

**CURRICULUM VITAE**

**Danesh Javeshghani, Ph.D.; D.V.M.**

**EDUCATION:**

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Shiraz University, Shiraz, Iran	DVM	1974-83	Veterinary Medicine
McGill University, Montréal (Québec) Canada	M.Sc	1993-95	Physiology
McGill University, Montréal (Québec) Canada	Ph.D	1995-01	Physiology
Institut de recherches cliniques de Montréal (IRCM)	Postdoc. fellow	2001-05	Expertl. Hypertension & Mol. Reprod. Res. Lab.
Lady Davis Institute for Medical Research	Postdoc. fellow	2005-07	Hypertension and Vascular Research Unit
Lady Davis Institute for Medical Research	Research Associate	2007-2008	Hypertension and Vascular Research Unit
Jahrom university of medical sciences (Iran)	Assistant professor	2008- present	Vascular biology

**RESEARCH EXPERTISE:**

- I am a cardiovascular physiologist and a veterinarian. I have gained expertise through study of the role of ANF in pregnancy, nitric oxide synthase (NOS) in septic shock and reproductive hormones in menopause by using different models (large and small animals, and cells) and different techniques including anesthesia and surgery for measurement of hemodynamic and renal function, use of pressurized myograph, HPLC, confocal microscopy, radio-labelling and binding, and molecular techniques to study the expression and role of different mediators in the regulation of vascular tone and blood pressure.
- **At McGill** in general I have used in research:
  - ✓ Atrial balloon distension in large animals
  - ✓ Hemodynamic measurements in :
    - ✓ large animals: systolic, diastolic and mean blood pressure, cardiac output (thermo-dilution method).
    - ✓ small animals: tail-cuff BP measurement (non-invasive method)
    - ✓ telemetry in mice
  - ✓ Renal Function evaluation.
    - a. Glomerular Filtration Rate
    - b. Renal Plasma Flow
    - c. Filtration Fraction
  - ✓ Functional and mechanical studies of resistance vessels using pressurized myographs

- ✓ Western blotting
- ✓ Immunoprecipitation
- ✓ Radio-iodination of pituitary hormones (FSH, LH, TSH) and angiotensin II
- ✓ Radioimmunoassay (RIA) and enzyme-linked immunosorbent assay (ELISA)
- ✓ Radioligand binding assay (ovarian, testes & mesenteric vessel membrane receptors)
- ✓ Immunohistochemistry
- ✓ Confocal microscopy
- ✓ Cell culture (vascular smooth muscle cells)
- ✓ Cryostat sectioning
- ✓ Nitric oxide synthase assay
- ✓ Nitric oxide measurement by chemiluminescence
- ✓ Reactive oxygen species measurements in tissues by chemiluminescence
- ✓ Reactive oxygen species measurements in a single mesenteric artery by chemiluminescence
- ✓ Nitrite measurement by spectrophotometry
- ✓ NADH consumption by spectrophotometry
- ✓ Xanthine oxidase assay

**In Iran extra training** in addition to Veterinary Medicine program

In **Organic Chemistry** and **Pharmacology** as student

Synthesis of diphenylhydantoin (antiepileptic).

Partial synthesis of an antihelminthic drug.

Synthesis of chlorinated antimicrobial drugs.

Formulation and production of tablets of the antibacterial and antiepileptic drugs.

Synthesis of Javex detergent

Evaluation of drug purity (by assessing melting point).

Evaluation of antiepileptic drug efficacy in mice (cooperative role).

