain T cell-mediated inflammation in the skin. **Sci Immunol** 6, eabb6444, 2021.
 16. Iriki H, Takahashi H, Wada N, Nomura H, Mukai M, Kamata A, Ito H, Yamagami J, Matsui T, Kurebayashi Y, Mise-Omata S, Nishimasu H, Nureki O, Yoshimura A, Hori S, and Amagai M. Peripheral tolerance by Treg via constraining OX40 signal in autoreactive T cells against desmoglein 3, a target antigen in pemphigus. **Proc Natl Acad Sci USA** 118(49) e2026763118; <https://doi.org/10.1073/pnas.2026763118>, 2021.
 17. Fukuda K, Ito Y, Furuichi Y, Matsui T, Horikawa H, Miyano T, Okada T, van Logtestijn M, Tanaka RJ, Miyawaki A, and Amagai M. Three stepwise pH progressions in stratum corneum for homeostatic maintenance of the skin. **Nat Commun** 15:4062 <https://www.nature.com/articles/s41467-024-48226-z>, 2024.
 18. Fukuda K, Ito Y, and Amagai M. Barrier integrity and immunity: exploring the cutaneous front line in health and disease. **Annual Rev Immunol** 43:219–52, <https://www.annualreviews.org/content/journals/10.1146/annurev-immunol-082323-030832>, 2025
 19. Fukushima-Nomura A, Kawasaki H, Yashiro K, Obata S, Tanese K, Ebihara T, Saeki H, Etoh T, Hasegawa T, Yazaki J, Seita J, Ohara O, Sekita A, Miyai T, Ashizaki K, Koseki H, Sakurada K, Kawakami E, and Amagai M. An unbiased tissue transcriptome analysis identifies potential markers for skin phenotypes and therapeutic responses in atopic dermatitis. **Nat Commun** 16:4981, <https://www.nature.com/articles/s41467-025-59340-x>, 2025
 20. Mukai N, Takahashi H, Kubo Y, Asahina Y, Iriki H, Nomura H, Kamata A, Ito H, Kurebayashi Y, Yamagami J, Mikami N, Sakaguchi S, Amagai M. Conversion of pathogenic T cells into functionally stabilized T_{reg} cells for antigen-specific immunosuppression in pemphigus vulgaris. **Sci Trans Med**, in press.