

Hamza N. Hanieh



Contact Information:

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Personal Information:

Nationality: Jordanian
Sex: Male
Marital Status: Married

Degree:

April/2007-March/2010, Okayama University, Okayama, Japan

- Ph.D. in Bioscience
Molecular Immunology
Division of Bioscience
Graduate School of Natural Science and Technology

Current Academic Position:

May/2017-present, King Faisal University (KFU), Hofuf, Saudi Arabia

- Associate Professor
Biological Sciences Department
College of Science

February/2016-present, KFU

- Consultant for Research Affairs
Deanship of Scientific Research (DSR)

Selected Duties:

February/2017-present, KFU

- Coordinator of Strategic Plan
College of Science

September/2012-present, KFU

- Chairman of Quality Assurance and Accreditation Committee
Biological Sciences Department

Employment History:

September/2011-May/2017, KFU

- Assistant Professor
Biological Sciences Department
College of Science

August/2010-August/2011, Osaka University, Osaka, Japan

- Specially Appointed Researcher (Full-time)
Laboratory of Immune Regulation
World Premier International-Immunology Frontier Research Center (WPI-IFReC)

May/2008-February/2010, Okayama University

- Teaching Assistant
Laboratory of Immunology and Pharmacology
Department of Bioscience
Graduate School of Natural Science and Technology

Teaching Experience:

September/2011-present, KFU

- Immunology
- Molecular Genetics
- Cytology
- Biology – Engineering
- General Biology – Science

Awards:

June - August/2017, Kishimoto Foundation, WPI-IFReC

- Junior Researcher Fellowship

May/2017, Collge of Science, KFU

- Distinction Award in Quality Assurance Management and Development

February/2017, DSR, KFU

- Award of Excellence in Scientific Publication in Q1 Journals

March/2017, College of Science, KFU

- Award of Excellence in International Collaboration for Scientific Research

June/2016, AAI, USA

- AAI Travel Grant for the International Congress of Immunology 2016

June/2016, KFU

- Distinction Award in Quality Assurance Management

June - August/2016, Kishimoto Foundation, WPI-IFReC

- Junior Researcher Fellowship

June - August/2014, Kishimoto Foundation

- Junior Researcher Fellowship

June - August/2015, Kishimoto Foundation

- Junior Researcher Fellowship

June/2003, Jordan University of Science and Technology (JUST), Irbid, Jordan

- Award of First Ranking Academic Excellence

August/2003, Engineering Association, Amman, Jordan.

- Award of First Ranking Student for Academic Excellence

Scholarships:

October/2004-March/2006, Monbokagakusho: MEXT, Tokyo, Japan

- Japanese Government Scholarship for Research and Graduate Studies (Ph.D.)

March/2006-March/2010, MEXT

- Japanese Government Scholarship for Research and Graduate Studies (MSc)

September/2000-June/2003, Ministry of Higher Education and Scientific Research, Amman, Jordan

- First Ranking Student Scholarship for Scientific Excellence

Professional Membership:

- Japanese Society for Immunology, Tokyo, Japan
- The American Association of Immunologists (AAI), MD, USA

Research Experience:

- Studying the role of Arid5a on mRNA stability in acute inflammation, autoimmunity and cancer.
- Investigating the role of microRNAs in Th17 and Treg cell differentiation.
- Researching transcriptional regulation of Ahr on microRNAs in adaptive immune cells and cancer cells.
- Studying the role Ahr/microRNAs axis in development of chronic inflammation and autoimmune disorders such as Multiple Sclerosis, Rheumatoid Arthritis and Colitis.
- Examining the role of Ahr/microRNA axis in metastasis of breast and colorectal cancers.
- Evaluation of the anti-cancer activities novel designed compounds.

