

Candice Price

www.candicerprice.com
cprice@smnith.edu

Mathematician and Educator

RESEARCH INTERESTS

MATH MODELING, KNOT THEORY, DNA TOPOLOGY, APPLIED MATHEMATICS

EDUCATION

UNIVERSITY OF IOWA | PHD IN MATHEMATICS

2012 | Iowa City, IA • Advisor: Isabel Darcy

SAN FRANCISCO STATE UNIVERSITY | MA IN MATHEMATICS

2007 | San Francisco, CA • Advisor: Mariel Vazquez

CALIFORNIA STATE UNIVERSITY, CHICO | BS IN MATHEMATICS

2003 | Chico, CA

POSITIONS HELD

SMITH COLLEGE | ASSISTANT PROFESSOR

Jul 2019 – Present | Northampton, MA

- Calculus I: Single Variable
- Discrete Mathematics

UNIVERSITY OF SAN DIEGO | ASSISTANT PROFESSOR

Sep 2016 – Present | San Diego, CA

- Applied Mathematics for Engineering and Science
- Calculus I: Single Variable
- Calculus II: Integration Techniques
- History of Mathematics
- Ordinary Differential Equations
- Problem Solving Seminar
- Survey of Calculus

SAM HOUSTON STATE UNIVERSITY | ASSISTANT PROFESSOR

Sep 2015 – May 2016 | Huntsville, TX

- Calculus I: Single Variable
- Calculus II: Integral Calculus
- College Mathematics

UNITED STATES MILITARY ACADEMY, WEST POINT | ASSISTANT PROFESSOR (TITLE 10)

Jul 2013-Jun 2015 | West Point, NY

- Differential Calculus
- Foundations: Introduction to Proof Writing
- Integral Calculus and Introduction to Differential Equations
- Introduction to Probability and Statistics
- Mathematical Modeling and Introduction to Calculus

OTHER TEACHING AND MENTORING EXPERIENCES

- Southeastern Undergraduate Workshop "DNA Topology" Mini-symposium Instructor Aug 2019
Georgia Institute of Technology, Atlanta, GA
- Enhancing Diversity in Graduate Education (EDGE) Summer Program, Analysis Instructor Jun 2019
Pomona College, Claremont, CA

- Summer Workshop in Geometry and Topology, “Knot Theory” Mini-symposium Instructor Aug 2017
Notre Dame University, South Bend, IN
- Enhancing Diversity in Graduate Education (EDGE) Summer Program, Mentor Jun 2012
Pomona College, Claremont, CA

PUBLICATIONS

1. G. Suarez, O. Udiani, B. Allan, C. Price, S. Ryane, E. Lofgren, A. Coman, C. Stone, L. Gallos and N. Fefferman. “A generic arboviral model framework for exploring trade-offs between vector control and environmental concerns”
Journal of Theoretical Biology Vol. 490 Apr 2020
2. S. Wilson, S. Sindi, H. Brooks, M. Hohn, C. Price, A. Radunskaya, N. Williams, and N. Fefferman. “How Emergent Social Patterns in Allogrooming Combat Parasitic Infections” Frontiers in Ecology and Evolution Vol 8 Mar 2020
3. C. Price, I. Darcy. “Oriented skein relation and a biological application”
Journal of Knot Theory and Its Ramifications Vol 28.13 Jan 2020
4. A. Alvarado, C. Price, “Academic Preparation for Business, Industry, and Government Positions”
“A Celebration of the EDGE Program’s Impact on the Mathematics Community and Beyond”,
Springer Vol. 18, 79-87 2019
5. C. Price, N. Fefferman, “Exploring the Professional Support Networks the EDGE Program Creates”
“A Celebration of the EDGE Program’s Impact on the Mathematics Community and Beyond”,
Springer Vol. 18, 317-325 2019
6. G. Jones, C. Price. “DNA Topology Review”,
Advances in the Mathematical Sciences, Springer Vol. 15 , 121-144 2018
7. H. Brooks, M. Hohn, C. Price, A. Radunskaya, S. Sindi, N. Williams, S. Wilson, N. Fefferman
“Mathematical analysis of the impact of social structure on ectoparasite load in allogrooming
populations.”, Understanding Complex Biological Systems with Mathematics, Springer Vol. 14,
31-46 2018
8. N. Williams, H. Brooks, M. Hohn, C. Price, A. Radunskaya, S. Sindi, S. Wilson, N. Fefferman
“How Disease Risks Can Impact the Evolution of Social Behaviors and Emergent Population
Organization.”, Understanding Complex Biological Systems with Mathematics, Springer Vol. 14,
47-61 2018
9. C. Price, E. Graham, R. Higgins, S. Wilson, “The Mathematically Gifted and Black Website”
Notices of the AMS, Vol 65.02, 124-126. Feb 2018
10. “Underrepresented Students in Topology and Algebra Research Symposium (USTARS)”
Notices of the AMS, Vol 64.04, 383-385. Apr 2017
11. M. Allocca, J. Graham, C. Price, S. Talbott, J. Vasquez. “Word Length Perturbations in Certain
Symmetric Presentations of Dihedral Groups.”
Discrete Applied Mathematics, Vol 221, 33-45. Apr 2017
12. J. Gatewood, C. Price. “Utilizing Social Network Analysis to Study Women in Conflict Zones.”
Journal of Humanistic Mathematics, Vol 7, Issue 1, 3-21 Jan 2017
13. “Applications of Knot Theory: Using Knot Theory to Unravel Biochemistry Mysteries.”
Advances in the Mathematical Sciences: Research from the 2015
Association for Women in Mathematics Symposium, Vol 6 2016
14. “A Biological Application for the Oriented Skein Relation”, PhD Dissertation Aug 2012
15. “The Coloring Invariant and Tangles”, Masters Thesis May 2007
16. “Coloring Invariant and Determinants” 2003
<http://www.math.jmu.edu/~taal/OJUPKT/candiceprice.pdf>
Online Journal of Undergraduate Papers in Knot Theory

