Hevidar Taha, Ph.D.

Curriculum vitae

Personal Information

Surname: Rostinki

Full name: Hevidar Mustafa Taha

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Date of birth: January 1, 1976

Place of birth: Duhok, Kurdistan Region, Iraq.

Current affiliation: Department of Basic Sciences

College of Agriculture Duhok University Chanden Street 1

1063BD Sumail/Duhok, Kurdistan Region-Iraq.

Previous affiliation: Department of Medical Biotechnology

Faculty of Biochemistry, Biophysics and Biotechnology

Jagiellonian University

Gronostajowa 7

30-387 Krakow, Poland.

Academic background

10.2013-01.2015 Post-doctoral researcher at the Department of Medical

Biotechnology, Faculty of Biochemistry, Biophysics and

Biotechnology, Jagiellonian University, Krakow, Poland.

10.2004 – 04.2010 Doctor of Philosophy (Ph.D) in biochemistry field at the

Department of Medical Biotechnology, Faculty of

Biochemistry, Biophysics and Biotechnology, Jagiellonian

University, Krakow, Poland. Supervised by: Professor Dr. hab

Alicja Jozkowicz. Ph.D. thesis "The effect of (GT)n

polymorphism of heme oxygenase-1 (HO-1) promoter on human endothelial cells".

10.1997- 11.2000	Master of Science (MSc) degree in the field of Biology (Cytogenetics). University of Duhok, Duhok, Kurdistan Region, Iraq. M.Sc thesis "The Genetic effects of pesticides (Raxil & Granstar) on Albino Laboratory Mice Mus musculus".
10.1993- 06.1997	Bachelor of Science (BSc) in the field of Animal Science at the College of Agriculture, University of Duhok, Duhok, Kurdistan Region, Iraq.
10.1990- 10.1993	High School Diploma in Science at the Department of Science, Kawa preparatory School, Duhok, Kurdistan region, Iraq. Major subjects were Mathematic, Biology, Chemistry and Physics.

University Services

2017-untill now	Chair of basic sciences department, College of Agriculture, Duhok University.
	Chair of scientific committee in basic sciences department, College of Agriculture, Duhok University.
	Served on scientific committee awarded academic scientific title in the College of Agriculture, Duhok University.
2017-2018	Served as a chair of scientific committee to evaluate teacher portfolio in the basic sciences department. College of Agriculture, Duhok University.
2017-2018	Served on scientific committee for curriculum development in the College of Agriculture, Duhok University.
2016-2017	Served on the permanent scientific committee of the department of animal production, College of Agriculture, Duhok University.
2015-2016	Served on scientific committee awarded academic scientific title in the Faculty of Agriculture, Duhok University.
2015-2016	Served on scientific committee to evaluate teacher portfolio in the school of animal production, Faculty of Agriculture, Duhok

	Oniversity.
2015-2016	Served on scientific committee to evaluate teacher portfolio in the school of animal production, Faculty of Agriculture, Duhok University.
2015-2016	Coordinator of quality assurance and post graduate studies in the school of animal production, Faculty of Agriculture, Duhok University.
2011-2013	Served on the permanent scientific committee of the school of animal production, Faculty of Agriculture, Duhok University.
2011-2013	Served on scientific committee to evaluate teacher portfolio in the school of animal production, Faculty of Agriculture, Duhok University.
2011-2013	Served on scientific committee to evaluate teacher portfolio in the school of animal production, Faculty of Agriculture, Duhok University.
2011-2013	Coordinator of quality assurance and post graduate studies in the school of animal production, Faculty of Agriculture, Duhok University.

Technical Skills

- Cell culture techniques
- Cell transfection with plasmid DNA
- RNA extraction from the cell cultures and tissues

University.

- DNA/protein extraction (from the cell culture and murine tissues)
- Tissue lysing (*TissueLyser- Qiagen*)
- Reverse transcription
- RT-PCR and real time PCR (Rotor-Gene RG-3000 from Corbett Research)
- Protein and nucleic acid electrophoresis
- Western blot analysis (Biorad)
- Colorimetric assay (LDH, MTT)
- ELISA for inflammatory mediator, VEGF and adhesion molecules (R&D systems and Bender Med systems)
- Angiogenic assay: Aortic ring assay and Spheroid sprouting assay
- Genetic reporter assay

