

# Industry Careers: What's Out There?

NIH Career Symposium  
May 19, 2009

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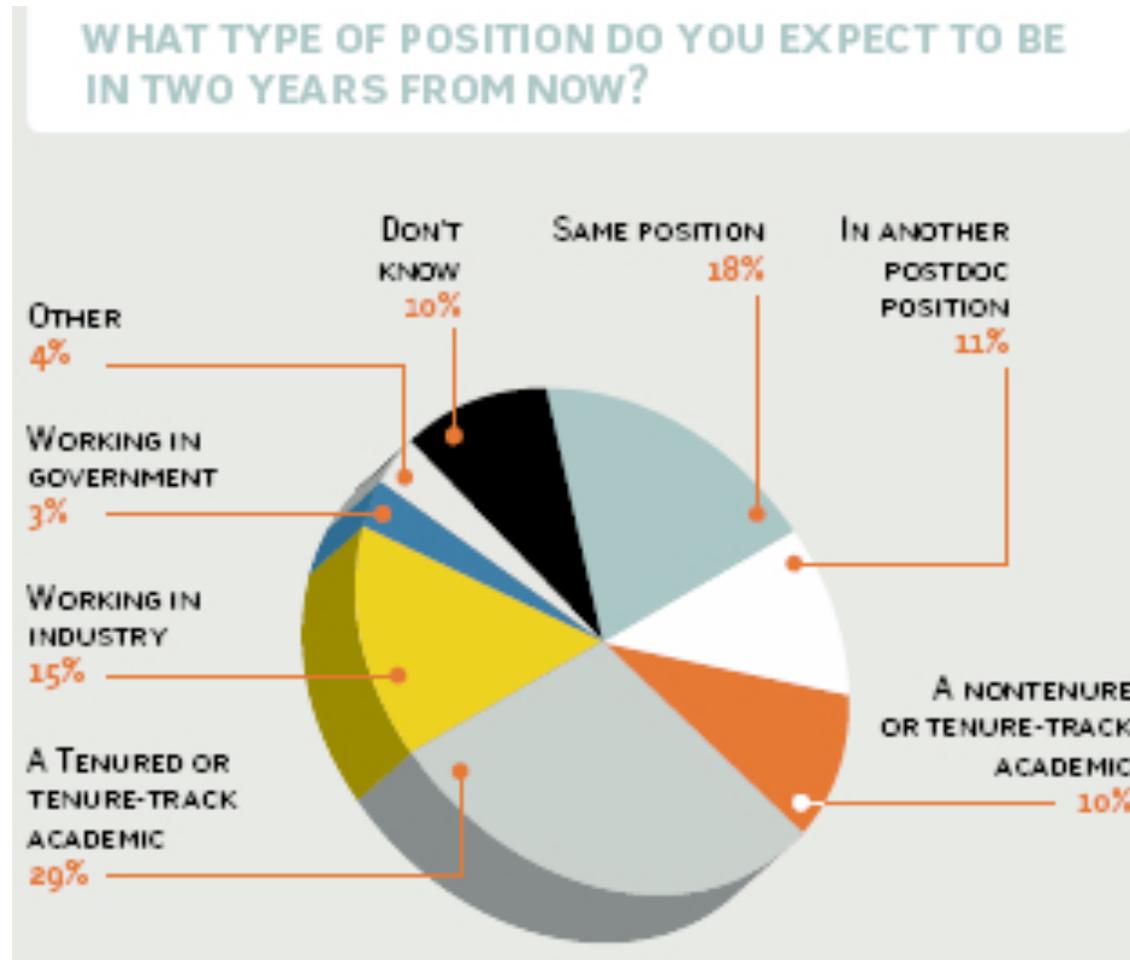


# Outline

- ❖ The realities of the job market
- ❖ What's available in "Industry"
- ❖ How do I relate my skills to the non-academic market?
- ❖ How do I best prepare myself to get a job in "Industry"



