Letter from the Director

Welcome to the first issue of the von Liebig Center Quarterly Newsletter!

Here, you'll find postings of our upcoming events, educational opportunities, and funding resources. Our quarterly newsletter is a way of reaching out to you and getting you involved with our work. In addition to the webinars, workshops, and fellowships we'll be posting, we want to take this time to highlight the tremendous work our start-up companies are up to and our talented entrepreneurial Fellows behind the science.

If you haven't had the chance to read our recently published paper, "Accelerating Commercialization of Cost-Saving Health Technologies," co-authored by the von Liebig Center, the California Health Care Foundation, Booz Allen Hamilton, and the Robert Wood Johnson Foundation, you can find the white paper here: Accelerating Commercialization of Cost-Saving Health Technologies.

The report highlights the process and accomplishments of the Southern California Health Technology Acceleration Program (HTAP). HTAP is just one of many collaborative programs the von Liebig Center offers.

The Clean Energy Technology Acceleration Program, sponsored by the Department of Energy, went regional this year. The program provides up to $75,000 in commercialization assistance to graduate students and postdoctoral researchers. You can read the press release here.

We continue to engage with organizations in the San Diego ecosystem, including:

- Listen and Learn Roundtable Discussion with Dr. Winslow Sargeant, Chief Counsel for Advocacy, Small Business Administration Office of Advocacy. See Event Here
- Informal discussion with Mr. Nish Acharya, Director of the Office of Innovation and Entrepreneurship; U.S. Department of Commerce.
- A four day Technology Commercialization Training Program with KIAT with 47 Korean delegates in attendance and a presentation by Dr. Roberto Padovani, Executive Vice President and Founder of Qualcomm.
- A Science Camp with the Institute of the Americas that featured students from 15 Latin American countries. See Article Here

We hope you subscribe to this newsletter and find our events, educational opportunities, and funding resources adventitious to you and your colleges.

Sincerely,
Rosibel Ochoa, Ph.D
Executive Director, von Liebig Center

Education
Fall 2012

WEBINARS from 12-1 pm on select dates:
New Venture Creation - October 17th
Intellectual Property Overview - October 24th
Regulatory Workshop Overview - November 14th
Partnerships & Alliances - December 5th
Regional Resources CCSE - December 12th

UNDERGRADUATE COURSES

Funding Opportunities

Southern California Clean Energy Technology Acceleration Program

This program, in its third year of operation, is intended to accelerate the commercialization of novel clean energy technologies developed within research institutes and universities throughout the Southern California
MAE 154 - Product Design & Entrepreneurship
In MAE 154 you will develop your own product concepts along with a business plan. At the end of the class, each team will present their products to a review panel which will award funding to winning teams.

GRADUATE COURSES
ENG 201: Venture Mechanics
ENG 201 focuses on the project manager level of an innovative organization with emphasis on assessing technological feasibility in relation to market potential.

ENG 207: Corporate Entrepreneurship for Global Competitiveness
ENG 207 focuses on the executive level and addresses challenges entrepreneurial enterprises face in an increasingly dynamic global business environment.

Workshops
Entrepreneurship and New Venture Creation - Every Tuesday from October 2nd - November 27th 6-9 pm: vLC and Knobbe Martens have collaborated to form this high-energy, interactive fast-paced workshop will examine the entrepreneur and the entrepreneurial process in start-up, high growth and large organizations. It will help you understand how to think in an entrepreneurial way and how to analyze hard facts in all aspects of starting and growing a company.

If you are interested in applying for a space, please email Barbara Bry, bbry@blackbirdv.com.

Featured MBA Innovation Fellow
Antonio Jude Aguiar
The MBA program at Rady gives us a tool kit in business. A tool kit which enables us to launch into the business world applying these principles to businesses both mature and those yet to be formed. The innovative spirit is showcased in the Lab 2 Market program: the capstone course at Rady. Through Lab 2 Market which entails three quarters of business ideation, market research and business plan development, we MBA students bridge the gap of academia and real world experience.

It was in this process of business ideation that I came across the research project being done at the Jacobs School of Engineering. The value proposition of the business is to reduce the cost of electricity produced over the life of a wind turbine through a cost efficient structural health monitoring technique. My research on the current state of the industry showed that this technique held promise. The von Liebig Center granted the project funding which awarded by the Department of Energy and at this point I was matched with the engineering team to develop the commercialization plan.

The team was mentored by two great advisors: Jim Corlett and Rick Cooper. Rosibel Ochoa, Director at the von Liebig Center was always there to guide us forward and establish connections. We conducted market research to understand the real pain point faced by the target market and customized our solutions based on their needs. In a short span, due to the continued support and perseverance from the team, we were able to develop a business plan. Our search for seed capital ($200,000) to launch our product and service took us to the FLoW (First Look of the West) National Clean Energy Business Challenge in the Western Region. We made the finals and this brought visibility to the team and the technology at hand. This
The goals of my project are two-fold: (1) To further refine my technology to the point of commercial feasibility; (2) to perform market research and initiate the commercialization process by forging connections with strategic partners and potential customers. By pursuing these two endeavors, I will be more staunchly positioned to launch my technology-based business upon completion of the fellowship program.

