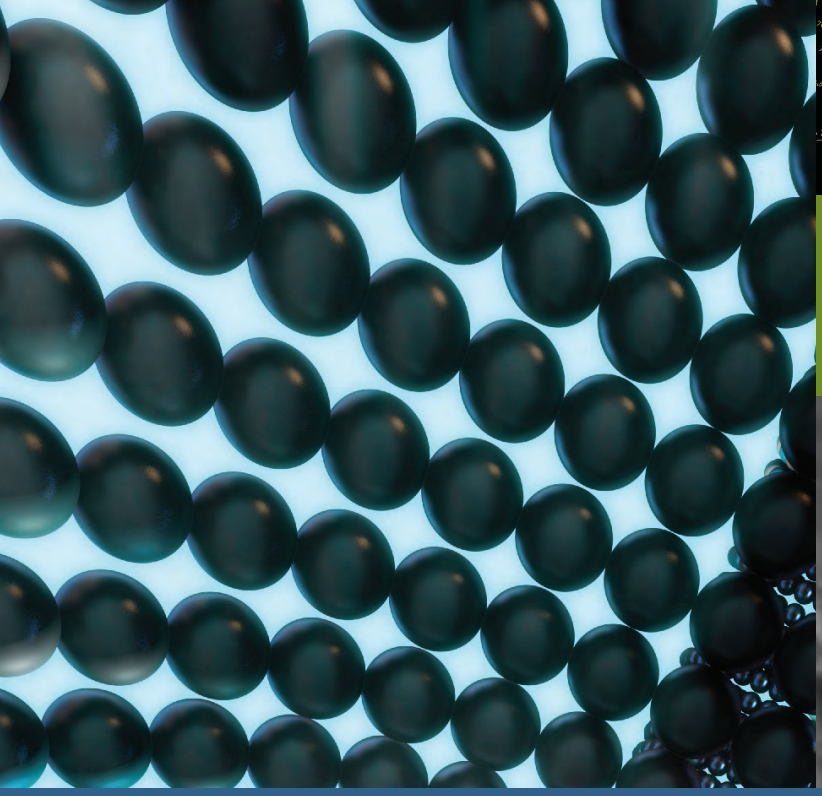
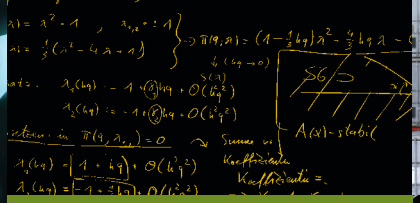
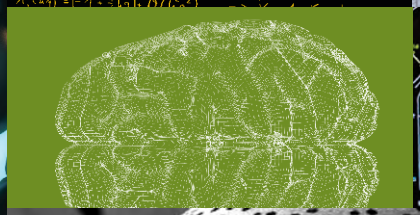
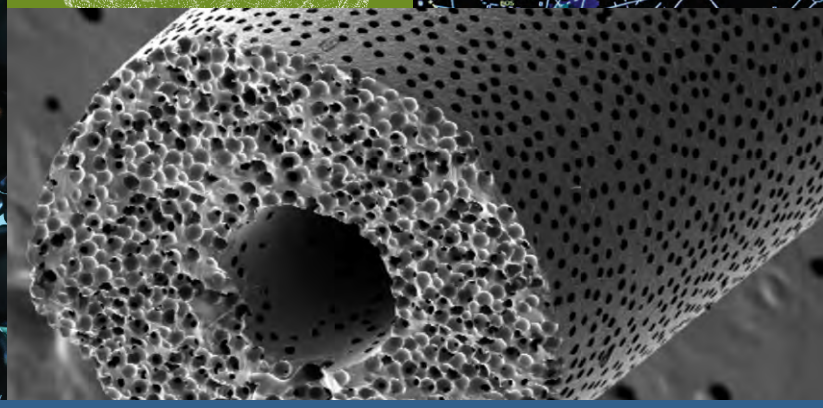


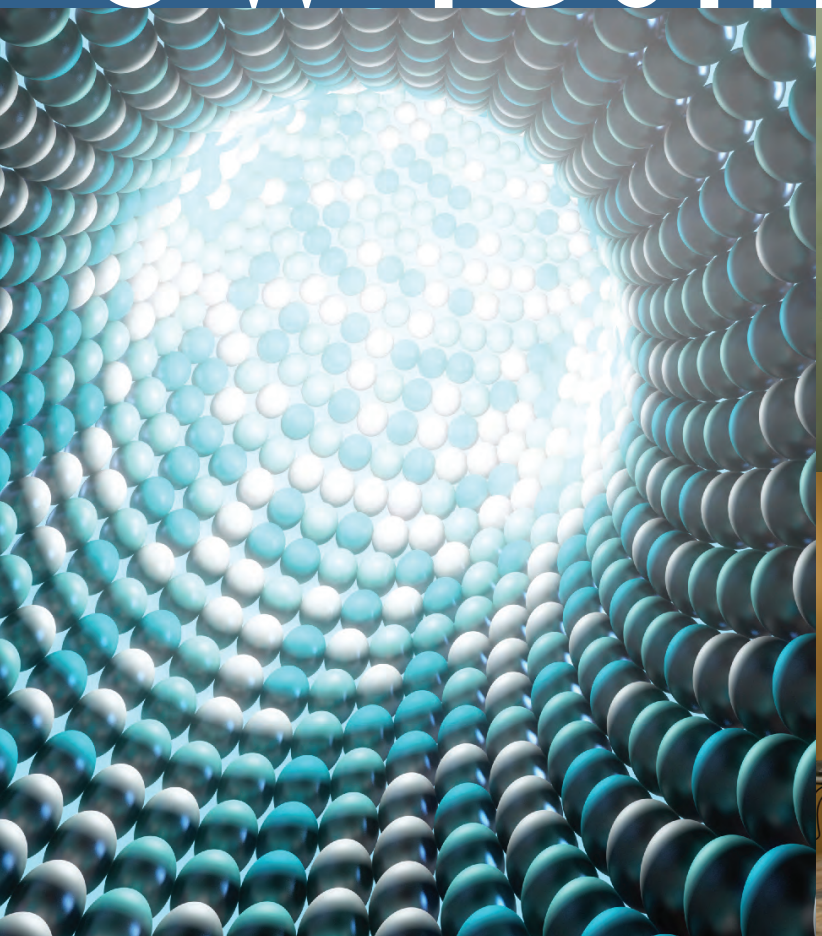


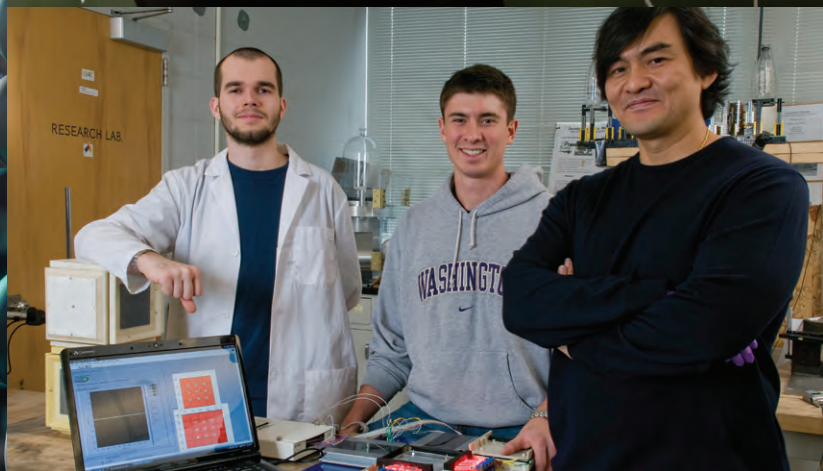




FY2008 ANNUAL REPORT

UW TechTransfer





WELCOME FROM THE VICE PROVOST

Dear Colleagues,

I was honored to accept the UW TechTransfer Vice Provost position in August 2008. While I have worked in Seattle's high tech industry for the past 20 years—including starting companies with UW faculty—I look forward to the challenge of working with academia and industry from my new vantage point here at the university.

I arrive at UW TechTransfer at an opportune time, as the department continues to post solid results in fundamental areas. In FY08, UW researchers, faculty and staff reported 349 innovations—a key indicator of the university's ability to generate new technologies and materials. UW research also generated nine startup companies in FY08, representing a wide range of products and services. UW TechTransfer also experienced significant growth in campus outreach, increasing the number of departments we worked with in FY08 by 27%, from 64 in FY07 to 81 in FY08.

Building on this strong foundation, I want to work with you to make our office a world leader in supporting researchers to the extent that UW TechTransfer becomes a reason why researchers doing the most promising and exciting work choose to join UW and stay at UW. By accomplishing this goal, we will, over time, broaden and deepen the stream of innovations our office brings to commercial fruition. That in turn will add leverage to our efforts and enable us to attract even more world-class researchers.

Our state, our country, and the world are desperately in need of real solutions to real problems, particularly solutions with the potential to strengthen our faltering economy. Partnerships between academic research and industry are a vital generator of such solutions. After meeting with thought leaders regarding current technology transfer challenges, I've concluded that we can catalyze that process by working with researchers earlier in their innovation cycle. We will, therefore, expand UW TechTransfer's ability to provide researchers with industry contacts and market research so that they can grasp the relevance and commercial potential of their work early on. Those who wish to can then apply that insight to streamline their research process.

Another way we will become a world leader in supporting researchers is to focus on UW startups. Our goal is to learn how to best support them and ultimately increase the number of startups generated each year. To achieve this goal I have increased departmental resources working with UW startups and I have expanded partnerships with the UW Foster School of Business and with local entrepreneurs. Teams of entrepreneurs and students will work with UW researchers to develop business essentials such as market research, funding opportunities and financials so that our researchers are better positioned in the marketplace and more commercially successful.

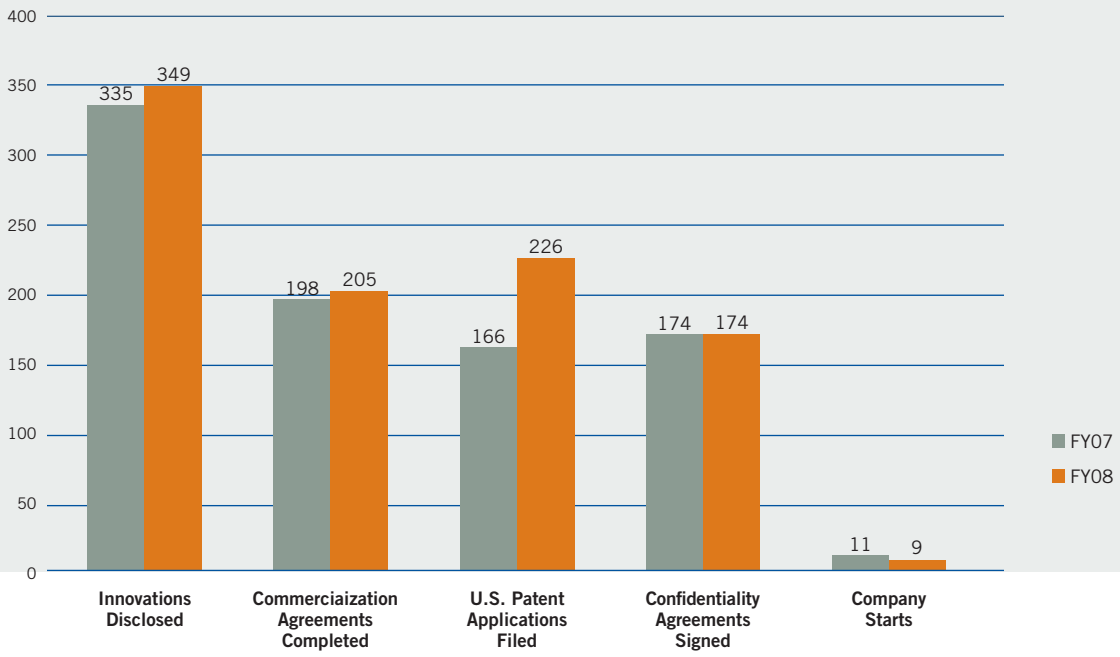
I am privileged to collaborate with such a talented group of business development professionals who share my joy in working with UW innovators and with our vibrant business community. I look forward to your help in guiding UW TechTransfer into FY09.