# Perception vs. Reality



Source: TheScientist Vol 23:3 p47, 2009

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# Distribution of USA Science Jobs by Market (+/- 5%)\*

- ◆ 15% Academia
  - ◆ 30% Government
  - ◆ 20% Non-Governmental Organizations
  - ◆ 35% Business
- 
- ◆ For example:
  - ◆ Maryland has 370 biotech companies employing 30,000 life science professionals\*\*

\* Source: AAAS Science Careers

\*\* Source: Baltimore Sun



# What's Out There?

- Kinds of Companies
  - Large Pharma
  - Biotechs
  - Medical Devices and Diagnostics
  - Non-profits, NGOs



# Typical Job Titles

- Research Scientist
- Applications Specialist
- Group Leader
- Project/Program Manager
- Technical Support Specialist
- QA/QC
- Business Development



# Job Examples: MedImmune

## Our Typical Careers

Learn more by [searching jobs](#) in the hiring area of your choice.

As a fully integrated biotechnology company, MedImmune offers a wide array of employment opportunities. Major hiring areas include:

### Administrative

Business Development, Licensing, Ventures

Clinical Development

Clinical Operations

Clinical Product Development

Corporate Communications and Public Relations

Development - Analytical Biochemistry

Development - Formulation

Development - Manufacturing Sciences

Development - Operations

Development - Process Biochemistry

Development - Process Cell Culture & Fermentation

Environment Health & Safety

Engineering & Facilities

Finance

Government Affairs, Advocacy, Public Policy

### Human Resources

Information Technology

Legal

Manufacturing and Production

Marketing

Medical Affairs

Operations - Quality

Operations - Supply Chain & Strategic Sourcing

Product Safety

Regulatory Affairs

Research - Antibody Development & Protein Engineering

Research - Infectious Disease

Research - Oncology

Research - Operations

Research - Respiratory, Inflammation, and Autoimmune

Research - Translational Science

Research - Vaccines

Sales

Sales Support



Source: MedImmune website

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# You need a Strategy

Short Term Strategy: 1-5 years

Long Term Strategy: 15 years

The typical “first job” lasts 1-2 years

The typical “second job” lasts 3-5 years



# Two Rules of Business (USA)

- ◆ By definition, a Business must make a profit. The tax code requires a profit status. Investors require a profit status.
- ◆ A business must constantly compete globally and improve its products and services as well as productivity standards: revenue per employee, return on capital deployed, new drug success rate, ...

Results in seeking employees with technical as well as business skills.



# Skill Sets by Company Type

- Large Pharma
  - Technical expertise
  - Product-driven
- Biotech and smaller companies
  - Technical expertise
  - Business sense
  - Communications
  - Project Management



# Critical Skills

- Good judgment
- Strong Communications skills
- Ability to work as part of a team



# Value Characteristics of Scientist to Employers

## **Generally positive**

- ◆ Education/learning
- ◆ Computer literacy
- ◆ Critical thinking
- ◆ Problem solving
- ◆ Technical writing
- ◆ Research a topic
- ◆ Self managed workflow
- ◆ Technical expertise
- ◆ Technical teams
- ◆ Work ethic
- ◆ Technical network

## **Generally need developed**

- ◆ Matrix team experience
- ◆ People communications
- ◆ Conflict management
- ◆ Supervisory skills
- ◆ Leadership skills
- ◆ Persuasion skills
- ◆ Relationship management
- ◆ Strategic thinking
- ◆ Financial acumen
- ◆ Performance acumen



# Business Competencies: The language of business success!

Competencies are coupled to the processes of business success;

- ◆ There are 23 business competencies that are derived from performance standards and hiring criteria used throughout industry.
- ◆ These competencies are organized into 6 functional categories:
  1. Creating the Vision
  2. Developing People
  3. Execution
  4. Achieving Results
  5. Communications
  6. Financial Acumen



