

Camillia Smith Barnes
Associate Professor of Mathematics
University of Science and Arts of Oklahoma
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EDUCATION

Harvard University <i>Philosophiae Doctor</i> (Ph.D.), Mathematics <i>Artium Magister</i> (A.M.), Mathematics	Cambridge, MA June 2009 June 2007
University of Cambridge <i>Certificate of Advanced Study</i> , retroactively equivalent to <i>Master of Advanced Study</i> (M.A.St.), Mathematics, with Merit	Cambridge, England June 2003
Michigan State University <i>Master of Science</i> (M.S.), Mathematics Honors <i>Bachelor of Science</i> (B.S.), Mathematics, with Highest Distinction, Lyman Briggs School Honors <i>Bachelor of Arts</i> (B.A.), English Literature, with Highest Distinction Honors <i>Bachelor of Arts</i> (B.A.), French Literature, with Highest Distinction	East Lansing, MI May 2002 May 2002 August 2002 August 2002

SELECTED GENERAL HONORS & HONORS IN MATHEMATICS * denotes declined awards

2009–2010, **Project NExT Fellow**, Mathematical Association of America
2009–2011, **Section NExT Fellow**, Maryland–District of Columbia–Virginia Section, Mathematical Association of America
2003, **AT&T Laboratories Fellowship**, AT&T Labs–Research
2002, **National Science Foundation Graduate Research Fellowship**, National Science Foundation
2002 & 2003, **National Defense Science and Engineering Graduate Fellowship***, American Society for Engineering Education
2002, **Winston S. Churchill Foundation Scholarship** for study at Cambridge, Winston Churchill Foundation of the United States
2002, **National Physical Science Consortium Fellowship**, National Physical Science Consortium
2002, **Graduate School of Arts and Sciences Grant**, Harvard University
2002, **Presidents’ Fellowship***, Princeton University
2002, **Olga Tausskey-Todd Fellowship***, California Institute of Technology
2002, **University Fellowship***, Yale University
2002, **Graduate School Fellowship***, Rutgers University
2002, **Lyman Briggs School Academic Excellence Award**, Michigan State University
2002, **Jennie Creer Stoddard Foundation Housing Scholarship**, Michigan State University
1999 & 2002, **L. C. Plant Math Award**, Michigan State University
2002, **National Finalist, Fulbright Scholarship** for study in the United Kingdom, United States
2001, **Merit Prize, Oral Presentations in the Physical Sciences**, Michigan State University
2001, **Regional Finalist, Marshall Scholarship**, Midwest Region
2001, **State Finalist, Rhodes Scholarship**, Michigan
2000 & 2001, **William Lowell Putnam Mathematics Competition Top 500**, Mathematical Association of America
2000, **Richard E. Phillips Memorial Scholarship**, Michigan State University
2000, **Herbert T. Graham Scholarship**, Michigan State University
1999, **Honorable Mention, Alice T. Schafer Mathematics Prize**, Association of Women in Mathematics
1999, **Phi Beta Kappa Society**, Michigan State University
1999, **Honor Society of Phi Kappa Phi**, Michigan State University
1999, **Golden Key International Honor Society**, Michigan State University
1998 & 1999, **Honorable Mention, Mathematical Contest in Modeling**, Consortium for Mathematics and Its Applications
1997, 1998, & 1999, **College of Natural Science Dean’s List**, Michigan State University
1998, **Pi Mu Epsilon National Mathematics Honor Society**, Michigan State University
1997, **Herzog Mathematics Prize**, Michigan State University
1997, **Alumni Distinguished Scholarship**, Michigan State University
1997, **John M. Stalnaker Memorial Scholarship**, National Merit Scholarship Corporation
1997, **Grand Prize Winner, USA Mathematical Talent Search**, Art of Problem Solving Foundation
1997, **Advanced Placement State & National Scholar**, Michigan

SELECTED HONORS IN LANGUAGE & LITERATURE

2010, **Pi Delta Phi, the National French Honor Society**, Sweet Briar College
2002, **Dorothy Carr Memorial Scholarship** for honors thesis in French Literature, Michigan State University
2001, **Hymen and Miriam Stein Endowed Scholarship** for honors thesis in English Literature, Michigan State University
2001, **Outstanding Student in French**, Michigan State University

