

Writing and Tailoring an Effective Resume

Propelling Careers Podcast
Spotify and Apple Podcasts
Resume episodes: 9, 12, 13, 14
Cover letter episode: 27

Lauren Celano, CEO,
Propel Careers
Lauren@propelcareers.com



Making Connections that Fuel Innovation!



Outline

Outline

- Purpose of a resume?
- Resume and CV differences
- Tailoring and Formatting advice
- Resume examples: research & non-research roles



Goal of Your Resume



Making Connections that Fuel Innovation!

Confidential; Not for Distribution. June 1, 2026

The Goal of Your Resume

- To highlight relevant skills & experiences for the position
- To trigger a discussion about your background
- To get the interview...



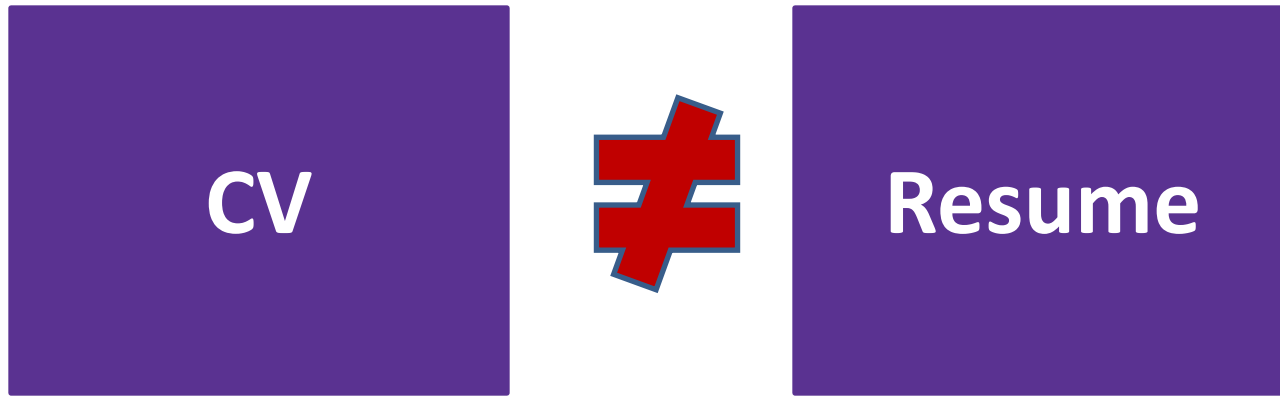
Your Resume

- It should be tailored for each role
- It is a marketing and branding document
- For a Resume: Don't assume people know what you do based upon your title, lab, research area

Your Resume should be forward looking



A Resume is not a CV



And a Resume is not an NIH Biosketch!!!

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

Resume Example

NAME

ADDRESS (City, State)

Phone; Email

Greencard Holder

LinkedIn

SUMMARY OF QUALIFICATIONS

- 1 sentence tailored to role
- 1 sentence tailored to role
- 1 sentence tailored to role

could also do paragraph, depends upon preference

EXPERIENCE

Org XX, Cambridge, MA

One sentence desc of org/lab

Postdoctoral Fellow, Jan 2026-Present

Graduate Student, Sept 2019 – Dec 2025

Sept 2019-2026

(you could put title and dates and then list details in some cases)

- Worked on three projects to study XX. Used techniques including X, Y, Z, to understand 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.
- Collaborated with three colleagues, a molecular biologist, computational biologist, and a chemist and managed two external collaborations with Stanford and Emory for genetic sequencing.
- Participated in preparing monthly reports for collaborators, annual reports, and conference presentations.
- Trained graduate student, post docs and technicians in mouse dissection and surgical procedures.

Org X, Boston, MA

One sentence desc of org/lab

Masters Researcher, Dept

Sept 2019-June 2019

- Investigated the effects of leptin in cardiac remodeling in human and murine cardiomyocytes.
- Pharmacologically inhibited the Janus-activated kinase and mitogen-activated protein kinase pathways.
- Utilized RT-q PCR to study the effects of leptin on matrix metalloproteinase and collagen expression.

Resume Example

EDUCATION

Ph.D, Pharmacology, SCHOOL, Boston, MA

Dec 2025

MS, Biology, SCHOOL, Boston, MA

2019

BS, Biology, cum laude, SCHOOL, Boston, MA

2016

Certifications

XX

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, transcatheter 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

LEADERSHIP

PRESENTATIONS

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

SELECTED PUBLICATIONS (out of X #)

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



Making Connectic

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)

Do not do... 2 Columns/insert images

Postdoctoral Fellow

MPI-CBG, Germany and NCBS, India

09/2017 – Present

Dresden, Germany

Achievements/Tasks

- Worked on understanding the mechanism of polarity maintenance in *Drosophila* photoreceptors
- Performed confocal microscopy to understand localization of phototransduction proteins
- Performed affinity purification of Phospholipase D antibody
- Performed transmission electron microscopy on fly retina
- Performed western blotting and PCR to check the expression of several phototransduction cascade proteins in fly mutants

Scientist II

ThermoFischer Scientific

04/2017 – 09/2017

Bangalore, India

Research and Development

Achievements/Tasks

- Successfully performed secondary screening of over 100 in-house antibodies using confocal microscopy and western blotting
- Performed a literature survey of the antigens and made plans for testing specificity of the in-house antibody
- Analysed and interpreted the results of immunocytochemistry and western blotting

EDUCATION

DOCTOR OF PHILOSOPHY (Ph.D.)

