CURRICULUM VITAE

Yahya Sohrabi, PhD

ADDRESS:

Work: Dept. of Cardiology I – Coronary and Peripheral Vascular Disease, Heart Failure, University Hospital Münster, Germany
Institute of Molecular Genetics Academy of Sciences, Videnska1083, Praha 4, Czech Republic
Home: Toppheideweg 46, 48161 Munster, Germany
Phone: 00492518357090
Mobile: 00491625195817
Email: yahya.sohrabi@ukmuenster.de, sohrabi@img.cas.cz
Date of Birth: 28 August, 1978

EXPERTISE

Working experience:
Staff Scientist, Molecular Cardiology, Dept. of Cardiology I – Coronary and Peripheral Vascular Disease, Heart Failure, University Hospital Münster, Germany, October 2016
Staff scientist part time: Institute of molecular Genetics Academy of Sciences, Czech Republic, since 2014
Postdoctoral research scientist at Max Planck Institute for Infection Biology, Berlin March 2016
Visiting scientist; Czech Centre for Phenogenomics and department of transgenic models, November 2014
Research assistant at Institute of molecular Genetics Academy of Sciences, Czech Republic, March 2007 to June 2014
Lab Assistant at the Center for Research and Training in Skin Diseases and Leprosy, Tehran 23.11.2002 to 1.3.2007
Lab experience: PCR, Real-Time PCR, electrophoresis, gel document and SDS-page, ELISA, antibody and cytokine assay, protein isolation, Lowry and Bradford protein assay, western blot, human and mouse sample preparation, human PBMC isolation and processing, Myeloid-derived suppressor cells isolation and characterization, IP and BM macrophages isolation and culture, neutrophils isolation and culture, Mtb and BCG culture, FACS and MACS, cell sorting, histology, microscopy, transfection, handling and working with animal model, working with microbial and eukaryotic cell and mouse model in S2 and S3 biosafety level, gene cloning and preparing knockout mouse, parasite burden test, liposome preparation and etc.
Computer expertise: Data analysis, microarray data analysis using Partek program, linkage analysis using Statistica, SPSS, PLINK, merlin, sequencing alignment, primer designing, Microsoft word, Microsoft Power Point, Excel, HTML, and etc.

EDUCATION

PhD student in Molecular and Cell Biology, Genetics and Virology, faculty of natural sciences, Charles University, Prague, Czech Republic
PhD in immunology, 3rd faculty of medicine, Charles University, Prague, Czech Republic, 2014
Title of Thesis: *Leishmania tropica*: immunopathology and genetic control
Supervisor: Marie Lipoldova PhD. **Advisor**: Ali Khamesipour
MSc. Microbiology, Department of Basic Sciences, Azad University, Iran 2005
Title of Thesis: Evaluation of immune response against leishmaniasis induced by liposomes incorporated with Leishmania antigens coated by mannan Mixed with BCG
Supervisors: Ali Khamesipour, PhD and Mahmoud Reza. Jaafari, PhD
BSc. Microbiology, Department of Basic Science, Azad University, Iran, 2001

ADDITIONAL TRAINING

Workshop on flow cytometry and cell sorting, Regulatory myeloid cells (MRC) in health and disease Conference and Workshop" September 14th-16th, Kracow, Poland

Short Term Scientific Missions, isolation, samples preparation and phenotyping of macrophages and monocytes, Aguste and- September, 2015, MRC Centre for Reproductive Health, Queen's Medical Research Institute, University of Edinburgh, UK

Tutorial Workshop on Natural Immunity and Cancer, April 12-13, 2010, Prague

Workshop on Theoretical and Practical Course "Molecular Biology of Leishmania"27-29 October 2010, Trieste, Italy

Workshop on "Molecular Cytogenetics and DNA microarrays" organized by European school of Genetic Medicine, Italy and Tehran University of Medical Sciences. 12 -17 November 2005, Tehran, Iran.

