

career handbook for school counselors and college advisors

# ● Seeds of Opportunity

“Working in the seed industry is very rewarding. It gives me great satisfaction to know that I’m helping to feed the world.”

Dr. Alan W.  
Soybean Product Development

## Did you know that there are lots of exciting jobs in the seed industry?

Take a look inside this handbook to explore the many different types of careers it offers. You’re about to discover that the seed industry is a vital, growing field whose employees not only make a good living, they also make a difference.

## Seeds impact our lives every day.

The impact of seeds on our lives is enormous. The food we eat, the clothes we wear and the fuel that gets us from point A to point B, all come from seed. From corn, cotton and canola to wheat, barley and soybeans to fruits and vegetables, seeds affect every aspect of our lives on a daily basis!

## Do you want to change the world?

Are you concerned about important issues like the energy crisis, global warming and world hunger? Would you like to positively impact the future of America and the World? If you’re looking for an opportunity to do good for a better world then consider one of the many seed careers.

*The seed industry accounts for nearly 22 million jobs in the United States.*

## What's inside this handbook?

|   |       |
|---|-------|
| <b>Seed Careers List:</b> A list of seed careers with the most opportunities. There's sure to be a perfect match for you! .....   | 5     |
| <b>Seeds of Preparation:</b> A handy checklist to guide you through the basic steps in preparing for a future seed career. Get started today! .....   | 8-9   |
| <b>Seeds of the Future:</b> A parent handout with information and resources for learning about the wonderful career opportunities in the seed industry. ....  | 10    |
| <b>Resources:</b> A valuable, time-saving list of websites so you can check out seed-related careers, colleges, scholarships, internships and much more – without leaving your chair! .....   | 11    |
| <b>Seed Career Profiles:</b> Career profiles of real people that give you a better idea of their job responsibilities, as well as the interests, skills, education and training that led them to a successful career in the seed industry. You can check out more career profiles online at <a href="http://www.firsttheseedfoundation.org">www.firsttheseedfoundation.org</a> . .... | 12-14 |

● Seeds +  You = A Better  World

When you choose a career in the seed industry, you'll be making the world a better place!



### Why are seeds important?

#### **Seeds are the foundation of life.**

Seeds are the foundation of life on earth, and the seed industry is a multibillion-dollar, high-tech business that plays a critical role in providing food, clothing and fuel to people throughout the world. Today's seed industry is at the forefront of a growing wave of innovative products, processes and ideas that are improving the way we live each and every day.

#### **Seeds are the basis for agriculture, and technology is critical.**

As the delivery mechanism for new plant technologies and varieties of plants, seed is the crux of agriculture. Quality seed is essential for growing quality crops. During the past 30 years, the use of new technologies has led to a 50% increase in productivity of the major agricultural products.

#### **Seeds play a vital role in addressing global challenges.**

Between 2015 and 2030, the world population is expected to grow by over 1.86 billion people, many of them in underdeveloped countries. Thanks to continuous improvement in technology and productivity, the seed industry is putting itself in a position to meet these expanding needs.

#### **The seed industry supports innovation.**

Seed companies devote significant time and resources to innovation. In 2007 alone, the industry spent nearly \$3 billion on research and development. Currently, projects include drought-resistant crops, biodegradable industrial products and vaccines that are delivered in fruits.

#### **Seeds boost our economy.**

The seed industry is making a growing contribution to the economy. In 2007, the U.S. seed industry, which represents about 21% of the global seed market, generated \$11.2 billion in sales. It is also expected to provide 52,000 annual job openings for new graduates through 2010.

“Everyone is looking for a career that makes a difference. What greater difference could one make than this?”

Rob R.  
Seed Business Owner



# Seeds of Success

“The salaries in the seed industry are very competitive. In my area of the business they range from \$65,000 to \$160,000.”

Lauren S.,  
Bulk Seed Production Supervisor

## There are 22 million reasons to consider a job in the seed industry.

Today's seed industry is a science-based, high-tech field that generates nearly 22 million jobs in the United States – the majority of which are located off the farm. In fact, fewer than 2 million Americans are actively engaged in farming today. The last two decades have seen tremendous advances in seed innovations and technologies, and, from all indications, the best is yet to come.

