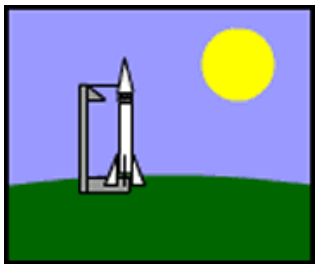
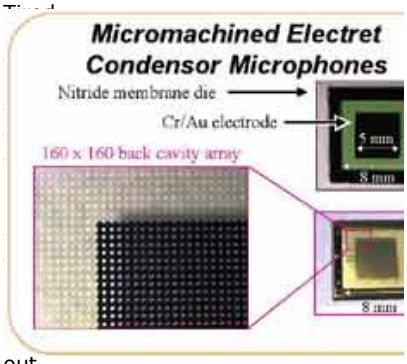


NEW GENERATION OF PHILANTHROPISTS HELP BRING RESEARCH TO MARKETPLACE

By Rosemary Clandos
Small Times West Coast Correspondent

LOS ANGELES, July 5, 2001 -- When Al Mann agreed to donate more than $112 million to the University of Southern California three years ago, the prospect of getting his name on a buildir wasn't a big deal -- but commercializing new technology was.



With funding from GM, Yu-Chong Tai, pro
of electrical engineering at Cal Tech, dev
a MEMS microphone that will be used ir
phones
and for voice recognition and activati
applications.

Tired out to transform intellectual property into products.

"There have always been philanthropic gifts to educational institutions and hospital research institutions from grateful patients or graduates. But what we're seeing now is a new generatio philanthropists," said John Kohring, a consultant to philanthropy.

"They started as entrepreneurs, and they think about philanthropy in a different way than the blue bloods. They're thinking more along the lines of venture capitalists.

The new breed of philanthropists wants to play a greater role in the entities that they make gif - instead of just writing the check, they may want to sit on the board and be involved in a han way."

Mann, the 75-year-old founder of MiniMed Inc. and Pacesetter Inc., was elected to USC's board in 1998. Mann said he plans to make similar contributions to other universities. All of his donations, Mann said, go toward helping researchers develop the types of biomed technology that businesses would spawn on their own if they were not so focused on short-term profits.

"I've come to realize that short-term focus really limits people to develop worthwhile products," said Mann, who founded seven high-tech companies. "If you're a public company driven by your quarterly expectations and the consequences of that, you can't invest in technology that won't achieve profitability unless it's in a short period of time. There's got to be some way to bridge the gap. I'm trying to find another way of doing it."

In the last few years, at the California Institute of Technology in Pasadena, several researchers who work with MEMS, nanotechnology and micromachining -- the use of integrated circuit technology to make micron-sized parts -- have received grants from major corporations such as Agilent, Nortel, Intel and General Motors.

To train students at Cal Tech's microfabrication lab, Alex Scherer, a professor of electrical engineering, received $99,000 worth of Agilent semiconductor testing equipment that can also be used for MEMS devices.

Yu-Chong Tai, professor of electrical engineering at Cal Tech, said that five years ago, only 5 percent of his funding came from industries and the rest came from government agencies such as the Department of Defense and National Institutes of Health. But those figures have jumped so that this year, funding from private companies hit 20 percent. Tai's yearly funding has reached a high of $l million and in low years, $600,000.

Funding university research is sometimes a less expensive than doing it in-house, academic and industry experts said.

Although Cal Tech retains the rights for the intellectual property, sometimes companies want to form relationships with researchers and watch the progress of project so they can jump in at the right time and license the technology, Tai said.

"Once they donate money, a connection is formed immediately and they can have very technical communications. A professor would never refuse to talk to someone who gives them money," Tai laughed.

With funding contributions from GM, Tai has developed a MEMS microphone that will be used in cell phones and for voice recognition and activation applications.

In the highly specialized field of microphones, where most companies are in Japan and Europe, one of Tai's students is considering prospects for commercialization and is checking out funding.

At the Alfred E. Mann Institute for Biomedical Engineering, all technology developed there becomes the intellectual property of the institute. The long-term goal is to license the technology, generate yearly royalties of $5 million to $10 million and put the money back into the institute for additional research and product development, said Dean Baker director of the institute.

"Some of Al's companies could be considered for transfer of technology from here, but there is no preference given to any of his companies," Baker said. "It's not a business investment, it's a philanthropic effort on his part to do something good for society. If the concept works, not only would you get products into the market to improve the quality of life, but it would also help the Southern California biomed industry and give them something to sell."

To support researchers, administrators have hired product development engineers, people experienced in doing clinical trials and processing U.S. Food and Drug Administration approvals.

Projects coming out of the institute will include next-generation technology such as neural stimulators made from thin precious metal wires that can be implanted into the body and used to stimulate damaged nerves. The result will be restored motor control for many patients, Baker said.

Mann said that he has targeted other research centers such as Johns Hopkins Hospital for similar gifts.

"I'm considering whether to do a larger number of institutions with $100 million endowments or increase the endowments to $150 million to $200 million, rather than make a lot more institutes," he said.

At the City of Hope, Steven S. Smith director of the department of cell and tumor biology has been working with nanotechnology and using microfluidic technology -- the Agilent 2100 lab-on-a-chip -- to determine the presence of cancer cells in prostate fluid. He said the microfluidic technology has been timesaving and accurate and has played a role in obtaining a grant for $225,000 from the National Institutes of Health and a forth-coming gift from a philanthropist.

To stir the interest of other philanthropists and auxiliary organizations, the City of Hope has increased the number of presentations on the microfluidic aspects of his work in cancer research from two last years, to 15 this year.

"It's an important technology we've developed, but it's not a dog and pony show. So we don't use it as a selling point," Smith said. However, he has seen a great interest in the applications of these cutting edge technologies for prostrate cancer.

According to a survey conducted by the Council for Aid to Education in New York, there was a 28 percent increase in donations to colleges and universities in 1999 and 2000.

The future of gift giving may take some dips because charitable contributions always reflect stock market activities, education experts said.

| Add RSS Feed

More Consumer Articles > Search Archives >

Small Times Article Categories:

Special Feature
Profiles
Manufacturing
Research and Development
Bio
Defense
Electronics
Legal
Tools
Photonics
Environment
Finance
Education
Consumer
Energy
Auto/Aero
Materials

Small Times Current Issue Table of Contents

Search Products Buyer's Guide >

Search Industry Jobs >

Magazine & E-Newsletter Subscriptions >

Sponsored White Papers

Recently Added White Papers

NanoPatterning Solutions on the Desktop - Where Nanofabrication and Nanobiology Meet (05/08/2009, NanoInk, Inc.)

Small Times University Report and Rankings - 2009 (04/21/2009, EV Group)

more

RSS FEEDS: XML RSS