

Iowa State University Research Foundation, Inc.

Annual Report July 1, 2011 to June 30, 2012

Contents

A Message from the Director	1
Executive Summary	2
Technology Activity	4
Technology Reporting: Inventions, Copyright Subject Matter	
and Proprietary Seed/Germplasm	
Patent Activity	5
Commercialization: Marketing and Licensing	6
SBIR/STTR Activity	7
Technology and Germplasm Financial Information	8
Revenues	8
Expenses	9
Income Distribution	10
Fiscal Year 2012 Financial Statement	12
Exhibits	13
ISURF Board of Directors and Staff	16



A Message from the Director...

The role of universities in the economic development of the region, state, and local economies has been a common topic of discussion; with increased pressure on the university to increase its impact. The role of technology transfer in economic development continues to be an important component of this very complex and dynamic endeavor.

Here is how **Iowa State Technology** has made an impact: In the past year, 33 different technologies were licensed or optioned; one-third of our active licenses are with Iowa Companies; 55% of our option and license agreements generated income; and sales based on licensed **Iowa State Technologies** continues to grow! Iowa-based sales topped \$100M and total world-wide sales were more than \$685M, an all-time high.

Some of our great selling technologies in Iowa include soybean germplasm, RFID tags for metal surfaces, PRRS-related vaccines, lead-free solder, and noise control for vacuum cleaners, while lead-free solder continues to be our top impact technology world-wide.

Financially, ISURF continues to generate enough revenue to maintain independence and to share a portion of its funds with Iowa State, with royalty income just over \$10M for fiscal year 2012. Only 16% of technology transfer offices nation-wide are financially independent and it is a testament to the great inventors at Iowa State and the Ames Lab that we have been financially independent for more than 20 years.

One of the biggest challenges that will face us in coming year is the continued implementation of the America Invents Act. There are a lot of questions that remain on how this will ultimately impact universities and a lot of time will be devoted to developing strategies that continue to ensure that **Iowa State Technologies** will impact and enhance your life on a daily basis.

Sincerely,

Lisa Lorenzen
Executive Director

IOWA STATE UNIVERSITY RESEARCH FOUNDATION, INC

Executive Summary

ISURF's total operating revenues in FY12 were \$10.1M, \$1.7M less than FY11. Net income from operations was \$2.7M, a decrease of 8% compared to FY11. Total assets for FY12 were \$36M, an increase of \$300K from FY11, and net assets were \$27.3M, an increase of \$1.4M from FY11. ISURF was fortunate to be able to disburse \$4.7M to ISU and its inventors and authors from FY12 receipts.

During FY12, 30 technologies and germplasm lines were marketed for the first time, compared to 48 in FY11. A total of 66 technologies and 147 germplasm lines were actively marketed in FY12.

Over 151 various agreements were entered into in FY12. Fifty of those agreements granted rights to ISURF technologies under new licenses or options to license. ISURF did not sign any options or licenses with Iowa start-up companies in FY12.

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 2002 through 2011, based on licensed ISU technologies. The Iowa-based companies' sales increased to \$101M in 2011, an increase of \$15M over 2010 sales. Sales of non-Iowa-based companies were \$585M, an 8% increase over 2010 sales of \$541M. Iowa-based sales were 15% of all sales for 2011. The figures do not include the sale of agricultural seeds or products that no longer enjoy protection of patents held by ISURF. Figure II illustrates more directly the actual sales based on licensed ISU technologies by Iowa-based companies from 2002 to 2011.

