RISKY BUSINESS

STANFORD
UNIVERSITY

OFFICE OF
TECHNOLOGY
LICENSING
ANNUAL
REPORT

2013/14

In memory of Professor Leonard Herzenberg, Ph.D.
Professor of Genetics
He was a wonderful person
and one of our most successful inventors.

At Stanford, we take chances. We gamble. We bet on the future. But we don't have a crystal ball and we are often surprised at what the future brings. Nevertheless, we do help shape the future.

Many of our inventions are the kind described by author Clayton M. Christensen in *The Innovator's Dilemma*—they could be revolutionary but often are difficult to implement at first and more expensive than the current technology.

What should we do about them?

“YOU DON’T CONCENTRATE ON

RISKS.

YOU CONCENTRATE ON

RESULTS.”

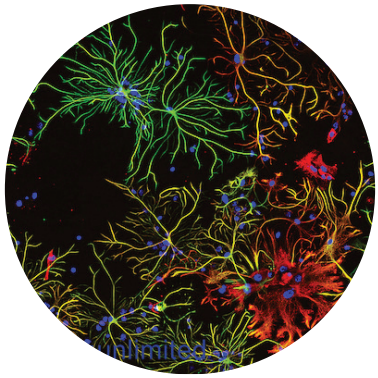
— CHUCK YEAGER

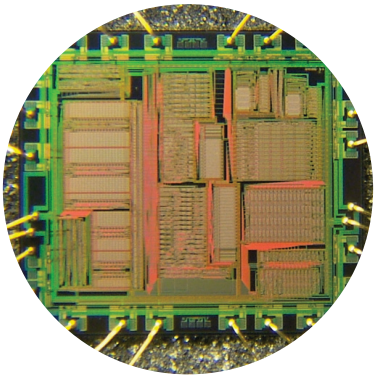
The nature of our licensing business is to take risks on very early-stage technologies resulting from university research — hoping that they will someday become commercial products to benefit society.

Created in 1970, the Stanford University Office of Technology Licensing (OTL) has proven that university inventions have a place in today's commerce. Our licensees have taken risks, too. And for many of them, the chances they took led to great success.

“FORTUNE SIDES WITH HIM WHO DARES.”

— VIRGIL





SEARCHING FOR THE BEST

TWO GRADUATE STUDENTS HAD DEVELOPED WHAT THEY PASSIONATELY BELIEVED WAS THE BEST SEARCH ENGINE IN THE WORLD, BUT THE EXISTING COMPANIES DIDN'T BELIEVE THEM. THEY HAD NO BUSINESS EXPERIENCE OR KNOWLEDGE ABOUT HOW TO BUILD A COMPANY. WOULD YOU TAKE A CHANCE ON THEM? WE DID. AND THEY STARTED GOOGLE.

PATENTLY PERSISTENT

PATENT ATTORNEY VICKI VEENKER ARGUED WITH THE U.S. PATENT OFFICE FOR 14 YEARS BEFORE THEY FINALLY GRANTED STANFORD AND COLUMBIA UNIVERSITY A PATENT. THANKS TO HER PERSEVERANCE, WE HAVE A STRONG PATENT THAT IS NOW LICENSED TO JOHNSON & JOHNSON. ITS MONOCLONAL ANTIBODY DRUGS MADE BY OUR PATENTED METHOD HAVE TREATED THOUSANDS OF PATIENTS WITH RHEUMATOID ARTHRITIS, CANCER, CARDIAC PROBLEMS, PSORIASIS, MULTIPLE SCLEROSIS AND MANY OTHER DISEASES. THIS INVENTION IS CURRENTLY OUR BIGGEST MONEY-MAKING INVENTION OF ALL TIME.

