

# Iowa State University Research Foundation, Inc.



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# A Message From the Director...

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## Performance

Financially, the Research Foundation saw an increase in net assets over the previous year of \$825K due primarily to realized gains on investments. Net income from operations was a gain of \$864,946 compared to a loss of \$50K in FY05. Total operating revenues were \$8.1M compared to FY05 revenues of \$5.0M.

ISURF disbursed \$4.7M to ISU and ISU inventors and authors in FY06.

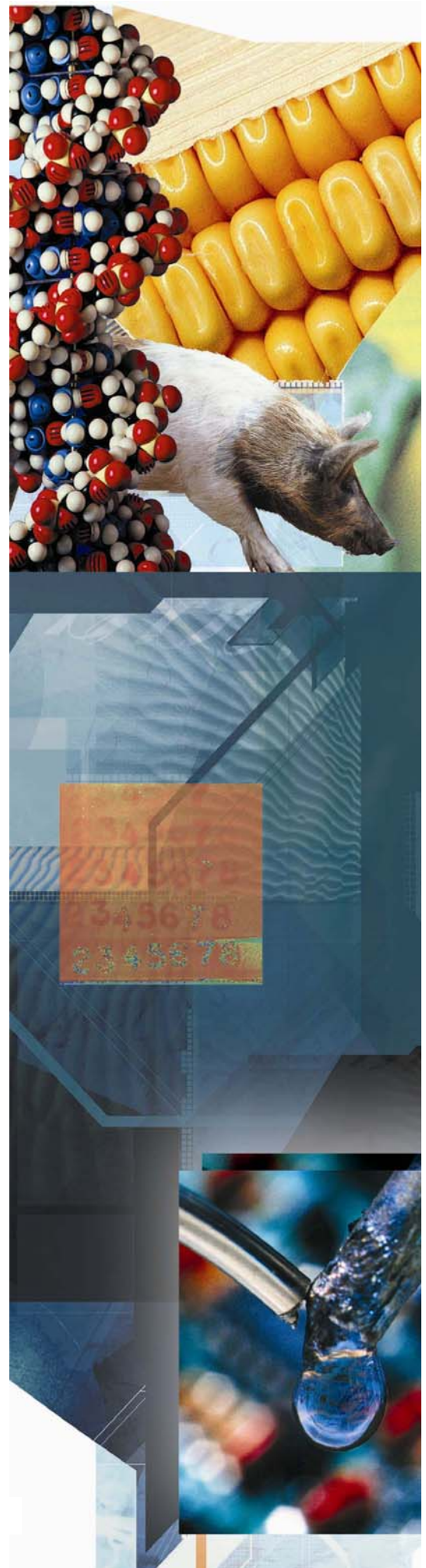
## Marketing and Licensing Activities

During FY06, ISURF marketed 20 technologies for the first time compared to 24 in FY05. A total of 20 technologies were actively marketed in FY06 through over 500 written contacts with companies. Our marketing approach has moved from a written, mailing format to an email/phone format.

Thirty-one technologies and germplasm lines were licensed/optioned for the first time in FY06.

In FY06, ISURF entered into two license agreements and 1 option agreement with start-up companies. One of these companies is located in Iowa.

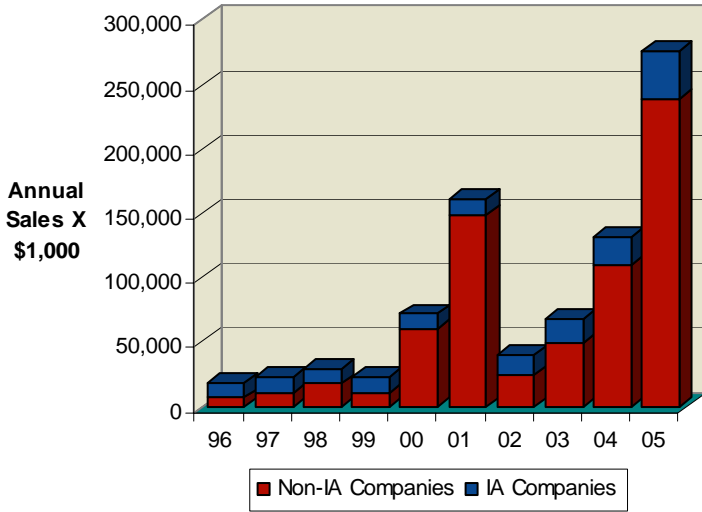
We continued to make ISU technologies available to Iowa-based companies to help in the growth and diversification of the economy of the State. Figure I illustrates total sales of products (goods and services) for calendar years 1996 through 2005 based on licensed ISU technologies. The Iowa-based companies' sales increased to \$38M in 2005, an increase of \$16M over 2004 sales. Sales of non-Iowa-based companies were \$239M; more than a 100% increase over 2004 sales of \$110M. Iowa-based sales were 14% of all sales for 2005. The figures do not include the sale of agricultural seeds or products that no longer enjoy protection by patents held by ISURF. Figure II illustrates more directly the actual sales based on licensed ISU technologies by Iowa-based companies from 1996 to 2005.



**ESTIMATED SALES  
BY IOWA  
COMPANIES WERE  
\$38M IN FY06**

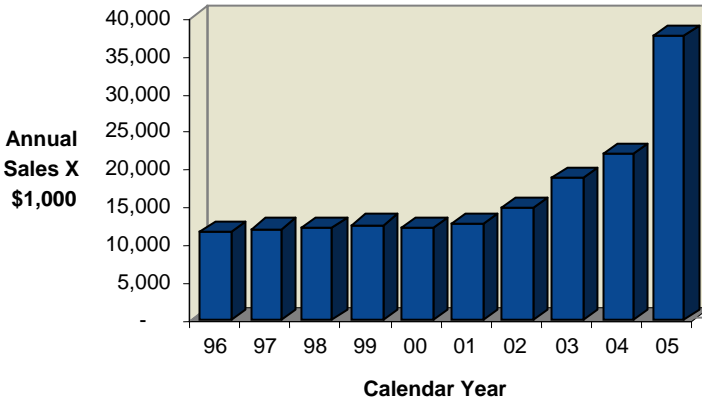
**Figure I. Sales by Companies of Licensed ISU Technologies\***

\*Non-patented plant germplasm not included



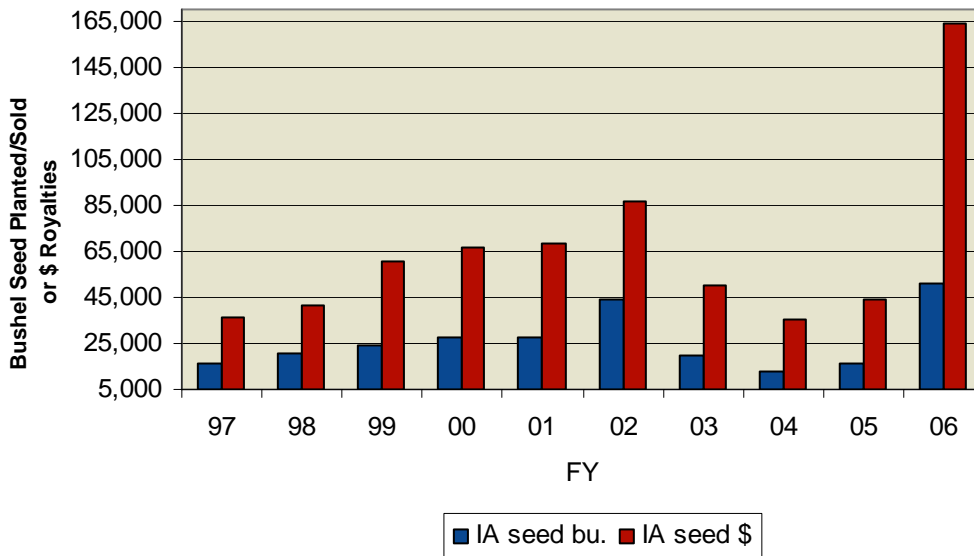
**Figure II. Sales of Iowa Companies Generated by Licensed ISU Technologies\***

\*Non-patented plant germplasm not included



ISURF continues to make ISU-developed plant germplasm available by licensing to seed and grain producers. Germplasm available in FY06 included soybean, corn, popcorn, oat, and amaranth, although most of the licensing activity was with food-grade, specialty soybeans. Figure III illustrates the level of activity and growth in this area by Iowa companies for the last ten years. Total royalties from all commercially licensed germplasm were \$370K in FY06, an increase of \$149K over FY05. A total of 95 licenses were executed this year for germplasm compared to 205 in FY05. The decrease in germplasm licenses is due to the fact that end-users who purchase seed from our licensees solely for grain production, no longer require a license from ISURF.

