Skill Identification and CV Workshop

Lauren Celano
CEO, Propel Careers
Lauren@propelcareers.com



Outline

- Overview of skills gained during academic training
- What skills are useful for different career paths
- How do you highlight your skills in a resume
 - Content advice
 - Formatting advice
- Resume examples research & non-research roles



Transferable Skills

Academic Training provides you with many skills, in addition to bench work



Skills for Academic Success can also apply to Industry

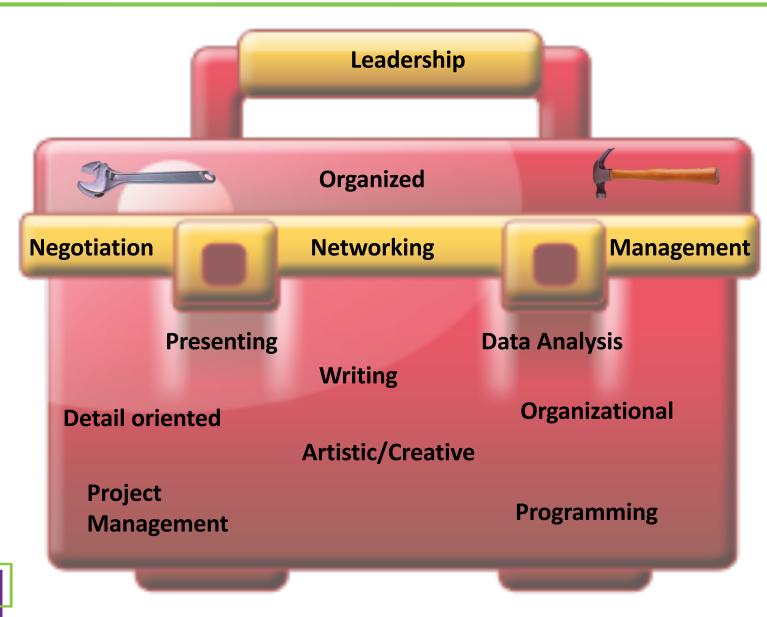
- Publications and Presentations
- Thought Leadership (e.g.)
 - Peer Reviewing
 - Chairing conferences
 - Advisory Roles
- Grants Navigation / external funding
- Involvement in the University
 - IRB, IACUC, etc
 - Admissions committees
 - Departmental initiatives
- Collaborations
- Teaching
- Mentoring



Additional Skills Gained in Academic relevant to Industry

- Writing / reviewing intellectual property
- Developing Business plans; market research
- Consulting clubs / case studies
- Writing: blogs, technical / nontechnical writing
- Software: Illustrator, photoshop, indesign
- Quantitative Skills: SAS, Matlab, STATA, R, SPSS, Matlab, etc
- Courses: i.e. Drug discovery, entrepreneurship, finance, regulatory, etc
- Leadership roles in organizations

What Skills do you want to use in your Career?



Three Essential Skills



Developing Teamwork Skills

- Lead collaborations with academia, industry, non-profits
- Initiate collaborations with labs (internal or external)
- Work on cross functional teams (for your research)
- Manage relationships with vendors
- Take leadership role in your Postdoctoral Association
- Leadership role in groups (internal / external to Univ.)
- Community Service





Developing Leadership Skills

- Leadership roles in groups internal and external to university
- Take leadership roles in collaborations
- Organize / co-organize a panel at a conference (i.e. Keystone, Gordon conference)
- Organize / co-organize a conference
- Manage people to complete a task
- Manage or a process
- Improve processes and efficiency (develop solutions)
- Set up new techniques, write protocols for them
- Manage a relationship with a vendor
- Train / Mentor students, interns, lab members





Organizations Value Communication





Developing Communication Skills

- Present to technical audiences (i.e. conferences) and non-technical audiences (i.e. patient advocacy groups)
- Lead / contribute to grant writing opportunities
- Review colleagues papers, presentations, grants
- Lead / contribute to annual grant reporting activities
- Become a spokesperson for your lab / give tours
- Present to collaborators
- Teach / Mentor
- Write (papers, blogs, white papers, etc)





Why are skills and experiences important to build / highlight





Research and Development

- Solid Technical Foundation
- Translational research
- Manage / Initiate research collaborations
- Work cross functionally
- Write patents
- Intern with startup
- Develop business plans
- Write Grants