TEACHING EXPERIENCES:

Supervising medical students at the University Hospital Münster, Germany
Teaching immunology and giving lectures in the 3rd faculty of medicine, Charles University in Prague. Training and supervising bachelor and master students from the faculty of natural sciences, Charles University and the faculty of biomedical engineering, Czech Technical University.

MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS:

Working group; COST My-UNITER Action BM1404 (European Network of Investigators Triggering Exploratory Research on Myeloid Regulatory Cells)
Working group; COST Epigenetic Chemical Biology – Action CM1406
International society for infection diseases
European society of clinical microbiology and infectious diseases
Czech society of immunology
Czech genetic society (Gregora Mendel)

PUBLICATIONS

Havelková H, **Sohrabi S**, Volkova V, Krayem I, Slapničková M, Demant D, LipoldováM, Genetic regulation of Fcγ receptor IV in leishmaniasis, **submitted to Front Immunol (Under revision)**

Kobets T, Cepickova M, Volkova V, **Sohrabi Y**, Havelková H, Svobodova M, Demant P and Lipoldova M. Genetic Architecture of Control of Parasite Load in Organs of Mice Infected with *Leishmania major*: Gene-Gene Interactions and Sex Influence. **Front Immunol. 2019 Jun 7;10:1083.**

Sohrabi Y, Lagache SMM, Schnack L, Godfrey R, Kahles F, Bruemmer D, Waltenberger J, Findeisen HM., mTOR-Dependent Oxidative Stress Regulates oxLDL-Induced Trained Innate Immunity in Human Monocytes. **Front Immunol. 2019 Jan 22;9:3155.**

Schnack L, **Sohrabi Y**, Lagache SMM, Kahles F, Bruemmer D, Waltenberger J, Findeisen HM., Mechanisms of Trained Innate Immunity in oxLDL Primed Human Coronary Smooth Muscle Cells. **Front Immunol. 2019 Jan 23;10:13.**

Amodio G, Cichy J, Conde P, Matteoli G, Moreau A, Ochando J, Oral BH, Pekarova M, Ryan EJ, Roth J, **Sohrabi Y**, Cuturi MC, Gregori S. Role of myeloid regulatory cells (MRCs) in maintaining tissue homeostasis and promoting tolerance in autoimmunity, inflammatory disease and transplantation. **Cancer Immunol Immunother. 2019 Apr;68(4):661-672.**

Sohrabi Y*, Lipoldová M*. Mannose Receptor and the Mystery of Nonhealing Leishmania major Infection. **Trends Parasitol. 2018 May;34(5):354-356.**

Sohrabi Y, Godfrey R, Findeisen HM. Altered Cellular Metabolism Drives Trained Immunity. **Trends Endocrinol Metab. 2018 Sep;29(9):602-605.**

Sohrabi Y, Volkova V, Kobets T, Havelková H, Krayem I, Slapničková M, Demant P, Lipoldová M.

Genetic Regulation of Guanylate-Binding Proteins 2b and 5 during Leishmaniasis in Mice. **Front Immunol. 2018 Feb 7;9:130.**

Sohrabi, Y., Havelková, H., Kobets, T., Šíma, M., Volkova, V., Grekov, I., Jarošíková, T., Kurey, I., Vojtíšková, J., Svobodová, M., Demant, P., Lipoldová, M. Mapping the Genes for Susceptibility and Response to *Leishmania tropica* in Mouse, **PLoS Neglected Tropical Diseases, 2013, 7 (7), art. no. e2282.**

Khamesipour, A., Nateghi Rostami, M., Tasbihi, M., Miramin Mohammadi, A., Shahrestani, T., Sarrafnejad, A., **Sohrabi, Y**., Eskandari, S.E., Keshavarz Valian, H. Phenotyping of circulating CD8 + T cell subsets in human cutaneous leishmaniasis, **Microbes and Infection, 2012, 14 (9), 702-711.**

