

## WHAT IS ASRF

The American Seed Research Foundation (ASRF) is an extension of the activities of the Seed Laboratory Committee, which was active during the 1940s and 1950s. In 1959, the American Seed Trade Association established ASRF as a tax-exempt, scientific, benevolent, and educational organization, to raise and distribute funds for seed research.

## ASRF OBJECTIVES

The primary objective of the Foundation is to Encourage Research Which Explores The Basic Principles Underlying Why Seeds Behave As They Do.

Basic research is costly. It is much too costly for seedsmen, regardless of the company size, to undertake individually. State and Federal Experiment Stations do as much seed research as their funds and facilities permit, but they have many other commitments. They cannot concentrate on the particular problems of seedsmen, unless the research needed by the industry is underwritten by seedsmen.



► OWEN NEWLIN, RETIRED  
PIONEER HI-BRED  
INTERNATIONAL, INC.

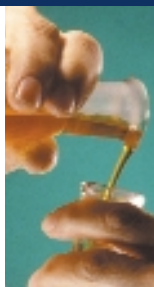
"For over four decades, the American Seed Research Foundation (ASRF) has made a difference in agriculture through seed research. The ASRF funding has been instrumental in recruiting and retaining graduates that become the scientists and industry leaders of tomorrow. Supporting the ASRF mission and its programs is investing in the future of agriculture."

# ASRF

## AMERICAN SEED RESEARCH FOUNDATION

The Mission of ASRF is to Encourage  
Research in Plant & Seed Biology & to  
Facilitate the Transfer of Resulting Technology  
to Benefit the Seed Industry, Farmers &  
Consumers on a Global Basis.

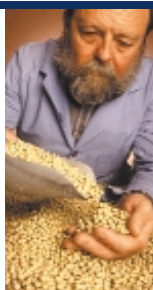
## HOW MUCH IS IT WORTH TO YOU



- ▶ to know the potential field performance of the seed you produce, buy or sell?
- ▶ to know the analysis of your seed was so accurate that it is above challenge?
- ▶ to have an accurate evaluation of the vigor of your seed and its longevity?
- ▶ to evaluate quickly and accurately dormant and hard seed?
- ▶ to have a twenty-four hour test that will accurately predict germination of seed?
- ▶ to know required storage conditions to maximize longevity of your seed?
- ▶ to detect quickly and control effectively pathogens that are seed borne?
- ▶ to treat seed internally and externally with fungicides and insecticides for more optimum plant populations and higher yield?
- ▶ to substitute bio-engineered organisms for chemicals to control seed and soil borne pathogens?
- ▶ to verify the genetic purity of your breeding lines and varieties prior to distribution and planting?
- ▶ to protect your proprietary products from infringement by use of genetic markers?
- ▶ to have automated production of a synthetic seed system for genetically improved crops?
- ▶ to prime seed to accelerate germination?
- ▶ to coat seed to promote precision planting and eliminate thinning?

The answers to these and similar questions are continuing to be answered by the **BASIC SEED RESEARCH** funded by ASRF through the support of its members.

## ACCOMPLISHMENTS



Since the inception of the Foundation, over 800 project proposals have been reviewed, and 54 have been funded. The total investment of ASRF in support of Basic Seed Research has exceeded \$800,000. These funds stimulated other sources of research support, with a 3 to 1 multiplier effect, adding another \$2,500,000 of matching funds provided by other cooperating organizations. ASRF funds have been distributed to 32 public institutions, and supported 69 individual seed researchers.

A bonus from ASRF research grants is the large number of students who have completed Master's and Doctor's degrees while receiving financial support from ASRF. Following completion of advanced degree requirements, these young scientists have joined seed companies, or been appointed to the faculties at state and federal institutions. Their theses have been the basis of hundreds of research reports and papers. These reports are currently published in *Seed Technology*.

## INCREASING COSTS OF SEED RESEARCH

ASRF dues have not been increased for at least twelve years, but the expenses of conducting basic seed research have increased dramatically. For example, in 1988 a graduate student at Iowa State received \$9,576 per year, while in 2001 the annual salary is \$15,000 per year, plus medical insurance. At the University of Florida, Assistant Professors starting salaries in 1988 were \$32,000 per year, while now they receive \$62,000.