Entrepreneurial Company



- Set up a lab (with 1st time PI)
- Develop a new research direction for the lab
- Comfortable with very innovative research
- Wear many hats
- Initiate collaborations
- Write grants, annual reporting
- Write Patents
- Intern with a startup



Intellectual Property Roles



- Latest techniques (i.e. CRISPR)
- Prior Art Searches
- Literature Searches
- Documentation
- Writing Patents for your Research
- Patent Courses
- Tech transfer internship
- Case Competitions
- Business Plan

Grant Management



- Contributing to Grant writing
- Writing Grants for your Research
- Searching for your own grants
- Annual Reporting for Grants
- Peer Reviewing your Colleagues Grants
- Grant ReviewCommittees

Project Management / Alliance Management



- Manage multiple projects
- Manage collaborations
- Manage tams
- Work with People of different backgrounds
- Develop schedules / deliverables



Medical Affairs, Clinical Research



- Translational disease research
- Collaborate with Clinicians/ Medical Teams
- Clinical research
- Clinical biomarkers
- IRB experience
- Regulatory submissions
- Regulatory / clinical courses
- Presenting a lot

Business Development



- Startup formed from your research
- Tech Transfer Internship
- Collaborative Research
- Intern at Startup
- Develop a business plan
- Secured funding for your research
- Business Course(s)
- Patents
- Networking
- Negotiation



Marketing Communications

- Technical & nontechnical writing
- Lab Public Relations Give Tours / Present
- Blog writing
- Design flyers or marketing materials
- Social Media
- use programs i.e.Illustrator,photoshop

Strategy Consulting



- Consulting club
- Case competitions
- Business courses
- Leadership roles in organizations
- Tech transfer internships
- Working with cross functional teams
- Presenting a lot
- Strong writing skills

Regulatory



- Develop / improve processes
- Develop SOP's and protocols
- Train people on techniques
- QC data
- Contribute data to a regulatory filing
- Work with cross functional teams



Technical Sales /
Application Specialist

- Manage relationship with vendors
- Manage the purchasing process
- Develop budgets
- Install equipment
- Train people on techniques
- Develop training materials

Policy

- Advocate for grad students / postdocs (i.e. head of grad student or postdoc association)
- Member of a groups advocacy committee like AWIS or your "professional association, i.e. AACR"
- Member of national postdoc association
- Improve policies within university

Data Science Roles

- Quantitative Skills i.e. SAS, STATA, R
- Data visualization tools
- Programming languages
- "big data analytics"



Teaching and Managing Skills – Always Valuable

Teaching



- TA or TF at undergrad or graduate school
- Adjunct teach a lecture or a course
- Design courses / labs
- Volunteer with STEM non-profits
- Teach at grade school

Management



- Manage people (interns, grad students, teams)
- Manage a team/activity for your lab or outside of your lab, i.e. non profit
- Manage a collaboration
- Manage a grant review
- Manage a activity



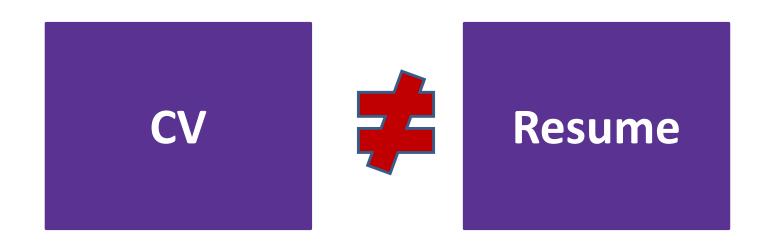
What skills do you have?



Resume Formatting



A Resume is not a CV



And a Resume is not an NIH Biosketch!!!



