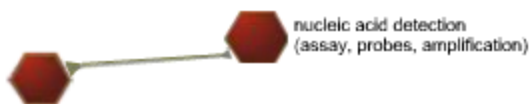


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Mann Foundation Gives Purdue \$100M To Intensify Technology-Transfer Efforts

By Ben Butkus

The Mann Foundation for Biomedical Engineering has endowed Purdue University with a \$100 million gift to establish an institute to help the university commercialize internally developed basic biomedical technologies, the Mann Foundation and Purdue said on Friday.

The gift, which is the largest single endowment in Purdue history, is expected to radically transform Purdue's technology-transfer efforts and spur economic development in the region and throughout Indiana.

However, according to recent media reports, the deal raises questions over what role the benefactor of such a large gift will have in deciding the direction of basic research or commercialization and how much control it might have over resulting intellectual property.

The Purdue arrangement has also been opened to scrutiny because a pair of North Carolina universities has had difficulty negotiating a similar gift from the Mann Foundation due to disagreements over IP control.

The Mann Foundation said it intends to have at least a dozen deals resembling the Purdue alliance in place with prominent US universities over the next five years.

The Alfred Mann Institute at Purdue will be housed in the school's Discovery Park, an incubator that currently houses more than 90 technology-related startup companies, many of which spun out of Purdue-developed research.

According to Purdue, the Discovery Park fosters a multi-disciplinary research approach, and works closely with the Purdue Office of Technology Commercialization and Purdue Research Foundation.

One of the main potential benefits of the deal will be an increase in economic development for the area surrounding West Lafayette, Ind., where Purdue is located, as well as for the entire state of Indiana.

"Our agreement states that preferential consideration will be given to Indiana companies wanting to license the university technologies that are further developed by the Alfred Mann Institute," Purdue President Martin Jischke said in a statement. "This university-private sector partnership can have a tremendous impact on economic development in Indiana."

Purdue also expects the new institute will significantly boost the school's return on research investment, which has been modest in recent years compared with its peers.

According to the Association of University Technology Managers' 2005 Licensing Survey, for the fiscal years 2003-2005, Purdue Research Foundation generated \$4.2 million in license income, 611 invention disclosures, and 27 US issued patents, placing it in the middle of the pack of the 144 responding US universities.

However, according to Purdue and the Mann Foundation, the Mann Institute has the potential to increase by five-fold the likelihood of product commercialization and rate of return.

"Through Purdue's Alfred Mann Institute for Biomedical Development, we are participating in a new model of university technology transfer for a new century," Jischke said in the statement. "Through the Purdue Research Park, we already have an effective strategy for technology transfer. But we now can enhance our capabilities to meet the growing need to translate our faculty members' discoveries into useful products."

Stephen Dahms, Mann Foundation president and CEO, said in a statement that "the product development conducted by the Alfred Mann Institute at Purdue will result in a substantially greater probability of the technologies reaching the market and the patient than if the technologies were handled through the traditional steps used by universities."

According to Dahms, universities that out-license biomedical technology at the basic research stage are likely to receive as little as 1 percent of the royalties the product is capable of generating.

The Mann Institute will aim to increase this yield by helping to identify approximately two new biomedical projects with commercialization potential per year out of hundreds at Purdue, and may foster as many as six ongoing projects when in full operation, Purdue said in a statement.

The institute will assume the typical responsibilities of a university tech-transfer office, including "intellectual-property analysis and project selection, market analysis, product development, and creation of an exit strategy for the technology," Purdue said.

As part of the product-development process, faculty at the Indiana University School of Medicine will engage in the research and clinical testing of some of the products. In addition, the staff of the Mann Institute and the Mann Foundation for Biomedical Engineering "will have established relationships with outside entities that acquire emerging biomedical technologies. These relationships will provide opportunities for licensing, sale, or spin-out" of technologies, Purdue said.

Laissez-faire?

According to recent media reports, this component of the deal worries some in the tech-transfer community, who suggest the deal could leave the Mann Foundation with too much influence over scientific, IP, or business decisions.

Fueling this concern is the fact that the University of North Carolina-Chapel Hill and NC State University have had difficulty negotiating a similar endowment from the Mann Foundation due to hang-ups over control of intellectual property rights.