SOUND IDEA

NO U.S. PIANO COMPANY WOULD TAKE A CHANCE ON PROF. JOHN CHOWNING'S "FM SOUND SYNTHESIS" TECHNOLOGY. BUT YAMAHA DID, BELIEVING THAT IT WAS THE ANSWER TO A PROBLEM THE COMPANY HAD BEEN TRYING TO SOLVE FOR YEARS. ALTHOUGH IT TOOK YAMAHA SEVEN YEARS TO FINALLY DEVELOP AUDIO CHIPS BASED ON STANFORD'S PATENT, THE CHIPS BECAME THE DE FACTO STANDARD IN THE INDUSTRY.

“Why *not*
go out on a limb?
That’s where
the *fruit* is.”

— WILL ROGERS

This year, two relatively old inventions surprised us.

TO SEE

IN 2001, A TEAM OF COMPUTER SCIENTISTS IN PROF. PATRICK HANRAHAN'S LABORATORY CREATED DATA VISUALIZATION SOFTWARE THEY CALLED "RIVET." INTERNALLY, A NOTE IN OTL'S FILES SAID "ALTHOUGH I LOVE THE INVENTION, DUE TO PATENTABILITY ISSUES AND POTENTIAL ENFORCEABILITY ISSUES, I DON'T THINK THIS IS A GOOD BET" AND WE MOVED THE CASE TO OUR INACTIVE DOCKETS. MORE THAN A YEAR LATER, PROF. HANRAHAN'S FORMER STUDENTS WERE INTERESTED IN STARTING A COMPANY AND LICENSING THE TECHNOLOGY. RIVET BECAME THE BASIS FOR THE NEW SOFTWARE, "POLARIS," WHICH STILL REQUIRED MUCH DEVELOPMENT BY THE NEW COMPANY, TABLEAU SOFTWARE. IN 2003 WE FILED A PATENT APPLICATION AND SIGNED AN EXCLUSIVE LICENSE, WHICH INCLUDED EQUITY. THE PATENT APPLICATION TOOK APPROXIMATELY SEVEN YEARS TO ISSUE AND WILL EXPIRE IN 2025. IN THE MEANTIME, TABLEAU SUCCESSFULLY DEVELOPED THE TECHNOLOGY AND WENT PUBLIC IN MAY 2013 AS "BIG DATA'S BIG IPO" ACCORDING TO CNBC.

OR NOT TO "C"

IN 2002, WE RECEIVED AN INVENTION DISCLOSURE FOR TECHNOLOGY TO DETECT SOFTWARE ERRORS THAT WOULD THEN IMPROVE PERFORMANCE IN SYSTEM SOFTWARE WRITTEN IN C AND JAVA. OTL MARKETED IT TO THE BIG SOFTWARE COMPANIES INCLUDING ORACLE, APPLE, MICROSOFT, GOOGLE, ETC. BUT NO ONE WAS INTERESTED. UNDETERRED, INVENTOR PROF. DAWSON ENGLER STARTED A COMPANY AND WE EVENTUALLY GRANTED AN EXCLUSIVE LICENSE TO COVERITY INC. AT THE TIME, WE EXPECTED THE COMPANY TO BE A RELATIVELY SMALL SOFTWARE COMPANY THAT WOULD CAPTURE A NICHE MARKET. IN OCTOBER 2013, COVERITY WAS NAMED THE MARKET LEADER IN AUTOMATED TESTING AND IN MARCH 2014 IT WAS ACQUIRED BY SYNOPSYS FOR $375M.

“TEST FAIL ADJUST FAST.”

— TOM PETERS

We take risks and sometimes our risks pay off. But there are many times that the chances we take do not end in success. We have had failures.