Differences Between CVs and Resumes

	CV	Resume	
Address	Work	Home	
Email	Professional address	Personal address	
Education	Education listed first	Education can be listed a few different places	
Research detail	Include a lot of detail on research projects. Correct to assume reader has knowledge in your field	Research detail is tailored for each role / company	
References	Professional references listed	Typically not listed	
Mentees	Mentees names listed	Mentees names not listed	
Grants	List grants with \$\$ on CV's	Grants funding agency name listed, typically not dollar amount	



US Resumes: Do not include

Picture



- Personal information:
 - date of birth, family, relationship status
- Be careful with listing hobbies
 - Interesting hobbies are ok



When to Submit a Resume or CV

	CV	Resume
Academic PI Role	X	
Academic Research Role	X	
Academic Administrative Role		X
Industry Research Role		X (with papers and presentations)
Industry non-research role i.e. project management, clinical, regulatory, etc		X (papers and presentations optional)
All other Non-Academic Roles i.e. consulting, investment banking, venture capital, marketing, etc		X (papers and presentations optional)



John Smith

Institution Address Email; Phone

EDUCATION

Example of an academic

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. Bernbaum 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



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

SUMMARY OF QUALIFICATIONS

- Experienced research scientist with a background 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.

PROFESSIONALEXPERIENCE

University of SCHOOL. Boston MA

Sept 2007-2013

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

- 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 obe: Undergraduate research thesis

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

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

Resume Example

- 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-viro 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



Making Connections that Fuel

Confide

10 Seconds ...

The average time an HR looks at your resume or CV



Customize your Skills!

You choose what to highlight among your experiences





NAME ADDRESS Phone; Email

SUMMARY OF QUALIFICATIONS

- Experienced research scientist with a background 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.

PROFESSIONALEXPERIENCE

University of SCHOOL. Boston MA

Sept 2007-2013

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

- 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 obe: Undergraduate research thesis

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

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

Resume Example

- 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-viro 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



Making Connections that Fuel

Confide

A Few Points to Consider...

- If you want to pursue research
 - Highlight research experiences, skills, techniques
 - Research Techniques Section in Resume
- If you want to pursue non-research roles
 - Highlight teaching, presentation, organizational, volunteer, team work, mentorship experiences
- 2 pages can be okay
- Put your name (first / last) in the file name
- Formatting matters



How do you Know What to Include in a Resume?

Use the job description to guide you



Hard Skills - Green. Soft Skills - Purple.

Company is looking for a Scientist, dedicated to the Molecular group to utilize high-throughput techniques to generate genetically modified mouse models for pharmaceutical development.

Experience and Required Skills:

- This position requires a Ph.D. or equivalent degree in the area of biology or life sciences.
- The candidate must have a minimum of 5 years of post-graduate/industry research experience related to <u>Molecular Genetics with a comprehensive understanding of genetically modified mouse</u> <u>model generation.</u>
- The individual should have extensive knowledge and technical proficiency in <u>standard molecular</u> <u>biology techniques</u> to <u>work independently</u> in the <u>design and generation of complex targeting</u> constructs
- Demonstrated <u>ability to quickly learn</u> and <u>accurately perform new procedures</u> involving a range of technologies
- Ability to motivate and/or supervise junior staff with a good understanding of project scheduling and timeline
- Excellent written and oral communication skills in addition to a strong desire to excel in a multidisciplinary environment and dedication to team work are essential



Points to Highlight in your Resume and Cover Letter

Hard Skills

- High-throughput techniques to generate genetically modified mouse models
- Experience with state-of-the-art molecular technologies
- Familiarity with current advances in transgenic and genome engineering technologies
- Ability to design and generation of complex targeting constructs
- Publications
- Patents

Soft Skills

- Ability to trouble shoot under minimal supervision
- Scientific and technical supervision to junior staff
- Ability to maintain scientific curiosity
- Communication and documentation skills
- Ability to quickly learn
- Experience with project scheduling and meeting timelines
- Experience working in a multi-disciplinary environment and team oriented



Details from Job Postings

ltem	Must Have	Nice to Have	Do you have the Skills (Y/N)	If N, how will you Build the Skill
Specific research experience – i.e. ChIP-seq	X			
Experience training people	X			
Experience with Budgeting	X			
Specific Disease/Technical Knowledge – i.e. Immunology	X			
Collaboration Experience		X		



Contact Information

- Your name, with credentials (e.g. Ph.D., MBA)
- Your HOME address, personal phone and email
 - Have a professional email name... i.e. firstname.lastname@gmail.com
- If you are international and have US citizenship or Green Card, list it, otherwise sponsorship is assumed

John Smith, Ph.D.

XX Street, Cambridge Ma, 02139

name@gmail.com; 123-456-7890

Green Card Holder



Objective vs. SOQ

Objective can be restrictive in a resume

Objective: to be a research chemist in an oncology biotech

What if your objective changes?



