

Kewalin Samart

COMPUTATIONAL BIOLOGY · BIOINFORMATICS · COMPUTATIONAL AND STATISTICAL GENOMICS

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Education

University of Colorado Denver, Anschutz Medical Campus (CU Anschutz)

Aurora, Colorado

DOCTOR OF PHILOSOPHY IN COMPUTATIONAL BIOSCIENCE

Aug 2022 – present

- Thesis Advisors: Dr. Arjun Krishnan, and Dr. Janani Ravi (co-primary)
- C. Werner and Kitty Hirs Fellowship

Michigan State University (MSU)

East Lansing, Michigan

B.SC. IN COMPUTATIONAL MATHEMATICS; MINOR IN COMPUTATIONAL MATH, SCIENCE, AND ENGINEERING

May 2022

- High Honor (Summa Cum Laude)
- McCartney Math Award, L.C. Plant Math Award, College of Natural Science Scholar
- Cumulative GPA: 3.98/4.00; Major GPA: 4.00/4.00
- Dean's Honor List: Fall 2018 – Spring 2022
- Royal Thai Government Scholarship Recipient 2017

Skills

Programming Languages R, Python, C++, TeX

Computational Tools Git, vi, Terminal, Unix/Linux, High-performance/ Cluster computing, LaTeX

Publications

- **Kewalin Samart**^{**}, Phoebe Tuyishime^{**}, Arjun Krishnan^{*}, Janani Ravi^{*}. Reconciling multiple connectivity scores for drug repurposing. *Briefings in Bioinformatics*(2021) doi.org/10.1093/bib/bbab161; ^{**}co-primary authors; ^{*}corresponding authors
[GitHub: github.com/jravidlab/connectivity_scores](https://github.com/jravidlab/connectivity_scores); [Live doc: jravidlab.github.io/connectivity_scores](https://live-doc.jravidlab.github.io/connectivity_scores)
- Janani Ravi, **Kewalin Samart**, Jason Zwolak, John Tyson. Modeling the START transition in the budding yeast cell cycle. *In preparation*. Online simulator: <http://sbmlsimulator.org/simulator/by-start>
- **Kewalin Samart**, Amy Tonielli, Arjun Krishnan, Janani Ravi. Integrating multiple transcriptome-based methods for drug repurposing in tuberculosis. *In preparation*.

Presentations

Research/Technical Talks

- R workshop at Global Alliance for Rapid Diagnostics (GARD). Virtual, Mar. 21, 2023. [Presentation material: github.com/jananiravi/R_intro](https://github.com/jananiravi/R_intro)
- 2nd Latin American Congress of Women in Bioinformatics and Data Science (WBDS LA). Virtual, Sep. 23, 2021.
- 29th Conference on Intelligent Systems for Molecular Biology and the 20th European Conference on Computational Biology (ISMB/ECCB). Virtual, Jul. 25, 2021.
- R-Ladies Pune. Virtual, May. 9, 2021. [Presentation material: github.com/KewalinSamart/RLadies-lightning-talk-distill](https://github.com/KewalinSamart/RLadies-lightning-talk-distill)

Poster Presentations

- Colorado Immunology and Microbiology conference. Vail, CO, Sep. 24 – 26, 2022.
- Intelligent Systems for Molecular Biology, ISMB 2022, International Society for Computational Biology flagship conference. Virtual, Jul. 11 – 12, 2022.
- 2nd Latin American Congress of Women in Bioinformatics and Data Science (WBDS LA). Virtual, Sep. 22 – 24, 2021.
- 2021 Mid-Michigan Symposium for Undergraduate Research Experiences (Mid-SURE). Virtual, Jul. 28, 2021.
- 29th Conference on Intelligent Systems for Molecular Biology and the 20th European Conference on Computational Biology (ISMB/ECCB). Virtual, Jul. 25 – 30, 2021.
- 2021 Great Lakes Bioinformatics Conference (GLBIO). Virtual, May 10 – 13, 2021.
- 2021 University Undergraduate Research and Arts Forum (UURAF). Virtual, Apr. 15 – 19, 2021.
- 2020 Mid-Michigan Symposium for Undergraduate Research Experiences (Mid-SURE). Virtual, Aug. 10, 2020.