## What kinds of jobs are there in seeds?

Small businesses, major corporations and government agencies offer career opportunities for people with a variety of skills and interests. The four categories are Management and Business; Scientific and Engineering; Agriculture and Forestry Production; and Education, Communication and Governmental Services.

## Where are the jobs?

Career opportunities in the seed industry can be found throughout the country, and many are international in scope. So whether you're interested in a technical job that's off the beaten path, a laboratory job in a major city or a job that lets you split your time between both, the seed industry has something for you.

## What will I get paid?

The salary range for an entry-level job for a college graduate with a Bachelor of Science degree could be from the mid-\$30,000s to low \$40,000s. Experienced professionals could expect to receive a starting salary in the mid-\$60,000s. These figures are estimated and salaries will vary across the various regions and career positions. To explore seed-related careers and salaries, visit [www.seedquest.com](http://www.seedquest.com) and [www.agcareers.com](http://www.agcareers.com).

## TIP

To learn about what seed jobs are like directly from seed professionals themselves, you can jump over to the *Career Profiles* on pages 12-14 or visit [www.firsttheseedfoundation.org](http://www.firsttheseedfoundation.org).

*There are career opportunities in the seed industry from coast to coast.*

## A Positive Career Forecast

A 2004 study by the U.S. Department of Agriculture estimated that there would be around **52,000 job openings** in the seed industry for new graduates through 2010, but only 49,300 qualified graduates available each year for these positions.

## Seed Career List

### Management and Business

- Market Research and Planning
- Advertising
- Product Management
- Marketing Administration
- Customer Service Manager
- Financial Manager
- Food Broker
- Human Resources Manager
- Sales Representative
- Business Manager

#### Interests and Skills:

*sales, marketing, communication, organization, collaboration, creativity*

### Agriculture and Forestry Production

- Fruit and Vegetable Grower
- Greenhouse Manager
- Seed Producer
- Aquaculturist
- Field Production Agronomist
- Plant Operator
- Maintenance Technician
- Tree Farmer
- Viticulturist

#### Interests and Skills:

*science, technology, computers, nature, problem-solving*

### Scientific and Engineering

- Plant Breeder
- Research Scientist
- Molecular Geneticist
- Field or Lab Technician
- Entomologist
- Pathologist
- Bioprocess Engineer
- Food Engineer
- Nanotechnologist
- Environmental Scientist
- Field, Plant, and Quality Manager
- Biomaterials Engineer
- Physiologist

#### Interests and Skills:

*science, mathematics, genetics, computers, technology, research*

### Education, Communication and Governmental Services

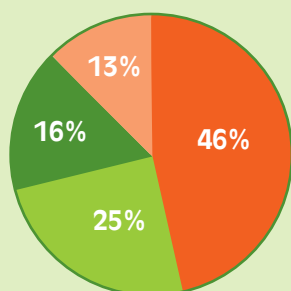
- Agricultural Science and Business Teacher
- Agricultural Science Reporter
- Environmental Impact Analyst
- Food Inspector
- Public Relations Specialist
- Naturalist
- Conservation Officer
- Plant and Animal Inspector

#### Interests and Skills:

*science, mathematics, education, communication, research, nature*

“The nice part about agriculture is that there are literally opportunities everywhere.”

Jerry F.,  
Director, Regulatory Affairs



- Management and Business
- Scientific and Engineering
- Agriculture and Forestry Production
- Education, Communication and Government Services



# Seeds of Growth

“Agricultural research and innovation allows you to make a contribution that beneficially impacts millions of acres, farmers and consumers.

Kater H.,  
Agricultural Research

*Note to self:  
Research career  
opportunities in  
the seed industry.*

## Ten Good Reasons to Consider a Career in the Seed Industry

- 1 You'll change the world.**  
The seed industry has a rich history of innovation and will be a key player in addressing critical issues such as world hunger and the energy crisis.
- 2 You'll be helping people.**  
The seed industry is working to produce healthier foods, cleaner, more energy-efficient fuels and better products.
- 3 You'll make a good living.**  
Starting salaries in the seed industry range from \$30,000-\$100,000+, depending on educational background and work experience.
- 4 You'll be part of a growing field.**  
The seed industry generated more than \$11 billion sales in 2007 and is expected to offer new graduates about 52,000 jobs annually through 2010.
- 5 You can choose from a wide range of jobs.**  
The seed industry offers many rewarding career opportunities for students with a variety of skills and interests.



