

## **CURRICULUM VITAE**

**Name: Bruno Buchholz, MD, PhD**

E- mail: bbuchholz@fmed.uba.ar

### **Office Address:**

University of Buenos Aires, Faculty of medicine, Department of Pathology and cardiovascular Pathophysiology Institute, J. E. Uriburu 950, 2nd floor, 1114 Buenos Aires, Argentina.

### **1. Present Professional Positions**

- a) Researcher staff, Cardiovascular Physiopathology Institute, University of Buenos Aires.
- b) Head of Instructor, Department of Anatomy, Faculty of Medicine, University of Buenos Aires (2005 – Present)

### **2. Education**

#### **a. Undergraduate:**

Bachelor, 1994. Bachillerato # 18, Alberdi, Misiones, Argentina.

#### **b. Graduate:**

- Physician, 2004. Northeast National University, Faculty of Medicine.
- Cardiovascular Physiopathology Institute, University of Buenos Aires, Faculty of Medicine.  
Doctoral Thesis.  
Title: "Effects of acetylcholine and vagal stimulation on experimental myocardial infarction in rabbits."  
Degree: **PhD**, 2011.

### **3. University Appointments**

Department: Anatomy  
University: Northeast National University, Faculty of Medicine  
Title: Instructor of Anatomy (1996 – 2003).

Department: Anatomy  
University: University of Buenos Aires, Faculty of Medicine  
Title: Instructor of Anatomy (2005 – Present).

### **4. Major Visiting Appointments**

- Visiting Researcher, Cardiac pacemakers, Inc. Boston scientific (Guidant corporation). St. Paul, Minnesota, USA.

March 20 – March 31, 2006.

- Visiting Researcher, Department of Molecular Medicine and Cellular Biology, and Cardiovascular research Institute, University of Medicine and Dentistry of New Jersey (UMDNJ), New Jersey Medical School, Newark, NJ, USA.

May 11 – May 26, 2010.

## **5. Memberships in Professionals Societies**

Argentina Society of Clinical Investigaion (SAIC)

Argentina Society of Cardiology (SAC).

Argentina society of Anatomy (AAA)

## **6. Articles**

1) D´Annunzio V, Donato M, Erni L, Miksztowicz V, Buchholz B, Lorenzo Carrión C, Schreier L, Wikinski R, Gelpi RJ, Berg G, Basso N. Rosuvastatin given during reperfusion decreases infarct size and inhibits mmp-2 activity in normo and hypercholesterolemic rabbits. *J Cardiovasc Pharmacol*, 53(2):137-44, 2009.

2) Donato M, D´Annunzio V, Buchholz B, Miksztowicz V, Lorenzo Carrión C, Valdez LB, Zaobornyjc T, Schreier L, Wikinski R, Boveris A, Berg G, Gelpi RJ. Role of matrix metalloproteinase-2 in the cardioprotective effect of ischemic postconditioning. ISSN: 0363-6135. *Exp Physiol*, 95 (2): 274–281, 2010.

3) Valdez LB, Zaobornyj T, Bombicino SS, Iglesias DE, Boveris A, Donato M, D´Annunzio V, Buchholz B, Gelpi RJ. Complex I syndrome in myocardial stunning and the effect of adenosine. *Free Radic Biol Med.*, 51(6):1203-1212, 2011.

4) D´Annunzio V, Donato M, Fellet A, Buchholz B, Antico Arciuch VG, Carreras MC, Valdez L, Zaobornyj T, Morales C, Poderoso JJ, Boveris A, Balaszczuk AM, Gelpi RJ. Diastolic function during hemorrhagic shock in rabbits. *Mol Cell Biochem*. Aug 13 [Epub ahead of print], 2011.

5) Buchholz B, Rodriguez M, Ivalde FC Donato M, Gelpi RJ. Preischemic efferent vagal stimulation increases the size of myocardial infarction in rabbits. *Int J Cardiol*, 2011 (manuscript in second revision).

6) Donato M, Buchholz B, Rodríguez M, Inserte J, García-Dorado D, Gelpi RJ. Role of the parasympathetic nervous system in cardioprotection by remote ischemic preconditioning. (manuscript sent for publication).

7) D´Annunzio V, Buchholz B, Siachoque Montaña NA, Quiroga A, Donato M, Gelpi RJ. Ischemic postconditioning reduces infarct size by  $\alpha$ -1 adrenergic receptor pathway. (manuscript in preparation).

## **7. Journal Reviewer**

Journal of the Argentine Society of Cardiology

## 8. Books, Monographs and Chapters

Buchholz B, D'Annunzio V, Gelpi RJ (2009). Isolated heart Langendorff technique. In: Rigalli A, Di Loreto V. *Experimental Surgical Models in the Laboratory Rat* (pages 209-213). Boca Raton, USA . Ed. CRC Press. Taylor and Francis Group. ISBN 13:978-1-4200-9326-1.