WE HOPED TO DEVELOP A MARKET FOR A NEW TRADEMARK THAT WE CREATED AND INVESTED IN: SONDIUS. THE TRADEMARK WAS TO REPRESENT NEW SOUNDS DEVELOPED BY RESEARCHERS IN OUR MUSIC DEPARTMENT. OUR PARTNER, YAMAHA, WAS WILLING TO USE THE MARK WITH ITS OWN MARK — XG — TO INDICATE PRODUCTS THAT WERE DEVELOPED WITH STANFORD TECHNOLOGY. THE JOINTLY OWNED MARK — SONDIUS-XG — WAS USED ON MANY PRODUCT LABELS BUT NEVER REALLY CAUGHT ON. IN ADDITION, WE FUNDED AN INTERNAL PROJECT TO DEVELOP TOOLS TO MAKE IT EASIER FOR PROGRAMMERS TO USE THE STANFORD TECHNOLOGY, SPENDING ABOUT $1M, WHICH WAS A HUGE RISK. ALTHOUGH NOT THE ORIGINAL INTENT, A START-UP WAS FORMED OUT OF THIS EFFORT. EVENTUALLY THIS START-UP, STACCATO SYSTEMS, WAS ACQUIRED BY ANALOG DEVICES, INC. WE CAME OUT AHEAD, CONSIDERED IT A MODEST SUCCESS, AND LEARNED A LOT FROM THE EXPERIMENT.

IN 2004, RESEARCHERS DISCLOSED AN INVENTION THAT COULD POTENTIALLY REDUCE THE RISK OF A PATIENT HAVING A HEART ATTACK. WE FILED A PROVISIONAL PATENT APPLICATION ALMOST IMMEDIATELY BECAUSE WE FELT WE COULD FIND A PARTNER WHO WOULD BE WILLING TO DEVELOP THE TECHNOLOGY. SEVERAL COMPANIES EXPRESSED INTEREST. WE FILED MORE PATENTS AND STARTED TALKING TO ONE COMPANY ABOUT AN EXCLUSIVE LICENSE. HOWEVER, BY 2007 WE HAD NOT CONCLUDED ANY NEGOTIATION WITH THE COMPANY AND WE HAD FILED MANY APPLICATIONS. BY 2009, AFTER OTL SPENT OVER $90,000 ON PATENT EXPENSES, THE COMPANY WAS NOT INTERESTED IN THESE PATENTS AND WE DECIDED TO ABANDON ALL OF THEM.

AN ACADEMIC PRIZE DOESN'T GUARANTEE THAT AN INVENTION WILL BE COMMERCIALIZED. MANY OF STANFORD'S NOTABLE PRIZE WINNERS ARE ALSO INVENTORS. ALTHOUGH THEIR RESEARCH IS PRIZE WORTHY, MANY TIMES THEIR INNOVATIONS ARE TOO EMBRYONIC TO BE COMMERCIALLY VIABLE IN THE LIFETIME OF A PATENT. CUTTING-EDGE RESEARCH DOES NOT ALWAYS MAKE A MARKETABLE PRODUCT, AT LEAST IN THE SHORT TERM.

“

YOU CAN MEASURE

OPPORTUNITY

WITH THE SAME YARDSTICK

THAT MEASURES THE

RISK

INVOLVED. THEY GO

TOGETHER.

— EARL NIGHTINGALE

”

One problem for university technology transfer is that even with success stories, most inventions still go unlicensed. Industry often finds university inventions to be too early stage, not developed enough for companies to take a chance on. No doubt about it: it's risky.

There are technical risks, market risks, and often regulatory risks. In fact, often many good inventions are never developed because we cannot find a company champion to move the technology along.

To help overcome some technical risks, we created the **Stanford Innovation Project (SIP)** to support invention development with the goal of licensing promising inventions. Financial support is milestone-driven based on a clearly-defined commercialization path. SIP projects require the committed involvement of the faculty researcher and the OTL Licensing Associate. We have funded 9 projects to date. This is still an experiment and the results are not yet in.

In a time when innovation seems to be the key to solving some of the world's biggest problems, university inventions can be part of the solution. Companies that are interested in seeing what technologies we have available for licensing should visit our website, otl.stanford.edu, and go to **TechFinder**. People can find out what's available in a particular area of interest by registering their technology focus and we will let them know when a new invention is ready for licensing.