**Figure III: Sales & Use of ISU Specialty Soybean Germplasm by Iowa Companies**



**ISURF RANKED 3RD AMONG ALL U.S. UNIVERSITIES IN NUMBER OF LICENSES AND OPTIONS SIGNED IN FY04**

**Recognition**

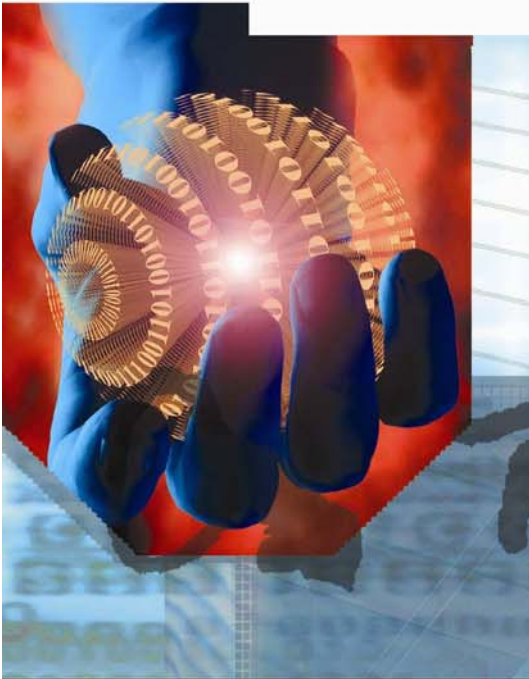
In the FY04 survey conducted by the Association of University Technology Managers (AUTM), ISURF ranked third among all U.S. universities in the number of license and option agreements signed to transfer the research results of the university. ISURF also ranked fourth in the number of licenses and options yielding income, tied for 34<sup>th</sup> place in the number of U.S. patents issued, and was in 40<sup>th</sup> place for invention disclosures received.

Sincerely,

IOWA STATE UNIVERSITY  
RESEARCH FOUNDATION, INC.

Kenneth Kirkland, Ph.D.  
Executive Director

**INCOME FROM TECHNOLOGY AND GERmplasm LICENSING INCREASED 63% TO \$8.1M**



# Technology Activity

## Technology Reporting: Inventions, Copyright Subject Matter and Proprietary Germplasm

ISURF received 120 new disclosures in FY06. This represents a decrease of 22 disclosures (15%) from FY05. Figure 1A provides a categorical breakdown of the various technologies disclosed in FY06.

**Figure 1A: FY06 Disclosure Distribution by Category**

Total = 120

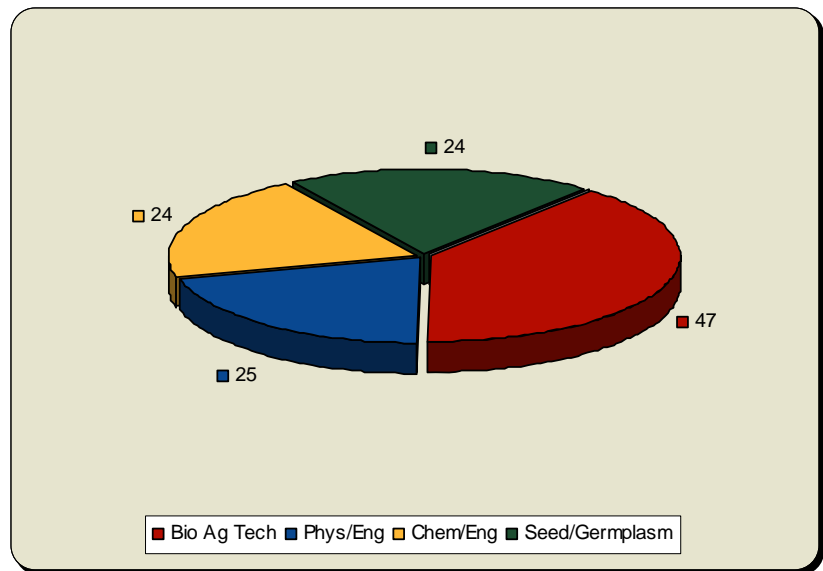
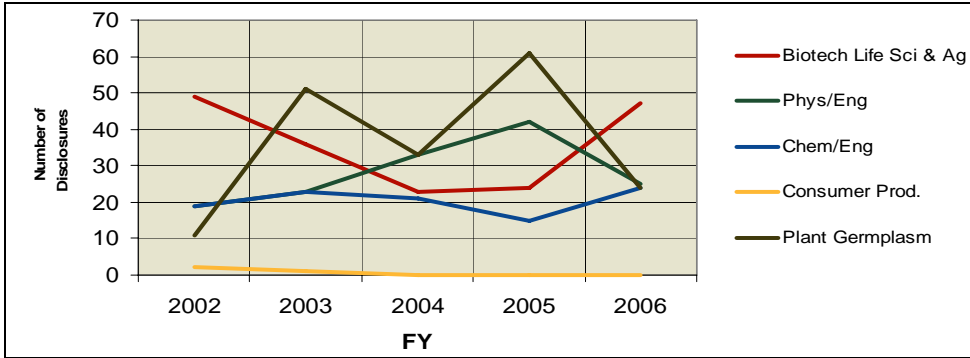


Figure 2A reflects nearly a doubling of the disclosures classified as biotechnology-life sciences and agriculture (47) over FY05 (24); and represents 39% of the total FY06 disclosures. Over the last 8 years the biotechnology-life sciences and agriculture category has ranged from a high of 49% of disclosures received in FY02 to a low of 17% of disclosures received in FY05. Disclosures received in the classification of physical sciences-engineering decreased in FY06 (25) by 40% from FY05's 42 disclosures. Chemical-chemical engineering increased 60% in FY06 (24) over FY05 (15) and Consumer products has seen little change. Plant germplasm experienced a significant decrease (70%) from FY05. Figure 2A provides a comparison of the disclosures in these categories over the last 5 years. An eight-year historical table of disclosure data by category can be found in Exhibit B.

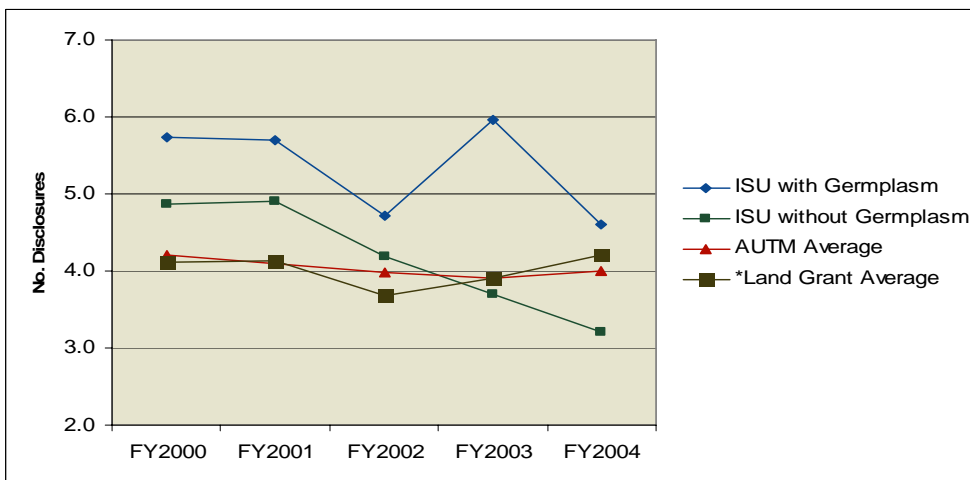
**Figure 2A: Disclosures Received by Category**



The sources of external research funding resulting in FY06 disclosures include U.S. Federal agencies, industry, commodity groups, foundations, and the State of Iowa. In FY06 the number of disclosures with industry, state and no funding increased over FY05 and those with Federal, commodity, and foundation funding decreased. Forty-eight percent of the total FY06 disclosures resulted from research projects funded by the U.S. Federal government; 11% from industry, 24% from commodity groups, 4% from foundations, and 8% from the State. Twenty-seven percent of the disclosures received no external project funding and 24 disclosures (20%) received funding from multiple sources. The table in Exhibit B shows the sources of funding over 8 years.

One measure of the inventiveness of ISU researchers is provided in a comparison to other research universities of the number of disclosures received per \$10M in research. Using data from the annual surveys conducted by the Association of University Technology Managers, ISU researchers out perform the averages for Iowa State’s peer land grant institutions (University of Illinois data includes Chicago and Urbana, and University of California, Davis data were not available since their data are compiled with the full University of California system), and the averages of all participating U.S. universities. In FY03 and FY04 ISU’s 3.7 and 3.2 non-germplasm disclosures per \$10M fell slightly below the 3.9 and 4.0 average of all U.S. universities. The following Figure 3A provides a five-year comparison with and without ISU’s germplasm disclosures.