But according to Jeff Davies, vice president for finance for the UNC system, the conversations between UNC and the Mann Foundation were much more positive than have been reported.

"'Turned down' is not exactly the way I would choose to characterize it," Davies told *BTW*. "We're very hopeful that we'll resume discussions with the Mann Foundation. We had great discussions. We liked them very much. I hope they liked us as much as we liked them, and we just found the

potential to be very exciting.”

“Our agreement states that preferential consideration will be given to Indiana companies wanting to license the university technologies that are further developed by the Alfred Mann Institute.”

UNC and the Mann Foundation “had differing viewpoints on access to IP,” Davies added. “Quite frankly, I would very much like to understand the Purdue transaction, and if there is anything there that we can use to model our transaction, that would excite me even more. We’re very proud of Purdue.”

Purdue did not disclose details of whether or how it would split royalties and other income between the Mann Foundation, Purdue, and faculty inventors. It is also unknown what terms the Mann Foundation proposed to UNC. Both Purdue and the Mann Foundation told *BTW* that the

institutions have declined to discuss agreement terms at this time.

In a statement, Purdue characterized the partnership as “50-50,” including a Mann Institute board that will comprise five Purdue representatives and five Mann representatives.

“Purdue and the Alfred Mann Foundation worked closely to develop a plan that was fair to all parties involved, including researchers, the university, and the foundation,” George Wodicka, professor and head of the Purdue Weldon School of Biomedical Engineering, said in a statement.

This is not the first time a donor-supported technology transfer center has been established at a university, although the model is relatively new. Leon Sandler is the executive director of the Deshpande Center for Technological Innovation at MIT, which was launched in 2002 with an initial \$20 million gift from Jaishree Deshpande and Desh Deshpande.

Sandler said that the Deshpandes are generally “hands-off” when it comes to involvement in which technologies the center deems worthy for commercialization or the control of resulting IP. Without knowing the exact terms of the Mann Foundation agreement, he said, it is difficult to say whether there would be any drawbacks.

“If people really are giving money to universities to encourage the transfer of technologies and move things out, I think that’s really positive,” Sandler told *BTW*.

“If you have a pot of water, it will slowly but surely evaporate and diffuse out,” he added. “But if you put a flame underneath it, it starts to bubble and the water gets out into the air a lot faster. That’s what we do – we’re like a little flame underneath. We’re really trying to accelerate a process.”

Purdue is also not the first university to receive an endowment from the Mann Foundation to set up a tech-commercialization institute on its campus. In 2001 the foundation penned a deal with the University of Southern California, and last October it partnered with the Technion-Israel Institute of Technology in Haifa.

The Mann Foundation, based in Valencia, Calif., said it intends to fund at least 12 such deals “at select entrepreneurial research universities” by 2012.

Mann Foundation founder and chairman Alfred Mann, who is a serial medical device entrepreneur and prominent philanthropist, said in a statement that his overall goal is to “build a bridge between academia and industry to move health-related products to doctors and their patients in an accelerated process.”

Mann is also chairman and CEO of MannKind and Advanced Bionics; chairman of Second Sight, Bioness, Quallion, and Implantable Acoustics; and chairman emeritus of Pacesetter Systems and

MiniMed.

He also serves as chairman of the Alfred Mann Institutes at USC and the Technion-Israel Institute of Technology, and will serve in the same position for the Alfred Mann Institute at Purdue.

Tech Transfer White Paper Authors Hope to Spur Debate, Socially Responsible Licensing

By Ben Butkus

This article has been updated from a previous version, which incorrectly stated that the socially responsible licensing program began at Stanford, rather than UC Berkeley.

Earlier this month, a group of leading US research universities and members of the Association of American Medical Colleges released a set of guidelines for universities and non-profit research institutes to consider when licensing internally developed technologies to private parties.

The white paper, entitled "In the Public Interest: Nine Points to Consider in Licensing University Technology," is thought to be the first document from members of the tech-transfer community that suggests a set of good practices.

"We thought it was really a time to go back to fundamentals, and think about what the values are that really should drive university technology management," Arthur Bienenstock, special assistant to the president for federal research policy at Stanford University and primary organizer of the white paper authors, said last week.

