

“We were ready for new challenges in our careers when we received a postcard from the Iowa Human Resource Recruitment Consortium asking us to consider opportunities in our home state of Iowa. We then attended the Iowa Alumni Reception held in Los Angeles, where Governor Vilsack invited us to ‘come back home.’ A search of The SmartCareer Move™ Web site convinced us there were good possibilities in Iowa. I accepted a position as a systems engineer with Rockwell Collins, and my wife, Deanna, took a position in the Center for Biocatalysis and Bioprocessing at The University of Iowa. We’ve come back home after a 12-year absence, and we are very happy with our decision.”

**Bernie Lettington**  
Formerly of Huntington Beach,  
California

## Life Sciences Careers Thrive in Iowa

Life sciences careers are abundant and professionals thrive in Iowa. World-class research universities, highly skilled technical workers and a proactive business climate combine to make Iowa the *smart idea* for careers in biotechnology and other life sciences.

Iowa’s major life sciences employers are some of the most recognized names in the field. They include Iowa Health System; Integrated DNA Technologies, Inc.; Monsanto; Pioneer. A DuPont Company; Cargill, Inc.; Combiseq; Kemin Biotechnology, L.C.; Trans Ova Genetics; and Wacker Biochem Corporation.

### World-Class Employers

Employing 11,500 people statewide, **Iowa Health System (IHS)** is one of Iowa’s largest employers, as well as its largest healthcare provider. Created in 1993, IHS is the state’s **first and largest integrated healthcare system**. It includes major hospitals in Cedar Rapids, Des Moines, Dubuque, Fort Dodge, the Quad Cities, Sioux City and Waterloo, as well as several community hospitals across Iowa.

A member of IHS, Iowa Methodist Medical Center is Iowa’s largest private hospital. In 1993, the hospital’s John Stoddard Cancer Center became the first central Iowa facility to house radiation, oncology and ancillary services in one location. Reaching beyond compassionate cancer care, IHS is also revolutionizing medical treatment through **human gene therapy research**. Its Human Gene Therapy Research Institute is developing new methods and applications of human **gene therapy for cancer prevention, treatment and cure**.

The Institute has developed innovative medical techniques that allow the delivery of new genes into cells to replace missing or defective genes. Scientists at the Institute are **developing new gene delivery vehicles** or vectors to target specific cells and are studying ways to **activate the immune system to attack cancer cells** in the body. In another cancer breakthrough, scientists at the Institute have developed protocols that involve selectively killing tumor cells while sparing healthy cells. A genetically altered virus delivers a gene into the tumor cells, changing the cells so they can be selectively destroyed with nontoxic medication. In 1996, the Institute became the nation’s first community-based clinical facility to receive FDA approval to produce **genetically engineered drugs**.



## Pioneer. A DuPont Company

Headquartered just north of Des Moines, where it was founded 75 years ago, Pioneer is the world's largest developer, producer, and distributor of corn and soybean seeds, selling seed corn in nearly 70 countries. Pioneer also develops and distributes improved varieties of sorghum, sunflower, soybean, alfalfa, canola and wheat, as well as forage and grain additives.

Pioneer's research and product development group operates more than **110 primary research locations** and thousands of test sites. A short list of current **R&D career opportunities** with Pioneer includes research associate positions in protein immunoassay and analytical biochemistry; computational biologists in quantitative genetics and biochemistry; and a senior research associate in multivariate statistics.

Pioneer also offers **career opportunities in communications, corporate administration, information management, technical support, supply management, and sales and marketing.**

## Integrated DNA Technologies, Inc.

Integrated DNA Technologies' (IDT) primary mission is to **advance research in DNA-based technologies**. The company's synthesis group combines **expertise in chemistry, molecular biology and engineering** to produce and purify complex chimeric and mixed sequence oligonucleotides. From its main facility in Iowa City, IDT's **active research program** contributes to a **growing patent portfolio and increasing career opportunities**.

Since 1987, IDT has been a **major force in advancing biotechnology research** as a supplier of custom oligonucleotide synthesis and developer of innovative new biotechnologies. Co-founded by Dr. Joseph Walder, a biochemistry professor at The University of Iowa College of Medicine, IDT is the **world's premier custom oligonucleotide supplier** — serving **14,000 customers worldwide**.