- Immunofluorescent and histological staining (hematoxylin/eosine and CD31)
- Isolation of Chromosomes from bone marrow and characterization of chromosomal aberrations
- Isolation of Sperms from murine testes and characterization of sperm head abnormalities
- Mitotic index assay
- Computer programs: Microsoft office software, image J and Graph pad
- Analysis of gene expression at mRNA level
- Analysis of gene expression at protein level (ELISA, western blotting, histological and immunofluorescence staining, Luminex platform application)
- Analysis of promoter and transcription factor activities (Colorimetric and fluorimetric reporter assays)
- Gene transfer techniques in cell cultures (plasmids, adenoviral vectors, retroviral vectors, AAV vectors)
- Basics of flow cytometry analysis and sorting using Fortessa flow cytometer (Becton Dickinson), and MoFlo XDP (Beckman coulter)
- Colorimetric, fluorimetric and luminometric assays for functional analysis of cell activities (proliferation, cell cycle, migration, apoptosis, necrosis, production of reactive oxygen species etc.)
- Angiogenic assays *in vitro* and *ex vivo* (tube formation on matrigel, capillary sprouting in endothelial spheroids, ring assay)
- Angiogenic assays in vivo (matrigel plaque assay)

Professional Development and Conferences

Professional Development

- 2nd Workshop of the *MIR-TNAGo* International Associated Laboratory on" micro RNAs, mediators of differentiation and biomarkers of diseases", **Krakow, Poland**. 4-6th December 2014
- Easy thesis and papers writing with EndNote X4 program workshop, Duhok, **Kurdistan Region-Iraq**. 14-15th April 2013
- Calculating an authors H index workshop, **Duhok, Kurdistan Region-Iraq**. 11th November 2012

- EndNote Reference Management Software The Complete Reference Solution Workshop, **Duhok, Kurdistan Region-Iraq**. 3rd May 2012
- 2nd Next Generation Sequencing workshop, **Szeged, Hungarv**. 6-8th October 2010
- 4th European Vascular Genomic Network (EVGN) Summer School, Krakow, Poland. 15-19th September 2008
- 4th European Meeting on Vascular Biology and Medicine, Bristol, UK. 17-20th September 2007
- International Workshop of The Physiological Society 15th Symposium of The Jagiellonian Medical Research Centre, **Krakow**, **Poland**. 9-12th May 2007
- XXXIII Winter School of the Faculty of Biotechnology, Krynica, Poland. 28th February - 2nd March 2006
- Molecular mechanisms of tumor-host interactions, Polish-French scientific meeting, **Krakow**, **Poland**. 22-24th September 2005
- Seminar of the Jagiellonian Medical Research Center on "Atherothrombosis -Diabetes- Vasculopathies", **Krakow, Poland**. 5-7th June 2005
- XXXII Winter School of the Faculty of Biotechnology entitled"From Molecular Biology to Biotechnology", **Zakopane**, **Poland**. 3-7th March 2005

- $\frac{\textbf{Conferences}}{\textbf{The } 3^{\text{rd}} \textbf{ Edition of World Congress \& Exhibition on Vascular Surgery,}}$ **London, UK**. 24-25th May 2018
- The 9th International Conference on Heme Oxygenase, **Prague**, **Czech Republic**. 14-17th September 2016
- The 2nd Congress BIO 2016 "Expanding beyond the limits", **Wroclaw**, **Poland**. 13-16th September 2016
- The 2nd Meeting of Polish Iron Club, **Jastrzebiec**, **Poland**. 12-13th May 2015
- Frontiers in Stem Cells & Cancer, **Heidelberg**, **Germany**. 29-31th Much 2015
- The 7th International Conference of Contemporary Oncology Personalized Cancer Medicine & Big Data Analysis, **Poznań**, **Poland**. 25-27th March 2015
- The 8th International Conference on Heme Oxygenases, BioIron & Oxidative Stress, **Sydney**, **Australia**. 8-11th October 2014

- The 5th Seminar of Jagiellonian Centre for Experimental Therapy, **Wierchomla, Poland**. 5-8th June 2014
- VI Kongres Współczesnej Onkologii, **Poznań**, **Poland**. 27-29th March 2014
- The 4th Kurdistan Conference on Biological Science, **Duhok, Kurdistan Region-Iraq**. 8-10th May 2012
- 1st Scientific Agricultural Conference, Sumail, Duhok, Kurdistan Region-Iraq. 10-12th April 2012
- 6th International congress on Heme oxygenases "Heme Oxygenases in Biology and Medicine", **Miami Beach, Florida, United States of America.** 30th September- 4th October 2009
- 34th FEBS congress "Life's Molecular Interactions", **Prague, Czech Republic**. 4-9th July 2009
- Central European Congress in Life Sciences "Eurobiotech 2008", **Krakow**, **Poland**. 17-19th October 2008
- XLIII Congress of Polish Biochemical Society, **Olsztyn, Poland**. 7-11th September 2008
- XIII International Congress of Histochemistry and Cytochemistry, **Gdañsk**, **Poland**. 23-27th August 2008
- XXXV Szkoła Zimowa Wydziału Biochemii, Biofizyki i Biotechnologii UJ 'Struktura a funkcja bialek i kwasow nukleinowych', Zakopane, Poland. 23-26th February 2008
- Heme Oxygenases 2007, The 5th International Congress, **Krakow, Poland**. 5-9th September 2007
- Trends in vascular biology. **Brixen, Italy.** 3-5th May 2007
- XXXIV Szkoła Zimowa Wydziału Biochemii, Biofizyki i Biotechnologii UJ, **Zakopane, Poland**. 7-11th March 2007
- IX Cell Biology Conference, Łódź, Poland. 15-17th September 2005