Linden Rhoads
Vice Provost, UW TechTransfer

THE MISSION OF UW TECHTRANSFER IS TO EXTEND THE IMPACT OF UNIVERSITY OF WASHINGTON RESEARCH THROUGH THE CREATION OF PARTNERSHIPS THAT ENCOURAGE INVESTMENT IN INNOVATION.

2008 FAST FACTS

FY07-FY08 COMPARISON



- UW TechTransfer manages a total patent portfolio of over 2,200 issued and pending patents filed in the U.S. and around the world.
- 244 companies have been started by UW students and faculty or with UW technology.
- $2.4 million in Technology Gap Innovation Funds (TGIF) have been awarded to 49 projects since the program was introduced in 2004. This joint program of UW TechTransfer and the Washington Research Foundation supports UW inventions that are commercially promising.
- In FY08, 571 researchers from 81 departments disclosed innovations to UW TechTransfer, increasing the number of departments UW TechTransfer worked with by 27 percent.
- UW innovators earned $10 million from their successful technologies in FY08.
- UW TechTransfer revenues contributed over $16 million in FY08 to UW's Royalty Research Fund, whose purpose is to advance new directions in research.
- In FY08, over 6,400 licenses were executed for academic no-charge software/content. Through the UW TechTransfer portals (UW OpenDOOR and Express Licenses), UW innovators make available academic licenses, open source software, freeware and data sets.

SUMMARY OF ACTIVITY: AGREEMENTS

FY08 Licensing Activity

In FY08 UW TechTransfer executed a total of 205 agreements for the commercial use of inventions and copyright works owned by the UW. This total includes both non-exclusive and exclusive licenses and options for commercial development of products and services utilizing inventions and copyright works, as well as software and research tool use agreements that exceed $1000.*

TABLE 1: FY08 COMMERCIALIZATION AGREEMENTS COMPLETED

Licenses/Options	98
Software Use Agreements over $1000	80
Research Tool Use Agreements over $1000	27
Total	**205**

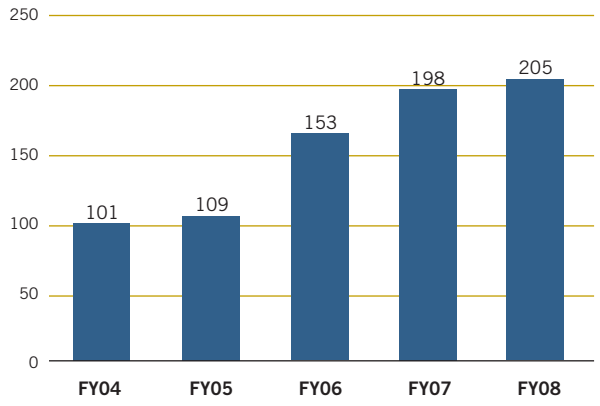
*This definition is employed by the Association of University Technology Managers (AUTM) in its Annual Licensing Survey. UW TechTransfer uses the definition to provide consistency and facilitate comparisons with peer institutions.

UW TechTransfer also negotiated and executed a substantial number of agreements that facilitate technology transfer but do not typically grant commercial development rights or generate licensing income. These include no-charge or academic software licenses, fee-based software use agreements, material transfer agreements for research materials and confidentiality or non-disclosure agreements.

No-Charge or Academic Software Licenses

To support the broad distribution of innovations created by the UW academic community, UW TechTransfer works closely with these individuals to first protect their innovation and then formulate strategies to share it at no charge with other universities, government entities and non-profits. In FY08, over 6,400 academic and no-charge licenses were executed. This number demonstrates the broad availability and impact of UW software, and reflects the many software projects managed by UW TechTransfer.

EXHIBIT 1: FY04-FY08 LICENSES AND OPTIONS COMPLETED



Fee-Based Software Use Agreements

UW TechTransfer also works with innovators to develop software distribution models that generate revenue to support their group and help further their software project. These formal software use agreements range from self service licenses with standard terms to negotiated licenses with fees applied. In FY08, more than 1,900 agreements were executed generating over $1 million in revenue.

Material Transfer Agreements (Research Materials)

The exchange of research materials is an important component of the research enterprise. UW researchers are both providers and recipients of research materials such as cell lines, cultures, bacteria, nucleotides, proteins, transgenic animals, pharmaceuticals, and chemicals. Material transfers can occur between the UW and research institutions or corporate entities.

This vital exchange requires a specific contract for each transfer. These contracts are known as Material Transfer Agreements (MTAs). In FY08, UW TechTransfer executed over 820 MTAs.

Confidentiality or Non-Disclosure Agreements

Confidentiality (CDAs) or Non-Disclosure Agreements (NDAs) measure to a certain degree the marketing success of a particular technology or group of technologies as it indicates the level of interest by outside parties in UW research. Entering into a CDA or NDA provides an opportunity for the company to better understand the technology and determine if they want to negotiate a license while protecting the researcher's intellectual property. In FY08, UW TechTransfer completed 174 Confidentiality or Non-Disclosure Agreements.

To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science.

– ALBERT EINSTEIN

FY08 STARTUP COMPANIES

In FY08, agreements for nine new company starts were completed:

4Care Solutions

ALCOHOL AND DRUG ABUSE INSTITUTE

4Care Solutions delivers low-cost hosted web applications to help substance abuse and mental health treatment providers and researchers efficiently collect, analyze and report patient data.

Artemisia BioMedical Inc.

BIOENGINEERING, CHEMISTRY

Artemisia BioMedical plans to design, develop and commercialize novel artemisinin-based therapeutics to treat cancer and other serious proliferative and inflammatory disorders.

Bio Architecture Lab

BIOCHEMISTRY

Bio Architecture Lab will use synthetic biology and computational enzyme design to develop biofuels for use in transportation and industrial applications. Produced from renewable carbon sources, Bio Architecture Lab will help reduce our carbon footprint and dependence of fossil fuels.

EAS Software, LLC

AERONAUTICS AND ASTRONAUTICS

EAS Software has developed plug and play software to help dispatchers optimize flight paths to save fuel and time for the airline industry.

Erudite, Inc.

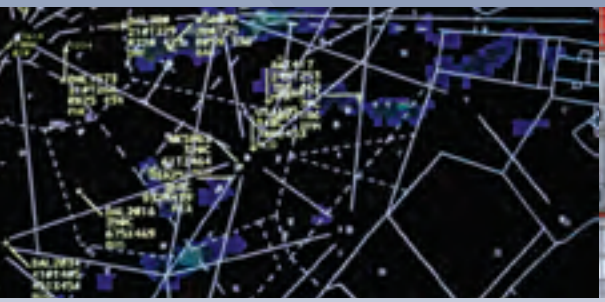
ELECTRICAL ENGINEERING

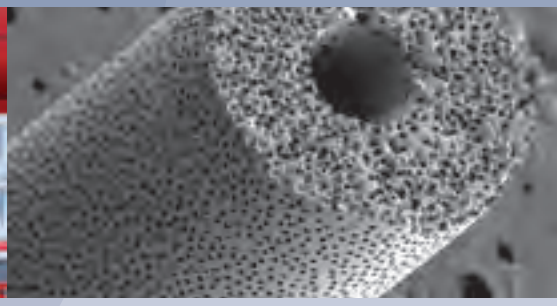
Erudite is developing a global wireless system for tracking and monitoring shipping containers and securing them against terrorist threat and loss through pilferage, theft and spoilage.

Healionics

BIOENGINEERING

Healionics was formed to develop tissue regeneration and device bio-integration solutions for healthcare manufacturers.





ImageSpace 4D (IS4D)

BIOENGINEERING, MECHANICAL ENGINEERING, RADIOLOGY

IS4D plans to develop medical imaging software that makes 3D imaging with interaction and movement, or 4D, easy to use. The patient-specific plastic models created will allow surgeons to see and feel the part of the body they will work on prior to a procedure.

NonProfit Technologies

SOCIAL WORK

NonProfit Technologies has licensed PowerON, a national HIV/STD online prevention program developed for city micro-sites with over 1,000 pages of localized referrals and culturally appropriate content for gay men, bisexual men and transgender persons.

ZuMeZu, Inc.

ELECTRICAL ENGINEERING

ZuMeZu is developing an advanced image compositing portal that will help photographers, artists, companies and the general public create and share photographs and images in creative ways.

BIOLOGICAL MATERIALS PROGRAM

Program leverages UW research assets to advance scientific innovations and generate revenue

To advance research programs and validate various models, scientists often develop research tools such as antibodies, transgenic or knock-out organisms, cell lines that express specific proteins, multiple DNA/RNA constructs and vectors. In addition to being critical tools for advancing academic scientists' research projects, these biological materials potentially have high commercial value, and UW TechTransfer is actively engaging with UW scientists to encourage them to disclose their biological materials.

"Sometimes inventors are hesitant to disclose their biological materials to UW TechTransfer because they believe a potential licensee would then own the material or gain control of the licensing," stated Valerie Carricaburu, UW TechTransfer technology manager. "That is not the case; the UW controls the licensing of biological materials and retains ownership of the materials even after licensing." Even if the biological material is not new, or has been described in a published research paper, it can still be licensed to companies because it is not necessary to patent biological materials for them to be commercialized.

In an effort to make these tools more broadly available, UW TechTransfer has been leveraging their value by creating a Biological Materials portfolio and actively marketing them to appropriate companies. The portfolio currently includes 143 biological materials disclosed by more than 65 investigators. Over the past year, UW TechTransfer's marketing efforts have generated close to 70 biological material license agreements with revenues distributed to the inventors, schools and departments where they were developed and to the UW's Royalty Research Fund.

"Our goal is to disseminate UW innovations as widely as possible so they can be used by the greatest number of people," said Valerie, "so we license biological tools to multiple companies."

HOW TO FIND UW RESEARCH MATERIALS AND TOOLS AVAILABLE FOR LICENSING:

Academic researchers and companies can search for UW technologies available for licensing on UW TechTransfer's website at http://depts.washington.edu/techtran.

The Biological Materials program would not have been successful without the participation of UW scientists who not only disclosed their materials to UW TechTransfer but also took the time to prepare, grow or breed, and ship these materials to companies. UW TechTransfer would also like to thank those who helped make this marketing initiative a fruitful program.

