



MIDAS 2.0 Introduction

H.V. Jagadish, Director
March 27, 2019

New Structure, New People

- Three Associate Directors
 - Two are new
- Staff structure still in the works

Kayvan Najarian

Director, MCIRCC Data Science, Emergency Medicine

Professor, Computational Medicine and Bioinformatics

Professor, Electrical Engineering and Computer Science

Professor, Emergency Medicine

Editor-in-Chief of Biomedical Engineering and Computational Biology



The focus of Dr. Kayvan Najarian's research is on the design of signal/image processing and machine learning methods to create computer-assisted clinical decision support systems that improve patient care and reduce the costs of healthcare.

Pamela Davis-Kean

Professor of Psychology

Research Professor at the Institute for Social Research

Editor/Author of *Socializing Children Through Language*, Elsevier and Academic Press, 2016

The focus of Dr. Davis-Kean's research is on the various pathways that the socio-economic status (SES) of parents relates to the cognitive/achievement outcomes (particularly mathematics) of their children.



Ivo Dinov

Professor and Vice Chair, Department of Health Behavior and Biological Sciences, School of Nursing

Professor, Computational Medicine and Bioinformatics

Director, Statistics Online Computational Resource (SOCR)

The focus of Dr. Dinov's research is neuroscience, nursing informatics, multimodal biomedical image analysis, and distributed genomics computing. Dr. Dinov is developing, validating and disseminating novel technology-enhanced pedagogical approaches for science education and active learning.



INSTITUTION-WIDE SUPPORT FOR DATA SCIENCE

Pamela Davis-Kean: Social Sciences and the Humanities including, but not limited to:

- Business
- Education
- Information
- Law
- Literature, Science and the Arts (Humanities and Social Sciences)
- Public Policy
- Social Work
- Institute for Social Research and other Centers and Institutes that conduct research in Social Sciences and the Humanities

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H.V. Jagadish: Physical Sciences, Engineering and the Arts including, but not limited to:

- Architecture and Urban Planning
- Art and Design
- Engineering
- Environment and Sustainability
- Literature, Science and the Arts (Natural Sciences)
- Music, Theater, Dance
- Centers and Institutes that conduct research in Physical Sciences, Engineering and the Arts

jag@umich.edu

Ivo Dinov: education and training, and for the School of Nursing.

Email: dinov@umich.edu

Kayvan Najarian: Biological Sciences and Health Sciences, including but are not limited to:

- Dentistry
- Kinesiology
- Medicine
- Pharmacy
- Public Health
- Life Sciences Institute and other Centers and Institutes that conduct research in Biological Sciences and Health Sciences

kayvan@umich.edu

Jing Liu

Interim Managing Director, MIDAS

Dr. Liu has been with MIDAS since 2016. Her past research management experience includes coordinating mental health research, biostatistics support for clinical research, and grant proposal review.



Moira Dowling

and

Alison Martin



Senior Project Manager
Senior



Administrative Assistant

NEW PROGRAMS

Research:

- MIDAS Small Grants Program
- Visiting Faculty Program
- Grant proposal support

Education:

- Data Science Fellows Program
- Student travel awards
- Student project clearinghouse
- Summer camp as a channel for faculty outreach effort

Community Support:

- Themed social events
- Online discussion board with CSCAR

For all these programs, we seek your feedback and participation, particularly as we plan and launch them over the next weeks.

NEW RESEARCH PROGRAMS

- MIDAS Small Grants Program
Coming soon, to support research in data science theory, methodology, application in any domain, and societal impact. Open to all U-M faculty (three campuses).
- Visiting Faculty Program
MIDAS will provide space and collaboration opportunities, on a short-term basis, for visiting faculty (including faculty on sabbatical).
- Grant proposal support
MIDAS will offer expertise to strengthen data science grant proposals, especially interdisciplinary and large proposals.

NEW EDUCATION PROGRAMS

- Data Science Fellows Program: <https://midas.umich.edu/fellows/>
MIDAS will fund outstanding postdoctoral fellows with a two-year term;
They will each have a primary and a second faculty sponsor (MIDAS affiliates);
They will interact with the broad data science community and help make it more connected.
- Student Travel Award: <https://midas.umich.edu/travel/>
For U-M graduate students to travel elsewhere, and for non-U-M graduate students to come to U-M, for data science events.
- Student project clearinghouse
Industry, academic, and non-profit projects for students.
- Summer camp as a channel for faculty outreach effort
Content can be modularized to accommodate small projects provided by faculty.

NEW COMMUNITY SUPPORT PROGRAMS

- Themed social events
 - Help build interdisciplinary collaboration;
 - Help build data science students community.
- Online discussion board in collaboration with CSCAR
 - Online community that allows researchers to share data science expertise and build collaboration.
- Better Communication
 - Newsletter
 - Social Media

MANY CURRENT PROGRAMS WILL CONTINUE AND BE EXTENDED

Research:

- Continued support for Challenge Award teams
- MIDAS annual symposia, seminars, and other research events

Education:

- Data Science Graduate Certificate Program
- Data Science student teams
- Data Science high school summer camp
 - Summer camp as a channel for faculty outreach effort

External Partnership:

- Midwest Big Data Hub, and other community engagement
- Actively seeking industry, academic and non-profit partners
 - Capitalizing on MIDAS faculty's deep and broad connections with external partners

A FEW PROGRAMS WILL UNDERGO RESTRUCTURING

Faculty recruitment and start-up package offers: the program will terminate. But we are continuing to help in the recruitment of prospective faculty members with an interest in Data Science.

Core Faculty: the program will be restructured to separate it from faculty recruitment and to better allow our core faculty make key contributions to the U-M data science community.

CELEBRATE COMMUNITY ACHIEVEMENTS

Nicholson Price, Law School, and Kayte Spector-Bagdady, Bioethics and Obstetrics and Gynecology, paper on Shadow Health Records, in *Science*. Topic of our first TwitterChat.

Chris Brooks, UMSI and Academic Innovation, Best paper at the Learning Analytics and Knowledge conference (LAK)

NSF CAREER awards won by:

Laura Balzano, Electrical and Computer Engineering

Mosharaf Chowdhury, Computer Science and Engineering

Eric Gilbert, UMSI

Ruiwei Jiang, Industrial and Operations Engineering

Danai Koutra, Computer Science and Engineering

Please do tell us when you do something we should all cheer.

JOIN US!

If you are not yet a MIDAS affiliate faculty member,
You can join us at <https://midas.umich.edu/facultyform/>