ISURF ENTERED
INTO 151
AGREEMENTS IN
FY12; 50 WERE NEW
LICENSES AND
OPTIONS

Figure I: Sales of ISU Technologies* by Licensed Companies

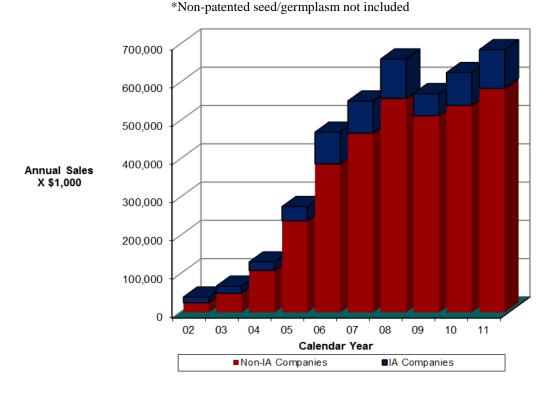
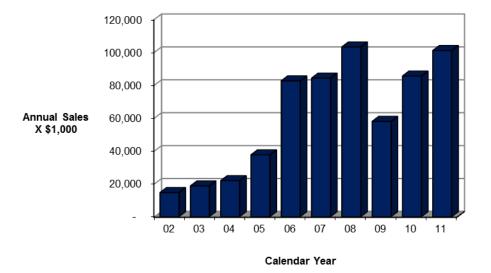


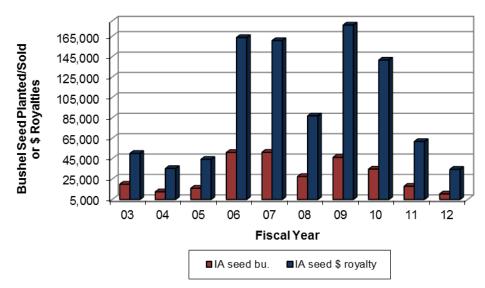
Figure II: Sales of ISU Technologies* by Licensed Iowa Companies
*Non-patented seed/germplasm not included



ISURF continues to make ISU-developed seed/germplasm available by licensing to seed and grain producers. Germplasm available in FY12, included soybean, corn, oat and amaranth; however, licenses signed were for specialty soybeans and oat. Figure III illustrates the level of germplasm activity by Iowa companies for the last ten years.

Total royalties from all commercially-licensed germplasm were \$194K in FY12, a decrease of \$94K over FY11. A total of 32 licenses were executed this year for germplasm compared to 35 in FY11.

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



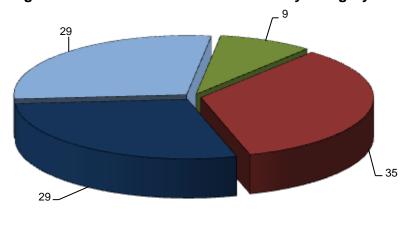
SALES OF PRODUCTS BY IOWA COMPANIES BASED ON ISU TECHNOLOGIES WERE APPROXIMATELY \$101M in 2011

Technology Activity

Technology Reporting: Inventions, Copyright Subject Matter and Proprietary Seed/Germplasm

ISURF received 102 new disclosures in FY12. This represents a decrease of four disclosures (4%) from FY11. Figure 1 provides a categorical breakdown of the various technologies disclosed in FY12.

Figure 1: FY12 Disclosure Distribution by Category

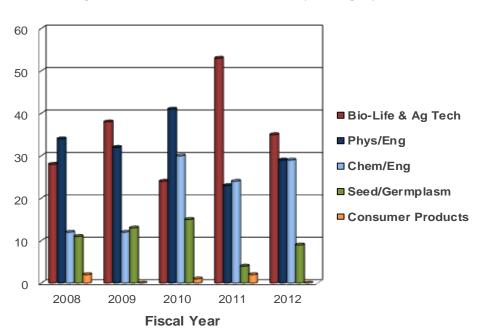


■Bio-Life & Ag Tech ■Phys/Eng ■Chem/Eng ■Seed/Germplasm

IN FY12
INTELLECTUAL
PROPERTY
DISCLOSURES
WERE 57%
FEDERALLY
FUNDED, 15%
INDUSTRY FUNDED,
AND 2% STATE
FUNDED. 22% HAD
NO EXTERNAL
FUNDING

Figure 2 reflects a 34% decrease of the disclosures classified as bio-life sciences and agriculture (35) from FY11 (53); and represents 34% of the total FY12 disclosures. Disclosures received in the classification of physical sciences-engineering increased 26% in FY12 (29) from FY11 (23), and represented 28% of all disclosures received in FY12. Chemical-chemical engineering increased 21% in FY12 (29) compared to FY11 (24), representing 28% of all FY12 disclosures. Seed/germplasm experienced an increase in FY12 (9) from FY11 (4). Figure 2 provides a comparison of the disclosures in these categories over the last five years. An eight-year historical table of disclosure data by category can be found in Exhibit B.