The public support base for Seed Biology research has eroded. The USDA-CRIS database identifies only 98 active seed research projects, and many of these relate to germplasm improvement.

## EDUCATIONAL ACTIVITIES

Although seed research results are the primary focus of ASRF funding, an important side benefit is the training of graduate students who may find careers in the seed industry, or support the industry from their positions at public institutions.

In further recognition of the educational role of ASRF, Operation Student Connection was established in 2001. The objective is to encourage graduate students majoring in seed science to attend the ASTA Annual Convention, and become exposed to our industry. ASTA has discounted registration fees, and ASRF is funding travel and hotel expenses, to encourage graduate student attendance.



► MANJIT MISRA,  
IOWA STATE UNIVERSITY

"ASRF funding is a great investment to attract the best and brightest minds to the seed profession."



► DAN CANTLIFFE,  
UNIVERSITY OF FLORIDA

"Funding from ASRF has allowed me to work on problems relating to seed vigor, as well as vigor tests for sh2 corn which are currently being used by the industry. The funds have supported three PhD students, who all work for the seed industry today."

## BASIC VERSUS APPLIED RESEARCH

As early as 1975, it was recognized that ASRF funds were only sufficient to support basic studies that had broad application to the seed trade. No attempt was made to address more applied kinds of research that might be of interest to various ASTA Divisions. However, several Divisions have collected funds for specific applied projects, such as Gray Leaf Spot in Maize, and Watermelon Fruit Blotch, and requested ASRF to administer these funds. ASRF has the legal and administrative structure to disperse such tax-deductible contributions.

In 1991, the administration of Divisionally-funded research projects was formalized by the establishment of a Permanent Research Fund in the Vegetable and Flower Seed Division, which ASRF administers. To date, this Divisional fund has collected over \$500,000, and supported 19 applied vegetable seed research projects. Discussions are now underway with the Corn and Sorghum Basic Research Committee, and the Soybean Basic Research Committee, to establish similar Permanent Research Funds.



► BILL KUHN,  
PIONEER

"ASRF provides an opportunity for industry to identify and support key basic seed research to increase our scientific understanding of basic seed development and why/how seeds react to various environmental factors. This increased understanding is critical to the continued success of the seed industry. ASRF also provides the important wide benefits of providing training for future scientists to work in seed related research in industry as well as the public sector and provides the opportunity for exchange of ideas between industry and the public sector concerning the most critical areas of basic seed research needed."

## ASRF FUNDING POLICY



To maximize the use of ASRF grants, cooperating institutions agree to furnish buildings, land, greenhouse space, supervision, etc., in support of the projects, and also agree that no indirect cost or overhead shall be deducted from these grants.

Since the ASRF is supported by a broad base of seed industry members, it is the intent of the ASRF to fund research projects in which the findings will be made available to all. Research supported by ASRF grants is intended for the benefit of the public good. If patentable information results from this research, the University has the option to seek patent protection; however, the licensing of such patents will be on a nonexclusive basis.



► MILLER MCDONALD,  
OHIO STATE UNIVERSITY

"In today's competitive world of research funding, ASRF funding of research projects enables scientists to successfully leverage additional internal research funds, while simultaneously identifying important research projects of practical interest to the seed industry."



► JIM DODD,  
PROFESSIONAL SEED RESEARCH, INC.

"ASRF research grants address the most significant issues of seed biology which potentially affect all the seed industry."

## ORGANIZATION & PROCEDURES

### MEMBERSHIP:

All persons, firms, partnerships, corporations, institutes, foundations, trusts, trade associations, and other duly constituted organizations, interested in advancing the purposes of the Foundation, shall be eligible for membership therein.

### FUNDING:

Annual dues are paid by all members based on a schedule approved by the Board of Directors.

### OFFICERS:

The Foundation operates under a Board of Directors with a President, First and Second Vice Presidents, and a Secretary-Treasurer. All officers and directors are members of both the ASTA and the ASRF. The members elect the Board of Directors, who in turn, elect the Officers.