Kobets, T., Havelková, H., Grekov, I., Volkova, V., Vojtíšková, J., Slapničková, M., Kurey, I., **Sohrabi, Y.,** Svobodová, M., Demant, P., Lipoldová, M.Genetics of host response to *leishmania tropica* in mice - different control of skin pathology, chemokine reaction, and invasion into spleen and liver**, PLoS Neglected Tropical Diseases, 2012, 6 (6), art. no. e1667.**

Lipoldová, M., Havelková, H., Badalová, J., Vojtíšková, J., Quan, L., Krulová, M., **Sohrabi, Y.,** Stassen, A.P., Demant, P. Loci controlling lymphocyte production of interferon γ after alloantigen stimulation in vitro and their co-localization with genes controlling lymphocyte infiltration of tumors and tumor susceptibility**, Cancer Immunology, Immunotherapy, 2010, 59 (2), 203-213.**

Sohrabi Y., Jaafari M.R., Miramin Mohammadi A., Eskandari S.E., Khamesipour A., Induction of Cell Mediated Immunity against Leishmaniasis Using Mannan Coated Liposomes Encapsulated with Autoclaved Leishmania major (ALM); (Proceeding of FOCIS) **Immunology, 2004, 125-128**

Sohrabi Y., Jaafari M.R., Khamesipour A, Evalaution of immune response against leishmaniasis in resistance C57Bl/6 mice immunized with liposomes containing autoclaved *leishmania major* with BCG, **Cellular and Molecular Biology Letters 2004, 10 Supplement, 98-**

Sohrabi Y., Jaafari M.R., Khamesipour A., immune response evaluation of against Autoclaved *leishmania major* encapsulated in liposomes with different Tm in murine model, **Iranian Journal of Basic Medical Sciences, 2006, 9(1): 7-18.**

Sohrabi Y, Jaafari M. R, Badee A, Hejazi S. H, Eskandari S. E. Miramin Mohammadi A , Khamesipour A, Evaluation of protection rate and immune response generated in murine model of leishmaniasis immunized with autoclaved *Leishmania major* (ALM) incorporated into positively charged liposomes ,**Iranian Journal of Dermatology, 2007; 9(37): 244-258.**

SELECTED ORAL PRESENTATION AND ABSTRACTS

Schnack L., **Sohrabi Y.,** Waltenberger J, Findeisen H., DAMPs and PAMPs induce a pro-inflammatory training effect in human coronary smooth muscle cells, **European Heart Journal, Volume 39, Issue suppl_1, 1 August 2018, ESC meeting Munich - Germany, August 25- 29, 2018.**

Sohrabi Y., Schnack L., Godfrey R., Kahles F, Bruemmer D., Waltenberger J, Findeisen H., mTOR-dependent ROS generation regulates trained immunity in oxLDL- primed human monocytes., **Clin Res Cardiol 107, Suppl 1, April 2018, DGK meeting, Mannheim, Germany, April 4-7, 2018.**

Sohrabi Y., Kobets T., Krayem I., Volkova V., Javorková E., Vojtíšková J., Pokorná T., Bartůněk J., Zajícová A., Grekov I., Jarošíková T., Slapničková M., Havelková H., Svobodová M., Holáň V., Demant P., Lipoldová M., New mouse models for resistance and susceptibility to leishmaniasis. **European workshop for young myeloid cell researchers, Brno, Czech Republic, March 01- 03, 2017**

Sohrabi Y., Kobets T., Krayem I., Volkova V., Javorková E., Vojtíšková J., Pokorná T., Bartůněk J., Zajícová A., Grekov I., Jarošíková T., Slapničková M., Havelková H., Svobodová M., Holáň V., Demant P., Lipoldová M., Strong Epistasis in Genetics of Leishmaniasis - Search for Genes and Mechanisms, **EMBL Conference Mammalian Genetics and Genomics: From Molecular Mechanisms to Translational Applications, Heidelberg, Germany, October 24 – 27, 2017**

