Camillia Smith Barnes

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4 June 2018

EDUCATION

Harvard University Philosophiæ Doctor (Ph.D.), Mathematics Cambridge, MA June 2009 June 2007

Artium Magister (A.M.), Mathematics

Cambridge, England

Certificate of Advanced Study, retroactively equivalent to Master of Advanced Study (M.A.St.), Mathematics, with Merit

June 2003

Michigan State University

University of Cambridge

East Lansing, MI

Master of Science (M.S.), Mathematics

May 2002

Honors Bachelor of Science (B.S.), Mathematics, with Highest Distinction, Lyman Briggs School Honors Bachelor of Arts (B.A.), English Literature, with Highest Distinction

May 2002 August 2002

Honors Bachelor of Arts (B.A.), French Literature, with Highest Distinction

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

Conference Presentations

"Shuffles of permutations"	June 2014
Invited paper, Stanley@70 conference	$Cambridge,\ MA$

"Shuffles of permutations" March 2012 Invited paper for special session, AMS Eastern Section Meeting 2012 Washington, DC

"3-Shuffles of permutations" January 2012 Joint Mathematics Meetings 2012 Boston, MA

"Enumeration of the distinct shuffles of permutations" (poster) May 2011 Banff, Alberta, Canada Algebraic Combinatorixx, BIRS

"Shuffles of permutations" January 2011 Joint Mathematics Meetings 2010 New Orleans, LA

"Shuffles of permutations" August 2010 Permutation Patterns 2010 Dartmouth, NH

"Enumeration of the distinct shuffles of permutations" (poster) January 2010

San Francisco, CA

Hagenberg, Austria

Project NExT/Young Mathematicians' Network Poster Session, Joint Mathematics Meetings

"Enumeration of the distinct shuffles of permutations" August 2009 Mathematical Association of America MathFest Portland, OR

"Enumeration of the distinct shuffles of permutations" (poster) July 2009 Formal Power Series & Algebraic Combinatorics, RISC

"Enumeration of the distinct shuffles of permutations" March 2009

Graduate Student Combinatorics Conference, University of Kentucky Lexington, KY

"Enumeration of the distinct shuffles of permutations" January 2009 Joint Mathematics Meetings Washington, DC

"Enumeration of the distinct shuffles of two permutations of any length" October 2008 National Science Foundation ADVANCE Workshop, Rice University Houston, TX

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"Optimal Oriented Diameters" Mathematical Association of America MathFest, University of Wisconsin-Madison	$\begin{array}{c} \text{August 2001} \\ \textit{Madison, WI} \end{array}$
"The Optimal Oriented Diameter of the 3 x 5 Torus" University Undergraduate Research and Arts Forum, Michigan State University	$\begin{array}{c} \text{April 2001} \\ East \ Lansing, \ MI \end{array}$
"The Optimal Oriented Diameter of the 3 \times 5 Torus and of Joins of Graphs" Nebraska Conference for Undergraduate Women in Mathematics, University of Nebraska-Lincoln	February 2001 Lincoln, NE
"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 Boca Raton, FL
"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 St Andrews, Scotland
Invited Colloquium & Seminar Presentations	
"Famous Math Puzzles" Math, Technology, & Science Club, University of Science & Arts of Oklahoma	September 2016 Chickasha, OK
"Who Wants to Be a Mathematician: Women in Math" Festival of Arts & Ideas, University of Science & Arts of Oklahoma	January 2016 Chickasha, OK
"The Evolution of Euler Characteristic" Math Colloquium, Longwood University	$\begin{array}{c} \text{April 2013} \\ Farmville, \ VA \end{array}$
"Shuffles of permutations" Virginia Commonwealth University Discrete Math Seminar	September 2011 Richmond, VA
"Fun with Catalan Numbers" Math Colloquium, Longwood University	February 2011 Farmville, VA
"Fun with Catalan Numbers" Math Colloquium, Mount Saint Mary's University	October 2010 Emmitsburg, MD
"Fun with Catalan Numbers" Math Colloquium, University of North Carolina Asheville	October 2010 $Asheville, NC$
"The Evolution of Euler Characteristic" Honors Colloquium, Sweet Briar College	April 2010 Sweet Briar, VA
"Enumeration of the distinct shuffles of permutations" University of Virginia Algebra Seminar	$\begin{array}{c} {\rm March~2010} \\ {\it Charlottesville,~\it VA} \end{array}$
"Enumeration of the distinct shuffles of permutations" Penn State Algebra Seminar	December 2009 State College, PA
"Enumeration of the distinct shuffles of permutations" North Carolina State University Algebra & Combinatorics Seminar	September 2009 Raleigh, NC
"Enumeration of the distinct shuffles of permutations" Brigham Young University Department of Mathematics	March 2009 Provo, UT
"Enumeration of the distinct shuffles of permutations" Wake Forest University Department of Mathematics	February 2009 Winston-Salem, NC
"Enumeration of the distinct shuffles of permutations" MIT Combinatorics Seminar	November 2008 Cambridge, MA
"Bounds for Optimal Single-Transposition Correcting Codes" Mathematics Seminar Series, AT&T Shannon Laboratories	August 2003 Florham Park, NJ

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Barnes, Camillia Smith, "Enumeration of the distinct shuffles of permutations"

FPSAC 2009, Hagenberg, Austria DMTCS proc. AK, 2009, 155D166.