## **PUBLICATIONS:**

### **Peer-Reviewed Papers:**

1. **Javeshghani D**, Mukaddam-Daher S, Fan L, Gutkowska J, Nuwayhid B, Quillen EW: Control of atrial natriuretic factor by right and left atrial distension in pregnant sheep. *Am. J. Physiol.* 268(6 Pt 2): R1411-7, 1995.
2. Fan L, **Javeshghani D**, Mukaddam-Daher S, Gutkowska J, Nuwayhid BS, Quillen EW: Effects of angiotensin II on plasma atrial natriuretic factor in nonpregnant and pregnant ewes. *Can. J. Physiol. & Pharmacol.* 73(5): 644-50, 1995.
3. Fan L, **Javeshghani D**, Mukaddam-Daher S, Gutkowska J, Nuwayhid BS, Quillen EW: Renal effects of prolonged intrarenal infusions of angiotensin II and atrial natriuretic peptide in sheep. *J. Cardiovasc. Pharmacol.* 34(3): 427-33, 1999.
4. Metha S, **Javeshghani D**, Robert D, Magder S: Porcine endotoxemic shock is associated with increased expired nitric oxide. *Crit. Care Med.* 27(2):385-93, 1999.

5. **Javeshghani D**, Sakkal D, Mori M, Hussain S: Regulation of diaphragmatic nitric oxide synthase expression during hypobaric hypoxia. *Am. J. Physiol. Lung Cell. Mol. Physiol* 279(3): L520-L527, 2000.
6. **Javeshghani D**, Magder S: Presence of nitrotyrosine with minimal iNOS induction in LPS treated pigs. *Shock*. 16(4):304-11, 2001.
7. **Javeshghani D**, Magder S: Regional changes in constitutive NOS and the hemodynamic consequences of its inhibition in LPS treated pigs. *Shock* 16(3):232-8, 2001.
8. Magder S, **Javeshghani D**, Cernacek P, Giaid A: Regional distribution of endothelin-1 and endothelin converting enzyme-1 in porcine endotoxemia. *Shock* 16(4):320-5, 2001.
9. Krishnaurthy H, Kats R, Danilovich N, **Javeshghani D**, Sairam MR: Intracellular communication between Sertoli Cells and Leydig Cells in the Absence of Follicle-stimulating Hormone Receptor signalling. *Biol. Reprod.* 65(4):1201-7, 2001.
10. **Javeshghani D**, Magder S, Quinn M, Hussain SNA: Molecular characterization of a superoxide generating NAD(P)H oxidase in ventilatory muscles. *Am. J. Resp. Crit. Care Med.* 165(3):412-18, 2002.
11. Danilovich N, **Javeshghani D**, Xing W, Sairam MR.: Endocrine alterations and signaling changes associated with declining ovarian function and advanced biological aging in follicle-stimulating hormone receptor haploinsufficient mice. *Biol. Reprod.* 67(2):370-8, 2002.
12. **Javeshghani D**, Hussain SNA, Quinn M, Magder S: Superoxide production in the vasculature of lipopolysaccharide treated rats and pigs . *J. Shock* 19(5):486-93, 2003.
13. **Javeshghani D**, Touyz RM, Sairam MR, Virdis A, Fritsch Neves M, Schiffrin EL: Attenuated responses to angiotensin II in follitropin receptor knockout mice, a model of menopause-associated hypertension. *Hypertension* 42(4): 761-7, 2003.
14. Touyz RM, Mercure C, He Y, **Javeshghani D**, Yao G, Callera GE, Yogi A, Lochard N, Reudelhuber TL. Angiotensin II-dependent chronic hypertension and cardiac hypertrophy are unaffected by gp91phox-containing NADPH oxidase. *Hypertension*. 45(4):530-7,2005.
15. **Javeshghani D**, Sairam MR, Neves MF, Schiffrin EL, Touyz TM: Angiotensin II induces vascular dysfunction without exacerbating blood pressure elevation in a mouse model of menopause-associated hypertension. *J. Hypertens.* 24(7):1365-73, 2006.
16. Sairam MR, Wang, M Danilovich N, **Javeshghani D**, Masinger D, Early obesity and age-related mimicry of metabolic syndrome in female mice with sex hormonal imbalances. *Obesity* 14(7): 1142-54, 2006.
17. Ko EA, Amiri F, Pandey NR, **Javeshghani D**, Leibovitz E, Touyz RM, Schiffrin EL. Resistance artery remodeling in deoxycorticosterone acetate-salt hypertension is dependent on vascular inflammation: evidence from m-CSF-deficient mice. *Am. J. Physiol. Heart Circ. Physiol.* 292(4): H1789-95, 2006.
18. **Javeshghani D**, Sairam MR, Schiffrin EL, Touyz TM. Increased blood pressure, vascular inflammation, and endothelial dysfunction in androgen-deficient follitropin receptor knockout male mice. *J. Am. Soc. Hypertens.* 1(5): 353-61, 2007.