The paper aims to trigger discourse that might strengthen the field, but also comes at a time when technology transfer and the Bayh-Dole legislation that enables it have come under especially heavy fire from critics – which is another major reason the collective felt compelled to draft the document, Bienenstock said.

The white paper grew out of a meeting on Stanford's campus last July, which brought together university research officers and technology-licensing directors from leading US research institutions. In addition to Stanford, the paper was signed by the California Institute of Technology; Cornell University; Harvard University; Massachusetts Institute of Technology; the University of California system; the University of Illinois, Chicago and UI-Urbana-Champaign; University of Washington; Wisconsin Alumni Research Foundation; and Yale University; as well as the AAMC.

The full paper can be seen [here](#).

According to Bienenstock, who is a former vice provost and dean of research and graduate policy at Stanford, several sources of criticism spurred him and Kathy Ku, Stanford director of technology licensing, to organize the group that produced the paper.

One was criticism by freelance journalist Jennifer Washburn "that universities were coming too close to industry in inappropriate manners," Bienenstock said. Washburn has penned multiple critical articles of university tech transfer, and in 2005 authored the book *University, Inc.: The Corporate Corruption of Higher Education*.

"On the other side, you had business people saying that universities were very difficult to deal with largely because of intellectual property," Bienenstock added. "[Another reason] was that rumors were reaching us that university leaders were pressuring university technology managers to maximize income without thoughtful consideration of the other values involved."

Bienenstock also cited ongoing issues that arose around the Wisconsin Alumni Research Foundation's requirements that universities "take licenses to do research on certain aspects of human stem cells." WARF has recently eased some of those restrictions and clarified its policies on its stem cell IP (see [BTW, 3/5/2007](#)), but Bienenstock made it clear that this was a particular sticking point.

"As a senior research officer having real responsibility for research at [Stanford], I entered the meeting with two fundamental goals," he said. "First, I wanted to ensure that universities and other non-profit institutes can continue to do research and advance scientific ... fields associated with university-held property. Also, I don't believe that one university should hinder another from doing research because of intellectual property."

The white paper is not meant to defend the practice of tech transfer, according to Bienenstock. Rather, one of its aims is to spur discourse that might strengthen the field.

"Different people will take different items" from the guidelines, he said. "I find myself wanting to see more debate in the relevant literature about these points that other people feel strongly about. I'm hoping, for instance, that Jen Washburn will write and criticize [the white paper]."

"In these cases, when you're getting down to fundamentals, it's important to have discussions between the concerned parties," Bienenstock added. "So I'm hoping that people will take it up in the literature, and we'll have an opportunity to think about the criticism we've received."

Carol Mimura, assistant vice chancellor for intellectual property and industry research alliances at the University of California, Berkeley, and one of the paper's co-authors, told *BTW* that Bienenstock and Ku "saw a need for more transparency in the way universities managed their IP – more understanding, in general, about how universities, both public and private, manage their IP."

"There are manuals published by [the Association for University Technology Managers] for people who are practitioners, but from a manager's point of view, there are separate issues to discuss other than the nuts and bolts of transacting licenses and funded research agreements," Mimura added.

A Social Compact?

One of the most important of those issues, Mimura said, was to stress the role that universities play in advancing science for the greater good.

Mimura authored the section of the guidelines that calls for tech-transfer officials to ensure that universities and non-profit research institutes honor their "social compact with society," help "advance knowledge in many fields," and "manage the deployment of resulting innovations for the public benefit."

The guidelines come at a time when technology transfer and the Bayh-Dole legislation that enables it is under especially heavy fire from critics – which is another major reason the collective felt compelled to draft the document.

For example, universities "should strive to construct licensing arrangements in ways that ensure that ... underprivileged populations have low- or no-cost access to adequate quantities of these medical innovations," Mimura wrote.

Such a philosophy, however, seems to be at odds with the secondary mission of a university tech-transfer office: to maximize the return on research investment by bringing in as much revenue from IP as possible.

But these two goals do not have to be mutually exclusive, Mimura told *BTW*. As an example, she offered what she called

a “socially responsible” licensing program at UC-Berkeley that emerged after its intellectual property management offices restructured about three years ago.