Grants:

September/2012-present, DSR, KFU

- 4 grants with grand total: 350000 SR

April/2015, King Abdulaziz City for Science and Technology (KACST), Riyadh, Saudi Arabia (Kingdome Strategic Plan)

- 3 grants with grans total: 6000000 SR

Selected Meetings and Conferences:

July/2017

- International Drug Discovery, Science and Technology 2017, Osaka, Japan

October/2014

- Cytokines Down Under 2014: From Bench to Beyond, Melbourne, Australia

August/2013

- 15th International Congress of Immunology, Milan, Italy

October/2011

- 9th Joint Meeting of International Cytokine Society and International Society for Interferon and Cytokine Research, Florence, Italy

January/2011

- MicroRNA in Human Disease and Development, Boston, USA

November/2011

- The 40th Meeting of Japanese Society For Immunology, Tokyo, Japan

August/2010

- 13th International Congress of Immunology, Kobe, Japan

March/2009

- WPSA Annual Meeting, Southport, UK

Training: Selected

February/2012-present, KFU and British Council

- Selected training courses in Quality Assurance and Accreditation
 - Benchmarking of Key Performance Indicators
 - Meeting Review Panel for Institutional Accreditation
 - Program Description
 - Course Description
 - Course Reports
 - Annual Program Report
 - Assessing Teaching Quality
 - Meeting Accreditation Standards
 - Effective Teaching Strategies

September/2013 Siica, Milan, Italy

- Clinical Immunology

Trainer:

September/2015-present, KFU

- Quality Assurance Management Systems
- Practices of Quality Assurance
- Records of Research in International Databases (Scopus, ORCID and Google Scholar)

Publications:

Refereed Papers:

- Alzahrana A, **Hanieha H**, Ibrahima H, Mohafezb O, Shehatab O, Bani Ismaila M, Alfwuaires M. Enhancing miR-132 expression by aryl hydrocarbon receptor attenuates tumorigenesis associated with chronic colitis. *International Immunopharmacology*. <https://doi.org/10.1016/j.intimp.2017.09.015>. October/2017. First two authors are equally contributed.

- **Hanieh H**, Hairul-Islam VI, Saravanan S, Chellappandian M, Rahul K, Durga A, Venugopal K, Senthilkumar V, Senthilkumar P, Thirugnanasambantham K. Pinocembrin, a novel histidine decarboxylase inhibitor with anti-allergic potential in vitro. *European Journal of Pharmacology*. 814: 178-186. August/2017.
- **Hanieh H**, Masuda K, Metwally H, Chalise JP, Mohamed M, Nyati KK, Standley DM, Li S, Higa M, Zaman M, Kishimoto T. Arid5a inhibits the functions of the endoribonucleases Regnase-I and Roquin-I on a stem-loop structure of *OX40* 3'UTR to exacerbate autoimmunity. *European Journal of Immunology*. Revision stage.
- Nyati, K, Masuda K, Zaman M, Dubey P, Millrine D, Chalise J, Higa M, Li S, Standley, D, Saito K, **Hanieh H**, Kishimoto T. TLR4-induced NF- κ B and MAPK signalling regulate the IL-6 mRNA stabilizing protein Arid5a. *Nucleic Acid Research*. 45(5):2687-2703. February/2017.
- **Hanieh H**, Mohafez O, Hairul-Islam V, Alzahrani A, Bani Ismail M, Thirugnanasambantham K. A novel aryl hydrocarbon receptor agonist suppresses migration and invasion in breast cancer cells. *PLOS ONE*. 11(12):e0167650. December/2016.
- Zaman M, Kazuya M, Nyati K, Dubey P, Ripley B, Wang K, Chalis J, Higa M, **Hanieh H**, Kishimoto T. Arid5a exacerbates IFN- γ -mediated septic shock by stabilizing T-bet mRNA. *PNAS*. 113(41):11543-11548. October/2016.
- Masuda K, Ripley B, Nyati K, Dubey P, Zaman M, **Hanieh H** Higa M, Yamashita K, Standley DM, Mashima T, Katahira M, Okamoto T, Matsuura Y, Takeuchi O, Kishimoto T. Arid5a regulates naïve CD4⁺ T-cell fate through selective stabilization of Stat3 mRNA. *J Exp Med*. 213(4):605-19. April/2016.
- **Hanieh H**. Aryl hydrocarbon receptor-microRNA-212/132 axis in human breast cancer suppresses metastasis by targeting SOX4. *Mol Cancer*. 14:172. September/2015.
- **Hanieh H**. 3'3-Diindolylmethane induces miRNA-132 to potentiate cholinergic anti-inflammation and suppress autoimmune encephalomyelitis. *ZJPS*. 213(4):605-19. December/2015.
- Chinen I, Nakahama T, Kimura A, Nguyen NT, Takemori H, Kumagai A, Kayama H, Takeda K, Lee S, **Hanieh H**, Ripley B, Millrine D, Dubey PK, Nyati KK, Fujii-Kuriyama Y, Chowdhury K, Kishimoto T. The aryl hydrocarbon receptor/microRNA-212/132 axis in T cells regulates IL-10 production to maintain intestinal homeostasis. *Int Immunol*. 27(8):405-15. August/2015.
- Saravanan S, Thirugnanasambantham K, **Hanieh H**, Karikalan K, Sekar D, Rajagopalan R, Hairul Islam V. miRNA-24 and miRNA-466i-5p controls inflammation in rat hepatocytes. *Cell Mol Immunol*. 12(1):113-5. September/2014.
- **Hanieh H**. Toward understanding the role of Ahr in the immune system: current progress and future trends. *BioMed Research International*. 2014:520763. January/2014.

