#### CURRICULUM VITAE

NAME/SURNAME: Masoumeh - Varedi PLACE OF BIRTH: Shiraz - IRAN

**WORK ADDRESS:** Department of Physiology, Medical School,

Shiraz University of Medical Sciences, Shiraz, IRAN,

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**EMPLOYMENT:** 

November 2015 - present Professor, Department of Physiology, Medical School. Shiraz

University of Medical Sciences, Shiraz, IRAN

October 2007-2015 Associate Professor, Department of Physiology,

Medical School. Shiraz University of Medical Sciences, Shiraz,

**IRAN** 

August 2000- 2007 Assistant Professor, Department of Physiology,

Medical School. Shiraz University of Medical Sciences, Shiraz,

**IRAN** 

November 1997- July 2000 Postdoctoral Program, Department of Molecular Biology,

University of Texas, Medical Branch, Texas, USA.

May 1983 - April 1991 Research Associate and Lecturer, Department of Physiology,

Medical School, Shiraz University, Shiraz, IRAN.

Jan. 1978 - April 1983 Research Assistant & Supervisor of

Serology / Immunology laboratory, Department of Pathology,

Medical School, Shiraz University, Shiraz, IRAN

**EDUCATION:** 

Postdoctoral Fellowship

1997-2000

Department of Molecular Biology, Shriners Hospital,

Medical Branch, University of Texas, USA

October 1992-1997 Ph.D. (Experimental Surgery/ Tissue Repair Pathophysiology),

Department of Reconstructive Surgery, Faculty of Graduate Studies and Research, University of Alberta, Edmonton,

CANADA.

July 1978-1984 M.Sc. (Medical Physiology), Department of Physiology, Faculty of

Graduate Studies and Research, Shiraz University, Shiraz, IRAN

June 1978 B.Sc. (Medical Technology/Medical Laboratory

Sciences), School of Medicine, Shiraz (Pahlavi) University,

Shiraz, IRAN.

Ph. D. THESIS:

The effects of re-organization of cytoskeleton and extracellular matrix on gene expression, growth and apoptosis of fibroblasts.

**M.Sc. THESIS:** 

Effects of opium alkaloids on blood sugar, liver glycogen, serum

insulin level, and the role of β-adrenergic receptors.

### **AWARDS:**

- \* Postdoctoral Fellowship Award (Sept. 1998): Department of Molecular Biology, Shriners Burns Hospital, University of Texas, Medical Branch, Galveston, Texas, USA
- \* 75th Anniversary, Faculty of Medicine Graduate Student Award: (Sept. 1992), Faculty of Graduate Studies and Research University of Alberta, Edmonton, CANADA.
- \* Gordian J Kaplan Graduate Student Award and Mary Louise Imrie Graduate Student Award: (April 1994), Faculty of Graduate Studies and Research, University of Alberta, Edmonton, CANADA.
- \* The Prize for Innovation in Biomedical Science Research: Optimizing culture condition for human adipose tissue culture. Khorasan-e- Razavi prize, Mashhad, IRAN
- \* The Prize for outstanding article: Processed amniotic fluid accelerates diabetic wound healing. The 2<sup>nd</sup> International Burn Symposium, Tehran, IRAN.

### **INTERNATIONAL & NATIONAL GRANTS:**

- \* Shriners Burn Research fellowship grant (July, 1998), Shriners Burns Hospital, Cell & Molecular Biology Department, University of Texas Medical Branch, USA
- \* The Firefighters' Burn Trust Fund of the University of Alberta (March 1995), Department of Surgery, University of Alberta, Edmonton, CANADA.

- \* The Medical Research Council of Canada (February 1997), University of Alberta, Edmonton, CANADA. (Joint Grant; Professor, Paul G. Scott.)
- \* Research Council of Shiraz University of Medical Sciences, Shiraz, Iran, No. 92-6734.
- \* Research Council of Shiraz University of Medical Sciences, Shiraz, Iran, No. 90-5955.
- \*Research Council of Shiraz University of Medical Sciences, Shiraz, Iran, No. 90-5699.
- \*Research Council of Shiraz University of Medical Sciences, Shiraz, Iran, No. 90-5818.
- \*Research Council of Shiraz University of Medical Sciences, Shiraz, Iran, 87-4276.
- \*Research Council of Shiraz University of Medical Sciences, Shiraz, Iran, No. 80-1390.
- \*Research Council of Shiraz University of Medical Sciences, Shiraz, Iran, No. 84-2628.
- \*Research Council of Shiraz University of Medical Sciences, Shiraz, Iran, No. 87-4164.
- \*Research Council of Shiraz University of Medical Sciences, Shiraz, Iran, No. 92-6734
- \*Research Council of Shiraz University of Medical Sciences, Shiraz, Iran, No.94-10137
- \*Research Council of Shiraz University of Medical Sciences, Shiraz, Iran, No. 95-11893
- \*Research Council of Shiraz University of Medical Sciences, Shiraz, Iran, No. 95-12078