Kobets T., **Sohrabi Y.,** Šíma M., Volkova V., Javorková E., Vojtíšková J., Pokorná T., Bartůněk J., Zajícová A., Grekov I., Jarošíková T., Slapničková M., Havelková H., Svobodová M., Holáň V., Demant P., Lipoldová M., Strong epistatic control of development of leishmaniasis. **29th International Mammalian Genome Conference, Yokohama, Japan., November 7-11, 2015**

Sohrabi Y., Kobets T., Sima M., Volkova V., Javorkova E., Vojtíšková J., Pokorna T., Bartunek J., Zajícová A., Grekov I., Jarosikova T., Havelková H., Svobodova M., Holan V., Demant P., Lipoldová M. Infiltration of granulocytes into lymphoid organs associate with susceptibility to leishmaniasis, **Regulatory myeloid cells (MRC) in health and disease Conference and Workshop, Krakow, Poland, September 14-16, 2017**

Kobets T., Volkova V., **Sohrabi Y.,** Kurey I., Svobodová M., Demant P., Lipoldová M.. Genetic control of parasite load in host responce to *L. major* and *L. tropica* infection. Book of abstracts, p. 86. **Genomes, Paris, France. June 24-27, 2014**

Sohrabi Y., Slapnickova M., Volkova V., Kobets T., Havelkova H., Vojtiskova J., Svobodova M., Demant P., Lipoldova M., First model of visceral disease after infection with *Leishmania tropica.* **Fifth World Congress on Leishmaniasis (WorldLeish5), Porto de Galinhas, Pernambuco, Brazil, May 13-17, 2013**

Sohrabi Y., Havelkova H., Kobets T., Sima M., Volkova V., Grekov I., Vojtiskova J. Jarosikova T., Svobodova M. Demant P. Lipoldova M., Genetics of susceptibility and response to *Leishmania tropica* in mouse **Fifth World Congress on Leishmaniasis (WorldLeish5), Porto de Galinhas, Pernambuco, Brazil, May 13-17, 2013**

Kobets T., Volkova V., **Sohrabi Y**., Kurey I., Svobodova M., Demant P.,Lipoldova M.,Novel method for *Leishmania* parasite detection and quantification is an efficient tool for mapping of genes that control parasite numbers. **Fifth World Congress on Leishmaniasis (WorldLeish5), Porto de Galinhas, Pernambuco, Brazil, May 13-17, 2013**

Lipoldova M, Havelkova H, Kurey I, Grekov I, Kobets T, Cepickova M, **Sohrabi Y**, and Demant P, Genetic and Functional Analysis of Genes that Control Immune Response to Leishmaniasis, **World Congress on Biotechnology, ,Hyderabad, India, March 21-23, 2011**

Lipoldova M, **Sohrabi Y**, Havelkova H, Kurey I, Grekov I, Kobets T, Cepickova M, and Demant P. Novel loci controlling lymphocyte production of interferon γ after alloantigen stimulation in vitro, **4th ESF Conference on Functional Genomics and Disease, Dresden, Germany, April 14-17, 2010**

Sohrabi Y., Havelkova H., Kobets T., Sima M., Volkova V., Grekov I., Vojtiskova J. Jarosikova T., Svobodova M. Demant P. Lipoldova M., IFN-γ production is genetically linked to the control of lymphocyte infiltration in tumors and may controls tumor growth and progression, **9th EFIS-EFI Tatra Immunology Conference**, **Molecular determinants of T Cell Immunity**, **Štrbské pleso (Tatra Mountains), Slovakia**, **September 4-8, 2010**

Lipoldová, M., Čepičková, M., Kurey, I., Havelková, H., Kobets, T., **Sohrabi, Y**., Svobodová, M., Demant, P; How many genes control leishmaniasis and how they do it. **4th World Congress on Leishmaniasis WorldLeish4, , Lucknow, India, February 3-7, 2009**

Sohrabi Y., Jaafari M R, Miramin Mohammadi A, Eskandari S E and Khamesipour A, Evalaution of immune response against leishmaniasis in resistance C57 Bl/6 mice immunized with liposomes containing autoclaved leishmania major with BCG. **Amphiphiles and their aggregates in basic and applied science, Wroclaw/**