Relevant courses attended

Academic year 2004/2005

- Principle and perspectives of gene therapy
- Glycobiology in medicine
- Molecular mechanisms of angiogenesis

- Nuclear receptors in gene regulation and diseases
- Laboratory practice

Academic year 2005/2006

- Gene transfer techniques
- Mechanisms of cell trafficking. From leukocyte homing to metastasis
- Photobiology and photomedicine biophysical principles
- Laboratory practice

Field of Research

- Vascular biology: mechanisms of angiogenesis and vasculogenesis.
- Medical biotechnology: gene and cell therapy in modulation of neovascularization and inflammation.
- Role of hypoxia in regulation of gene expression.
- Role of heme oxygenase-1 and other antioxidant genes in inflammation and neovascularization in cancer and cardiovascular system.
- Pharmacological modulation of inflammation and neovascularization.

Current Research Interest

- Effect of heme oxygenase-1 (HO-1) on differentiation of mesenchymal stem cells.
- Statins as pharmacological enhancers of proangiogenic activity in human CD34+ progenitor cells.
- Investigation the effect of heme oxygenase-1 (HO-1) on differentiation of progenitor cells.
- Analyze the molecular mechanisms responsible for regulation of hemangioblastic genes and effect of diabetes and antidiabetic drugs on differentiation of hemangioblasts.
- Investigation the role of HO-1 and HO-1-regulated transcription factors (especially c/EBP, PPAR and HIF families) in the diabetes-dependent modulations of stem cell differentiation.
- Investigation the influence of (GT)n polymorphism of heme oxygenase-1 (HO-1) promoter on human endothelial cells, namely on their angiogenic potential, inflammatory reaction and resistance to oxidative stress.
- Involvement of heme oxygenase-1 (HO-1) pathway in anti-inflammatory activities of PTX *in vitro* and *in vivo*.

Publications

- Jozkowicz A., Was H., **Taha H.**, Kotlinowski J., Mleczko K., Cisowski J., Weigel G., Dulak J. *15d-PGJ2 upregulates synthesis of IL-8 in endothelial cells through induction of oxidative stress*. **Antioxidants Redox Signaling** 10(12):2035-2046 2008.
- M.A. Papiez, A. Cierniak, W. Krzysciak, M. Bzowska, **H.M. Taha**, A. Jozkowicz and M. Piskula. *The changes of antioxidant defense system caused by quercetin administration do not lead to DNA damage and apoptosis in the spleen and bone marrow cells of rats.* **Food and Chemical Toxicology** 46(9):3053–3058 2008.
- Papiez M.A., Dybala M., Sowa-Kucma M., Krzysciak W., Taha H., Jozkowicz A., Nowak G. Evaluation of oxidative status and depression-like status in Brown Norway rats with acute myeloid leukemia. Progress in Neuro-Psychopharmacology and Biological Psychiatry 33(4):596-604 2009.
- Taha H., Grochot-Przeczek A., Was H., Kotlinowski J., Kozakowska M., Marek A., Skrzypek K., Lackowska B., Balcerczyk A., Mustafa S., Dulak J., Alicja Jozkowicz A. Modulation of inflammatory response by pentoxifylline is independent of heme oxygenase-1 pathway. Journal of physiology and pharmacology 60(2):3-12 2009.
- Hevidar Taha, Klaudia Skrzypek, Ibeth Guevara, Anneliese Nigisch, Stefan Mustafa, Anna Grochot-Przeczek, Pawel Ferdek, Halina Was, Jerzy Kotlinowski, Magdalena Kozakowska, Aneta Balcerczyk, Lucie Muchova, Libor Vitek, Guenter Weigel, Jozef Dulak and Alicja Jozkowicz. Role of Heme Oxygenase-1 in Human Endothelial Cells. Lesson from the Promoter Allelic Variants. Arteriosclerosis, Thrombosis, and Vascular Biology 30(8):1634-1641 2010.
- Agnieszka Jazwa, Paulina Kucharzewska, Justyna Leja, Anna Zagorska, AleksandraSierpniowska, Jacek Stepniewski, Magdalena Kozakowska, **Hevidar Taha**, Takahiro Ochiya, Rafal Derlacz, Elisa Vahakangas, Seppo Yla-Herttuala, Alicja Jozkowicz, Jozef Dulak. *Combined vascular endothelial growth factor-A and fibroblast growth factor 4 gene transfer improves wound healing in diabetic mice*. **Genetic Vaccines and Therapy** 8:6 2010.
- Halina Was, Małgorzata Sokolowska, Aleksandra Sierpniowska, Paweł Dominik, Klaudia Skrzypek, Bozena Lackowska, Antoni Pratnicki, Anna Grochot-Przeczek, Hevidar Taha, Jerzy Kotlinowski, Magdalena Kozakowska, Andrzej Mazan, Witold Nowak, Lucie Muchova, Libor Vitek, Anna Ratajska, Jozef Dulak, Alicja Jozkowicz. Effects of heme oxygenase-1 on induction and development of chemically induced squamous cell carcinoma in mice. Free Radicals Biology & Medicine. 51(9):1717-1726. 2011.