LAUNCHPAD






In FY08, LaunchPad, UW TechTransfer's business development program, introduced new resources to assist UW innovators in starting new companies. The goal of LaunchPad is to build a strong supportive system and network in which UW innovators can vet and develop their business ideas based on their UW research. Through partnering, UW TechTransfer is able to leverage key resources that are essential to the UW's entrepreneurial researchers. These resources include:

LaunchPad Advisory Board

The LaunchPad Advisory Board comprises experienced local business executives, entrepreneurs, attorneys and investors who meet quarterly with our startup teams. The meetings are designed to help the teams focus their ideas, practice their business plan pitches and anticipate questions from potential investors. The sessions also help the teams prepare for the UW Center for Innovation and Entrepreneurship (CIE) Business Plan Competition held each spring.

LaunchPad Advisory Board members are: Paul Budak, Confirma; Sonya Erickson, Heller Ehrman; John Hansen, Stillwater Connection; Stuart Jamieson, Slipstream Design; Byron McCann, Ascent Partners Group; Tammy Mullarky, Targeted Growth Inc.; Chris Somogyi, Somogyi Ventures; Michael Tobiason, Chihuly Studio; Kurt Wedgewood, IBM; and Mike Wilson, Connect Northwest.

UW School of Law Entrepreneurial Law Clinic (ELC)

Legal advice on how to form a new company is an essential concern for our LaunchPad teams. UW TechTransfer established a partnership with the UW School of Law's Entrepreneurial Law Clinic, which serves entrepreneurs in the Pacific Northwest by teaming pro bono attorneys and business advisors with law and business students to provide critical early-stage legal and business counseling.

UW Foster School of Business Center for Innovation and Entrepreneurship (CIE)

UW TechTransfer has worked closely with CIE to help our entrepreneurially minded UW innovators connect with resources at the UW Foster School of Business.

- In FY08, two LaunchPad projects were selected for the Technology Commercialization Practicum course taught by Ralph Derrickson, a seasoned entrepreneur. In the course LaunchPad projects benefitted from having student teams research and present market research and business strategies to the UW innovators. Due to the success of the partnership, the Technology Commercialization course will work exclusively with LaunchPad projects.

- At this year's business plan competition, LaunchPad-assisted teams took first (photo below) and third prize and won two other awards, capturing $45,000 of the $75,000 total prize money.

UW Foster School of Business Technology Management MBA (TMMBA)

UW TechTransfer also worked with the TMMBA Program to help assess and determine the market potential for UW technologies. In FY08, four technologies in the LaunchPad program were selected for the TMMBA Technology Commercialization Capstone project. This was the first time LaunchPad was involved with the Capstone Program and because of the successful outcome it will be repeated again next year.

Photo right: Impel NeuroPharma team members hold their RealNetworks Grand Prize check. On the right is Dean of the Foster School of Business Jim Jiambalvo; at left is Edmond Mesrobian of RealNetworks.

SUMMARY OF ACTIVITY: INNOVATIONS

Innovations Reported

In FY08 innovations reported increased from 335 in FY07 to 349. The types of innovations range from software and other digital assets to medical and engineering discoveries. A total of 571 researchers from 81 departments contributed to these innovations, increasing the number of departments UW TechTransfer worked with in FY08 by 27 percent.

Colleges and Schools

Researchers in the College of Engineering contributed to 48 percent of the innovations reported, the School of Medicine contributed to 33 percent and the College of Arts and Sciences contributed 8 percent.

Departments

In FY08, 38 researchers in the Mechanical Engineering Department were involved in 63 reported innovations. The Mechanical Engineering Department has expertise in such diverse areas as energy, manufacturing processes, robotics, nanotechnology and medical devices.

Individuals

The most active innovator for the past four years is Dr. Wei-Chih Wang, a research assistant professor in Mechanical Engineering, who disclosed 23 innovations in FY08. Dr. Wang heads the Micro Technology Laboratory in the Mechanical Engineering Department and uses unique polymer materials and fabrication techniques to develop electromagnetic- and photonic-based micro-sensors and actuators for industrial and biomedical applications.

In FY08, Dr. Wang was encouraged to present one of his technologies, a disposable surgical glove that measures the amount of force applied by the wearer, to UW TechTransfer's LaunchPad Advisory Board. In the meeting he presented his idea to the seasoned group of business executives and received valuable feedback and advice on how to take his idea to the next level, and was further encouraged to see his idea through as a potential startup

company. Next, Dr. Wang and his team entered the UW Business School's Annual Business Plan Competition where LiteTouch placed in the top sixteen out of the 89 teams that applied. Currently, Dr. Wang and his team continue to develop and protect the technology. They have officially incorporated and look to license the technology in 2008.

Our second most active innovator was Dr. Minoru Taya, who disclosed 9 innovations to our office in FY08. For the past five years Dr. Taya has consistently ranked in our top innovators list. Dr. Taya is currently the Director of the Center for Intelligent Materials and Systems (CIMS), where he is involved in supervising a number of projects related to intelligent materials and systems.

Dr. Taya's research focuses on three major areas: (1) energy harvesting and storage materials and systems (EHSS), (2) smart materials and (3) bio-inspired design. In his EHSS research, Dr. Taya is designing, processing, and characterizing a new set of EHSS components to be used on airplanes and automobiles. Dr. Taya's smart materials research addresses sensing and active materials, shape memory alloys (SMA), and electroactive polymers (EAP) and their devices. Examples of EAP devices are electrochromic windows whose optical transmission changes when a voltage change is applied and Flemion tactile sensors that can detect three-dimensional forces. Bio-inspired design is a new area of research for Dr. Taya, one that combines the study of biological structures with the design of adaptive structures and intelligent materials. Dr. Taya believes this could be a better way of designing a new set of materials, as biological systems are ideal adaptive structures with smart sensing capabilities.

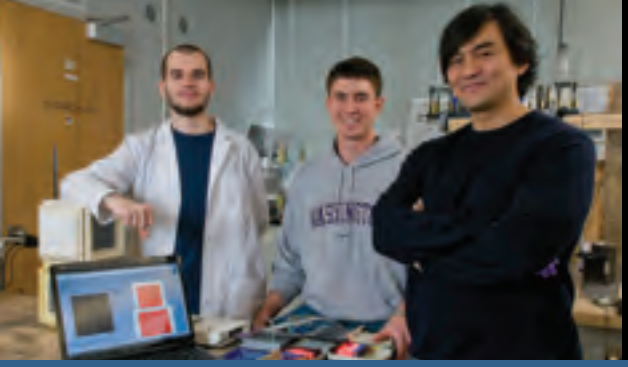


Photo left: Dr. Wang (right) in his lab with members of his research team, David Linders (center) and Alex Perez (left).

Photo right: Dr. Taya (center) with Drs. Chunye Xu (right) and Morio Nagata (left) holding prototypes of their technologies.

EXHIBIT 2: FY04-FY08 INNOVATIONS REPORTED

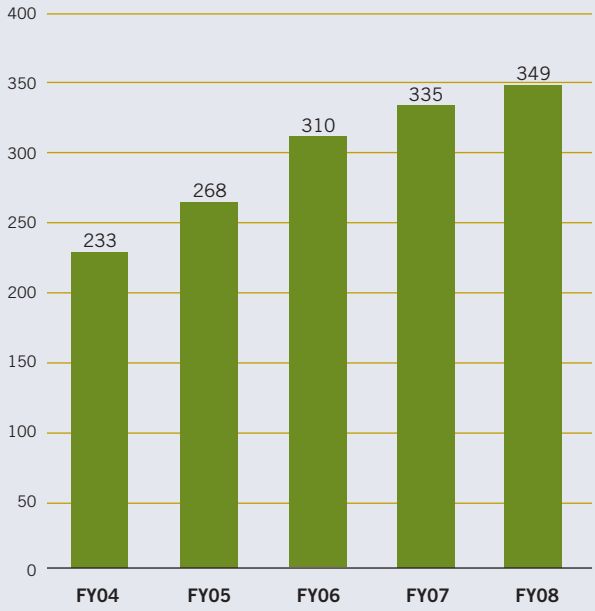


TABLE 2: FY04-FY08 INNOVATIONS REPORTED BY COLLEGE/SCHOOL

	FY04	FY05	FY06	FY07	FY08
Arts and Sciences	32	26	23	27	27
Dentistry	7	1	1	3	1
Engineering	89	122	156	172	169
Forest Resources	2	0	0	0	0
Medicine	74	94	102	111	115
Ocean and Fishery Sciences	10	11	12	8	18
Pharmacy	2	2	4	4	4
Public Health	1	2	5	4	6
Other	16	10	7	6	9
	233	**268**	**310**	**335**	**349**

Table 2 illustrates the school/college affiliation for innovations reported in FY08. The percentage is pro-rated in the case where more than one school/college is affiliated with the innovation. The Department of Bioengineering reports jointly to the School of Medicine and College of Engineering; thus half of the total number of innovations is credited to each department.

TABLE 3: FY08 DEPARTMENTS REPORTING MORE THAN TEN INNOVATIONS

DEPARTMENT	NO. OF INNOVATIONS
Mechanical Engineering	63
Electrical Engineering	43
Bioengineering	29
Department of Medicine	15
Radiology	15
Computer Science and Engineering	14
Materials Science and Engineering	13
Applied Physics Laboratory	13
Chemistry	13

TABLE 4: FY08 INNOVATIONS GROUPED BY INDIVIDUAL

NAME	DEPARTMENT	COLLEGE/SCHOOL	NO. OF INNOVATIONS
Wei-Chih Wang	Mechanical Engineering	Engineering	23
Minoru Taya	Mechanical Engineering	Engineering	9
Eric Seibel	Mechanical Engineering Human Photonics Laboratory	Engineering	7
Dustin Miller	Mechanical Engineering	Engineering	7
Vipin Kumar	Mechanical Engineering	Engineering	7
Alex Jen	Materials Science and Engineering	Engineering	7
Thomas Baehr-Jones	Electrical Engineering	Engineering	6
Allan Hoffman	Bioengineering	Engineering & Medicine	6
Tadayoshi Kohno	Computer Science & Engineering	Engineering	6
Michael Hochberg	Electrical Engineering	Engineering	6
Nathan Camp	Pharmacology	Medicine	6
Randall Moon	Pharmacology	Medicine	6
Patrick Stayton	Bioengineering	Engineering and Medicine	6
Travis Biechele	Pharmacology	Medicine	6

SUMMARY OF ACTIVITY: PATENTS

Intellectual Property

Intellectual property protection for commercially viable innovations is a significant activity for UW TechTransfer as it formalizes the transfer of UW-based research from the university to the marketplace. While the form of protection (patent, copyright, or trademark) can vary depending on the intellectual property strategy, our department works in close partnership with researchers to ensure that the models we use are consistent with and support their research goals.

Patent Applications

UW TechTransfer filed 226 U.S. patent applications on UW innovations in FY08, a 36 percent increase over FY07. The significant increase in UW TechTransfer's patent filings can be attributed to a number of factors. As noted earlier in this report, UW TechTransfer worked with a number of new groups with novel technologies that resulted in an increase in patent filings. Additionally, our established relationships with UW innovators made an impact as their research developed into technologies that warranted patent filing protection.