Featured Start-up

Dr. Aydogan Ozcan

How did the von Liebig Center help you achieve your goals and reach major milestones?

"The funds provided by vLC helped us to significantly accelerate maturing of our results for blood analysis on a cellphone. In addition to funding, vLC has also helped us to better define the opportunity and focus toward a viable solution."

What advice would you offer future start-ups?

"IP is quite important to start with. Protecting your invention with strong intellectual property filings would serve as the foundation of your company, and for short and long term success it would be the key. In addition to that forming a strong team that has complementing set of skills (whether it is technical, business, etc) would make a good start. And finally, patience! It could indeed be the most important element."

Business Advice 101

When developing a business strategy around bringing your product to market, how do you think outside the box?

"Forming a core team that includes business and management experience is a must for technical experts launching a successful new venture. To efficiently work together to create a new product in an ever-changing global marketplace, make sure the cross functional team of business and engineering experts jointly develop a set of priorities, deliverables, and timelines that will guide the firm forward in the initial throws of creating a viable company.

A focus on understanding customer needs, and positioning a "must have" product is another critical element. How do you do that? To understand customer needs, first, define your ultimate customer. Who is that person? What are their pain points that your product would solve? Second, get out and ask your potential customers about how they would interface with your product. Listen & discuss solutions. Positioning a "must have" product instead of a "nice to have" will evolve from the above exploration and help define the benefit to the customer and the unique differentiator your product has that the current competitor does not have.

-Rakesh Kumar
vLC Technology and Business Advisor
Meet Our New Technology and Business Advisors!

Rakesh Kumar

During 38 years in the semiconductor industry Dr. Kumar has held various technical and executive positions at Motorola and Cadence Design. As the current President and CEO of TCX, Technology Connexions, he provides business and technical consulting and "connexions" services to over 20 clients, include emerging, established, and leading edge companies, as well as some leading research organizations. He was the founder and CEO of a Fabless startup from 2003-2008.

Dr. Kumar has authored the book "Fabless Semiconductor Implementation", published by McGraw Hill in 2008. He has also authored numerous publications and patents. Dr. Kumar is a Life Fellow of the IEEE and is the President of the IEEE Solid State Circuits Society. Dr. Kumar is a Distinguished Lecturer of the IEEE Electron Devices and Solid-State Circuits Societies. He has chaired and served on the Steering committee of the IEEE CICC (Custom IC Conference) for fourteen years.
He received his Ph.D. and M.S. degrees in Electrical Engineering from the University of Rochester in 1974 and 1971 respectively. He received his Bachelors degree in Electrical Engineering from the Indian Institute of Technology, New Delhi in 1969. He is a 1989 graduate of UCSD's EPSE (Executive Program for Scientists and Engineers) program.

Jan D'Alvise

Jan is a life science executive with more than 30 years of experience in big pharma, clinical diagnostics, medical devices and drug discovery research tools. Jan is a serial entrepreneur and has built several companies from technology concept through to successful regulatory approvals, product launch and sustainable revenue growth. She has raised more than $80M from institutional and corporate investors, completed dozens of strategic deals including an IPO and several profitable exits. Jan is currently the CEO of Pediatric Bioscience and Precision Through Imaging, and the Managing Partner of BioBiz Partners, a business development consulting firm that guides emerging life science companies to develop and implement the right strategies to attract investors and strategic partners, and to maximize their commercial potential.

Rick Cooper

Rick Cooper is a seasoned Entrepreneur, Executive, Angel Investor, and Advisor with over 20 years of experience in Pioneering Cleantech discoveries. Rick has been working in senior management positions, including CEO and VP BD, Sales and Marketing, in cleantech start-ups since 1996. His work in alternative energy goes back to the early 80s and includes some interesting research on rechargeable lithium battery technology for the Canadian company Ballard - now the world leader in hydrogen fuel cells. One of the companies Rick was involved with have sold starting up for $400 M. Rick has been involved with 13 proposals that have resulted in 12 government contracts totaling $26M. Most of his cleantech work has been in automotive, consumer electronics and portable power. Rick worked in a joint venture and other collaborative relationships with most of the world's leading companies in those sectors including Ford, Mercedes Benz, General Motors, Nissan, Chrysler, BYD, Samsung, Sanyo, Toshiba, Panasonic, Lenovo, Intel and NEC.
These days, Rick is an active member of Tech Coast Angels, a southern California based angel investment group. He is also interested in adding value in an executive role at a cleantech start-up.
From Left: Rosibel Ochoa, Ph.D., Executive Director; Silvia Mah, Ph.D. M.B.A; Commercialization Analyst; Janny Li, Center Coordinator; Pedro Franco Navarro, von Liebig Center Fellow; and Jack Millen, von Liebig Center Intern