

Welcome CAP Executive Board



UCSD
Jacobs

School of
Engineering

January 31, 2013

CAP Chairman 2012 - 2013



Anton Monk, Ph.D. UCSD '94
Co-founder & VP Technology
Entropic Communications

Welcome New CAP Members!



Welcome Distinguished Students

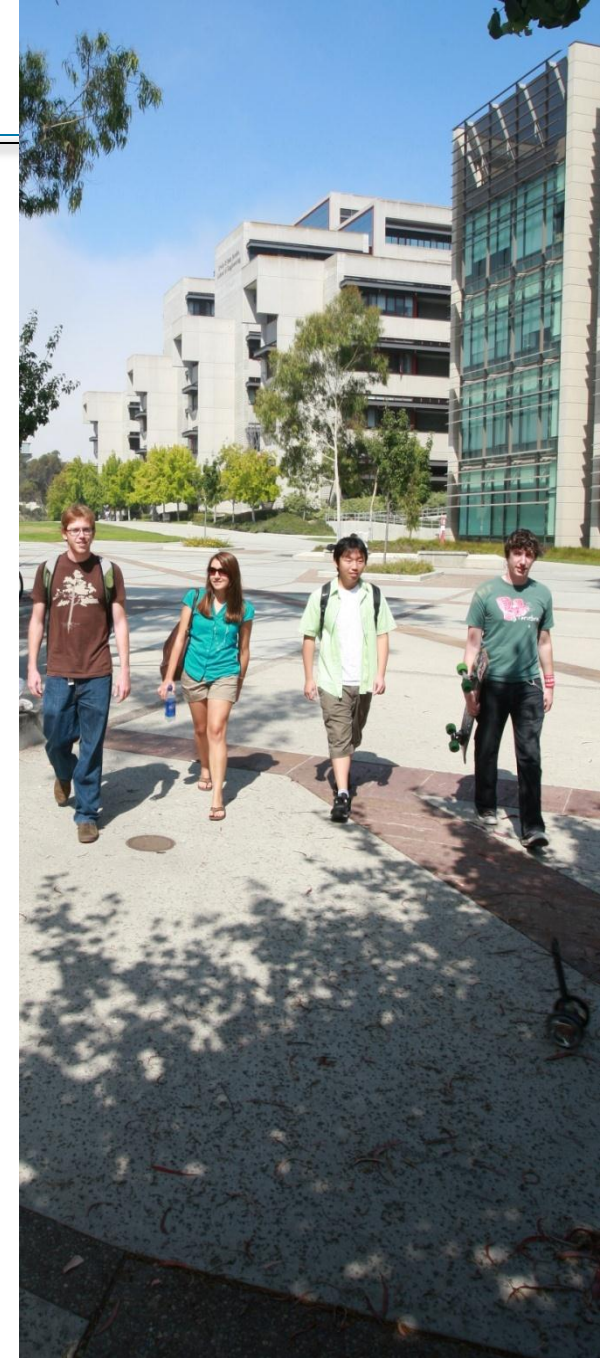
Triton Engineering Student Council

Eduardo Mateo, VP Finance

ThoughtSTEM

Sarah Esper, Co-founder

Stephen Foster, Co-founder







A big thanks to all of our Corporate Sponsors!
Over 25 CAP Members Attending!



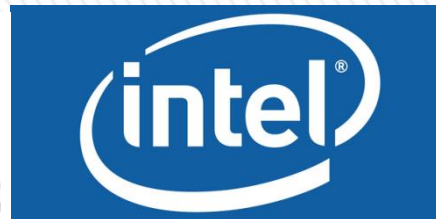
ViaSat[®]



life technologies[™]



**Sandia
National
Laboratories**





Friday, February 22, 2013
9:30 AM to 2:00 PM
University of California, San Diego

The regular registration period ends February 1st, 2013!



Enspire

Wednesday, February 20, 2013
9:00am – 1:00pm

This year, we have invited over 300 under-served middle school students to UCSD to learn about university-level engineering!

The students will participate in a design activity, lab tours, and listen to guest speakers through the span of their stay at UCSD



Enspire



We really need your help to continue making this event a successful event!