STANFORD TAKES RISKS

One of the earliest experiments to enhance Stanford/industry collaborations was the creation in 1983 of the **Center for Integrated Systems**, known as CIS. For 30 years, CIS has been a highly successful partnership between the university and industry members to produce world-class research and train Ph.D. graduates in fields related to integrated systems. From its original focus on semiconductor and nanoelectronics technologies for computer and networking applications, CIS has evolved along with its industry partners to embrace fundamental challenges in the complex technology stacks of various application areas, from automobiles to medical devices. CIS research, Ph.D. fellowships, and information-exchange programs draw on the unique strengths of the university and industry to enhance the productivity and competitiveness of both sectors. From 2015, this ongoing, vibrant program is recognizing the central role of systems in its new research approach by changing its name to the **Stanford SystemX Alliance**.

A grassroots movement among Stanford faculty resulted in a bold enterprise known as **Bio-X**, created to facilitate interdisciplinary research and teaching in the areas of bioengineering, biomedicine, and bioscience. Established in 1998, Bio-X supports, organizes, and facilitates interdisciplinary research connected to biology and medicine. The Clark Center is a radical new research building that is the physical embodiment of Bio-X, housing scientists, engineers, and physician investigators in the same facility.

Bio-X Interdisciplinary Initiatives Seed Grant Program (IIP) awards are given to teams of faculty with early-stage, high-risk ideas that couldn't be funded by traditional sources. Bio-X awards approximately $4M every other year in the form of two-year seed grants. From inception in 2000 through the seventh round in 2014, the program has provided critical early-stage funding to 164 projects. These IIP awards were the seeds for over $170M in external funding awarded to the Stanford faculty. What began as a bold experiment is now a demonstrated success. Research fostered by Bio-X has attracted global attention and produced amazing results, including breakthrough technologies and pioneering areas of study.

In 2002, Stanford launched the **Global Climate and Energy Project** (GCEP) to solve the world's energy needs in a way that protects the environment. In December 2002, four sponsors — ExxonMobil, GE, Schlumberger, and Toyota — helped launch GCEP at Stanford University with plans to invest $225M over a decade or more. DuPont and Bank of America joined the GCEP partnership in 2011 and 2013, respectively, bringing new perspectives and insights about the global energy challenge. GCEP develops and manages a diverse portfolio of research on technologies that will reduce greenhouse gas emissions, if they are successful in the marketplace.

A new initiative at Stanford is **ChEM-H**, which will bring together chemists, engineers, biologists, and clinicians to understand life at a chemical level and apply that knowledge to improving human health. The term ChEM-H serves as both shorthand for an emerging interdisciplinary area of chemistry that we seek to foster and an acronym for the fields it encompasses (harnessing Chemistry, Engineering, and Medicine to understand and advance Human health). ChEM-H builds on Stanford's talent in the Schools of Humanities and Sciences, Engineering, and Medicine, as well as its proximity to the SLAC National Accelerator Laboratory, to explore this new frontier at the interface of chemistry and human biology.

BENEFITS OF PARTNERSHIP

Stanford has paved the way for establishing better partnerships with foundations and other non-profit funders of research.

Last year, we took a chance by hosting a small meeting to begin a dialogue with non-profit research sponsors. For the first time, senior research officers and technology transfer professionals from several universities exchanged perspectives on research and the commercialization of the research with the leadership of several non-profit funders. The effort was well worth it because we have catalyzed the conversation so that several groups are working together to come to a shared understanding of best practices in university/non-profit funder relationships.

"PEOPLE WHO **DON'T** TAKE RISKS GENERALLY MAKE ABOUT 2 BIG MISTAKES A YEAR.

