Gottfried Baier, PhD

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Personal information

Place of Birth: Bludenz, Austria

Date of Birth: Feb 12, 1963

Citizenship: Austria

Acad. Degree: Univ.-Prof. Dr. rer nat Mag. rer.nat

Education

1987 1989	Ph.D. thesis in medical microbiology, University of Innsbruck
1981 1986	Undergraduate studies, University of Innsbruck, Austria and Max-Planck-Institute for Molecular Genetics, Berlin, Germany (specialized in biochemistry).

Relevant Career History

Since 2016	Appointment as director of the Christian Doppler Laboratory for pharmacological cancer immunotherapy, Medical University of Innsbruck, Austria.
Since 2011	Appointment as full Professor (§98 Univ.-Prof.) at the Division for Translational Cell Genetics, Department for Pharmacology and Genetics, Medical University of Innsbruck.
Since 2009	Appointment as Director of the Division for Cell Genetics, Medical University of Innsbruck.
1997-2008	Tenure, Habilitation & Venia Docendi in "Human Genetics" and Associate Professor at the Department of Genetics, University of Innsbruck.
1994-1996	Univ.-Assistant, Institute for Human Genetics, University of Innsbruck, Austria.
1990-1993	Postdoctoral Fellow, La Jolla Institute for Allergy and Immunology, USA.

Key personal awards

2002: Novartis-Award for Biochemistry

1998: Hoechst/Sanofi-Award

1995: German Allergy and Immunology-Award

1995: Austrian Prof. Brandl-Award

Career-related activities

Since 2009:	Director of the Institute for Translational Cell Genetics
Since 2007:	Board member of EC FP7 SYBILLA and ONCOTYROL for Personalized Cancer Therapy
Since 2005:	Faculty member of the FWF-funded Doctoral College “Molecular Cell Biology and Oncology” and supervisor committee member of numerous bachelor & master students
Since 2003:	Board member of SFB021. “Cell Death in Tumours“
Since 2000:	Member of several Austrian and European immunological societies
Since 1994:	Academic teacher and examiner of lectures and seminars in genetics and signal transduction.

Reviewer activities

Journals:	J.Clin.Inv., J.Exp.Med, Nature Commun, Blood, Proc Natl Acad Sci USA, J.ImmunoTherapy of Cancer, et al.
Funding agencies:	Wellcome Trust (U.K.), Israel Science Foundation, Italian Telethon, French, Dutch and Swiss Science Foundations, German Science Foundations BMfWF and DFG.
Mentoring:	As a member of the mentor and/or supervisor thesis committee, he has supervised >50 Master's degree and PhD students as well as >25 postdoctoral fellows, some of whom have gone on to become staff scientists and independent group leaders.

Major international academic cooperation partners

Amnon Altman, La Jolla Institute for Immunolgy, San Diego, USA: T cell signal transduction

Michael Leitges, Memorial University of Newfoundland, St. John`s, Canada: Mouse genetics

Josef Penninger, Life Sciences Institute, Vancouver Campus, Univ. of British Columbia, Canada: Gene editing

Research interests and major achievements

Research of his laboratory is focusing on molecular mechanisms signaling mediating tolerance induction versus clonal expansion of T lymphocyte. His team has initially focused on the physiological involvement of distinct PKC isotypes in specific immune cell functions, employing a set of single- and double PKC isotype gene knockout mice as well as specific and potent low molecular weight inhibitors generated by his BigPharma and SME partners. His achievements include the leading-edge discoveries of the central-staged PKC/Cbl-b and PKC/NR2F6 signaling pathways and their key role in the control of cancer immunity. Genetic blocking experiments have shown promising improvements in anti-tumour T cell responses, thereby validating particularly NR2F6 as an alternative and druggable cancer therapeutic candidate drug target for next-generation immune-oncology regimens.

Publications of Gottfried Baier: s. complete list on:

https://www.i-med.ac.at/cell-genetics/publications.html

h-index: 55, >130 original publications and >25 reviews in peer reviewed journals & invited book chapters,

>100 invited lectures, 5 patents, Cumulative Impact Factor: >1350, Cumulative Citations: > 11000.