Summary of Qualifications

- What top 3 things do you want people to know about your qualifications...
 - Scientific skills
 - Business skills/interest
 - Leadership ability, analytical skills, teamwork
- ... and your fit with the company and position





SOQ Example

- Ph.D. trained molecular and cell biologist with expertise developing novel genetically modified mouse models to study metabolic and aging disorders.
- Established track record of successful collaborative research projects (4 external and 3 internal), strong ability to multi-task and work effectively within a group setting.
- Successful publication record (14 first author including Nature and Cell) > 15 conference presentations and 3 patents.

EXPERIENCE



What belongs in this section?

- Employment salaried
- Graduate and undergraduate research
- Certain volunteer experience

EXPERIENCE

University of SCHOOL, Boston MA

Sept 2008-2014

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

Doctoral researcher

- · Research focused on ...
- Demonstrated that ... Adapted sorting and dissecting techniques to purify culture and implant murine neural stem cells.
- · Used techniques ...
- Participated in preparing and writing of operating grant applications
- Trained ...

SCHOOL University, BOSTON MA

Jan 2004-June 2007

Lab focused on the molecular mechanisms underlying the association of obesity and insulin resistance. Undergraduate research thesis

- Investigated ...
- Identified ...
- Used techniques ...



How you List Information Matters

Name Address Phone; email

SUMMARY

Biotechnology researcher with 14 years of basic and translational science and industry R&D experience. Excellent communicator and enthusiastic collaborator, with an objective of meeting and exceeding project goals.

WORK EXPERIENCE

Amgen, Inc., Research Associate in Hematology/Oncology, Cambridge MA, 2005 – 2007

- I participated in a discovery research program and screened two novel hematology/oncology therapeutics involving target identification/validation, assay development, small molecule library screening and SAR.
- I investigated novel drug targets based on reports from the primary literature and recommended novel
 molecular target that was screened both in vitro and in vivo.
- I was lab safety coordinator for the Oncology laboratory where I coordinated with the building EH&S head
 to ensure compliance with local, state and federal safety regulations.

Boston University School of Medicine, *Research Technician in Dermatology*, Byers Lab, Boston MA, 2001 – 2005

- I studied the role of intermediate chain cytoplasmic dynein in response to UV-induced DNA damage using
 a combination of techniques including Western blot, time lapse microscopy, immunocytochemistry and
 immunohistochemistry and published two papers on this research.
- I also assisted in the development of a novel melanoma small molecule therapeutic using SCID and Nude mouse xenograft models using a metastatic melanoma model which was also published in a peer-reviewed



Level of Details Matter

RESEARCH EXPERIENCE

University X, Boston MA

2010 - Present

Graduate Researcher

The role of myocardin related transcription factor A (MRTFA) in controlling the commitment of progenitors to adipose lineage versus osteoblastic lineage.

University X, Boston MA

2008 - 2010

Masters Researcher

The mechanisms of plant lectin-induced cancer cell apoptosis.



Listing Scientific Experience

- List what you were responsible for:
 - Research focused on XX
 - Identified a novel pathway related to XX
 - Responsible for setting up the lab and/or coordinating research of lab mates
 - Utilized the specific lab techniques of XXX
 - Were you responsible for managing any...
 - People, budgets, collaborations, activities, relationships, etc
 - Did you present at public meetings or conferences on behalf of the lab or company?
 - Did you write grants?



Highlighting Transferable Experience

- Lead a team of 4 graduate students and postdocs to perform a genetic screen leading to the identification of 12 novel genes that regulate synaptic morphology and development
- Initiated and lead collaborations with Dr. James E. Rothman (Yale University), Dr. Daniel Kümmel (Universität Osnabrück, Germany), Dr. Maria Bykhovskaia (Universidad de Caribe, Puerto Rico)
- Collaborated with clinical team in the design of a phase I trial for brain tumors (industry / academic collaboration).
- Extensive experience writing successful grants (i.e. RO1, SBIR, AHA, NSF).
- Trains fellows and graduate students (>20 people) in cellular and molecular biology techniques.



Resumes – Wording Matters...

Before:

 Research studies the role of different cell types in VNH with emphasis on key proteins such as VEGF-A, miRNA-21 and IEX-1

What does this mean?