The resulting reorg combined the office that negotiated and signed corporate-sponsored research agreements with the office that negotiates outgoing IP licenses to the private sector.

The move “resulted in a different definition of tech-transfer success,” Mimura said. “At Berkeley, the definition is ‘success in all aspects of the industry-university relationship,’ including foundation support, traditional tech-transfer revenue that comes in from outlicensing IP, and then research obtained through the private sector.”

Furthermore, the new structure allowed Berkeley to be part of a much-ballyhooed public-private collaboration begun in 2004 to develop a malaria cure, and which Mimura said has served as the poster child for socially responsible licensing.

As part of that deal, the Bill and Melinda Gates Foundation awarded \$42.6 million to non-profit drug maker Institute for OneWorld Health to collaborate with Berkeley and its spin-off, Amyris Biotechnologies, to develop a cure for the disease.

“It’s clear that while we were sort of driving the transaction with the lure of a royalty-free license in 88 countries in the developing world, at the end of the day Berkeley was able to get [some] \$8 million dollars of the Gates grant for basic research, which we wouldn’t have had an opportunity to get from a federal funding source like NIH,” Mimura explained. “When your tech-transfer program is open to new definitions of success, it can then have a new definition of measuring success, including revenue coming in from the sponsored research side.

“Since we have combined those two units, a given transaction that used to be at the expense of the licensing office, for instance, if it was a royalty-free license, is no longer detrimental because there is a compensatory income through the opposite office that brings in revenue, and it’s all good for Berkeley,” she added.

Still, Mimura said it was important for those in tech transfer to realize that a possible financial windfall along the lines of the Berkeley-Gates partnership is not the main reason to have a socially responsible licensing program.

“A program where you use royalty-free license agreements or a commitment to maximize your impact in the developing world doesn’t have to be set up to ensure you don’t lose money,” she said. “It’s simply a moral imperative to do it. We really are trying to maximize our impact, not maximize the revenue.”

WashU's Tech-Transfer Co-Director on Beefing Up Entrepreneurship

Name: Bradley Castanho

Position: Interim co-director and business development director, Office of Technology Management, Washington University, St. Louis

Background: Founder and head, Statim, St. Louis; Various marketing and research positions, Monsanto, St. Louis; PhD, plant pathology, University of California, Davis



Washington University in St. Louis, one of the top recipients of research grants from the US National Institutes of Health, has not traditionally found itself among the top universities in terms of technology commercialization.

To remedy this notion, the university's Office of Technology Management has recently upped its efforts to better maximize the school's return on research investment. Its efforts began last year when it promoted Samuel Stanley to the position of vice chancellor for research at WashU's School of Medicine, and the subsequent appointments of Bradley Castanho and Michael Marrah as co-directors of the OTM and assistant vice chancellors for research.

Bradley Castanho
*co-director and
business
development director*
Office of Technology
Management,
Washington
University

The backgrounds of Castanho, a former business-development manager and researcher for Monsanto, and Marrah, a patent lawyer, complement one another, and the two have been instrumental in beefing up WashU's tech-transfer efforts.

Last week, *BTW* caught up with Castanho to discuss the WashU OTM's efforts and how it plays into St. Louis-area economic development.

What is your background and how did you become involved in tech-transfer efforts at Washington University?

I worked at Monsanto, here in St. Louis, for close to 25 years. I started off in the research part of the organization, then moved more into development and commercialization of technologies, and then finished my career at Monsanto more in sales and marketing. Most of my career has been on the commercial side of discovering, developing, commercializing, and selling technologies to, in my case, the plant science and agricultural markets.

About five years ago, I left Monsanto, and looking for some new opportunities was approached by [former associate vice chancellor for research] Michael Douglas to join the effort here, initially as a consultant. I was then hired as a business-development person about four years ago. Michael left the office about a year ago, and I then took on the interim responsibility of the office along with Mike Marrah. About a month or so ago, Mike and I were offered the position as co-directors of the office.

When did Washington University really start moving forward in beefing up its tech-transfer efforts?

I don't have all the [history], but I would say that 10 to 15 years ago the institution moved it from something that was a little less organized and more diffuse within the organization. About 10 to 15 years ago, things were probably not as centralized. About 10 years ago they started bringing all the pieces of tech transfer into a unified office. Things have since then been pretty well organized within a centralized office.

