

# Johannes A. Schmid, PhD Associate Prof.

## Curriculum Vitae



Medical University Vienna  
Center for Physiology and Pharmacology,  
Dept. of Vascular Biology and Thrombosis Research,  
Schwarzspanierstr. 17, A1090 Vienna, Austria,  
Tel. +43 1 40160 31155; Email: [johannes.schmid@meduniwien.ac.at](mailto:johannes.schmid@meduniwien.ac.at)  
Website: [www.meduniwien.ac.at/user/johannes.schmid](http://www.meduniwien.ac.at/user/johannes.schmid)

### Personal Data

Date of Birth: 11-07-1966  
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 (Univ. f. Bodenkultur), Vienna. Graduation with distinction.  
1976 - 1984 Secondary school in Mödling, Lower Austria (with emphasis on foreign languages). Final examination with excellent success.  
1972 - 1976 Elementary school in Wiener Neudorf, Lower Austria

### Career History

9/2015 Ranked 2<sup>nd</sup> 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) funded by the FWF, coordinating a consortium of 10 groups of the Medical University of Vienna (Title: Cellular mediators linking inflammation and thrombosis)  
4/2011 Ranked 2<sup>nd</sup> 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 2<sup>nd</sup> 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)"
Since 2/1998	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 <sub>3</sub> -metabolites on human keratinocytes).

### **Career-related Activities**

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

### **Guest Professorships**

1. University of Salzburg, Austria, March 2010
2. National University of Science and Technology, Islamabad, Pakistan, April 2010

### **Awards**

1989	Award of a scholarship for outstanding performance at the university.
1994	Theodor-Körner-Award for natural sciences.

### **Memberships**

- Austrian Association of Molecular Life Sciences and Biotechnology (OeGMBT)
- Associate Editor of the scientific journal *Molecular Cancer* (IF: 7.77)
- Associate Editor of *Frontiers in Cardiovascular Medicine*, section: atherosclerosis
- Associate Editor of the journal *Cells* (IF: 4.89)
- Member of the “Arbeitskreis für Gleichbehandlungsfragen der Med. Univ. Wien” (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

### **Publications, talks and citations**

73 publications, 26 invited lectures, 4 patents

Total number of citations: 7021; h-index: 33 (based on Google Scholar, Nov. 30<sup>th</sup>, 2018)

### Sources of funding in the last 10 years

<i>Period</i>	<i>Organization</i>	<i>Short Title</i>	<i>€/year</i>
2/2018 - 2/2022	FWF (SFB-F54)	Cellular Mediators Linking Inflammation and Thrombosis (Coord. Project and Project P07)	256.000
8/2015 – 8/2018	FWF (P27842)	Dynamics of molecular interactions in living cells	112.000
2/2014 - 2/2018	FWF (SFB-F54)	Cellular Mediators Linking Inflammation and Thrombosis (Coord. Project and Project P07)	group: 249.000
8/2012 – 8/2015	FWF (P24802)	The Role of macrophages and PTEN in colon cancer (as co-investigator of G. Schabbauer)	47.000
10/2011 - 10/2013	FWF (P23690)	Transcription factors in inflammation and cancer	137.000
2005 - 2009	Ludwig Boltzmann Ges.	Foundation of a new Ludwig Boltzmann Institute for Cancer Research (as deputy director) Cooperativity of factors in prostate cancer	group: 219.000

### Thesis supervisions

Six completed PhD supervisions; two current PhD students; member of the PhD committee for approx. 20 students