Resumes – Wording Matters...

After:

 Research studies chronic kidney disease and the role of key proteins in an oxygen-deprived environment.

Drill your resume down to words that many people can understand

Two+ Positions under one Organization

PROFESSIONAL EXPERIENCE

University of SCHOOL. City, State

2004 - Present

Sept 2012 - Present Aug 2009 - Sept 2012

Sept 2004 - Aug 2009

The laboratory of Dr. XXX focuses on....

Research Associate, XXX Department

Postdoctoral Fellow, XXX Department

- · Research investigates...
- Demonstrated that...
- Techniques include...
- · Writing experience, presentations....
- Training, Supervising, Teaching experience....
- Teamwork experience....
- Collaborations with other labs, institutes, industry

The laboratory of Dr. XXX focuses on....

Ph.D. Candidate, XXX Department

- Research investigates...
- Demonstrated that...
- · Techniques include...
- Writing experience, presentations....
- · Training, Supervising, Teaching experience....
- Teamwork experience....
- Collaborations with other labs, institutes, industry

COMPANY NAME, City, State

Start - End



Making Connections that Fuel Innovation!

Strategy for Subheadings...

 If you have gained several experiences in a position you can make a separate section to highlight the skills

SCIENTIFIC EXPERIENCE

Organizations, City, State

2010 - Present

One sentence desc of company....

Researcher, XX Department

Regulatory Experience

- · Contributed to technical summaries for regulatory submissions including IND and NDA
- · Develop protocols and SOP's for XX
- Trained team members on XX

Scientific Experience

- Responsible for identifying a therapeutic target for breast cancer
- Screened small molecules and identified a lead molecule which advanced from efficacy testing into a preclinical IND program
- Responsible for performing in vivo efficacy studies in xenograft models
- · Managed scientific discussions collaborators

WRITING EXPERIENCE

TEACHING EXPERIENCE



Listing Multiple Projects

University X, Boston MA

2011- Present

Graduate Student Researcher, Dept of _____

- Project 1: Research focused on X (2014- present)
- Project 2: Research focused on X (2013- present)
- Project 3: Research focused on X (2011-2013)
- Collaborated with XX
- Techniques used include XX
- etc



RESUME EXAMPLES



Research Resume

EXPERIENCE

University, X, Cambridge, MA

Sept 2007-2013

Lab of Dr. XX develops therapeutics for neuro-oncology indications with and emphasis in gliomas and neurofibromas Graduate Researcher, Department of Neuroscience

- 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.



Project Management Role

University of California Berkeley (Berkeley, CA)

2004 - 2011

Lab focuses on ion channel and neurotransmitter receptor biology Ph.D Student

- Research focuses on optical control of excitatory neurotransmitter receptors.
- Research techniques used include: electrophysiology, optics, molecular biology.
- Managed multiple collaborations:
 - Dirk Trauner Chemical Biology and Genetics, University of Munich (Synthetic photochromic neurotransmitter receptor ligands).
 - John Flannery Dept. of Molecular and Cell Biology, University of CA, Berkeley (Viral vectors and retinal degeneration).
 - Herwig Baier Dept. of Physiology, University of CA, San Francisco (Optogenetics in zebrafish).
 - Xiang Zhang Dept. of Mechanical Engineering, University of CA, Berkeley (Custom spatiotemporal optics).
- Business courses involving project management, managing innovation, and business plan development.
- Presented extensively at scientific conferences and meetings.



Business Development Role

Business Experience

XX Pharmaceuticals, City, State

February - May 2010

Advisor, Business Development

- Provided recommendation on strategic decision to pursue in-house clinical development program v/s out-license prostate cancer asset for optimizing value. Assisted in preparation of business proposal. Successfully secured nondilutive grants.
- Recommended market positioning for asset in Regenerative Medicine & Transplantation immunology space

Venture Capital Firm, City State

January - August 2009

Consultant

- Conducted due-diligence, identified investment risks & performed valuation analysis on 4 deals in Oncology space
- Participated in diligence of 2 successful transactions valued at \$40M

Boutique Consulting Firm, City, State

July - December 2008

Consultant

 Advised client of boutique consulting firm. Evaluated cardiovascular market entry strategy for med-tech company in clinical imaging space. Created map of competitive landscape & scenarios for disruption created by client's technology application

University XX, Office of Technology Licensing Associate

February – December 2008

- ociate
- Evaluated commercialization potential of 2 life-science technologies: intellectual property landscape, market analysis, start-up capital requirement
- Co-wrote business plan for start-up. Received capital commitments from angels.

