

# Adrienne P. Bratcher, PhD

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## CURRICULUM VITAE

Assistant Clinical Professor and Director of Graduate Studies with 10 years of leadership, teaching and advising experience. Innovative instructor and leader focused on providing students with a rigorous and challenging education, along with the confidence, tools, and skills required to build and advance toward a framework of success. Effective communicator with a track record of anticipating needs, implementing programs, evaluating results, and utilizing outcomes to plan for further development.

## CORE COMPETENCIES

Program Management and Assessment • Teaching and Service • Academic Advising  
Recruitment and Retention • Research and Data Analysis • Diversity Initiatives  
Graduate Placement and Career Planning • Conflict Resolution

## EDUCATION

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- PhD**    **Physiology and Biophysics**  
University of Louisville, Louisville, KY (May 2007)
- MS**    **Physiology and Biophysics**  
University of Louisville, Louisville, KY (May 2004)
- BS**    **Chemistry**  
Tennessee State University, Nashville, TN (May 2002)

## CURRENT POSITION

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**University of Louisville, Louisville, KY**  
**Department of Health and Sport Sciences**

**June 2016 - Present**

*Assistant Clinical Professor, Director of Graduate Studies*

- Provides challenging course work while utilizing active learning techniques as an undergraduate and graduate instructor (teaching load of eight courses with 250-300 students per year)
- Serves as graduate academic advisor with an advising load of 35-40 graduate students per year
- Serves as liaison between the Exercise Physiology (EXP) program, College of Education and Human Development and School of Interdisciplinary and Graduate Studies.
- Coordinates and implements the policies and procedures for EXP graduate education
- Supervises the graduate leadership team (clinical coordinator and strength/conditioning coordinator)
- Facilitates the recruitment and admission of a diverse group of highly talented graduate students
- Prepares annual program assessment reports indicating achievement of relevant learning outcomes, placement of students, graduation rate, program accreditation and changes made to improve the program
- Creates and implements enrollment management plans that increase student quality, matriculation and success
- Develops programs to enhance graduate student professional development opportunities.
- Develops initiatives to recruit and retain students into allied-health and STEM disciplines
- Monitors and implements all program changes, including curriculum, reviews, revisions and additions in collaboration with the Department Chairperson
- Monitors course schedules during all registration periods and works with department and college leadership to add/eliminate course sections
- Collaborates with Department Chairperson to hire and assign quality teachers to all graduate courses

## PROFESSIONAL EXPERIENCE

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<b>University of Louisville, Louisville, KY</b> <b>Department of Health and Sport Sciences</b> <i>Assistant Clinical Professor, Director of Graduate Studies</i>	<b>June 2016 - Present</b>
<b>University of Louisville, Louisville, KY</b> <b>Department of Health and Sport Sciences</b> <i>Assistant Professor, EXP Graduate Program Coordinator</i>	<b>Aug. 2012 – May 2016</b>
<b>DeVry University, Louisville, KY</b> <b>Department of Biological Sciences</b> <i>Adjunct Professor</i>	<b>Aug. 2009 - July 2010</b>
<b>University of Louisville, Louisville, KY</b> <b>Department of Health and Sport Sciences</b> <i>Instructor, EXP Graduate Program Coordinator</i>	<b>Aug. 2008 - July 2012</b>
<b>Jefferson Community and Technical College, Louisville, KY</b> <b>Department of Biology</b> <i>Adjunct Professor</i>	<b>June 2008 – Dec. 2008</b>
<b>University of Louisville, Louisville, KY</b> <b>Department of Health and Sport Sciences</b> <i>Adjunct Professor</i>	<b>Jan. 2008 - July 2008</b>
<b>University of Louisville, Louisville, KY</b> <b>Department of Physiology and Biophysics</b> <i>Research Fellow</i>	<b>May 2007 – Dec 2007</b>
<b>University of Louisville, Louisville, KY</b> <b>School of Medicine, Summer Minority Pre-matriculation Program</b> <i>Instructor</i>	<b>May 2004 – July 2004</b>
<b>Tennessee State University, Nashville, TN</b> <b>Department of Chemistry</b> <i>Teaching Assistant</i>	<b>Aug. 2001- May 2002</b>