**Figure 3A: Disclosures per \$10M Research**



\* Land Grant 10 includes: Iowa State University, University of Arizona, University Illinois-Chicago & Urbana, Michigan State University, University of Minnesota, North Carolina State University, Ohio State University Purdue University, Texas A&M University, and University of Wisconsin-Madison

**IN FY06 48% OF TECHNOLOGIES DISCLOSED WERE FEDERALLY FUNDED, 11% INDUSTRY, AND 27% RECEIVED NO EXTERNAL PROJECT FUNDS**

**FROM FY2000-2004  
U.S. PATENTS  
ISSUED AS A  
PERCENTAGE OF  
U.S. PATENT  
APPLICATIONS  
FILED WAS 31%  
FOR U.S.  
UNIVERSITIES.  
ISURF'S WAS 75%**

Forty-nine disclosures were inactivated from the portfolio after unsuccessful attempts at licensing, unfavorable evaluations by patent attorneys, or commercialization difficulties. ISURF does not reserve any rights to these inactivated disclosures.

ISURF currently maintains a portfolio of 571 invention disclosures. Some of these disclosures are put on "hold" because of incomplete information. The majority of the remaining disclosures are being actively evaluated, prepared for patent applications, marketed through the plant germplasm program, and/or explored to match with potential licensees.

### **Patent Activity**

Fifty-two patent applications, including continuations, divisionals and converted provisional applications were filed with the U.S. Patent & Trademark Office during FY06. This is a decrease of two applications over last year's 54 patent application filings.

Of the 52 patent applications filed, 17 were in biotechnology-life sciences and agriculture, 17 were in physical science and engineering, 16 were in chemical-chemical engineering, two in plant germplasm and none in consumer products. Exhibit B provides detailed information on the categories filed over an eight-year period.

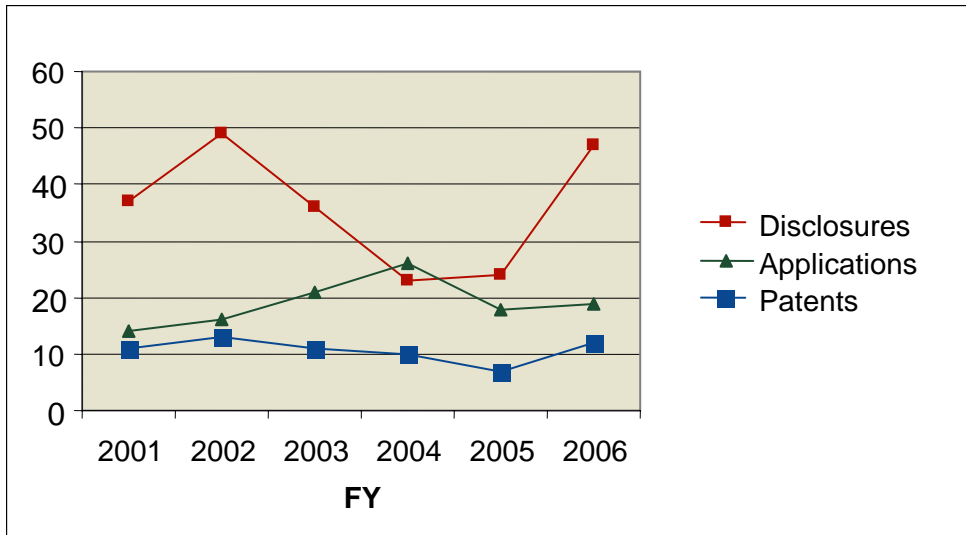
Provisional patent applications are applications that can be filed with the patent office, which give us one year to file a "regular" patent application. We file provisional applications on disclosures where we (i) want to delay the actual application to prolong the effective patent life by a year without jeopardizing the priority date, (ii) are not sure of the commercial value at the moment, or (iii) want to preserve a filing date because of a pending or previous public disclosure by the inventors. ISURF filed 30 provisional patent applications in FY06 compared to 39 in FY05.

ISURF currently has 160 patent applications (not including provisional applications) pending in the U.S. Patent Office (see Exhibit A for a ten-year history).

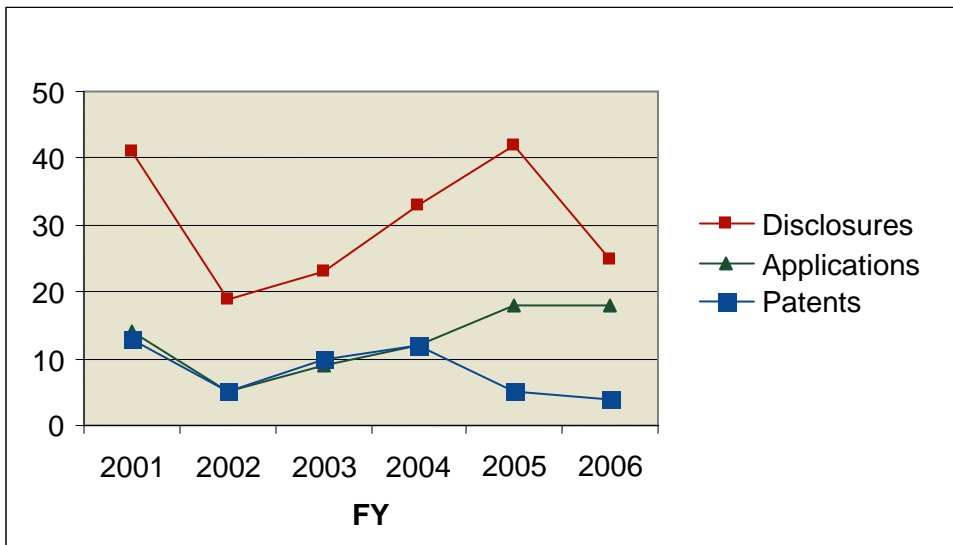
Nineteen patents were issued in FY06, an increase from 15 issued in FY05. We continue to see an increase in the pendency for patent applications in the U.S. patent office. The issued patents cover most of our technology categories. Twelve (63%) of the issued patents are in biotechnology-life sciences and agriculture, 4 (21%) are in physical science and engineering, and 3 (16%) are in chemical-chemical engineering.

The following Figures 1B, 2B, and 3B provide a comparison of 6 years of disclosure, application, and patent activity for the categories of biotechnology-life sciences and agriculture, physical science and engineering, and chemical-chemical engineering.

**Figure 1B: Biotechnology-Life Sciences and Agriculture Technologies**

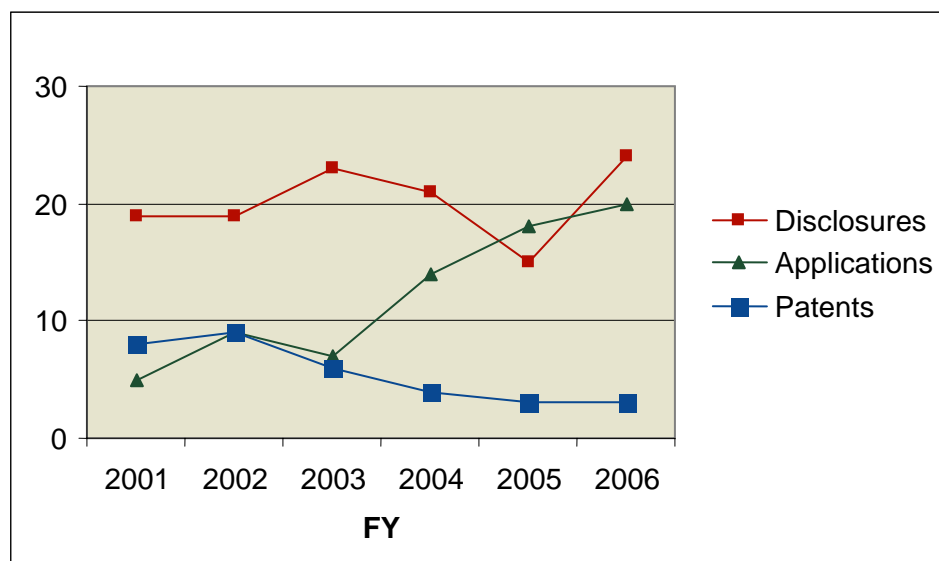


**Figure 2B: Physical Science and Engineering Technologies**



**22% OF TECHNOLOGIES LICENSED / OPTIONED FOR THE FIRST TIME IN THE LAST 5 YEARS WAS IN THE BIO-LIFE SCIENCES AND AGRICULTURE CATEGORY, 52% WAS IN GERmplasm**

**Figure 3B: Chemical-Chemical Engineering Technologies**



**45 (32%) LICENSES  
AND OPTIONS  
WERE SIGNED WITH  
IOWA COMPANIES  
IN FY06**

ISURF currently maintains a portfolio of 355 active patents. For the majority, we are actively seeking industrial licensees for commercial development.