Our office serves the entire university, so our role is to supply the tech-transfer support and IP management for all of the university. We have two facilities, and in between them is this huge municipal park. On one side of the park we have the main campus, or the Danforth campus, as it is referred to. That houses the engineering school, the biomedical engineering school, arts and sciences, and computer sciences. On the other side of the park is the medical school, which is associated with Barnes Jewish Hospital and Children's Hospital. We're kind of integrated into one facility, if you will, all in the geographic area of the med school and the hospitals.

Are engineering and biomedical/life sciences WashU's two biggest areas in terms of ripeness for commercialization?

Yes. At the end of the day, I think the 80/20 rule applies. Eighty percent, or even more, of what we do is on the life sciences and biomedical side of managing IP. Far less of what we see in the management of IP is engineering, and less than that would be Arts and Sciences. The medical school is by far the largest component of that.

As you said, WashU really got its tech-transfer efforts going 10 to 15 years ago, but recent articles discuss how the university may have been falling behind in this area despite its solid reputation for sponsored and federally funded research. Do you feel you had fallen behind?

I think if you look statistically – and I think you can make statistics look any way you want – if you look at where we fit within the list of our peer institutions – and for that, I gauge it on the position of WashU in *US News and World Report*, where it is a top-20 university in the world and in the US. We probably have one of the top two to three medical schools in the nation. When you look at it in the context of how much NIH funding we get – \$400 million or so [annually] – one can argue that there should be more output that results from that level [of funding].

If you look at the AUTM report, or some of the other reports, we're not high on those lists, whether you're measuring on revenue, or on the number of disclosures or patents. There seems to be less of a numerical statistical position for Wash U than, say, our peer institutions. Where we're trying to go is to increase the amount of deal flow and opportunities that we have in the institution beyond what we've seen in the past. I think we're trying to change some things in the makeup of the office. We're trying to focus a little more on the things we do, like any office. It may be a little different than what [Joel] Kirschbaum and colleagues are doing at UCSF [see [BTW 3/5/07](#)]. They're pretty well-focused on life sciences; they're a graduate school, and we obviously have graduates and undergraduates; and we obviously serve the entire university, so we have a broader portfolio of faculty. We also do perhaps a lot more in the sense that we are a full-service office. We handle all the material transfer agreements for the university; we do all the industry MTAs; we do all the sponsored research agreements for the university; we do all the licensing and patent management; and we do all of the financial management. I don't think this is unusual, but it does dictate how many resources you have relative to the different aspects of those resources that you're actually providing resources for.

I'm not sure that we've been a laggard in tech transfer. I think the expectation relative to what some of these statistics say can be a little misleading.

Where are these expectations coming from?

Most of the expectations in that regard probably come from the community. In the past five years, St. Louis has been building a bio-belt, or building a community where life science and biotechnology can invigorate the economy of the region. Central to that whole expectation, of course, is Washington University. In a lot of ways, the community looks at WashU to provide the raw materials for start-up opportunities. I think that has created a large expectation that we have the raw material, and the faculty that should and could become the entrepreneurs of the future. I think that in a lot of ways, the alignment of the community expectations with the university – although we're doing a lot more today than five or 10 years ago – that's where a lot of that criticism, curiosity, or expectation comes from. Even in the last three to five years we're doing things to facilitate more start-ups in the region, and to do things more quickly and efficiently than in the past to create these opportunities.

In the Bay area, or in the Boston area, I don't know if there is that much pressure put on the institutions from the community. Obviously Harvard and MIT have been at this for quite a bit longer than this area, and they're probably under different pressures than we are. But to be blunt, WashU, when it comes to the raw materials for start-up companies, is the main source for the state of Missouri. Kansas City, across the state, obviously has the Stowers Institute and others; but

when it comes to this side of the state, and the St. Louis region, we definitely represent the biggest source.

When you read or hear about the state of our tech-transfer efforts, it's not so much from WashU internally, or from people looking at the AUTM reports; I think it has more to do with the community, where we play a big role.

So has the university focused more recently on creating start-ups as opposed to licensing out technologies to established companies?