An increase in patent filings can also be attributed to both the variety and quality of innovations disclosed as it is easier to move forward with patenting on a novel discovery with commercialization potential.

Patents Awarded

In FY08, 97 patents were awarded on 80 different innovations from 28 departments at the University, including 56 U.S. patents and 41 issued in foreign jurisdictions. Awarded patents include:

- A model that uses color changes in zebra fish to screen drug candidates. The resulting technology could improve the treatment and prevention of diseases like melanoma, colorectal cancer and osteoporosis
- New methods to diagnose and treat major diseases such as cancer, diabetes, and Alzheimer's, and
- An improved structure and system for occupant protection in a side impact automobile collision.

Colleges and Schools

The College of Engineering and School of Medicine continue to produce the majority of U.S. patents issued. In FY08, the College of Engineering contributed to 45 percent of the issued U.S. patents and the School of Medicine contributed to 42 percent.

UW Patent Ownership

The University of Washington holds over 1,000 granted patents and is participating in the prosecution of more than 1,200 pending patent applications in the U.S. and throughout the world.

EXHIBIT 3: FY04-FY08 U.S. PATENT APPLICATIONS FILED

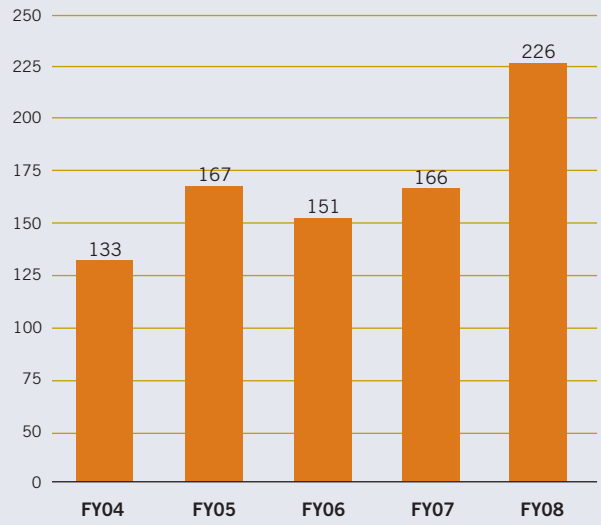


EXHIBIT 5: FY04-FY08 U.S. PATENTS AWARDED

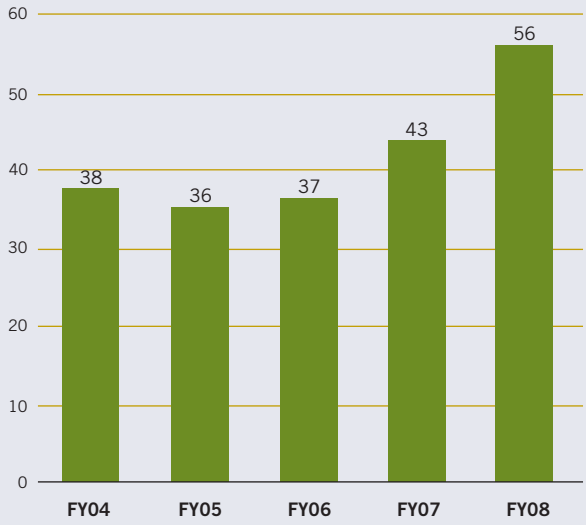


EXHIBIT 4: FY08 U.S. PATENTS FILED, GROUPED BY COLLEGE OR SCHOOL

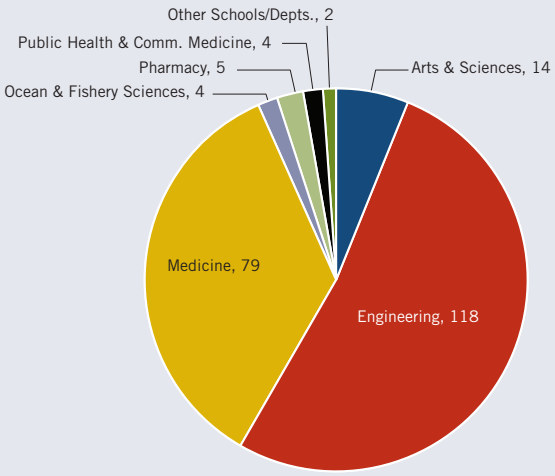


EXHIBIT 6: FY08 U.S. PATENTS AWARDED, GROUPED BY COLLEGE OR SCHOOL

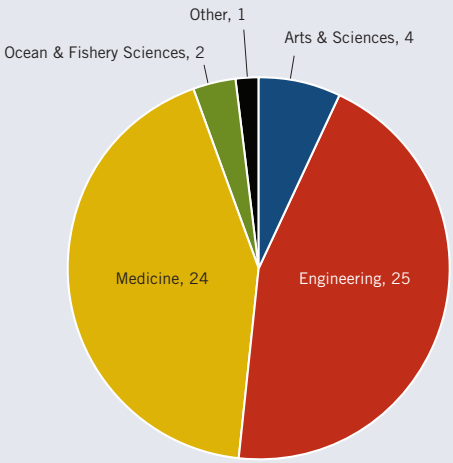
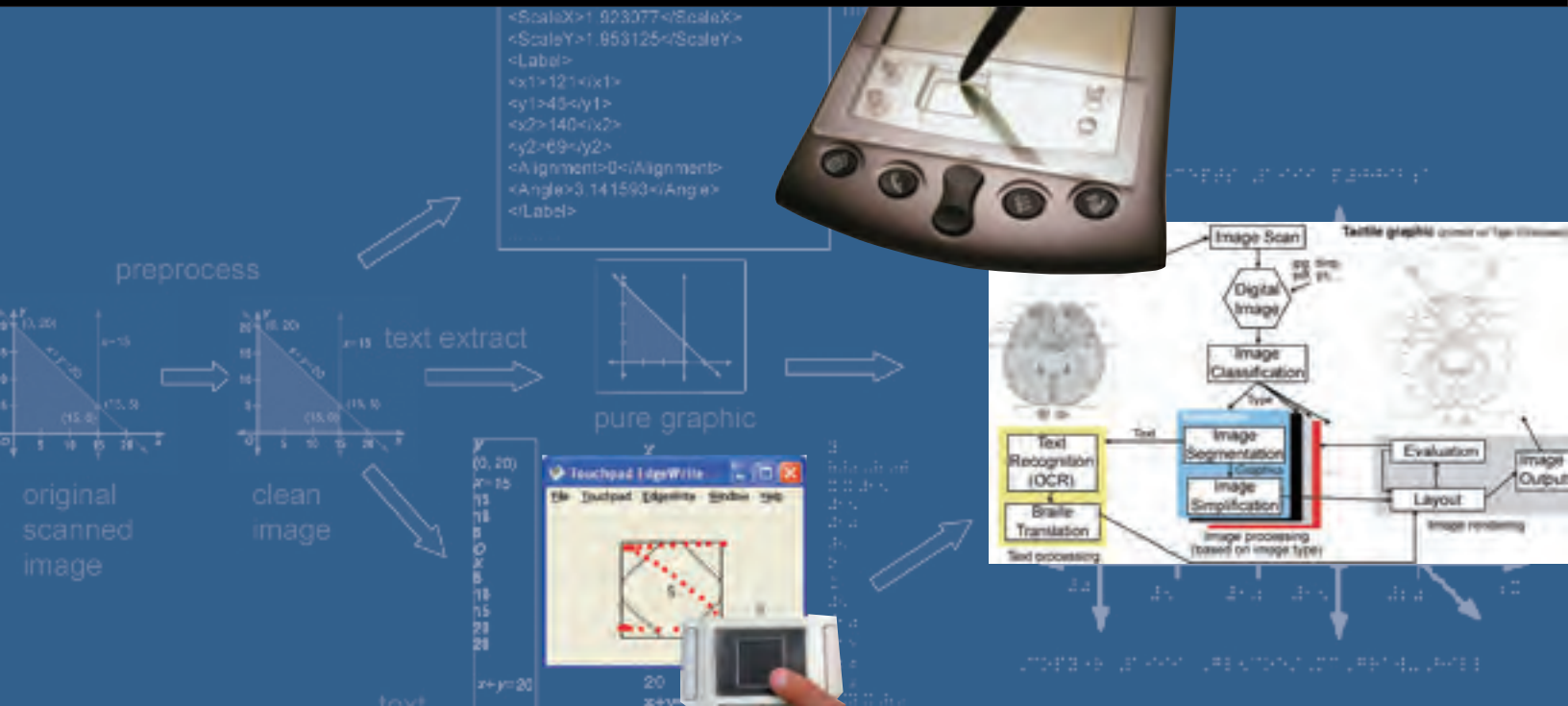


Exhibit 6 illustrates the school/college affiliation for inventions on which patents were awarded in FY08. The number is pro-rated in the case where more than one school/college is affiliated with the invention. The Department of Bioengineering reports jointly to the School of Medicine and College of Engineering; thus half of the total number of patents is credited to each.

Ensuring

Access to Technology for All

UW researchers have devised a range of ingenious new tools to improve access to technology for blind, deaf, and motor-impaired persons. Highlighted here are four successful projects that demonstrate the commitment of UW researchers and students to achieving broad distribution of innovations that enable fair access to technology.



MobileASL: Signing on the go

UW computer scientists and engineers have developed software that, for the first time, enables deaf Americans to use cell phones to converse in American Sign Language (ASL). Until now, mobile video communication in ASL has been essentially unavailable in the U.S. due to the low bandwidth of wireless telephone networks and the limited processing power of most mobile devices, which produces video that is too low quality to easily interpret the subtle gestures and expressions communicated through ASL.

The MobileASL team, which includes UW electrical engineering professor Eve Riskin, computer science and engineering professor Richard Ladner, Information School assistant professor Jake Wobbrock, Cornell researcher Sheila Hemami, and graduate and undergraduates students, developed new video compression technology to transmit the most important parts of the image—the signer's face and hands—in higher quality and the background in lower quality. The result is both faster processing time and higher quality video.

"We see this technology as important because it would offer people who are deaf wireless communication in their native language wherever they are, without special hardware or a high-bandwidth connection," said Riskin.

The team is now working on a feature to reduce battery consumption and processing power by recognizing when the signer's hands are still, then sending fewer frames per second.

The MobileASL team has received enthusiastic responses from the deaf community, and is talking with major wireless providers about getting the technology onto mobile phones. The National Science Foundation recently awarded the project a grant to conduct field studies in 2009.

Tactile Graphics Assistant: Making scientific images available to blind students

For many blind students in math, science and engineering, lack of access to images in textbooks can be a major obstacle to success. Graphs, equations, and diagrams are prevalent in science and technology texts to help elucidate scientific concepts, but blind students must rely on instructor descriptions of images or, when available, on expensive Braille versions of texts that contain only a small sample of touch-accessible (tactile) images. Currently, translating print images into tactile images is a slow, labor-intensive process done manually by specialists, one image at a time.

Now a multi-disciplinary team led by computer science professor Richard Ladner has developed a computer tool that automates the most tedious parts of image translation to make the translator's job easier, faster, and more efficient. The ultimate goal is to increase the participation of blind students in math, science, and engineering careers.

