

Navigating the Industry Landscape and Job Search Strategy

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Propelling Careers Podcast
Spotify and Apple Podcasts



Making Connections that Fuel Innovation!

Outline

- Life Sciences Career Areas
- Preparing and conducting an effective job search
- How to identify and research organizations
- Identify the title(s) relevant to your career interests
- Flux in Industry
- Job search timeframes





Lauren Celano Involvement Includes

- Co-founder and CEO of Propel Careers (2009 – Present)
 - Worked with >60 organizations to hire talent
- 10 years in drug discovery / development before Propel
- Chair, MassBioEd Board
- Member, MassBio Board
- Member, National Tay-Sachs & Allied Diseases Association Board
- Advisory Board, Professional Science Masters Program, Framingham State University
- Advisory Board, New England Graduate Women in Science & Engineering
- MBA, **Boston University**, Health Sector and Entrepreneurship
- B.S. Biochemistry and Molecular Biology, **Gettysburg College**



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Remember

Many people feel uncertain about their future –
you have many options



Finding the Right Path

What do you Like

What are you good
at

What kind of
environment is a
match for you



Job Searching: The Funnel Effect



Various Types of Organizations Exist

**Universities /
Academic
Institutions**

**Private Research
Foundations**

Non-Profits

Hospitals

**Companies
Developing
Technologies**

Think Tanks

**Venture Capital /
Finance**

IT Companies

Consulting Firms

Big Data Firms

**STEM Education
Firms**

**Research Tools
Companies**

Journals

**Communications /
Marketing Firms**

Public Health

Government



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Many Titles / Focus Areas Exist