## TEACHING EXPERIENCE

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**University of Louisville, Louisville, KY** **May 2004 - Present**

Undergraduate Courses

HSS 190 Life Skills Development in Collegiate Athletics  
HSS 202 Human Anatomy and Physiology  
HSS 386 Anatomy and Physiology of Exercise I  
HSS 390 Anatomy and Physiology of Exercise II  
HSS 402 Practicum in Health and Human Performance  
HSS 492 Exercise Science Internship

Graduate Courses

EXP 600 Physiology of Exercise  
EXP 605 Human Physiology

Summer Minority Pre-matriculation Program

Medical Physiology Course

Academic/Career Advising

EXP Advisor for 35-40 Master's Students (per year)

2008 - Present

Program Mentor, Summer Cardiovascular Undergraduate Research Program 2008 – Present  
 (Under-Represented/Under-Served Populations; NIH Short-Term Training Grant from the National Heart, Blood and Lung Institute)  
 8-10 Undergraduate Students (per year), mentorship in the areas of oral/poster presentations and professional degree program (MD, PhD, PT/OT, Nursing) application processes and matriculation

Dissertation/Thesis Committee, External Dept. Member, Dept. of Physiology 2013 - 2018  
 Nithya Narayanan, Lee Winchester, Anatasia Familtseva, Ashley Mack, Nicholas Theilen

**DeVry University, Louisville, KY**

**Aug. 2009 - July 2010**

BIOS 140 Biology with Lab

**Jefferson Community and Technical College, Louisville, KY**

**June 2008 – Dec. 2008**

BIO 135 Basic Anatomy and Physiology with Lab

**Tennessee State University, Nashville, TN**

**Aug. 2001- May 2002**

CHEM 3411 General Biochemistry I Lab  
 CHEM 3421 General Biochemistry II Lab

## RESEARCH

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### Refereed Publications

1. **Bratcher, A.** (2014). Central Endocrine Hormones Review. *Life-Science Teaching Resource Community-APS Archive*. <http://www.lifescitrc.org/resource.cfm?submissionID=9221>.
2. Narayanan N, Pushpakumar SB, Givvimani S, Kundu S, Metreveli N, James D, **Bratcher AP** and SC Tyagi. (2014). Epigenetic regulation of aortic remodeling in hyperhomocysteinemia. *FASEB J*, 28 (8): 3411-3422.
3. Joshua, IG, Zhang, Q, Falcone, JC, **Bratcher, AP**, Rodriguez, WE and SC Tyagi. (2005). Mechanisms of Endothelial Dysfunction with Development of Type 1 Diabetes Mellitus: Role of Insulin and C-Peptide. *J Cell Biochem*, 96 (6):1149-1156.

### Refereed Publications in Review/Preparation

1. Rodriguez-Alvarez,W, **Bratcher,A**, D'Souza,S, and Joshua,I. Low level short-term arsenic exposure impairs endothelial mediated vascular relaxation. Will submit to *Cardiovascular Toxicology*.
2. **Bratcher, A** and Joshua, I. Acute effects of high salt intake on endothelial-mediated dilation and constriction in the vasculature. Will submit to *Canadian Journal of Physiology and Pharmacology*.
3. **Bratcher, A**, and Ledford, E. Correlation of admissions statistics to graduate student success in exercise physiology Will submit to *Advances in Physiology Education*.
4. **Bratcher, A**. *Peripheral Endocrine Hormones Review*. Will submit to *Life-Science Teaching Resource Community-APS Archive*.
5. **Bratcher, A**. *Endocrine System Diseases and Disorders*. Will submit to *Life-Science Teaching Resource Community-APS Archive*.

### Scholarly Presentations

#### *International/National*

1. **Bratcher, A** and Joshua, I. (2016, April) *Acute effects of high salt intake on endothelial-mediated dilation and constriction in the vasculature*. Poster presented at Experimental Biology 2016, San Diego, CA.