**6 You can choose from a wide range of employers.**

The seed industry is made up of a diverse collection of organizations – from small businesses to government agencies to major corporations.

**7 You can choose from a wide range of locations.**

There are seed industry jobs throughout the country, in both urban and rural areas.

**8 You'll be working with cool people.**

There are lots of innovators in the seed industry, people who are changing the world on a daily basis.

**9 You'll have lots of room to grow.**

Nearly every job in the seed industry offers room to grow – from the science and technology jobs to the marketing and communication positions.

**10 You'll be protecting the environment.**

The seed industry is constantly working to find ways to leave a smaller environmental footprint.

**TIP**

**Counselors/Advisors:** The next four pages “Seeds of Preparation” are designed as tools for working with students and parents. We suggest using the two-page student handout as a tool for guiding students through an exploration of education and career paths. You may choose to have students explore the resources on page 11 prior to meeting with them.

*It pays to work in the seed industry, with some starting salaries of up to \$100,000.*

“Agriculture is a face-to-face industry where personal values and integrity play an important role in getting things done.”

Jerry F.,  
Director, Regulatory Affairs





# Seeds of Preparation

The time to think about your career is now. Even if you're still in high school, there are steps you can take to begin to prepare for a rewarding career in the seed industry. Here's a handy four-step checklist to guide you through the process.

## **STEP 1** Get to Know Yourself Better

The first step in discovering a career in the seed industry is taking some time to discover YOU.

- ☐ **Meet with your school counselor or college advisor.** Ask for help in exploring career paths in the seed industry.
- ☐ **Think about what you're good at.** When researching seed careers, you'll want to consider those that match your talents and interests.
- ☐ **Consider your personal values.** What's important to you? Saving the environment? Helping to feed people in developing countries? You'll be happier going to work if you know you're contributing in a way that matters to you!
- ☐ **Take personal interest inventories.** Inventories are questionnaires you fill out to discover career paths that are right for you. With all the career opportunities the seed industry has to offer, you'll need help zeroing in on the best careers for you. Ask your counselor or advisor to give you a personal interest inventory.
- ☐ **Sign up for career exploration classes.** These classes give you an opportunity to research careers before making any decisions. They also help you prepare for life as a professional by focusing on the development of critical skills such as how to interview and write a resumé.
- ☐ **Seek opportunities to volunteer and/or intern.** Volunteering or interning gives you a chance to discover your natural talents, explore your interests and develop important skills. It also shows prospective colleges and employers that you can handle commitment. Many seed companies offer such opportunities. Visit [www.agfuture.org](http://www.agfuture.org) to learn more.
- ☐ **Find a mentor.** A mentor can be a parent, teacher, counselor or industry professional. An effective mentor will guide you in preparing for your future and encourage you to take the steps you need to pursue your career path.

## **STEP 2** Research potential seed careers and companies

Once you've found a few seed industry careers that interest you, find out what they're all about.

- ☐ **Ask your counselor for a list of seed-related websites.** There are seed professionals working in research, marketing, business and management, seed production and even education. As you learn more about each career, consider whether it matches your talents, interests and values. See page 11 for a list of seed-related websites.
- ☐ **Research educational paths for those careers.** Find colleges that offer education programs for those careers. What courses would you need to take? How much is tuition? Do they offer scholarships? You can take virtual tours of many colleges at [www.youniversitytv.com](http://www.youniversitytv.com).
- ☐ **Research companies that offer those careers.** Where are they located? How big are they? How successful have they been? Do they offer internship programs? Learn more about seed companies at [www.seedquest.com](http://www.seedquest.com).
- ☐ **Find professionals working in those careers.** Ask to interview and/or "shadow" professionals working in the seed industry to get a better idea of what they do. As you see what a typical workday is like, try to envision yourself in that career.

*Suggestions:*

---

---

---

---

---

---

---

Visit [www.firsttheseedfoundation.org](http://www.firsttheseedfoundation.org) today for more information.





## STEP 3 Plan & Implement

After you've narrowed down your list of potential seed careers to those that interest you most, dig a little deeper and then get some real-life experience.

