
AWARDS, FELLOWSHIPS, AND HONORS

- 2020 Mentors Hall of Fame, Student Research Symposium, San Diego State University.
- 2019 Grant Research and Enterprise Writing Fellowship, San Diego State University (3,000 USD).
- 2019 Outstanding Faculty Award, College of Sciences, San Diego State University.
- 2019 Outstanding Faculty Award, Department of Physics, San Diego State University.
- 2019 Senate Teaching Excellence Award nominee, San Diego State University.
- 2018 Faculty Innovation and Leadership Award, California State University (10,000 USD).
- 2018 Top ePortfolio Award for "Calculus for the Life Sciences: Growth Mindset and Active Learning" as part of the Course Redesigned with Technology Program.
- 2017 California State University Program in Education and Research in Biotechnology (CSUPERB) Travel Award, Institute of Mathematical Sciences, Singapore (2,000 USD).
- 2017 Outstanding Faculty Award, Department of Physics, San Diego State University.
- 2017 Center for Teaching and Learning Academy Award, San Diego State University.
- 2012 Thesis Honors by the *Claustre de Doctors* of the Universitat de Barcelona, Spain.
- 2011 Thesis Honor Award from the Ph.D. program of the Government of Catalonia, Spain (6,000 EUR).
- 2010 Research Fellowship for a research visit at the University of California, Los Angeles, funded by the Government of Catalonia, Spain (7,500 EUR).
- 2007 Ph.D. Research Fellowship. Government of Catalonia, Spain, 2007-2010 (60,000 EUR).
- 2006 Extraordinary M.S. Award in Biophysics from the Universitat de Barcelona, Spain, 2006.
- 2006 Undergraduate Research Fellowship. Ministry of Education and Science, Spain (4,000 EUR).

PRESENTATIONS

Invited Talks and Seminars

- 2022 Physics Seminar, Department of Biology, University of Miami, Coral Gables, FL, USA.
- 2022 Biology Seminar, Department of Biology, University of Miami, Coral Gables, FL, USA.
- 2022 Ciclo Los Viernes de la Evolución, Colegio Nacional, Mexico City, Mexico (Spanish).
- 2022 Mathematics Seminar, Temple University, Philadelphia, PA, USA.
- 2022 Mathematical Biology Colloquium, University of California, Merced, CA, USA.
- 2022 Computational Science Research Colloquium, San Diego State University, San Diego, CA, USA.
- 2022 Physics Colloquium, Florida International University, Miami, FL, USA.
- 2021 Biology of Viruses (BIL354), The University of Miami, Miami, FL, USA.
- 2021 Interdisciplinary Center for Quantitative Modeling in Biology, University of California, Riverside, USA.
- 2020 International Conference on Science and Technology of Complex Fluids, Universidad de Guanajuato, Guanajuato, Mexico.
- 2020 Computational Science Research Colloquium, San Diego State University, San Diego, USA.
- 2019 International Workshop on Calorimetry and Microbial Ecology, Telluride Science Research Center, Telluride, CO, USA.
- 2019 San Diego Microbiology Group, University of California, San Diego, USA.
- 2018 Computational Science Research Colloquium, San Diego State University, San Diego, CA, USA.
- 2018 York Cross-disciplinary Centre for Systems Analysis, University of York, UK.
- 2018 Coral Club, San Diego, CA, USA.
- 2017 International workshop on geometry and shape analysis in biological sciences, Institute for Mathematical Sciences, Singapore.
- 2015 Computational Science Research Colloquium, San Diego State University, San Diego, USA.
- 2015 Southern California Systems Biology Conference, UC Irvine, CA, USA.
- 2015 International Year of the Phage Conference, San Diego State University, USA.
- 2014 Center for Genomic Regulation, Barcelona, Spain.
- 2014 Condensed matter seminar series, Department of Physics, Universitat de Barcelona, Spain.
- 2014 Biomathematics and Computational Biology Colloquium, Courant Institute of Mathematical Sciences, New York University, New York, NY, USA.
- 2014 Viral Information Institute, San Diego State University, San Diego, CA, USA.
- 2014 Physics seminar, Hunter College of The City University of New York, New York, USA.
- 2013 Seminar at the Department of Biochemistry and Molecular Biology, Pennsylvania State University, Hershey, USA.
- 2011 Seminar condensed matter series, Universidad Autónoma de Madrid, Spain.

