

# “Critical National Needs in New Technologies”

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“Every individual that we can inspire, that we can guide, that we can help to start a new company, is vital to the future of our economic welfare.”

— Ewing Kauffman



# Enabling Commercialization Through Proof of Concept Centers



## **Not just gap funding**

- **Prioritization of commercially viable projects**
- **Expertise in developing commercial plans**
- **Focused commercialization education**
- **Small level of funding**
- **External outreach**
- **Focused in engineering**

## **Lessons – build a sustainable model**





# von Liebig (UCSD) & Deshpande (MIT)

## Centers Comparison - 11/07

|   | <b>The von Liebig Center</b>  | <b>The Deshpande Center</b>   |
|---|---|---|
| <b>Location</b>                           | UCSD – Jacobs School of Engineering   | MIT – School of Engineering   |
| <b>Initial funding</b>                    | \$10 million<br>Gift in 2001 from the William J. von Liebig Foundation  | \$17.5 million<br>Donation in 2002 from Jaishree and Gururaj Deshpande  |
| <b>Budget</b>                             | ~\$1.2 million per year <ul style="list-style-type: none"> <li>• Administrative Staff ~\$475K</li> <li>• Grants ~\$420K</li> <li>• Advisors' Salary ~\$240K</li> <li>• Academic Courses ~45K</li> </ul> | ~\$1.7 million per year <ul style="list-style-type: none"> <li>• Administrative Staff ~\$320K</li> <li>• Grants ~\$1.3M</li> <li>• Operational Expenses ~\$80K</li> </ul> |
| <b>Amount of grants</b>                   | Seed Funding – \$15K - \$75K  | Ignition Grants – ≤\$50K<br>Innovation Grants – ≤\$250K   |
| <b>Total amount of grants awarded</b>     | Over \$2.8 million  | Over \$7 million  |
| <b>Number of proposals funded</b>         | 66 Projects<br>Approximately 11 grants per year<br>35 percent-60 percent approval rate of proposals   | 64 Projects (78 Grants, 39 Ignition Grants, 39 Innovation Grants)<br>Approximately 16 grants per year<br>Approximately 18 percent approval rate of proposals              |
| <b>Time period of accepting proposals</b> | 1-2 proposal rounds per year<br>(spring and fall)   | 2 proposal rounds per year (spring and fall)  |

# von Liebig (UCSD) & Deshpande (MIT)

## Centers Comparison - 11/07

|                             | <b>The von Liebig Center</b>  | <b>The Deshpande Center</b>   |
|-----------------------------|---|---|
| <b>Advisory services</b>    | 6 Advisors work at the center approximately 1 day a week<br>Advisory services available to all faculty and research staff at Jacobs School independent of funding considerations  | Pool of 50 volunteers are assigned as advisors in the Catalyst Program  |
| <b>Networking events</b>    | The "von Liebig Forum: Profiles in Innovation" – speaker series that showcases entrepreneurs, scientists, and innovators<br>Open House – informal gathering for UCSD and business community<br>Community Workshops – i.e. IP transfer between University and Industry<br>Lunches – Award luncheon/networking event<br>Other events, including seminars and additional speaker/presentation events | IdeaStream Symposium – Networking event for grant recipients, venture capitalists, entrepreneurs, and other researchers<br>Open House – Informal gathering for MIT and business community<br>Catalyst Party – Informal gathering of grant recipients and Catalysts<br>Other optional events, including Ignition Forum, joint seminars with student groups, and team-building events |
| <b>Educational programs</b> | 4 graduate-level courses to introduce engineering students to entrepreneurship (Venture Mechanics, Enterprise Dynamics, Applied Innovation, Corporate Entrepreneurship for Global Competitiveness).<br>Over 400 students and graduate student interns have enrolled in at least one of these courses.   | I-Teams Course – Collaboration with MIT Entrepreneurship Center that consists of teams with 3-5 science, engineering, and management graduate students evaluating the commercial feasibility of innovation research emerging from MIT research labs   |



# von Liebig (UCSD) & Deshpande (MIT) Centers Comparison - 11/07

|   | <b>The von Liebig Center</b>  | <b>The Deshpande Center</b>   |
|---|---|---|
| <b>Number of start-ups and licenses</b> | 16 Startups, 4 Licenses   | 10 Startups, 1 License  |
| <b>Number of employees in startups</b>  | 64+   | 150+  |
| <b>Capital leverage</b>                 | Spinouts have acquired over \$71 million in private capital   | Spinouts have acquired \$88.7 million in private capital                |
| <b>Sustainability</b>                   | Percentage of University royalty income from the commercialization of any technologies that receive Center services<br>University support and private donations, targeting \$2 million by 2008 and \$10 million by 2010 | Donations from companies that have spun out<br>Future private donations |
|   |   |   |

# Enabling Commercialization Through Proof of Concept Centers Conclusions



**DESHPANDE CENTER**  
FOR TECHNOLOGICAL INNOVATION



- **Small level of funding creates tremendous impact**
- **Active mentorship & center team involvement**
- **Technology commercialization education**
- **Strong external social network**

**Recommendation – allot % of all Federal R&D funding toward supporting this model**