# Universal Talent Practices- All Business Jobs The Language of Business

## ***Creating the Vision***

- ◆ Strategic
- ◆ Technical/Scientific
- ◆ Innovative
- ◆ Risk Management
- ◆ Champion/Energy

## ***Developing People***

- ◆ Collaboration
- ◆ Enabling
- ◆ Empathy
- ◆ Rapport

## ***Execution***

- ◆ Structuring
- ◆ Control
- ◆ Tactical
- ◆ Delegation

## ***Achieving Results***

- ◆ Production
- ◆ Focus
- ◆ Competition

## ***Communications/Learning***

- ◆ Technical Literacy
- ◆ Style Flexibility
- ◆ Emotional Intelligence
- ◆ Social Intelligence

## ***Financial Acumen***

- ◆ Return on Investments
- ◆ Determining performance metrics
- ◆ Managing the Balance Sheet



# Behavioral Based Talent Mapping Academic and Research Experience

## **PhD Behavior\***

- Formulate a problem statement
- Research the problem
- Extend knowledge to new findings
- Cost/Benefit of a PhD
- Manuscript/Grant Rejected
- Manage advisors
- Design an experiment
- Adapt design to accomplish goals
- Self manage workflow
- Show progress, milestones
- Identify process limitations
- Systematic approach
- Meet deadlines, self-monitor
- Achieve PhD
- Learn new content
- Sell your hypothesis
- Accept feedback

## **Relates to:**

Strategic  
Innovation  
Innovation  
Risk Management  
Champion/Energy  
Rapport  
Structuring  
Structuring  
Control  
Control  
Tactical  
Production  
Production  
Focus  
Technical Literacy  
Style Flexibility  
Emotional Intelligence

\* Partial Listing



# Behavioral Based Talent Mapping Academic and Research Experience

## **Research Team Behavior\***

- Coordinate task with team members
- Use others input in decisions
- Build consensus within team
- Accommodate needs of team members
- Show active concern for team
- Show loyalty to team
- Form close and supportive relationships with team members
- Delegate task to team
- Consult with superiors

## **Relates to:**

Collaboration  
Collaboration  
Enabling  
Empathy  
  
Empathy  
Rapport  
Rapport  
  
Delegation  
Social intelligence



# How do competencies vary with the Market?

Competency	Academia	Government	NGOs	Business
Technical/Scientific	++++	+++	+++	++
Creating the Vision	+	++	++	+++
Developing People	+	++	++	+++
Execution	++	++	+++	+++
Achieving Results	++	++	+++	++++
Communications	++	++	++++	++++
Financial Acumen	+	+	++	+++



# Matching your Talent Map to Business Requirements by Employee Size and Revenue

Competency	<100 employees	<1,000 employees	Global	<\$5M per year	<\$500M per year	>\$500M per year
Technical/Scientific	++++	++++	+++	++++	+++	+++
Creating the Vision	+++			+++		
Developing People	+++			+++		
Execution	+++	+++		+++		
Achieving Results	++++			++++		
Communications	++++	+++		+++	+++	
Financial Acumen	++++			+++		



# Job example: Scientist

## Science jobs from Monsanto Company: job description

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### **Scientist**

**Location: St. Louis, MO**

Monsanto, an Ag industry leader creating scientific breakthroughs around the world, is seeking a Molecular Geneticist/Plant Molecular Biologist to elucidate mechanisms of plant recombination which can be used to develop novel strategies for crop improvement. This position will be part of a research team responsible for the rapid development of scientific breakthroughs in recombination control to benefit a world class plant breeding program. Research will focus on elucidating the key regulators for the control and specificity of recombination. R&D efforts will be supported with the latest tools in sequencing, genotyping, plant transformation and field testing. The program will combine both reverse and forward genetic approaches and integrate lab and field experiments. The position will be located at our Creve Coeur, Missouri site.



# Scientist: Required Skills

## **Required Skills/Experience/Attributes:**

Ph.D. or equivalent.