2. Narayanan, N, Pushpakumar, SB, Qipshidze, N, **Bratcher, A**, Tyagi, N and Tyagi, S (2013, April). *Epigenetic inhibition by 5 Aza 2' deoxycytidine mitigates hypertension in hyperhomocysteinemia*. Poster presented at Experimental Biology 2013, Boston, MA.
3. James, D, **Bratcher, A** & Joshua, IG (2013, April). *The Role of Antioxidant Tempol on Endothelial-Mediated Vascular Responsiveness*. Poster presented at ACC (Atlantic Coast Conference) Meeting of the Minds, Winston-Salem, NC.
4. **Bratcher, A.P.**, J. Ash-Shaheed Ali and I.G. Joshua (2005, April). *The effects of high dietary salt intake on large and small resistance vessels in the rat*. Poster presented at Experimental Biology 2005, San Diego, CA.
5. **Bratcher, A.P.** and I.G. Joshua (2004, April) *Decreased in vivo responsiveness to acetylcholine and endothelin by arterioles of rats on a high salt diet*. Poster presented at Experimental Biology 2004, San Diego, CA.
6. **Bratcher, A.P.** and I.G. Joshua (2003, April). *Altered in vivo responsiveness to acetylcholine and endothelin by microvessels of rats on a high salt diet*. Poster presented at Experimental Biology 2003, San Diego, CA.

#### Regional/Local

1. Petit-Homme, R, Miller, C, Joshua, IG, Tyagi, S & **Bratcher, A** (2015, August). *The Effects of Exercise Training on Impaired Vascular Responses in Dahl-Salt Hypertension*. Poster presented at SROP/SMURP Poster Day, Louisville, KY.
2. Miller, C, Joshua, IG & **Bratcher, A** (2014, August). *Effects of Exercise on Impaired Vascular Function with Hypertension Development*. Poster presented at SROP/SMURP Poster Day, Louisville, KY.
3. **Bratcher, A** & Joshua, IG (2013, September). *The Effects of High Salt Intake on Endothelial-Mediated Dilatation and Constriction in the Vasculature*. Poster presented at Research!Louisville, Louisville, KY.
4. James, D, Narayanan, Roberts, C, Tyagi, S, Joshua, IG & **Bratcher, A** (2013, July). *Aortic Vascular Responsiveness in Hyperhomocysteinemic Mice*. Poster presented at SROP/SMURP Poster Day, Louisville, KY.
5. James, D, **Bratcher, A** & Joshua, IG (2013, February). *The Role of Antioxidant Tempol on Endothelial-Mediated Vascular Responsiveness*. Poster presented at Posters-at-the-Capitol, State of KY Undergraduate Research Day, Frankfort, KY.
6. James, D, **Bratcher, A.** & Joshua, I.G. (2012, August). *The Role of Antioxidant Tempol on Endothelial-Mediated Vascular Responsiveness*. Poster presented at SROP/SMURP Poster Day, Louisville, KY.

#### Dissertation

*Effects of High Salt Intake on Endothelial-Mediated Dilatation and Constriction in the Vasculature*. Chair: Irving G. Joshua, PhD  
Committee: Ayotunde Adeagbo, PhD, William Dean, PhD, Jeffrey Falcone, PhD, William Wead, PhD

#### Grants

1. **NIH R25 Summer Research Education Experience Programs**, University of Louisville, 2018-2022. *Summer Cardiovascular Research Program*, Co-PI, \$100,000 (In Review).
2. **NIH R25 Bridges to Baccalaureate Program Grant**, University of Louisville and Jefferson Community and Technical College, 2018-2023. *Building a Bridge to STEM and Biomedical Research Careers*, Co-PI, \$1,486,242 (In Review).
3. **Intermural Research Incentive Grant**, University of Louisville, 2014-2015. *Effects of exercise on impaired vascular function with hypertension development*, Co-PI, \$5,000. (Funded)
4. **Research and Faculty Development Grant**, University of Louisville, College of Education and Human Development, 2014-2015. *Effects of acute exercise on hyperhomocysteinemia with hypertension development*, PI, \$1,550. (Funded)

**Fellowships**

<b>Southern Regional Education Board Dissertation Fellowship</b> University of Louisville, Louisville, KY Department of Physiology and Biophysics	<b>\$15,000 (2006-2007)</b>
<b>American Physiological Society Porter Fellowship</b> University of Louisville, Louisville, KY Department of Physiology and Biophysics <i>Eleanor-Ison Franklin Fellow (Highest-Ranked Application)</i>	<b>\$18,000 (2004-2005)</b>
<b>American Physiological Society Porter Fellowship</b> University of Louisville, Louisville, KY Department of Physiology and Biophysics	<b>\$18,000 (2003-2004)</b>