### PhD Supervisions

<i>Period</i>	<i>Name of student</i>	<i>Topic</i>
2004 - 2007	Pia-Maria Maurer	The small GTPase Gem - a putative negative regulator of T-cell activation
2006 - 2009	Muhammad Ilyas	Studies on Prostate Cancer using Human Cells and Mouse Models
2005 - 2009	Anuruddhika Wanasinghe	In vitro and in vivo investigation of the crosstalk between androgen receptor, c-MYC and NF-κB signaling in prostate carcinogenesis
2008 - 2012	Kalsoom Sughra	Cooperativities between transcription factor c-Myc, NF-κB and ERG in prostate cancer, Med. Univ. Vienna
2009 - 2014	Naila Malkani	The role of the transcription factor ERG in endothelial cells, Med. Univ. Vienna
2014 - 2018	Manuel Salzmann	The role of IKK2 in atherothrombosis
since 2015	Bernhard Hochreiter	Dynamics of protein interactions in live cells
since 2015	Bernhard Moser	Investigating signaling molecules by CRISPR/Cas9 based fluorescence tagging

## Publication lists

73 publications, 26 invited lectures, 4 patents

Total number of citations: 7021; h-index: 33 (based on Google Scholar, Nov. 30<sup>th</sup>, 2018)

Complete list see:

<http://www.meduniwien.ac.at/user/johannes.schmid/publications.htm>

[Pubmed-Link](#)

ORCID Number: [0000-0002-6586-3507](https://orcid.org/0000-0002-6586-3507)

## J. Schmid Publications 2013-2018

1. Seif K, Alidzanovic L, Tischler B, Ibrahim N, Zagrapan B, Rauscher S, Salzmann M, Hell L, Mauracher LM, Budde U, Schmid JA, Jilma B, Pabinger I, Assinger A, Starlinger P, Brostjan C: **Neutrophil-Mediated Proteolysis of Thrombospondin-1 Promotes Platelet Adhesion and String Formation.** *Thromb Haemost* 2018.
2. Salzmann M, Hoesel B, Haase M, Mussbacher M, Schrottmaier WC, Kral-Pointner JB, Finsterbusch M, Mazharian A, Assinger A, Schmid JA: **A novel method for automated assessment of megakaryocyte differentiation and proplatelet formation.** *Platelets* 2018, **29**(4):357-364.
3. Mussbacher M, Salzmann M, Brostjan C, Hoesel B, Schoergenhofer C, Dattler H, Hohensinner PJ, Basilio J, Petzelbauer P, Assinger A, Schmid J: **Cell -type-specific roles of NF- $\kappa$ B linking inflammation and thrombosis.** *Frontiers in immunology* 2018, **(under revision)**.
4. Hoesel B, Mussbacher M, Dikorman B, Salzmann M, Assinger A, Hell L, Thaler J, Basilio J, Moser B, Resch U, Paar H, Mackman N, Schmid JA: **Androgen receptor dampens tissue factor expression via NF- $\kappa$ B and EGR1.** *J Thromb Haemost* 2018.
5. Zanin M, Chorbev I, Stres B, Stalidzans E, Vera J, Tieri P, Castiglione F, Groen D, Zheng H, Baumbach J, Schmid JA, Basilio J, Klimek P, Debeljak N, Rozman D, Schmidt H: **Community effort endorsing multiscale modelling, multiscale data science and multiscale computing for systems medicine.** *Brief Bioinform* 2017.
6. Schwarz T, Prieler B, Schmid JA, Grzmil P, Neesen J: **Ccdc181 is a microtubule-binding protein that interacts with Hook1 in haploid male germ cells and localizes to the sperm tail and motile cilia.** *European journal of cell biology* 2017, **96**(3):276-288.
7. Schoergenhofer C, Matzneller P, Mussbacher M, Schmid JA, Jilma-Stohlawetz P, Zeitlinger M, Jilma B: **Colistin dampens fibrinolysis and endothelial activation during endotoxaemia. A randomised, double blind trial.** *Thromb Haemost* 2017, **117**(9):1714-1721.
8. Mussbacher M, Schrottmaier WC, Salzmann M, Brostjan C, Schmid JA, Starlinger P, Assinger A: **Optimized plasma preparation is essential to monitor platelet-stored molecules in humans.** *PLoS One* 2017, **12**(12):e0188921.
9. Moser B, Hochreiter B, Herbst R, Schmid JA: **Fluorescence colocalization microscopy analysis can be improved by combining object-recognition with pixel-intensity-correlation.** *Biotechnol J* 2017, **12**(1).
10. Lutz MI, Schwaiger C, Hochreiter B, Kovacs GG, Schmid JA: **Novel approach for accurate tissue-based protein colocalization and proximity microscopy.** *Scientific reports* 2017, **7**(1):2668.
11. Kral-Pointner JB, Schrottmaier WC, Horvath V, Dattler H, Hell L, Ay C, Niederreiter B, Jilma B, Schmid JA, Assinger A, Mackman N, Knapp S, Schabbauer G: **Myeloid but not epithelial tissue factor exerts protective anti-inflammatory effects in acid aspiration-induced acute lung injury.** *J Thromb Haemost* 2017, **15**(8):1625-1639.
12. Asare Y, Ommer M, Azombo FA, Alampour-Rajabi S, Sternkopf M, Sanati M, Gijbels MJ, Schmitz C, Sinitzki D, Tilstam PV, Lue H, Gessner A, Lange D, Schmid JA, Weber C, Dichgans M, Jankowski J, Pardi R, de Winther MPJ, Noels H, Bernhagen J: **Inhibition of atherogenesis by the COP9 signalosome subunit 5 in vivo.** *Proceedings of the National Academy of Sciences of the United States of America* 2017.
13. Schmid JA: **Endoplasmic and exoplasmic: the evolutionary principles underlying endocytosis, exocytosis, and vesicular transport.** *Wien Med Wochenschr* 2016, **166**(7-8):236-241.