### SCIENTIFIC ADVISORY COUNCIL:

The Board of Directors appoints a Scientific Advisory Council of not less than twelve or more than twenty-four members to serve in an advisory capacity in the selection of research projects.

Members of the Council shall serve for a period of three years and are eligible for reappointment.

It is the objective of the Foundation that one-half of the Council members shall be selected from members of the seed industry and the other half to consist of public scientists associated with research institutions distinguished for competence in the field of agriculture sciences.

The Chairman of the Scientific Advisory Council is appointed by the officers of the ASRF and reports directly to the President.



## ENDOWMENT FUND

The ASRF Board of Directors established an ASRF Endowment Fund in 1990. This fund is a combination of income from ASRF Life Members, the Fred Rohnert Endowment, and the Robert Huey Endowment. The purpose of this endowment fund is to provide a means by which individual seedsmen and others may contribute to basic seed research by making life contributions or bequests in their wills to ASRF. The principle of the endowment fund, which currently is over \$70,000, is to be kept intact. However, the interest earned is used to fund basic seed research. Others who may want to further the work of ASRF through bequests, cash contributions or other means, are encouraged to contact the ASRF officers.



► ALAN TAYLOR,  
CORNELL UNIVERSITY

" Past ASRF grants provided the essential funding to conduct cutting edge research on seed biology, attract the best people to the program, and resulted in matching funds to acquire state-of-the-art instrumentation."



► DENNIS TEKRONY,  
UNIVERSITY OF KENTUCKY

" The grant from ASRF allowed us to conduct seed storage studies of hybrid and inbred corn, and to critically evaluate a viability model for predicting declines in seed germination for this species."

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► FOR FURTHER INFORMATION  
CONTACT ANN JORSS AT:

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# SCIENTIFIC ADVISORY BOARD



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RESEARCH FOUNDATION

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Visit Our Web Site at  
[www.amseed.com/asrf/index.html](http://www.amseed.com/asrf/index.html)

revised 2001

# ASRF MEMBERSHIP APPLICATION

Date\_\_\_\_\_

Firm\_\_\_\_\_

Address\_\_\_\_\_

City\_\_\_\_\_ State\_\_\_\_\_ Zip\_\_\_\_\_

Name of Officers of Firm:\_\_\_\_\_

President\_\_\_\_\_

Vice-President\_\_\_\_\_

Secretary-Treasurer\_\_\_\_\_

Firm will be represented by\_\_\_\_\_

Application is hereby made for annual membership in the Foundation. Annual dues based upon annual gross sales of seed applicable thereto are: (Circle one)

(A-R includes Seed and Seed Technology Companies, Seed Treatment and Coating Companies and Seed Testing Companies)

<u>Classification</u>	<u>Annual Gross Sales of Seed (\$)</u>	<u>Annual Dues</u>
A	Over 500,000,000	\$8500
B	400,000,001 to 500,000,000	\$7500
C	300,000,001 to 400,000,000	\$6500
D	200,000,001 to 300,000,000	\$5500
E	150,000,001 to 200,000,000	\$4500
F	100,000,001 to 150,000,00	\$4000
G	50,000,001 to 100,000,000	\$3400
H	30,000,001 to 50,000,000	\$2700
I	25,000,001 to 30,000,000	\$2300
J	20,000,001 to 25,000,000	\$2100
K	16,000,001 to 20,000,000	\$1900
L	12,000,001 to 16,000,000	\$1600
M	8,000,001 to 12,000,000	\$1200
N	4,000,001 to 8,000,000	\$1000
O	2,000,001 to 4,000,000	\$750
P	1,000,001 to 2,000,000	\$500
Q	500,000 to 1,000,000	\$300
R	Less than \$500,000	\$200
S	Equipment Companies	\$500
T	State and Regional Seed Associations	\$300

Signed\_\_\_\_\_

Print Name\_\_\_\_\_

Mail to: **AMERICAN SEED RESEARCH FOUNDATION**

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