- Agnieszka Jazwa, Mateusz Tomczyk, **Hevidar M Taha**, Elisa Hytonen, Mateusz Stoszko, Lorena Zentilin, Mauro Giacca, Seppo Yla-Herttuala, Costanza Emanueli, Alicja Jozkowicz and Jozef Dulak. *Arteriogenic therapy based on simultaneous delivery of VEGF-A and FGF4 genes improves the recovery from acute limb ischemia.* **Vascular Cell**. 5(1):13. 2013.
- Jerzy Kotlinowski, Anna Grochot-Przeczek, Hevidar Taha, Magdalena Kozakowska, Bartosz Pilecki, Klaudia Skrzypek, Aleksandra Bartelik, Rafal Derlacz, Anton J.G. Horrevoets, Attila Pap, Laszlo Nagy, Jozef Dulak, Alicja Jozkowicz. PPARγ activation but not PPARγ haplodeficiency affects proangiogenic potential of endothelial cells and bone marrow-derived progenitors. Cardiovascular Diabetology. 13:150. 2014.
- Neli Kachamakova-Trojanowska, Witold Nowak, Krzysztof Szade, Jacek Stepniewski, Karolina Bukowska-Strakova, Monika Zukowska, Hevidar Taha, Antonina Chmura-Skirlinska, Michael Beilharz, Jozef Dulak, Alicja Jozkowicz. Generation of functional endothelial cells with progenitor-like features from murine induced pluripotent stem cells. Vascular Pharmacology. 86:94-108. 2016.
- Witold Norbert Nowak, Hevidar Taha, Neli Kachamakova-Trojanowska, Jacek Stępniewski, Joanna Agata Markiewicz, Anna Kusienicka, Krzysztof Szade, Agata Szade, Karolina Bukowska-Strakova, Karolina Hajduk, Damian Klóska, Aleksandra Kopacz, Anna Grochot-Przęczek, Kathrin Barthenheier, Camille Cauvin, Józef Dulak and Alicja Józkowicz. Murine bone marrow mesenchymal stromal cells respond efficiently to oxidative stress despite the low level of heme oxygenases 1 and 2. Antioxidants and Redox Signaling. 29(2): 111-127. 2018.
- Witold Nowak, **Hevidar Taha**, Joanna Markiewicz, Neli Kachamakova-Trojanowska, Jacek Stępniewski, Damian Kloska, Urszula Florczyk, Rafal Nizankowski, Marzena Frołow, Zbigniew Walter, Jozef Dulak and Alicja Jozkowicz. *Atorvastatin and conditioned media from atorvastatin-treated human hematopoietic stem/progenitor-derived cells show proangiogenic activity in vitro but not in vivo.* **Mediators of Inflammation**. In press.
- **Hevidar Taha.** Effect of pentoxifylline on expression of proinflammatory cytokines. **Duhok medical Journal**. In press.

Language Abilities

English: ILR Level 4
Arabic: ILR Level 5
Kurdish: ILR Level 5
Polish: ILR Level 3

REFEREES

- Prof. Alicja Jozkowicz, PhD, DSc, Department of Medical Biotechnology, Faculty of Biochemistry, Biophysics and Biotechnology, Jagiellonian University, Krakow, Poland (alicja.jozkowicz@uj.edu.pl)
- Prof. Jozef Dulak, PhD, DSc, Department of Medical Biotechnology, Faculty of Biochemistry, Biophysics and Biotechnology, Jagiellonian University, Krakow, Poland (jozef.dulak@uj.edu.pl)