## 9. Abstracts (Last 3 years)

D'Annunzio V, Donato M, Buchholz B, Erni L, Miksztowicz V, Berg G, Schreier L, Basso N, Gelpi RJ. Effects of acute rosuvastatin administration on myocardial ischemia/reperfusion injury and MMP-2 activation in normo and hypercholesterolemic rabbit hearts. XVI World Congress of Cardiology. Buenos Aires, Argentina. May 18- 21, 2008.

D'Annunzio V, Donato M, Buchholz B, Miksztowicz V, Berg G, Schreier L, Gelpi RJ. Cardioprotection by ischemic postconditioning: role of MMP-2. XVI World Congress of Cardiology. Buenos Aires, Argentina. May 18- 21, 2008.

Buchholz B, Miksztowicz V, D' Annunzio V, Quiroga A, Lorenzo Carrion C, Berg G, Donato M, Gelpi RJ. EL poscondicionamiento isquémico atenúa la actividad de MMP-2 y reduce el tamaño de infarto en el corazón aislado de conejo. LIII Congress of the Argentina Society of Clinical Investigation, Mar del Plata, November 22, 2008. *Medicina (B Aires)*, 68(supl. II):65, 2008.

D'Annunzio V, Buchholz B, Quiroga A, Lorenzo Carrión C, Donato M, Gelpi RJ. The effect of ischemic postconditioning is mediated by  $\alpha$ -adrenergic receptor in isolated rat hearts. XVII congress of the International Society of Heart Research, Latin American Section . Buenos Aires; May 23- 25, 2009.

Buchholz B, Rodríguez JM, Ivalde FC, Donato M, Gelpi RJ. La estimulación vagal eferente incrementa el tamaño del infarto de miocardio en el conejo. XVII congress of the International Society of Heart Research, Latin American Section. Buenos Aires. Argentina. May 23- 25, 2009.

Buchholz B, Rodríguez JM, Ivalde FC, Donato M, Gelpi RJ. La estimulación vagal eferente aumenta el tamaño del infarto de miocardio en el conejo. XXXV Congress of the Argentina Society of Cardiology. Buenos Aires. Argentina. October 2-4, 2009.

Buchholz B, Rodríguez JM, Ivalde FC, Donato M, Gelpi RJ. La estimulación vagal eferente aumenta el tamaño de infarto de miocardio en conejos a través de la activación de receptores muscarínicos. LIV Congress of the Argentina Society of Clinical Investigation. Mar del Plata, Argentina. November 18-21, 2009. *Medicina (B Aires)*, 69(supl. I):150, 2009.

Buchholz B, Rodríguez JM, Ivalde, FC, Siachoque NA, Donato M, Gelpi RJ. Preischemic efferent vagal stimulation increases infarct size in rabbit hearts by activation of muscarinic receptors. European Society of Cardiology Congress 2010. Estocolmo, Suecia, August 29- September 1, 2010. *Eur Heart J*, 31(Abstract Supplement):88-89, 2010.

Buchholz B, Rodríguez JM, Ivalde FC, Siachoque N, Alvarez Yuseff MF, Donato M, Gelpi RJ. La estimulación vagal eferente pre isquémica aumenta el tamaño de infarto de miocardio en conejos a través de la activación de receptores muscarínicos. XXXVI Congress of the Argentina Society of Cardiology. Buenos Aires, Argentina. October 7-9, 2010. *Rev Arg Cardiol* 78 (2): 111; 2010.

Siachoque N, Buchholz B, D'Annunzio V, Quiroga A, Donato M, Gelpi RJ. Los receptores alfa-adrenérgicos participan en el mecanismo de protección del poscondicionamiento isquémico en el corazón aislado de rata. XXXVI Congress of the Argentina Society of Cardiology. Buenos Aires, Argentina. October 7-9, 2010. *Rev Arg Cardiol* 78 (2): 111; 2010.

Buchholz B, Rodríguez JM, Ivalde FC, Donato M, Gelpi RJ. La activación de los receptores muscarínicos por estimulación vagal eferente pre isquémica aumenta el tamaño de infarto de miocardio en conejos. LV Congress of the Argentina Society of Clinical Investigation. Mar del Plata, Argentina. November 17-20, 2010. *Medicina (B Aires)*, 70(Supl. II):224, 2010.

Siachoque NA, Buchholz B, D'Annunzio V, Quiroga A, Donato M, Gelpi RJ. El poscondicionamiento isquémico reduce el tamaño de infarto a través de la activación de los receptores- $\alpha$ 1 adrenérgicos. LV Congress of the Argentina Society of Clinical Investigation. Mar del Plata, Argentina. November 17-20, 2010. *Medicina (B Aires)*, 70(Supl. II):252, 2010.

Donato M, Buchholz B, Gelpi RJ. Role of the autonomic nervous system in cardioprotection by remote ischemic preconditioning. American Heart Association Scientific Sessions 2011. Orlando, FL, USA. November 13-15, 2011. American Heart Association. *Circulation*, xxx (xx) Supplement: xxxxxx, 2011.