2000, **Phi Beta Delta Honor Society for International Scholars**, Michigan State University
 2000, **Coca-Cola Global Fellows International Study Award Scholarship**, Michigan State University
 2000, **Certificat pratique de langue française, premier degré**, avec mention «**bien**», Université de Paris IV–Sorbonne
 1999, **Jeffrey Kathryn Cole International Study Award Scholarship**, Michigan State University
 1999, **Robert G. Marshall Scholarship**, Sweet Briar College Junior Year in France
 1999, **College of Natural Science Study Abroad Scholarship**, Michigan State University
 1996, **Third Prize, North American Open Poetry Competition**, International Library of Poetry

TEACHING & PROFESSIONAL EXPERIENCE

2015–present, Associate Professor , Department of Mathematics, University of Science and Arts of Oklahoma	<i>Chickasha, OK</i>
2009–2015, Assistant Professor , Department of Mathematical Sciences, Sweet Briar College	<i>Sweet Briar, VA</i>
2010–2013, Bimonthly Columnist , <i>Girls' Angle Bulletin</i> , http://www.girlsangle.org/page/bulletin.php	<i>Cambridge, MA</i>
2008, Teaching Fellow , Department of Mathematics, Harvard University	<i>Cambridge, MA</i>
2008, Course Assistant , Department of Mathematics, Harvard University Summer School	<i>Cambridge, MA</i>
2008, Proofreader , Lillian Lieber's <i>Einstein Theory of Relativity</i> , Paul Dry Books	<i>Philadelphia, PA</i>
2007–2009, Mentor , Girls' Angle Math Club	<i>Cambridge, MA</i>
2005, Math Editor , McDougal Littell, a division of Houghton Mifflin Company	<i>Boston, MA</i>
2004–2005, Supervisor , Math Question Center, Harvard College	<i>Cambridge, MA</i>
2003, Summer Research Intern , AT&T Shannon Laboratories	<i>Florham Park, NJ</i>
1998–2002, Teaching Assistant , Department of Mathematics, Michigan State University	<i>East Lansing, MI</i>
2001, Teacher , MASCOT Summer Program, Ingham Intermediate School District	<i>Okemos, MI</i>
1999, Summer Research Assistant , Department of Mathematics, University of Minnesota Duluth	<i>Duluth, MN</i>
1998, Summer Research Assistant , Department of Mathematical Sciences, Michigan Technological University	<i>Houghton, MI</i>
1998–2002, Assistant Coach , Michigan All-Star Math Team	<i>Albion, MI & Iowa City, IA</i>
1997–1999, Professorial Assistant , Department of Mathematics, Michigan State University	<i>East Lansing, MI</i>
1997–1998, Laboratory Assistant , Department of Microbiology, Michigan State University	<i>East Lansing, MI</i>

CONFERENCE PRESENTATIONS

“Shuffles of permutations” Invited paper, Stanley@70 conference	June 2014 <i>Cambridge, MA</i>
“Shuffles of permutations” Invited paper for special session, AMS Eastern Section Meeting 2012	March 2012 <i>Washington, DC</i>
“3-Shuffles of permutations” Joint Mathematics Meetings 2012	January 2012 <i>Boston, MA</i>
“Enumeration of the distinct shuffles of permutations” (poster) Algebraic Combinatorixx, BIRS	May 2011 <i>Banff, Alberta, Canada</i>
“Shuffles of permutations” Joint Mathematics Meetings 2010	January 2011 <i>New Orleans, LA</i>
“Shuffles of permutations” Permutation Patterns 2010	August 2010 <i>Dartmouth, NH</i>
“Enumeration of the distinct shuffles of permutations” (poster) Project NExT/Young Mathematicians' Network Poster Session, Joint Mathematics Meetings	January 2010 <i>San Francisco, CA</i>
“Enumeration of the distinct shuffles of permutations” Mathematical Association of America MathFest	August 2009 <i>Portland, OR</i>
“Enumeration of the distinct shuffles of permutations” (poster) Formal Power Series & Algebraic Combinatorics, RISC	July 2009 <i>Hagenberg, Austria</i>
“Enumeration of the distinct shuffles of permutations” Graduate Student Combinatorics Conference, University of Kentucky	March 2009 <i>Lexington, KY</i>
“Enumeration of the distinct shuffles of permutations” Joint Mathematics Meetings	January 2009 <i>Washington, DC</i>
“Enumeration of the distinct shuffles of two permutations of any length” National Science Foundation ADVANCE Workshop, Rice University	October 2008 <i>Houston, TX</i>
“Optimal Oriented Diameters” Mathematical Association of America MathFest, University of Wisconsin-Madison	August 2001 <i>Madison, WI</i>