Thirty-eight issued patents expired or were abandoned during FY06. Four expired at the end of their useful patent life. Twenty-one of the expired or abandoned patents were formerly licensed or optioned.

## **Commercialization**

### **Marketing**

Assessment of the commercial opportunity for technologies disclosed to ISURF is the first step in the marketing process. If the technology has commercial utility, an assessment of the licensing opportunity is made based on the comparative advantages of the technology and the intellectual property protection available. Identification of the barriers to the enforcement of the intellectual property or to the commercial use of the technology is also considered.

When formation of a start-up company is not anticipated, technologies having commercial potential are marketed to a targeted group of companies using non-confidential descriptions. Our inventors, on-line search programs, publications, and third party market information are among the resources used in identifying particular companies. In FY06, 15 new soybean, 2 amaranth and 1 oat lines were marketed for the first time and 20 new technologies were identified as having commercial potential and marketed for the first time.

Contacts with companies are made through personal contacts, electronic and regular mailings, and trade shows. Companies may view all available technologies on our web site. In June 2004, an electronic technology notification service was initiated. This service allows companies to register to receive emails on new technologies related to their area of interest. We currently have 251 subscribers for this service of which 195 are outside of ISU.

## Licensing

From the contacts made during marketing and other sources, the following agreements were executed: 40 technology license agreements, 5 option agreements, 72 license agreements for non-patented plant germplasm, 23 license agreements for patented AFA soybean varieties, 36 confidentiality agreements, 66 material transfer agreements, and 74 plant germplasm research and development agreements. The Committee for Agricultural Development affiliated with the College of Agriculture and the Agricultural Experiment Station collaborated with ISURF in the commercialization of ISU plant germplasm.

FY06 licenses and options (140) decreased 36% from FY05 (218). Although licenses and options increased 246% for non-germplasm innovations germplasm licenses decreased by 54%. Multiple non-exclusive licenses for our lead-free solder technology accounted for most of the increase in non-germplasm licenses and options. Germplasm licenses have decreased due to the fact that end-users who purchase seed from our licensees, solely for grain production, no longer require a license from ISURF.

Additionally, 9 administrative agreements were executed that amended existing licenses by adding new technologies or addressed royalty-sharing, joint ownership, inventorship, and/or management rights. Twelve additional agreements that updated or altered existing agreements were also executed.

The new license agreements, option agreements and administrative agreements introduced to industry 31 ISU innovations never before exploited for commercial development and use. These innovations included 13 technologies, 15 soybean lines, 2 amaranth lines and 1 oat line. Table I below provides a more detailed overview of FY06's 140 license and option agreements. A ten-year historical review can be found in Exhibit C.

**Table I: FY06 Licenses and Options**

Description of FY06 Commercial Agreements	Total FY06 Agreements	Option to an		
		Exclusive License	Non-Exclusive License	Exclusive License
Germplasm to Iowa Growers	23	0	23	0
Germplasm to Non-Iowa Growers	49	0	49	0
AFA Soybean Varieties to Iowa	16	0	16	0
AFA Soybean Varieties to Non-Iowa	7	0	7	0
Technology Agreements to Iowa Companies	6	2	2	2
Technology Agreements to Non-Iowa Companies	39	3	32	4
<b>Total Commercial Agreements</b>	<b>140</b>	<b>5</b>	<b>129</b>	<b>6</b>

**IN FY06 ISURF LICENSED OR OPTIONED TECHNOLOGIES TO 3 START-UP COMPANIES**

ISURF currently maintains a portfolio of 690 active license and option agreements, 154 of which are technology licenses and options (Table II). A summary of the categories currently in the portfolio is presented below.

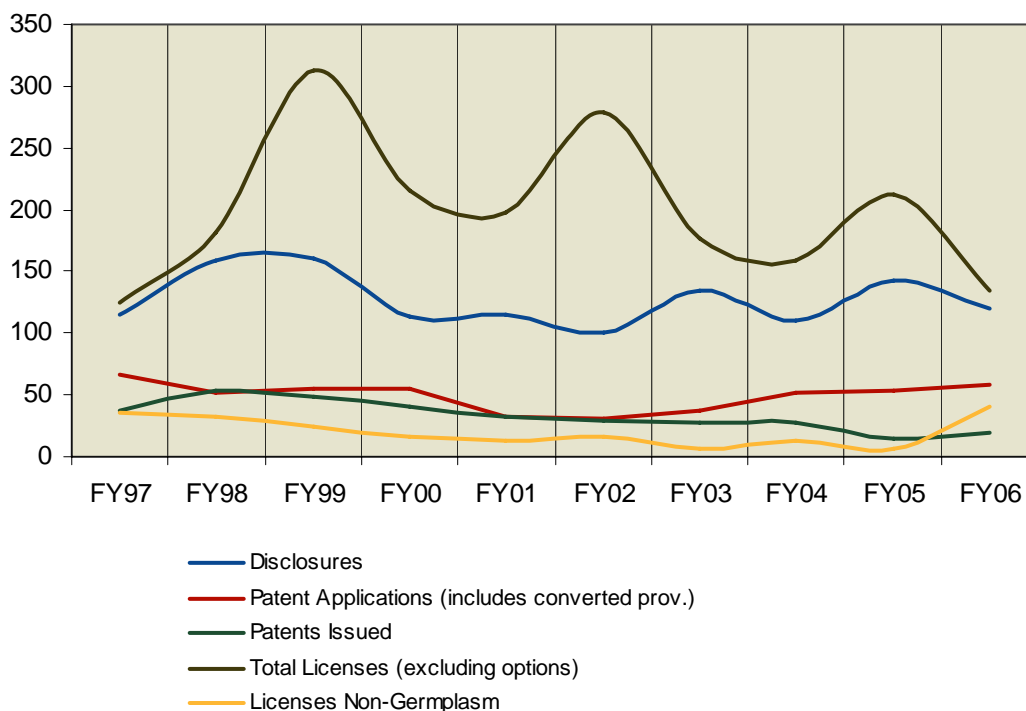
**Table II: Portfolio of Active Agreements at Fiscal Year End**

	FY									
	97	98	99	00	01	02	03	04	05	06
<b>License Agreements</b>										
Plant Germplasm/not patented	295	441	695	717	737	883	849	702	498	444
AFA Soybean Varieties/patented							8	47	92	74
Other	109	137	152	145	139	136	138	145	132	154
<b>Option Agreements</b>	14	11	14	12	17	19	21	22	23	18
<b>Total Active Agreements</b>	<b>418</b>	<b>589</b>	<b>861</b>	<b>874</b>	<b>893</b>	<b>1038</b>	<b>1016</b>	<b>916</b>	<b>745</b>	<b>690</b>

Figure 1C provides a historical view of the activities at ISURF related to invention disclosures, patent applications, patents issued, and licenses executed for the last ten years.

**Figure 1C. Ten Year History of Disclosure, Patent Application\*, Patent and Licensing Activity at ISURF**

\*Provisional applications not included



**NON-GERMPLASM  
LICENSES AND  
OPTIONS  
INCREASED 246%**

## Protecting Our Intellectual Property

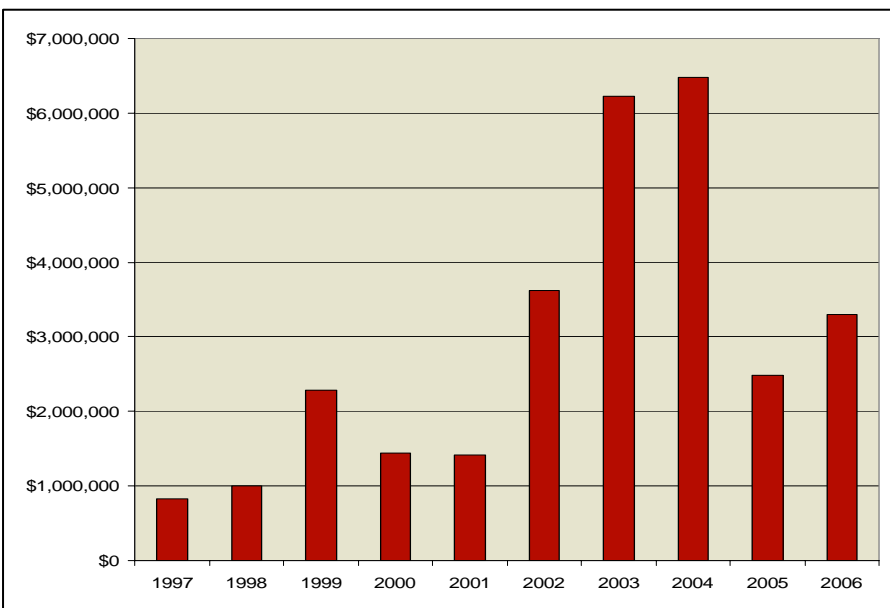
ISURF continues to collaborate with the licensees of our technologies for corn gluten meal natural herbicide and  $\beta$ -hydroxy- $\beta$ -methylbutyrate (HMB) nutritional supplement to enforce our rights against infringers. Due to the nature of these inventions, we anticipate continued enforcement efforts will be necessary in future years. Also, with the assistance of our inventors and infringement counsel, we are currently investigating three potential infringement situations.