# PUBLICATIONS (SIENTIFIC ORIGINAL ARTICLES) & CORRESPONDENCE 66\*\*

- M. Tatar, **M. Varedi** & F. Naghibalhossaini. Epigenetic Effects of Blackberry Extract on Human Colorectal Cancer Cells. (2021), Nutrition and Cancer, DOI: 10.1080/01635581.2021.1952454.
- M. Tatar, Z. Bagheri, **M. Varedi** & F. Naghibalhossaini. Blackberry Extract Inhibits Telomerase Activity in Human Colorectal Cancer Cells (2018), Nutrition and Cancer, doi.org/10.1080/01635581.2018.1506491.
- M. S. Owji, **M. Varedi** \*, F. Naghibalhossaini, & N. Pajouhi. Thyroid Function Modulates Lung Fluid & Alveolar Viscoelasticity in Mechanically Ventilated Rat (2020), Journal of Surgical Research, (253)272 279. doi.org/10.1016/j.jss.2020.03.060.
- Bagheri Zohreh, **Varedi Masoumeh** \*, Naghibalhossaini Fakhraddin & Omrani Ghulam H. Apigenin-mediated Alterations in Viability and Senescence of SW480 Colorectal Cancer Cells Persist in The Presence of L-thyroxine (2019); doi: 10.2174/1871520619666190704102708

- Z. Shahedi, **M. Varedi** \*, Z. Bagheri, A. Moatari, H. Sharafpour. Attenuation by L-thyroxine of oxidant-induced gut epithelial damage. Iranian Journal of Basic Medical Sciences; (2019);22:1091-1096. doi: 10.22038/ijbms.2019.37169.8852
- Tatar M., Bagheri Z., **Varedi M.** & Naghibalhossaini F. Blackberry Extract Inhibits Telomerase Activity In Human Colorectal Cancer Cells. Nutrition and Cancer (2018). 10.1080/01635581.2018.1506491
- **Varedi.** M \*. Pajouhi N., Owji M., Naghibalhosaini F.D., Omrani G.H. Regulation by thyroid function of claudin 4 protein expression and myosin light chain phosphorylation in lung injury. The Clinical Respiratory Journal (2015) DOI:10.1111/crj.12418.
- Pajouhi N., Owji M., Naghibalhosaini F.D.Omrani G.H. and **Varedi M** \*. Modulation by thyroid hormone of myosin light chain phosphorylation and aquaporin 5 protein expression in intact lung J Physiol Biochem (2015); 71:99–106
- Hadi Feizi, Afagh Moattari, Zahra, Amirghofran, and **M. Varedi** \*. Methimazole-induced hypothyroidism enhances HSV-1 infectivity without altering circulating leukocytes in the rat. Journal of Ardabil University of Medical Sciences, (2015), 15:1, 56-65
- A. Bazrafshan, M. Owji, M. Yazdani, and **M. Varedi** \*. Activation of mitosis and angiogenesis in diabetes impaired wound healing by processed human amniotic fluid. Journal of Surgical Research; (2014), 188:545-552.
- **M. Varedi**, A.Moattari, Z. Amirghofran, Z.Karamizadeh, and H.Feizi. Effects of hypo- and hyperthyroid states on herpes simplex virus infectivity in the rat. Endocr Res, 2014; 39(1): 50–55
- Ahmad Ghorbani, Seyed Amir Jalali, **M. Varedi**. Isolation of adipose tissue mesenchymal stem cells without tissue destruction: A non-enzymatic method. 2014; Tissue and Cell 46 54–58
- **M.Varedi**, H.Shiri, A.Moatari, G.R. Omrani, and Z. Amirghofran. Hyperthyroid State or *in vitro* Thyroxine Treatment Modulates T<sub>H</sub>1/T<sub>H</sub>2 Responses during Exposure to HSV-1 Antigens. J Immunotoxicol, 2014; 11(2): 160–165
- A. Ghorbani, Gh.H Omrani, Moosa-Al-Reza Hajzadeh, and **M. Varedi** \*. Proinsulin C-peptide Inhibits Lipolysis in Diabetic Rat Adipose Tissue Through Phosphodiestrase-3B. Enzyme. Horm. & Metab.Res. 2012; 44:1-6.