Figure 2: Disclosures Received by Category



Patent Activity

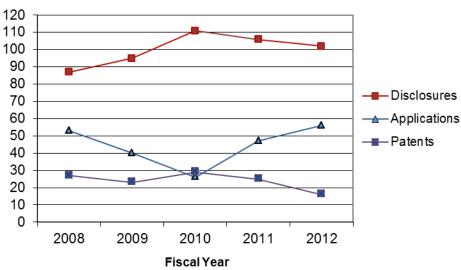
Fifty-six patent applications, including continuations, divisionals and converted provisional applications were filed with the U.S. Patent & Trademark Office during FY12. This is an increase of nine applications over last year's 47 patent application filings. ISURF filed 29 provisional patent applications in FY12 compared to 42 in FY11.

ISURF currently has 145 patent applications (not including provisional applications) pending in the U.S. Patent Office (see Exhibit A for a ten-year history).

Sixteen patents were issued in FY12, a decrease from 25 issued in FY11. The issued patents cover most of our technology categories.

Figure 3 provides a comparison of five years of disclosure, application, and patent activity.

Figure 3: Disclosure, Application and Patent Activity FY08-FY12



PATENT
APPLICATION
FILINGS INCREASED
BY 19% OVER FY11

ISURF currently maintains a portfolio of 389 active patents. For the majority, we are actively seeking industrial licensees for commercial development.

Thirty-four issued patents expired or were abandoned during FY12. Six expired at the end of their maximum available patent life. Twenty-three of the expired or abandoned patents were formerly licensed or optioned.

Commercialization

Marketing

In FY12, 11 new soybean lines were marketed for the first time, and 19 new technologies were identified as having commercial potential and marketed for the first time. A total of 213 technologies and germplasm were actively marketed in FY12.

Contacts with companies are made through personal contacts, electronic and regular mailings, and trade shows. Companies can view all available technologies on our web site. Also, companies may register to receive emails on new technologies related to their area of interest. We currently have 321 subscribers to this service, of which over 86% are outside of ISU.

Licensing

The following agreements were executed in FY12: 9 technology license agreements, 9 option agreements, 30 license agreements for non-patented seed/germplasm, 2 license agreements for patented AFA soybean varieties, 31 confidentiality agreements, 46 material transfer agreements, and 11 seed/germplasm research and development agreements.

FY12 licenses and options (50) were a slight increase from FY11 (49). Table 1 provides more detail on FY12 licenses and options.

Table 1: FY12 Licenses and Options

Description of FY12 Commercial Agreements	Total FY12 Agreements	Option to an Exclusive License	Non-Exclusive License	Exclusive License
Germplasm to lowa Growers	15	0	15	0
Germplasm to Non-lowa Growers	15	0	15	0
AFA Soybean Varieties to lowa	1	0	1	0
AFA Soybean Varieties to Non-lowa	1	0	1	0
Technology Agreements to Iowa Companies	3	1	1	1
Technology Agreements to Non-lowa Companies	15	8	5	2
Total Commercial Agreements	50	9	38	3

ISURF currently maintains a portfolio of 340 active license and option agreements, 159 of which are technology licenses and options. A summary of the categories currently in the portfolio is presented below in Table 2.

Table 2: Portfolio of Active Agreements at Fiscal Year End

	Fiscal Year									
	03	04	05	06	07	08	09	10	11	12
License Agreements										
Seed/Germplasm/not patented	849	702	498	444	327	275	210	217	156	150
AFA Soybean Varieties/patented	8	47	92	74	92	70	57	104	57	31
Other	138	145	132	154	153	162	159	157	156	147
Option Agreements	21	22	23	18	10	10	2	4	6	12
Total Active Agreements	1016	916	745	690	582	517	428	482	375	340

ISURF
CURRENTLY
MAINTAINS A
PORTFOLIO OF 340
ACTIVE LICENSES
AND OPTION
AGREEMENTS

SBIR/STTR Activity

Preliminary award reports indicate that Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) funding will be comparable to FY12, and higher than funding levels of just a few years ago. An emphasis placed on outreach and training activities in addition to providing proposal preparation support through the Office of Intellectual Property and Technology Transfer has contributed to companies successfully competing for funding in the face of budget constraints and increasing competition; 21 companies received assistance in preparing 23 proposals in FY2012. Reauthorization of the SBIR/STTR programs in late 2011 will also bring changes to the programs in the future with respect to eligibility to participate, amount of the set-aside, award ceilings, and outreach.