- 2010 Physics seminar, Brookhaven National Laboratory, Long Island, CA, USA.
- 2010 Quantitative biology seminar, University of Southern California, Los Angeles, USA.
- 2010 Biophysics seminar, University of California, Los Angeles, USA.
- 2010 Seminar, National Center of Biotechnology (CNB- CSIC), Madrid, Spain.
- 2009 Condensed matter seminar series, Universitat de Barcelona, Barcelona, Spain.
- 2009 Quantitative biology seminar, Institute of Marine Sciences (ICM-CSIC), Barcelona, Spain.

Contributed Talks

- 2022 FASEB Virus Structure and Assembly, Southbridge, Connecticut, USA.
- 2022 International Virus Bioinformatics Meeting, Valencia, Spain (online).
- 2020 International Colloquium Physics and Function of Protein Nanoshells: From Viruses to Biomimetic Nanocontainers, Condensed Matter Division 2020 Meeting, Madrid, Spain (online).
- 2020 International Coral Reef Symposium (ICRS), (cancelled due to COVID19).
- 2011 FISES'11: XVII National Conference on Statistical Physics, Barcelona, Spain.
- 2009 SEV 2009: X Spanish National Conference of Virology, Salamanca, Spain.

MENTORING

Assistant Professors (1)

Uduak George, Department of Mathematics & Statistics, SDSU. 2020 – Present

Postdoctoral Researcher (1)

Sergio Cobo-López, biophysical modeling, co-mentorship, SDSU. 2021 – Present
Margarita Salas fellowship.

Doctoral Students (3)

Diana Lee, Computational Science, SDSU. 2016 – Present
NSF G-STEM Scholarship, Computational Science Qualcomm Award, SIAM
CSE Award, Grace Hopper Scholar 2017, SACNAS Scholar,
Viral Information Institute Interdisciplinary Graduate fellowship.

James Mullinix, Computational Science, SDSU. 2015 – Present
NSF G-STEM Scholarship, Student Travel Award, Computational Science Tioga
Research Award and Natural Selection, Inc. Award.

Kevin Joiner, Computational Science, SDSU. 2015 – 2018
SMART Fellowship, Department of Defense, NSF G-STEM Scholarship,
Computational Science ESET Research Award.

Master Students (10)

Aurora Vogel, Applied Mathematics, co-mentorship, SDSU. 2021 – Present

Emma Sully, Applied mathematics, lab internship, SDSU. Summer 2021

Brandon Ricafrente, Physics, SDSU. 2020 – Present

Colin Brown, Physics, SDSU. 2019 – Present

Matthew Witt, Physics, SDSU. 2017 – 2019

Emily Jasien, Applied Mathematics, SDSU. 2015 – 2017

Shahir Sikder, Mathematics, SDSU. 2015 – 2016

Emma George, Cell Molecular Biology, co-mentorship, SDSU. 2015 – 2016

Maria Aznar, Biophysics, co-mentorship, Universitat de Barcelona. 2010 – 2011

Undergraduate Students (17)

Vaishnavi Patel, Biology, SDSU. 2022 – Present

Caitlin Bartels, Biology, SDSU. 2020 – Present

Jessica Vogt, Computer Science, SDSU. Fall 2021

Neilsen Lu, Mathematics, SDSU. 2020 – 2021

Antonio Cobarrubia, Physics, SDSU. 2018 – 2019

Austin Crispin-Smith, Physics, SDSU. 2018 – 2019

Jarod Tall, Physics, SDSU. 2018 – 2019

Meg Robinson, Mathematics, SDSU. 2018 – 2019

Malida Hecht, Physics, SDSU. 2018 – 2019

Undergraduate Senior Thesis Supervised (5)

Antonio Cobarrubia, Physics, SDSU.	2019
Austin Crispin-Smith, Physics, SDSU.	2019
Jarod Tall, Physics, SDSU.	2019
James Hellfeier, Physics, SDSU.	2018
Max Anthenelli, Physics, SDSU.	2018