- A.Ghorbani, Gh.H Omrani, Moosa-Al-Reza Hajzadeh, and **M. Varedi** \*. Effects of Rat C-peptide-II on Lipolysis and Glucose Consumption in Cultured Rat Adipose Tissue . Exper.Clin. Endo.Diabetes; Exp Clin Endocrinol Diabetes 2011;119:343-347
- Akbari Z., **Varedi M**. \*, Dehghani Gh., and Tabei S.Z. Quantitative and qualitative evaluation of healing in full thickness cutaneous wounds. Kowsar Medical Journal, Spring 2011; Vol.16:1, 27-31.
- A.Ghorbani, **M. Varedi** \*, Moosa-Al-Reza Hajzadeh, and Gh.H Omrani. Diabetes induces depot-specific alterations in adipocyte diameter and mass of adipose tissues in the rat. Exper.Clin. Endo.Diabetes (2010) 118: 1-7.
- Ghorbani A, **Varedi M**, Ranjbar Omrani GR. Effects of Aging Associated with Weight Gain on The Cell Size. and Heterogeneity of Different Fat Depots in The Rat. Iranian Journal of Endocrinology & Metabolism. (2010) Vol. 11 No. 6.
- M. Varedi\*, Z.Akbari, Gh.A. Dehghani and S.Z. Tabeie. Local administration of L-arginine Accelerates Wound Closure. IJBMS, 2009; Vol. 12, No.3-4.
- M. Varedi \*, E.W. Englander. TGF-β1 Latency Associated Peptide Promotes Remodeling of Healing Cutaneous Wounds in the Rat. Iranian Journal of Medical Sciences, (2006); Vol 31, No 2.
- **M. Varedi**; R. Chinery; G.H. Greeley; D.N. Herndon and E.W Englander. Thermal injury effects on intestinal crypt cell proliferation and death are cell position dependent. Am. J. Physiol. 2001; 280(1):G157-163.
- **M. Varedi**; H.M Lee; G. H. Greeley; D. N. Herndon, and E. Englander. Gene expression in intestinal epithelial cells, IEC-6, is altered by burn injury-induced circulating factors. Shock 2001; 16(4): 259-263.
- **M. Varedi**, M.G. Jeschke; E.W Englander; D. N. Herndon; and R.E. Barrow. Serum TGF-beta in thermally injured rats. Shock 2001; 16(5):380-382.
- **M. Varedi**, P.G. Scott, E.E. Tredget. Stress-relaxation and contraction of a collagen matrix induces expression of TGF-beta and triggers apoptosis in dermal fibroblasts. Biochem. Cell Biol.; 2000; 78:427-436.
- **M. Varedi**, G. H. Greeley, D. N. Herndon, and E. Englander. A thermal injury-induced circulating factor(s) compromises intestinal cell morphology, proliferation and migration. Am. J. Physiol. 1999; 277 (Gastrointest. Liver Physiol. 40) G175-G182.

- M. Varedi, P.G. Scott, A. Ghahary, and E.E. Tredget. Cytoskeleton Regulates Expression of genes for Transforming Growth factor-\$1 and extracellular matrix Proteins in dermal fibroblasts. J. Cell. Physiol. 1997; 178: 192-199.
- **M.** Varedi, E.E. Tredget, P.G. Scott, Y.J. Shen, and A. Ghahary. Alteration in Cell Morphology Triggers Transforming Growth Factor-β1, Collagenase and Tissue Inhibitor of Metalloproteinases-I Expression in Normal and Hypertrophic Scar Fibroblasts. J. Invest. Dermatol. 1995; 104:118-123.
- E.J. Sanders, **M. Varedi**, and A.S. French. Cell Proliferation in the Gastrulating Chick Embryo: A Study Using BrdU Incorporation and PCNA Localization. Development 1993; 118: 389-399.
- **M. Varedi**, & E. Englander. TGF-\(\beta\)1 Latency Associated Peptide Promotes Remodeling of Cutaneous Healing Wounds. Iranian Journal of Medical Sciences 2006; 31(2): 65-69.
- **M. Varedi**, The JAK-STAT Signaling Pathway of Interferon System: *Snapshots*. Iranian Journal of Immunology; 2005, 2(2): 3-13.
- Gh. H. Omrani, A. Zarifkar, **M. Varedi**, S. Nasseri Moghaddam and M. S. S. Salles. Effect of Intracisternal TRH on the Basal Acid Output and Serum Gastrin in Hyperthyroid Rats. Iranian Journal of Medical Sciences. 1992; 17(1): 87-91.
- S. Sadeghi-Hasanabadi, K. Nader, B. Abdolahi, Z. Tabei, **M. Varedi,** and M. Imani. An Outbreak of Leishmaniasis with Unusual Presentation in Shiraz, Iran. Transaction of the Royal Society of Tropical Medicine and Hygiene 1987; 81:359.
- **M. Varedi**, Gh. Omrani, and M. S. S. Salles. The Effects of Opium Alkaloids on Glucoregulatory Factors. Iranian Journal of Medical Sciences. 1986; 13: 22-26.