- N. Jonoska, N. Obatake, S. Poznanović, C. Price, M. Riehl, M. Vazquez. “Modeling RNA:DNA Hybrids with Formal Grammars”
Submitted to Using Mathematics to Understand Biological Complexity, Springer Volume Nov 2019
- E. Insko, B. Kubik, C. Price “Upper broadcast domination of toroidal grids and a classification of diametrical trees”
arXiv:1610.05250 [math.CO] Oct 2018

MEDIA COVERAGE AND SELECT POPULAR MEDIA

- Meet a Mathematician website interview Apr 2020
- “Mathematically Gifted & Black.” Relatively Prime: Stories from the Mathematical Domain Podcast Apr 2019
- “Professor makes mathematics accessible, inclusive.” The San Diego Union Tribune Jul 2018
- “Candice Price’s Favorite Theorem” My Favorite Theorem Podcast Feb 2018
- “Are you thriving or surviving?” AMS e-Mentoring Networking the Mathematical Sciences Blog Sept 2016
- “An Academic Party of One” AMS e-Mentoring Networking the Mathematical Sciences Blog May 2016

AWARDS

GRANTS RECEIVED | EXTERNAL

- Principal Investigator: NSA “Underrepresented Students in Topology and Algebra Research Symposium (USTARS)” \$24,845
start date Jan. 2020
- Principal Investigator: NSA “Underrepresented Students in Topology and Algebra Research Symposium (USTARS)” \$24,845
start date Jul. 2018
- Co-Principal Investigator: NSF “Underrepresented Students in Topology and Algebra Research Symposium (USTARS)” DMS 1808177 \$49,942
PI: Erik Insko, CoPIs: Syvillia Averett, Shannon Talbott start date Oct. 2017
- Principal Investigator: NSF “Collaborative Research: Directed Reading Program Network” \$74,623
DUE 1740089 start date Oct. 2017
- Principal Investigator: NSF INCLUDES WATCH US Mini-Grant Award \$3000
“USTARS Collaboration Travel Grants” start date Sep. 2017
- Co-Principal Investigator: NSF “Enhancing Diversity in Graduate Education: Research Results From Twenty Years of Empowering Women in Mathematics” DMS 1747396 \$24,263
PI: Ami Radunskaya, CoPIs: Amy Buchmann, Laurel Ohm, Shanise Walker start date Sep. 2017
- Co-Principal Investigator: NSF “Underrepresented Students in Topology and Algebra Research Symposium (USTARS)” DMS 1717543 \$34,391
PI: Erik Insko, CoPIs: Syvillia Averett, Gabriel Sosa, Shannon Talbott start date Jan. 2017
- Co-Principal Investigator: NSF “Enhancing the Mathematics and Statistics Component of the 2016 SACNAS Conference” DMS 1643235 \$49,945
PI: Pamela Harris, CoPIs: Antonia Franco, Dagan Karp, Shannon Talbott start date Aug. 2016
- Principal Investigator: NSF “Underrepresented Students in Topology and Algebra Research Symposium (USTARS)” DMS 1602558, 1638418, 1711937 \$38,836
CoPIs: Syvillia Averett, Garrett Jones, Erik Insko, Shannon Talbott start date Nov. 2015
- Co-Principal Investigator: NSF “Underrepresented Students in Topology and Algebra Research Symposium (USTARS)” DMS 1458396 \$30,000
PI: Erik Insko, CoPIs: Syvillia Averett, Garrett Jones, Shannon Talbott start date Feb. 2015
- Co-Principal Investigator: NSF “SACNAS Scientific Symposia Sessions in Mathematics” DMS 1419383 \$13,600
PI: Shannon Talbott, CoPIs: Pamela Harris start date May 2014
- Principal Investigator: NSA “Underrepresented Students in Topology and Algebra Research Symposium (USTARS)” \$15,000
PI: Pamela Harris start date Jan. 2013

