What is industry looking for?
- Mastering Social Communications
- Solving the industry conundrum
- Building your Network
- How can I leverage my self assessment
  - Targeted Resumes
  - Preparing for Interviews
  - Separating yourself from your competition
Dispelling the Myths

- I can’t publish in Industry
- Research is technical and boring
- I’m overqualified and under-experienced
- ... or, in other words...

Dispelling the Myths
“Industry is the Dark Side”

Myth #1: I can’t publish
Myth #2: Research in Industry is technical and boring
- Industry make products that matter
- These products impact peoples lives

YouTube “GE Stories Healthcare”

Myth #3: “Over-qualified and Under-experienced” Curse (the industry conundrum)

WHAT ARE WE GOING TO DO?
- Business and Social Competencies
- Relationship to your experiences
- How to use those experiences in:
  - Resumes
  - Cover Letters
  - Interviews
  - Career Planning
Job Example: Senior Scientist, Antibody Engineering

Job Description
The candidate will lead a group focused on the establishment and development of innovative recombinant antibody engineering technologies. These will be applied toward the identification of innovative recombinant antibody therapeutics for the treatment of autoimmune, oncology and infectious disease areas. In addition, the candidate will manage internal collaborations with other HGS research and development groups on relevant projects as well as external collaborations/contracts with current or future HGS partners.

Desired Skills & Experience
A PhD in Chemistry, Biochemistry, Molecular Biology or a related field is required in addition to a strong publication record in peer-reviewed journals, demonstrating significant postdoctoral and independent research. The candidate must also have at least five years of demonstrated successful leadership of an academic or industrial research lab-group (research associate and Ph.D. scientist) with managerial skills and be able to independently plan, design and execute experiments as well as follow-through, interpret results and direct new approaches. He/she should have experience in creating recombinant antibody libraries and have hands-on experience with all aspects of antibody discovery including structure and function. Experience with external collaborations/contracts with current or future HGS partners.

Internal collaborations with other HGS research and development groups on relevant projects as well as external collaborations/contracts with current or future HGS partners.

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In 2006, only 14% of PhDs were in tenure or tenure-track positions 4-6 years after receiving their degree**

** Source: CBE-2011
Kinds of Companies
- Large Pharma
- Biotechs
- Medical Devices and Diagnostics
- Non-profits, NGOs

Senior Scientist/Engineer
- QA/QC
- Group Leader
- Applications Specialist
- Technical Support Specialist

Project/Program Manager
- Business Research Analyst
- Technical Writer
- Patent Review
Typical Science Enterprise Job Titles

- Corporate Communications
- Regulatory Affairs
- Business Development

References for Industry Jobs

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
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.

**Critical Skills**

- Good judgment
- Strong Communications skills
- Ability to work as part of a team
- Ability to get things done!

**Evolving Realization**
Perceived Value of Doctoral Graduates in Industry

<table>
<thead>
<tr>
<th>Highly value doctoral graduates (%)</th>
<th>Strong interest in doctoral graduates (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: “Recruiting researchers: survey of employer practices 2009”

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

What is your Brand? “Me Inc.”

- Scientific/technical identity
- Business Identity
- Social Identity
My Scientific Identity

- Formal training
- Publications
- References
- Ability to discuss relevant scientific areas

My Social Identity

- Developing People
  - Collaboration
  - Empathy
  - Rapport
- Communications
  - Technical literacy
  - Style flexibility
  - Emotional intelligence
  - Social intelligence

Business Identity

- Strategic thinking
- Productivity
- Implementation (project management)
- Financial Drivers
  - Return on Investment
  - Performance Metrics
- Defined through self-assessment
## What is your Brand? “Me Inc.”

<table>
<thead>
<tr>
<th>Science</th>
<th>Business (how you get work done)</th>
<th>Social (how do you build relationships)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunologist</td>
<td>Idea guy (innovative)</td>
<td>Dependable</td>
</tr>
<tr>
<td>Specialty: MHC Class I Antigen presentation</td>
<td>Motivator</td>
<td>Team player</td>
</tr>
<tr>
<td>Vaccine development</td>
<td>Good hands</td>
<td>Do what’s necessary</td>
</tr>
<tr>
<td>Molecular modeling</td>
<td>Timeless worker</td>
<td>Goal focused</td>
</tr>
<tr>
<td>Functional assays</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Major Business Competency Categories

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

## Creating the Vision

- Vision
Communications

Financial Acumen

Experience Statements
- Group Activity
  - Provide examples of experience statements based on your own academic career.
24 Core Business Competencies