“The Optimal Oriented Diameter of the 3 x 5 Torus” University Undergraduate Research and Arts Forum, Michigan State University	April 2001 <i>East Lansing, MI</i>
“The Optimal Oriented Diameter of the 3 x 5 Torus and of Joins of Graphs” Nebraska Conference for Undergraduate Women in Mathematics, University of Nebraska-Lincoln	February 2001 <i>Lincoln, NE</i>
“The Number of Repeated Parts in an Integer Composition” with Nils Barth Thirtieth Southeastern International Conference on Combinatorics, Graph Theory, & Computing, Florida Atlantic University	March 1999 <i>Boca Raton, FL</i>
“The Representation of the Future in Spoken French” Le français d’hier, d’aujourd’hui et de demain: Association for French Language Studies Annual Conference, University of St Andrews	September 2002 <i>St Andrews, Scotland</i>

INVITED COLLOQUIUM & SEMINAR PRESENTATIONS

“Famous Math Puzzles” Math, Technology, & Science Club, University of Science & Arts of Oklahoma	September 2016 <i>Chickasha, OK</i>
“Who Wants to Be a Mathematician: Women in Math” Festival of Arts & Ideas, University of Science & Arts of Oklahoma	January 2016 <i>Chickasha, OK</i>
“The Evolution of Euler Characteristic” Math Colloquium, Longwood University	April 2013 <i>Farmville, VA</i>
“Shuffles of permutations” Virginia Commonwealth University Discrete Math Seminar	September 2011 <i>Richmond, VA</i>
“Fun with Catalan Numbers” Math Colloquium, Longwood University	February 2011 <i>Farmville, VA</i>
“Fun with Catalan Numbers” Math Colloquium, Mount Saint Mary’s University	October 2010 <i>Emmitsburg, MD</i>
“Fun with Catalan Numbers” Math Colloquium, University of North Carolina Asheville	October 2010 <i>Asheville, NC</i>
“The Evolution of Euler Characteristic” Honors Colloquium, Sweet Briar College	April 2010 <i>Sweet Briar, VA</i>
“Enumeration of the distinct shuffles of permutations” University of Virginia Algebra Seminar	March 2010 <i>Charlottesville, VA</i>
“Enumeration of the distinct shuffles of permutations” Penn State Algebra Seminar	December 2009 <i>State College, PA</i>
“Enumeration of the distinct shuffles of permutations” North Carolina State University Algebra & Combinatorics Seminar	September 2009 <i>Raleigh, NC</i>
“Enumeration of the distinct shuffles of permutations” Brigham Young University Department of Mathematics	March 2009 <i>Provo, UT</i>
“Enumeration of the distinct shuffles of permutations” Wake Forest University Department of Mathematics	February 2009 <i>Winston-Salem, NC</i>
“Enumeration of the distinct shuffles of permutations” MIT Combinatorics Seminar	November 2008 <i>Cambridge, MA</i>
“Bounds for Optimal Single-Transposition Correcting Codes” Mathematics Seminar Series, AT&T Shannon Laboratories	August 2003 <i>Florham Park, NJ</i>

PUBLICATION

Barnes, Camillia Smith, **“Enumeration of the distinct shuffles of permutations”**
FPSAC 2009, Hagenberg, Austria DMTCS proc. AK, 2009, 155Ð166.
<http://www.dmtcs.org/dmtcs-ojs/index.php/proceedings/article/view/dmAK0113/2667>

MAJOR GRANTS FROM EXTERNAL SOURCES

2010, **Academy for Inquiry-Based Learning Grant**, Educational Advancement Foundation
 2010, *collaborator*, Math Images II, **Course, Curriculum, & Laboratory Improvement Grant**, National Science Foundation
 2008, **Travel Grant**, American Mathematical Society

MAJOR GRANTS FROM HOME INSTITUTIONS

2016, **Gladys Anderson Emerson Research Grant**, University of Science & Arts of Oklahoma
 2014, **Faculty Grant**, Sweet Briar College, for travel to 2014 Stanley@70 conference
 2012, **Faculty Grant**, Sweet Briar College, for travel to 2012 MathFest
 2011, **Faculty Grant**, Sweet Briar College, for travel to 2012 Joint Mathematics Meetings
 2011, **Faculty Grant**, Sweet Briar College, for travel to 2011 Algebraic Combinatorixx
 2010, **Faculty Grant**, Sweet Briar College, for travel to 2011 Joint Mathematics Meetings
 2010, **Science Initiative Start Up Funds Grant**, Sweet Briar College
 2002, **Graduate School of Arts and Sciences Grant**, Harvard University