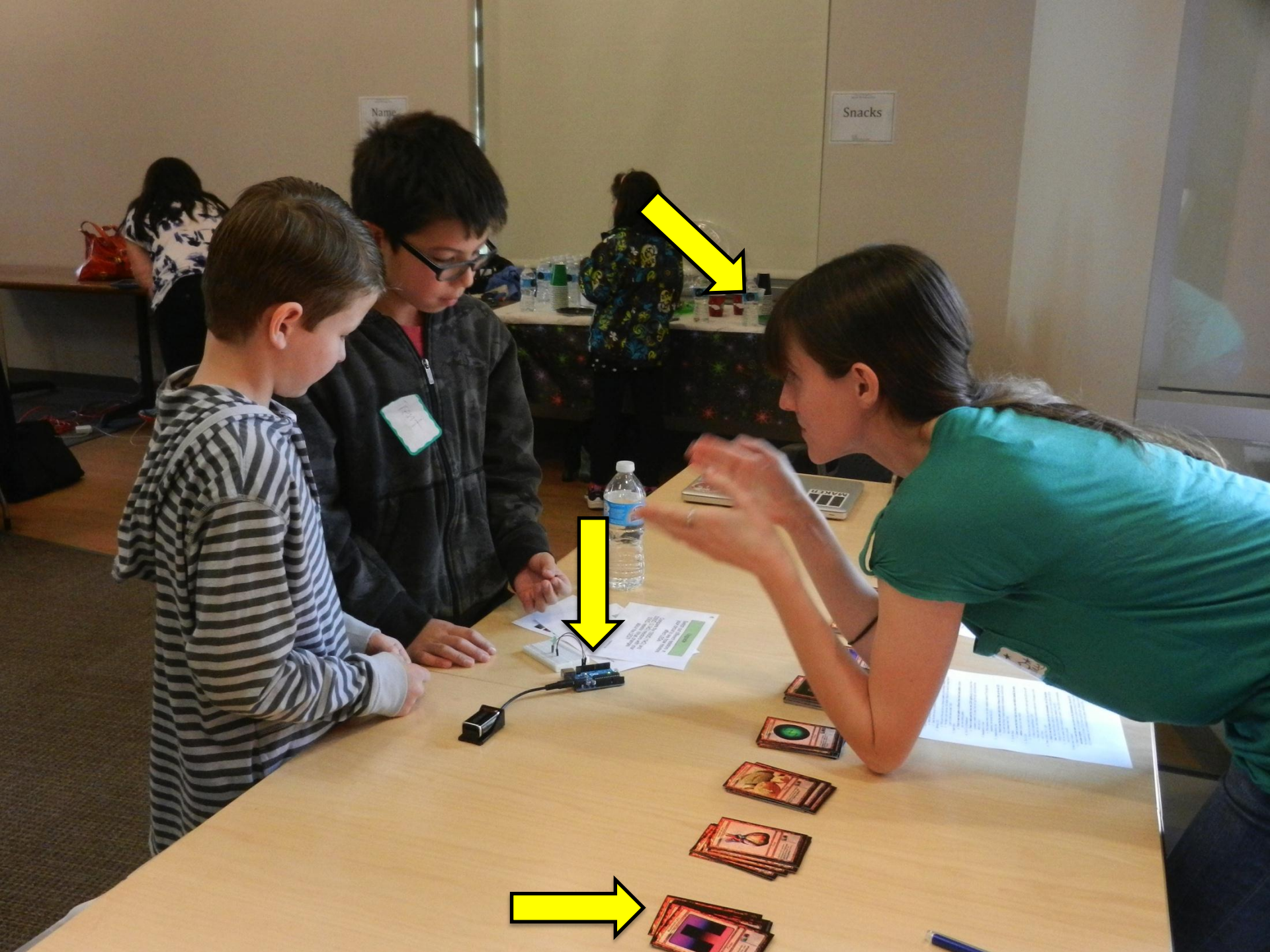
“College-level material”



“Traditional classrooms”