Research Experience

University, City, State

2005-2010

PhD, Researcher, Department of Molecular Biology



1 Page Consulting Resume Example

EXPERIENCE

Business Development Intern

Aug 2014 - present

Harvard Biotech Career Development Program, Boston, MA

- Business development for Enteromics Inc, a start-up in Dana Farber Cancer Institute Harvard University.
- Performed due diligence on clinical indications, competitive landscape and a patent licensing deal (term sheet).
- Conducted primary research including KOL interview. Communicated scientific presentations to the internal stake holders and a business pitch presented to a VC firm.

Early Technology Assessment Fellow

Jan 2014 - Mar 2015

Office of Technology Development at Harvard University, Boston, MA.

- Selected to perform due diligence on early stage technologies from Harvard medical research community.
- Evaluated 8 early stage technologies for scientific novelty, disease indications, market size, and identified potential commercialization partners for licensing.
- Experience in pharmaceutical / biopharma databases such as Thomson Reuters-Cortellis and Biopharma Insight.

Academic Partner & Investment Analyst

Oct 2013 - present

Beacon VP. Cambridge, MA

- Member of an investment club that evaluates investment opportunities in small & mid-cap bio-pharma based on publicly available data including basic research, clinical trials data and company reports.
- Examined clinical trials data and predicted approval of 3 drugs. Achieved 27% return on investment in one year.

TEAM & LEADERSHIP EXPERIENCE

Team Competitions

 Finalist - Tufts New England Biomedical consulting case competition 	2014
 (Top 10%) Business plan pitch - Healthcare Innovation & Commercialization course at Harvard 	2013
 (Top10%) Harvard vs. MIT consulting case competition 	2012

Co-Vice President, Harvard - MIT Consulting Case Competition

2013

- Led a 10 day case competition co-organized by consulting clubs at Harvard (HGCC) and MIT (CCM).
- Managed communications as a liaison between the participants and client.

Consultant, Harvard Volunteer Consulting Club

2012

Report leader of a 5-person team working with a non-profit client for 12 weeks.

EDUCATION & TRAINING

Postdoctoral Research Fellow in Cell Biology

2010 - present

Harvard Medical School, Boston, MA

Examined the ubiquitin proteasome system in neurodegenerative disorders including autism.

Doctor of Philosophy (Ph.D.) in Cell and Molecular Biology

2004 - 2009

University of Vermont, Burlington, VT

2 first authored publications and 1 patent (licensed by a biotech company named Mitotherapeutix in 2014)

Master of Veterinary Science in Biochemistry

2001 - 2003

Indian Veterinary Research Institute (IVRI), Deemed University, Bareilly, India

Awarded senior research fellowship (top 5%) by the Indian Council of Medical Research.

Bachelor of Veterinary Science (D.V.M)

1995 - 2000

Bombay Veterinary College, Mumbai, India



Making Connections that Fuel Innovation!

53

SKILLS AND TECHNIQUES



Scientific / Technical Skills

Skills and Techniques

- Molecular Biology: Cloning, PCR, quantitative PCR, mutagenic PCR, DNA purification from Gram-positive and Gram-negative bacteria, DNA sequence analysis, plasmid design and construction, microarrays, Illumina-based sequencing
- Protein: Protein expression, protein purification via affinity chromatography, protein separation by SDS/PAGE, ELISAs, Western blotting, protein quantification, enzymatic protein digestion
- Microbiology: Construction and maintenance of mutant bacterial strains, characterization of mutant phenotypes (ie. growth curves, cell wall protein profile, biofilm assays, antibiotic and stress susceptibility, etc.), quantitative plating, bacterial staining, light and fluorescent microscopy, electronic microscopy sample preparation, transcriptional profiling
- Virology: Manipulation of positive RNA virus (Dengue virus) including tissue culture infection, plaquing assays, and mouse model of infection
- Immunology and Tissue Culture: Growth of bacteria in primary macrophages and tissue culture cells; maintenance of tissue culture lines; isolation and differentiation of primary cells; flow cytometry; cytokine analysis by ELISAs and Western blotting; immunofluorescence; transcriptional profiling by qPCR and microarray analysis; Tcell stimulation assays; quantitative and qualitative antibody assessment
- Animal Infections: Intravenous, intraperitoneal, and pulmonary infection, nasopharyngeal colonization of mice, full dissections and determination of bacterial load in liver, spleen, intestines, lymph nodes, lungs, nasal lavage; cytokine and antibody assessment from serum and tissue samples
- Computer: Microsoft Office, Swiss PDB, GraphPad Prism, Kaleidagraph, Adobe Photoshop and Illustrator,
 Vector NTI, EndNote, Literature Search (PubMed, MEDLINE, GoogleScholar, Science Direct)



