### **TEXAS STATE VITA**

# I. Academic/Professional Background

A. Name: Joel Bergh Title: Senior Lecturer

B. Educational Background

Degree	Year	University	Major	Thesis/Dissertation
PhD	2003	University of	Biological Sciences	Osteoblastic voltage-sensitive calcium
		Delaware	_	channels mediate the actions of 1,25-
				dihydroxyvitamin D3 during bone remodeling.
MBA	2001	University of	Finance	
		Delaware		
BS	1996	University of	Biology	
		Houston-Clear Lake		

C. University Experience

Position	University	Dates
Senior Lecturer	Texas State University	2014-Present
Instructor	St. Edward's University	2010-2014

D. Relevant Professional Experience

Position	Entity	Dates
Assistant Director of Business Development and	Pharmaceutical Research Institute,	2006-2007
Finance	Albany College of Pharmacy	
Postdoctoral Research Fellow	Ordway Research Institute, Albany New	2004-2006
	York	

### II. TEACHING

# B. Courses Taught:

### **Texas State University:**

Bio 1320 Modern Biology 1 Bio 1421 Modern Biology 2

Bio 4350Y Introduction to Laboratory Methods

Bio 1330 Functional Biology Bio 4311/5311 Cancer Biology Coordinator Bio 1420 Labs Coordinator Bio 2450 Genetics Lab Fall 2014-Present Spring 2016-Present

Fall 2017

Spring 2018-Present Spring 2018-Present Summer 2016 Fall 2014- Present

### St. Edwards University:

Biol 3324 Human Anatomy and Physiology I and II, Lecture and Lab

Biol 3345 Human Anatomy, Lecture and Lab

Biol 1305 Stem Cell Biology

Biol 1107 Cells, Genetics, and Organ Systems Lab

Biol 1108 Organismal Biology Lab

Biol 3145 Special Topics in Biology - Basic Laboratory Skills

Biol 4435 Cell Biology Lab

# D. Courses Prepared and Curriculum Development:

#### **Texas State University:**

Bio 4350Y Introduction to Laboratory Methods

# St. Edwards University:

Biol 3324 Human Anatomy and Physiology I and II, Lecture and Lab

Biol 3345 Human Anatomy, Lecture and Lab

Biol 1305 Stem Cell Biology

Biol 1107 Cells, Genetics, and Organ Systems Lab

Biol 1108 Organismal Biology Lab

Biol 3145 Special Topics in Biology - Basic Laboratory Skills

# E. Teaching Development

Texas State University
Allies Training Workshop
SXSW Edu
Transition from Service to School Workshop
Multicultural Curriculum Transformation Institute

Spring 2017 Spring 2017 Spring 2017 May 2017

### III. SCHOLARLY/CREATIVE

#### A.Works in Print

#### 1. Books

Essentials of the Living World 7e, By George Johnson and Joel Bergh. McGraw Hill Publishing ISBN13: 9781264156528

### 2. Articles

# a. Refereed Journal Articles:

Mousa S.A., Bergh J.J., Dier E., Rebbaa A., O'Connor L.J., Yalcin M., Aljada A., Dyskin E., Davis F.B., Lin H.Y., Davis P.J.. "Tetraiodothyroacetic Acid, a Small Molecule Integrin Ligand, Blocks VEGF and bFGF-Stimulated Angiogenesis." Angiogenesis. 2008;11(2):183-90.

Lin, H-Y., Lansing, L., Merillon J.M., Davis F.B., Tang H.Y., Shih A, Vitrac X, Krisa S, Keating T, Cao H.J., Bergh, J.J., Quackenbush S., and Davis P.J.. "Integrin AphaVBeta3 Contains a Receptor Site for Resveratrol." FASEB J. 2006 Aug;20(10):1742-4.

Bergh, J.J., Shao, Y., Puente, E.C., Duncan, R.L., and Farach-Carson, M.C.. "Osteoblast Ca<sup>2+</sup> Permeability and Voltage-Sensitive Calcium Channel Expression is Temporally Regulated by 1,25-Dihydroxyvitamin D<sub>3</sub>." American Journal of Physiology – Cell Physiology. 2005 Oct 12.

Mousa, S.A., O'Connor, L.J., Bergh, J.J., Davis, F.B., Scanlan, T.S., and Davis, P.J.. "The Proangiogenic Action of Thyroid Hormone Analogue GC-1 Is Initiated at an Integrin." J of Cardiovascular Pharmacology. 2005 Sep;46(3):356-360.