Professor Ladner teamed with researchers and students at UW's Computer Science and Engineering department, the Information School and DO-IT, a nationally acclaimed UW program that promotes the use of computer and networking technologies to increase disabled individuals' involvement in challenging academic programs and careers. Working closely with visually impaired and blind consultants, the team developed and tested a tool called Tactile Graphics Assistant (TGA). The TGA software works with image processing and other standard off-the-shelf software to automate the process of translating print images into raised, tactile images. Because it employs a batch-processing method, TGA is able to drastically reduce the amount of time to translate an entire textbook, from months to weeks.

The team has tested and refined the system and received positive reviews from users. Ladner is now demonstrating TGA around the country, and in keeping with the team's mission to broadly increase the accessibility of information technologies, the executable software is available as a free download on UW TechTransfer's OpenDOOR website. More than 90 individuals from around the world have licensed the Tactile Graphics Assistant software.

WebAnywhere: Free Web access for blind users

To access the Internet, blind persons often rely on screen readers—software programs that translate the contents of web pages to text and read them aloud for the user. But currently available screen reading software is expensive for home purchase (up to $1000) and for the same reason is rarely installed on public computers, leaving many blind users with limited or no public access to the Web.

UW computer science doctoral student Jeff Bigham, working with computer science professor Richard Ladner, developed a whole new approach to the problem. WebAnywhere is a free, Web-based screen reader for use on any computer with an Internet connection and audio capability. Unlike downloaded programs, a Web-based service does not require local technical support or uploads of the newest version; the latest version is always available. Screen reader users can now surf the Web at coffee shops, libraries, Internet cafes, their homes, and many other locations for free.

Currently, WebAnywhere is hosted on a UW server within the Department of Computer Science & Engineering. And while improvements and additional features to the program are in the works, the service is already generating interest among blind users around the world. Since the service was announced in August, about 300 users a day have visited the UW website to try it out. To promote broad distribution and fair access, the team has released WebAnywhere as an open source project to enable other researchers to both contribute to the development of the code base and to make the software available to host servers worldwide.

Professor Ladner hopes to see one of the large commercial search engines pick up the program. “This should be a ubiquitous product, just like other Web-enhancing services that are freely available,” he said. Several companies have expressed interest in WebAnywhere, which could soon make on-the-go Web surfing a reality for everyone.

EdgeWrite: Enabling easier text entry

As part of his doctoral research under Brad A. Myers at Carnegie Mellon University, Jacob Wobbrock was looking for a better way for people with motor difficulties to enter text on a Palm PDA. To address the problem, he devised software technology called EdgeWrite. EdgeWrite is a text entry method that allows people with motor impairments to more easily input characters using keyboards, joysticks, touchpads and trackballs on handheld, mobile, and desktop devices.

EdgeWrite uses an intuitive easy-to-learn alphabet of strokes that closely resemble Roman letters. The user draws the strokes, or letters, within a square plastic frame attached to the device. The corners of the frame correspond to points along the stroke. The program looks only at the order in which the corner points are hit, not at the shape of the character itself, so any hand unsteadiness is ignored. In testing, EdgeWrite was found to be easier to use and led to more accurate text entry than other methods.

For people with neuromuscular conditions such as Parkinson’s disease and cerebral palsy, typing characters on a computer keyboard is difficult. Tremors and muscle weakness make accurate text entry on a keyboard or with a stylus pen challenging, and with an aging population, user-friendly ways of entering text are becoming more important.

Wobbrock, now a UW assistant professor at UW’s Information School, is working to implement the program on a variety of devices and for purposes beyond just accessibility. One of his projects, a collaboration with a Clemson University professor, is called EyeWrite. EyeWrite employs an eye-tracker device to follow eye movements for writing with the eyes using the EdgeWrite alphabet.

“My goal as an academic researcher,” said Wobbrock, “is to invent technologies in response to human needs, and to see those needs get met through user-centered design and innovation.”

Carnegie Mellon University and the UW are cooperating to support Wobbrock in disseminating the EdgeWrite technology.

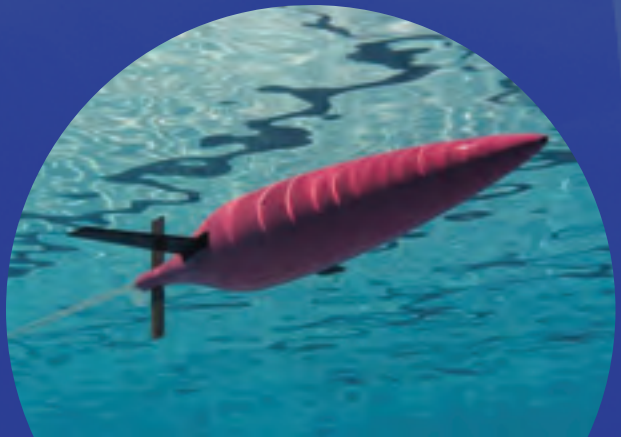
Underwater Robotic Vehicle Technology Transitions out of UW

Discovery is at the heart of our University—but discovery doesn't stop in the laboratory. UW TechTransfer works with UW's academic departments to move world-class research discoveries beyond the boundaries of campus. The Office of Naval Research (ONR) funds millions of dollars of UW research each year with the expectation that the research can be transitioned out of the University for the benefit of the operating Navy and the public. Beginning in the mid-1990s, UW researchers received funding from the National Science Foundation and the ONR to explore the development of underwater robots that could collect oceanographic data faster, cheaper, and more safely than large ships and crews. In 2007, UW TechTransfer began working with the research team to ensure the technology would be available to industry and government users.

Over thirty scientists and engineers at UW's Applied Physics Lab and the School of Oceanography developed the Seaglider, a free-swimming, torpedo-shaped robot that glides through ocean waters taking measurements and transmitting ocean environment data to the shore via satellite. Traditionally, scientists on research vessels would collect such data, but the deep-diving Seaglider does the job at a fraction of the cost and can be deployed for months at a time. And because it is driven by a hydraulic buoyancy-control system instead of a propeller, its power requirements are low. Various sensors can be attached to the Seaglider to continuously collect data across a range of ocean depths and environments, providing valuable insights to oceanographers and military planners. Seagliders are used around the world. Recent deployments include waters off Norway, Greenland, Taiwan, the Philippines and Iceland.

UW TechTransfer helped bring together the numerous parties involved in the complicated licensing process. "We are pleased to have worked closely with UW TechTransfer," said Russell McDuff, director of the School of Oceanography. "With over 30 developers involved there were many challenges, but with their help we were able to successfully meet the expectations of our federal sponsors and transfer this innovative technology to industry."

UW TechTransfer recently licensed the Seaglider technology to iRobot Corporation, a 1990 startup out of the Massachusetts Institute of Technology that designs behavior-based robots to perform a variety of tasks, from cleaning dirty floors to disarming explosives. To date, the company has sold more than 3 million home robots worldwide and over 1,500 PackBot® tactical mobile robots, which have been deployed worldwide, mostly in Iraq and Afghanistan. PackBot® robots have performed tens of thousands of military missions, and are credited with saving scores of soldiers' lives. iRobot will commercialize the Seaglider technology for oceanographic and military applications.



Breakthroughs in Nanotechnology

Nanotechnology research is an exciting field that will make a significant impact on the way we manufacture products, practice medicine and protect our environment. UW researchers are developing nanotechnologies to solve problems in many of these arenas. Highlighted here are four nanotechnology breakthroughs developed by UW scientists in the fields of semiconductor manufacturing and medical testing and treatment.

Tumor Paint and Nanoparticles: Improved imaging and targeting of brain tumors

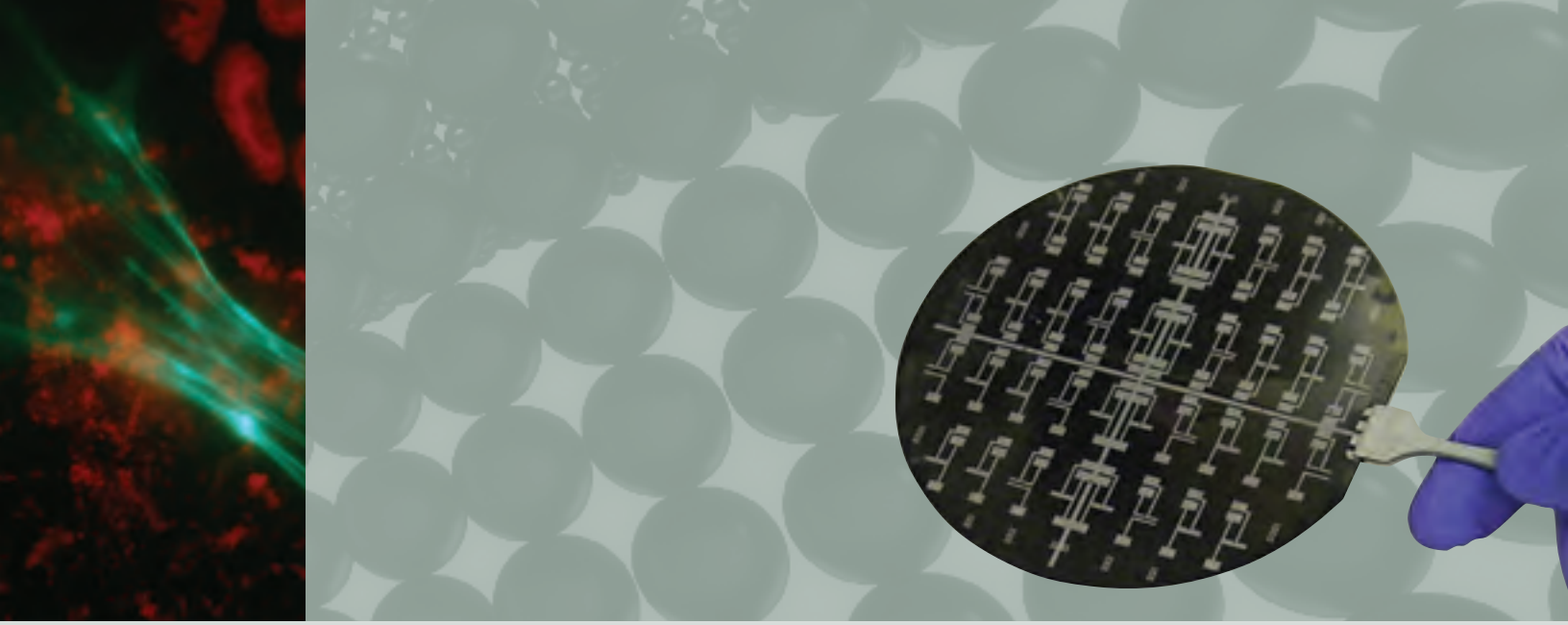
In the operating room, surgeons often find it difficult to distinguish brain tumor cells from normal cells, or to identify the edges of a tumor for removal. But new nanotechnologies from researchers at the UW, Fred Hutchinson Cancer Research Center, Children's Hospital and other institutions are making cancer cells easier to see and treat.