Courses Taught

Calculus for the Life Sciences, MATH 124, 3 units, lecture, 128 students, SDSU.	Spring 2022
Calculus for the Life Sciences, MATH 124, 1 unit, lab coordinator, 6 sections, SDSU.	Spring 2022
Communication in Interdisc. Appl. Math., MATH 695, 3 units, lecture, 4 students, SDSU.	Spring 2022
Calculus for the Life Sciences, MATH 124, 3 units, lecture, 129 students, SDSU.	Fall 2021
Calculus for the Life Sciences, MATH 124, 1 unit, lab coordinator, 6 sections, SDSU.	Fall 2021
Calculus for the Life Sciences, MATH 124, 3 units, lecture, 174 students, SDSU.	Spring 2021
Calculus for the Life Sciences, MATH 124, 1 unit, lab coordinator, 6 sections, SDSU.	Spring 2021
Communication in Interdisc. Appl. Math., MATH 695, 3 units, lecture, 10 students, SDSU.	Spring 2021
Calculus for the Life Sciences, MATH 124, 3 units, lecture, 105 students, SDSU.	Fall 2020
Calculus for the Life Sciences, MATH 124, 1 unit, lab coordinator, 4 sections, SDSU.	Fall 2020
Calculus for the Life Sciences, MATH 124, 3 units, lecture, 125 students, SDSU.	Spring 2020
Calculus for the Life Sciences, MATH 124, 1 unit, lab coordinator, 4 sections, SDSU.	Spring 2020
Methods of Applied Mathematics II, MATH 342B, 3 units, lecture, 31 students, SDSU.	Spring 2020
Calculus for the Life Sciences, MATH 124, 3 units, lecture, 68 students, SDSU.	Fall 2019
Calculus for the Life Sciences, MATH 124, 1 unit, lab coordinator, 3 sections, SDSU.	Fall 2019
Methods of Applied Mathematics I, MATH 342A, 3 units, lecture, 45 students, SDSU.	Fall 2019
Calculus for the Life Sciences, MATH 124, 3 units, lecture, 89 students, SDSU.	Spring 2019
Calculus for the Life Sciences, MATH 124, 1 unit, lab coordinator, 4 sections, SDSU.	Spring 2019
Methods of Applied Mathematics II, MATH 342B, 3 units, lecture, 26 students, SDSU.	Spring 2019
Calculus for the Life Sciences, MATH 124, 3 units, lecture, 95 students, SDSU.	Fall 2018
Calculus for the Life Sciences, MATH 124, 1 unit, lab coordinator, 4 sections, SDSU.	Fall 2018
Methods of Applied Mathematics I, MATH 342A, 3 units, lecture, 36 students, SDSU.	Fall 2018
Calculus for the Life Sciences, MATH 124, 3 units, lecture, 99 students, SDSU.	Spring 2018
Calculus for the Life Sciences, MATH 124, 1 unit, lab coordinator, 4 sections, SDSU.	Spring 2018
Methods of Applied Mathematics II, MATH 342B, 3 units, lecture, 27 students, SDSU.	Spring 2018
Calculus for the Life Sciences, MATH 124, 3 units, lecture, 83 students, SDSU.	Fall 2017
Calculus for the Life Sciences, MATH 124, 1 unit, lab coordinator, 3 sections, SDSU.	Fall 2017
Methods of Applied Mathematics I, MATH 342A, 3 units, lecture, 43 students, SDSU.	Fall 2017
Methods of Applied Mathematics II, MATH 342B, 3 units, lecture, 42 students, SDSU.	Spring 2017
Methods of Applied Mathematics I, MATH 342A, 3 units, lecture, 52 students, SDSU.	Fall 2016
Methods of Applied Mathematics II, MATH 342B, 3 units, lecture, 34 students, SDSU.	Spring 2016
Methods of Applied Mathematics I, MATH 342A, 3 units, lecture, 49 students, SDSU.	Fall 2015
Fluid Mechanics Laboratory, 25 students, Universitat de Barcelona.	Fall 2010

Participation in Teaching Training Workshops

California State University Summer Institute: Course Redesign with Technology.	Summer 2018
California State University Summer Institute: Course Redesign with Technology.	Summer 2017
SDSU Center for Teaching and Learning program: Scholarly Teaching through Evidence and Practice program.	2016 – 2017
SDSU Center for Teaching and Learning reading club: Brown, Roediger III, and McDaniel, "Make it stick: The science of successful learning."	Summer 2016
California State University Summer Institute: Course Redesign with Technology.	Summer 2017
Attended 25 SDSU Center for Teaching and Learning workshops.	2015 – 2016
Workshop on Scientific Teaching.	Spring 2013

Curriculum Development and Teaching Innovations

In MATH 124, Incorporated GradeScope as an online grading system; Expanded synchronous and asynchronous activities using TopHat in lectures and lab sections.	Fall 2021
---	-----------