Indian Institute of Science

07/2011 – 05/2017

Bangalore, India

Thesis

- Dissecting the role of calcium binding proteins in muscles using *Drosophila* indirect flight muscles as the model system

Cloning

western blotting

quantitative PCR

2D gel electrophoresis

Polyclonal antibody production

Protein Mass spectrometry

Protein expression

Confocal and transmission electron microscopy

Live cell calcium imaging

Immunohistochemistry

Dissection of *Drosophila* brain, muscles, ovary, photoreceptors

Primary cell culture

Cell culture maintenance

PERSONAL PROJECTS

Genetics Society of America Early Career Leader, Career Development Subcommittee (01/2018 – Present)

- Interviewed scientists who transition from academia to different fields

Mentor- Science goes to school- MPI-CBG, Dresden (04/2018 – Present)

- Platform for multinational teams of researchers offering biology workshops with hands-on experiments at Dresden schools. Taught high school students about DNA fingerprinting, DNA isolation and Model organisms

Mentor- Lecture Series in Advanced Biology, NCBS, India (01/2018 – 03/2018)

- Taught undergraduates on advanced topics in biology

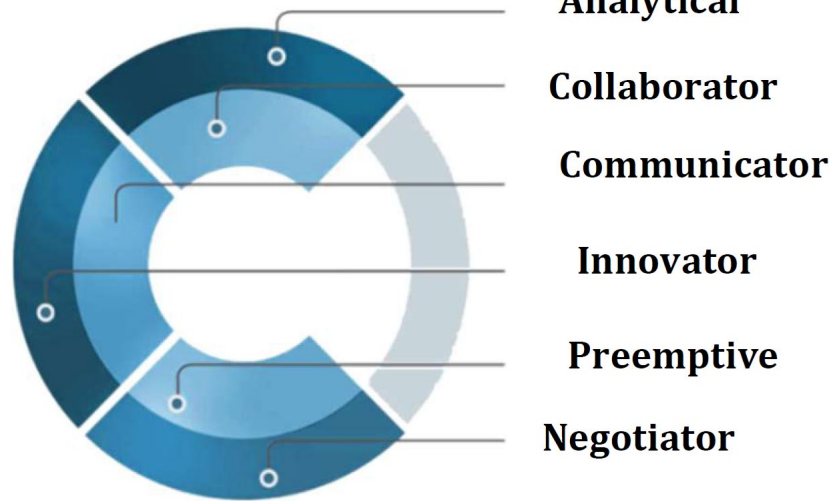
Mentor- Notebook Drive Initiative, IISc

Making Connections that Fuel Innovation!

A Few More Things Not To Do...



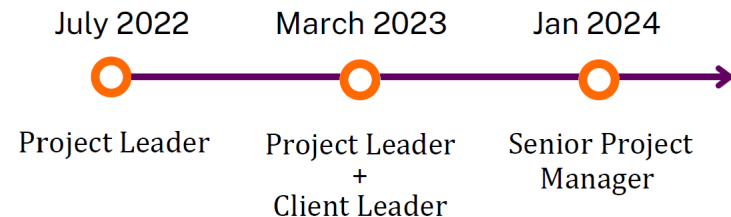
SOFT SKILLS



EXPERIENCES

SENIOR PROJECT MANAGER

Digital Surgeons



Making Connections that Fuel Innovation!

Confidential; Not for Distribution. June 1, 2026

Do not do... 1-5 skills ranking by circles

SKILLS

Critical thinker	☒	☒	☒	☒	☐
Web Design	☒	☒	☒	☒	☐
Interpersonal skills	☒	☒	☒	☒	☐
Infogram	☒	☒	☒	☒	☒
Reporting and analysis	☒	☒	☒	☒	☐
Dependability	☒	☒	☒	☒	☒
Leadership	☒	☒	☒	☒	☐

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)

How much time does an HR person/Hiring manager look at a resume initially?