Neurosurgery resident Patrick Gabikian and postdoctoral researchers Mandana Veiseh and Bahram Bahrami, along with a number of other collaborators, have developed an imaging agent called Tumor Paint. Tumor Paint molecules link chlorotoxin, a protein found in scorpion toxin venom that binds to cancer cells, to a bright fluorescent signal that can easily be visualized in the operating room with special lenses. Because it is a small molecule, Tumor Paint is able to cross the blood-brain barrier, a chemical barrier that prevents many large-molecule drugs from reaching the brain. In studies with mice, researchers were able to see a tiny cluster of 200 cancer cells, making this method much more sensitive than current magnetic resonance imaging (MRI) scans, which identify groups of 1 million or more cells. Tumor Paint was able to identify other types of cancer in testing, including prostate, colon and skin cancers.

Rich Ellenbogen, professor and chair of neurological surgery at UW, and James Olson, associate professor of pediatrics hematology/oncology at Fred Hutchinson Cancer Research Center and the UW, led the Tumor Paint project as well as a second, related project. The focus of the second project was to develop a compound using nanoparticles to target and kill cancer cells. This molecule links an iron oxide nanoparticle that lights up under MRI with chlorotoxin and a near-infrared fluorescent dye. The nanoparticle conjugate was developed by Conroy Sun, Omid Veiseh, and Jonathon Gunn, graduate students in the laboratory of materials science and engineering professor Miqin Zhang. Raymond Sze, division chief of radiology, also collaborated on this and the Tumor Paint project.

The ability to accurately identify and target even small numbers of cancer cells and define the edges of solid tumors in the operating room will lead to better outcomes for patients undergoing surgery, especially for those with tumors that are resistant to radiation and chemotherapy.

UW TechTransfer, in conjunction with Fred Hutchinson Cancer Research Center, has applied for patents on these unique technologies.



Hybiscus Technologies: Building computer chips from the ground up

UW electrical engineering professor Babak Parviz and graduate student Sam Kim have developed a revolutionary method for manufacturing computer chips. The method represents a new paradigm for the fast and inexpensive manufacture of semiconductor microsystems. Using the concept of self-assembly, the researchers' method is capable of automatically aligning tens of thousands of semiconductor components simultaneously.

The current integration of semiconductor chips is an expensive process. After they have been fabricated, the chips are diced from large wafers and then placed on the final chip template using robotic systems. This is a time-consuming process in which the chips are placed one by one into the final assembly. In addition, the size of each component must be large enough for the robot to pick up, driving up the cost per part. With the new self-assembly method, tiny sand-like component particles are suspended in a fluid and flowed across the surface of the template, which is covered with the complementary-shaped receptor sites. The components find and stick to their corresponding receptor sites and are then bound with a special solder, giving them electrical and mechanical connections at the same time. The self-assembly approach enables the use of particles smaller than what is possible with robotic systems, making it cost effective and feasible for large-scale manufacturing applications.

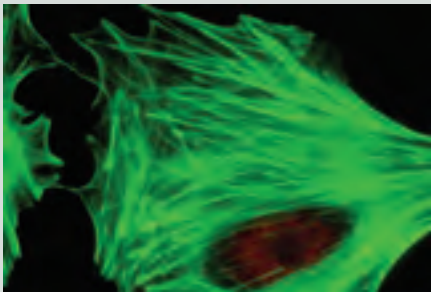
With help from UW TechTransfer's LaunchPad program, Kim and several colleagues formed a new company called Hybiscus Technologies, Inc. The company's focus will be utilizing the new method for the self-assembly of chips for short-range optical interconnects, the use of which greatly increases the speed that data travels between chips. This unique technology was recently given the thumbs-up from a panel of local judges at UW's 2008 Business Plan Competition: Hybiscus was one of 4 finalists and won the OVP Venture Partner's Best Technology Award.

Shadow Edge Lithography: Opening up possibilities for the smallest computer chips ever

Computer chips and their components are becoming smaller and smaller. To keep pace with the shrinking size of semiconductor features and denser packing of circuits onto chips, microelectronics companies are seeking new manufacturing methods. Currently, manufacturing the microscopically small features of semiconductor chips is accomplished by lithography, but this method is fundamentally limited by the so called "diffraction limit" to features not much smaller than the wavelength of light.

Jaehyun Chung has developed a new fabrication method that makes even smaller features feasible, cleverly bypassing the optical diffraction limit. Shadow Edge Lithography is a microfabrication method that uses tiny metal patterns deposited onto substrates as a shadowing mask. When combined with conventional lithography, this method enables the production-scale manufacture of nanochannels, nanowires and other nanostructures that are as small as a few nanometers. The throughput, resolution, and manufacturing cost of this lithography method are superior to current methods. This capability opens up a new generation of nano-scale components for electronics and biotechnology applications such as tiny implantable drug delivery devices and nano-scale features of "labs-on-chips."

Chung hopes to incorporate the new lithography process into a nanotechnology-based biosensor, and several companies have expressed interest in the method.

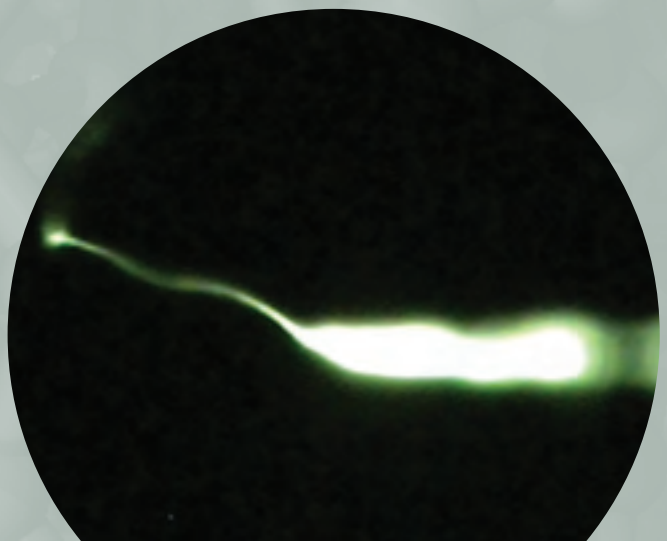


The Nanotip: A fast and accurate molecular detection and concentration method

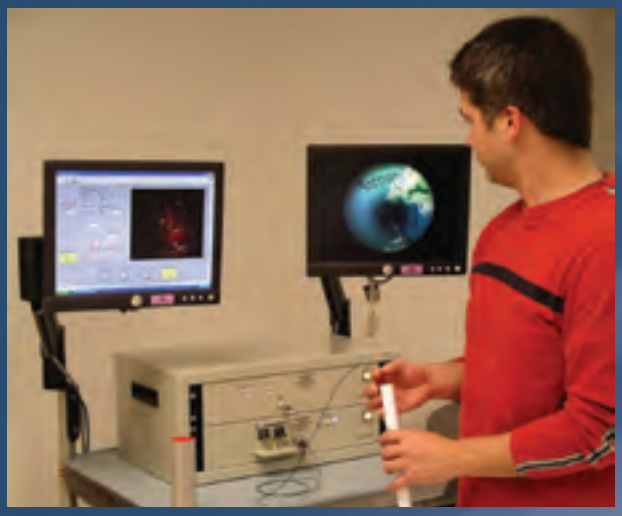
Detecting very small amounts of particular molecules, such as DNA, in blood and body fluid samples is a time-consuming, multi-step process of first centrifuging the molecules and then amplifying the number of copies by a million-fold or more so they can be detected. Assistant professor of mechanical engineering Jaehyun Chung has developed a new approach to the problem using nanotechnology. His invention, a tiny nanotip, draws the desired molecules to itself through electrical, chemical, and capillary action and concentrates them in a very small area. The unique use of capillary action prevents the attraction of particles that are the wrong size, ensuring that only the desired particles are captured.

Chung's approach is more sensitive and faster than current methods, such as PCR. For example, detecting the DNA of a pathogenic organism such as the tuberculosis bacteria would take about 10 minutes using the nanotip system instead of a few days with PCR. The new technology can also be applied to the detection of viruses and biomarkers, molecules that indicate the presence of a particular disease or condition. Even physiologically significant metals such as copper, which may be associated with the development of Alzheimer's disease, could be detected.

Collaborating with a nanotechnology manufacturing company and with funding from the Centers for Disease Control and the National Science Foundation, Chung is working toward the goal of making a nanochip-based, point-of-care biosensor incorporating the nanotip to quickly and accurately detect molecules of interest in biological samples at the patient's bedside. UW TechTransfer has applied for a patent for the technology.



A Unique Imaging Technology Improves Patient Comfort During a Common Procedure



In the past 30 years diagnoses of cancer of the esophagus have more than tripled. Patients in early stages of the disease can often be healed if pre-cancerous changes in the cells that line the esophagus are detected, but internal scans are expensive and the commonly-used screening procedures, endoscopies, are uncomfortable. An endoscopy is a minimally invasive procedure in which a flexible tube with a small camera attached at the end is inserted into the esophagus to look for abnormalities such as pre-cancerous cells.

This spring UW TechTransfer signed an exclusive license agreement with Pentax Life Care Division of Hoya Corporation (formerly Pentax Corporation), one of the world's largest imaging companies, for a suite of new imaging technologies called the scanning fiber endoscope. The suite of intellectual property is one of the largest to ever be licensed from the UW.

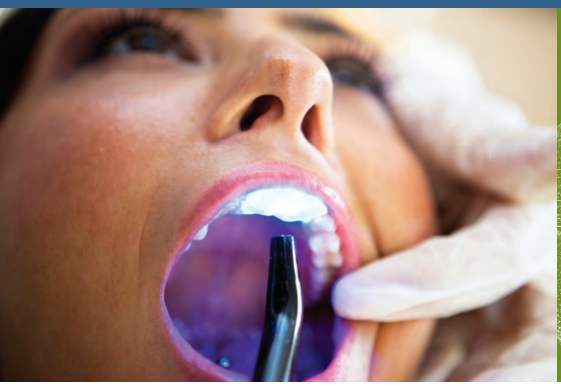
The new imaging technologies were developed by a large multidisciplinary team involving six UW departments and led by Eric Seibel, research associate professor of mechanical engineering. The team included chief technologists Richard Johnston and David Melville of mechanical engineering and previously the Human Interface Technology Lab. "Although this technology was developed to detect cancer at an early stage and thus save lives, there is no impact on society without commercialization,' stated Seibel.

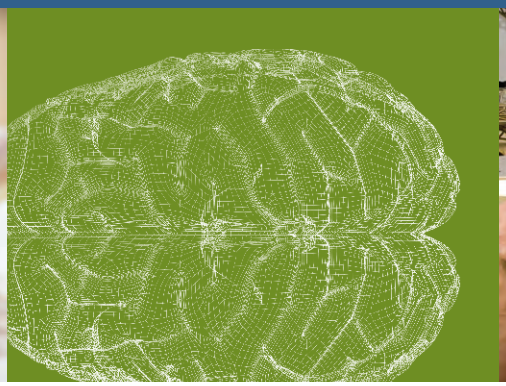
The fundamental difference of the scanning fiber endoscope technology from the current technique is that it consists of just a single optical fiber for illumination, oscillated in a pattern to scan a broader field of view with better image quality. This tiny device provides improved imagery of hard-to-reach places, compared to conventional endoscopy. And unlike capsule endoscopes, the scope is attached to a narrow flexible cord that is easily retrieved instead of being swallowed and lost. The narrow flexible tether also makes the scope more maneuverable by the physician, who can move the scope up or down to zero in on a particular area.