19. Pu Q, Brassard P, **Javeshghani D**, Iglarz M, Webb RL, Amiri F, Schiffrin EL. Effects of combined AT1 receptor antagonist/NEP Inhibitor on vascular remodeling and cardiac fibrosis in SHRSP. *J. Hypertens.* 26(2): 322-33, 2008.
20. Viel VC, Benkirane K, **Javeshghani D**, Touyz RM, Schiffrin EL. Xanthine Oxidase and Mitochondria Contribute to Vascular Superoxide Anion Generation in DOCA-Salt Hypertensive Rats. *Am. J. Physiol. Heart Circ. Physiol.* 295(1): H281-8, 2008.
21. **Javeshghani D**, Sairam MR, Schiffrin EL, Touyz TM. Potentiation of vascular oxidative stress and nitric oxide-mediated endothelial dysfunction by high-fat diet in a mouse model of estrogen deficiency and hyperandrogenem. *J. Am. Soc. Hypertens.* 3(5): 295-305, 2009.
22. Amiri F, Ko EA, Reudelhuber TL, **Javeshghani D**, Schiffrin EL Deleterious combined effects of salt-loading and endothelial cell restricted endothelin-1 overexpression on blood pressure and vascular function in mice. *J. Hypertens.* 28(6): 1243-1251, 2010.
23. **Javeshghani D**, Barhoumi T, Idris-khodja N, Paradis P, Schiffrin EL. Reduced macrophage-dependent inflammation improves endothelin-1 induced vascular. *J. Hypertens.* 62(1): 112-117, 2013.
24. Ahamadi Vasmejani A, **Javeshghani D**, Baharlou R, Shayestehpour M, Mousavinasab SD, Joharinia N, Endermani SE. Hepatitis A infection in patients with chronic viral liver disease: a cross-sectional study in Jahrom, Iran. *Epidemiol. Infect.* 143(3): 534-539, 2015.

#### **HONORS AND AWARDS:**

2002	Canadian Hypertension Society, <b>Trainee Award</b> (Merck Frosst)
2003	Canadian Hypertension Society, <b>Trainee Award</b> (Merck Frosst)
2005-07	<b>Research Fellowship</b> , Heart and Stroke Foundation of Canada
2005	American Heart Association <b>New Investigator Award (CV Therapeutics)</b>
2005	Société québécoise d'hypertension artérielle <b>Trainee Award</b>
2005	Canadian Hypertension Society <b>Trainee Award</b>
2006	Société québécoise d'hypertension artérielle <b>Trainee Award</b>
2006	Canadian Hypertension Society <b>Trainee Education Award</b>
2007	Société québécoise d'hypertension artérielle <b>Travel Award</b>
2007	<b>Sarah Strathmore Award</b> (McGill)
2007	Société québécoise d'hypertension artérielle <b>Travel Award</b>
2008	LDISA Research award (McGill)
2011	<b>Research Award</b> in 5 <sup>th</sup> Middle East Cardiovascular Congress (MECC) and 2 <sup>nd</sup> CRF symposium held in Kish island, February 2011 (500US\$)
2012	<b>Research Award</b> from IV international cardiovascular congress held in Dubai, UAE, February 2012 (500 Derham)

#### **REVIEWER FOR:**

- Journal of Comparative Biochemistry and Physiology

**SOCIETY MEMBERSHIPS:**

- Canadian Hypertension Society
- Quebec Society of Hypertension
- American Heart Association