Walder established the university's first facility for nucleic acid synthesis — *the*



*fuel that drives the biotechnology revolution* — and pioneered breakthrough technologies, including a method for cross-linking a hemoglobin derivative, the Cycling Probe Technology™ and the chimeric “Gamer” structure.

## Monsanto

Celebrating its 100th anniversary, Monsanto is a leading global provider of **technology-based solutions** and agricultural products that improve agricultural productivity and food quality. Monsanto utilizes **DNA-based genetic analysis capabilities** to deliver products and solutions to the world's food producers, helping them meet the growing need for food and fiber — while conserving natural resources and improving the environment.

Investing in Iowa's growing, critical mass of life sciences companies, Monsanto built a **\$20 million research and development center** in Ankeny. The facility uses high-throughput grain analysis methods to support the development of new specialty grain products. The company is expanding its **trait discovery capabilities** at its Holden's Foundation Seed Company in Williamsburg, which, in combination with the Ankeny facility, is accelerating the introduction of new and superior hybrid corn products.

Work life at Monsanto is described as providing people who enjoy facing complex challenges and a stimulating, ever-changing environment with the chance to make a difference.

## University Research Centers

Iowa's state universities are renowned for their leadership in agricultural science, animal science, and medical and pharmaceutical research. They are at the forefront of scientific discovery and technology transfer.

With the goal of attracting as much as \$425 million in public and private investments, Iowa State University's Plant Sciences Institute is the **global center for the study and commercialization** of products derived from plant biotechnology. Established in 1999, the Institute is an umbrella organization that involves nine centers, 25 Iowa State University departments and 250 faculty. The Plant Sciences Institute uses new technologies to improve agriculture, the environment and human nutrition through plant genomics, proteomics and metabolomics.

The Institute's director, **internationally renowned** molecular geneticist Stephen Howell, grew up in Iowa and recently returned after two decades of teaching at the University of California, San Diego, and serving a post as vice president of research for a nonprofit corporation affiliated with Cornell University. His reason for returning to Iowa: “**the momentum of Iowa's biotechnology revolution.**”

Research conducted at Iowa State's Plant Sciences Institute will make plants more valuable in feeding the world's population, producing livestock, and providing bio-based fuels and industrial feedstock. That means new products, new companies and **new jobs**.

In addition, Iowa State University is building a Biotechnology Incubator at the ISU Research Park. The facility will house up to five companies and is expected to generate nearly 40 **high-paying research positions** for the state of Iowa.

The University of Iowa's Center for Biocatalysis and Bioprocessing is comprised of 50 collaborating faculty members and more than 300 supporting researchers. It is one of the core research facilities for the university's technology



transfer programs and is the state's **primary contract research facility** for biocatalysis and bioprocessing. It has collaborated in the development of food and feed ingredients, pharmaceuticals, anti-cancer therapeutics, pathogenic and engineered organisms, anti-insect vectors, enzymes, and industrial biochemicals. Research areas include culture and fermentation, bioseparation, bioremediation, immobilized antibodies and new biocatalyst development. Typically, 15 research projects are in progress at one time.

The University of Northern Iowa Ag-Based Industrial Lubricants Research Program is an **innovator in the development and commercialization** of environmentally friendly soybean-based industrial lubricants. The program demonstrates feasibility and provides a basis for developing cost-effective manufacturing capacity and advancing process improvement.

### Statewide Tech Support

Iowa Governor Thomas J. Vilsack recently launched a statewide technology initiative led by former Rockwell Collins executive Robert J. Tibor. As Iowa's Technology Advisor, Tibor is assisted by an advisory network of industry executives from the life sciences, information solutions and advanced manufacturing sectors. This

move is indicative of Iowa's **commitment to creating more careers in these cluster areas of innovation.**

The Iowa Biotechnology Association works to improve human, environmental and economic well-being through the development and application of value-added technologies in life sciences. The association also enhances Iowa's abilities to commercialize new technologies and gives Iowa companies an edge in delivering timely new products to consumers through the sharing of ideas regarding the transfer and development of technologies.

