

# ICubed: The UCF Community Embraces the Knowledge-Based Economy

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#### **ICubed Vision**

To create integration and synergy among Science, Technology, Engineering, Mathematics (STEM) research and education activities at the University of Central Florida to increase the ability of the UCF community to meet the challenges of today's knowledge-based economy.

#### Goals

- To provide coherence to the multiple internally and extramurally funded STEM projects at UCF
- To integrate STEM research and education activities throughout the UCF Community

### Objectives

- Increase STEM education program interactions
- Improve UCF community STEM fluency
- Integrate STEM research and education

Fostering a relationship between arts and sciences, people who hardly interact—as well as further deepening the appreciation for each other's and/or interests

## ICubed Fellows

ICubed Fellows are select students mentored by funded faculty researchers. They enjoy the following benefits:

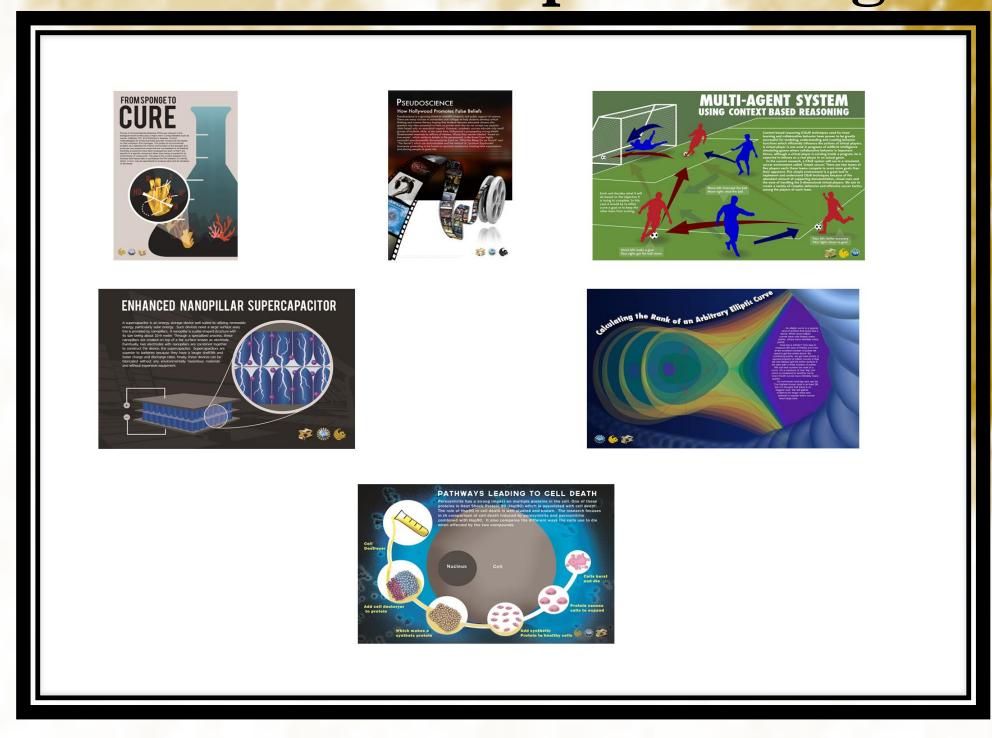
- Receive grant supplements
- Participate in other undergraduate research experiences programs
- Participate in UCFSTEAM (Science, Technology, Engineering, Arts, and Mathematics)
- Engage in outreach activities:
  - Showcase for Undergraduate Research Excellence (SURE)
  - State of STEM Conference
  - Internet Science and Technology Fair (ISTF)
  - UCF-CECS Engineering Futures Forum
  - Sunshine State Scholars
  - SECME Regional Competition
- Access to numerous networking opportunities

#### Assessment and Evaluation

Data Collection Methods: Qualitative Interviews, Focus Groups, Document Review, Questionnaires, Event Attendance, Database Analysis, Wilder Collaboration Factors Inventory

Outcomes: To date, the program has reached 441 students, 63 faculty members, and over 4000 other participants, including K-12 students and the public.

#### UCF STEAM Graphic Design Posters



# Science, Technology, Engineering and Mathematics

Science and art student teams created STEM-inspired art as part of the UCF ICubed project

#### Participating art classes:

- Advanced Sculpture -- David Isenhour
- Advanced Painting—Carla Poindexter
- Intermediate Illustration—Wanda Raimunidi-Ortiz
- Advanced Printmaking

   Dennis Ahearn
- Intermediate Book Binding

   Larry Cooper
- Intermediate Photography

   Keith Kovach
- Graphic Design

   Joo Kim

#### STEM Majors (2010-Present):

- Aerospace Engineering Biology
- Biomedical Science
- Chemistry
- Civil Engineering
- Computer Engineering
- Computer Science
- Electrical Engineering
- Environmental Engineering
- Industrial Engineering
- Mathematics
- Mechanical Engineering
- Molecular and Microbiology
- Physics

# UCFSTEAM Artworks Spring 2013



I loved the way my project turned out. Fusing the mechanics of physics with art was a fun learning experience for me.

### ICubed Personnel

Principal Investigator
Provost Tony Waldrop

Co-Principal Investigator
Debra Reinhart, EECS, ORC

Co-Principal Investigator Costas Efthimiou, COS

Co-Principal Investigator
Joo Kim, SVAD

PEER Program Evaluators
Bonnie Swan, Ph. D.

Bonnie Swan, Ph.D.
Christine DeStefano, M.A.
Conrad Katzenmeyer, Ph.D.

Co-Principal Investigator
Michael Georgiopoulos, EECS

Co-Principal Investigator Theo Lotz, SVAD

Co-Principal Investigator Carla Poindexter, SVAD

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