Bench / Clinical
Research

Business
Development

Data Science / Data
Analysis

Advocacy /
Outreach

Marketing / Sales

Consultant

Writing /
Communications

Finance /
Investment
Banking

Product
Development

Regulatory /
Quality

Venture Capital

Operations

Technical Specialist

Product / Project /
Alliance Manager

Teaching / Training

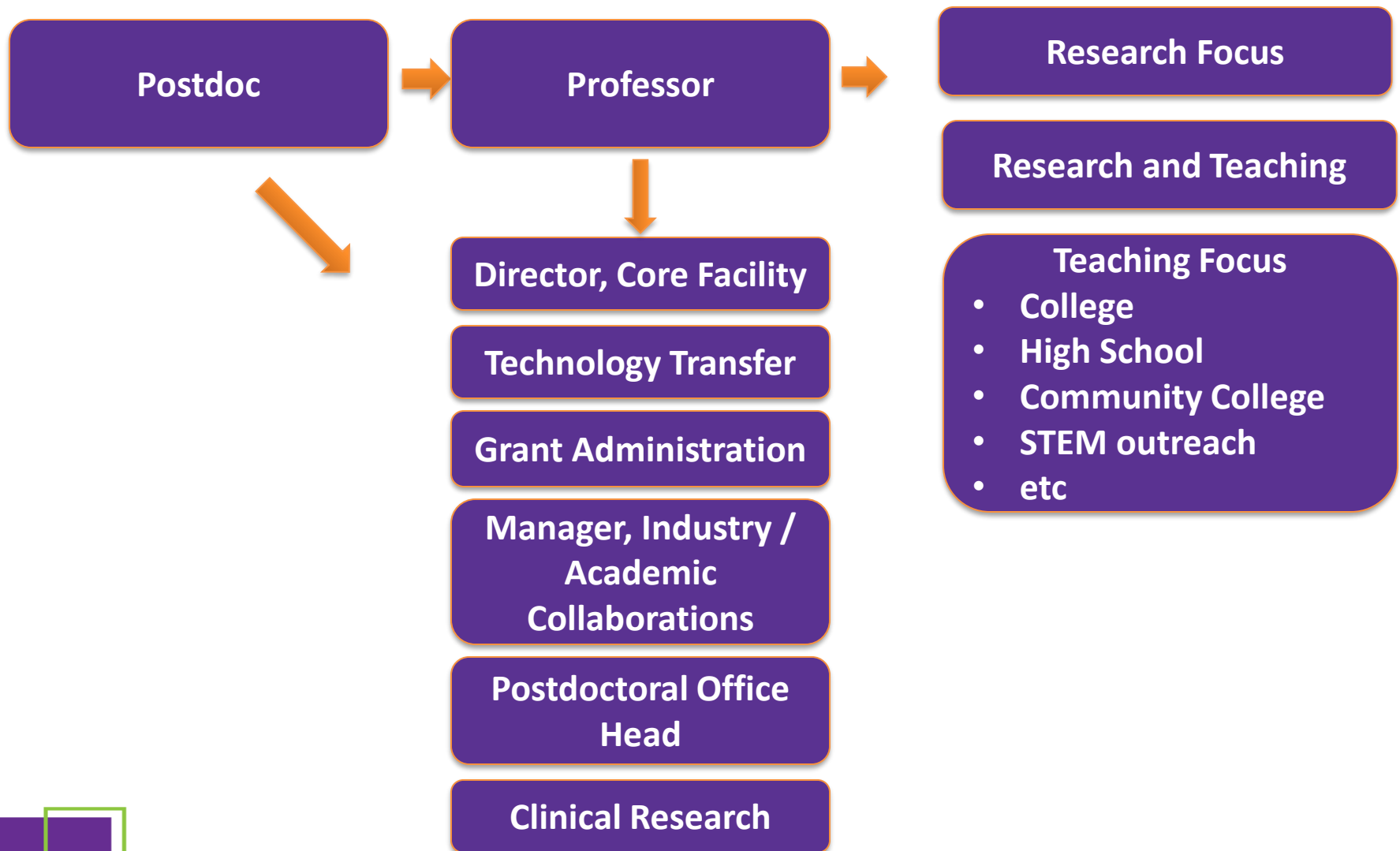
etc



Career Paths



A Few Academic Career Paths



Variety of Career Paths - Postdocs

Academic

- Research fellowship
 - Medical Institution
 - Research Institution
 - Non-profit
 - NIH

AAAS

- Policy Fellowship
 - i.e. AAAS
- Mass Media Fellowships
 - i.e. AAAS

Industry

- Research Postdoctoral fellowships
- Non Research Postdoctoral Fellowships
 - Regulatory
 - Medical affairs
 - Quality
 - Business Development
 - Real World Outcomes
 - etc



Career Paths in Research Institutions



THE SCRIPPS RESEARCH INSTITUTE®



- Research Roles
- Alliance / Project / Program Management Roles
- Grant Administration / Evaluation
- Patient Advocacy Roles
- Licensing / Partnership Roles



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Industry is Very Broad

Drug Companies

- Companies that develop Drugs



Making Connections that Fuel Innovation!

Diagnostics Companies

- Companies that diagnosis Disease



Digital Health Companies

- Companies building IT tools to understand Health



Industry is Very Broad

Contract Research Organizations (CRO's) / Contract Development Manufacturing Organizations (CDMO's)

- Companies do research for pharma/biotech companies (i.e. animal studies, manufacturing of drugs)