Experience in genetics, breeding or molecular biology and at least 2 years of additional relevant experience.

Current understanding and a demonstrated research record in genetic recombination, meiosis, and/or DNA repair.

Experience in utilizing state-of-the-art tools such as high throughput sequencing, genotyping and bioinformatics analysis.

Communication and connectivity will be an important asset to work in a cross-functional environment where scientists with diverse expertise are being brought together to overcome obstacles and deliver innovative solutions to unsolved challenges.

In a dynamic business environment, the successful candidate is expected to be flexible and adept at shifting priorities and research directions in order to leverage emerging opportunities identified through genotyping platform discoveries.

- Exceptional teamwork skills are required to promote team synergy, leverage resources cross functions, and proactively collaborate with internal and external technical experts.



# Applications Specialist

## Applications Specialist

Join a dynamic team selling the market leading product to an industry that will transform our society over the next decade.

As a core member of Geospiza's sales and marketing team you will provide technical expertise and life science market knowledge to drive sales and adoption of Geospiza's suite of data management and analysis platforms. The primary responsibility of the Applications Specialist will be to work closely with the sales team to evaluate, educate, and guide customers throughout the sales process, provide live demonstrations of product capabilities, evaluate and manage demonstration projects, and provide applications support to the sales force as needed.

Additionally, the Applications Specialist will interface between customers and marketing/product teams to provide critical input for product requirements and monitor emerging applications and technologies. Significant customer interaction is required. Position may require travel.

## Qualifications:

- Background in the life sciences/molecular biology, particularly in the areas of genomics and next generation DNA sequencing (including related applications)
- Significant experience in customer-facing roles, including technical pre-sales of new technologies and customer relationship management
- Outstanding written and verbal communication skills; ability to present technical materials to a technical audience
- Demonstrated ability to develop written materials and technical tools to support job functions and/or related products
- Strong analytical and problem solving skills  
3-5 years of laboratory experience

## Required:

- B.S. or B.A. in life science-related field; advanced degree preferred
- U.S. citizenship required
- English: Fluent



# Project Manager

Title: Project Manager  
Location: Hayward, CA  
Req: 01617

## Position Summary:

The Translational Sciences Project Manager will be responsible for the operational management of Translational Sciences project teams, engage in critical communication with TS senior management and other functional and cross-functional teams, and contribute to the establishment of the project management organization.

## Major Duties and Responsibilities (including supervising others):

- Working with the scientific leadership of all areas of Translational Sciences, across multiple therapeutic areas, the Project Manager plans and manages projects throughout the entire drug development process, in accordance with the vision set forth by senior management in support of corporate goals. The project complexity is high.
- Using collaboration and influencing skills, the Project Manager guides the Translational Sciences sub-team of the Product Development Team through project goal setting, strategy development, risk analysis and mitigation, decision-making and problem-solving activities in order to evaluate viable project progression alternatives and maximize portfolio success rates.
- With strong communication skills, the Project Manager will be responsible for clear and efficient communication of project status, progress to plan and issues to all stakeholders, including preparation of reports, presentations and other required documentation relating to tracking project progression, dissemination of key messages through multiple channels across different departments and sites. The project Manager will work closely with Research Project Management, Research Portfolio Management, Corporate Project Management, Product Development Team Leadership, project schedulers within Translational Sciences and the MedImmune governance committees.
- The Project Manager will assist in developing and optimizing project management processes for coordinated project management, information flow / key project documentation and budgeting across Translational Sciences and work to implement these processes within the TS Sub-teams and the Research organization.