Currently available endoscopes are long cords about 9mm wide. The width of the cord causes discomfort for patients, who are usually sedated during the procedure. The smaller and more maneuverable endoscope will likely make endoscopies more comfortable.

Seibel and the rest of the research team will continue to develop the innovative scanning fiber technologies for other uses. Potential applications could include laser diagnostics and therapeutics, image-guided mining and core sampling, and exploration of unsafe or unstable structures.

2008 TECHNOLOGY GAP INNOVATION FUND (TGIF) RECIPIENTS





TGIF, a joint program of UW TechTransfer and the Washington Research Foundation, advances the development of UW innovations that are commercially promising but need to bridge the funding gap between academic research and a full-fledged commercial product or service. Researchers use the funds to test or refine innovations or create prototypes in anticipation of licensing. To date, 49 projects have been awarded over $2.4 million in TGIF funds.

Rodney Ho and John Hoekman of Pharmaceutics will develop a prototype pressurized drug-delivery device that deposits drug in the upper nasal cavity, providing direct access to the brain, which increases drug effectiveness and reduces toxic side effects from drugs given orally or intravenously. The researchers will also collect preclinical data to demonstrate the enhanced delivery of two analgesic drugs to the central nervous system.

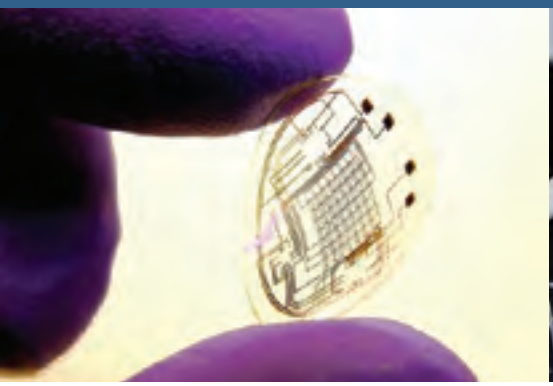
Rose Ann Cattolico of Biology will optimize the industrial-scale culture of a high lipid-containing strain of algae that produces biofuel. The algae cultured in Cattolico's laboratory grow rapidly in fresh water (as opposed to marine environments, which many algae require) and can be cultured in high volume. The funds will support research to generate high lipid-producing strains, optimize the lipid quality, and determine the effect of various factors on lipid production.

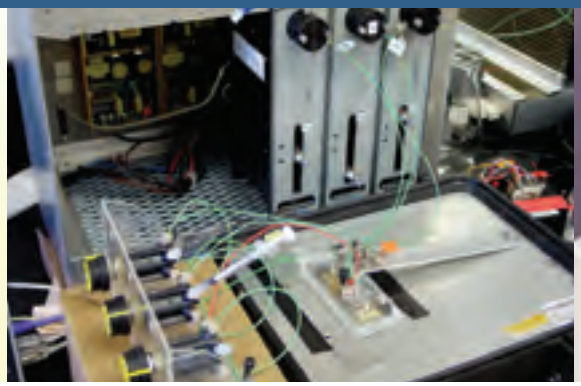
Pierre Mourad of the Applied Physics Lab and Joel Berg of Pediatric Dentistry will build and test a bench-top LED (light-emitting diode) device to identify locations in teeth where cavities may be forming. The device will be the first inexpensive and simple system to identify cavities without using lasers.

Wesley C. Van Voorhis of Medicine will produce and test a new, more sensitive and specific diagnostic test for syphilis. Van Voorhis and colleagues have discovered three protein antigens of the organism that causes syphilis. The team will collaborate with the Program for Appropriate Technology for Health (PATH) to use the antigens in the development of point-of-care diagnostic test strips.

Paul Yager of Bioengineering and colleagues have developed a bench-top system to monitor the concentration of a popular anti-epileptic drug in saliva rather than blood. They will develop and validate a second assay for another commonly-prescribed drug, and combine the two tests into one while demonstrating reliability and accuracy comparable to blood-based tests. Their ultimate goal is to develop a practical system for drug monitoring at home, saving patients time and money.

Professor Karl Bohringer of Electrical Engineering is developing microfluidics systems based on the movement of droplets along textured surfaces. This technology will provide a unique, efficient, flexible, and low-cost alternative for micro-scale analysis of biological liquid samples. These systems have commercial potential in the field of portable and disposable biomedical devices for point-of-care patient testing and for research. The TGIF funds will be applied to designing, fabricating, and testing the technology.





Raimondo D'Ambrosio, associate professor of Neurosurgery will improve features of his Algorithmic eXplorer of Electrophysiological Signals (AXES) software. AXES automates the mining of large sets of brain wave data, a big improvement over the current practice of manual brain wave data analysis, which is time consuming, slow, and expensive. The software will be marketed to pharmaceutical companies and laboratories involved in the discovery of drugs for epilepsy, a condition that afflicts approximately 2 million Americans. AXES is already being used to test epilepsy therapies in vivo.

Computer Science and Engineering assistant professor James Fogarty, associate professor James Landay, and graduate student Michael Toomim are developing a solution for controlling access to semi-private content on the Internet based on shared knowledge of users. This novel approach will eliminate the need for remembering passwords and adding users to lists of "friends," making the sharing and viewing of semi-private content on social websites easier and more intuitive. The team will apply the awarded funds to designing, building, and testing a plug-in application and a platform-independent Web application.

The laboratory of Materials Science and Engineering professor Alex Jen will build a large-scale prototype organic photovoltaic cell device for harvesting solar energy. The organic solar cells are stable and highly efficient, and represent an advance in ultra-low-cost photovoltaic technology. The development of the prototype will be key to the successful commercialization of the solar cells, which could lead to roof tiles, windows, and portable electronic devices that generate their own power supply.

The research group of assistant professor Babak Parviz of Electrical Engineering is developing a power supply for "functional" contact lenses: lenses that incorporate a display, electronics, wireless telecommunication, biosensors and other sophisticated technology. Parviz' group will design, fabricate, and demonstrate the operation of a photovoltaic power supply integrated on a contact lens.

Chunye Xu, research assistant professor of Mechanical Engineering, and professor Minoru Taya of Mechanical Engineering will optimize the design of a tactile array for use in orthotics, prosthetics and cosmetic enhancements. These new sensors are based on electroactive polymers that provide significant advantages over sensors currently in use: they sense forces in three dimensions (vectoral forces), they are flexible and thus fit better into prosthetics and orthotics, they are low cost, and they require low power consumption.

PhD student Woon Jong Yoon and Eric Seibel, research associate professor of Mechanical Engineering will build a working prototype of a unique cytoscope imaging device for scanning the interior surface of the bladder. As opposed to manually operated cytoscopes, which are the current standard, Yoon and Seibel's imaging device is remotely controlled. This robotic scope is computer programmed to scan the bladder in an efficient motion sequence, ensuring a complete 3-D picture and substantially reducing the likelihood of missing a cancerous tumor. The device is also smaller and more flexible than current rigid scopes, and thus more comfortable for patients.

FINANCIAL RESULTS

Revenue Summary

The University of Washington receives revenue from UW technologies managed by UW TechTransfer and the Washington Research Foundation (WRF). Total revenue received in FY08 from all sources was over $47 million, a 23 percent increase from FY07. Merck's use of a UW technology, Expression of Polypeptides in Yeast, that is managed by WRF continues to generate a substantial amount of revenue for the university. Merck's human papillomavirus (HPV) vaccine, Gardasil, is manufactured using the UW technology.

In addition, 564 agreements for 423 different technologies generated licensing revenue in FY08. This total represents revenue received from commercial development agreements, software use licenses, and transfers of biomaterials. Three technologies generated over $1 million each and cumulatively accounted for 81 percent of the total revenue received. A further twenty three individual technologies and one project generated over $100,000 each.

EXHIBIT 7: FY04-FY08 REVENUE

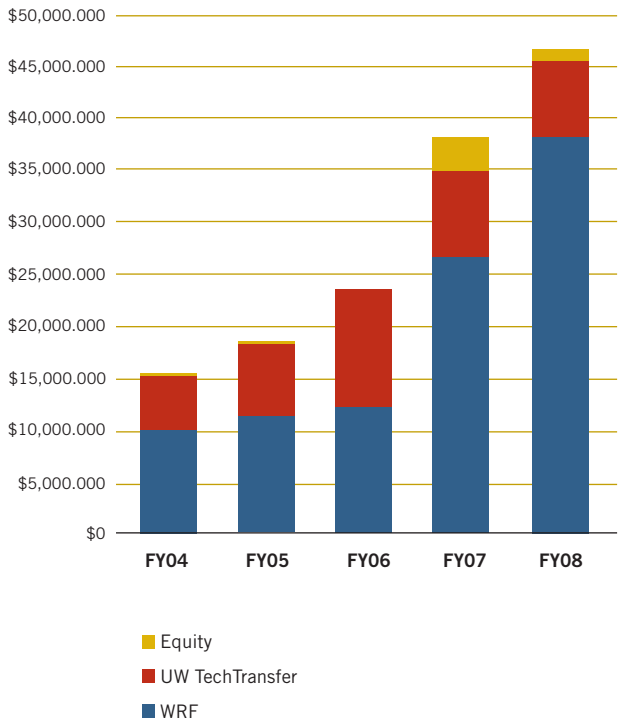


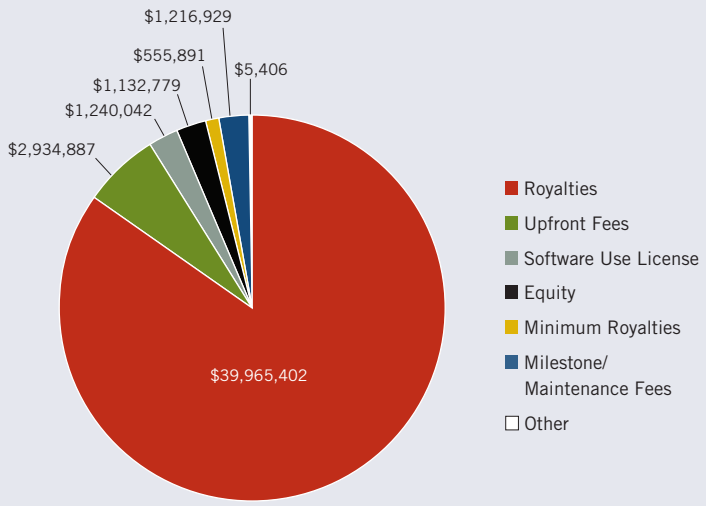
TABLE 5: FY04-FY08 REVENUE

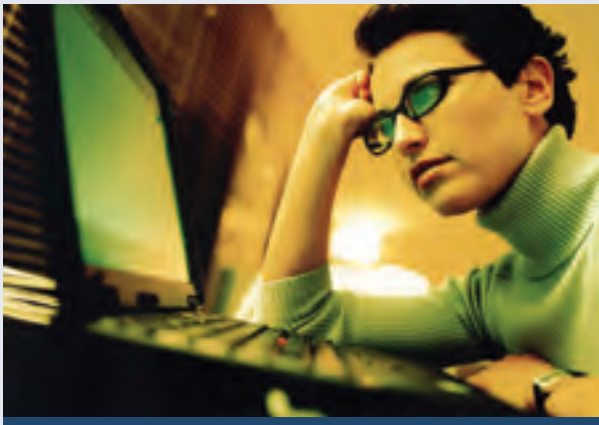
	FY04	FY05	FY06	FY07	FY08
WRF	$10,282,932	$11,174,046	$12,384,443	$26,544,945	$38,226,019
UW TechTransfer	5,219,281	7,288,095	11, 097,654	8,317,947	7,692,538
Equity	254,410	181,573	5,032	3,361,011	1,132,779
Total	**$15,756,623**	**$18,643,714**	**$23,487,129**	**$38,223,903**	**$47,051,336**

Revenue by Type

Revenue includes several components: royalties on sales of products or services; lump sum or upfront fees generally received when a license is signed; periodic fees tied to milestones or time periods over the life of the license; liquidation of equity received as consideration for a license; and ongoing fees for continued use of licensed software. Over 80 percent of total revenue received in FY08 was from royalties on sales of products and services.

