



Hamza N. A. Hanieh C.V.



CURRICULUM VITAE

Hamza Hanieh

June 2021

PERSONAL

Your Photo

Place of Birth Jordan
Date of Birth 1981
Marital Status Married
Nationality Jordanian
Work Address Department of Medical Analysis , Department of Biological Sciences, Al-Hussein Bin Talal University, Ma'an, Jordan.
Phone: +962-3-2179000 Ext.: 6304, E-mail: hhanieh@ahu.edu.jo
Academic Rank (date) Associate Professor (2017)
Permanent Address 77110 Aqaba, Jordan. Cell Phone: E-mail: hhanieh@ahu.edu.jo

ACADEMIC QUALIFICATIONS

2007 - 2010 Ph.D., Bioscience, Okayama University, Okayama, Japan

SPECIALTY

General Specialization: Bioscience
Specialization: Molecular Immunology

CAREER HISTORY

August 2019 -Present Associate Professor, Department of Medical Analysis, Department of Biological Sciences, Al-Hussein Bin Talal University, Ma'an, Jordan.
April 2017 – January 2019 Associate Professor, Biological Sciences Department, College of Science, King Faisal University, Ahsa, Saudi Arabia.



September 2011 - April 2017 Assistant Professor, Biological Sciences Department, College of Science, King Faisal University, Ahsa, Saudi Arabia

August 2010 – September 2011 Specially-Appointed Researcher, Immunology Frontier Research Center (IFReC), Osaka University, Osaka, Japan.

ADMINISTRATIVE EXPERIENCE

Positions

September 2019 - Present Head of Department of Biological Sciences, Al-Hussein Bin Talal University

September 2018 - December 2018 Consultant for Quality Assurance and Accreditation Affairs, College of Science, King Faisal University

November 2016 - December 2018 Coordinator of Strategic Planning, College of Science, King Faisal University

November 2016 - December 2018 Coordinator of Strategic Planning, College of Science, King Faisal University

September 2016 - December 2018 Coordinator for Strategic Planning, Deanship of Scientific Research, King Faisal University

December 2015 – December 2018 Consultant for Scientific Research Affairs, King Faisal University

September 2012 – December 2018 Director of Experimental Animal Facility, King Faisal University

| <i>Committees (Selected)</i> | |
|------------------------------|--|
| 2021 | Strategic Planning, College of Science, College of Science, Al Hussein bin Talal University |
| 2021 | Establishing and Supervision Committee for “Natural Museum”, College of Science, Al Hussein bin Talal University |
| 2021 | Quality Assurance and Accreditation Committee, College of Science, AL Hussein bin Talal University |



| | |
|------|--|
| 2020 | Scientific Research and Promotion Committee, Princes Aisha bin Al Hussein for Nursing and Health Sciences, Al Hussein bin Talal University |
| 2019 | Quality Assurance and Accreditation Committee, College of Science, AL Hussein bin Talal University |
| 2018 | Strategic Planning, Deanship of Scientific Research, King Faisal University |
| 2018 | Institutional Accreditation Committee, King Faisal University |
| 2017 | Quality Assurance and Program Accreditation Committee, King Faisal University |
| 2016 | Standing Quality Assurance and Accreditation Committee, King Faisal University |

HONORS, SCHOLARSHIPS, AWARDS AND GRANTS (SELECTED)_____

| | |
|-----------|---|
| 2021 | Excellence in International Patent Registry, King Faisal University |
| 2020 | Scientific Achievement for Human Health, Red Crescent, Jordan |
| 2020 | Senior Researcher Fellowship, Kishimoto Foundation, Japan |
| 2020 | Scientific Research Grant, Deanship of Scientific Research, Al Hussein bin Talal University |
| 2019 | Senior Researcher Fellowship, Kishimoto Foundation, Japan |
| 2012-2018 | 6 Scientific Research Grants, Deanship of Scientific Research, Deanship of Scientific Research, King Faisal University |
| 2018 | International Collaboration in Scientific Research Award, King Faisal University |
| 2018 | Excellence in Scientific Publication and Grants, King Faisal University |
| 2018 | Senior Researcher Fellowship, Kishimoto Foundation |
| 2018 | Distinguished Faculty Member (Niqati) Prize for Scientific Research, Academic and Community Service, King Faisal University |
| 2017 | Junior Researcher Fellowship, Kishimoto Foundation |