Stanford has always been about Big Ideas. Last winter, Prof. William Newsome, who had recently become director of the new Stanford Neurosciences Institute, asked: What would faculty members hope to achieve if money and time were no object and potential collaborators would all say yes? The result is seven Big Ideas in Neurosciences that create new interdisciplinary collaborations spanning Stanford schools and departments. The initiatives fall broadly into three categories:

NEURODISCOVERY INITIATIVES intend to probe the inner workings of the brain. These include:

- **NeuroChoice:** Probes how the brain makes decisions and expands that to influence public policy and economic decisions.
- **NeuroCircuit:** Combines a detailed understanding of brain circuits with technology that modulates neural activity to develop improved ways of treating mental health conditions.
- **NeuroVision:** Develops optical technologies that enable neuroscientists to visualize the brain in unprecedented detail.

NEUROENGINEERING INITIATIVES tap into Stanford's engineering faculty to create innovative new technologies for interfacing with the brain. These include:

- **Brain Machine Interface:** Develops technology to interface with the brain and create intelligent prosthetics.
- **NeuroFab:** Creates an incubator for next-generation neural interface platforms.

NEUROHEALTH INITIATIVES create collaborations to translate neuroscience discoveries into treatments. These include:

- **Brain Rejuvenation:** Creates a center for neurodegeneration research focusing on brain maintenance and regeneration, and the role of the immune system in these processes.
- **Stroke Collaborative Action Network:** Breaches barriers in our understanding of stroke to develop therapies and improve stroke recovery.

PEOPLE WHO **DO** TAKE RISKS GENERALLY MAKE ABOUT 2 BIG MISTAKES A YEAR.

— PETER DRUCKER

YEAR IN REVIEW

Stanford received $108.6M in gross royalty revenue from 655 technologies, with royalties ranging from $1.18 to $60.53M.

Forty of the 655 inventions generated $100,000 or more in royalties. Six of those forty inventions generated $1M or more. We evaluated 481 new invention disclosures in calendar year 2014. Filing and maintaining patents is an expensive proposition and we spent $9.8M in legal expenses. Of the 106 new licenses we signed this year, 48 were nonexclusive, 31 were exclusive, and 27 were option agreements.

ROYALTY DISTRIBUTION

Stanford's royalty-sharing policy provides for the distribution of cash net royalties (gross royalties less 15% for OTL's administrative expenses, minus direct expenses) to inventors, their departments, and their schools. In FY2013–14, inventors received personal income of $22.1M, departments received $20.5M, and schools received $18.4M. The university assessed an infrastructure charge on the department and school shares of royalty income. OTL contributed $1M to the University General Fund and $1.3M to the OTL Research Incentive Fund.

With respect to liquidated equity, we transferred $9.2M each to the Dean of Research for the OTL Research Fund and to the Vice Provost for Graduate Education for the VPGE/OTL Graduate Education Fund. Stanford also paid the University of California and other organizations $573,676.73 for jointly-owned technologies for which Stanford has licensing responsibility.

EXPENSES

OTL spent $9.8M on patent and other legal expenses, of which $4.0M was reimbursed by licensees. We have an inventory of $20.3M, which represents patent expenses for unlicensed inventions. Our operating budget for the year (excluding patent expenses) was $7.5M.

We take a financial risk each time we decide whether or not to file for a patent. In this period of tremendous change in the intellectual property landscape as court cases determine new patent law, we must weigh the likelihood of licensing a technology versus the expense of patenting or litigation. In addition, because of the America Invents Act, we sometimes need to decide whether or not to file patent applications earlier than would be optimal.

IN FY 2013–14, STANFORD RECEIVED

$108.6M

IN GROSS ROYALTY REVENUE FROM

655

TECHNOLOGIES.

481

NEW INVENTION DISCLOSURES WERE EVALUATED, AND

106

NEW LICENSES WERE SIGNED.

OTL SPENT

$9.8M

ON PATENT AND OTHER LEGAL EXPENSES, OF WHICH

$4M

WAS REIMBURSED BY LICENSEES.

EQUITY

As of August 31, 2014, Stanford held equity in 121 companies as a result of license agreements. For institutional conflict-of-interest reasons and insider trading concerns, the Stanford Management Company sells our public equities as soon as Stanford is allowed to liquidate rather than holding equity to maximize return. We received $23.2M in liquidated equity from eight companies.