Creating the Vision
- Strategic
- Technical/Scientific
- Innovative
- Risk Management
- Champion/Energy

Developing People
- Collaboration
- Coaching
- Empathy
- Support

Execution
- Structuring
- Control
- Tactical
- Delegation

Achieving Results
- Production
- Focus
- Competition

Communications/Learning
- Technical Literacy
- Style Flexibility
- Emotional Intelligence
- Social Intelligence

Financial Acumen
- Return on Investment
- Internal Rate of Return
- Determining performance metrics
- Managing the Balance Sheet

Competencies Interact

Your Own Experiences map to Business and Social Skills

<table>
<thead>
<tr>
<th>PhD Behavior</th>
<th>Related to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing a Hypothesis</td>
<td>Creating the Vision</td>
</tr>
<tr>
<td>Training students</td>
<td>Developing People</td>
</tr>
<tr>
<td>Planning and performing experiments</td>
<td>Execution</td>
</tr>
<tr>
<td>Quality-checking data</td>
<td>Achieving Results</td>
</tr>
<tr>
<td>Presenting and defending your work</td>
<td>Communications</td>
</tr>
<tr>
<td>Managing costs for an experiment</td>
<td>Financial Acumen</td>
</tr>
</tbody>
</table>
Matching your Talent Map to Business Requirements by Function

<table>
<thead>
<tr>
<th>Competency</th>
<th>Executive</th>
<th>Mid-level Manage</th>
<th>Staff Support</th>
<th>Research</th>
<th>Operations</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical/Scientific</td>
<td>+++</td>
<td>+++</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>+++</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Competency</th>
<th>&lt;100 employees</th>
<th>&lt;1,000 employees</th>
<th>Global</th>
<th>&lt;$50M per year</th>
<th>&lt;$500M per year</th>
<th>&gt;$500M per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical/Scientific</td>
<td>+++</td>
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<td>+++</td>
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Self Assessment

- Understanding what I’m good at...
- ... and what I’m not so good at
Short and long term planning
- Self-assessment
- Match skills to opportunities
- Relate experience to competencies
- Identify gaps in long-term goal required skills

Career Planning
- Self-assessment
- Match skills to opportunities
- Relate experience to competencies
- Identify gaps in long-term goal required skills

Pursuing Long-term goals
- New responsibilities
- Broadened experience
- Promotions
Self Assessment

The following image shows a self-assessment tool. The assessment tool is designed to help users identify their strengths and weaknesses in various areas. It includes multiple choice questions and prompts for reflection. The tool is intended to be a valuable resource for self-improvement and professional development.
How Do Your Skills Stack Up?

- Learn/understand the 24 competencies
- Rate your skills in each competency
- Map your skills to job description
- Develop experience statements
- Identify strengths/weaknesses
- Develop targeted resume
- Develop talking points
Scientists and engineers [...] tend to think of themselves as subject-matter experts rather than as broadly adaptable problem solvers. Unfortunately, the world needs a lot more of the latter than the former.

-Peter Fiske (Naturejobs, 2010)
Keeping Perspective

Q: What is the purpose of deciphering job ads?
A: Develop a targeted resume

Q: What is the purpose of the resume?
A: To get an interview

Q: What is the purpose of the Interview?
A: To get a job

Job Description: Scientist II: Respiratory, Inflammation, Autoimmunity

Scientist II/III
Medimmune, LLC

Description
Medimmune has a new opportunity for a scientist in the Respiratory, Inflammation, Autoimmunity group within the Translational Strategy group in the Department of Translational Science. This position can be located in Gaithersburg or Rockville, MD. In this role you will be responsible for managing the operational and strategic aspects of projects in respiratory, inflammation, and autoimmunity. The Scientist II position will report to the Sr. Scientist in Translational Science and support multiple cross-functional projects across various departments.