- ☐ **Talk with a counselor or advisor again** to narrow down the list of colleges you've researched. You'll need to consider the following:
  - **GPA** – Are your grades and SAT score high enough to qualify for the school?
  - **Location** – Is the school nearby? Will you have to pay out-of-state tuition?
  - **Scholarships, grants and loans** – There are lots of ways to finance your education. Ask your counselor to help guide you in your research. Visit [www.agfuture.org/](http://www.agfuture.org/) for seed-related scholarships and grants information.
  - **Financial aid** – Visit [studentaid.ed.gov](http://studentaid.ed.gov) or [www.fafsa.com](http://www.fafsa.com) to learn more.
- ☐ **Develop skills and deepen your knowledge.** Sign up for classes that will help you gain the understanding and skills you need to pursue your desired career path in the seed industry. These could include: foreign languages, international business, sociology, biology, botany, physiology, psychology, business management, and communications, to name a few.
- ☐ **Get involved in seed-related organizations.** Find opportunities to volunteer, intern or do work-study with a company, government agency or foundation that will give you career-related experience.
- ☐ **Join organizations like 4-H, AFA, NAMA and the National FFA Organization.** These as well as many local organizations provide support and opportunities for exploring and developing your interests and talents. Do some research to see how you can get involved!
- ☐ **Choose a major.** Meet with a counselor or college advisor for help planning your career path. There are a number of academic programs that can prepare you for a future in the seed industry. These include agronomy, plant science, plant breeding, agribusiness, agricultural economics, agricultural engineering, genetics and life sciences.



## STEP 4 Re-evaluate Your Choices

As a young adult, your interests and talents may change over time. Therefore, once you've taken the before-mentioned steps, re-evaluate your choices and make adjustments. Consider whether the career path you've explored thus far still matches your talents, interests and values.

- ☐ **Give the following questions some thought:**
  - What are your top career choices at this point?
  - Have you discovered additional careers you'd like to explore?
  - Have your interests and/or talents changed?
  - What schools do you like? Make a list of your top five and write pros and cons of each.
  - Can you arrange a campus visit? Is your school planning to arrange a visit?
  - What scholarships or grants could you apply for? When are the applications due?
  - What financial aid do you qualify for? When are applications due?
  - What tests do you need to take? When are they administered? How much do they cost?
  - How are you going to prepare for the tests?





# Seeds of the Future

Whether your child is still in high school or already in college, now is the time to start thinking about the future. There are important decisions to be made – where to go to college, what to major in, what type of career to pursue – and he/she needs your help and advice to make them.

## Dear Parents/Caregivers,

Rooted in science and driven by innovation, the seed industry is full of opportunities for those who are interested in science, business, research and even education. This fast-growing “business of the future” generates nearly 22 million jobs in the U.S.!

With competitive starting salaries and a variety of careers that appeal to a wide range of different skills and interests, the seed industry is a field to consider. For more information about the seed industry, visit [www.firsttheseedfoundation.org](http://www.firsttheseedfoundation.org).

*This fast-growing business of the future generates 22 million jobs, including 52,000 new jobs per year.*