### Future-Forward Infrastructure

The state of Iowa supports its commitment to science and scientists with high-tech infrastructure. Iowa's comprehensive infrastructure includes information access through the first-in-the-nation, statewide fiber-optic network; analytical tools; and storage and processing facilities that measure, preserve and **capture value from data and deliver information at the speed of innovation.**

When all the evidence is gathered and the advantages are weighed, a scientific mind comes to one conclusion: **Iowa is a nurturing climate for careers in the life sciences.**

## Performing Arts Take Center Stage in Iowa

Theater is alive and well in Iowa. With 55 performing arts theaters, opera houses and cultural auditoriums across the state, Iowans enjoy easy access to the best in musical and dramatic events.

The Iowa State Center in Ames is dedicated to being the premier university public assembly complex in the United States. Performances that range from hit Broadway touring shows to the soul-stirring Girls Choir of Harlem and the Grammy-nominated, lively island music of Afro-Cuban All-Stars prove the Center's commitment to diverse entertainment.

Hancher Auditorium in Iowa City fills The University of Iowa's Arts Calendar with season after season of world-renowned classics and edgy avant-garde events. A sample from the 2001 – 2002 season includes talked-about performances of Ballet Folklórico de Mexico, Lincoln Center Jazz Orchestra, *Cabaret*, *The Music Man*, and Anonymous 4 — enough variety for every taste.

Sioux City Auditorium hosts box office favorites ranging from Broadway's Never-Never Land of *Peter Pan* to the razzle-dazzle "ripped from the headlines" plot of *Chicago* and the tragic tale of unrequited love in *Phantom*.

The Des Moines Civic Center draws audiences of thousands from around the state and performers from around the world — all awed by its acoustical perfection and impressive staging capacity. Playbills from last season include *RENT*, *Titanic*, *Miss Saigon* and *The Sound of Music* — just a few of the national touring events that played to full houses in the capital city.



**Integrated DNA Technologies, Inc., (IDT)** is the industry leader in innovative molecular biotechnology products. Located near major university medical and research centers in Coralville, Iowa, **fast-paced IDT offers careers in four general areas: scientific research, engineering, sales and administration.** The rapidly expanding research program supports the company's mission to improve nucleic acid synthesis technology and develop new applications for the use of DNA- and RNA-based compounds. **Research scientists** in molecular genetics play an **active role in bench research and product development.** Positions in direct sales to academic, government and industry accounts require knowledge of molecular biology and life sciences sales experience. Since 1987, IDT has been a **major force in advancing biotechnology research** as a leading supplier of custom oligonucleotide synthesis and as a developer of new biotechnologies. **Engineering technician** responsibilities include monitoring, diagnosing and performing routine maintenance on production equipment.



a member of Nationwide Insurance

### Allied Insurance

Headquartered in Des Moines, Allied Insurance, a member of Nationwide Insurance, is building a **\$137 million Gateway Campus** west of downtown. When completed in 2003, the seven-story structure — with its own parking facility, skywalk access and substantial green space — will house 1,650 employees. Allied Insurance gives new employees a head start with **earn-while-you-learn training programs** that prepare them for careers in insurance.

**Underwriting and claims are core disciplines** in the company's professional preparation program, which is followed by ongoing career education. Allied surpasses industry standards with its home and auto protection, and it offers superior commercial protection for business and farm owners. Allied Insurance is represented throughout its operating territory by **skilled, professional independent insurance agents.** The agents are served by regional offices and staff in Iowa and three other states.

# Iowa Human Resource Recruitment Consortium

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AEGON Insurance Group/  
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Allied Insurance/A Nationwide Company  
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Fisher Controls Division  
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## Gold Level

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Iowa Area Development Group  
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Monsanto  
Musco Lighting  
NCMIC, Inc.  
Renaissance Worldwide, Inc.  
Sauer-Danfoss  
Seabury & Smith  
Snyder & Associates  
The Stanley Group  
Turbine Fuel Technologies, Goodrich  
Corporation  
Wellmark Blue Cross and Blue Shield of Iowa

## Community Level

Ames Chamber & Development Commission  
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Clear Lake/Mason City Economic  
Development Corporations  
Corridor Careers — Cedar Rapids/Iowa City  
Council Bluffs Chamber/Pottawattamie Area  
Growth Alliance  
Greater Des Moines Partnership  
Greater Dubuque Development Corporation  
Indian Hills Regional Development  
Iowa Great Lakes Corridor of Opportunity  
Jasper County Alliance for Economic Development  
Marshall Economic Development Impact  
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Muscatine Development Corporation  
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Quad City Development Group  
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## Supporting Organizations

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Iowa Business Council  
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