Name

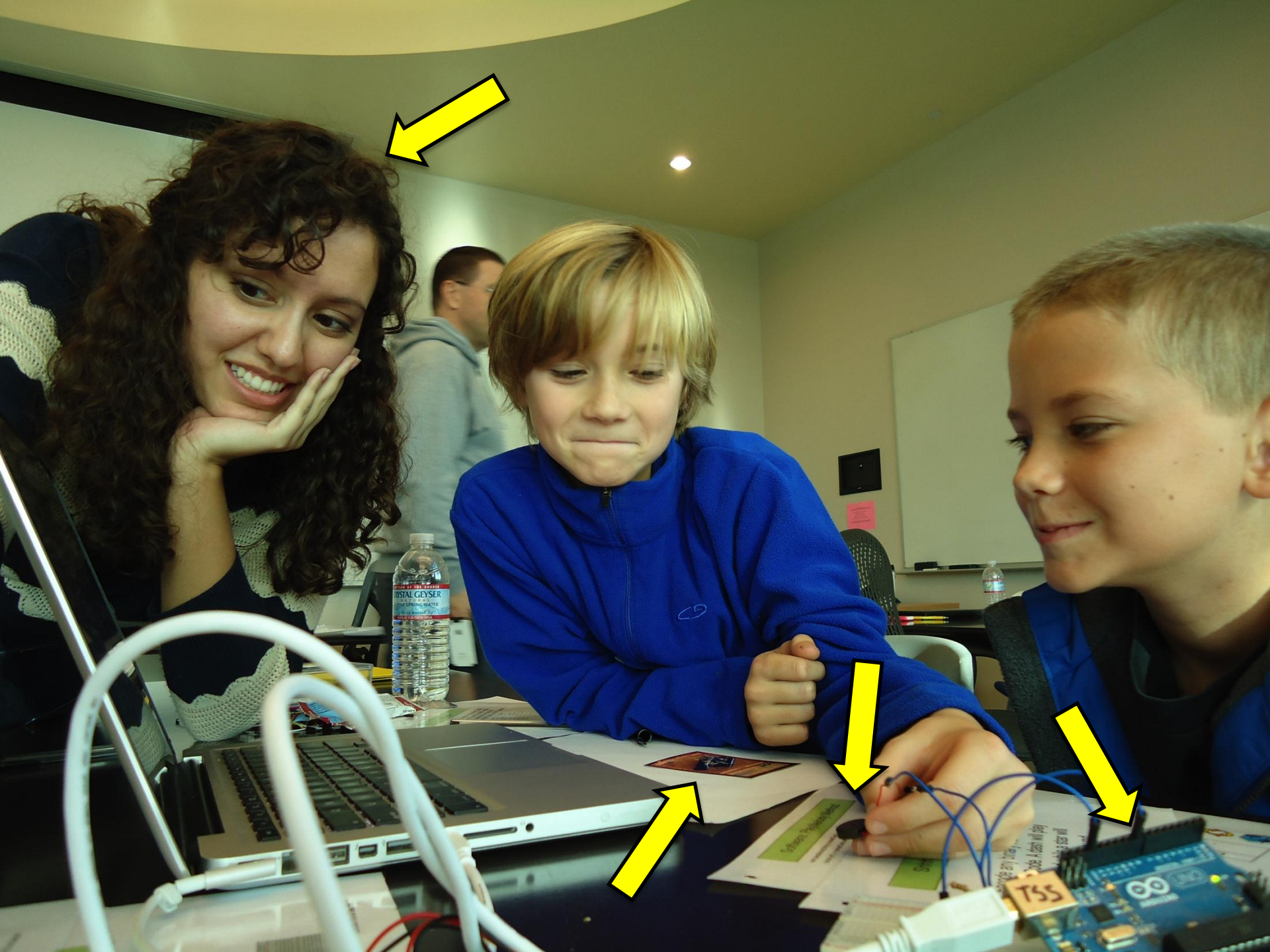
Snacks



Software

1. The first step is to download the software from the website. The software is available for Windows, Mac, and Linux. Once you have downloaded the software, you can install it on your computer. The installation process is simple and straightforward. Once you have installed the software, you can run it and start using it. The software is designed to be easy to use and understand. It provides a clear and concise interface for managing your data. The software is also very flexible and can be customized to meet your needs. The software is a great tool for anyone who needs to manage their data. It is a must-have for anyone who is serious about their work. The software is available for free download. You can find the download link on the website. The software is a great tool for anyone who needs to manage their data. It is a must-have for anyone who is serious about their work. The software is available for free download. You can find the download link on the website.

Lighting is an LED







contact@thoughtstem.com



Dean's Report

Corporate Affiliates Executive Board Meeting

Juan C. Lasheras
Interim Dean

Interim Dean



Juan C. Lasheras

Distinguished Professor
Mechanical and Aerospace Engineering
Bioengineering

Penner Chair in
Engineering and Applied Science

National Academy of Engineering

Director,
Center for Medical Device and Instrumentation,

Faculty Director,
MAS Medical Device Engineering



Frieder Seible

Dean Emeritus

30 Years of Service as Distinguished Professor
10 Years of Service as Dean of the Jacobs
School

87 Faculty Hires

Industry Partnerships Doubled

Two New Academic Departments

Four Buildings