To date, awards worth \$6.2M have been reported for FY12, with 15 different Iowa companies winning 21 new or continuing SBIR and STTR awards. The Departments of Agriculture and Defense, as well as the National Institutes of Health (NIH), the National Aeronautics and Space Administration, and the National Science Foundation are funding this year's Iowa SBIR/STTR award winners. The funded projects reflect Iowa's strengths in biotechnology, information systems, manufacturing, and agriculture. Over \$2.5M in support was awarded from NIH for diverse projects that range from the development of medical imaging and analysis technologies to new animal models for human diseases.

An additional \$1.8M has been received from the Department of Defense for projects that include development of underwater sonar transducers to methods for characterizing free-play in control surfaces to performance assessments for human and systems in operational environments.

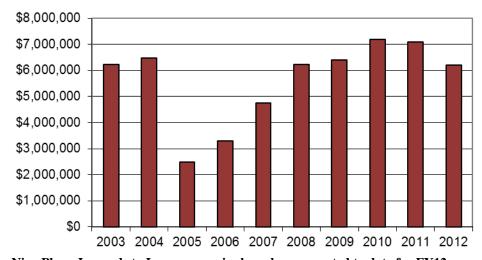


Figure 4: Iowa SBIR/STTR Award Dollars – FY03-FY12*

Nine Phase I awards to Iowa companies have been reported to date for FY12. Iowa companies also received eleven Phase II awards in FY12. The majority of funding was awarded by the Department of Defense and the National Institutes of Health.

IN FY12, 21 IOWA
COMPANIES
RECEIVED
SUPPORT IN
PREPARING 23 SBIR
OR STTR
PROPOSALS

^{*}Preliminary numbers.

Technology and Germplasm Financial Information

Revenues

Licensing activity includes both technology and germplasm. The total income, which includes license fees, royalties (earned royalties based on sales and minimum royalty payments), material transfer agreement fees, patent expense reimbursement from licensees, and research support leveraged through licensing activities was \$10.1M for FY12, a decrease of \$1.7M from FY11. This includes income of \$194K from seed/germplasm licenses, a decrease from FY11's \$288K. Table 3 provides a categorical breakdown of our licensing income from the various sources.

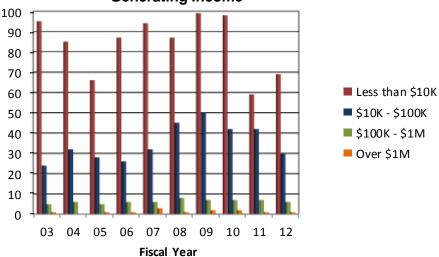
Table 3: Income Related to Licensing Activity

	Fiscal Year									
Category	03	04	05	06	07	80	09	10	11	12
				Royalty	y Income	* (x US \$	1,000)			
Licenses										
Plant Germplasm/not patented	289	167	177	234	249	214	200	211	243	165
AFA Soybean Varieties Patented		11	44	135	165	66	202	355	45	29
Other	6,032	2,226	4,317	7,424	17,513	8,800	8,680	8,933	11,234	9849
Option Agreements	482	382	374	200	149	249	154	169	150	31
Administrative & MTA Agreements	17	12	23	71	48	136	106	167	169	64
Total for All Agreements	6,820	2,798	4,935	8,064	18,124	9,465	9,342	9,835	11,841	10,138

^{*}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. Figures do not include income from educational materials.

Of the 340 active license and option agreements in ISURF's portfolio, 188 (55%) generated income in FY12. One agreement produced income over \$1M; 6 agreements (3%) produced income from \$100K – \$1M; 34 agreements (18%) produced incomes from \$10K - \$100K; and 147 agreements (78%) produced less than \$10K in FY12. As shown by Figure 5, of the 106 non-plant germplasm licenses generating income, the majority (69 licenses) produced \$10K or less in income annually. A ten-year historical table is provided in Exhibit C.