# Position Requirements

## Experience:

Essential: Demonstrable experience in the pharmaceutical or biotechnology industry and a solid understanding of the detailed stages of biologic drug discovery and development, from early research phase activities through clinical development

Demonstrable experience in leading complex project teams in a dynamic environment

A demonstrated ability to apply a broad and integrated perspective when planning, problem-solving, and assessing impact across functional areas; including the identification of the critical steps, activities, upstream / downstream processes in Research drug discovery

Desirable: Experience managing teams in a global organization

Experience working within a PMO

## Special Skills/Abilities:

Essential: Significant project management and project planning expertise:

„X Project definition and design goals, project strategy, risk analysis, timeline and budget

„X Communication of project status and issues to stakeholders

„X Value assessment of project and portfolio placement

Managerial courage and conflict management

Able to influence widely, and develop relationships regardless of level

Facilitation and matrix team building

Negotiation and relationship development skills

Excellent oral and written communication competencies

Strong analytical / problem solving abilities

Well organized with excellent time management

A strong leader, but a team player first

Able to deal with ambiguity and respond effectively and decisively to change

Desirable: Experience with OPX2 or other EPM system

Job Complexity: High

Supervision: Able to work effectively with minimal supervision  
(supervision required, level of independence)

**Educational Requirements** Essential: Educated to BSc level or equivalent in a Biological Science  
Desirable: Advanced degree, at MBA, PhD or MS-level



# How do I Sell Myself

- Research the company
- Understand its products
- Express your skill-sets in terms of the company's needs
- Relate your personal experience with business-centric traits
- Emphasize your understanding of their products and services from a user perspective



# What Jobs do I apply for?

- Jobs that will excite you
- Don't take prerequisites too literally
- Get a foot in the door
- Your first job is NOT your permanent job
- Have a plan



# Networking

- Get involved in local business
  - Learn
  - Gain Visibility
  - Make connections
- Business Networking sites
  - Links to companies with jobs
  - References