Kleczka, Poland, May 15-19, 2005,

Sohrabi Y. Jaafari, MR., MirAmin-Mohammadi, A., Eskandari SE, Evaluation of immune response against leishmaniasis against leishamianiasis indused by liposomes containing freeze/taws thimerosal treated L. major (KLM) in C57BL/6; **Third world congress on leshmaniasis (world leish3) Palermo-terrasini Sicily, Italy April 10-15, 2005,**

Sohrabi Y., Jaafari M.R., Miramin Mohammadi A., Eskandari S.E., Khamesipour A., Induction of Cell Mediated Immunity against Leishmaniasis Using Mannan Coated Liposomes Encapsulated with Autoclaved Leishmania major (ALM), **12th international congress of immunology and 4th annual conference of FOCIS, Montreal, Canada, July 18-23, 2004**

Sohrabi Y., Jaafari, MR., MirAmin-Mohammadi, A., Eskandari SE, Khamesipour A., Evaluation of the immune reponse induced by Freezed/thawed thimersal treated Leishmania major (KLM) in murine model of leishmaniasis, **9th European Multicolloquium of Parasitology, Valencia, Spain, July 23, 2004;**

Khamesipour A., Jaafari, MR., MirAmin-Mohammadi, A., **Sohrabi, Y.,** Evaluation of cell mediated immunity against leishmaniasis by liposome encapsulated with autoclaved L. major (ALM) precipitated with Alum. **9th European Multicolloquium of Parasitology, Valencia, Spain, July 23, 2004,**

Sohrabi Y., Jaafari, MR., MirAmin-Mohammadi, A., Eskandari SE, Khamesipour A., Immunization of Balb/c mice with Positively charged liposomes encapsulated with autoclaved leishmania major(ALM).**9th international congress of dermatology, , Beijing, Chine. May 19-22,2004**

Sohrabi, Y., Jaafari, MR., MirAmin-Mohammadi, A., Khamesipour A., Induction of cell mediated immunity against leishmaniasis using mannan coated liposomes containing autoclaved Leishmania major. 6th International conference Liposome advances; progress in drug and vaccine delivery, **December 15-19, 2003, London, UK.**

Khamesipour A., Jaafari, MR., MirAmin-Mohammadi, A., **Sohrabi, Y.,** Immunization of BALB/c mice with liposomes/autoclaved Leishmania major (ALM) composed of different phospholipids. 6th International conference Liposome advances; progress in drug and vaccine delivery, **December 15-19, 2003, London, UK.**

BOOK:

Laboratory Biosafety Manual, 3rd edition, WHO

Translated by: Nateghi Rostami M., **Sohrabi Y**., Zare M., Baghaie A., published by National Institute of Genetic Engineering and Biotechnology, **ISBN: 5-26-8516-964-978**

PROJECTS INVOLVED:

PRINCIPLE INVESTIGATOR:

Expression analysis of different genes and visceral pathology after *Leishmania tropica* infection in CcS-9 recombinant congenic strain, **Grant Agency of Charles University, Prague, Czech Republic, GAUK 685212, 2011-2013**

Evaluation of immune response against lishmaniasis induced by positively charged liposomes incorporated with Alum-ALM (autoclaved *Lishmania* antigens) and SLA (Soluble Leishmania antigen).**Young researchers club, Azad University, Iran. And Center for Research and Training in Skin Diseases and Leprosy, Tehran, Iran, 2002-2005**

CO-INVESTIGATOR:

Mapping and molecular identification of genes after *L. major* infection. **Grant Agency of the Czech Republic (GA CR)**, **GA310/06/1745, 2006-2008**

Genetic control of immune responses against murine model leishmaniasis, **Grant Agency of the Czech Republic**, **Czech Republic**

New model for analyzing susceptibility to *L. major* infection: role of H2 part of the genome in B10.O20 susceptibility, **Grant Agency of Charles University, Prague, Czech Republic, GAUK 396313, 2012-2014.**