ACADEMIC SERVICE

2017, Chair , Mathematics/Statistics Faculty Search Committee, University of Science & Arts of Oklahoma	<i>Chickasha, OK</i>
2016–2017, Representative , Mathematics Committee, State of Oklahoma Course Equivalency Project	<i>Edmond, OK</i>
2016–2017, Representative , Annual Math & Engineering Competition, Muskogee Area Educational Consortium	<i>Muskogee, OK</i>
2016–2017, Member , Mathematics/Statistics Faculty Search Committee, University of Science & Arts of Oklahoma	<i>Chickasha, OK</i>
2016–2017, Member , Regents Professional Achievement Awards Committee, University of Science & Arts of Oklahoma	<i>Chickasha, OK</i>
2015–2016, Chair , Regents Professional Achievement Awards Committee, University of Science & Arts of Oklahoma	<i>Chickasha, OK</i>
2015, Attendee , Oklahoma Concurrent Enrollment Convening, University of Tulsa	<i>Tulsa, OK</i>
2014–2015, Member , Assessment Committee, Sweet Briar College	<i>Sweet Briar, VA</i>
Fall 2013, Member , Faculty Grants Committee, Sweet Briar College	<i>Sweet Briar, VA</i>
2011–2013, Member , Honors Committee, Sweet Briar College	<i>Sweet Briar, VA</i>
2010–2012, Member , International Studies Advisory Committee, Sweet Briar College	<i>Sweet Briar, VA</i>
2010–2011, Member , Gender Studies Advisory Committee, Sweet Briar College	<i>Sweet Briar, VA</i>
March 2010, 2011, 2012, 2014, & 2015, Member , Phi Beta Kappa Nominating Committee, Sweet Briar College	<i>Sweet Briar, VA</i>
April 2011, Judge , Undergraduate Presentations and Posters, Mathematical Association of America MD–DC–VA Section Meeting	<i>Ashland, VA</i>
January 2011, Session Chair , Combinatorics II, American Mathematical Society Joint Mathematics Meetings	<i>New Orleans, LA</i>
November 2010, Session Organizer , “Undergraduate Research: Issues and Challenges”, Section NExT, Mathematical Association of America MD–DC–VA Section Meeting	<i>Fairfax, VA</i>
August 2010, Session Organizer , “Motivating the Unmotivated: Getting Students to Buy Into Your Course, the Next Course, and the Math Major”, Project NExT, Mathematical Association of America MathFest	<i>Pittsburgh, PA</i>
April 2010, Judge , Undergraduate Presentations, Mathematical Association of America MD–DC–VA Section Meeting	<i>Petersburg, VA</i>
January 2010, Judge , Undergraduate Poster Session, American Mathematical Society Joint Mathematics Meetings	<i>San Francisco, CA</i>
January 2010, Session Organizer , “Designing and Implementing Your Own Upper Level Course”, Project NExT, American Mathematical Society Joint Mathematics Meetings	<i>San Francisco, CA</i>
January 2009, Session Chair , Combinatorics IV, American Mathematical Society Joint Mathematics Meetings	<i>Washington, DC</i>
2008–2009, Board Member & Department Representative , Harvard Graduate Women in Science & Engineering (HGWISE), Harvard University	<i>Cambridge, MA</i>
August 2008, Assistant to the Coordinator , Conference on Geometric Analysis: Present & Future, Harvard University	<i>Cambridge, MA</i>
2002–2003, External Events Officer , Churchill College Middle Common Room Committee, Cambridge University	<i>Cambridge, England</i>
Spring 1999, 2001, & 2002, Member , Selection Committee for Honors Contributions Award, Michigan State University	<i>East Lansing, MI</i>
2001–2002, Advisor , Undergraduate Math Club, Michigan State University	<i>East Lansing, MI</i>
2001–2002, Vice President , Honors College Student Advisory Committee, Michigan State University	<i>East Lansing, MI</i>
1998–1999 & Spring 2001, Treasurer , Honors College Student Advisory Committee, Michigan State University	<i>East Lansing, MI</i>
2000–2001, Member , University Committee on Honors Programs, Michigan State University	<i>East Lansing, MI</i>