IIS CAREER Office Hours

Jie Yang, PhD: Robust Intelligence

Sylvia Spengler, PhD: Information Integration Informatics

Cindy Bethel, PhD: Human-Centered Computing

May 15, 2025

National Science Foundation's Mission

"To promote the progress of science   to advance the national health, prosperity, and welfare; to secure the national defense…"

CISE Organization and Leadership

Office of the Assistant Director

Ellen Zegura
Acting Assistant Director

Joydip Kundu
Deputy Assistant Director

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Ellen Zegura
Division Director

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Deputy Division Director

Division of Computing and Communication Foundations (CCF)

Dilma DaSilva
Division Director

Irina Dolinskaya
Deputy Division Director

Division of Information and Intelligent Systems (IIS)

Michael Littman
Division Director

Wendy Nilsen
Deputy Division Director

Office of Advanced Cyberinfrastructure (OAC)

Katie Antypas
Office Director
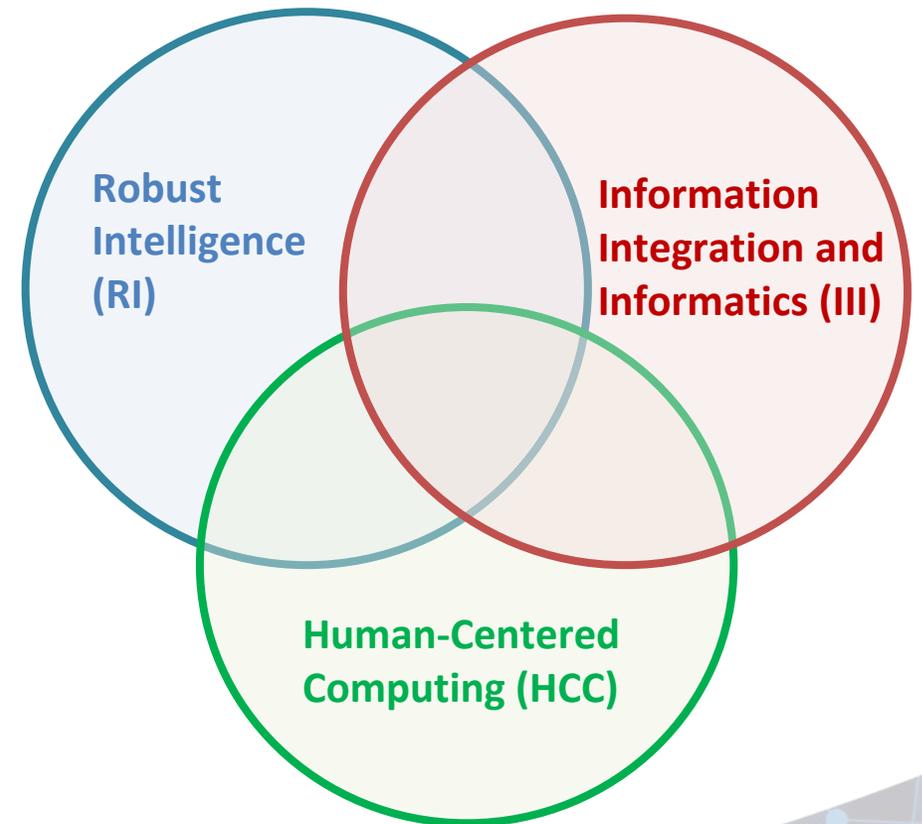

Amy Walton
Deputy Office Director

Information and Intelligent Systems

IIS supports research in the inter-related roles of people, computers, and information.

IIS includes three core programs: Human-Centered Computing (HCC), Information Integration and Informatics (III), and Robust Intelligence (RI). There is also the Foundational Research in Robotics program.

Robust Intelligence (RI)

Information Integration and Informatics (III)

Human-Centered Computing (HCC)

Human-Centered Computing (HCC)

Mission: **Accelerate creation of new human-centered computing technology**

- **Advance our understanding of the complex and increasingly coupled relationships between humans and computing systems.**
- **Advance multiple dimensions of human capabilities:**
  - **perceptual and cognitive**
  - **physical and virtual**
  - **social and societal**
- **HCC research is central to how humans work, learn, and live in a world abundant with computers and blanketed by networks.**

Information Integration and Informatics (III)

Mission: **Realize the full transformative potential of data, information and knowledge in this increasingly digital and interconnected world**

- *Areas of emphasis:*
  - **Data of unprecedented scale, complexity, and rate of acquisition**
  - **Issues of heterogeneity and complexity**
  - **Diverse functionalities and processing needs for data, information and knowledge from disparate and uncoordinated sources**
  - **Coping with the changing landscape of computing platforms at scales ranging from small mobile devices to potentially global-scale cloud and networked computing resources**
  - **Focus on variety of dimensions, including scalability, interactivity, or scientific, technological or societal impact**

Robust Intelligence (RI) Core

Mission: **Encompasses all aspects of the computational understanding and modeling of intelligence in complex and realistic contexts**

- *Is characterized by:*
  - **a system's flexibility, resourcefulness, use of a variety of modeling or reasoning approaches, and use of real-world data in real time, demonstrating a level of intelligence and adaptability seen in humans and animals**

- *Advances and integrates the research traditions of:*
  - **artificial intelligence, computer vision, human language research, robotics, machine learning, computational neuroscience, cognitive science, and related areas**

What is CAREER?

Intent

- Provide stable support at a sufficient level and duration

- Enabling careers as
    - Outstanding researchers
    - Outstanding educators

Program website

- https://new.nsf.gov/funding/opportunities/faculty-early-career-development-program-career

Deadline

- July 23, 2025

What is CAREER?

CAREER is not meant to recognize outstanding scholarship, but to enable it.

We encourage to submit your first CAREER proposal when your proposal is ready.

NSF priorities

Updates on NSF priorities

- https://www.nsf.gov/updates-on-priorities

NSF implementation of recent Executive Orders

- https://www.nsf.gov/executive-orders

We accomplish our mission by supporting you.

Send us your proposals.

Tell us about your triumphs.

Become a reviewer.

Talk to our program officers.

https://new.nsf.gov/cise