## SBIR/STTR Activity

ISURF began supporting SBIR/STTR outreach efforts July 1, 2005 with the addition of an SBIR/STTR program administrator to the OIPTT staff. The program provides support to all Iowa companies as well as university start-ups. The program is to provide outreach and training activities in addition to providing proposal preparation support.

In FY06 ten Iowa companies won twelve new SBIR and STTR awards worth \$3.3 million. The funded projects reflect Iowa's strengths in biotechnology, information systems, materials development and agriculture.

**Figure 2C. Iowa SBIR/STTR Award Dollars 1997 - 2006**



*The increase in the value of awards in 2006 is due in part to an increase in the Phase II grants awarded to Iowa companies. Phase II awards can be worth up to \$750,000 compared to an award of up to \$100,000 for Phase I grants.*

FY06 outreach activities included informational presentations to a number of groups across Iowa, including colleges and universities, as well as economic development representatives and entrepreneurs. These presentations reached audiences of over one hundred. In addition, publication of the Iowa SBIR/STTR Newsletter began in September 2005, and is currently distributed to nearly 200 researchers, entrepreneurs, investors, economic development representatives, and federal, state and local governmental officials across the state. Materials for a Phase I Writing Workshop were developed, and for the first time in several years, an SBIR/STTR proposal preparation workshop was held in March on the ISU campus. Sixteen small Iowa companies were provided direct assistance in the preparation of twenty Phase I and Phase II proposals.

**FOR THE FIRST TIME IN SEVERAL YEARS, AN SBIR/STTR PROPOSAL PREPARATION WORKSHOP WAS HELD.**

# Technology and Germplasm Financial Information

## Revenues

The total income from technology and germplasm licensing activity, which includes license fees, royalties (earned royalties based on sales and minimum royalty payments), plant seed sales, material transfer agreement fees, patent expense reimbursement from licensees, and research support leveraged through licensing activities was \$8.1M for FY06, an increase of \$3.1M over FY05. Over \$369,000 was from plant germplasm licenses, an increase from FY05's \$221,000, with income of \$7.4M from other licenses. Option fees brought in \$200,000 reflecting a decrease of \$174,000 from FY05. Table III provides a categorical breakdown of our licensing income from the various sources.

**Table III: Income Related to Licensing Activity**

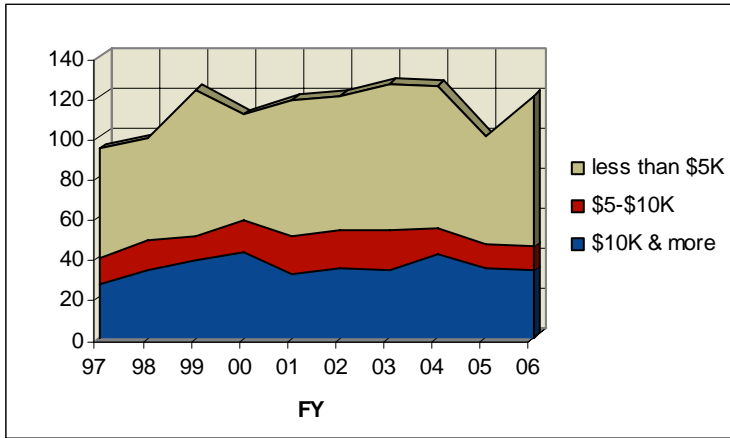
Category	97	98	99**	00	01	02	03	04	05	06
	<b>Royalty Income* (x US \$1,000)</b>									
<b>Licenses</b>										
Plant Germplasm/not patented	124	215	289	239	310	285	289	167	177	234
AFA Soybean Varieties Patented								11	44	135
Other	7,495	2,469	2,585	1,477	3,044	11,588	6,032	2,226	4,317	7,424
<b>Option Agreements</b>	29	78	110	297	147	193	482	382	374	200
<b>Administrative &amp; MTA Agreements</b>	1	7	87	86	88	37	17	12	23	71
<b>Total for All Agreements</b>	7,649	2,769	3,071	2,099	3,589	12,103	6,820	2,798	4,935	8,064

\*Figures include license/option fees, earned royalties on sales and guaranteed minimums, research support leveraged through licensing, proprietary seed transfer fees, material transfer agreements, and patent expense reimbursement.

\*\* FY1999 figures adjusted during FY2000 audit.

Of the 690 active license and option agreements in ISURF's portfolio, 299 generated income in FY06. Thirty-nine agreements (13%) produced income over \$10,000 and 24 agreements (8%) produced from \$5,000 to \$10,000 in FY06. The remaining 236 agreements (79%), mostly in "Plant Germplasm not patented" category, produced less than \$5,000 each. Figure 1D shows that the majority of our non-plant germplasm licenses and options generating income continue to produce \$5,000 or less in income annually. A ten-year historical table is provided in Exhibit C.

**Figure 1D: Non-Plant Germplasm Licenses and Options Generating Income<sup>1</sup>**



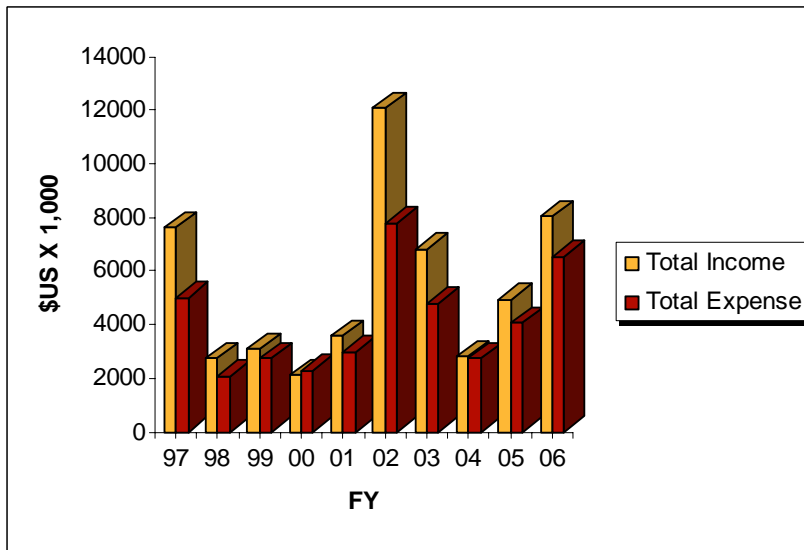
<sup>1</sup>Income includes license/option fees, royalties, guaranteed minimum royalties, research support leveraged through licensing, and patent expense reimbursement, but not income from trademark, educational materials and plant licensing.

### Expenses

FY06 technology and germplasm expenses (patent/legal costs, royalty sharing, licensing and infringement/litigation expense and research support payments) of \$6.6M were significantly above FY05's \$4.1M due to an increase in royalty sharing. Patent prosecution expense (disclosure, application, patent, foreign, and patent maintenance) of \$1.3M is slightly higher than FY05's \$1.2M. Foreign filing expense is dependent on our licensees' instructions, and ISURF is reimbursed for nearly all of those expenses. Foreign filing expense in FY06 was \$474,000 compared to FY05's \$360,000.

Figure 2D provides a historical view of the technology and germplasm related income and expense. Expenses for patent applications and other legal matters were not dependent on patent income. Other expenses such as royalty sharing to inventors and academic units were directly dependent on income.