14. Puujalka E, Heinz M, Hoesel B, Friedl P, Schweighofer B, Wenzina J, Pirker C, Schmid JA, Loewe R, Wagner EF, Berger W, Petzelbauer P: **Opposing Roles of JNK and p38 in Lymphangiogenesis in Melanoma.** *J Invest Dermatol* 2016, **136**(5):967-977.
15. Kuttke M, Sahin E, Pisoni J, Percig S, Vogel A, Kraemmer D, Hanzl L, Brunner JS, Paar H, Soukup K, Halfmann A, Dohnal AM, Steiner CW, Bluml S, Basilio J, Hochreiter B, Salzmann M, Hoesel B, Lametschwandtner G, Eferl R, Schmid JA, Schabbauer G: **Myeloid PTEN deficiency impairs tumor-immune surveillance via immune-checkpoint inhibition.** *Oncoimmunology* 2016, **5**(7):e1164918.
16. Hoesel B, Malkani N, Hochreiter B, Basilio J, Sughra K, Ilyas M, Schmid JA: **Sequence-function correlations and dynamics of ERG isoforms. ERG8 is the black sheep of the family.** *Biochim Biophys Acta* 2016, **1863**(2):205-218.
17. Kunze M, Malkani N, Maurer-Stroh S, Wiesinger C, Schmid JA, Berger J: **Mechanistic insights into PTS2-mediated peroxisomal protein import: the co-receptor PEX5L drastically increases the interaction strength between the cargo protein and the receptor PEX7.** *The Journal of biological chemistry* 2015, **290**(8):4928-4940.
18. Kreiseder B, Holper-Schichl YM, Muellauer B, Jacobi N, Pretsch A, Schmid JA, de Martin R, Hundsberger H, Eger A, Wiesner C: **Alpha-catulin contributes to drug-resistance of melanoma by activating NF-kappaB and AP-1.** *PLoS One* 2015, **10**(3):e0119402.
19. Hochreiter B, Garcia AP, Schmid JA: **Fluorescent proteins as genetically encoded FRET biosensors in life sciences.** *Sensors (Basel)* 2015, **15**(10):26281-26314.
20. Forster F, Paster W, Supper V, Schatzlmaier P, Sunzenauer S, Ostler N, Saliba A, Eckerstorfer P, Britzen-Laurent N, Schutz G, Schmid JA, Zlabinger GJ, Naschberger E, Sturzl M, Stockinger H: **Guanylate binding protein 1-mediated interaction of T cell antigen receptor signaling with the cytoskeleton.** *Journal of immunology (Baltimore, Md : 1950)* 2014, **192**(2):771-781.
21. Luiskandl S, Woller B, Schlauf M, Schmid JA, Herbst R: **Endosomal trafficking of the receptor tyrosine kinase MuSK proceeds via clathrin-dependent pathways, Arf6 and actin.** *The FEBS journal* 2013, **280**(14):3281-3297.
22. Hoesel B, Schmid JA: **The complexity of NF-kappaB signaling in inflammation and cancer.** *Molecular cancer* 2013, **12**:86.
23. Asare Y, Shagdarsuren E, Schmid JA, Tilstam PV, Grommes J, El Bounkari O, Schutz AK, Weber C, de Winther MP, Noels H, Bernhagen J: **Endothelial CSN5 impairs NF-kappaB activation and monocyte adhesion to endothelial cells and is highly expressed in human atherosclerotic lesions.** *Thromb Haemost* 2013, **110**(1):141-152.