### **CONFERENCE PRESENTATIONS & ABSTRACTS:**

- Pajouhi N., Varedi M., Owji S.M., Naghibalhossaini F., Omrani R.GH. Ventilator induced lung injury, Myosin light chain phosphorylation and claudin 4 expression in rat lung are thyroid dependent. 22 <sup>nd</sup> Iranian Congress of Physiology and Pharmacology; December 15-17; 2009, Tehran, IRAN.
- A. Bazrafshanm, M. Owji, M. Yazdani and **M. Varedi.** Processed human amniotic fluid accelerates wound closure and promotes maturation of granulation tissue and remodeling of excisional wound. The Second Internatioal Tehran Burn Symposium. Tehran, Bahman , January , , 2013.
- Ghorbani A, Omrani GR, Hadjzadeh MR, **Varedi M.** Antilipolytic effect of proinsulin C-peptide in diabetic rat. International Conference and Exhibition on Metabolism & Systems Biology. Oral Presentation, 20-22 Feb, 2012, San Francisco, USA.

- A.Ghorbani, **M. Varedi,** Moosa-Al-Reza Hajzadeh, and Gh.H Omrani. Establishment of Adipose tissue culture in IRAN for the first time. The First Research Achievement Congress, Mashad, Dec. 2010.
- A. Bazrafshanm, M. Owji, M. Yazdani and **M. Varedi.** The effects of amniotic fluid on excisional wound in normal and diabetic rats. The 17<sup>th</sup> National and 5<sup>th</sup> International Iranian Biology Congerence. 2-6 Sept. 2012; Kerman, IRAN.
- Moattari A, Ashrafi H., Arabpour M. and **Varedi M**. Antigenic variations of human influenza virus in Shiraz, Iran.6<sup>th</sup> European Congress on Tropical Medicine and International Health. September 6-10, 2009 Verona, ITALY.
- Ghorbani A, **Varedi M**, Omrani GH. Streptozotocin-induced diabetes alters fat cell size and homogeneity in a depot specific manner in rat. Iranian Journal of Diabetes and Obesity Pre-Issue Spring 2009. International Congress on Diabetes and its complications, 19-21 May 2009, Yazd-IRAN.
- Ghorbani, A.; **Varedi, M**.; Hajzadeh, M.A.; and Omarani, GH. Effects of Aging Associated with Weight Gain on The Cell Size & Heterogeneity of Different Fat Depots in The Rat. Iranian Journal of Endocrinology & Metabolism
- **Varedi M.,** Keshavarz S., Moattari A., Owji M., The Effects of Acute Hyperthyroxinemia on Adrenal Reserve and Resistance to HSV-1 Infection in The Rat. 19<sup>th</sup> Iranian Congress of Physiology and Pharmacology; December 15-17; 2009, Tehran, IRAN.
- H. Faizee; A. Moattari; & **M. Varedi.** The Effects of serum levels of thyroid hormones on the susceptibility to herpes simplex virus (HSV-1) infection in the rat. 18<sup>th</sup> Iranian Congress of Physiology and Pharmacology 2007; August 26-30, Mashhad, IRAN.
- **M. Varedi;** EE. Tredget and PG, Scott. Alterations in mechanical properties of extracellular matrix alter human fibroblasts activity. 17<sup>th</sup> International Congress of Geographic Medicine 2004; November 23-25; Shiraz, IRAN.
- Z. Akbari, G.H. Dehghan; SZ. Tabei & **M. Varedi**. Effects of L-arginine on the post-inflammatory phases of cutaneous wound healing. 16<sup>th</sup> Iranian Congress of Physiology and Pharmacology 2003; May 9-13, Tehran, IRAN.
- **M. Varedi**, G. H. Greeley, D. N. Herndon and E. Englander. The effects of burn injury on the small intestine in the rat. 32<sup>nd</sup> Annual meeting of American Burn Association 1999; March 23-28, Orlando, Florida, USA.
- **M. Varedi**, G. H. Greeley, D. N. Herndon, and E. Englander. Mechanisms involved in post-burn gut mucosal atrophy: Morphology, migration, proliferation and apoptosis of intestinal epithelial