I think in the last several years, yes. I wouldn't say it is necessarily a result of the addition of Mike Marrah and myself. But we certainly are trying to adjust how we do things such that we can integrate our technologies into start-up opportunities, either at some of our incubators, or, more importantly, into the BioGenerator, which is kind of a gap organization in St. Louis that looks for nascent technologies to create companies that ultimately can be invested in. We are probably more integrated today into those entities than we have [been] in the past. We are also providing access to our technologies earlier, so we're allowing them to look at these technologies earlier than we have in the past. We're exposing our faculty members to more entrepreneurship. We have various training programs here at the university inside our fence line, where we're trying to provide entrepreneurial training of our faculty that are interested in starting a company. So there are pieces that are coming together and have been in existence for a couple of years. We're just trying to [optimize] their effectiveness and impact.

Doesn't this mean that many of the researchers have to show an interest in getting involved in a business venture? Is that a challenge?

It's a fair point. We have seen a shift in our faculty entrepreneurship in the past few years. Historically one could raise an argument that entrepreneurship may not have been to the same level as it was in other parts of the US, but we see more and more faculty, as they join WashU and become attracted to WashU, coming from other parts of the country that want to connect into our office very early. In some cases, we've actually been part of the interview process and decision process for them to come here. So we're seeing more entrepreneurial faculty coming to us that want to see their technologies cross the barrier from science into the commercial arena. That is becoming more energized in the Midwest as a whole.

The other aspect is that in order to create start-up opportunities for the region, there are so many elements that have to come together at the right time and place. You have to have the infrastructure in place, the financial basis in terms of angels and VCs, the entrepreneurial culture, and of course, the science and technology. All of these things have started to come together in the past couple of years better than five to 10 years ago.

Our role is clear – we're the supplier of the IP and scientific expertise, but obviously we're not investors, and we don't have facilities that companies can start up in. We are doing better at understanding our role in that process.

What are some of the promising technologies in the pipeline or that have legs for commercialization?

In general, I think we are seeing a higher level of technology from our nanotechnology area. We have some interesting surgical devices from our medical school. We're seeing a lot of stuff in the context of electronics, in the area of chip development, to move information much faster. In biomedical engineering, we have some new promising areas in cardio-imaging, and the way in which heart attacks and the injuries caused in heart attacks can be better characterized. Another one is a spin-off called Medros, which has to do with a new way to screen molecules for treating diabetes and possibly cancer. Those would all be start-up company technologies – the kinds of technologies that are really promising for commercialization. We are seeing the fruits of the work

we've been doing in some of these opportunities. But on the other side, we are still licensing technologies to large pharmas and biotechs, and suffice to say that most of our business still is in licensing to established companies. This is an area that the BioGenerator and incubators are helping us with – to better distinguish which technologies are better for start-up or licensing opportunities.

Another area that makes us unique is this co-directorship situation. My expertise lies in more of the business aspects of what we do; while the legal aspects of what we do, in terms of contracts and patenting, falls more with Mike Marrah. And we are sharing a lot of those responsibilities, which I think is pretty novel in comparison to some other institutions.

Technology Spotlight: Washington University

Following are select notable biotechnologies available for licensing from Washington University (source: Washington University Office of Technology Management):

Tech: Image-guided electrophysiologically determined treatment of atrial fibrillation

IP Status: Applied for patent (US patent application No. [20070049816](#))

Lead Inventor: Ralph Damiano

Description: Surgical method to treat atrial fibrillation, a condition affecting 2 million Americans. The method uses a patient's own geometry and electrophysiology to "dramatically" improve surgery success rates.

Tech: Diagnostic method for sepsis

IP Status: US patents issued (US patent No. [6,939,716](#))

Lead Inventor: Jay Heinecke

Description: Sepsis test analyzes 3-chloro/bromotyrosine biomarkers to diagnose and measure treatment efficacy for the leading cause of death in the elderly and critically ill – 1,400 patients each day, according to Washington University.

Tech: Load-independent index of diastolic function

IP Status: Applied for patent (not yet published)

Lead Inventor: Sandor Kovacs

Description: Load-independent index of diastolic function enables direct, non-invasive measurement of heart's actual functionality as a pump, as opposed to only volume of blood pumped.