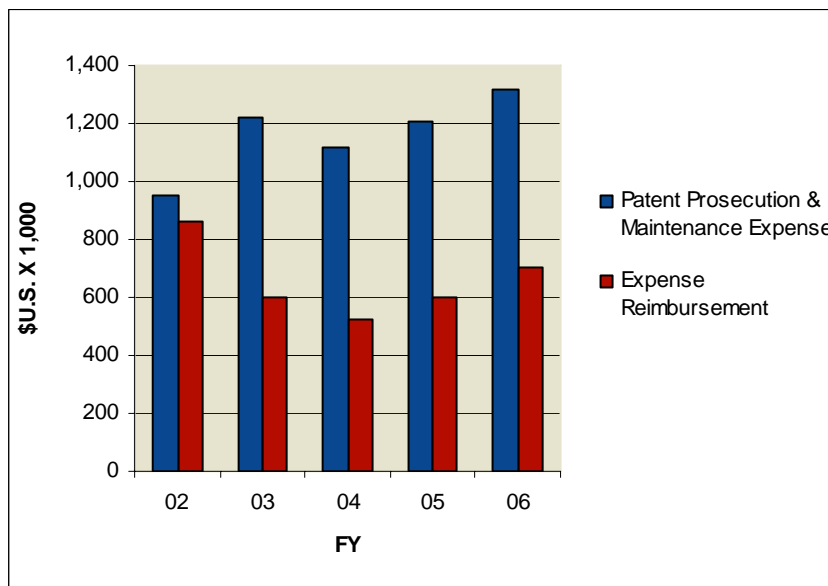
**Figure 2D: Technology and Germplasm Related Income and Expense**



**43% OF ACTIVE LICENSE AND OPTION AGREEMENTS GENERATED INCOME IN FY06**

Reimbursement of our patent prosecution expense from our licensees has averaged 57% over a five-year period. Figure 3D provides a five-year comparison of expense reimbursement and patent prosecution expense. Table IV provides a five-year overview of income and expense for our technology and germplasm activity.

**Figure 3D: Reimbursement of Patent Expense - 5 Year**



**57% OF PATENT PROSECUTION AND MAINTENANCE EXPENSE IS REIMBURSED**

**Table IV: Technology and Germplasm Related Income and Expense**

	FY				
	02	03	04	05	06
	\$U.S. X 1,000				
<b>INCOME</b>					
Royalty Income	10,864	5,786	2,118	4,019	7,214
Expense Reimbursement	860	599	525	600	703
Research Income	379	434	156	316	147
<b>TOTAL</b>	<b>12,103</b>	<b>6,819</b>	<b>2,799</b>	<b>4,935</b>	<b>8,064</b>
<b>EXPENSE</b>					
Patent Prosecution & Maintenance	949	1,220	1,120	1,208	1,316
Licensing	18	17	91	154	79
Infringement/Litigation	220	77	12	6	18
General Legal	16	12	12	32	14
Royalty Sharing to ISU Parties	6,143	3,065	1,001	1,633	2,760
Royalty Sharing to Others	97	87	340	747	2,218
Research Support - ISU	364	419	159	316	147
<b>TOTAL</b>	<b>7,807</b>	<b>4,897</b>	<b>2,735</b>	<b>4,096</b>	<b>6,552</b>
<b>Net Income (Expense)</b>	<b>4,296</b>	<b>1,922</b>	<b>64</b>	<b>839</b>	<b>1,512</b>

### Income Distribution

From income received in FY06, ISURF disbursed \$1.5M to ISU and former ISU inventors. Another \$1.3M was distributed to five different academic units in royalty sharing. Table V summarizes the royalty sharing paid to the individual academic units since FY97.

**Table V: Royalty Sharing with Academic Units**

Academic Unit <sup>(1)</sup>	FY (\$US)										10-Yr Total
	97	98	99	00	01	02	03	04	05	06	
Agriculture/Exp. Station	91,121	151,536	228,443	197,872	207,442	184,863	169,140	123,053	131,999	240,740	1,726,209
Engineering	103,237	4,253	19,983	16,137	13,577	5,605	7,321	27,281	9,301	9,784	216,479
Veterinary Medicine	86,603	69,656	76,126	58,038	31,587	33,434	44,438	41,071	39,399	36,674	517,026
Liberal Arts & Sciences	0	4,836	12,953	12,369	4,129	7,129	10,941	9,482	25,462	5,587	92,888
IPRT <sup>(2)</sup>	29,077	76,659	39,156	170,254	116,375	810,361	188,869	588,172	718,191	1,016,914	3,754,028
Provost	0	0	0	0	0	0	0	1,445	0	0	1,445
All Units Total <sup>(3)</sup>	310,039	306,940	376,661	454,670	373,110	1,041,392	420,709	790,504	924,352	1,309,699	6,308,076

(1) Units receiving less than \$1,000 total are not listed.

(2) Sharing to IPRT includes royalties for Ames Laboratory and prorated royalty shares from inventions that, regardless of College affiliation of the inventors, (i) received for their development research funding from the Department of Commerce via a grant to CATD, (ii) at least one of the inventors is affiliated with an IPRT center, or (iii) received for their development any funding at all from the Iowa Manufacturing Technology Center, the Iowa Industry Incentive Program, or other IPRT sources.

(3) Total royalty sharing may not match figures in "Detailed Financial Statements" due to "accrual" vs. "cash" accounting methods.

Disbursement of research funds directly leveraged as a condition for licenses and options in FY06 was \$147,344. This brings the total research fund disbursement by ISURF for the last 15 fiscal years to \$5.4M.

In addition to royalty sharing with academic units and disbursement of research dollars, ISURF's activities also benefit the units in other ways such as royalty sharing with inventors affiliated with the units and directly supporting projects with activities that might strengthen or rescue patents, and/or promote the licensing of our technologies. Also, ISURF has provided the university with an unrestricted research grant every year since FY99. In FY99 through FY01, the grants were \$500,000 each year, and in FY02 through FY06, ISURF's grant to the University was \$750,000. Table VI provides a summary of the benefits provided to the academic units receiving at least \$1,000.

**Table VI: Grants, Research Support and Royalty-Sharing to Academic Units and Affiliated Individuals from FY06 Operations**

Iowa State Unit	Royalty Sharing to Unit <sup>(1)</sup>	Agreement Leveraged Research <sup>(2)</sup>	Royalty Sharing to Unit Inventors	ISURF Funded Projects	FY Unit Total
(\$US)					
College of Agriculture/Exp. Station	240,740	120,000	216,306	36,437	613,483
College of Engineering	9,784	27,344	17,560	0	54,688
College of Veterinary Medicine	36,674	0	36,536	0	73,210
College of Liberal Arts & Science	5,587	0	5,511	60,500	71,598
IPRT	1,016,914	0	1,194,001	60,000	2,270,915
Provost	0	0	0	0	0
OIPTT	NA	NA	NA	890,659	890,659
Iowa State General Research Support	NA	NA	NA	750,000	750,000
<b>Total <sup>(3)</sup></b>	<b>1,309,699</b>	<b>147,344</b>	<b>1,469,914</b>	<b>1,797,596</b>	<b>4,724,553</b>

(1) Ames Lab sharing is included with IPRT sharing.

(2) Separate research agreements negotiated by IPRT Co. Assistance are not included here to avoid double-counting of \$ leveraged.

(3) Total in "Royalty-sharing" may not match figures in "Detailed Financial Statements" due to "accrual" vs. "cash" accounting methods.

**IN FY06 ISURF  
DISBURSED \$4.7M  
TO ISU AND ISU  
INVENTORS AND  
AUTHORS**

# Educational Materials

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ISURF manages certain educational materials created by ISU departments, faculty and staff. Working with the University's Office of Intellectual Property & Technology Transfer (OIPTT), ISURF's management ensures the proper

- a) identification of authors;
- b) assignment of copyright ownership;
- c) timely registration with the U.S. Copyright Office when necessary;
- d) review and approval of licensing, distribution and publishing agreements; and
- e) disbursement of royalties to authors and departments.

ISURF continues to honor certain past obligations to distribute selected departmental properties directly. At the end of this fiscal year, 9 educational materials projects generated income; the same as in FY05. Income received by ISURF in FY06 was \$17,480, a 75% decrease over FY05's \$71,542. This decrease was due to the College of Engineering's withdrawal from participation in the National Technology University program. Disbursement either paid or accrued in FY06 to colleges and departments totaled \$12,440, and \$2,310 to authors. This represents a total disbursement of 84% of FY06 income.



