

## CURRICULUM VITAE

**NAME:** **Deborah A. Barr, Sc.D.**

**CURRENT APPOINTMENT:** Professor  
1991 to present  
Basic Sciences Department  
New York Chiropractic College  
2360 State Route 89  
Seneca Falls, NY 13148  
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### EDUCATION:

1990-1991 Postdoctoral Fellow  
Department of Physiology and Cell Biology  
Albany Medical College of Union University  
Albany, New York

1988-1990 Postdoctoral Fellow  
Atherosclerosis Research Center  
Bowman Gray School of Medicine  
Winston-Salem, North Carolina

1984-1988 Sc.D., Boston University  
Boston, Massachusetts  
Applied Anatomy and Physiology  
Advisor: Dr. John C. Young

1980-1982 M.S., Texas A&M University  
College Station, Texas  
Animal Science/Exercise Physiology

1975-1979 B.S., Colorado State University  
Ft. Collins, Colorado  
Animal Science

## TEACHING EXPERIENCE

### COURSE INSTRUCTOR

1991-Present NYCC	Musculoskeletal Physiopathology Lecture and Laboratory (PHY 6404) 5 credits Human Physiology Lecture (AOM 5242) 2 credits Systems Physiology Lecture (AOM 5342) 2 credits Neuroanatomy Laboratory Lead Instructor (ANA 6104 and ANA 6205) 5 credits each Spinal Anatomy Laboratory Instructor (AN 0104)
1982-1984	Instructor and coordinator in cooperative Veterinary Technician program between Tufts University and Mt. Ida College (Massachusetts) Small Animal Clinical Care (VS 192) Large Animal Medicine and Management Lecture and Laboratory (VS 309) Coordinator of Senior Clinical Rotation (VS 410)

### TEACHING FELLOWSHIPS

#### Lecture and Laboratory

1986-1988	Human Neuroanatomy and Neurophysiology (HS 370/582, Boston University)
1987	Human Gross Anatomy (HS 369/581, Boston University)
1985-1986	Human Physiology (HS 372, Boston University)
1979	Comparative Animal Anatomy and Physiology (AY 300, Colorado State University)

## **PROFESSIONAL DEVELOPMENT**

Initiated continuing education course work in the School of Education, Syracuse University, January 2000. In the Instructional Design, Development and Evaluation Program, the following courses have been completed:

IDE 615 Principles of Instructional Development 3 credits Spring 2000

IDE 641 Techniques in Educational Evaluation 3 credits Spring 2000

(Transcripts available upon request)

Participated in a management workshop on Effective Feedback conducted by Dr. Ted Baumhauer, Cornell University, New York State School of Industrial and Labor Relations, May 10, 2000.

Certificate Program on Excellence in Supervision conducted by the FLCC Institute for Workforce Development. Workshops included Interactive Skills and Personality Styles; Staff Development; Coaching, Counseling and Discipline; Advanced Supervisory Skills, Spring 2001.

Meetings of the International Association of Medical Science Educators (IAMSE)

- 14<sup>th</sup> Annual Meeting of IAMSE, InterContinental Hotel, New Orleans, LA, July 10 – 13, 2010
- 13<sup>th</sup> Annual Meeting of IAMSE, University of Leiden, Leiden, Netherlands, June 29 – July 3, 2009
- 12<sup>th</sup> Annual Meeting of IAMSE, University of Utah, Salt Lake City, UT, July 25 – 29, 2008
- 11<sup>th</sup> Annual Meeting of IAMSE, Cleveland Clinic and Case Western Reserve University, Cleveland, OH, July 21 – 24, 2007
- 10<sup>th</sup> Annual Meeting of IAMSE; University of Puerto Rico School of Medicine, San Juan, PR, July 15 – 18, 2006
- 9<sup>th</sup> Annual Meeting of IAMSE, Keck School of Medicine, University of Southern California, Los Angeles CA, July 16 – 19, 2005
- 8<sup>th</sup> Annual Meeting of IAMSE; Tulane University School of Medicine, New Orleans, LA, July 10 – 13, 2004
- 7<sup>th</sup> Annual Meeting of IAMSE; Georgetown University School of Medicine, Washington, D.C., July 19 – 22, 2003.
- 6<sup>th</sup> Annual Meeting of IAMSE; The future of Basic Sciences in Undergraduate Medical Education; Universidad Autonoma de Guadalajara, Guadalajara, Mexico, July 20 – 23, 2002. \*\*\* Conducted a Focus Session entitled The Future of Basic Science Laboratories in Medical Education.
- 5<sup>th</sup> Annual Conference of IAMSE; Assessing Competence and Sustaining Curricular Revision. Mayo Clinic, Rochester MN, July 21 - 24, 2001.
- 4th Biennial Conference of the International Association of Medical Science Educators (IAMSE, formerly BSEF); Advances in Medical Science Education: Learning Modes and Teaching Strategies. Georgetown School of Medicine, Washington, D.C., June 17 - 20, 1999.
- 3rd Biennial Conference of the Basic Science Education Forum, Strategies for Teaching Medical Sciences in the 21st Century; June 21 - 24, 1997, University of South Carolina Medical School, Charleston, SC.