Tech: SXC air filtration system

IP Status: US patent issued (US patent No. [6,861,036](#))

Lead Inventor: Pratim Biswas

Description: Air filtration system captures bio-particles as small as 5 nm with maximum efficiency and uses specialized titanium dioxide to destroy harmful microbes in the air. The technology could be useful for lab hood filtration systems.

CIRM, Johns Hopkins University Press, Biotechnology Industry Organization, University of North Carolina, Charlotte Research Institute, Med BioGene, Duke University

CIRM Announces \$75M in Grants for California Stem Cell Scientists

One month after approving almost \$45 million for embryonic stem cell research, the California Institute for Regenerative Medicine on Friday authorized an additional \$75.7 million in funds for 29 research projects to scientists at 12 non-profit and academic institutions.

The comprehensive, four-year grants will support mature, ongoing studies on human embryonic stem cells by scientists with a record of accomplishment in the field, CIRM said. They were designed for investigators with "well-developed expertise in hESC research or in a closely related field to pursue new directions in hESC research," the institute said.

Institutes receiving funding include the University of California, San Francisco, with seven grants totaling \$17.4 million; Stanford University, six grants, \$15.2 million; UC San Diego, three grants for \$7.5 million; UC Irvine, three grants, \$7.4 million; Burnham Institute for Medical Research, two grants, \$6.1 million; UCLA, two grants, \$5 million; UC Davis, two grants, \$4.8 million; J. Davis Gladstone Institutes, one grant, \$3.2 million; Salk Institute for Biological Studies, one grant, \$2.9 million; CHA Regenerative Medicine Institute, one grant, \$2.6 million; and Children's Hospital of Los Angeles, one grant, \$2.6 million.

A full description of individual grants, institutions, principal investigators, and award amounts can be found [here](#).

Johns Hopkins Press Gives AUTM Discount for Tech-Transfer Journal

The Johns Hopkins University Press and the Association for University Technology Managers last week announced an agreement to jointly promote and expand the dissemination of scholarly work in the field of technology transfer.

Under the agreement, print or electronic versions of *Comparative Technology Transfer and Society* will be offered to AUTM members at a 25-percent discount.

CTTS is an interdisciplinary, international, comparative academic journal that explores issues involved in tech transfer. Its editorial offices reside at the University of Colorado at Colorado Springs, and it is published by Johns Hopkins University Press under contract.

BIO to Feature New 'Emerging Technologies' Exhibit at 2007 Conference

The Biotechnology Industry Organization last week announced the addition of an emerging technologies-specific area to the exhibition floor at the 2007 BIO annual conference, to be held May 6-9 in Boston.

The Emerging Technologies Area will be open on Monday, May 7, and Tuesday, May 8. Registered attendees who have access to the BIO exhibition hall will have full access to the new area.

Exhibitors in the Emerging Technologies Area will be given a one-day tabletop display and two exhibition-only passes for all three days of the conference at a reduced rate of \$500 per day. In order to be considered, companies must be less than three years old, have fewer than 15 employees, and have been formed after 2003. Space is limited to 50 companies per day and granted on a first-come, first-served basis.

Charlotte Research Institute Hosts \$100K Business Plan Competition

The University of North Carolina at Charlotte and the Charlotte Research Institute last week announced the launch of its annual Five Ventures business plan competition and conference.

Charlotte-area entrepreneurs have submitted business plans to compete for more than \$100,000 in cash and in-kind services, and will present their plans to more than 25 local judges at the Charlotte Research Institute on March 21.

The top five scorers become Five Ventures finalists, and will subsequently present their business concepts at the Five Ventures Summit on April 12.

Presenting teams include:

- Accunetix, which has created a molecular diagnostic relevant to a wide range of healthcare applications including infectious diseases and cancer.
 - Acphazin, a biopharmaceutical company developing cancer therapeutics.
 - A-Metrics, which has developed a sensor technology to track changes in pressure, temperature, humidity, and vibration frequencies for applications such as breast cancer detection, sonar devices, and voice recognition.
 - HepatoSys, which has developed a technology to restore the function of donor livers for use in transplantation and to evaluate the integrity of donor livers.
 - Kiyatec, which proposes to reduce the time and cost associated with pre-clinical drug discovery through improved correlation of lab-based results and clinical trials.
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Med BioGene and Duke to Jointly Develop Biomarkers for Lymphoma, Leukemia

Med BioGene this week said that it has entered into a research collaboration and option agreement with Duke University to further develop and validate MBI's genetic biomarkers for lymphoma and leukemia using its Gene Expression Profiling System.