- cells. Trauma, Infection and Repair Research Presentation 1998; Sept. 16, University of Houston, Medical Branch, Galveston, TX. USA.
- **M. Varedi**, P. G. Scott, E. E. Tredget. Re-Organization of the cytoskeleton and matrix modulate gene expression, growth and apoptosis of/in dermal fibroblasts. 7<sup>th</sup> Annual Meeting of The Wound Healing Society 1997; Jun. 11-14, Nashville, Tennessee, U.S.A.
- **M. Varedi**, P.G., Scott, A. Ghahary and E. E. Tredget. Cytoskeleton Regulates the Gene Expression of TGF-β1 and Extracellular Matrix Proteins. 6<sup>th</sup> International Congress on Cell Biology and 36<sup>th</sup> American Society for Cell Biology Annual Meeting 1996; Dec. 7-11, San Francisco, CA. U.S.A.
- **M.** Varedi, E. E. Tredget, P.G. Scott, and A. Ghahary. The Role of Cell Cytoskeletal Organization in Gene Expression in Dermal Fibroblasts. Research Revelations 1995; March 4, HMRC, University of Alberta, Edmonton, Canada.
- **M. Varedi**, E. E. Tredget, P.G. Scott, and A. Ghahary. Alterations in Cell Morphology Induce TGF-ß1, Collagenase and TIMP-I Expression in Dermal Fibroblasts. 37<sup>th</sup> Annual Meeting of Canadian Federation of Biological Societies 1994; Jun. 18-20, Montreal, Quebec, Canada.
- A. Ghahary, Y. J. Shen, B. Nedelec, **M. Varedi**, P.G. Scott, E. E. Tredget. Differential Effects of Interferons Gamma and Alpha 2b on Expression of Collagenase and TIMP-I mRNA in Human Hypertrophic and Normal Dermal Fibroblasts. 1<sup>st</sup> Joint Meeting of The Wound healing Society and The European Tissue Repair Society 1993; Aug. 22-25, Amsterdam, The Netherlands.
- **M. Varedi,** E. E. Tredget, P.G. Scott, and A. Ghahary. Regulation of Transforming Growth Factor-beta Expression in Normal and Hypertrophic Scar Fibroblasts. Resident research Day, 1993; May 14, Department of Surgery, Faculty of Medicine, University of Alberta, Edmonton, Canada.
- **M. Varedi**, Gh. H. Omrani, M.S. Shahid Salles (1986). The Effect of Opium Alkaloids on Blood Sugar, Liver Glycogen and Serum Insulin Level, and The Role of β-Adrenergic Receptors in These Effects. 7<sup>th</sup> Iranian International Congress of Physiology and Pharmacology 1986; May 22-26, Tabriz University, Tabriz, IRAN.
- **M. Varedi**, Gh. H. Omrani (1989). Immune Suppressive Therapy in Type-I Insulin Dependent Diabetes Mellitus (IDDM) in an animal model. 9<sup>th</sup> Iranian International Congress of Physiology and Pharmacology 1989; Jul. 15-18, Shahid Beheshti University, Tehran, IRAN.
- M.S. Shahid Salles, K Sharifi Hossaini & **M. Varedi**. Poikilothermia of ethyl alcohol and the possible role of brain serotonin. 12<sup>th</sup> Annual Meeting of Neuroscience Society 1982; Oct 31-Nov 5, Minneapolis, MN. USA.

### **Book Chapters:**

H. R. Rezai, S. Ardehali, A. Kharazmi, S. Motamedi and **M. Varedi** (1986). Interpretation of Immunology and Serology Tests. 1st Edition, Shiraz University, Shiraz, IRAN.

## **Research Interest:**

My laboratory is located in the Department of Physiology, 6the floor, Building 3, Medical School. Shiraz University of Medical Sciences, Shiraz, IRAN. Studies in my laboratory are centered on:

- 1-Tissue injury & repair
- 2- Trauma & MOSF & epithelial-endothelial barrier malfunction
- 3- Thyroid hormones & viral immunity
- 4- Thyroid hormones, flavonoid & cancer
- 4- Diabetes & Adipose tissue