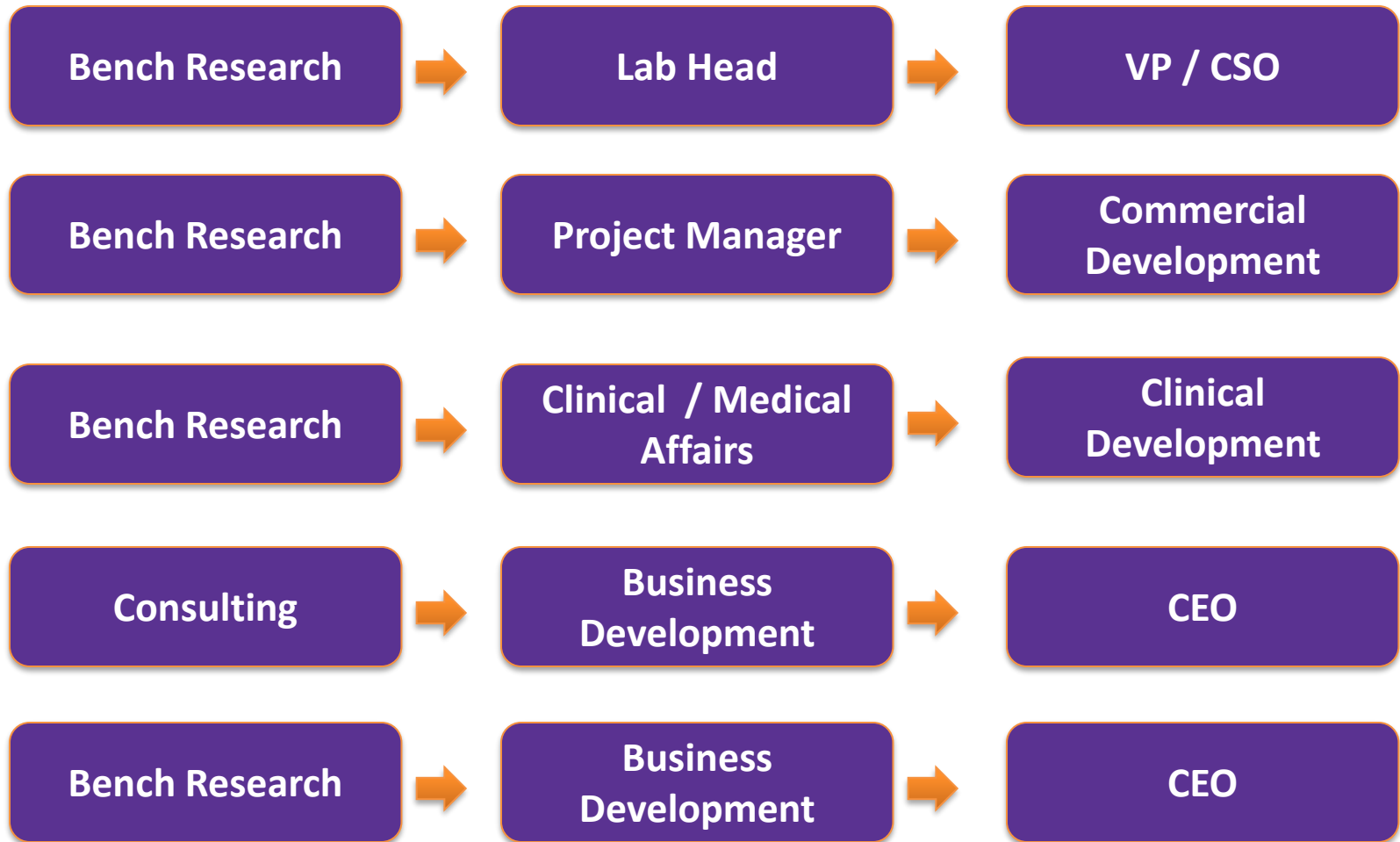
Research Tools Companies

- Companies that develop research tools for research



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A Few Industry Career Paths



Research Career Paths

- Many organizations have different career tracks:
 - Management track
 - Do research in an org → 3-5 years later Manage people, projects, teams, etc
 - Individual Contributor track
 - Strong hands on researchers are invaluable. If you like performing research, you can have a fulfilling career being an individual contributor

Industry Discovery & Development Process



Discover Drugs



Manufacture Drugs



Perform Clinical Trials to Ensure Safety



Drug Approval / Sale of Drugs

Drug Discovery Related Roles



- Exploratory Biology
- Preclinical Development

Example Roles:

- Cell Biology
- Molecular Biology
- Pharmacology
- Animal Studies
- Chemistry
- Drug Delivery
- Analytical Development
- Bioinformatics
- Lab Operations
- etc

Drug Manufacturing Related Roles



Example Roles:

- Upstream Process Development
- Downstream Process Development
- Analytical
- Quality Assurance
- Regulatory
- Drug Delivery
- Etc



Tablets



Capsules



Vials

Clinical Research Related Roles



Example Roles:

- Translational Biomarker Scientist
- Clinical Research Coordinator
- Clinical Recruitment
- Patient Advocacy
- Medical Writing
- Medical Science Liaison
- IT / Database management
- Regulatory
- Supply Chain
- Language Translation
- Etc

Other Roles

- Business Development
- Portfolio Prioritization
- Product Management
- Project Management
- Alliance Management
- Market Access
- Reimbursement
- Pharmacoeconomics
- Technical Specialist
- Sales
- Medical Communications
- Scientific Communications
- Marketing
- Investor Relations
- Public Relations
- Human Resources



Many Consulting Firms Exist

Management Consulting

McKinsey
& Company

Deloitte.

BCG

Life Sciences Specific

HEALTH ADVANCES
Strategy Consultants for the Healthcare Industry

putnam associates
INSIGHT. CLARITY. STRATEGY.

TRINITY PARTNERS

Analytical / Health Economics Focused

ANALYSIS GROUP
ECONOMIC, FINANCIAL and STRATEGY CONSULTANTS

Evidera

PPD

Public Health Focused

JSI JOHN SNOW, INC.
JSI RESEARCH & TRAINING INSTITUTE, INC.
Promoting and improving health in the US and around the globe

Government Focused

Booz | Allen | Hamilton®

THE **Brattle** GROUP

Specialty Focused

GLOBAL PRIOR ART, INC.

Immuneering

METRUM
RESEARCH GROUP



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Additional Roles

Patent Law

- Technical Specialist
- Patent Analyst (licensed patent agent)

Editor

Venture Capital / Investment Banking



VC Fellows Programs



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ABOUT THE PROGRAM

A 12-week paid summer program where exceptional innovator-entrepreneurs help create the next disruptive life science startups.

We recruit outstanding scientists, engineers, inventors and budding entrepreneurs to work hand-in-hand with our seasoned professionals through our uniquely entrepreneurial scientific exploration process, with the potential to ultimately produce pioneering new ventures. This program is exclusively for Ph.D., M.D., M.S., and science-minded M.B.A. students who are within one year of graduating or have just done so.

If you're considering an alternative path from academia that allows you to remain engaged in creative science, Flagship's Fellows Program offers a balance of freedom of thought, imagination, science rooted in reality and rigorous business practice.



Making Connection

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Non-Profit Organizations – such as...

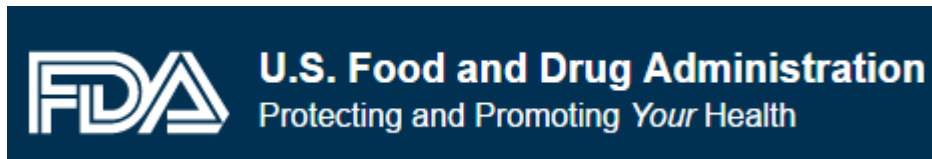


- Research Roles
- Alliance / Project / Program Management Roles
- Grant Administration / Evaluation
- Patient Advocacy Roles
- Licensing / Partnership Roles



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Government Roles / Science Policy



- Research Roles (Full time and Contract)
- Alliance / Project / Program Management Roles
- Grant Administration / Evaluation
- Science Policy
- Licensing / Partnership Roles
- Communications

<https://www.aaas.org/programs/science-technology-policy-fellowships>



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Providing opportunities for outstanding scientists and engineers to learn first-hand about federal policymaking while using their knowledge and skills to address today's most pressing societal challenges.

Photo credit: AAAS STPF

PROGRAMS

Science & Technology Policy Fellowships



APPLY

SUBSCRIBE

SCIENCE & TECHNOLOGY POLICY FELLOWSHIPS

BECOME A FELLOW

Big Data



ORACLE®



BURBERRY



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Convergence Areas

The Unseen for Selfridges



The Unseen's color-change collection at Selfridges (Image: The Unseen)

What kind of organization do you want to work in?



Small Organization



Small Organization

Research

Training
Scientists

Grants

Managing
Collaboration

Interact with
Vendors

Fix machines

Write SOP's

Prepare
presentations
for Business
Group

Etc...

