

IMSC Retreat Panel

A Discussion on

Academic Research Centers and Industry:
How can they work together?

Panel Participants

Dan Fay - Microsoft Director External Research

Dr. Jose Rodriguez - IC Design Intel Corporation

Dr. Ramesh Jain - Donald Bren Chair Professor UC Irvine

John Sweet - USC Stevens Institute

Moderator: Kris V. Srikrishnan (Emeritus- IBM)

Why this topic?

Major Universities in US have tens to hundreds of Academic Research Centers (ARCs) and consider them favorably - IMSC at USC is an ARC and wants to undertake steps to grow its contributions

Each ARC is focused on one or more associated academic areas / themes and have varying strength of researchers (faculty), staff and facilities

Link to Industries is an important element for ARC - to offer innovative and practical solutions to “NEEDS”.

Bridging Academic goals and Industry expectations

Varied Funding sources: Industry sponsors, Corporate membership levels, Funded projects, Seed capital, IP licensing, Spin-out business etc.

ARC s has the general goal of providing leading edge capabilities for the researchers and develop nationally recognized research programs, while supporting teaching mission of the University with enhanced opportunities for students.

The goals have evolved into applied /sponsored work with a great deal of focus on providing innovations and practical solutions

Some Examples from leading US Universities

UW- Madison has many institutes but is particularly focused on New Business Initiatives.. WARF is their technology transfer organization.

Carnegie Mellon has more than 100 research centers

Stanford and UC all have many research centers and has created many well known start-ups.

MIT - Media Lab (one of over 40 labs) (source: MIT website)

In School of Architecture & Planning

Seems like an umbrella org. with a large and diverse topics , e.g affective computing, biomechatronics, fluid interfaces, information ecology, personal robots, object based media etc. (Much broader in scope relative to IMSC)

~ 35 M\$ budget, good part from different level of sponsorship from corporations, usually not tied to specific projects

At the minimum end, the sponsor has visiting rights, invitation to semi annual sponsor only forums. At high end, employee in residence and name graduate fellowships.

Sponsor value streams:

Knowledge transfer (creative ideas), Interactive Demos, Brainstorming and technology review sessions, student recruitment, IP, provide a neutral place for cross-company collaborations.

Many models exist for benchmarking but knowing effectiveness of ARC –Industry collaboration will be key to building long term relationship.

Some points that the Panel presentations and audience discussions

1. What are the collaboration models between ARC and Industry- applicable model elements to IMSC
2. How satisfactory are the outcomes from industry and academia point of view-
3. Are there ways to improve innovation and outcomes? Lessons from failures and successful collaborations.
4. How best to manage detractors while building on Synergy and Goodwill?