With respect to new licenses, we received equity in 20 companies this year.

NEW DISCLOSURES

In calendar year 2014, we received 481 new technology disclosures. About 11% of the inventions were considered such an amalgam of both physical and life sciences that it was not possible to categorize them in one group or the other — evidence of the results of interdisciplinary research. Approximately 47% of the total disclosures were in the life sciences, 34% were in the physical sciences, and 8% were considered medical devices.

STANFORD TRADEMARK ENFORCEMENT FUND AND PATENT EXPENSES

The Stanford Trademark Enforcement Fund (STEF) was established as a source of funding for extraordinary cases associated with the protection of the Stanford name and associated logos and trademarks. Funding for the STEF comes from 1% of the department and school shares of net revenue OTL receives. In addition, the University President authorized OTL to set aside an additional 1% to provide a fund to offset expenses associated with the new America Invents Act patent law.

INDUSTRY-FUNDED RESEARCH

Part of OTL, the Industrial Contracts Office (ICO) specializes in research agreements with industry. In FY2013–14, ICO finalized 170 new industry-sponsored research agreements, where companies fund, and sometimes collaborate on, research projects in Stanford laboratories. The School of Medicine accounted for just over 52% of the sponsored research agreements and the School of Engineering accounted for about 32% of these agreements. The School of Earth Sciences accounted for another 10% of the total. The rest of the agreements were for projects in the School of Humanities and Sciences, the Graduate School of Education, the Graduate School of Business, and the Independent Laboratories.

THE OTL OPERATING BUDGET, EXCLUDING PATENT EXPENSES, WAS

$7.5M.

STANFORD HELD EQUITY IN

121

COMPANIES , AND RECEIVED

$23.2M

IN LIQUIDATED EQUITY FROM 8 COMPANIES.

OF THE NEW DISCLOSURES, ABOUT

47%

WERE IN LIFE SCIENCES, AND

34%

WERE IN PHYSICAL SCIENCES.

Among the other agreements that ICO finalized, Material Transfer Agreements (MTAs) continued to account for the largest number, with about 480 new MTAs for incoming materials and 130 outgoing MTAs. Another 54 agreements covered Stanford investigators sending out human tissues for research purposes.

Other ICO agreements included more than 142 amendments to existing sponsored research agreements, plus new collaborations, data-sharing agreements, equipment loans, non-disclosure, and other research-related agreements. ICO also handles agreements for Industrial Affiliates programs.

NEW MASTER RESEARCH AGREEMENTS

SAP Labs Inc. and Stanford completed a master agreement to cover research projects in the area of genetics and related fields. Two projects have been funded under the agreement: the **Cardiovascular Health Study** (headed by Prof. Euan Ashley, Department of Medicine), and the **Human Genome Sequence Variation Resource Study** (headed by Prof. Carlos Bustamante, Department of Genetics). Prof. Ashley's project aims to sequence the complete spectrum of genetic variation for a form of congenital heart disease called atrioventricular septal defect. Prof. Bustamante's project will merge disparate sources of data regarding individuals and the genetic variants they carry in order to improve genome interpretation.

In addition, SAP Labs and Stanford signed a second, separate master agreement to cover projects from the School of Engineering.

In March 2014, a master sponsored research agreement between Stanford and L'Oreal was signed with Stanford Bio-X as the facilitator. Since the execution of the agreement, two research projects have been funded.

ONGOING MASTER AGREEMENTS

In the past fiscal year, the Ford Motor Co. continued its ongoing involvement with Stanford researchers through its sponsorship of five research projects under its master agreement with Stanford.