Larger Organization



Job search tips



Leverage Anchors - Otherwise You May Feel Like You Are In a Maze



Using Anchors in your Job Search

Anchor 1: Disease Area

Anchor 2: Focus of company

Anchor 3: Location: i.e. Boston, NYC, San Francisco

Anchor 4: Stage of company: i.e. clinical stage

Anchor 5: Type of Role: Non-Bench

Anchor 6: Lifestyle Options i.e. work from home

Etc



Develop Your Target List



Organizations Interested in	Organizations that are a fit	Organizations applied to	Status



Conferences Provide a Wealth of Information



MEMBERSHIP

MEETINGS

CAREERS

INITIATIVES

ADVOCACY

OUTREACH

PUBLICATIONS

ABOUT

Thank You for Attending #SfN24!



Search all Neuroscience 2024 abstracts and presentations via the [Neuroscience Meeting Planner](#), or [download PDFs of abstracts](#) for all annual meeting presentations.

Neuroscience 2025 took place Saturday, November 15–Wednesday, November 19 in San Diego. Learn more about [Neuroscience 2025](#).

Quick Links



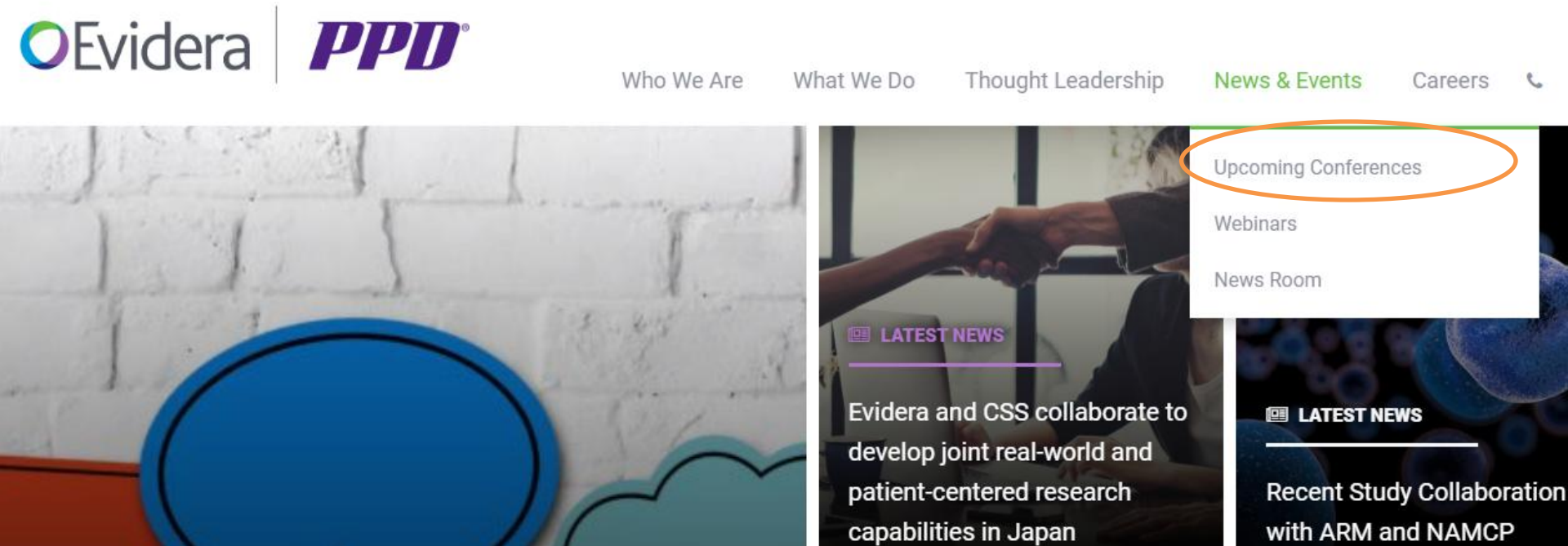
- ▶ [Neuroscience Meeting Planner](#)
- ▶ [Neuroscience 2024 Abstract PDFs](#)
- ▶ [Program and Exhibit Guide](#)
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Use Organization Websites to Identify Conferences



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NIH RePORTER

Version: 7.11.0

<https://reporter.nih.gov/advanced-search>

Identifying Organizations – Search...