Non-Laboratory Scientific Skills

- Imaging software
- Statistics programs
- Design software
- Programming languages
- Patent databases
- Marketing software
- Etc...



Education Section

- List degree, thesis title, academic distinctions
- List certificates, etc. under "Additional Training"

EDUCATION

Tufts University, Sackler School of Biomedical Sciences, Boston, MA

2013

Ph.D. in Neuroscience

 Thesis: Design, fabrication and development of a novel flexible electromyographic electrode array to study neural control of adaptive locomotion in soft-bodied animals.

University of Tennessee, Knoxville, TN

2006

M.S. in Physics

Thesis: Neutron diffraction study of heavy water intercalation in superconducting sodium cobaltate
Universita' La Sapienza, Rome, Italy

B.S. in Physics

2003

Thesis: Scandium doping of superconducting magnesium diboride.

Additional Coursework

Tufts University, Entrepreneurial Leadership Program, Gordon Institute Course Focus: High Technology Entrepreneurship and Business Planning 2012



Additional Sections

These sections vary from person to person.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Society for Neuroscience

2001 - Present

PATENTS

AWARDS

- Society for Neuroscience Travel Award (Harvard)
- Teaching assistant of the Year, Microbiology (UMass)

PRESENTATIONS

· Oral, Poster, Invited

PUBLICATIONS

· In press, submitted, Peer-reviewed, commentaries, book chapters, etc.

Selected Publications (8 out of 51):

Selected Invited Talks and Scientific Abstracts (7 out of 46):



Additional Sections

REVIEW AND EDITORIAL EXPERIENCE

•	Reviewer, Research Foundation Flanders (RWO) grants	2012-present
•	Reviewer, Cancer Research, International Journal of Cancer, PLosOne	2012-present
•	Reviewer (ad-hoc), Nature Medicine, Cancer Cell, PNAS, JCI, Clinical Cancer Research	2012-present
•	Guest Editor, Cancer and Oncology Research	2014

LEADERSHIP ACTIVITIES

- Co-President- Boston Children's Hospital Postdoctoral Association (BCH-PDA) 7/2014-present
 - Responsible for defining overall vision and direction of BCH-PDA
 - Serve as a liaison between postdocs and BCH leadership
 - Set agendas and lead monthly board meetings
 - Provide general oversight for PDA activities and committees
 - Co-chair the advocacy committee, ensure the postdoc policy is reviewed yearly
- Treasurer- Boston Children's Hospital Postdoctoral Association (BCH-PDA)
 3/2014-present
 - Manage the PDA's annual budget/balance sheets
 - Reimburse PDA members for incurred expenses using sign-off authorization.
 - Prepare yearly financial overview.
- . Co-chair, Career Development Committee, BCH-PDA

5/2013-7/2014

- Organized one seminar/panel per month on career options/professional skills for postdocs.
- Secretary Postdoctoral Association at Boston Children's Hospital

6/2013- 3/2014

- Recorded meeting minutes and emailed the minutes to all PDA members.
- Women in Biology Committee, Boston University

2006-2008

Organized seminars/panels on career options/professional skills for graduate students



What happens to your job application





















Your Career is a Journey





Contact Details: Connect with Propel



Lauren Celano

Founder and CEO

Propel Careers

cell: 215-370-2285

email: <u>Lauren@propelcareers.com</u>

Twitter: @Propel_Careers

Facebook: Propel Careers

LinkedIn: Propel Careers

Web: www.propelcareers.com

