# 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/jravilab/connectivity_scores; Live doc: jravilab.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
- 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

### 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/

## Peer Review

**Academic Journals**     Contributed to peer review at PROS ONE

## Honors/ Awards/ Scholarships

Aug 2023  **C. Werner and Kitty Hirs Fellowship**, University of Colorado Denver, Graduate School          *Aurora, CO*

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| 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 DEPERTMENT 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 DEPERTMENT 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

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| 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* |