Case Western Reserve University  
Internet of Things (IoT)  
Internal Planning Grant Competition

The CWRU Vice President for Research and Technology Management, in collaboration with the Case School of Engineering Dean’s Office, is pleased to announce a campus-wide internal grant competition to seed research ideas around the emerging field of technology called the Internet of Things (IoT). The IoT, which is expected to represent a societal and industrial shift as significant as the introduction of the World Wide Web, is defined as follows:

[The Internet of Things] “is the concept of basically connecting any device with an on and off switch to the Internet (and/or to each other). This includes everything from cellphones, coffee makers, washing machines, headphones, lamps, wearable devices and almost anything else you can think of. This also applies to components of machines, for example a jet engine of an airplane or the drill of an oil rig....The analyst firm Gartner says that by 2020 there will be over 26 billion connected devices... The IoT is a giant network of connected "things" (which also includes people). The relationship will be between people-people, people-things, and things-things.”¹

Case Western Reserve University can lead this next technological revolution through not only a technological lens, but also through a societal and business perspective that is at the heart of an institution like CWRU: We do interdisciplinary work better than any institution in the country.

To incentivize CWRU faculty and researchers to begin working across disciplines to attack problems and solutions around realizing the IoT future, one year, planning grants up to $10,000 are available for projects in the following areas:

- Smart Cities – Bridging the digital divide, Smart physical infrastructure, Improved municipal/county services, Transportation, Public safety, Environmental monitoring
- Manufacturing – Automation, Adaptive operation, Digital thread
- Healthcare – Connected health devices, Improved health services (formal and informal care), Diagnostics and prognostics, Health data management
- Energy – Grid resilience and reliability, Efficiency, Security
- Crosscutting areas – Software, Interoperability, Human-machine interface (HMI), Cybersecurity, Big data, Business models, Standards, Ethics, Legal areas (Privacy, Consent, Liability, Regulation, Ownership of data), Education

These grants are expected to be used to stimulate interactions such as chalk talks, dinner meetings, preliminary data collection, speaker support, trips to DC, etc. that builds a research community of scholars. Key features of a competitive submission:
- More than one school/college included on team

¹ https://www.forbes.com/sites/jacobmorgan/2014/05/13/simple-explanation-internet-things-that-anyone-can-understand/#6dd79eb1d091
• Integration of both technical and non-technical disciplines
• Detailed and realistic 12 month plan of activities
• Convincing explanation of how team considers the local, regional, state, national, and global perspectives in their topic area

Eligibility
• Full-time faculty (tenure, tenure-track, non-tenure track, research)

Critical Dates
• Campus Town Hall Meetings:
  ○ December 5th, 1:00-2:00, Tink Senior Classroom
  ○ December 6th, 4:00-5:00, Tink Senior Classroom
  ○ December 11th, 8:00-9:00, Adelbert M2
• Proposal Due Date: January 22, 2018
• Decisions Returned: February 1, 2018

Submission Guidelines: Proposals should be no more than three pages in length and include:
• Team member names, with point of contact (responsible party) identified
• List of other collaborators outside of CWRU
• Title of Project for which seed funding is sought
• Description of proposed activities to be funded by the Internal competition
• Expected outcome of efforts, with a deliverable

Budget Guidelines: Please provide a one page justification of all direct costs. Faculty time is not an allowable cost. Allowable expenses include:
• Domestic travel
• Hourly student support for data collection & reduction, web-based/library research, etc.
• Consumables
• Food & beverage
• Facility costs
• Speakers (honoraria & expenses)

Deliverable: All funded projects will be asked to provide a talk summarizing planning outcomes and next steps.

Please submit proposals via email by 5:00 p.m. on January 22, 2018 to suzanne.rivera@case.edu with “IoT Internal Grant” in the subject line of your email.