- Co-Principal Investigator: NSF “Underrepresented Students in Topology and Algebra Research Symposium (USTARS)” DMS 1317928 \$25,000
PI: Edray Goins, CoPIs: Alejandra Alvarado, Pamela Harris, Shannon Talbott start date Feb. 2013
- Principal Investigator: NSF “Underrepresented Students in Topology and Algebra Research Symposium (USTARS)” DMS 1053428 \$24,960
CoPIs: Syvillia Averett, Carlos De la Mora, Erik Insko, Julianna Tymoczko start date Jan. 2011

GRANTS RECEIVED | INTERNAL

- Superintendent Office of Diversity and Inclusion, “Sonia Kovalsky Day” 2015 \$10,000
United States Military Academy, West Point NY
- Faculty Development Research Fund “Collaborative Efforts” AY 2015 \$2600
United States Military Academy, West Point NY
- Photonics Research Center, “Collaborative Research Efforts” AY 2014 \$5443
United States Military Academy, West Point NY
- Faculty Development Research Fund, “Collaborative Research Efforts” AY 2013 \$1800
United States Military Academy, West Point NY

FELLOWSHIPS AND HONORS

- Benjamin Banneker Association, Incorporated “2019 Exemplary Mathematics Teachers of African American Students Award” 2019
- University of San Diego Black Student Resource Center Faculty Trailblazer Award AY 2018-2019
- University San Diego Women of Impact Nominee AY 2017, 2018
- University of San Diego ChangeMaker Fellow AY 2018-2019
- Short-term Visitor, National Institute for Mathematical and Biological Synthesis (NIMBioS) Knoxville, TN Jul 2018
- MSRI Summer Research for Women in Mathematics Participant Jun 2018
- Research Experience for Undergraduate Faculty (REUF) Participant Jun 2018
- Summer Innovation Institute 2018 Cohort Jun 2018
- USD Most Inspiration Professor, Student Support Services May 2018
- Teaching Inquiry-oriented Mathematics: Establishing Supports (TIMES) ODE Fellow AY 2017
- Project NEXt Fellow AY 2013
- The National Research Council Davies Fellow Jul 13-Jun 15
- Dr. Janice A Lumpkin Educator of the Year Award Mar 2013
- The Alfred P. Sloan Foundation’s Minority Ph.D. Program Fellow Jun 10-Aug 12
- Vertical Integration of Research and Education (VIGRE) Trainee Aug 10-May 11
- Graduate Assistants in Areas of National Need (GAANN) GAANN Fellow Aug 08-Aug 09
- Graduate Assistants in Areas of National Need (GAANN) GAANN Fellow Aug 06-Aug 07
- Sally Casanova California Pre-Doctoral Program Scholar Aug 05-Aug 06
- Minority Access to Research Careers (MARC) Honors Program MARC Scholar Aug 05-Aug 06
- Louis Stokes Alliance for Minority Participation (LSAMP) Masters Bridge to the Doctorate Fellow Aug 04-Aug 06

SELECTED PRESENTATIONS

VIRTUAL PRESENTATIONS

- “Using Mathematics to Unlock Biological Mysteries”
Math Modeling and Ecology course, University of San Diego, San Diego, CA May 2020