Stanford currenty also has master agreements with ABB, Agilent, Airbus S.A.S., Amgen, Aramco Services, BEI Research, Boeing, Calypso, Chevron, Chevron ETC, CyberHeart, Daimler Chrysler, Elektra, ENI, Exxon Mobil Exploration, Genentech, General Electric, General Motors, Gilead, Google, Hewlett-Packard, Hoffman-LaRoche, Ingrain, L'Oreal, Nodality, Nokia, Novo Nordisk, NTT, Organogenesis, Pharmacyclics, Pfizer, Philips, Quest, Roche, Samsung, Sanofi US Services, SAP, SAP Labs, Semiconductor Research Corp., Siemens, SuperSonic, Varian Medical Systems, and Volkswagen of America.

We are pleased to have so many master research agreements with companies who want to work with Stanford faculty. We encourage companies to establish these agreements with pre-negotiated terms because they minimize contracting time for both parties.

IN FY 2013–14, ICO FINALIZED **170** NEW INDUSTRY SPONSORED RESEARCH AGREEMENTS .

APPROXIMATELY **480** MTAS WERE FOR INCOMING MATERIALS, AND **130** FOR OUTGOING MTAS.

ICO FACILITATED MORE THAN **142** AMENDMENTS TO EXISTING SPONSORED RESEARCH AGREEMENTS.

OTHER RESEARCH

Several faculty members from the School of Medicine, including Prof. Brian Rutt (Department of Radiology), Prof. Ted Graves (Department of Radiation Oncology), and Prof. Phillip Yang (Division of Cardiovascular Medicine), are collaborating with Bell Biosystems Inc. on projects incorporating Bell's magnetic organelle (Magnelle®) technology. Bell Bio is a synthetic biology company, pioneering the use of synthetic organelles, cell structures with specialized functions. Its first product, the Magnelle, aims to accelerate research in oncology, regenerative medicine, and other cell-based fields. The Rutt lab is using Magnelles to track cancer metastasis in the brain, with the aim of detecting single cells. The Graves lab is using Magnelles to track cancer cell migration following radiation. The Yang lab is using Magnelles to monitor cardiac progenitor cell therapies in the heart following cardiovascular disease.

Prof. Gianluca Iaccarino (Department of Mechanical Engineering) received new funding from Doosan Heavy Industries and Construction, a South Korean company, to develop a novel numerical method to simulate the operating environment of steam turbine equipment in power plants. Based on the immersed boundary concept, such numerical predictions are required to handle moving, deformable boundaries, fluid/structure coupling, and complex turbulent flow featuring boundary layers and viscous wakes.

INDUSTRY AFFILIATES PROGRAMS

During FY2013–14, 58 affiliates programs at Stanford brought in a total of $28.6M dollars.

Four new Industry Affiliates Programs were created during the year:

ICME is the Institute for Computational and Mathematical Engineering, led by Prof. Margot Gerritsen, (Department of Energy Resources Engineering). ICME supports collaboration with industry partners in areas such as algorithms and optimization, machine learning, data science, computational finance, geoscience, computational medicine, and imaging.

The Secure Internet of Things, directed by Prof. Philip A. Levis (Department of Computer Science), is a cross-disciplinary research effort among computer science and electrical engineering faculty at Stanford, the University of California, Berkeley, and the University of Michigan, which is focused on analytics, security, and hardware and software systems.

SDSI is the Stanford Data Science Initiative, directed by Prof. Hector Garcia-Molina (Department of Computer Science). SDSI focuses on core data technologies with ties to campus-wide application areas for methods research, infrastructure, and education.

The Stanford Digital Learning Forum is directed by Prof. John C. Mitchell (Department of Computer Science). The program is designed to bring companies together with faculty, students, and staff throughout the University who are involved in online learning initiatives.

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COMPANIES SPONSOR RESEARCH THROUGH MASTER AGREEMENTS.

DURING FY2013–14
58
AFFILIATES PROGRAMS BROUGHT IN A TOTAL OF
$28.6M.

4
NEW INDUSTRY AFFILIATES PROGRAMS WERE CREATED THIS YEAR.

Office of Technology Licensing
3000 El Camino Real
Building 5, Suite 300
Palo Alto, CA 94306
650-725-0651
otl.stanford.edu

DESIGN: ARTEFACT DESIGN, INC.