Advanced Projects Search

Reset

Search

Researcher and Organization

Fiscal Year ?

Active Projects

Current FY is 2025

Principal Investigator (PI) ?

PI Names or Profile IDs, semicolon ";" separated

Organization ?

Enter at least 3 characters to search

City ?

State ?

Country ?

Congressional District ?

Department Type ?

Organization Type ?

Please select a state first

Text Search

Text Search (Logic) ?

☒ AND ?

☐ OR ?

☐ Advanced ?

Limit Project search to ?

☒ Project Title

☒ Project Terms

☒ Project Abstracts

2,500 characters left



Look at Venture Capital Organizations



ANDREESSEN HOROWITZ *Software Is Eating the World*



<https://nvca.org>

Portfolio

Status

▼

Focus

▲

All
Autoimmunity
Cancer
Cardiovascular Disease
Device/Therapeutic Technology
Diagnostic
Digital/AI/ML

Location

▼

Thrive.
Earlier Detection

Ma22

AVA

IS

insitro

Cedilla
THERAPEUTICS

Look at Incubators

OUR RESIDENT NETWORK

Meet Our Residents

LabCentral has generated significant interest from entrepreneurs and startups working on groundbreaking science who are eager to join LabCentral, a first-of-its-kind, fully resourced and equipped life-sciences laboratory space. Participants are chosen through a competitive process, where only the highest-potential applicants are selected in keeping with our mission.

<https://www.labcentral.org/>

<https://www.masslifesciences.com/resources/incubators/>

Industry Associations

Council of State Bioscience Associations



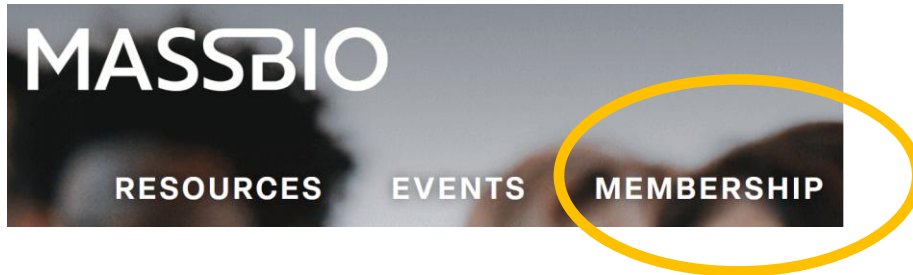
The Council of State Bioscience Associations (CSBA) is a confederation of state-based, non-profit trade organizations each governed by its own board of directors. The common mission of the members of the CSBA is to promote public understanding, and to advocate for public policies that support the responsible development of the bioscience industry. These groups are recognized by BIO as affiliate organizations in their respective states. The contents of this

listing may not be reproduced or used in any form without prior written permission from BIO.

BioAlabama	+
Arizona BioIndustry Association	+
Biocom	+
California Life Sciences Association	+
Southern California Biomedical Council	+

<https://www.bio.org/council-state-bioscience-associations>

MassBio's Membership List and Jobs Page



<https://www.massbio.org/members/>

SEARCH MEMBERS BY CATEGORY

– Select a category – ▼

– Select a category –

- Academic, Hospitals, & Non-Profit Organizations
 - Academic
 - Disease Foundation
 - Foreign Agencies
 - Government
 - Hospitals
 - Incubator
 - Non-Profit Organization
 - Non-Profit Research Institute
- Associate Industry
 - Accounting
 - Business & Financial Consulting
 - Cleanroom Operations & Mechanics
 - Clinical & Regulatory Strategic Consulting
 - Design & Construction Services
 - Environmental, Health & Safety Consulting
 - Facility Services
 - Government Affairs
 - Human Resources & Operations Consulting

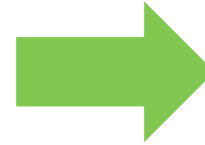
MassBio's Career Center

careers.massbio.org



Don't just search via "Job Title"

Target List of Orgs



**Look on Website
for Roles**

**Look at profiles on
LinkedIn to Learn
about roles at org**

**Put org name into
Job Boards**

**Do Informational
Interviews**

**You could reachout to
org directly if no roles
are posted**

Organizations Interested in	Organizations that are a fit	Organizations applied to	Status

What Job Title Are You Looking For?