Initiatives to enhance education through
team engineering and leadership programs

Thank You, Frieder!



Dean Search Advisory Committee

Firm: Isaacson, Miller

Committee Chairman: Robert Bitmead (MAE)

rbitmead@ucsd.edu

Committee Members:

Professor Pamela Cosman (ECE)

Provost Daniel Donoghue (Council of Provosts)

Vice Chancellor Linda S. Greene (Equity, Diversity and Inclusion)

Shazzy Gustafson (Student, CSE)

Professor Michael Heller (NanoEng)

Professor Michael Holst
(Mathematics/Physical Sciences)

Professor Ryan Kastner (CSE)

Professor Francesco Lanza Di Scalea (SE)

Dean Seth Lerer (Arts and Humanities)

Professor John Orcutt (IGPP/Scripps
Institution of Oceanography)

Professor Kevin Patrick (School of
Medicine)

Nieves Rankin (Staff Representative)

Professor Geert Schmid-Schonbein (BE)

Sayan Sivaraman (Student, ECE)

Professor Steven Wasserman (Biological
Sciences)

Proposed Translational Fund Focused on UC San Diego Technologies

Structure

- \$15 Million Fund, 4 year investment cycle
- Externally managed, for-profit
- Focused on UCSD technology
- Experienced VC management who have long-term relationships with UCSD
- Close collaboration with von Liebig Center and the Office of Technology Transfer
- Balanced portfolio with targeted exits planned within three years
 - Telecomm
 - Internet/IT
 - Nanotech/Materials
 - Energy
 - Medical Device Technologies

Management & Investment Decision Process

Operating Committee

Dave Schwab, Co-Chair
John Rodenrys, Co-Chair
Managing Director
UCSD-designated Investment Professional
San Diego-based Investment Professional



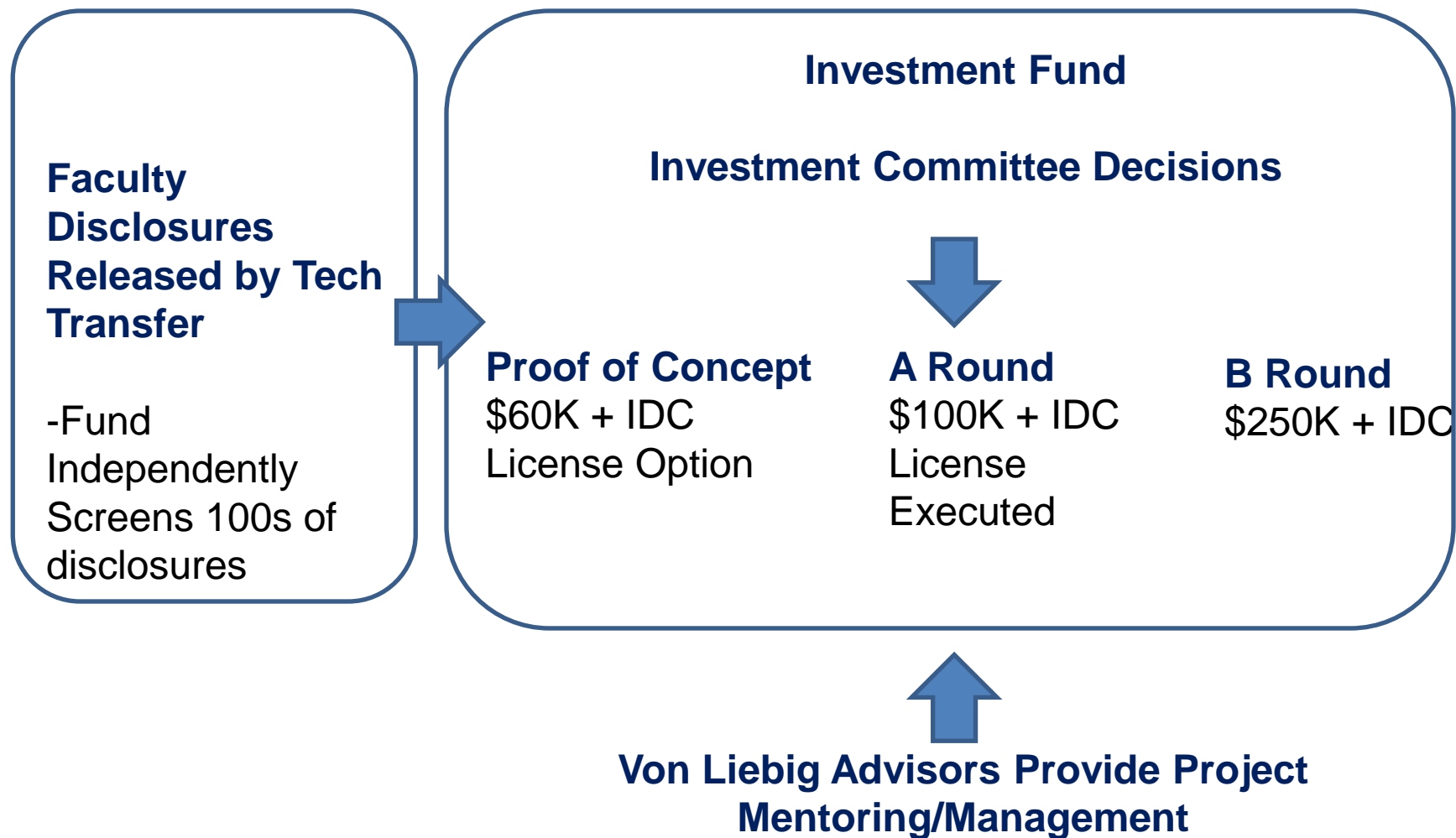
- Investment Decisions
- Kill Decisions
- Operational Decisions