Critical Thinking Workshop; March 15-17, 1996 Kansas City, MO  
The Foundation for Critical Thinking

## **ADMINISTRATIVE RESPONSIBILITIES**

Director, Bachelors of Professional Studies Program 2003 - 2007  
Department Head, Physiopathology 1997 - 2003  
Acting Department Head, Physiopathology 1996 - 1997  
Interim Pre-Clinical Director of New York Chiropractic College, 1996  
Curriculum Revision Management Committee 1997 - 2001  
Senior Instructor and Coordinator of Neuroanatomy and Neurophysiology Laboratories at  
Boston University, 1987-1988  
Clinical Coordinator of Tufts University Cooperative Veterinary Technician Program  
with Mt. Ida College, 1982-1984.  
Central Supply Supervisor of Tufts University Veterinary School, Grafton Campus, 1982-84.

## **COLLEGE SERVICE**

Middle States Accreditation Self Study Committee – Subcommittee VIII – Assessment of  
Student Learning (MSCHE Standard 14) 2003 - 2005  
Coordinator of the NYCC Research Symposium 2005 to present  
Member of CCE Self Study Committee on Research 2005  
Member of Basic Sciences Department Leadership Team 2004 – 2006  
Chair of Pathophysiology / Public Health Leadership team for board evaluation 2005  
Faculty Evaluation Task Force 1999 – 2002  
Faculty Evaluation Subcommittee to evaluate pilot data 2002 - 2003  
Faculty-Administrative Cooperative Team (F.A.C.T.) of the New York Chiropractic  
College, 1993 - 1995  
Presidential Planning Committee, Program/Service Mix and Comparative Advantage  
Subcommittee (NYCC) 1994 - 1996

Reviewer for Foot Levelor and Kenneth Padgett Scholarships 2000 to present  
Research Committee 2005 to present  
Academic Policy Committee 1995 – 1997; 1999 – 2003  
Academic Standing Committee 1996 – 1999 ; 2007 - present  
Registration Committee 1996 - 1998  
Educational Technology Committee 1999 - 2002  
Vision Statement Task Force 1996  
Curriculum Committee 1996 – 1997; 2009 to present  
Commencement Committee 1996 – 1997  
Committee on Faculty Appointment and Promotions (CFAP) 2009 to present  
Learning Center Advisory Committee (NYCC) 1995 - 1999  
Student Academic Advisor (NYCC) 1993 - 1997  
Orientation Committee (NYCC) 1992 - 1995  
Research Committee (NYCC) 1993 – 1996; 2005 - present  
Search Committee (NYCC) 1991 - 1993; Searches for Director of Clinical Studies, Dean  
of Academic Affairs, Neuroanatomist and Clinical Studies Faculty, Director of Research

Institutional Search Committee for the Director of Enrollment Management - 1996  
Student Admissions Interviewer (NYCC) 1992 – 1994; 1999 - 2008  
Student - Faculty Forum Steering Committee; Chairman (NYCC) 1993 - 1995

New York Chiropractic College Faculty Senate 1991 - 2002

Faculty Senate Officer

Secretary 1991-1992

Treasurer 1992-1993

Executive Council 1991-1993

Faculty Senate Committees:

Academic Standards 1994-1996

Faculty Development 1994-1996

Professional Development 1994-1995

Library Committee 1992 - 1994

Library Projects Committee 1995 - 1996

Ad-Hoc Committees – Physiopathology Department

Biochemistry and Nutrition Group – 2000 – 2002

Laboratory Issues Group – 2001 - 2003

## **COMMUNITY SERVICE**

New York Chiropractic College

Science and Education - Mynderse Academy/Rotary Project, October 1997

Commencement Marshall for Faculty 1996 - 1998

Second NYCC Natural Fitness Festival, May 20, 1995

Sixth Annual Seneca County Child's Safety Fair, NYCC Booth, June 10, 1995

## **RESEARCH INTERESTS**

### Education

Integration of musculoskeletal pathophysiology and radiology cases and concepts in the second year; developing blended learning tools to challenge critical thinking and problem solving skills in neuroanatomy and musculoskeletal pathophysiology course work; assessment of learning and scholarship of teaching.

### Basic Science

Human performance, mechanism of injury at the cellular level; muscle and extracellular matrix response to exercise or repetitive stress; vascular endothelial cell biology; cardiopulmonary pathophysiology; pulmonary endothelium response to ischemia-reperfusion injury; neutrophil and endothelial interactions.

## **RESEARCH and PRESENTATIONS**

Ongoing project of literature review regarding Scholarship of Teaching and defining scholarship in chiropractic education. Paper in progress.

Data analysis is ongoing from two surveys conducted regarding medical problems in bagpipers and in flutists. Paper in progress.

Platform presentation: Van Dusen L., Barr D., Burke JR, Medical problems of flutists: Are we making progress? Presented at the 23<sup>rd</sup> Annual symposium on Medical Problems of Musicians and Dancers, Aspen, CO, June 24, 2005.

Abstract accepted for platform presentation for the Association of Chiropractic Colleges Educational Conference, March 15 - 18, 2001, San Diego, CA. Abstract Title: The Progression from Basic Science Concepts to Critical Thinking: Are We Bridging the Gap?

Abstract accepted for presentation for the Association of Chiropractic Colleges Educational Conference, March 15 - 18, 2000, San Antonio, TX. Abstract Title: Student Performance in the Pre-Clinical Science Curriculum: A Comparison of Test Scores in an Academic Setting of Differing Lead Lecture and Laboratory Instructors.

17th Annual Symposium on Medical Problems of Musicians and Dancers, June 24 - 27, 1999, Aspen, CO. Platform presentation of Physiological Assessment of Bagpipers: A Preliminary Study of Cardiopulmonary Parameters.

1998 Research Project: A Study of Cardiopulmonary Parameters in Bagpipers. 1st NYCC Research Symposium, May 22, 1998; Piper study data presented

## **FELLOWSHIPS, ASSISTANTSHIPS, AND SCHOLARSHIPS**

Postdoctoral Training Grant Fellowship, Pulmonary Physiology (NIH HL-175229), Albany Medical College of Union University, 1990-1991

Postdoctoral Training Grant Fellowship, Atherosclerosis (NIH HL-07115), Bowman Gray School of Medicine of Wake Forest University, 1988-1990

Graduate Research Assistant, Diabetes and Muscle Metabolism, Dr. Neil Ruderman's Laboratory, Boston University Hospital, 1987

Department of Health Sciences Scholarship, Boston University, 1984-1986

## **PROFESSIONAL MEMBERSHIPS AND SERVICE**

American Physiological Society

International Association of Medical Science Educators

Member of Nominating Committee 2000

Membership Committee – appointed 2000 to present

Chair of Membership Committee – 2001 to 2004

Elected to Executive Committee, Office of Secretary – 2002 to 2004; reelected to second term 2004 to 2006

Elected to Board of Directors of IAMSE 2006 to 2009

Appointed Chair of Strategic Planning Committee of IAMSE 2006 to 2007

Member of 2010 Program Planning Committee - 2009 - 2010

Association for Medical Education in Europe

Reviewer for the Association of Chiropractic Colleges Education Conference and Clinical Conference for Chiropractic Research:

March 18 – 20, 2010, Las Vegas, NV

March 12 – 14, 2009, Las Vegas, NV

March 13 – 15, 2008, Washington, DC

March 15 – 17, 2007, Phoenix, AZ

March 16 – 18, 2006, Washington, DC

March 16 – 19, 2005, Las Vegas, NV

March 10 – 13, 2004, Las Vegas, NV

March 13 – 16, 2003, New Orleans, LA

March 13 – 16, 2002, New Orleans, LA

March 15 – 18, 2001, San Diego, CA

March 15 - 18, 2000, San Antonio, TX.