# Fiscal Year 2006 Financial Statement

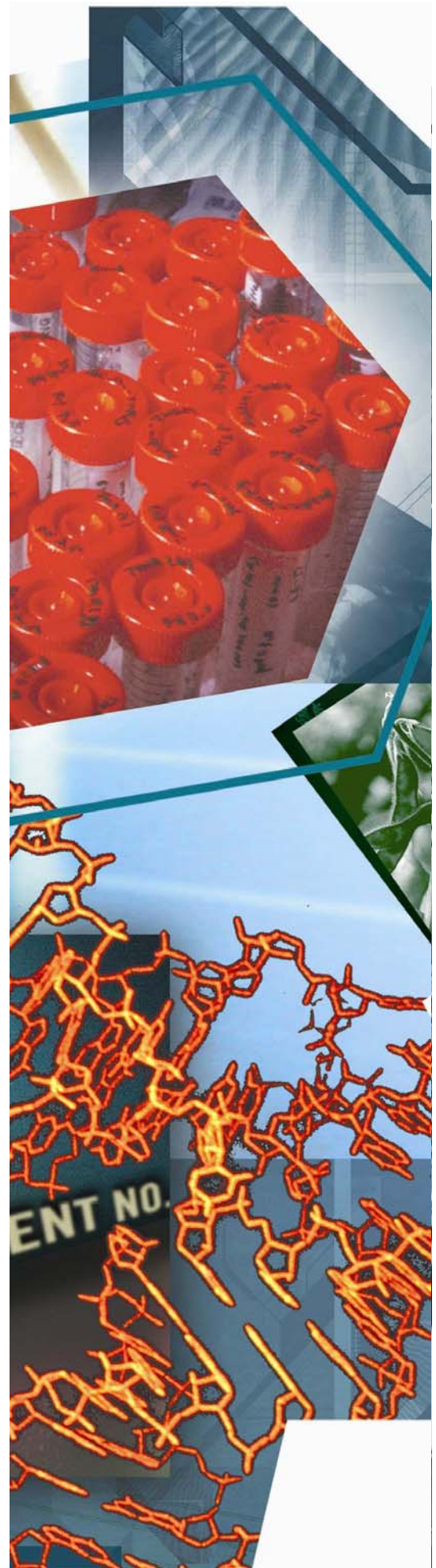
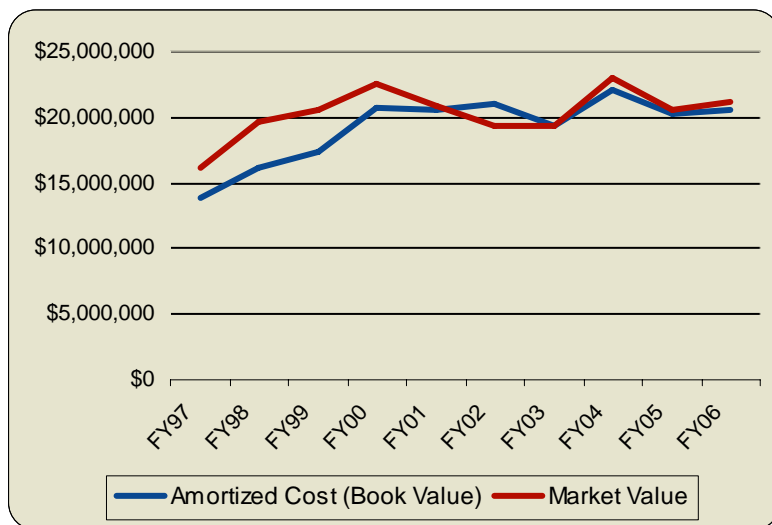
ISURF's FY06 annual financial audit was conducted by D.D. Pyle Company (Ames, IA). The Audit Committee of the ISURF Membership reviewed the independent audit report.

ISURF completed FY06 with net assets of \$23M, an increase of \$825K over FY05. A net operating gain of \$864,946 was realized in comparison with FY05's net operating loss of \$49,913. The net gain from investments with realized interests and capital gains was \$1.5M, and a gain from investments with capital gains not yet realized for the year of \$412K. An additional reduction to investment income is \$72K payable to Ames Laboratory for current year interest realized by ISURF. Total revenues (including investments) of \$9.9M exceeded total expenditures (including grants) of \$9.05M for a net increase in assets of \$825K.

ISURF closed out the fiscal year with total assets of \$31.7M and \$8.7M in liabilities. ISURF's investments had a market value of \$21.2M at the close of FY06. Figure 1E provides a ten-year historical view of ISURF's investments.

**Figure 1E Investments**

Does not include income in money market accounts.



# ISURF Membership, Board of Directors, and Staff

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## Membership

\*indicates Board of Director

**Dr. John A. Brighton\***  
Vice Provost for Research  
Iowa State University

**Dr. J. Timothy Keller\***  
Professor and Chair for  
Landscape Architecture  
College of Design  
Iowa State University

**Dr. Donald Reynolds**  
Associate Dean for Research  
College of Veterinary Medicine  
Iowa State University

**Mr. Jamie P. Constantine\***  
Senior Vice President  
Salomon Smith Barney, Inc.

**Mr. Warren Madden\***  
Vice President for Business  
and Finance  
Iowa State University

**Dr. Michael B. Roof**  
Director of Bio-R&D  
Boehringer Ingelheim  
Vetmedica, Inc.

**Dr. Gregory L. Geoffroy\***  
President  
Iowa State University

**Dr. Theodore H. Okiishi\***  
Associate Dean  
College of Engineering  
Iowa State University

**Dr. Daniel Russell**  
Associate Dean for Research  
College of Human Sciences  
Iowa State University

**Dr. Richard Gladon**  
Associate Professor Horticulture  
Iowa State University

**Dr. David Oliver\***  
Associate Dean for Research  
College of Liberal Arts and  
Sciences  
Iowa State University

**Dr. David Sly\***  
President  
Proplanner

**Mrs. Ruth Harkin\***  
State Board of Regents

**Mr. Mike Peterson\***  
President  
Peterson Genetics, Inc.

**Dr. Steven E. Sukup**  
Vice President  
Sukup Manufacturing Company

**Mr. John Hayes, Esq.\***  
Deere & Company  
(Retired)

**Dr. Mark Power**  
Professor  
Department of Finance  
College of Business  
Iowa State University

**Dr. Wendy Wintersteen**  
Dean  
College of Agriculture  
Iowa State University

## Officers

President:	Mr. Jamie P. Constantine
Vice-President:	Dr. Theodore H. Okiishi
Treasurer:	Mr. Warren R. Madden
Secretary:	Dr. John A. Brighton
Executive Director:	Dr. Kenneth Kirkland

## Staff

Kenneth Kirkland	Director, OIPTT
	Executive Director, ISURF
Nita Lovejoy	Associate Director
Mary Kleis	Technology Licensing Manager
Eddie Boylston	Licensing Associate II, Physical Sciences – Engineering
Dario Valenzuela	Licensing Associate I, Life Sciences – Biotechnology
Julie Minot	Licensing Associate, Germplasm
Kristine Johansen	SBIR/STTR Program Administrator
Donna Johns	IP Portfolio Manager
Kristine Koehler	Patent Administration Assistant
Soma Mitra	Disclosure & Database Manager
Kathi Cunningham	Accountant
Tenann Everly	Contract & Information Specialist
Patsy Duncan	Disclosure Secretary
Linda Galvin	Receptionist/Secretary

# Exhibit A

## Summary of Activity: Ten-Year History

Category*	FY									
	97	98	99	00	01	02	03	04	05	06
<b>Annual Activities:</b>										
Disclosures Received	115	158	160	114	115	100	134	110	142	120
Disclosures Inactivated	49	50	118	139	101	73	123	34	43	49
Patent Applications Filed (1)	67	52	55	59	33	30	37	52	54	52
Provisional Applications Filed	29	39	51	47	26	34	41	48	39	30
Patent Applications Abandoned	17	25	27	9	15	14	11	5	16	8
Provisional Applications Abandoned	3	6	21	24	21	11	11	12	15	8
Patents Issued	38	54	48	41	34	29	27	27	15	19
Patents Expired or Abandoned	28	37	39	46	24	15	24	18	24	38
Licenses & Options Signed (2)	132	191	323	219	208	287	187	166	218	140
Inventions Licensed/Optioned First Time (3)	72	68	41	35	33	37	48	47	49	31
<b>Portfolio Status:</b>										
Active Disclosures	462	482	528	462	447	456	441	481	539	571
Patent Applications in Progress	156	117	127	136	127	114	110	129	143	160
Active Patents	304	335	343	339	350	367	373	383	374	355
Active License/Option Agreements (4)	418	589	861	874	893	1038	1016	916	745	690

\*Numbers include inventions assigned to ISURF through activities such as collaborative research and in-licensing

(1) Includes converted provisional applications

(2) FY06 figure includes 72 licenses for non-patented plant germplasm and 23 licenses for patented AFA soybean varieties

(3) FY06 figure includes inventions added to existing licenses by administrative agreements amending existing licenses/options, and includes first time licenses for 15 new soybean, 2 amaranth, and 1 oat lines

(4) FY06 figure includes 444 active licenses for non-patented plant germplasm and 74 licenses for AFA soybean varieties patented