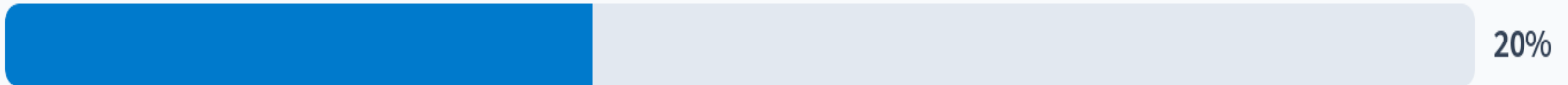
5-10 seconds



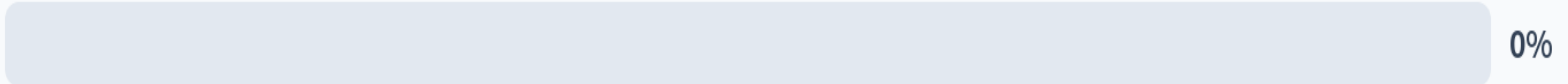
30 seconds



1 minutes



for as long as it takes to understand my experience



Resume review with With Human eyes

10 Seconds ...

**The average time an HR person
looks at your resume or CV**

Make the Time Count!!!



With AI

- AI screens resumes automatically and flags resumes to be viewed
- An HR person may still spend ~10 seconds looking at the resume after it's flagged

Make the Time Count!!!

The ATS - Applicant Tracking System

- The system captures your resume and application questions
- The recruiter looks the resume in most cases (not the parsed info)
- The parsed info syncs to the HRIS system (once you get hired)



Resume Building / Formatting



Making Connections that Fuel Innovation!

Confidential; Not for Distribution. June 1, 2026

Building a Resume

- Create a Master Resume
 - The resume can be shortened to 1 or 2 pages depending upon role applying for
- These are living documents and should be updated fairly often
- You should keep a running list of accomplishments and activities so that the resume can be updated in “real time”

Do you have a master CV or resume?

I have a master CV

40%

I have a master resume

0%

I have both

20%

I have various versions on my computer each with different information

20%

I never thought of this

20%

Sections in a “Master” Resume or CV

- Education along with Additional Courses/certifications
- Research Experience
- Clinical Experience
- Business Experience
- Teaching Experience
- Leadership / Volunteer Experience
- Writing Experience
- Review / Editing Experience
- Other experience sections such as policy, outreach etc
- Skills and Techniques
- Publication
- Presentations
- Membership
- Patents
- Etc



Formatting Matters

Experience

University, City State

2022 - Present

Title, Department of XX

Worked on three projects to do XX

Identified a pathway involved in XX

Managed two collaborations and worked on three others

Used techniques such as XX

Worked with researchers with background including chemistry, computational, clinical and XX

Experience

University, City State

2022 - Present

Title, Department of XX

- Worked on three projects to do XX
- Identified a pathway involved in XX
- Managed two collaborations and worked on three others
- Used techniques such as XX
- Worked with researchers with background including chemistry, computational, clinical and XX



Compile A List of Accomplishments



What you Like and are Good at

What are you good at?

What do you enjoy?



Making Connections that Fuel Innovation!

Confidential; Not for Distribution. June 1, 2026

Turn a skill into a sentence

Skill: Mentoring students

Sentence: Mentored 5 summer students for three summers. Train the lab's undergraduate researchers, new graduate students and visiting fellows on advanced microscopy, single cell sequencing, and data analysis.



How do you know what to include in a resume for a specific job?



How do you Know What to Include in a Resume?

Use the job description
to guide you



Hard Skills – Orange. 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 experience related to Molecular Genetics with a comprehensive understanding of genetically modified mouse model generation.
- The individual should have extensive knowledge and technical proficiency in current advances in transgenic and genome engineering technologies to work independently in the design and generation of complex targeting constructs
- Demonstrated ability to quickly learn and accurately perform new procedures 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 multi-disciplinary environment and dedication to team work are essential



Skills / Experiences to Focus on Building

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



Developing Responses for Your Resume

Hard Skills

- **High-throughput techniques to generate genetically modified mouse models**
 - Led a team of 4 people to develop 3 different genetically modified mouse models to study drug targets for diabetes
- **Familiarity with current advances in transgenic and genome engineering technologies**
 - Used tools such as CRISPR and NGS to develop and characterize models. Prepared NGS library coordinated analysis with core facility. Interpreted data in order to design follow up studies.



Developing Responses for Your Resume

Soft Skills

- **Scientific and technical supervision to junior staff**
 - Managed 2 research technicians, an undergraduate researcher and a graduate student to complete projects
- **Communication and documentation skills**
 - Presented work at 3 international and 4 national meetings and to the local diabetes disease foundation
- **Experience with project scheduling and meeting timelines**
 - Managed 3 collaborations (Emory, Stanford, UCLA). Developed and managed timelines and prepared monthly research summaries and the annual progress report
- **Experience working in a multi-disciplinary environment and team oriented**
 - Worked in a team with a computational biologist, chemist, and pharmacologist



Do you break down job descriptions to help tailor your resume

(A) Yes

50%

(B) No

30%

(C) I never even thought about it

10%

(D) I don't tailor resumes

10%

At Voyager, we are working to treat – and eventually cure – neurological diseases. This is no easy task. Diseases like Alzheimer's, Parkinson's, and ALS are unmet needs because no one has conquered them...yet. When you walk in our doors, you feel the buzz of innovation, you hear the hum of collaboration and you feel the rush of urgency, because we know patients are waiting.