Figure 5: Non-Plant Germplasm Licenses and Options Generating Income¹



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

OVER HALF OF THE ACTIVE LICENSE AND OPTION AGREEMENTS GENERATED INCOME IN FY12, WITH ONE PRODUCING OVER \$1M

Expenses

FY12 technology and germplasm expenses (patent/legal costs, royalty sharing, licensing and infringement/litigation expense and research support payments) of \$6.7M were lower than FY11's \$8.3M due to an decrease in royalty sharing expense. Patent prosecution expense (disclosure, application, patent, foreign, and patent maintenance) of \$1M is slightly lower than FY11's \$1.1M.

Figure 6 provides a historical view of the technology and germplasm related income and expense.

20,000 18,000 16,000 14,000 12,000 10,000 ■ Total Income ■ Total Expense 8,000 6,000 4,000 2,000 0 03 04 05 07 06 80 09 10 11 12

Figure 6: Technology and Germplasm Related Income and Expense

Reimbursement of our patent prosecution expense from our licensees was 23% in FY12. The average over five years is 43%. Figure 7 provides a five-year comparison of expense reimbursement and patent prosecution expense. Table 4 provides a five-year overview of income and expense for our technology and germplasm activity.

Fiscal Year

1,600 1,400 1,200 Patent Prosecution & 1,000 \$U.S. X 1,000 Maintenance Expense 800 Expense Reimbursement 600 400 200 0 80 09 10 11 12 Fiscal Year

Figure 7: Reimbursement of Patent Expense - Five Years

REIMBURSEMENTS
RECEIVED FROM
LICENSEES
RANGED FROM 23%
TO 62% OVER THE
LAST 5 YEARS FOR
AN AVERAGE OF
43%

Table 4: Technology and Germplasm Related Income and Expense

0,	•			•	
		Fi	scal Yea	r	
	2008	2009	2010	2011	2012
		\$U	.S. x 1,00	0	
INCOME					
Royalty Income	8,580	8,833	9,402	11,308	9,902
Expense Reimbursement	835	508	433	534	236
Research Income	50	1	0	0	0
TOTAL	9,465	9,342	9,835	11,842	10,138
EXPENSE					
Patent Prosecution & Maintenance	1,356	1,122	1,171	1,118	1,028
Licensing	56	28	28	5	18
Infringement/Litigation	2	137	157	78	99
General Legal	12	6	15	5	34
Royalty Sharing to ISU Parties	3,477	3,141	2,968	4,180	5,190
Royalty Sharing to Others	2,605	2,904	2,561	2,888	308
Research Support - ISU	50	2	0	0	0
TOTAL	7,558	7,340	6,900	8,274	6,677
Net Income (Expense)	1,907	2,002	2,935	3,568	3,461

ISURF
DISBURSED
\$2.3M TO ISU
INVENTORS
AND AUTHORS

Income Distribution

From income received in FY12, ISURF disbursed \$2.3M to current and former ISU inventors and authors. Another \$2.4M was distributed to seven different academic units in royalty sharing. Table 5 summarizes the royalty sharing paid to the individual academic units since FY03.

Table 5: Royalty Sharing with Academic Units

	,	,	9			
			Fiscal Yo	ear (\$US)		
Academic Unit (1)	2010	2011	2012	3-Yr Total	5-Yr Total	10-Yr Total
Agriculture/Exp. Station	376,769	462,670	465,539	1,304,978	4,919,499	5,860,377
Engineering	40,240	22,462	24,704	87,406	109,935	213,717
Veterinary Medicine	364,363	38,000	49,075	451,438	592,456	1,021,363
Liberal Arts & Sciences	10,757	17,195	13,266	41,218	65,271	123,283
IPRT ⁽²⁾	8,202	3,207	9,259	20,668	46,090	2,580,125
Ames Lab	929,208	1,103,662	1,813,266	3,846,136	5,937,966	6,874,087
Provost and Extension	2,500	7,060	2,416	11,976	18,557	20,002
All Units Total ⁽³⁾	1,732,039	1,654,256	2,377,525	5,763,820	11,689,774	16,692,954

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

⁽²⁾ Sharing to IPRT includes royalties for Ames Laboratory for FY03-06 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 lowa Manufacturing Technology Center, the lowa 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.