Under the terms of the collaboration, Duke will provide MBI a certain number of samples from patients with clinically confirmed lymphoma and leukemia for genetic analysis by MBI. Duke and MBI will collaborate on further analysis of those results, and Duke will grant MBI an option to acquire exclusive worldwide licensing rights to the intellectual property developed under the

collaboration.

MBI will reimburse Duke for certain expenditures, and then pay undisclosed royalties to Duke on revenue received from product commercialization, and Duke will be entitled to publish the results of the research, subject to review by MBI.

"The development of these biomarkers is the first step towards personalized medicine and is intended to replace the conventional 'one drug fits all' approach to disease management," Erinn Broshko, CEO of MBI, said in a statement.

David Kettner, Robert Zaugg, Nathan Tinker, Greg Simon, Lee Goldman, Jim Greaves, Chris McCleary, Vin Miles

The **Wisconsin Alumni Research Foundation** last week said that **David Kettner**, in-house counsel for WARF, will leave after March 30 to become chief intellectual property counsel for **Virent Energy Systems**, a Madison-based company developing carbon-neutral renewable energy products.

WARF said that Kettner will continue to work at WARF one or two days per week for a period of time after March 30. Kettner holds a law degree and BS in genetic and cellular biology from the **University of Minnesota**.

The **Burnham Institute for Biomedical Research** this week appointed **Robert Zaugg** to the position of vice president of business development, the institute said.

Zaugg will be responsible for all business development activities at Burnham, including technology licensing and establishing strategic alliances to support the institute's scientists in La Jolla and Santa Barbara, Calif., and Orlando, Fla. Zaugg has worked as an independent consultant and has served as interim CEO of several California biotech companies, including **DermAegis** and **Optime Therapeutics**. He has also been general manager of **GTS Proteomics**; vice president of business development at **Triton** (now **Berlex Biosciences**); and assistant director of technology assessment at **Sandoz** (now **Novartis**). Zaugg earned his postdoc from the **Massachusetts Institute of Technology**, a PhD and MS from **Northwestern University**, and an MBA from **New York University**.

The **New York Biotechnology Association** last week announced that **Nathan Tinker** has been named executive director.

Tinker most recently was director of **Antenna Group's** East coast office. He also formerly served as founder and executive vice president of the **NanoBusiness Alliance**, a trade association for the nanotechnology community; and as executive director of the Cancer Vaccine Consortium at the **Sabin Vaccine Institute**. He holds a PhD from **Fordham University**.

NYBA also said last week said that **Greg Simon**, president of **FasterCures**, and **Lee Goldman**, executive vice president for health and biomedical sciences at **Columbia University**, will be the featured speakers at NYBA's 17th Annual Meeting on April 10 in New York.

ITI Life Sciences has appointed **Jim Greaves** to the post of director of marketing and communications, ITI said last week.

Greaves arrives at ITI from **CXR Biosciences**, where he served as director of business development.

Greaves formerly was director of European marketing for **Invitrogen**.

Baltimore's Emerging Technology Center, a non-profit business incubator focused on growing early-stage technology and biotechnology companies, has selected **Chris McCleary** to join its board of directors.

McCleary is currently director of **Blue Chip Venture**, a Cincinnati-based venture capital firm. Blue Chip recently tapped McCleary to open an office in Maryland to expand its presence in the Mid-Atlantic region, Blue Chip said. Prior to Blue Chip, McCleary founded several companies including **Digex**, **USinternetworking**, and **Evergreen**.

Abingworth, a life sciences investment group, recently announced the appointment of **Vin Miles** as venture partner.

Miles, the former senior vice president of business development at **Anylam Pharmaceuticals**, will be responsible for evaluating new investment opportunities and supporting portfolio companies on the East coast, Abingworth said.

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