# Exhibit B

## Detailed Disclosure and Patent Activity: Eight Years

	FY							
	99	00	01	02	03	04	05	06
<b>Intellectual Property Disclosures Reported</b>								
Germplasm not patented	24	17	16	11	44	17	24	6
AFA Varieties/Patented	0	0	0	0	7	16	37	18
Bio-Life Sciences & Ag.	61	38	37	49	36	23	24	47
Physical Sciences-Eng.	55	40	41	19	23	33	42	25
Chemistry-Chem. Engineering	19	19	19	19	23	21	15	24
Consumer Products	1	0	2	2	1	0	0	0
Total Disclosures Received	160	114	115	100	134	110	142	120
<b>Total Disclosure Portfolio</b>	528	462	447	456	441	481	540	571
<b>Disclosures Received by Source of Funding</b>								
Federal	86	60	60	56	94	69	90	57
Industry	44	28	36	32	54	20	10	13
Commodity	25	21	27	21	23	7	46	29
Foundation	6	2	5	1	3	5	23	5
State	1	1	1	1	0	2	4	10
No Funding	40	33	27	22	20	17	21	32
<b>Patent Prosecution</b>								
U.S. Provisional Patent Application Filings	51	47	26	34	41	48	39	30
U.S. Patent Application Filings								
Bio-Life Sciences & Ag.	25	23	14	16	21	26	18	17
Physical Sciences-Eng.	17	21	14	5	9	12	18	17
Chemistry-Chem. Engineering	8	14	5	9	7	14	18	16
Consumer Products	1	0	0	0	0	0	0	0
Plant Germplasm	4	1	0	0	0	0	0	2
Total US Patent Appl. Filed	55	59	33	30	37	52	54	52
U.S. Patent Application Filings								
First Filings	34	46	26	19	28	37	41	39
Secondary Filings	21	13	7	11	11	15	13	12
Patent Application Portfolio	127	136	127	114	110	129	143	160
U.S. Patents Issued								
Bio-Life Sciences & Ag.	13	17	12	13	11	10	7	12
Physical Sciences-Eng.	20	17	13	12	10	12	5	4
Chemistry-Chem. Engineering	12	4	8	4	6	4	3	3
Consumer Products	0	0	0	0	0	0	0	0
Plant Germplasm	3	3	1	0	0	1	0	0
Total Patents Issued	48	41	34	29	27	27	15	19
U.S. Patent Portfolio	343	339	350	367	373	383	374	355
<b>Technologies Licensed/Optioned First Time</b>								
Germplasm not patented	16	11	16	10	22	27	28	18
AFA Varieties/Patented	0	0	0	0	4	1	1	0
Bio-Life Sciences & Ag.	14	11	9	10	11	12	5	8
Physical Sciences-Eng.	10	6	6	12	5	6	14	1
Chemistry-Chem. Engineering	1	7	2	5	6	1	1	4
Consumer Products	0	0	0	0	0	0	0	0
Total Technologies	41	35	33	37	48	47	49	31

# Exhibit C

## Licensing Activities at ISURF: A Ten-Year Summary

Category	FY									
	97	98	99	00	01	02	03	04	05	06
<b>FY License Agreements</b>										
Plant Germplasm/not patented	87	149	288	198	185	262	150	107	138	72
AFA Soybean Varieties/patented							8	39	67	23
Other	36	33	25	17	13	16	18	13	7	40
<b>FY Option Agreements</b>	9	9	10	4	10	9	11	7	6	5
<b>Total Commercial Agreements</b>	<b>132</b>	<b>191</b>	<b>323</b>	<b>219</b>	<b>208</b>	<b>287</b>	<b>187</b>	<b>166</b>	<b>218</b>	<b>140</b>
<b>Other Agreements related to Licensing Activities:</b>										
Confidentiality Agreements	134	126	174	159	70	69	59	45	44	36
Material Transfer Agreements	33	7	13	15	27	18	22	42	43	66
Plant germplasm R & D Agts	244	371	202	150	96	97	93	93	89	74
Administrative Agreements*	10	7	9	11	8	10	9	6	2	9
Miscellaneous Agreements**	22	8	17	21	18	17	23	17	8	12

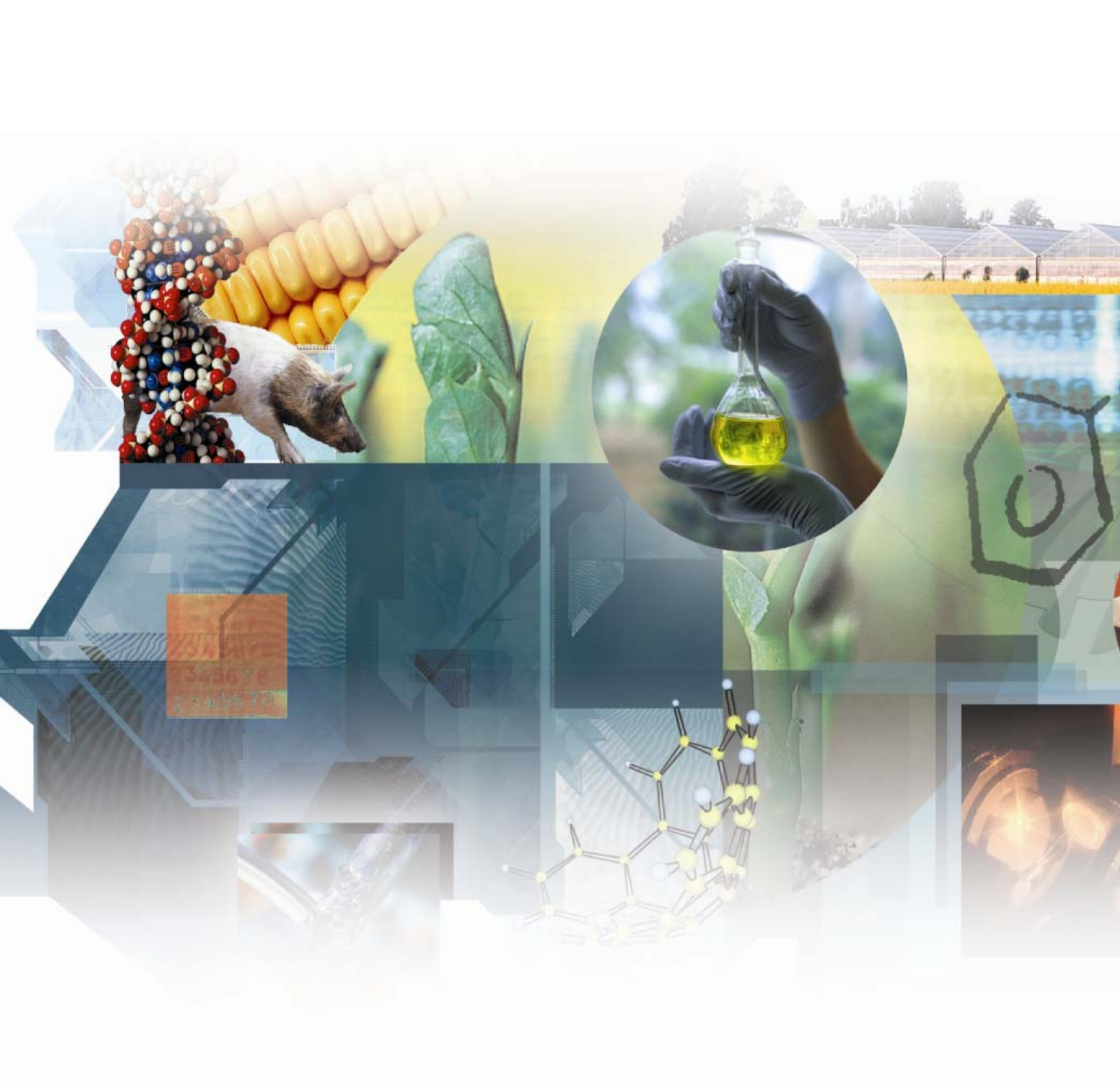
\*Administrative agreements include agreements amending existing licenses/options which add additional inventions or agreements addressing royalty-sharing, joint ownership, inventorship, and/or management rights.

\*\*Figure includes new master agreements and amendments to existing agreements which do not fall under the above footnote.

## Commercialization Agreements Producing Income: A Ten-Year Summary

Agreements with Income*	FY									
	97	98	99	00	01	02	03	04	05	06
over \$10,000 / FY	29	37	40	44	35	37	36	38	35	39
\$5,000 - \$10,000 / FY	15	20	18	24	31	33	30	20	18	24
< \$5,000 / FY	142	132	240	311	320	346	371	304	264	236
<b>Total No. of Agreements</b>	<b>186</b>	<b>189</b>	<b>298</b>	<b>379</b>	<b>386</b>	<b>416</b>	<b>437</b>	<b>362</b>	<b>317</b>	<b>299</b>

\*Includes Licenses, Options, Material Transfer Agreements and Administrative Agreements. Figure include license fees, royalties on sales and guaranteed minimums, research support leveraged through licensing activities, proprietary seed transfer fees, and expense reimbursement.



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