## Patents

1. MONICA[AT]; BLAAS LEANDER[AT] + (EFERL, ROBERT, ; CASANOVA, HEVIA EMILIO, ; STOIBER-SAKAGUCHI, DAGMAR, ; MORIGGL, RICHARD, ; SCHMID, JOHANNES, ; KENNER, LUKAS, ; ZENZ, RAINER, ; MUSTEANU, MONICA, ; BLAAS, LEANDER) ERACHEAS-SDAMRASJAKLAZRAM: **Method for the generation of a non-human animal with an oncogene.** In.; 2007.
2. JOHANNES[AT]; SOBANOV YURI[AT] + (DE MARTIN, RAINER, ; HOFER, ERHARD, ; HOFER-WARBINEK, RENATE, ; KALTHOFF, FRANK, STEPHAN, ; LIPP, HANS-JOACHIM, ; MECHTCHERIAKOVA, DIANA, ; SCHMID, JOHANNES, ; SOBANOV, YURI) DMRAHEAH-WRAKFSALH-JAMDAS: **IKK2 VARIANT, DINO GENE, LECTIN-LIKE RECEPTOR GENE, AND PROTEINS ENCODED THEREBY.** In. Edited by Register EP. AT; 2002.
3. DIANA[AT]; SOBANOV YURI[AT] + (DE MARTIN, RAINER, ; SCHMID, JOHANNES, ; HOFER-WARBINEK, RENATE, ; HOFER, ERHARD, ; KALTHOFF, FRANK STEPHAN, ; LIPP, HANS-JOACHIM, ; MECHTCHERIAKOVA, DIANA, ; SOBANOV, YURI) DMRASJAH-WRAHEAKFSALH-JAM: **DINO polypeptide** In., A61K38/00; A61K45/00; A61P1/04; A61P17/06; A61P29/00; A61P37/08; A61P9/10; C07K14/47; C07K14/705; C07K16/18; C07K16/28; C07K16/40; C12N1/15; C12N1/19; C12N1/21; C12N15/09; C12N15/12; C12N5/10; C12N9/00; C12N9/12; C12Q1/02; C12Q1/68; A61K39/00 edn; 2002.
4. BINDER BERND R[AT]; SCHMID JOHANNES[AT]; BRUESS JOHANNES[AT]; HUFNAGL PETER[AT]; GRUBER FLORIAN[AT] + (BINDER B, R, ; SCHMID, JOHANNES, ; BRUESS, JOHANNES, ; HUFNAGL, PETER, ; GRUBER, FLORIAN): **USE OF TRANSCRIPTION FACTOR NAK-1 OR GENES REGULATED BY TRANSCRIPTION FACTOR NAK-1 FOR THE DIAGNOSIS AND/OR THERAPY OF INFLAMMATORY AND MALIGNANT DISEASES.** In. Edited by Register EP, vol. EP1407275 (A2). AT; 2002.