**SERVICE**

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**University**

U of L (Division I-A) Athletics Recruiter for Exercise Science (Football, Track/Field, Swimming, Rowing, Baseball)	2013 - Present
Paul Weber Award for Departmental Excellence in Teaching Committee	2013 - 2015
African-American Alumni Council	2009 - 2014
Black Faculty and Staff Association, Faculty Affairs Chair	2009 - 2011
Delta Sigma Theta Sorority, Inc. Xi Chapter, Advisory Team	2009 - 2011
Student Nonviolent Coordinating Committee, Faculty Advisor	2009 - 2010

**College**

Organizational Leadership & Learning Search Committee	2017 (Fall)
Diversity Committee	2016 - Present
Dean's Search Committee	2013 - 2014
Grawemeyer Award in Education Committee	2012 - 2013
Honors and Scholarships Committee	2010 - 2011

**Department**

Student Engagement Committee	2017 - Present
Faculty Annual Review Advisory Group	2017 - Present
Diversity Initiatives Committee, Chair	2012 - 2014
Curriculum Committee	2011 - 2017

**Program**

Interdisciplinary PhD Committee	2015 - Present
EXP Search Committee, Chair	2012 - 2013
EXP Graduate Program Leadership, Chair	2008 - Present
EXP Graduate Admissions Committee, Chair	2008 - Present
Exercise Science Program Committee	2008 - Present

**National**

American Physiological Society Member	2003 - Present
Porter Physiology Development and Minority Affairs Committee	2015 - Present

*Canadian Journal of Physiology and Pharmacology*  
Manuscript Reviewer

2014 - Present

Annual Biomedical Research for Minority Students  
Abstract Reviewer, Poster Reviewer

2013 - Present

## PROFESSIONAL DEVELOPMENT

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1. *Life Science Teaching Resource Community Scholar Program*, American Physiological Society, March 2014-May 2014.
2. *Delphi U Advanced*. University of Louisville Shelby Campus, Louisville, KY, August 2012.
3. *7<sup>th</sup> Annual Junior Faculty/Post-doctoral Fellows Career Development Conference*, American Society for Cell Biology, Minority Affairs Committee, San Antonio, TX, June 2012.
4. *Delphi University*. University of Louisville Shelby Campus, Louisville, KY, July 2011.

## HONORS AND AWARDS

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UofL Athletics Mentor of the Year	2016
National Minority Access Role Model Award	2014
YMCA Black Adult Achiever Award	2013
UofL "Top 9" Faculty Favorite Award	2010
UofL Provost Award for Exemplary Advising	2010
UofL Student-Athlete Red and Black Faculty Mentor	2009, 2011, 2012, 2014, 2018
Outstanding Leadership in Enhancement of Diversity, UofL Commencement Award	2007
Dean's Moment of Honor Award	2006
American Physiological Society /NIDDK Minority Travel Award	2005
Research! Louisville Travel Award, Poster Competition-2 <sup>nd</sup> Place	2004
American Physiological Society /NIDDK Minority Travel Award	2004
M. Celeste Nichols Award for Professional Development, University of Louisville <i>(Dr. M. Celeste Nichols was the 1st African-American to receive a Ph.D. from UofL's Dept. of English)</i>	2003

## SPEAKING AND HOSTING ENGAGEMENTS

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Multicultural Association of Graduate Students (Career Panelist)	2018
African-American Male Initiative (Event Facilitator)	2017, 2018
NPHC Senior Send-Off (Speaker)	2017
ELT Annual Women's Empowerment Dinner (Keynote Speaker)	2017
NPHC Step Show (Host)	2008, 2012, 2017
Cultural Graduation Celebration (Host)	2017
Miss Omega Psi Phi Fraternity Inc. Pageant - Phi Eta Chapter (Host)	2017
Collegiate 100 Auction (Host)	2015, 2016, 2017
Delta Sigma Theta Sorority, Inc Xi Chapter "Men of DiSTinction" Pageant (Host)	2014