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

4	2017–present, Member, Festival of Arts and Ideas Committee, University of Science & Arts of Oklahoma	Chickasha,	OK
	2017—present, Member, Symposium Committee, University of Science & Arts of Oklahoma	Chickasha,	OK
-	2017—present, Member, Handbook Committee, University of Science & Arts of Oklahoma	Chickasha,	OK
-	2017—present, Member, Higher Learning Commission Criterion 3 Committee, University of Science & Arts of Oklahoma	ı Chickasha,	OK
	2017–2018, Chair, Mathematics/Statistics Faculty Search Committee, University of Science & Arts of Oklahoma	Chickasha,	OK
	2016–2017, Representative, Mathematics Committee, State of Oklahoma Course Equivalency Project	Edmond,	OK
	2016–2017, Representative, Annual Math & Engineering Competition, Muskogee Area Educational Consortium	Muskogee,	OK
4	2016–2017, Member, Mathematics/Statistics Faculty Search Committee, University of Science & Arts of Oklahoma	Chickasha,	OK
-	2016–2017, Member, Regents Professional Achievement Awards Committee, University of Science & Arts of Oklahoma	Chickasha,	OK
-	2015–2016, Chair, Regents Professional Achievement Awards Committee, University of Science & Arts of Oklahoma	Chickasha,	OK
4	2015, Attendee, Oklahoma Concurrent Enrollment Convening, University of Tulsa	Tulsa,	OK
4	2014–2015, Member, Assessment Committee, Sweet Briar College	$Sweet\ Briar,$, VA
]	Fall 2013, Member, Faculty Grants Committee, Sweet Briar College	Sweet Briar,	, VA
-	2011–2013, Member, Honors Committee, Sweet Briar College	Sweet Briar,	, VA
-	2010–2012, Member, International Studies Advisory Committee, Sweet Briar College	Sweet Briar,	, VA
-	2010–2011, Member, Gender Studies Advisory Committee, Sweet Briar College	Sweet Briar,	, VA
]	March 2010, 2011, 2012, 2014, & 2015, Member, Phi Beta Kappa Nominating Committee, Sweet Briar College	Sweet Briar,	, VA
	April 2011, Judge , Undergraduate Presentations and Posters,		
]	Mathematical Association of America MD–DC–VA Section Meeting	Ashland,	, VA
,	January 2011, Session Chair, Combinatorics II, American Mathematical Society Joint Mathematics Meetings	New Orleans,	LA
]	November 2010, Session Organizer, "Undergraduate Research: Issues and Challenges",		
,	Section NExT, Mathematical Association of America MD–DC–VA Section Meeting	Fairfax,	, VA
	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	Pittsburgh,	, PA
	April 2010, Judge, Undergraduate Presentations, Mathematical Association of America MD–DC–VA Section Meeting	Petersburg,	, VA
,	January 2010, Judge , Undergraduate Poster Session, American Mathematical Society Joint Mathematics Meetings Society	an Francisco,	CA
,	January 2010, Session Organizer, "Designing and Implementing Your Own Upper Level Course",		
]	Project NExT, American Mathematical Society Joint Mathematics Meetings Science	an Francisco,	CA
,	January 2009, Session Chair, Combinatorics IV, American Mathematical Society Joint Mathematics Meetings	Washington,	DC
4	2008–2009, Board Member & Department Representative,		
]	Harvard Graduate Women in Science & Engineering (HGWISE), Harvard University	Cambridge,	MA
	August 2008, Assistant to the Coordinator,		
(Conference on Geometric Analysis: Present & Future, Harvard University	Cambridge,	MA
-	2002–2003, External Events Officer, Churchill College Middle Common Room Committee, Cambridge University Cambridge University	nbridge, Engl	land
,	Spring 1999, 2001, & 2002, Member, Selection Committee for Honors Contributions Award, Michigan State University I	East Lansing,	MI
4	2001–2002, Advisor, Undergraduate Math Club, Michigan State University	East Lansing,	MI
		East Lansing,	MI
	1998–1999 & Spring 2001, Treasurer , Honors College Student Advisory Committee, Michigan State University	East Lansing,	MI
4	2000–2001, Member , University Committee on Honors Programs, Michigan State University	$East\ Lansing,$	MI

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