Requirements
The position can be filled in Gaithersburg or Rockville, MD. For the Scientist II, we require a BS with 1-3 years of relevant experience. A PhD with 0-2 years of relevant experience is also acceptable. In addition to a PhD, we require the following experiences:

- 2+ years of relevant experience
- Experience in respiratory or autoimmunity research
- Knowledge of monoclonal antibodies
- Experience in cross-functional teams

Job Description: Scientist II: Respiratory, Inflammation, Autoimmunity

Education:
BS (10 years) or PhD (3 years)

Medimmune, LLC is an Equal Opportunity/Affirmative Action Employer and does not discriminate on the basis of race, color, religion, sex, age, national origin, disability, veteran status, or any other characteristic protected by applicable laws. Medimmune does not discriminate against any candidate because of race, color, religion, sex, national origin, disability, age, or veteran status or any other characteristic protected by law. Any individual requesting assistance or accommodations in the application process should contact hrmedimmune.com. Medimmune is an equal opportunity employer that is committed to diversity, equity, and inclusion in the workplace.
Business Competency Hierarchy

Core ➞ Operational ➞ Executive

Job Description: Scientist II:
Respiratory, Inflammation, Autoimmunity

Mapping Operational Competencies
Putting it together

Summary of Qualifications

SUMMARY OF QUALIFICATIONS

Organization matters!
• Builds your “Brand”
• Targeted Resume
• Talking points for Interviews
• Emphasize your strengths
• Mitigates weaknesses (risk management!)
• Differentiates you from your competition
WHAT DO I DO WITH THIS TARGETED RESUME?

Apply online?
Really?

The Importance of Growing in your job: Networking

Building Your Business Network
- Local Businesses
- Organizations
- Meetings and Conferences
- Discussion Groups
- Blogging
Networking

- Get involved in local business
  - Learn
  - Gain Visibility
  - Make connections

- Business Networking sites
  - Links to companies with jobs
  - References

Networking: Make 4 Lists

- Current job
- Previous job
- Social contacts
- Alumnae

No one on these lists will offer you a job…
…but they know someone who will!

Networking: Local Business
Why Network

- Get your resume on the right desk
- Validate that the job ad is accurate and complete
- Gain intelligence on the company

Strategies in applying for jobs

- 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

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
Your Scientific Identity

- Formal training
- Publications
- References
- Ability to discuss relevant scientific areas

Research their Science!!

Research their Science!!

Formal training
Publications
References
Ability to discuss relevant scientific areas
Your Business Identity

- Strategic thinking
- Productivity
- Implementation (project management)
- Financial Drivers
  - Return on Investment
  - Performance Metrics
Your Social Identity

Preparation for Interviews
- Research the Company
- Research the Job
- Research the Individuals
- Use your brand

Research the Company
Learn everything you can about the company and those interviewing you

[Logos for Google, LinkedIn, and Glassdoor]
Job Description

Pacific Biosciences is seeking a highly skilled, driven and experienced Executive to manage our Semiconductor Device Research and Development group. This group is responsible for the design, development and implementation into high volume manufacturing environments of semiconductor structures using advanced geometries that are used in single molecule, real time detection applications. This position reports to the Sr. Vice President of Research and Development. The successful candidate will be responsible for managing a group of engineers and scientists that are focused on component design, fabrication, integration, metrology development and transfer into both domestic and off-shore high volume manufacturing facilities. This position will also require close working relationships with other internal and external R&D teams and activities including optics, instrument engineering, biochemistry, enzymology and molecular biology and must be comfortable working in a multi-disciplinary, fast paced R&D environment. This candidate will also be expected to identify, develop relationships and negotiate working relationships with established industry foundries and other critical suppliers, and be able to assess the capabilities of potential suppliers that will be used to develop, fabricate and supply critical components for our product lines. This candidate will also serve as a critical contributor to developing both the short and long term technology roadmaps to ensure that Pacific Biosciences remains at the forefront of single molecule, real time detection applications.
Glassdoor.com

Use Social Intelligence
- Who am I speaking with?
- What is their role?
- What is the best context with which to make my point.

Questions you MUST be prepared to answer
- Why should I hire YOU?
- What is your biggest weakness?
- Do you have any questions?
- Always frame your questions using Social Intelligence
Questions you MUST be prepared to ask

- Is there opportunity to develop your career plans within the company?
- Questions based on company research
  - Technical
  - Business
  - Social
- Are there unstated competencies that would add value to you in that job?
- Always frame your questions using Social Intelligence

Questions you MUST be prepared to answer

Forbes

Top Executive Recruiters Agree There Are Only Three True Job Interview Questions

Interviewing Protocol

- Never Interrupt
- Pause and think before answering each question
- Answer a question with a question
- Listen more than you talk
- Engage your interviewers
  - Eye contact
  - Body position
- Use Social Intelligence
What do you do now?
- Identify your strengths and weaknesses
- Develop your brand
- Network, network, network

Thank You
... keep on rowing!!
Questions & Feedback
info@sciphd.com