Podcast Interview

- Repurposing drugs for diseases. The Sci-Files on Impact 89FM Episode 11 Season 6, Aug. 1, 2021.
[Podcast: https://impact89fm.org/101365/podcasts/the-sci-files-08-01-2021-kewalin-samart-repurposing-drugs-for-diseases/](https://impact89fm.org/101365/podcasts/the-sci-files-08-01-2021-kewalin-samart-repurposing-drugs-for-diseases/)

Peer Review

Academic Journals Contributed to peer review at PROS ONE

Honors/ Awards/ Scholarships

Aug 2022 **C. Werner and Kitty Hirs Fellowship**, University of Colorado Denver, Graduate School

Aurora, CO

May 2022	High Honor (Summa Cum Laude) , Michigan State University	East Lansing, MI
Apr 2022	McCartney Mathematics Award , MSU Department of Mathematics	East Lansing, MI
Oct 2021	Fall 2021 CNS Undergraduate Research Scholarship , MSU College of Natural Science	East Lansing, MI
May 2021	Summer Research Scholarship , EnSURE program – MSU College of Engineering	East Lansing, MI
Jan 2021	Spring 2021 CNS Undergraduate Research Scholarship , MSU College of Natural Science	East Lansing, MI
Oct 2020	Fall 2020 CNS Undergraduate Research Scholarship , MSU College of Natural Science	East Lansing, MI
May 2020	Summer 2020 CNS Undergraduate Research Scholarship , MSU College of Natural Science	East Lansing, MI
Apr 2020	L.C. Plant Mathematics Award Scholarship , MSU Department of Mathematics	East Lansing, MI
Jan 2020	Spring 2020 CNS Undergraduate Research Scholarship , MSU College of Natural Science	East Lansing, MI
Mar 2018	Academic Excellence Award (High Honor) , Lawrence Academy	Groton, MA
Dec 2017	Academic Excellence Award (Honor) , Lawrence Academy	Groton, MA
May 2017	Full-Ride Scholarship , BIOTEC, Royal Thai Government	Bangkok, Thailand

Research Experience

Ravi and Krishnan Labs; PIs: Dr. Janani Ravi and Dr. Arjun Krishnan

Jul 2023 – present

DEPARTMENT OF BIOMEDICAL INFORMATICS, CU ANSCHUTZ

Aurora, CO

Graduate researcher

Zhang Lab; PI: Dr. Fan Zhang

Mar 2023 – May 2023

DEPARTMENT OF BIOMEDICAL INFORMATICS, CU ANSCHUTZ

Aurora, CO

Graduate researcher; Rotation student

Kechris Lab; PI: Dr. Katerina Kechris

Jan 2023 – Mar 2023

DEPARTMENT OF BIOSTATISTICS AND INFORMATICS, CU ANSCHUTZ

Aurora, CO

Graduate researcher; Rotation student

Krishnan Lab; PI Dr. Arjun Krishnan

Mar 2021 – May 2022

MSU DEPARTMENT OF COMPUTATIONAL MATHEMATICS, SCIENCE, AND ENGINEERING

East Lansing, MI

Undergraduate researcher in computational biology

JRavi Lab; PI: Dr. Janani Ravi

Dec 2019 – May 2022

MSU DEPARTMENT OF PATHOBIOLOGY AND DIAGNOSTIC INVESTIGATION

East Lansing, MI

Undergraduate researcher in computational biology

Teaching Experience

CMSE 202: Computational Modeling and Data Analysis II

Jan 2022 – Apr 2022

MSU DEPARTMENT OF COMPUTATIONAL MATHEMATICS, SCIENCE, AND ENGINEERING

East Lansing, MI

Undergraduate learning assistant (LA) with Dr. Luciano Silvestri

University Service/ Leadership

Committee Member

Aurora, CO

COMPUTATIONAL BIOSCIENCE PROGRAM RETREAT

2022-2023 Academic Year

- Planned and organized the annual retreat for the Computational Bioscience graduate program.

Committee Member

East Lansing, MI

A REPRESENTATIVE ON BEHALF OF MSU COLLEGE OF NATURAL SCIENCE FOR

Fall 2021 – Spring 2022

- the University Academic Grievance Hearing Board
- the University Academic Integrity Hearing Board
- the University Academic Appeal Board

Extracurricular/ Volunteer Activities

Jul 2021	MaRmot at useR! 2021 The R Conference , Helped provide program information to participants	Virtual
2021–	International Society for Computational Biology (ISCB) , Member	Leesburg, VA
2021–	Association for Women in Mathematics (AWM) , Member	Providence, RI
2021–2022	MSU Women in STEM , Member	East Lansing, MI
2020–2022	Women + Data Science , Member	East Lansing, MI
2019–2022	R-Ladies East Lansing , Member	East Lansing, MI
Jul 2018	Burirum Pitthayakhom School , Assisted in the educational guidance seminar for K-12 students	Burirum, Thailand
Mar 2018	The Arc of Opportunity in North Central Massachusetts , Cared for people with disabilities	Fitchburg, MA