PLENARY ADDRESSES

- “Math in Everything and for Everyone”
Math for All Conference, Tulane University, New Orleans, LA Mar 2020
- “Viewing the World through a Mathematical Lens”
Hidden No More: Stories of Triumph, Excellence, and Achievement in Math and Computer Science
Lecture Series Southwestern University, Georgetown, TX Jan 2020
- “Increasing the Rate of Change: The Impact of Broadening the Visibility of Mathematicians of Color”
MAA Michigan Section Meeting
University of Detroit Mercy Apr 2019
- “My ‘Tricky’ Mathematical Journey”
California State University, Fresno Sonia Kovalevsky Day, Fresno, CA Mar 2019
- “Changing the ‘Face’ of Mathematics”
 - Math Equity in SoCal (MESCal) UnConference, University of La Verne May 2019
 - Teaching and Diversity Seminar, University of Illinois at Urbana-Champaign Dec 2018
- “Mathematically Gifted and Black”
Pi Mu Epsilon Induction Ceremony
California State University, Chico May 2018
- “Mathematically Gifted and Black”
Special AWM Lecture
University of Utah Mar 2018
- “Young, Mathematically Gifted and Black”
Advancing Student Participation in Research Experiences (ASPIRE),
Florida Gulf Coast University Feb 2018
- “An Application of Knot Theory to Biochemistry”
Southeastern Undergraduate Mathematics Workshop,
Georgia Institute of Technology, Atlanta, GA Aug 2017
- “Intersecting Parallel Lines”
7th Annual S.E.S.H.A.T. STEAMing Towards Social Justice Meeting Apr 2017

INVITED ADDRESSES (SELECTED)

- “Changing the ‘Face’ of Mathematics”
 - Teaching and Diversity Seminar; University of Illinois at Urbana-Champaign Dec 2018
- “Modeling DNA-Protein Interactions with Topology”
 - Chico Topology and Cascade Conference; California State University, Chico May 2018
 - Mathematical Biology Seminar; University of Utah Mar 2018
 - Applied Topology Seminar; Youngstown University Mar 2018
- “Using Mathematics to Unlock Biological Mysteries”
 - Minorities in Mathematics Speaker Series, USMA West Point Nov 2018
 - AMS Fall Western Sectional Meeting, San Francisco State University Oct 2018
 - UW-PIMS Colloquium, University of Washington Mar 2018
 - STEMinar Series, Florida Gulf Coast University Feb 2018

SERVICE

DEPARTMENTAL SERVICE

Smith College Department of Mathematics and Statistics
Faculty Advisor

- Issa Susa '22

Smith College Department of Mathematics and Statistics
Math TAs coordinator

AY 2019-2020

Smith College Department of Mathematics and Statistics
Hiring Committee

AY 2019-2020

Fletcher Jones Summer Scholars Faculty Mentor

"Correlation between Race and Socioeconomic Status in Maternal Mortality Rate"

MarGhece Barnes

2019

"Fair Division in the discussion of Liver Transplant Allocations"

Elie Nyembo

2019

University of San Diego Department of Mathematics
Hiring Committee

AY 2017-2018

University of San Diego Department of Mathematics
Faculty Research Seminar Co-Organizer

AY 2016-2017

University of San Diego Department of Mathematics
Senior Thesis Advisor

"The Role of Financial Aid on Economic Crime at the University of San Diego"

Timothy Berend and Gregory Dreyfus

2016-2017

Sam Houston State University Math Department
Graduate Teaching Seminar
Co-Organizer

Spring 2016

USMA West Point Math Department
Topology and Algebra Research Seminar
Co-Organizer

2013-2015

USMA West Point Math Department
Math Competitions Committee Member

2012-2015

University of Iowa Mathematics Graduate Board
Vice President and Newsletter Co-Chair

2007-2009

UNIVERSITY SERVICE

Smith College

Sherrerd Grounded Knowledge Panel panelist

Mar 2020

University of San Diego

Faculty Research Grant and University Professorship Committee

AY 2018-2019

University of San Diego

Committee on Undergraduate Teaching and Learning

AY 2018-2019

University of San Diego

Student Support Services Summer Bridge Instructor

Summer 2018

University of San Diego

Faculty Co-Advisor for an Undergraduate Research group: "Aqua Squad"

2016-2019

University of San Diego

Co-Advisor for Students of Color in STEM(M)