| | |
|------|---|
| 2017 | Excellence in Scientific Publication in Q1 Journals Award, King Faisal University |
| 2016 | Excellence in International Scientific Collaboration Award, King Faisal University |
| 2016 | Junior Researcher Fellowship, Kishimoto Foundation |
| 2016 | American Association for Immunology Travel Grant for the International Congress of Immunology 2016, USA |
| 2015 | Junior Researcher Fellowship, Kishimoto Foundation |
| 2014 | Junior Researcher Fellowship, Kishimoto Foundation |
| 2007 | Japanese Government Scholarship for Research and Graduate Studies (MEXT; Ph.D.), Japan |
| 2004 | Japanese Government Scholarship for Research and Graduate Studies (MEXT; MS.c.) |
| 2003 | First Ranking Student Scholarship for Scientific Excellence, Ministry of Higher Education, Jordan |
| 2003 | First Ranking (Honor) in Academic Excellence, Jordan University of Science and Technology, Jordan |

PROFESSIONAL MEMBERSHIPS AND SERVICES _____

Membership(s)

- 2015 - Present American Association for Immunology, USA
- 2007-Present Japanese Society for Immunology, Japan
- 2020-Present Jordan Society for Scientific Research, Entrepreneurship, and Creativity (JSSREC), Jordan

Service(s)

- The Proceedings of the National Academy of Sciences (PNAS Journal)



RESEARCH INTEREST

PUBLICATIONS

Peer-reviewed journal articles

- Abdullah M. Alzahrani, Peramaiyan Rajendran, Vishnu Priya Veeraraghavan and **Hamza Hanieh**. Cardiac Protective Effect of Kirenol against Doxorubicin-Induced Cardiac Hypertrophy in H9c2 Cells through Nrf2 Signaling via PI3K/AKT Pathways. *International Journal of Molecular Sciences*. 22(6), 3269. March/2021.
- **Hanieh H**, Ahmed EA, Vishnubalaji R, Alajez NM. SOX4: Epigenetic Regulation and Role in Tumorigenesis. *Seminars in Cancer Biology*. S1044-579X(18)30180-9. December/2020.
- Alzahrani A, **Hanieh H**. Differential modulation of Arid5a and Ahr: A new strategy to treat autoimmune encephalomyelitis. *Saudi Pharmaceutical Journal*. 28(12):1605-1615. December/2020. Equally first co-authors.
- Metwally H, Tanaka T, Li S, Parajuli G, Kang S, **Hanieh H**, Hashimoto S, Chalise J, Gemechu Y, Standley D, Kishimoto T. Noncanonical STAT1 phosphorylation expands its transcriptional activity into promoting LPS-induced IL-6 and IL-12p40 production. *Science Signaling*. 13(624). pii: eaay0574. March/2020.
- Aladaileh SH, Abukhalil MH, Saghir SAM, **Hanieh H**, Alfuwaires MA, Almainan AA, Bin-Jumah M, Mahmoud AM. Galangin Activates Nrf2 Signaling and Attenuates Oxidative Damage, Inflammation, and Apoptosis in a Rat Model of Cyclophosphamide-Induced Hepatotoxicity. *Biomolecules*. 9(8). pii: E346. August/2019.
- Chalise J, Hashimoto S, Parajuli G, Kang S, Singh S, Gemechu Y, Metwally H, Nagahama Y, Dubey P, Nyati K, Mahabub-Uz Zaman M, **Hanieh H**, Masuda K, Kishimoto T. Feedback regulation of Arid5a and Ppar-gamma2 maintains adipose tissue homeostasis. *Proc Natl Acad Sci U S A*. 116(30):15128-15133. July/2019.
- Rajendran P, Alzahrani AM, **Hanieh HN**, Kumar SA, Ben Ammar R, Rengarajan T, Alhoot MA. Autophagy and senescence: A new insight in selected human diseases. *Journal of Cellular Physiology*. doi: 10.1002/jcp.28895. May/2019.
- Alzahrani A, Mohammed M, Ibrahim H, Alwassil O, Habash M, Alfuwaires M, **Hanieh H**. Activation of aryl hydrocarbon receptor signaling by a novel agonist ameliorates



autoimmune encephalomyelitis. *PLOS ONE*. 14(4):e0215981. April/2019. First and last authors are equally contributed.