- **Hanieh H**, Alzahrani A. MicroRNA-132 suppresses autoimmune encephalomyelitis by inducing cholinergic anti-inflammation: a new Ahr-based exploration. *European Journal of Immunology*. 43(10):2771-82. October/2013.
- Nakahama T, **Hanieh H**, Nguyen NT, Chinen I, Ripley B, Millrine D, Lee S, Nyati KK, Dubey PK, Chowdhury K, Kawahara Y, Kishimoto T. Aryl hydrocarbon receptor-mediated induction of the microRNA-132/212 cluster promotes interleukin-17-producing T-helper cell differentiation. *Proc Natl Acad Sci U S A*. 110(29):11964-9. June/2013.
- Nguyen NT, **Hanieh H**, Nakahama T, Kishimoto T. The role of the aryl hydrocarbon receptor in immune responses. *International Immunology*. 25(6):335-43. April/2013. First three authors are equally contributed.
- Alzahrani A, Ragia G, **Hanieh H**, Manolopoulos VG. Genotyping of CYP2C9 and VKORC1 in the Arabic Population of Al-Ahsa, Saudi Arabia. *Biomedical Research International*. 2013:315980. April/2013.
- **Hanieh H**. Toward understanding the role of aryl hydrocarbon receptor in the immune system: current progress and future trends. *BioMed Research International*. Accepted article to be published in December 2013.
- Masuda K, Kimura A, **Hanieh H**, Nguyen NT, Nakahama T, Chinen I, Ootoy Y, Murotani T, Yamatodani A, Kishimoto T. Aryl hydrocarbon receptor negatively regulates LPS-induced IL-6 production through suppression of histamine production in macrophages. *International Immunology*. 23(10),637-645. August/2011.
- Nakahama T, Kimuar A, Nguyen NT, Chinen I, **Hanieh H**, Nohara K, Fujii-Kuriyama Y, Kishimoto T. Aryl hydrocarbon receptor deficiency in T cells suppresses the development of collagen-induced arthritis. *Proc Natl Acad Sci U S A*. 108(34), 14222-14227. July/2011.
- **Hanieh H**, Narabara K, Tanaka Y, Piao M, Gerile C, Abe A, Kondo Y. Immunomodulatory effects of *Alliums* and *Ipomoea batata* extracts on lymphocytes and macrophages functions in White Leghorn chickens: *in vitro* study. *Animal Science Journal*. 83(1):68-76. January/2012.
- **Hanieh H**, Narabara K, Gerilechaogetu, Piao M, Gerile C, Abe A, Kondo Y. Modulatory effects of two levels of dietary *Alliums* on immune response and certain immunological variables, following immunization, in White Leghorn chickens. *Animal Science Journal*. 81, 673-680. December/2010.
- **Hanieh H**, Gerile C, Narabara K, Gu Z, Abe A, Kondo Y. *In vivo* immunomodulatory effects of dietary purple sweet potato after immunization in chicken. *Animal Science Journal*. 81, 116-121. February/2010.
- Narabara K, Abe A, Gerilechaogetu, **Hanieh H**, Kondo Y. B cell differentiation in the bursa of Fabricius and spleen of embryos and chicks immediately after hatching. *Animal Science Journal*. 80, 669-677. December/2009.