Evaluate Job Postings

- Top bullet points, normally most important
- Evaluate Hard and Soft Skills to see your alignment
 - 60% match might be fine...
- Evaluate “Years of Experience”



Which Title is Relevant to you?

- Many titles may mean the same thing since organizations may have different title structures
- Ask people during informational interviewing what titles they have seen for your roles of interest
- Search LinkedIn profiles to see what titles people have in organizations of interest
- Look at job descriptions



The Industry is in Flux



Fierce Biotech Layoff Tracker

Fierce Biotech Layoff Tracker 2025: BioNTech lays off 63 as it ends CAR-T development in testicular cancer

By Gabrielle Masson, Darren Incorvaia · Jun 18, 2025 12:43pm

<https://www.fiercebiotech.com/biotech/fierce-biotech-layoff-tracker-2025>



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Fierce Biotech Funding Tracker

Fierce Biotech Fundraising Tracker '25: Actio raises \$66M series B; Draig draws in \$140M

By Gabrielle Masson, Darren Incorvaia, James Waldron • Jun 18, 2025 9:00am

<https://www.fiercebiotech.com/biotech/fierce-biotech-fundraising-tracker-25>



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Innovation is still very active

Digital Health

Process
Development

Translational
Research

Cell and Gene
Therapy

Computational
Biology / ML

DMPK /
Toxicology

Lipid
Nanoparticles
/ Drug Delivery

Functional
Genomics



Tidal Wave of Applicants



Example of an academic CV

John Smith

Institution Address

Email; Phone

EDUCATION

- 2007-2013 **Ph.D. Molecular and Biochemical Nutrition**
University of California, Berkeley, CA
Advisor: Hei Sook Sul
Thesis Title: "Embryonic Development and Adult Expansion of Adipose Tissue"
- 2002-2006 **B.S. Nutrition, Chemistry minor**
Case Western Reserve University, Cleveland, OH
Advisor: Pamela B. Davis

RESEARCH EXPERIENCE

- 2008-2013 **Graduate Research**, University of California, Berkeley, CA
Advisor – Hei Sook Sul
- 2006-2007 **Research Assistant**, Metabolic Mouse Phenotyping Center (MMPC), Department of Nutrition,
Case Western Reserve University
Advisor – Henri Brunengraber
- 2005-2007 **Undergraduate Research**, Case Western Reserve University, Cleveland, OH
Advisor – Prof. Pamela B. Davis, Willard A. Bembaum Cystic Fibrosis Research Center

TEACHING EXPERIENCE

- 2007-2013 **Research Mentor**, University of California at Berkeley, CA
- Mentored one graduate student and twelve part-time undergraduate students
- 2012 **Guest Lecturer for NST 103: Nutrient Function and Metabolism**, University of California at
Berkeley, CA
- 2011 **Guest Lecturer for "The Chemistry of Cooking"**, University of California at Berkeley, CA
- 2010 **Guest Lecturer for NST 148: Food Science**, University of California at Berkeley, CA
- 2008-2010 **Graduate Student Instructor**, University of California at Berkeley, CA
- Food Science Lab, Spring 2009, Spring 2010
- Introduction to Human Nutrition, Fall 2008

HONORS

- 2012 **Stokstad Memorial Award**, Department of Nutritional Science and Toxicology, UC Berkeley
- 2009 **National Science Foundation, Honorable Mention**
- 2008 **Outstanding Grad Student Instructor Award**, GSI Teaching & Resource Center, UC Berkeley
- 2004-2006 **Alumni Scholarship**, Case Western Reserve University

NAME
ADDRESS
Phone; Email

Resume Example

SUMMARY OF QUALIFICATIONS

- Experienced research scientist with a background in *in-vivo* modeling and adult neural stem cells
- Proficient in techniques in molecular and cellular biology, microscopy, histology and virology
- Excellent verbal and written skills, strong interpersonal and team work skills.