# Networking: Local Business

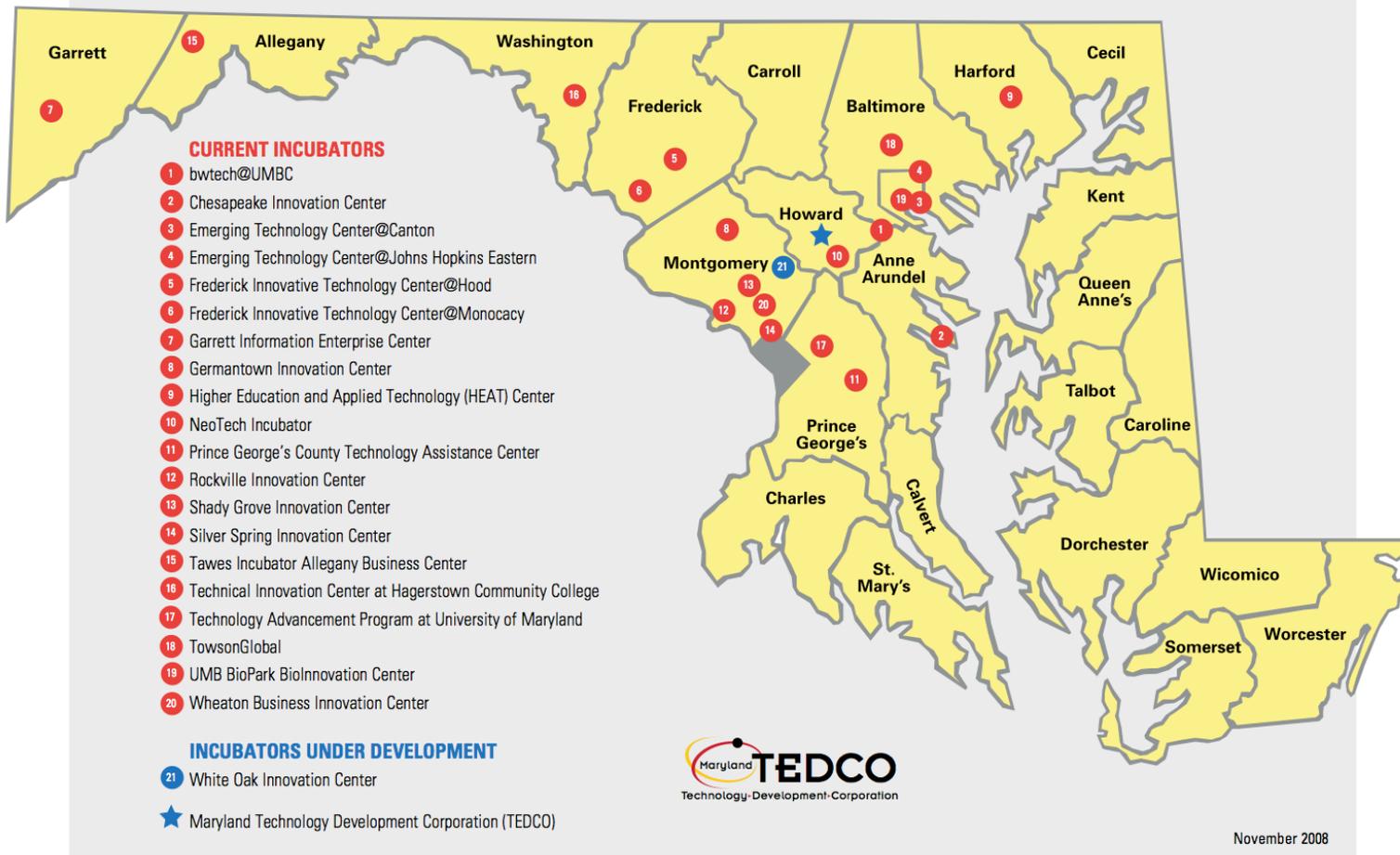


Rockville Innovation Center



# Maryland Technology Incubators

## MARYLAND TECHNOLOGY DEVELOPMENT CORPORATION Maryland Technology Incubators



# Networking: Linked-In

www.linkedin.com

The screenshot displays the LinkedIn homepage interface. At the top, the LinkedIn logo is followed by navigation links for People, Jobs, Answers, and Companies. A search bar is prominently featured with a 'Search People' button and a 'Search' button. A notification box for 'New Improved Search!' is visible. Below the search bar, the user's profile is partially visible, showing the name 'Randall Ribaudo' and his title 'President, CEO, Human Workflows, LLC'. The main content area is divided into sections: 'Inbox (1 unread)' with an invitation from Emme Marino; 'Network Updates' with a status update from Randall Ribaudo; 'People you may know' listing Sarah Elkins, Maria Dombroski, and Barry Gropman; 'Featured Applications on LinkedIn' featuring WordPress; and 'Who's viewed my profile?' showing 7 views in the last 3 days and 16 views in the last 15 days.



# Linked-In connections

- Home
- Groups +
- Profile +
- Contacts +
- Inbox (1) +
- Applications +

[Add Connections](#)



**Randall Ribado**

President, CEO, Human Workflows, LLC

What are you working on?

Your profile is 90% complete [\[ Edit \]](#)

[Companies](#) BETA

[Companies Home](#) | 
 [Add Company](#) | 
 [FAQ](#)

## Monsanto

Last edited by Employment Branding |

Monsanto is an agricultural company. We apply innovation and technology to help farmers around the world produce more while conserving more. We help farmers grow yield sustainably so they can be successful, produce healthier foods, better animal feeds and more fiber, while also reducing agriculture's impact on our environment.