Advisory Committee

Outside Domain Experts
Researchers, UCSD & External
Entrepreneurs
Venture Capitalists

Technology Acceleration Process & Funding Phases





Strategic Planning Process: Defining UC San Diego's Future



Our Goals

- **To be the leading public university that enriches human life by:**
 - Creating and disseminating, discoveries, technologies, inventions, cures, creative works and artistic expression
 - Educating and training leaders for society
 - Maintaining access and affordability
 - Engaging with, and contributing to, the community
 - Recognizing and celebrating diversity
- To be a university that provides an **enabling environment** and **opportunity for all** to achieve their objectives, dreams and ambitions, while contributing to institutional goals

Act Locally and Impact Globally



Current Context – External

- State General Funds expected to be flat at best
- State budget for construction expected to be non-existent
- Reduction in federal research support – very likely!
- Clinical income will decrease through healthcare reform

Why we are undertaking this strategic planning effort

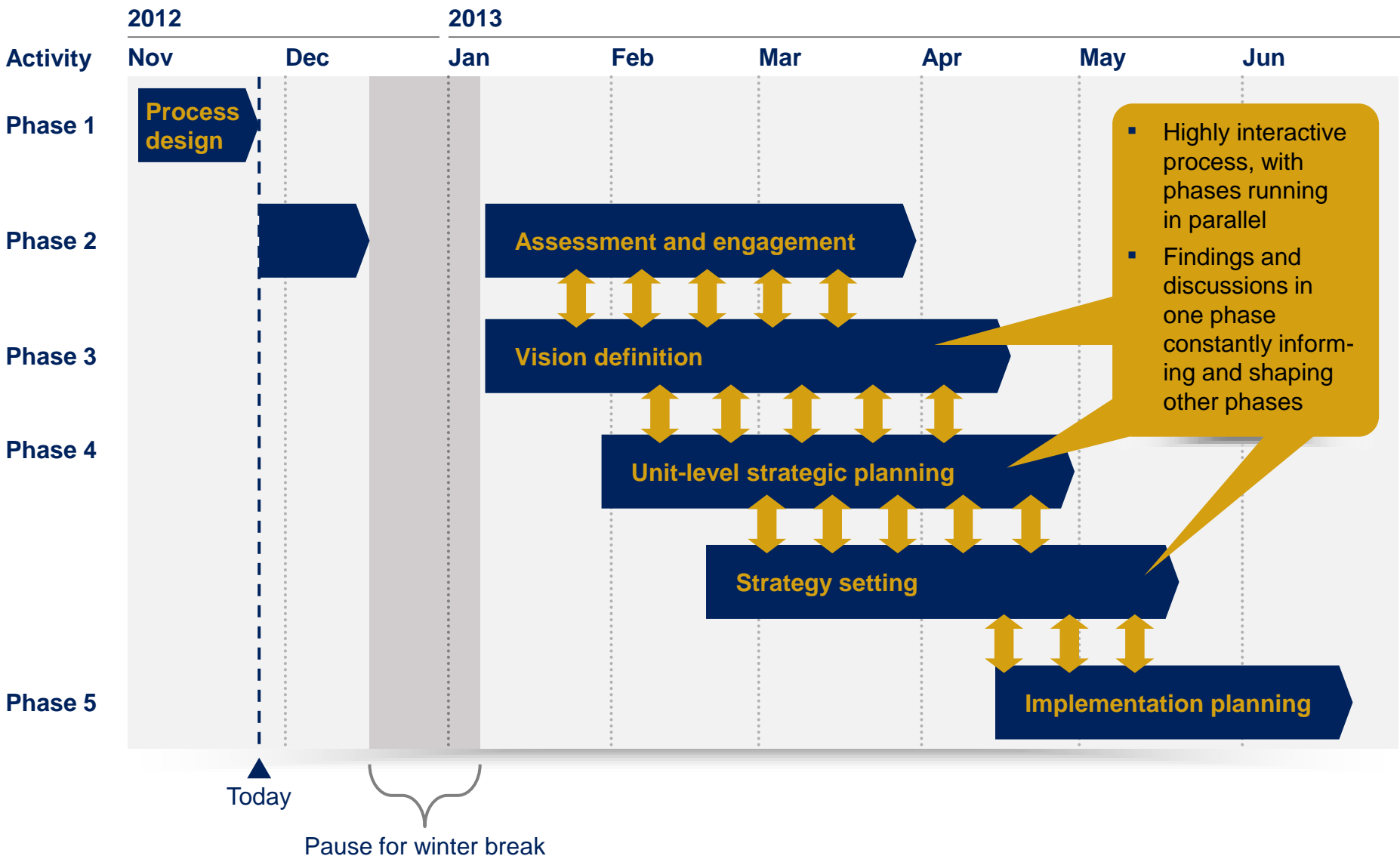
Overall Context

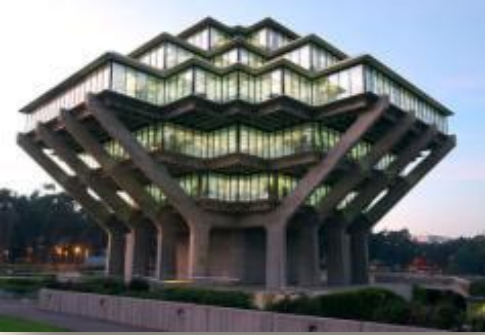
- Highly successful trajectory over the last 52 years
- Increasing financial constraints
- Many opportunities for distinctiveness and leadership

Challenges for UC San Diego

- Improving the undergraduate student experience
- Serving the best students regardless of their ability to pay
- Attracting more graduate students
- Improving student to faculty ratio
- Attracting and retaining talented faculty
- Enhancing infrastructure
- Improving UC San Diego's brand
- Enhancing global presence
- Fostering interdisciplinary cooperation among departments and schools by removing institutional barriers
- Increasing alumni giving rates

High level workplan for the strategic planning effort





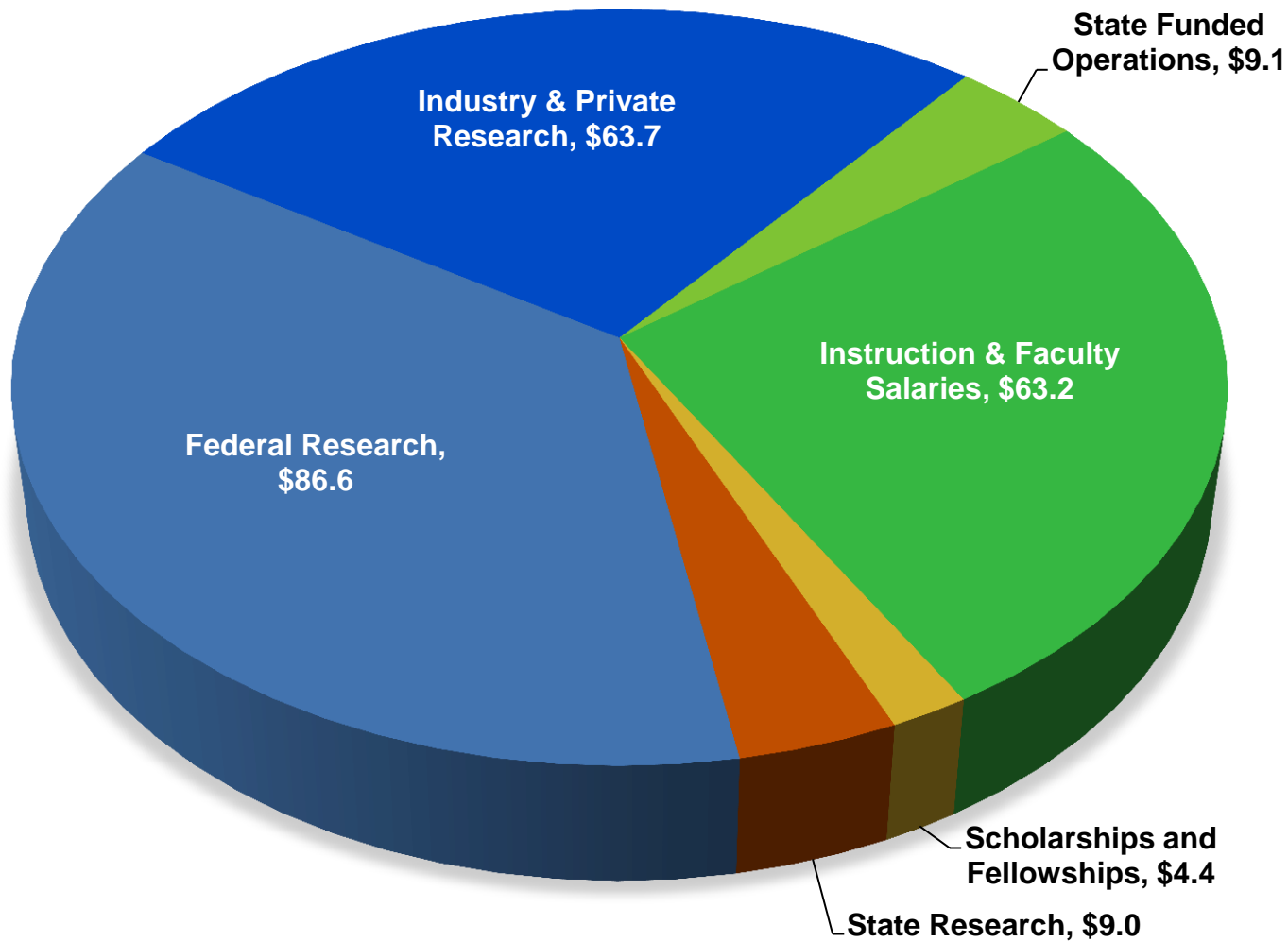
Jacobs School Strategic Planning

Workgroups:

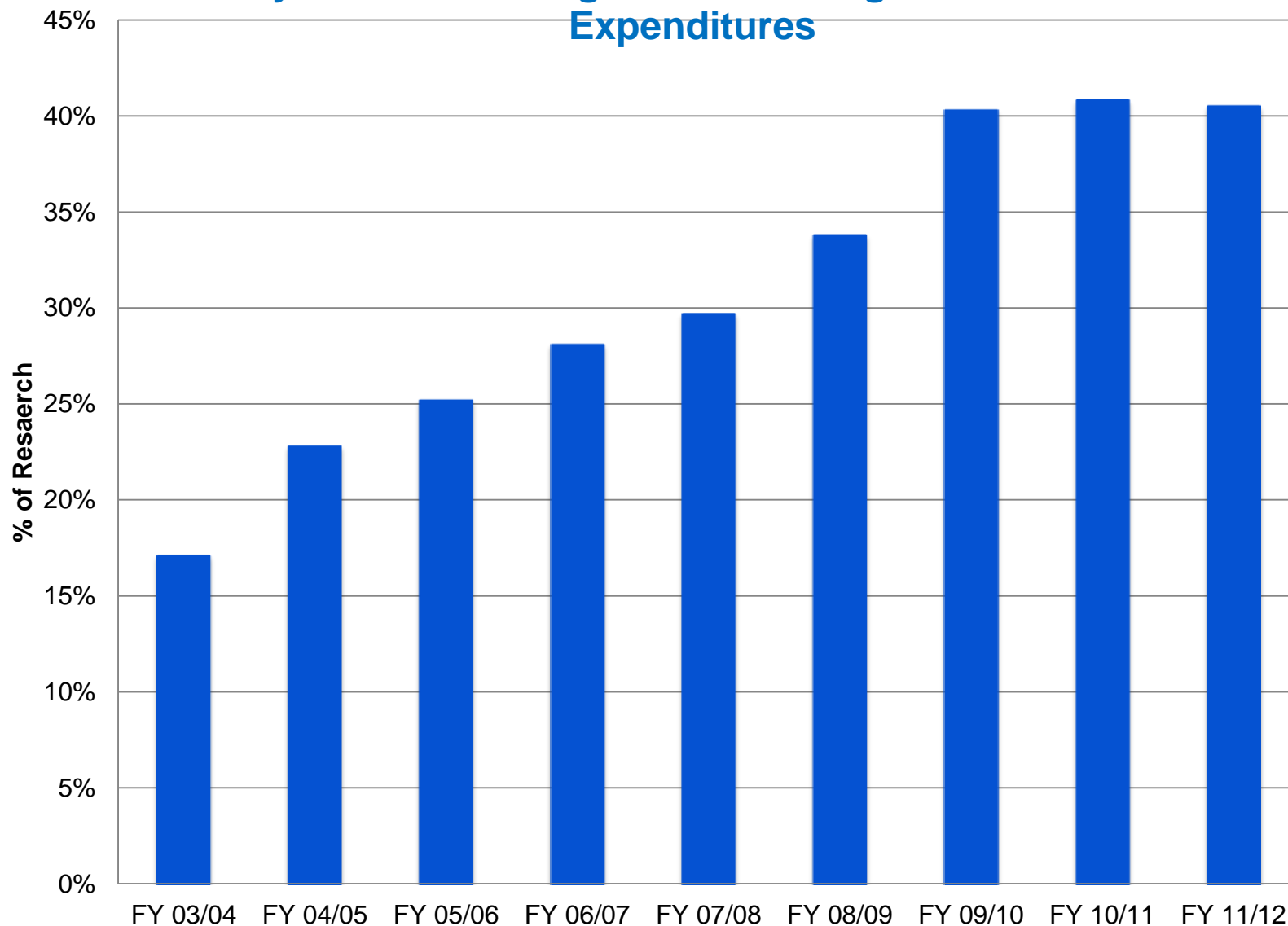


Undergraduate
Graduate
Research
Organization and Governance
External Relations

Jacobs School 11/12 Expenditures \$236M



Industry/Private Funding as a Percentage of Total Research Expenditures



General Campus Students

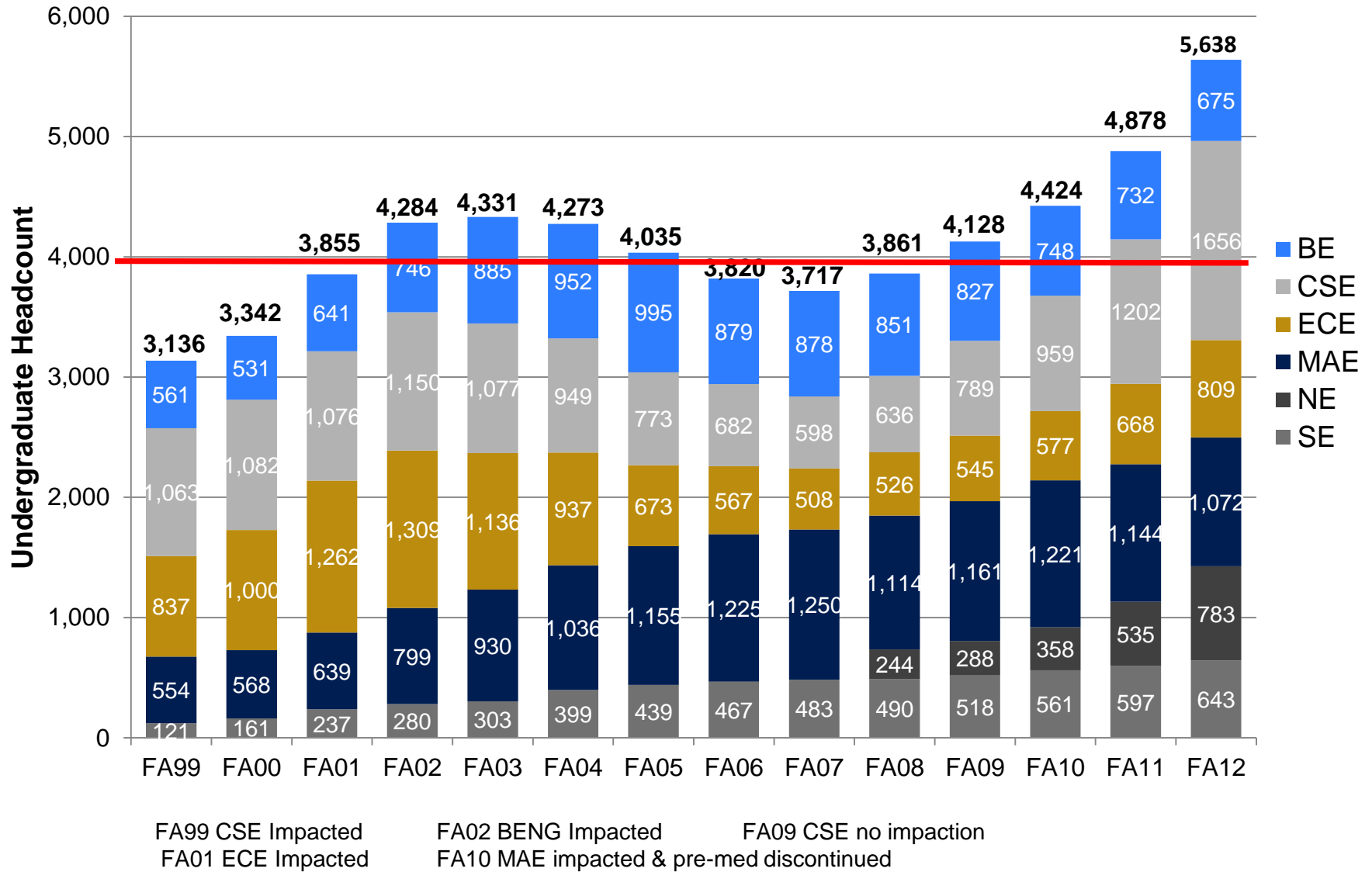
3 quarter average

Student Counts

	FY2008	FY2009	FY2010	FY2011	FY2012	Change
Division of Arts & Humanities						
Undergraduate Majors - 3QAvg	2,088.00	2,003.33	1,994.00	1,912.67	1,712.00	(376.00)
Master's Students - 3QAvg	139.00	129.67	148.67	144.00	142.33	3.33
PhD Students - 3QAvg	301.67	319.00	331.67	325.33	322.67	21.00
Division of Biological Sciences						
Undergraduate Majors - 3QAvg	5,107.00	5,625.33	5,560.67	4,884.67	4,062.33	(1,044.67)
Master's Students - 3QAvg	80.33	99.00	95.67	128.67	132.00	51.67
PhD Students - 3QAvg	198.00	181.33	170.33	159.00	159.00	(39.00)
Division of Physical Sciences						
Undergraduate Majors - 3QAvg	2,075.67	1,833.00	1,954.67	2,371.00	2,465.00	389.33
Master's Students - 3QAvg	41.66	41.67	63.00	70.00	82.00	40.34
PhD Students - 3QAvg	432.00	434.67	453.33	477.00	460.33	28.33
Division of Social Sciences						
Undergraduate Majors - 3QAvg	7,547.00	8,008.67	8,436.67	8,586.67	8,461.33	914.33
Master's Students - 3QAvg	138.00	110.33	112.67	117.67	115.67	(22.33)
PhD Students - 3QAvg	594.33	595.33	614.67	609.00	623.33	29.00
Jacobs School of Engineering						
Undergraduate Majors - 3QAvg	3,624.33	3,805.00	4,105.67	4,330.67	4,790.33	1,166.00