- **Hanieh H**, Masuda K, Metwally H, Chalise JP, Mohamed M, Nyati KK, Standley DM, Li S, Higa M, Zaman M, Kishimoto T. Arid5a stabilizes *OX40* mRNA by recognizing a stem-loop structure in its 3'UTR. *European Journal of Immunology*. 48(4):593-604. April/2018.
- Shehata T, Mohafez O, **Hanieh H**. Pharmaceutical Formulation and Biochemical Evaluation of Atorvastatin Transdermal Patches. *IJPER*. 52(1):54-61. January/2018.
- Alzahrani A, **Hanieha H**, Ibrahim H, Mohafez O, Shehata O, Bani Ismail M, Alfwuaires M. Enhancing miR-132 expression by aryl hydrocarbon receptor attenuates tumorigenesis associated with chronic colitis. *International Immunopharmacology*. 52:342-351. 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.
- 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. *Proc Natl Acad Sci U S A*. 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. *Journal of Experimental Medicine*. 4;213(4):605-19. April/2016.



- **Hanieh H.** Aryl hydrocarbon receptor-microRNA-212/132 axis in human breast cancer suppresses metastasis by targeting SOX4. *Molecular 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. *International Immunology*. 27(8):405-15. August/2015.
- Saravanan S, Thirugnanasambantham K, **Hanieh H**, Karikalan K, Sekar D, Rajagopalan R, Hairul Islam VI. miRNA-24 and miRNA-466i-5p controls inflammation in rat hepatocytes. *Cell and Molecular Immunology*. 12(1):113-5. September/2014.
- **Hanieh H.** Toward understanding the role of Ahr in the immune system: current progress and future trends. *BioMedical 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.



- Masuda K, Kimura A, **Hanieh H**, Nguyen NT, Nakahama T, Chinen I, Otoyoy 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 and book chapters

- **Hanieh Hamza (Editor)**, Mona Altoweisi, Rabab Hamad. Basic Immunology. 1st Edition. Rushd Bookstore, Riyadh, Saudi Arabia. (ID: 987-603-8214-81-70). 2018. (Accredited textbook).



Patents

US Patents:

- **Hanieh H.** Therapeutic agents for treating diseases associated with chronic inflammation and screening method. United States Patent and Trademark Office (USPTO), US 10,709,639, December/2019.
- **Hanieh H.** Therapeutic agents for treating diseases associated with chronic inflammation and screening method. United States Patent and Trademark Office (USPTO), US 10,709,696, July/2020.
- **Hanieh H** and Alzahrani A. Novel Arid5a peptide inhibitors. United States Patent and Trademark Office (USPTO), US 11,001,608, May/2021.

World-wide Patent Registry

- **Hanieh H** and Alzahrani A. Novel Arid5a peptide inhibitors. World Intellectual Property (WIPO), WO 2021/005581 A1, January/2021.
- **Hanieh H.** Therapeutic agents for treating diseases associated with chronic inflammation and screening method. World Intellectual Property (WIPO), WO 2020/222101 A1, November/2020.
- **Hanieh H.** Therapeutic agents for preventing and treating autoimmune diseases and cancer and a screening method. World Intellectual Property (WIPO), WO 20200338058, October/2020.

CONFERENCES AND PROCEEDINGS

December/2020

- International Conference on Neuro Science & Brain Disorders (NBD 2020), Valencia, Spain; invited honorable speaker.

October/2018

- Immunology Congress, Amsterdam, Netherland; invited session Chair

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

TEACHING

Courses Taught-undergraduate

- Immunology
- Haematology
- Molecular Genetics
- Cytology
- Biology
- Virology
- Blood Bank

Courses Taught-postgraduate

- Advanced Immunology

SKILLS

Languages

- Arabic (Native)
- English (Advanced)
- Japanese (Intermediate)

Computer Programs

- Molecular Docking Simulation