**Specialties**  
 biotechnology, agriculture

**Current Employees (500+ total, 5 in your network)**

- 2nd [Jay Mergentson](#), Lead, Gene Engineering through [Kevin Munnally](#)
- 2nd [Mario Coffin](#), Biostatistician through [Scott Markel](#), [Jennifer Russo](#), [Walter](#)
- 2nd [Jenny Steiner](#), EVP through [Richard Steiner](#)
- 2nd [Anthony Remon](#), LIMS Administrator/C# Programmer through [Paul Denis](#)
- 2nd [Gene Nelson](#), Data Management Specialist through [Chinappa Dille](#), [Kedra](#), [Lohar Chandrasekharan](#), and 2 others [See more >](#)

**Former Employees**

- 2nd [Ding Ming](#), Senior Director, CHC Medicine at Boehringer Ingelheim Senior Scientist (to 1999) through [Qing Zhang](#)
- 2nd [Michael Stigall](#), PMP, Senior Software Engineer at Perlegen Sciences Team Lead (to 1999) through [Ellen Goulet](#)
- 2nd [Ken Rottmann](#), Sr. Director at Inspire Pharmaceuticals Team Leader (to May 1999) through [Linda Lim](#)
- 2nd [Christina Middle](#), Sequence Capture Tech Transfer Scientist at NimbleGen Systems Inc Monsanto Protein Technologies Analytical Scientist (to December 2003) through [Daniel Glotter](#)
- 2nd [Joseph McDonald](#), research fellow at pfizer research scientist (to 2000)

**Related Companies**

- Subsidiaries**
- [De Ruyter Seeds](#)
  - [Seminis](#)
- 
- Career path for Monsanto employees**
- before: after:
- [Anheuser-Busch](#) • [Pfizer](#)
  - [MasterCard](#) • [Solutia](#)
- 
- Monsanto employees are most connected to:**
- [Standing Partnership](#)
  - [Daugherty Business Solutions](#)
  - [NetEffects](#)
  - [Asynchrony Solutions](#)
- [See more >](#)

**Key Statistics**

**Top Locations**

- [Greater St. Louis Area](#) (500+) 

▶ **Headquarters Address**

Headquarters	Greater St. Louis Area
Industry	Biotechnology
Type	Public Company
Status	Operating
Company Size	22,000 employees
2007 Revenue	\$8,563 mil (17%)
Founded	1901
Website	<a href="http://www.monsanto.com">http://www.monsanto.com</a>

[BW](#) [More info >](#)

Common Job Titles		
Research Associate		3%
Manager		3%
Leader		2%
Administrative Assistant		2%
Median Age	33 years	



# Networking: Plaxo

www.plaxo.com

The screenshot shows the Plaxo website homepage. At the top, there is a blue navigation bar with the Plaxo logo on the left, and links for "Sign up", "Take the tour", and "Already a user? Sign In" on the right. Below the navigation bar is a white banner with the headline "Stay in touch with the people you care about." in blue text. The main content area is divided into three columns. The first column, titled "Connect", features an illustration of a man and a woman and text describing how to connect with family, friends, and business networks. The second column, titled "Share and discover", features icons for Amazon, YouTube, Flickr, and Digg, along with text about using Pulse to discover and share content. The third column, titled "Take it with you", features an illustration of a laptop and a smartphone, with text about syncing address books and Pulse with Outlook, Mac, and mobile phones. In the center of the page is a blue "Sign Up Now" button with the text "It's free!" below it. At the bottom of the page is a search bar with the text "Find people you know on Plaxo" and a "Search" button. The footer contains links for "About Us", "Downloads", "Partners", "Privacy Policy", "Terms of Service", and "Help", along with the copyright notice "Copyright 2002-2009 Plaxo, Inc. All rights reserved."

**plaxo** Sign up Take the tour Already a user? Sign In

## Stay in touch with the people you care about.

**Connect**  
Connect to your family, friends, and business network. We make it easy to find who you know.

**Share and discover**  
Use **Pulse** to discover the great content your friends are creating all over the web — and share your own.

**Take it with you**  
Take your address book and Pulse with you to **Outlook, Mac,** and your mobile phone.

**Sign Up Now**  
It's free!

Find people you know on Plaxo  **Search**

About Us | Downloads | Partners | Privacy Policy | Terms of Service | Help  
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# Summary

- Have a short and long term strategy
- Emphasize skills based on company type
- Use language of business
- Be creative in describing qualifications
- Do your Research
- Network, Network, Network