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. ISURF has provided the university with research grants since FY99. Table 6 provides a summary of all funds ISURF provided to ISU in FY12.

Table 6: Grants, Research Support and Royalty-Sharing to Academic Units and Affiliated Individuals from FY2012 Operations

	Royalty	Royalty	ISURF	FY
	Sharing	Sharing to	Funded	Unit
Iowa State Unit	to Unit	Unit Inventors	Projects	Total
		(\$US))	
College of Agriculture/Exp. Station	465,539	469,792		935,331
College of Engineering	24,704	24,704		49,408
College of Veterinary Medicine	49,075	49,115		98,190
College of Liberal Arts & Science	13,266	13,415		26,681
IPRT	9,259	9,259		18,518
Ames Lab	1,813,268	1,729,148		3,542,416
Provost and Extension	2,416	0		2,416
OIPTT	NA	NA	946,883	946,883
Iowa State General Research Support	NA	NA	187,117	187,117
Total ⁽¹⁾	2,377,527	2,295,433	1,134,000	5,806,960

⁽¹⁾ Total in "Royalty-sharing" may not match figures in "Detailed Financial Statements" due to "accrual" vs. "cash" accounting methods

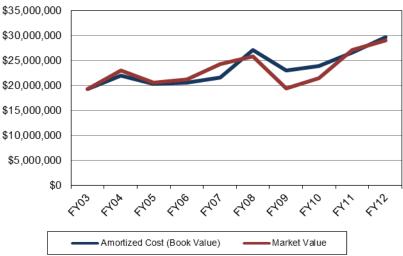
IN FY12, ISURF
DISBURSED \$3.5M
TO ISU UNITS FOR
ROYALTY SHARING
AND ISURF-FUNDED
PROJECTS

Fiscal Year 2012 **Financial Statement**

ISURF's FY12 annual financial audit was conducted by Schnurr & Company, LLP. ISURF completed FY12 with net assets of \$27.3M, an increase of \$1.4M over FY11. A net operating gain of \$2.7M was realized. The net gain from investments with realized interests and capital gains was \$1.1M, and a loss from investments with capital gains not yet realized for the year was \$1.3M. Total expenditures (including grants) of \$8.6M were less than the revenues (including investment, income or loss) received of \$10M.

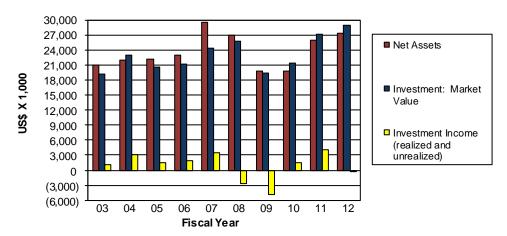
ISURF closed out the fiscal year with total assets of \$36.1M and \$8.8M in liabilities. ISURF's investments had a market value of \$29M at the close of FY12. Figure 8 provides a ten-year historical review of ISURF's investments. Figure 9 compares net assets with investments' market value and return on investment.

Figure 8: Investments



\$25,000,000 \$20,000,000 \$15,000,000 IN FY12, ISURF'S \$10,000,000 \$1.4M AND **EXPENSES** \$1.3M

Figure 9: Net Assets and Investments FY03-FY12



NET ASSETS INCREASED BY DECREASED BY

Exhibit A

Summary of Activity: Ten-Year History

	Fiscal Year									
Category*	03	04	05	06	07	80	09	10	11	12
Annual Activities:										
Disclosures Received	134	110	142	120	114	87	95	111	106	102
Disclosures Inactivated	123	34	43	49	55	71	195	58	42	45
Patent Applications Filed (1)	37	52	54	52	41	53	40	26	47	56
Provisional Applications Filed	41	48	39	30	43	37	23	44	42	29
Patent Applications Abandoned	11	5	16	8	18	20	26	12	25	30
Provisional Applications Abandoned	11	12	15	8	8	10	9	4	9	13
Patents Issued	27	27	15	19	26	27	23	29	25	16
Patents Expired or Abandoned	24	18	24	38	16	22	25	12	25	34
Licenses & Options Signed (2)	187	166	218	140	113	62	84	97	49	50
Portfolio Status:										
Active Disclosures	441	481	540	571	609	586	456	492	516	537
Patent Applications in Progress	110	129	143	160	153	163	154	141	134	145
Active Patents	373	383	374	355	381	390	388	408	407	389
Active License/Option Agreements (3)	1016	916	745	690	582	517	428	482	375	340

