Schmid, Johannes A., PhD, Associate Prof. - Curriculum Vitae 2024-02-09



Medical University Vienna

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Personal Data

Date of Birth: 1966-07-11

Place of Birth: Mödling, Lower Austria

Nationality Austria

Education

1990 - 1994 PhD-thesis at the Dept. of General and Experimental Pathology, University Vienna (now:

Inst. of Pathophysiology, Med. Univ. Vienna), Topic: "Endocytosis and Transcytosis in

Hepatocytes". Doctorate with distinction.

1984 - 1990 Studies of food technology and biotechnology at the University of Natural Resources and

Life Sciences, Vienna.

1976 - 1984 Secondary school in Mödling, (with emphasis on foreign languages).

Final examination with excellent success.

1972 - 1976 Elementary school in Wiener Neudorf, Lower Austria

Career History

02/2024 Full professorship in the field of Cardiovascular Medicine, Medical University of Vienna

06-08/2023 Panel leader for the evaluation of the faculty for medicine and dentistry of the Palacky Univ.

of Olomouc

04/2022 Selected as one of three candidates for an internationally announced professorship for

physiology/pathophysiology at the Med. Univ. of Graz

Since 10/2020 Head of the Inst. of Vascular Biology and Thrombosis Research, Med. Univ. Vienna

Since 2/2018 Speaker and coordinator for the 2nd funding period of the Special Research Program (SFB-

F54; Cellular mediators linking inflammation and thrombosis)

9/2015 Ranked 2nd for a full-professorship at the Medical Univ. Vienna (for the field "Molecular

Physiology).

Since 2/2014 Speaker of a Special Research Program (SFB-F54) of the Austrian Science Fund (FWF),

coordinating a consortium of 10 groups of the Medical University of Vienna (Title: Cellular

mediators linking inflammation and thrombosis)

4/2011 Ranked 2nd at an application for the position of a vice-rector for research at the University of

Veterinary Medicine, Vienna

Since 7/2008 Associate Professor and Group Leader at the Medical University Vienna, Center for

Physiology and Pharmacology.

8. 5. 2008 2nd Habilitation for Biochemistry at the Univ. of Natural Resources and Life Sciences, Vienna

9/2005 – 6/2008 Co-founder and Deputy Director of the Ludwig Boltzmann Institute for Cancer Research

heading one of the research groups and serving as Chief Financial Officer

1/2004 – 9/2005	Research Assistant at the Dept. of Vascular Biology and Thrombosis Research, Univ.
	Vienna and Group Leader at the Competence Center "Bio Molecular Therapeutics"
Dec. 2004	Award of a comprehensive research grant for the foundation of a new "Ludwig Boltzmann
	Institute for Cancer Research" with a size of about 18 scientists (as co-applicant)
2/2003 – 1/2004	Sabbatical at the Yale University Medical School, Dept. of Immunobiology in the group of
	Sankar Ghosh (funded by a Max Kade Grant from the Austrian Academy of Sciences).
6. 6. 2002	Habilitation (University Lecture Qualification) for Vascular Biology at the Medical Univ.
	Vienna
9/2000 – 03/2003	Group Leader at the Competence Center "Bio Molecular Therapeutics (BMT)"
2/1998 – 9/2000	Research Assistant at the Dept. of Vascular Biology and Thrombosis Research, Univ.
	Vienna
10/1996 – 2/1998	Postdoctoral Fellowship at the Dept. of Vascular Biology and Thrombosis Research, Univ.
	Vienna (Research on activation of endothelial cells).
11/1994 - 10/1996	Postdoctoral Fellowship at the Novartis Research Institute, Vienna (Dept. of General
	Dermatology: Investigation of the effects of vitamin D ₃ -metabolites on human keratinocytes).

Career-related Activities

8/1988 - 9/1988	Temporary employment at the Unilever Research Laboratory, Bedford, England, in co-
	operation with the Austrian Research Center, Seibersdorf.
2/1991 - 4/1991	Scientific investigations at the Research Institute of Scripps Clinic, La Jolla, California, USA.
2/1993 - 3/1993	Research at the Carnegie Mellon University, Pittsburgh, USA.
5/2000 - 6/2000	Short term fellowship at the European Advanced Light Microscopy Facility, localized at the
	EMBL Heidelberg, Germany

Further achievements

03/2010	Guest professorship: University of Salzburg, Austria, March 2010
04/2010	Guest professorship: National University of Science and Technology, Islamabad, Pakistan,
	April 2010
1994	Theodor-Körner-Award for natural sciences.
1989	Award of a scholarship for outstanding performance at the university.