2016-2019

United States Military Academy, West Point

ROCKS Mathematical Sciences Department Liaison

2014

United States Military Academy Women's Army Rugby Team

Officer Representative

2012-2015

STEM COMMUNITY SERVICE

Society of Industrial and Applied Mathematics/American Mathematical Society Frank and Brennie Morgan Prize selection committee	Feb 2020-Present
Mathematical Association of America Committee on the Euler Prize	Jan 2020-Present
Critical Issues in Mathematics Education 2020: Today's Mathematics, Social Justice, and Implications for Schools Co-Organizer (moved online due to CoViD 19)	Mar 2020
International Conference in Industrial and Applied Mathematics (ICIAM) Genomics to Populations: Mathematical Views of Modelling Biological Scales (Minisymposium) Co-Organizer	Jul 2019
AMS-MAA Joint Mathematics Meeting Special session on Women in Topology Co-Organizer	Jan 2019-Present
SoCal-Nevada MAA Sectional Chair	May 2018-May 2019
SIAM Annual Conference A Mathematical View of the Different Biological Scales: From the genomic level to the human interaction level Organizer	Jun 2017
SoCal-Nevada MAA Section Vice Chair	May 2017-May 2018
AWM Research Symposium EDGEy Mathematics: A Tribute to Dr. Sylvia Bozeman and Dr. Rhonda Hughes Co-Organizer	Apr 2017
SIGMAA-IBL Executive Board Coordinator for Outreach and Advocacy	Mar 2017-Present
Co-Creator of "www.mathematicallygiftedandblack.com"	Feb 2017-present
AWM Research Symposium 2017 Proceedings, AWM-Springer Co-editor	2017-2018
Career and Mentoring Workshop (CaMeW) Mentor	Jun 2016
Mathematical Association of America Membership Committee	2015-2018
Association of Women Mathematicians MathFest Organizing Committee	2015-2018
AMS-MAA Joint Mathematics Meeting Early Career Female Mathematicians in Algebra and Topology Session Co-Organizer	2015-2017
Sam Houston State University presents Operation Math Girls Co-Organizer	2015
Mathical Book Prize Committee Prize Selection Panel	2014-Present
Infinite Possibilities Conference Steering Committee Member: Program Committee	2014, 2017
United States Military Academy, West Point Sonia Kovalevsky Day Organizing Committee	2014
Joint Mathematics Meeting Pure and Applied Talks by Women Math Warriors presented by EDGE Session Co-Organizer	2014-2017
Underrepresented Students in Topology and Algebra Research Symposium (USTARS) Co-Founder and Organizing Committee Member	2010-Present
SIAM's Moody Mega Math Challenge Judge	2010-Present

INVITED PARTICIPATION

PANELS

- “Random Bits of Advice”
Nebraska Conference for Undergraduate Women in Mathematics Jan 26, 2019
- Hidden Figures: Then and Now
SIAM Annual Conference Jul 11, 2018
- Choosing a Graduate Program
Inifinte Possibilities Conference Apr 14, 2018
- Career Panel, Southeastern Undergraduate Mathematics Workshop
Georgia Tech University, Atlanta, GA Aug 7, 2017
- No longer Hidden Figures: Women mathematicians share their path to the profession
MAA MathFest, Chicago IL Jul 28, 2017
- SIAM’s Professional Development Evening Panel II: Networking for Success: Establishing
Connections Within Your Professional Community
SIAM Annual Meeting, Pittsburgh, PA Jul 13, 2017
- Black Again Forum, University of San Diego, San Diego, CA, Feb 21, 2017
- Getting into Graduate School
Graduate Research Opportunities for Women,
Northwestern University, Evanston, IL Oct 16, 2016

WORKSHOPS

- Association of Women in Mathematics Moving Towards Action Workshop
Joint Mathematics Meeting, Denver, CO Jan 14, 2020
- Collaborative Workshop for Women in Mathematical Biology
Institute of Pure and Applied Mathematics, Los Angeles, CA Jul 17-21, 2019
- Difficult Dialogues Workshop: How to Be a Better Ally
SIAM Annual Meeting, Portland, OR Jul 9, 2018
- Geometry of Redistricting Summer School, Expert Witness Track
Tufts University, Boston, MA Aug 7-11, 2017
- re:boot Number Theory 2017
Duke University, Durham, NC Jun 1-3, 2017
- Women Advancing Mathematical Biology: Understanding Complex Systems with Mathematics
Mathematical Biology Institute, Columbus, OH Apr 24-28, 2017
- Gender Imbalances Summit Meeting, Northwestern University
Evanston, IL Oct 13-14, 2017
- Entanglement in Biology; How nature controls the topology of proteins and DNA, Nov 17-22, 2013
Banff International Research Station, Banff, Canada

ASSOCIATIONS AND MEMBERSHIPS

- Alpha Phi Omega, Eta Psi Chapter
- Society for Industrial and Applied Mathematics
- Association for Women in Mathematics
- Mathematical Association of America