EXHIBIT 8: FY08 REVENUE BY TYPE





The value of an idea

lies in the using of it.

– THOMAS EDISON

FINANCIAL RESULTS

Expenses

UW TechTransfer utilizes legal counsel from outside the University for the preparation and prosecution of all patent applications, and currently oversees more than 450 outside counsel appointments with over 30 firms. Firms and attorneys are selected on a case-by-case basis depending on the particular expertise required. Legal expenses are also incurred for trademark registrations, legal opinions on intellectual property protection available, and for conflict resolution (which is associated with issues that could lead to arbitration and litigation).

Pursuing patent protection for UW innovations requires significant resources. UW TechTransfer invested over $4 million on patent protection and other legal expenses in FY08. The University of Washington also received reimbursements totaling $2.3 million from UW's licensees. The majority of the reimbursements are from expenses incurred in FY08, but a portion is from expenses incurred in previous years.

Distributions

Revenue received by UW TechTransfer is distributed to various stakeholders in accordance with contractual obligations and University policies. These stakeholders include inventors and developers, departments, laboratories, colleges and schools, University research funds and joint rights holders. UW TechTransfer retains an administrative fee and recovers certain expenses prior to distributions. Revenue received through the close of each fiscal year (June 30) is generally distributed in the following fiscal year, in accordance with University policy.

TABLE 6: FY04-FY08 LEGAL EXPENDITURES

	FY04	FY05	FY06	FY07	FY08
Expenditures	$1,690,970	$2,824,399	$3,277,839	$3,157,640	$4,165,195
Cost Recovery	$1,088,147	$1,375,385	$1,091,946	$1,685,094	$2,344,302

Note: The data for Table 6 has been reformatted and calculated to be consistent with how UW TechTransfer submits data to the Association of University Technology Managers (AUTM) survey. Legal fees as defined by the AUTM survey include patent and copyright prosecution, maintenance, and interference costs, as well as minor litigation expenses.

EXHIBIT 9: FY04-FY08 DISTRIBUTIONS

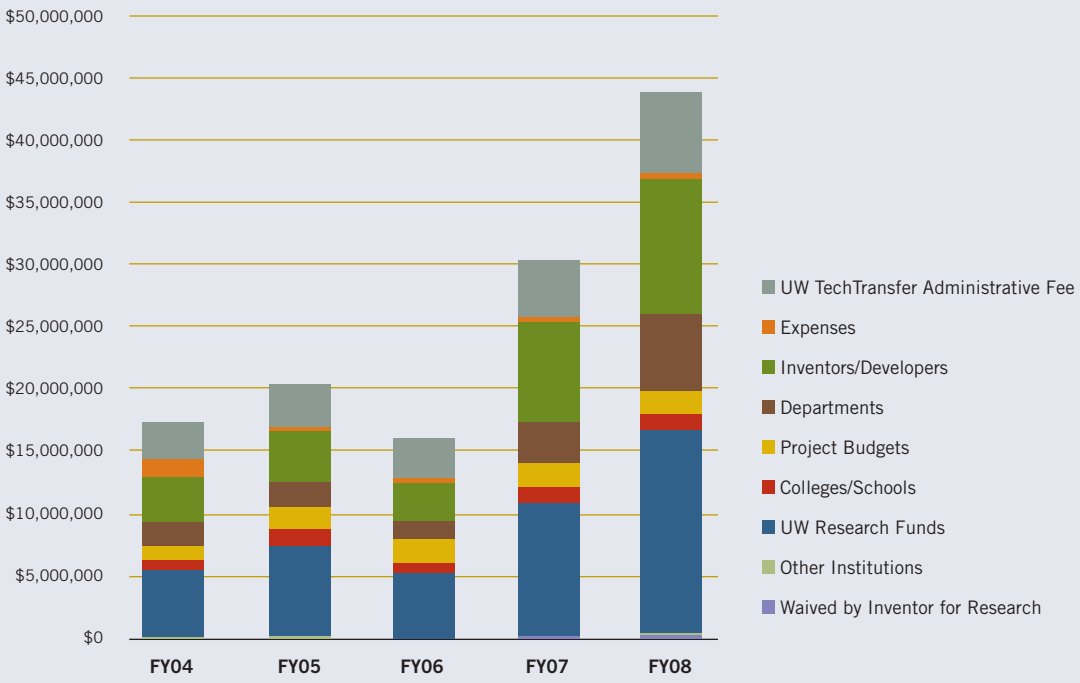


TABLE 7: FY04-FY08 DISTRIBUTIONS

	FY04	FY05	FY06	FY07	FY08
UW TechTransfer Administrative Fee	$2,614,887	$3,149,003	$2,590,701	$4,702,479	$7,154,628
Expenses	1,746,781	188,440	174,587	252,128	245,741
Inventors/Developers	3,726,192	4,588,513	3,624,202	8,057,138	10,064,057
Departments	1,973,856	2,109,870	1,722,095	3,073,636	6,277,601
Project Budgets	1,184,239	2,168,106	1,945,392	2,245,351	2,029,199
Colleges/Schools	574,598	954,304	570,935	1,007,620	1,385,527
UW Research Funds	5,427,564	6,743,084	5,485,340	10,891,527	16,130,112
Other Institutions	186,338	264,868	44,758	91,590	134,874
Waived by Inventor for Research				64,083	117,909
Total	**$17,434,455**	**$20,166,188**	**$16,158,010**	**$30,385,152**	**$43,539,648**

NOTE: Expenses are legal expenses withheld from royalty distributions and costs from UW Treasury to manage equity.
Waived by Inventor is a new category; this option for inventors became available in FY2004.

FY08 TOP TEN REVENUE-GENERATING TECHNOLOGIES

TITLE	DEPARTMENT & RESEARCHERS	TOTAL INCOME ($)
Polypeptides in Yeast A method of producing recombinant proteins in yeast.	GENOME SCIENCES, BIOLOGY **Hall, Ammerer**	**$29,913,187**
Clotting Factor/Factor IX Construction of a plasmid containing the human gene for factor IX (Christmas Factor).	BIOCHEMISTRY **Davie, Kurachi**	**$6,022,807**
Hepatitis B Vaccine A method of producing synthetic hepatitis B antigen. Jointly developed with the University of California.	GENOME SCIENCES, BIOLOGY **Hall, Ammerer**	**$2,016,413**
Tape Management Library for STK 4400 Systems A series of client software for the Unisys STK 4400 tape library.	UW TECHNOLOGY (FORMERLY COMPUTING & COMMUNICATIONS) **Profit, McHarg, Mason**	**$931,975**
Metabolism-Based Drug Interaction Database A web-based research tool that allows researchers to search peer-reviewed literature and ask specific questions about the content of drug interaction studies.	PHARMACEUTICS **Ragueneau, Carlson, Levy**	**$816,640**
Mass Spectrometry Fragmentation Patterns of Peptides Patterns of peptides used to identify amino acid sequences in databases.	GENOME SCIENCES **Yates, Eng**	**$480,467**
Flow Cytometry Technologies A method to analyze the characteristics of individual cells.	GENOME SCIENCES **van den Engh, Esposito**	**$396,060**
High Intensity Focused Ultrasound for Intraoperative Ablation A surgical device that uses high intensity ultrasound to ablate and cauterize tissues.	ANESTHESIOLOGY, APPLIED PHYSICS LAB, BIOENGINEERING, LABORATORY MEDICINE, MECHANICAL ENGINEERING, NEUROLOGY, NEUROLOGICAL SURGERY, RADIOLOGY, AND SURGERY **Beach, Brentnall, Caps, Carter, Chandler, Crum, Helton, Kaczkowski, Martin, Mourad, Noble, Proctor, Prokop,Schmiedl, Vaezy**	**$374,731**
Monoclonal Antibodies for Cancer Diagnostics A collection of monoclonal antibodies that work against actin, cytokeratins, melanoma gp100 antigen, for in vitro diagnosis or research purposes.	PATHOLOGY **Gown, Vogel**	**$277,776**
Price Mining Software A computer algorithm that predicts when airfare prices will be lowest. The software program is the basis of UW startup Farecast.	COMPUTER SCIENCE & ENGINEERING **Etzioni, Yates**	**$258,050**

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For more information or additional copies of this report, please contact UW TechTransfer: (206) 543-0905.

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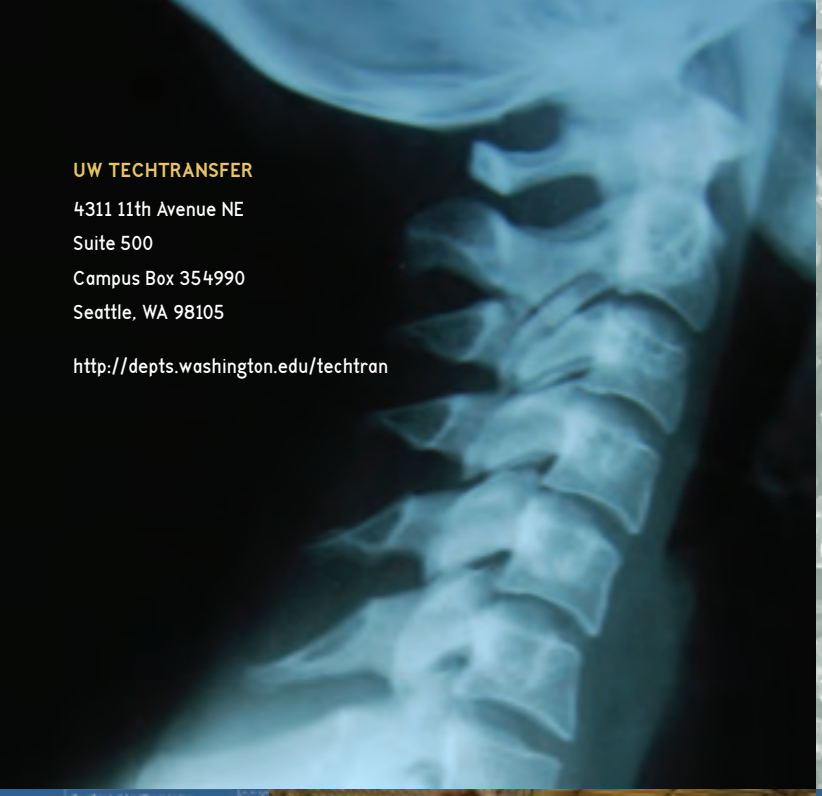

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