PROFESSIONAL EXPERIENCE

University of SCHOOL, Boston MA

Lab focused on molecular neuro-oncology with an emphasis in gliomas and neurofibromas

Doctoral researcher

Sept 2007-2013

- Research focused on developing mouse models of gliomas. Used gene expression to study glial development and the process of tumorigenesis.
- Demonstrated that the interaction between specific combinations of genetic alterations and susceptible cell types, rather than the site of origin are important determinates of gliomagenesis.
- Adapted sorting and dissecting techniques to purify culture and implant murine neural stem cells.
- Used molecular biology, cell biology, tissue culture, histology, flow cytometry and imaging techniques extensively. Also used viral production/delivery and mouse models (somatic and germline genetic models) extensively.
- Participated in preparing and writing of operating grant applications (NIH and DOD)
- Trained graduate student, post docs and technicians in mouse dissection and surgical procedures.
- Trained and supervised technicians in the management of the mouse colony.

SCHOOL University, BOSTON MA

Lab focused on the molecular mechanisms underlying the association of obesity

Undergraduate research thesis

- Investigated the effects of leptin in cardiac remodeling in human and mice
- Pharmacologically inhibited the Janus-activated kinase and mitogen-activated protein kinase
- Utilized RT-q PCR to study the effects of leptin on matrix metalloproteinases

EDUCATION

SCHOOL UNIVERSITY, Boston, MA

PhD. in Cancer Biology

- Study of the mTOR Pathway with respect to cancer formation

SCHOOL University, Boston, MA

BS, Department of Biology, cum laude

SKILLS AND TECHNIQUES

- **Molecular biology:** recombinant DNA techniques, western blotting, RT-qPCR, viral transduction, liposome mediated transfection, electroporation
- **Cellular biology:** Isolation and culture of neural stem cells, astrocytes, neurons and cardiomyocytes, apoptotic, cell cycle and differentiation assays, immunofluorescence, flow cytometry, protein extraction purification
- **Microscopy:** light microscopy, fluorescent/laser confocal microscopy
- **Virology:** Amplification and purification of adenovirus and lentivirus for *in-vivo* and *in-vitro* work
- **Tumor biology:** Stereotactic intracranial injection of cells and virus, micro-dissection of mouse brain at embryonic and adult stages, transcardial perfusion.
- **Histology:** Immunocytochemistry, HE staining, cryosection and vibratome sectioning
- **Computer skills:** Microsoft word, Excel, PowerPoint, Photoshop, Illustrator, FlowJo, Prism
- **Language:** French, Italian, Spanish

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- | | |
|--|------|
| • Society of neuro-oncology | 2011 |
| • American association for cancer research | 2010 |

PRESENTATIONS

- | | |
|------------------|------|
| • Presentation 1 | Date |
| • Presentation 2 | Date |
| • Presentation 3 | Date |

PUBLICATIONS

- List publication 1
- List publication 2
- List publication 3
- List publication 4, etc



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Job Search Timelines

- AAAS fellowships: Nov 1, 2025 application deadline, start in Sept 2026
- Most Industry Roles: Desired start 1-3 months after role is posted
- Large Consulting / Investment Banks: apply Fall 2025; start ~ June 2026
- Boutique consulting firms / investment banks: Some fall application process, other rolling hiring



Contact Details: Connect with Propel



**Propelling Careers Podcast
Spotify and Apple Podcasts**



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Twitter: @[Propel_Careers](https://twitter.com/Propel_Careers)

LinkedIn: [Propel Careers](https://www.linkedin.com/company/propel-careers)

Web: www.propelcareers.com



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