Master's Students - 3QAvg	356.66	378.67	458.00	483.00	496.67	140.01
PhD Students - 3QAvg	785.67	762.67	820.67	879.33	901.33	115.67
Jacobs School of Engineering						
Percent of UG	18%	18%	19%	20%	22%	111%
Percent of Masters	47%	50%	52%	51%	51%	66%
Percent of PhD	34%	33%	34%	36%	37%	75%
Percent of Total	20%	20%	21%	22%	25%	100%

source: EVC Resource Profile Data

Jacobs School Total Undergraduate Enrollment



Fall 2011 - Fall 2013 Undergraduate Applications

	2011 Applications	2012 Applications	2013 Applications	1 Year Change	2 Year Change
Engineering	12,250	14,500	17,000	17%	39%
Non-Engineering	59,000	62,000	65,300	5%	11%
Total	71,250	76,500	82,300	8%	16%

Fall 2013:

17,000 applicants to Jacobs School out of a total of
156,000 applicants to the *entire* UC System

11%

Discussion Questions

1. What do you perceive to be the Jacobs School's reputation and distinguishing strengths?
2. Are the Jacobs School's contributions to the future well-being and prosperity of the state properly recognized within your company? How are we viewed in terms of our contributions to:

Educating the future workforce? Advancing knowledge in science and technology
Contributing to the growth of industry?
3. Does your company value a strong, thriving, entrepreneurial Jacobs School of Engineering? What are the most important reasons you include us amongst the select universities with whom you do business?
4. How much is the Jacobs School reputation tied to that of the overall UC San Diego reputation? Can/should we create our own brand?