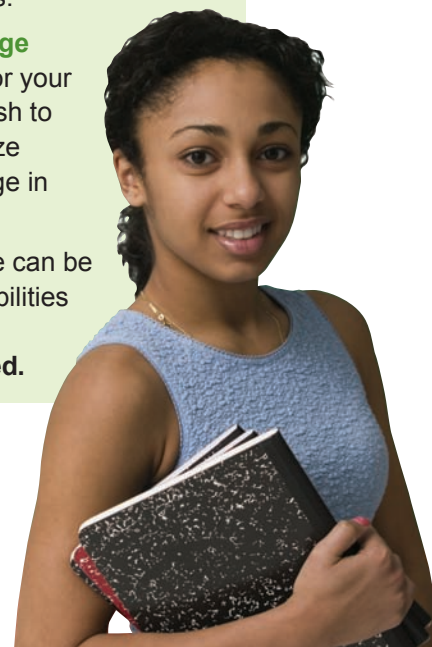
*A note from:*

Counselor's Name

## 5 steps you can take to help your child prepare for the future:

- 1. Talk to your child about the future.** Encourage him/her to explore his/her interests and talents. Talk about your personal values and how they have impacted your education and career decisions. Does he/she want to protect the environment? Help address world hunger? People who work in the seed industry not only make a good living, they also help make the world a better place.
- 2. Encourage your child to volunteer.** Volunteering builds communication skills and people skills and shows colleges and employers that your child can live up to a commitment. Many seed companies offer such opportunities. Visit [www.agfuture.org](http://www.agfuture.org) to learn more.
- 3. Assist your child in researching colleges and careers online.** It can be interesting and fun to explore different schools and programs together. Be sure to visit [www.agcareers.com](http://www.agcareers.com) and [www.seedquest.com](http://www.seedquest.com) to learn about seed careers, locations and salaries.
- 4. Encourage your child to take science, technology and foreign language classes.** We live in a plugged-in, multicultural world, and it is important for your child to take these classes no matter what type of career he/she may wish to pursue. The seed industry is a global industry where many careers utilize technology advances and being bilingual can be a significant advantage in finding a job.
- 5. Research loans, scholarships and grants with your child.** College can be an expensive proposition. Work together to explore financial aid possibilities and create a plan. Many seed-related organizations support students preparing for careers in seed. Visit [www.agfuture.org](http://www.agfuture.org) and [www.amseed](http://www.amseed).

Visit [www.firsttheseedfoundation.org](http://www.firsttheseedfoundation.org) today for more information.



# Resources

With the wealth of information available on the Internet these days, you can find out everything you need to know about preparing for college and a career in the seed industry with a few simple mouse clicks. The links below will help you get your research started:

## Seed Industry Information and Organizations

### Agriculture Careers

*Helps students explore agriculture-related careers by location and learn about internship opportunities.*

[www.agcareers.com](http://www.agcareers.com)

### Agriculture Future of America (AFA)

*Supports students preparing for careers in the agriculture and food industry by offering scholarships, leadership training and career development.*

[www.agfuture.org](http://www.agfuture.org)

### Agriculture in the Classroom

*Helps students gain a greater awareness of the role of agriculture in the economy and society*

[www.agclassroom.org](http://www.agclassroom.org)

### AgrowKnowledge

*Educates and prepares college agriculture students to utilize new technologies.*

[www.agrowknow.org](http://www.agrowknow.org)

### The Council for Biotechnology Information

*Provides information about the benefits and safety of agricultural biotechnology and its contributions to sustainable development.*

[www.whypiotech.com](http://www.whypiotech.com)

### Food and Agriculture Organization of the United Nations

*Leads international efforts to defeat hunger.*

[www.fao.org](http://www.fao.org)

### 4-H

*Helps 6 million young people across America learn leadership, citizenship and life skills through science-based service projects and campaigns.*

[www.4-h.org](http://www.4-h.org)

### FuSE

*Educates and supports future seed industry executives. Their Campus Connections program awards grants to undergraduate students wishing to pursue a career in the seed industry.*

[www.amseed.com/mtg\\_fuse\\_welcome.asp](http://www.amseed.com/mtg_fuse_welcome.asp)

### National Agricultural Statistics Service

*Provides agriculture-related statistics and career info.*

[www.nass.usda.gov](http://www.nass.usda.gov)

### National FFA Organization

*Works to help students develop career, personal and leadership skills.*

[www.ffa.org](http://www.ffa.org)

### National Postsecondary Agricultural Student Organization

*Provides seed-related opportunities for individual growth, leadership and career preparation.*

[www.nationalpas.or](http://www.nationalpas.or)

### Purdue Agriculture

*The Purdue University College of Agriculture serves Indiana and the nation through teaching, extension, research and international programs.*

[www.agriculture.purdue.edu/careerfinder](http://www.agriculture.purdue.edu/careerfinder)

### Seed Quest

*Gives students a preview of jobs in the seed industry, including job openings, locations and salaries.*

[www.seedquest.com](http://www.seedquest.com)

## College Planning Resources

### Academic Info

*Provides free and accurate information about degree programs, financial aid, test prep and more.*

[www.academicinfo.net](http://www.academicinfo.net)

### College Board

*Helps students find information about preparing for college, personal interest inventories, practice test questions, schools and programs.*