Editorial board memberships

- Associate Editor of the journal *Molecular Cancer* (IF: 41.4)
- Associate Editor of Frontiers in Cardiovascular Medicine (Atherosclerosis and Vascular Medicine: IF: 5.8).
- Associate Editor Editor of the journal Cells (Section: Cell signaling IF: 7.7)

Memberships

- Austrian Association of Molecular Life Sciences and Biotechnology (OeGMBT)
- Austrian Society for Allergology and Immunology (OeGAI)
- European Atherosclerosis Society and Austrian Atherosclerosis Society
- Austrian Physiology Society
- Member of the Study group for equal treatment issues of the Med. Univ. Vienna: 2011 2013
- Member of the PhD Curriculum Committee of the Med. Univ. Vienna: 2011-2013

Description of research interests and most important scientific achievements

Current research interests focus on molecular and cellular links between inflammation, cardiovascular diseases and cancer with a special focus on NF-kappa B signaling, as well as interconnections with other signaling processes and

networks. Various experimental systems are used, such as cell culture of primary and transformed cells, transgene mouse models, and analysis of human samples. Molecular and biochemical techniques are applied and complemented by high-end microscopy, cytometry and multiple omics-approaches (RNA- and ATAC-sequencing, DNA-methylation, proteomics, epigenomics) combined with professional bioinformatics and network analyses.

Publications, talks and citations

98 publications, 70 lectures, 4 patents; Pubmed-Link

Total number of citations: 11171; h-index: 43 (based on Google Scholar, Feb. 9th, 2024)

http://scholar.google.at/citations?user=7kJu MYAAAAJ;

http://orcid.org/0000-0002-6586-3507; SCOPUS: h-index: 36, 7936 citations

Top 10 Publications

- Mussbacher M, Derler M, Basilio J, Schmid JA: NF-kappaB in monocytes and macrophages an inflammatory master regulator in multitalented immune cells. Front Immunol 2023, 14:1134661. https://doi.org/10.3389/fimmu.2023.1134661
- 2. Beck S, Hochreiter B, Schmid JA: Extracellular Vesicles Linking Inflammation, Cancer and Thrombotic Risks. Frontiers in Cell and Developmental Biology 2022, 10. https://doi.org/10.3389/fcell.2022.859863
- 3. Moser B, Hochreiter B, Basílio J, Gleitsmann V, Panhuber A, Pardo-Garcia A, . . . Schmid JA: **The inflammatory kinase IKKα phosphorylates and stabilizes c-Myc and enhances its activity**. *Mol Cancer* 2021, **20**(1):16. https://doi.org/10.1186/s12943-021-01308-8
- 4. Salzmann M, Bleichert S, Moser B, Mussbacher M, Haase M, Hoesel B, . . . Schmid JA: IkB kinase 2 is not essential for platelet activation. *Blood Adv* 2020, **4**(4):638-643. https://doi.org/10.1182/bloodadvances.2019001044
- 5. Mussbacher M, Salzmann M, Haigl B, Basílio J, Hochreiter B, Gleitsmann V, . . . Schmid JA: Ikk2-mediated inflammatory activation of arterial endothelial cells promotes the development and progression of atherosclerosis. *Atherosclerosis* 2020, 307:21-31. https://doi.org/10.1016/j.atherosclerosis.2020.06.005
- Mussbacher M, Salzmann M, Brostjan C, Hoesel B, Schoergenhofer C, Datler H, . . . Schmid JA: Cell Type-Specific Roles of NF-κB Linking Inflammation and Thrombosis. Front Immunol 2019, 10:85. https://doi.org/10.3389/fimmu.2019.00085
- 7. Hoesel B, Schmid JA: **The complexity of NF-kB signaling in inflammation and cancer**. *Mol Cancer* 2013, **12**:86. https://doi.org/10.1186/1476-4598-12-86
- 8. Haschemi A, Kosma P, Gille L, Evans CR, Burant CF, Starkl P, . . . Wagner O: **The sedoheptulose kinase CARKL directs macrophage polarization through control of glucose metabolism**. *Cell Metab* 2012, **15**(6):813-826. https://doi.org/10.1016/j.cmet.2012.04.023
- Ebner K, Bandion A, Binder BR, de Martin R, Schmid JA: GMCSF activates NF-kappaB via direct interaction of the GMCSF receptor with IkappaB kinase beta. Blood 2003, 102(1):192-199. https://doi.org/10.1182/blood-2002-12-3753
- 10. Stehlik C, de Martin R, Kumabashiri I, Schmid JA, Binder BR, Lipp J: **Nuclear factor (NF)-kappaB-regulated X-chromosome-linked iap gene expression protects endothelial cells from tumor necrosis factor alpha-induced apoptosis**. *J Exp Med* 1998, **188**(1):211-216. https://doi.org/10.1084/jem.188.1.211