Gottfried Baier: 10 most important original publications

1. Klepsch V, Hermann-Kleiter N, Do-Dinh P, Jakic B, Offermann A, Efremova M, Sopper S, Rieder D, Krogsdam A, Gamerith G, Perner S, Tzankov A, Trajanoski Z, Wolf D, **Baier G**. Nuclear receptor NR2F6 inhibition potentiates responses to PD-L1/PD-1 cancer immune checkpoint blockade. **Nat Commun**. 2018 Apr 18;9(1):1538. doi: 10.1038/s41467-018-04004-2. PubMed PMID: 29670099.

2. Hermann-Kleiter N, Klepsch V, Wallner S, Siegmund K, Klepsch S, Tuzlak S, Villunger A, Kaminski S, Pfeifhofer C, Gruber T, Wolf D, **Baier G**. The Nuclear Orphan Receptor NR2F6 Is a Central Checkpoint for Cancer Immune Surveillance. **Cell Reports** 2015 Sep 29;12(12):2072-85. doi:10.1016/j.celrep.2015.08.035. PMID: 26387951.

3. Gruber T, Hinterleitner R, Hermann-Kleiter N, Meisel M, Kleiter I, Wang CM, Viola A, Pfeifhofer-Obermair C, **Baier G**. Cbl-b mediates TGFbeta sensitivity by downregulating inhibitory SMAD7 in primary T cells. **J Mol Cell Biol**. 2013. doi: 10.1093/jmcb/mjt017. PMID: 23709694. [Epub ahead of print].

4. Meisel M, Hermann-Kleiter N, Hinterleitner R, Gruber T, Wachowicz K, Pfeifhofer-Obermair C, Fresser F, Leitges M, Soldani C, Viola A, Kaminski S, **Baier G**. The kinase PKC□lpha selectively upregulates interleukin-17A during Th17 cell immune responses. **Immunity**. 2013;38(1):41-52. doi: 10.1016/j.immuni.2012.09.021. PMID: 23290522.

5. Hinterleitner R, Gruber T, Pfeifhofer-Obermair C, Lutz-Nicoladoni C, Tzankov A, Schuster M, Penninger JM, Loibner H, Lametschwandtner G, Wolf D, **Baier G**. Adoptive transfer of siRNA Cblb-silenced CD8+ T lymphocytes augments tumour vaccine efficacy in a B16 melanoma model. **PLoS One**. 2012;7(9):e44295. doi: 10.1371/journal.pone.0044295. PubMed Central PMCID: PMC3433477.

6. Evenou JP, Wagner J, Zenke G, Brinkmann V, Wagner K, Kovarik J, Welzenbach KA, Weitz-Schmidt G, Guntermann C, Towbin H, Cottens S, Kaminski S, Letschka T, Gruber T, Hermann-Kleiter N, Thuille N, **Baier G**. The potent PKC-selective inhibitor AEB071/Sotrastaurin represents a new class of immunosuppressive agents affecting early T-cell activation. **J Pharmacol Exp Ther**. 2009. 330:792-801.

7. Gruber T, Hermann-Kleiter N, Hinterleitner R, Fresser F, Schneider R, Gastl G, Penninger JM, **Baier G**. PKCtheta modulates the strength of T cell responses by targeting Cbl-b for ubiquitination and degradation. **Science Signalling**. 2009. 2(76):ra30. doi: 10.1126/scisignal.2000046. PMID: 19549985.

8. Hermann-Kleiter N, Gruber T, Lutz-Nicoladoni C, Thuille N, Fresser F, Labi V, Schiefermeier N, Warnecke M, Huber LA, Villunger A, Eichele G, Kaminski S, **Baier G**. NR2F6 suppresses lymphocyte activation and Th17-dependent autoimmunity. **Immunity**. 2008 Aug;29(2):205-16. PMID: 18701084.

9. Pfeifhofer C, Kofler K, Gruber T, Tabrizi NG, Lutz C, Maly K, Leitges M, **Baier G**. PKCtheta affects Ca^{2+} mobilization and NFAT activation in primary mouse T cells. **J Exp Med**. 2003 Jun 2;197(11):1525-35. PMID: 12782715.

10. **Baier G**, Telford D, Giampa L, Coggeshall KM, Baier-Bitterlich G, Isakov N, Altman A. Molecular cloning and characterization of PKCtheta, a novel member of the PKC gene family expressed predominantly in hematopoietic cells. **J Biol Chem**. 1993 Mar 5;268(7):4997-5004. PMID: 8444877.