[www.collegeboard.com](http://www.collegeboard.com)

### College.gov

*Provides information about planning, preparing and paying for college.*

[www.college.gov](http://www.college.gov)

### Know How 2 Go

*Provides high-school students with a list of grade-level-specific steps and tips for preparing for college.*

[www.knowhow2go.org](http://www.knowhow2go.org)

### Student Aid on the Web

*Offers free financial aid information from the U.S. Department of Education.*

[studentaid.edu.gov](http://studentaid.edu.gov)

### YOUiversityTV.com

*Provides virtual tours of colleges and universities all over the U.S. and abroad, and highlights the top 100 careers.*

[www.youniversitytv.com](http://www.youniversitytv.com)

*Be sure to check out the virtual college tours and top 100 careers on YOUiversityTV.com.*



# Seeds of Satisfaction

## Who Works in the Seed Industry?

People of all backgrounds, geographic locations and interests work in the seed industry. The following profiles will provide a series of snapshots of the many types of jobs the industry offers.

## Career Profile 1

Lauren S.

### Job/Career Position

Bulk Seed Production Supervisor

### Location

New York City, NY

### Starting Salaries

\$65,000-\$160,000

“There are many different facets of the seed industry, so there are jobs for many different disciplines.”



### Bio

I was born and raised in North Carolina. My interests growing up were all based in the arts. I studied violin, piano and dance. I was always academically inclined, especially toward the sciences. During high school, I took advantage of a program that placed advanced students with labs at local colleges. From there, my academic interests took priority over a career in dance and I decided I wanted to be a microbiologist.

### Why I Pursued a Career in Seeds

It didn't really occur to me to work with seed until I was actually a seed producer.

### My Educational Path

In high school I took AP Biology, Physics, Chemistry, Environmental Science, History, English and Literature. I attended McGill University in Montreal, where I earned a diploma in farm management. During the school year, I worked at local farms, which was an education in itself. I have continued my education at Rutgers University, where I am currently a nonmatriculated student.

### Mentors, Clubs and Organizations

In college I belonged to the Ecological Agriculture Club, which took trips to local farms and to conferences about sustainable farm techniques. The faculty at Macdonald College was very helpful when job searching or looking for internships.

### Why I Love My Career

I enjoy seeing the crops grow and change during the season. I also like having to be creative – using new cover crops for weed management and fertilization, experimenting with different field techniques and building different contraptions to make seed cleaning easier and more efficient.

### Why My Job Is Important

New York City has limited natural areas left, so it is of the utmost ecological importance to preserve these areas and the natural genetic diversity of native plant species.

### A Typical Day at Work

I never really have a “typical” day. Sometimes I will be on my knees weeding all day or in the tractor mowing all day. More often than not, I will do several different things, ranging from gardening-type work to tractor maintenance to making spreadsheets on the seed inventory.

### Skills and Talents

Skills and knowledge required for my position are: plant identification, heavy-equipment operation, basic carpentry and mechanics, greenhouse propagation, working knowledge of soils and nutrient management, plant physiology, insect and pest identification, as well as the ability to use Microsoft Word, Excel and PowerPoint.

### Why You Should Consider a Career in the Seed Industry

There are many different facets of the seed industry, so there are jobs for many different disciplines. My advice would be to do a lot of internships because it is a great way to explore and discover your interests.

# Career Profile 2

**Dr. Alan W.**

## **Job/Career Position**

Soybean Product Development

## **Location**

Huxley, Iowa

## **Starting Salaries**

\$65,000-\$160,000

**“The seed industry is very rewarding for anyone who puts their mind and heart into it.”**



## **Bio**

I was raised on a farm near Alden, Minnesota. We grew corn, soybeans, alfalfa, oats, wheat, cattle and hogs. I loved agriculture and took agricultural classes in high school. I also participated in the county fair. My farm background made it natural for me to stay in agriculture.

## **Why I Pursued a Career in Seeds**

I wanted to study agronomy so that I could help feed a hungry world.

## **My Educational Path**

I first became interested in a career in the seed industry between my sophomore and junior year in college. I had a mentor at the University of Minnesota who helped to encourage and guide me toward my career.