First genetic model for analysis of susceptibility to parasite *Leishmania tropica*: potential implications for studies of human leishmaniases, **GA CR, GA310/08/1697, 2008-2012**

Centre for Molecular Ecology of Vectors and Pathogens, **Ministry of Education, Youth and Sports of the Czech Republic, LC06009 2006-2011**

Differences in clinical course of tick-borne encephalitis in host, and their genetic determination**, GA CR, GAP502/11/2116, 2011-2015,**

New genomic strategy for rapid identification of genes controlling development of infections and cancer**, Ministry of Education, Youth and Sports of the Czech Republic and AMVIA, USA, LH12049 2012-2015**

Phenotyping T cell subsets in human cutaneous leishmaniasis, **Center for Research and Training in Skin Diseases and Leprosy (CRTSDL), Tehran University of Medical Sciences, Tehran, Iran. 2007-2011**

Immunization of susceptible (BALB/c) and resistant (C57BL/6) mice with different liposomes containing *Leishmania* antigens. **CRTSDL, Tehran University of Medical Sciences, Tehran, Iran. 2002-2006**

Identification of *Leishmania* Sp. In Iran using PCR technique, **Iranian Molecular Medicine Network, Pasture institute, Iran, 2002-2005**

Assess of possible induction of a Th1 response in mice immunized with *M. vaccae* mixed with killed *L. major*. **Tehran University of Medical Sciences, Tehran, Iran, 2000-2004**

Evaluation of possible protection and immune response against leishmaniasis induced by liposomes co-encapsulated with *Leishmania* Antigen and CpG ODNs in BALB/c mice **CRTSDL, Tehran University of Medical Sciences. Tehran, Iran, 2002-2006**

Evaluation of immune response development in cutaneous leishmaniasis, **RSG/WHO, 2001-2003.**

Evaluation of cross protection immunity against *Leishmania donovani* induced by ALM and Alum-ALM encapsulated in liposomes compare with ALD in Swiss Albino mice. **Indian Academy of Sciences, New Delhi,India, 2006**

HONORS AND AWARDS

Travel award for Oral presentation 9th European Multicolloquium of Parasitology, 23 July 2004, Valencia, Spain.

Travel award for Oral presentation 3rd Worldleish congress 10-15 April 2005, Palermo-terrasini Sicily, Italy

Award of INSA-JRD-TATA Research Fellowship, **Indian National Science Academy,** 6 months in Department of Biotechnology, Jamia Hamdard University and School of Life Sciences Jawaharlal Nehru University, New Delhi, India.2006

Travel award, 4th ESF Conference on Functional Genomics and Disease, April 14-17, 2010, Dresden, Germany

Full travel award, 9th EFIS-EFI Tatra Immunology Conference, Molecular determinants of T Cell Immunity, Štrbské pleso (Tatra Mountains), Slovakia, September 4-8, 2010

Travel award, Workshop on Theoretical and Practical Course "Molecular Biology of *Leishmania"* 27-29 October 2010, Trieste, Italy

Travel award, Fifth World Congress on Leishmaniasis (WorldLeish5), Porto de Galinhas, Pernambuco, Brazil, and May 13th to 17th, 2013

Short term visit awarded by Mye-EUNITER COST, isolation, samples preparation and phenotyping of macrophages and monocytes, MRC Centre for Reproductive Health, Queen's Medical Research Institute, University of Edinburgh, UK, August- September, 2015

SCIENTIFIC INTERESTS

Innate immunity, inflammation, macrophages and neutrophil biology, role of macrophages and neutrophils in immune response and immunopathology

REFERENCES:

Prof. Dr. Vaclav Horejsi, Institute of Molecular Genetics, Prague, the Czech Republic
Email: vaclav.horejsi@img.cas.cz

Assoc. Prof. Dr. Marie Lipoldova, Head of the Department of Cellular and Molecular Immunology, Institute of Molecular Genetics, Prague, the Czech Republic
Email: marie.lipoldova@img.cas.cz