March 18 - 20, 1999, Orlando, FL

Appointed to a three-year term as the public member to the Animal Chiropractic Accreditation Commission of the American Veterinary Chiropractic Association, January 2007 - 2010.

## **GRANT FUNDING**

Dudley Allen Sargent Research Grant, Boston University 1985-1988  
NIH Training Grant – National Heart, Lung and Blood Institute, 1988 – 1990

## **EXTRACURRICULAR ACTIVITIES**

National Youth Sports Coaches Association (NYSCA) - Level 1  
ATA Trap Coach – Level 1  
Rochester Scottish Heritage Society

## **PUBLICATIONS:**

### **Manuscripts:**

Barr, D., Silvestrone, J., Defining Scholarship in Chiropractic Education. Submitted to J Chiro Ed.

Barr, D. Potter, P., Van Dusen, L., Burke, J., Prevalence of Medical Problems Associated with Playing the Great Highland Bagpipe: Survey Results and Comparisons to Other Musicians. Med Prob Perf Art, 20(4):163-167, 2005.

Barr, D, Van Dusen, L, Ess, S., Plezbert, J., Physiological Assessment of Bagpipers: A Preliminary Study of Cardiopulmonary Parameters. Med Probl Perform Art, 15(2):51 – 54, 2000.

Barr, DA, Jerome, WG, Lewis, JC. Morphologic characteristics of naturally occurring atherosclerosis in the brachiocephalic artery of the pigeon. Exp Molec Pathology, 54;99 111, 1991.

Lum, H, Barr, D, Shaffer, J, Gordon, R, Ezrin, A, Malik, AB. Reoxygenation of endothelial cells increases permeability by oxidant - dependent mechanisms. Circulation Research, 70(5); 991-998, 1992.

Barr, DA, Young, JC. Effects of exercise stress on skeletal muscle collagen in the growing animal model. J Appl Phys, (Submitted).

Barr, DA, Jerome, WG, Lewis, JC. Morphologic characteristics of atherosclerosis following 0.3% cholesterol diet in the brachiocephalic artery of the pigeon. (Paper in progress).

Barr, DA, Jerome, WG, Lewis, JC. Structural characteristics of naturally occurring and dietary induced atherosclerosis in the carotid artery of the White Carneau (WC) pigeon. (Paper in progress).

## **Contributions:**

Micrographs for publication in Ultrastructural Pathology: An Introduction to Interpretation, Norman F. Chevelle, Iowa State University Press, 1994; Fig. 8.33 p. 382.

## **Dissertation**

The Effects of Exercise Stress on Skeletal Muscle Collagen in the Growing Animal Model, Boston University, 1988.

## **Abstracts**

Potter PJ, Barr D, Vandusen L, Burke J, Medical Problems Associated with Playing the Great Highland Bapipe. Canadian Association of Physical Medicine and Rehabilitation Annual Scientific Meeting, London, Ontario, June 2007

Barr, DA, Sciotti, V, Van Dusen, L. Student Performance in the Pre-Clinical Science Curriculum: A Comparison of Test Scores in an Academic Setting of Differing Lead Lecture and Laboratory Instructors. J Chiro Ed, 14(1):27 – 28, 2000.

Barr, DA, Jerome, WE, Lewis, JC. Structural characteristics of naturally occurring atherosclerosis in brachiocephalic and carotid arteries of White Carneau (WC) pigeons. Arteriosclerosis, 1989, 9(5):725a.

Barr, DA, Lum, H, Malik, AB. Endothelial permeability increases following reoxygenation. FASEB J 5:A1491, 1991.

Lum, H, Blumenstock, F, Barr, D, Gordon, R, Ezrin, A, Malik, AB. Hypoxia increases cell-associated superoxide dismutase in endothelial cells. FASEB J, 5:A1490, 1991.