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

⁽¹⁾ Includes converted provisional applications

⁽²⁾ FY12 figure includes 32 licenses for non-patented plant germplasm

⁽³⁾ FY12 figure includes 150 active licenses for non-patented plant germplasm and 31 licenses for AFA soybean varieties patented

Exhibit B

Detailed Disclosure and Patent Activity: Eight Years

Figual Voor								
05	06	07	08	09	10	11	12	
24	6	13	3	a	3	0	9	
							0	
							35	
							29	
							29	
							0	
142	120	114	87	95	111	106	102	
540	571	609	586	456	492	516	537	
90	57	78	54	56	68	60	58	
							15	
							12	
							8	
							2	
21	32	20	18	19	22	19	22	
39	30	43	37	23	44	42	29	
							16	
							20	
18	16		16	4	5	20	20	
0	0	0	0	0	0	0	0	
0	2	0	0	0	0	0	0	
54	52	41	53	40	26	47	56	
41	39	24	39	32	16	37	38	
13	12	17	14	8	10	10	18	
143	160	153	163	154	141	134	145	
140	100	100	100	104	141	104	140	
	12				10		6	
							8	
3	3	11	6	4	8	7	2	
0	0	0	0	0	0	0	0	
				0	0		0	
15	19	26	27	23	29	25	16	
374	355	381	390	388	408	407	389	
28	18	2	13	6	8	0	8	
1	0	28	0	4	15	0	0	
5	8	6	7	3	7	1	7	
14	1	5	5	3	2	2	7	
1	4	1	7	1	3	3	11	
0	0	0	0	0	0	0	0	
49	31	42	32	17	35	6	33	
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Exhibit C

Licensing Activities at ISURF: A Ten-Year Summary

					Fisca	l Year				
Category	03	04	05	06	07	08*	09	10	11	12
FY License Agreements										
Seed/Germplasm/not patented	150	107	138	72	58	31	52	38	21	30
AFA Soybean Varieties/patented	8	39	67	23	26	0	15	27	14	2
Other	18	13	7	40	25	25	15	28	12	9
FY Option Agreements	11	7	6	5	4	6	2	4	2	9
Total Commercial Agreements	187	166	218	140	113	62	84	97	49	50
Other Agreements related to										
Licensing Activities:										
Confidentiality Agreements	59	45	44	36	36	38	26	28	29	31
Material Transfer Agreements	22	42	43	66	37	20	6	46	42	46
Plant germplasm R & D Agts	93	93	89	74	28	42	38	22	17	11
Administrative Agreements**	9	6	2	9	8	6	4	10	7	3
Miscellaneous Agreements***	23	17	8	12	5	19	11	13	17	10

^{*}One "other" license for AFA patented trait devleopment includes a license to AFA varieties.

Commercialization Agreements Producing Income: A Ten-Year Summary

	Fiscal Year									
Agreements with Income*	03	04	05	06	07	80	09	10	11	12
Over \$1M / FY	1	0	1	1	3	1	2	2	1	1
\$100K - \$1M / FY	5	6	5	6	6	8	7	7	7	6
\$10K - \$100K / FY	30	32	29	32	38	52	57	50	49	34
< \$10K / FY	401	324	282	260	222	189	198	201	141	147
Total No. of Agreements	437	362	317	299	269	250	264	260	198	188

^{*}Includes licenses, options, material transfer agreements and administrative agreements. Figures include license fees, royalties on sales and guaranteed minimums, research support leveraged through licensing activities, proprietary seed transfer fees, and expense reimbursement.



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

^{***} Includes new master agreements, in-licensed technology and amendments to existing agreements which do not fall under the above footnote.

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Dr. Steven Leath President – Iowa State University

Mr. Warren R. Madden

Vice President - Business and Finance, ISU

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