Bergh, J.J., Lansing, L., Lin, H.-Y., Mohamed, S.N., Davis, F.B., Mousa, S.A., and Davis, P.J.. "Integrin  $\alpha V\beta 3$  Contains a Cell Surface Receptor Site for Thyroid Hormone that is Linked to Activation of MAPK and Induction of Angiogenesis." Endocrinology. 2005 Jul;146(7):2864-71.

Farach-Carson, M.C., Bergh, J.J., and Xu, Y.. "Integrating rapid responses to 1,25-dihydroxyvitamin  $D_3$  with transcriptional changes in osteoblasts:  $Ca^{2+}$  regulated pathways to the nucleus." Steroids. 2004 Aug;69(8-9):543-7.

Bergh, J.J., Xu, Y., and Farach-Carson, M.C.. "Osteoprotegerin expression and secretion is regulated by calcium influx through the L-type voltage-sensitive calcium channel." Endocrinology. 2004 Jan;145(1):426-36.

Bergh, J.J., Shao, Y., Akanbi, K.A., and Farach-Carson, M.C.. "Rodent osteoblastic cells express voltage-sensitive calcium channels lacking a gamma subunit." Calcified Tissue International. 2003 Nov;73(5):502-10.

Swann, S.L., Bergh, J.J., Farach-Carson, M.C., Ocasio, C.A., and Koh, J.T.. "Structure-based design of selective agonists for a rickets-associated mutant of the vitamin D receptor." Journal of the American Chemical Society. 2002 Nov 20;124(46):13795-805.

Swann, S.L., Bergh, J.J., Farach-Carson, M.C., and Koh, J.T.. "Rational design of vitamin D₃analogues which selectively restore activity to a vitamin D receptor mutant associated with rickets." Organic Letters. 2002 Oct 31;4(22):3863-6.

Liu, R., Li, W., Karin, N.J., Bergh, J.J., Adler-Storthz, K., and Farach-Carson, M.C.. "Ribozyme ablation demonstrates that the cardiac subtype of the voltage-sensitive calcium channel is the molecular transducer of 1,25-dihydroxyvitamin D<sub>3</sub>-stimulated calcium influx in osteoblastic cells." Journal of Biological Chemistry. 2000 Mar 24; 275(12):8711-8.

#### 3. Abstracts:

Endocrine Society – 2005, San Diego, California, poster discussion.

American Thyroid Association – 2004, Vancouver, British Columbia, Canada, poster discussion Endocrine Society – 2003, Philadelphia, Pennsylvania, poster discussion.

American Society for Bone and Mineral Research – 2002, San Antonio, Texas, poster discussion.

American Society for Bone and Mineral Research – 2001, Phoenix, Arizona, poster discussion.

American Society for Cell Biology – 2000, San Francisco, California, poster discussion.

#### B. Works not in Print

### 2. Invited Talks, Lectures, Presentations:

Guest Lecturer – Modern Biology 1 (Bio 1320) February 2017, August 2017 Federation of American Societies for Experimental Biology. – Tucson, Arizona 2006, "Nongenomic actions of thyroid hormone on angiogenesis and cell migration"

### 3. Books

The Living World 11e, By George Johnson and Joel Bergh. McGraw Hill Publishing Publish Jan 2023

### **IV. SERVICE**

# A. University:

**Texas State University** 

Chair - College of Science and Engineering Safety CommitteeFall 2015-PresentMember - Undergraduate Research Fellowship CommitteeFall 2017-PresentMember - Lecturer Evaluation CommitteeMay 2016-Present

Member – University Honor Code CouncilFall 2020-presentMember – University Research Safety CommitteeSpring 2020-present

Member - Institutional Review Board, St. Edwards University Radiation Safety - Ordway Research Institute

# B. Departmental:

Texas State University

Member – Lecturer Evaluation Committee May 2016-Present
Member – Graduate Student Compensation Committee May 2016-Present

Member – A & P Senior Lecturer Search Committee

December 2016-May 2017

Safety Officer, Biology, University of Delaware

# E. Organizations

### 2. Professional:

American Thyroid Association – Member, 2005 – 2008

Awarded travel grant to 2004 annual meeting in Vancouver, British Columbia, Canada

Endocrine Society - Member, 2004-2008

Sigma Xi – Member, 2012-present

National Association of Biology Teachers - Member - 2016-Present

AAAS - Platinum Member - 2020-present