- Gerilechaogetu, **Hanieh H**, Abe A, Kondo Y. Extracellular signal-regulated kinase (ERK) activation in chicken heterophils stimulated with phorbol 12-myristate 13-acetate (PMA), Formyl-methionylleucyl-phenylalanine (fMLP) and lipopolysaccharide (LPS). *Animal Science Journal*. 80, 577-584. October/2009.

Books:

- **Hanieh Hamza (Editor)**, Mona Altoweisi, Rabab Hamad. Basic Immunology. King Faisal University Press. A head of Publication. January/2017.
- **Hanieh Hamza**. Experimental Immunology. King Faisal University Press. In Process.
- Alzahrani Abdullah, Abdullah Bassem, **Hanieh Hamza**. Atlas (Translation). King Faisal University Press. In Process.

Others:

- Hanieh Hamza, Bani Ismail Mohammad, Hairul-Islam Villianur Ibrahim, Manal Al-Fwuaires. Aryl Hydrocarbon Receptor/microRNA Axis in Breast Cancer: Implications and Therapeutic Potential. Proceedings of IDDST 2017. In press.
- Kazuya Masuda, Barry Ripley, Kishan Kumar Nyati, Praveen Kumar Dubey, Mohammad Mahabub-Uz Zaman, **Hamza Hanieh**, Tadamitsu Kishimoto. Arid5a enhances the development of Th17 cells by stabilizing Stat3 mRNA. Proceedings of ICIS 2014. No. 299.
- **Hanieh Hamza** and Alzahrani Abdullah. MicroRNAs—the missing link between aryl hydrocarbon receptor and autoimmunity. *European Journal of Immunology-In This Issue*. 43 (10), 2522-2523. October 2013. Invited contribution.
- **H. Hanieh** and A. Alzahrani. miR-132 suppresses autoimmune encephalomyelitis by inducing cholinergic anti-inflammation: a novel Ahr-based exploration. Proceedings of 15th ICI. P.766.
- Taisuke Nakahama, **Hamza Hanieh**, Nam Nguyen, Ichino Chinen, Tadamitsu Kishimoto. Ahr mediated induction of miR-212/132 cluster enhances Th17 differentiation. Proceedings of JSI. P74. October /2012.
- Nam Nguyen, Tasuke NAKAHAMA, **Hamza Hanieh**, Ichino Chinen, Tadamitsu Kishimoto. miR-212/132 cluster is involved in M1 differentiation possibly via Ahr-dependent mechanism. Proceedings of JSI. P157. October/ 2012.
- **Hanieh Hamza**, Masuda Kazuya, Nguyen Nam, Chinen Ichino, Nakahama Taisuke, Kishimoto Tadamitsu. Ahr-mediated transcription of miR-212/132 cluster promotes anti-inflammation in autoimmunity by modulating Treg subset and targeting inflammatory cytokines. *Cytokines*. 56, 16-17. October/2011.
- Chinen I, Kimura A, Nguyen N, **Hanieh H**, Nakahama T, Masuda K, Kishimoto T. Aryl hydrocarbon receptor suppression of colon inflammation induced by dextran sulphate Sodium. *Cytokines*. 56: 29-30. October /2011.

- Kazuya Masuda, Akihiro Kimura, **Hamza Hanieh**, Nam Trung Nguyen, Taisuke Nakahama, Ichino Chinen, Yuichi Ootoy, Tomotaka Murotani, Atsushi Yamatodani, Tadamitsu Kishimoto. Aryl hydrocarbon receptor suppresses LPS-induced IL-6 production through inhibition of histamine production in macrophages. Cytokine. 56, P39. October /2011.
- Nam Trung Nguyen, Taisuke Nakahama, **Hamza Hanieh**, Ichino Chinen, Kazuya Masuda, Tadamitsu Kishimoto. Aryl hydrocarbon receptor involves in the expression of several microRNAs in dendritic cells. Cytokine. 56, P5. October/2011.