Raytheon

UCSB's Technical Staff and Facilities allows Raytheon's Vision Systems to do Technology Development at a Fraction of the Cost

A true measure of success for university-industry collaborations is a seamless operation that stimulates new concepts for potential products. That is what Raytheon's Vision Systems (RVS), which develops sensors, electronics and meta-materials for infrared imaging, feels they get with their collaborations with UCSB. For the last 6 years plus, RVS has been conducting a significant portion of their technology development at a couple of labs on campus. In so doing, Raytheon saves millions of dollars on equipment purchases and maintenance, facilities and staff time. According to Andreas Hampp, Manager of New Technologies at RVS, net savings is only half of the story. "What makes our relationship with UCSB's Nanofab facility and the MRL characterization labs noteworthy is the exceptional relationship we have established with the lab managers and technical staff who operate the equipment. Jack Whaley, for example, has one of the best development labs in the country for micro-electonics and nano-fabrication and he and his staff work side-by-side with our engineers to solve specific fabrication, materials and/or processing challenges. They train the Raytheon staff and keep us consistently abreast of new equipment coming in to the labs and include us in seminars and workshops that keep us up-to-date in our field. Beyond the technical staff, we have worked with Claudia Gutierrez in accounting at the Nanofab, for example, as part of our collaborative team. We have jointly developed accounting practices that precisely dovetail into ISO practices that Raytheon is required to follow. With all of these efforts, our UCSB collaborators have become our academic partners of choice."

There is a 60 mile radius around UCSB that circumscribes the nation's largest efforts in infrared technology. There are more companies, producing more government and commercial products, with more revenue in infrared here than perhaps any where else in the world. Much of what fuels this is the world-renown materials research and the quality of education at UCSB. By most any measure, including national and international rankings, numbers of citations of faculty publications in materials, placement of UCSB's students in industry and academia after graduating, and the number of companies we have helped to build, we produce the best. For any infrared company that is within this radius, who continues to use Molecular Beam Epitaxy (MBE) to grow their own materials, UCSB is THE source of engineering talent.

The challenge for any company is to get the interest of the materials-related faculty to consider new collaborations with industry. What RVS has discovered is the best approach is to explore potential collaborations that are unique and go beyond what both the faculty member and RVS are currently doing. By working with faculty in complimentary, not overlapping fields, new ideas for technologies have emerged. It has also allowed faculty, whose funding stream from the Federal Government is constantly changing, to tap in to new sources of funding that they would not have had the opportunity to otherwise.

Overall, having one of the best universities in the world in materials nearby has had a myriad of advantages for Raytheon, not the least of which is having a team of people who operate seamlessly to help Raytheon stay on the leading edge and to do it efficiently and cost effectively.

To learn more about how your company can work with UC Santa Barbara, contact Leslie Edwards (805-893-3944/edwards@engineering.ucsb.edu) or Chris Russo (805-893-5544/crusso@engineering.ucsb.edu) in the Corporate Affiliate Programs office.