- B.S., Agronomy, *University of Minnesota*
- M.S., Plant Breeding, *University of Maryland*
- Ph.D., Plant Breeding and Cytogenetics, *Iowa State University*

## **Mentors, Clubs and Organizations**

In high school, I took four years of vo-ag classes and was also a member of the FFA from freshman through senior year. In the FFA, my project was to raise hogs and show them at the annual county fair. Vo-ag classes were important to me and my career development, as was my mentor, John Nelson, who was good at determining a person's interest and helping them develop that interest.

## **Why I Love My Career**

It gives me satisfaction to know I'm helping to feed the world.

## **Why My Job Is Important**

In my job, we continuously innovate to make growing more efficient, which means better and more crop yields.

## **A Typical Day at Work**

Every day is different. We start the day by reading the daily safety messages. As a product manager, I then answer questions that come in from sales reps and agronomists in the field on product characteristics. Planning for the next year's seed supply takes a lot of time during the winter and spring months. During the summer I train agronomists and sales reps on products. During the fall I am evaluating potential products and selecting the best to be commercialized.

## **Skills and Talents**

As a plant breeder, one must have leadership skills, be a risk taker, plan to get results, be a good communicator, have creativity for problem solving, be a team player, and always be able to learn and apply new things.

## **Why You Should Consider a Career in the Seed Industry**

It is a very rewarding industry for anyone that puts their mind and heart into it. It's a smaller industry, and therefore your contributions are more easily noticed. As an individual, you get to see the difference you can make. We need bright minds to fill the needs, so I'd suggest taking classes in biology, math and the sciences to get the basics before determining your major.

# Career Profile 3

**Kater H.**

## **Job/Career Position**

Agricultural Research

## **Location**

Cary, North Carolina

## **Starting Salaries**

\$100,000-\$200,000

“My advice to anyone considering a career in the seed industry is: Go for it. Your timing couldn’t be better.”



## **Bio**

Neither my grandparents nor parents were farmers, but we have a close association with farming since my family owned Iowa farm land. As a result, I became interested in plant breeding in college. But I took jobs in field agronomy from the San Joaquin Valley to the Mississippi Delta. It was only after several years in field agronomy that I “returned” to plant breeding and the seed industry.

## **My Educational Path**

While still in high school, I took advanced placement courses. This allowed me to enter college with credits already in place. I rushed through two college degrees, then I worked for a few years before pursuing a Ph.D. I continued to work while in school. I was very lucky that my employer supported my work toward an advanced degree, even though it took a little longer to complete.

- B.S. Genetics, University of California at Davis
- M.S. Agronomy, University of California at Davis
- Ph.D. Plant Science, University of California at Riverside

## **Mentors, Clubs and Organizations**

Mentors have been critical. Working and interacting with senior members of the industry lets you learn from their experiences and extends your knowledge base to challenges they faced and overcame.

## **Why I Love My Career**

I enjoy using science to help people, and I like working with my fellow agriculturalists.

## **Why My Job Is Important**

Agricultural research and innovation allows you to make a contribution that beneficially impacts millions of acres, farmers and consumers.

## **A Typical Day at Work**

I supervise a team of eight scientists and their support staff. We coordinate research with 350 different cooperators. A typical day for me includes meetings, conference calls, writing reports and reading research papers.

## **Skills and Talents**

As an agricultural researcher, one needs strong communication and collaboration skills, self-motivation, the ability to adapt to a rapidly changing industry and to multitask, patience and a long-term perspective.

## **Why You Should Consider a Career in the Seed Industry**

If you love challenges, this is a great industry. It combines the traditional challenges of farming (crop production, logistics, long-term planning) with the challenges of a high-tech industry (research, marketing, cutting-edge science).



**First the Seed Foundation** is a not-for-profit organization established in 2008 by the American Seed Trade Association, one of the oldest trade associations in America, to inform today's consumers and tomorrow's workforce about the important role of the seed industry.

---

### **A Special Thanks to Our Advisory Board**

**Diane Reese**, School Counselor

**Julia Taylor**, School Counselor



In Partnership with:



First the Seed Foundation • 225 Reinekers Lane, Suite 650, Alexandria, VA 22314 • 703-837-8140 • [www.firsttheseedfoundation.org](http://www.firsttheseedfoundation.org)

©2009 First the Seed Foundation