Anne O'Donnell
Director
Corporate Affiliates Program
Jacobs School of Engineering

RESEARCH EXPO

April 18, 2013

CAP Members receive 2 for 1 admission Call for Expo Judges

2:00P – 4:30P

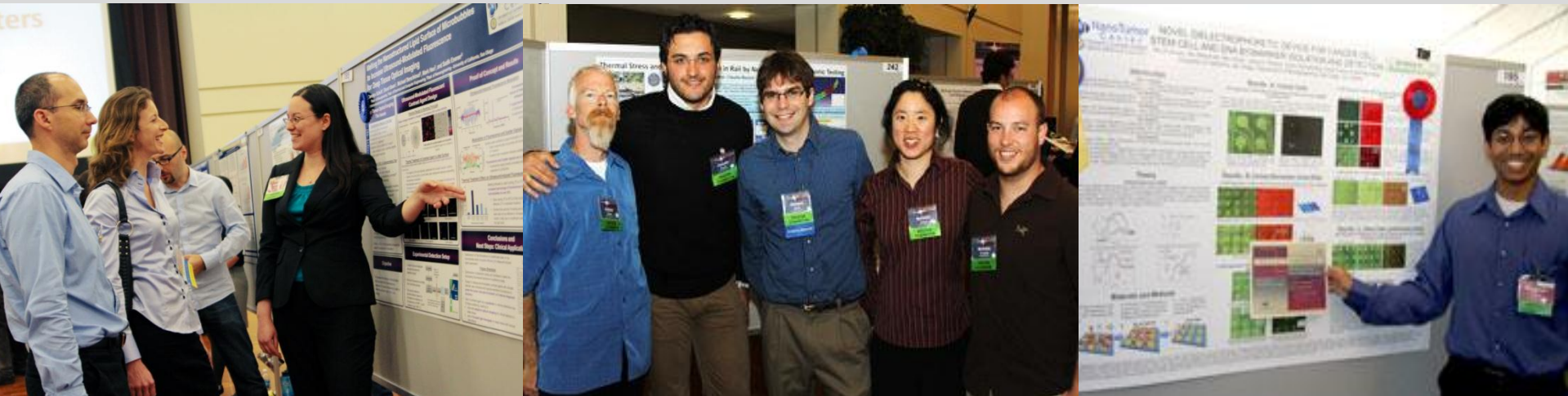
Poster Sessions

2:30P – 4:30P

Faculty Research Talks

4:30P – 6:00P

Awards Presentation and Networking Reception



Master of Advanced Study Updates



Mark your calendars: MAS Open House on March 27th.

On campus – reserved parking (spring break week)

Please help promote and distribute information at your organizations.

Flyers available mid-February




Now accepting applications:

Architecture-Based Enterprise Systems Engineering (AESE)

Wireless Embedded Systems (WES)

Medical Device Engineering (MDE)



**First Wireless Embedded Systems and Medical Device Engineering
students graduating this spring!**



Now accepting projects for summer 2013!

These companies have already posted projects:

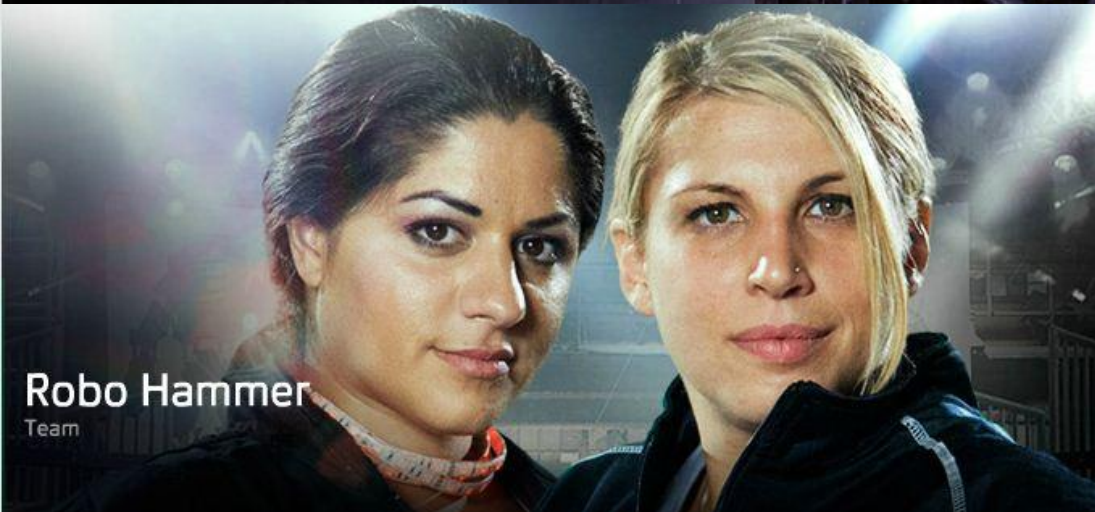


*Stay ahead of the
competition by
submitting your
project descriptions
now!*





Series Premiere
Tuesday, Feb 26 at 10/9c



Robo Hammer
Team

*Starring UCSD's very own
Martha Stewart of Electronics,
Saura Naderi!*



CAP Business:



Dates to Remember:

Friday, February 22

Thursday, April 18

Thursday, June 6

Thursday, October 3

DECaF (Disciplines in Engineering Career Fair)

Research Expo

CAP Executive Board Meeting

CAP Executive Board Meeting

Thank you CAP Executive Board



UCSD
Jacobs

School of
Engineering

September 27, 2012