Diversity at Voyager

Diversity is the acknowledgement of the experiences that make us unique as well as the appreciation for our entire person. Diversity is achieved through mutual respect, especially when there are differences in views and thoughts. We are eager to learn more about identities that vary by race, ethnicity, social background, religion, gender, age, disability, sexual orientation, veteran status, and national origin. We also recognize that diversity is inherently intersectional, with identities that have yet to be defined or are an amalgamation of several. Join us, teach us, and allow us to learn from you.

Because at Voyager, we are better together.

Tips to Build an AI Friendly Resume

- Use the key details from the job description in your resume details
- Hard skills (techniques) are most important to mention



Experience



Making Connections that Fuel Innovation!

Confidential; Not for Distribution. June 1, 2026

Customize Your Resume

You choose what to
highlight among your experiences



What belongs in experience

- Employment – salaried
- Postdoctoral, Graduate and undergraduate research
- Certain volunteer experience

Listing Experience in a Resume

- List what you were responsible for:
 - Research focused on XX – BIG PICTURE
 - Identified a novel finding related to XX **Then dive into details**
 - Utilized the specific techniques of XXX
 - Were you responsible for managing any...
 - People, budgets, lab setup, collaborations, activities, relationships, etc
 - Did you present at public meetings or conferences on behalf of the lab or company?
 - Did you write grants?

Don't Forget To Highlight These ...



Too much info... Humanized Mouse Models Interest

Research Experience

Ph.D Student; PI: Dr. David S. Bradley, **University of North Dakota**, Grand Forks, ND

Jan 2021- Present

- Explore the potential of targeted immunotherapies in enhancing antitumor immune responses and improving cancer treatment outcomes. Initiated, designed, and executed superantigen SEI and SEG immunotherapy studies in TC-1 tumor-bearing HLA-DR3, HLA-DQ8, and HLA-DR3/DQ8 double transgenic mice, as well as in the B16-F10 melanoma model for the double transgenic mice. Led the EC50 and Vbeta profile studies in the single transgenic models and conducted intratumoral Vbeta studies in both TC-1 tumors and B16-F10 melanoma, demonstrating comprehensive expertise in experimental design and execution.
- Designed and carried out effects of Staphylococcal enterotoxins SEI and SEG on TCR Variable beta region stimulation to understand the specificity and diversity of the T cell response against tumor antigen and to further understand the mechanism of tumor immune evasion.
- Utilized advanced immunological techniques, including 13-color flow cytometry on the FACS Symphony, PCR, ELISA, Western blot, LEGEND PLEX, immunohistochemistry (IHC), and ELISPOT assays, to characterize immune cell populations, measure gene and protein expression, quantify cytokines and chemokines, and evaluate antigen-specific T cell responses in HLA-transgenic mice challenged with B16-F10 melanoma and TC-1 tumors.
- Demonstrated expertise in tissue collection, including blood, peritoneal lavage, bone marrow, inguinal lymph node macrophage collection, and tumor collection. Conducted viability dye staining, Fc block, flow cytometry panel setup, and tumor microenvironment immunophenotyping.
- Independently prepared samples, including permeabilization for intracellular staining, showcasing proficiency in complex experimental setups and comprehensive data analysis.
- Collaborated effectively with multidisciplinary teams for data interpretation and successful project outcomes.
- Handling, breeding, and performing procedures on mice regularly for immunological studies.
- Presented research at graduate achievement research day and Frank Low Day in addition to extensive presentations to the Department of Biomedical Sciences, University of North Dakota

Updated: Humanized Mouse Models Interest

University of North Dakota, Grand Forks, ND

Jan 2021- Present

Ph.D Student; Department of XX

- Work on 3 projects using humanized mouse models to evaluate the potential of targeted immunotherapies in enhancing antitumor immune responses and improving cancer treatment outcomes for melanoma.
- Developed 2 humanized mouse models and used 3 others to complete studies including the B16-F10 melanoma model and one with TC-1 tumors.
- Use 13 color FLOW and OCR, ELISA, Western blot, LEGEND PLEX, immunohistochemistry (IHC), and ELISPOT assays to characterize immune cell populations (T, B and Macrophage), measure gene and protein expression, quantify cytokines and chemokines and evaluate antigen-specific T cell responses
- Trained research technicians on breeding, dosing, and in vivo sample collection.
- Etc



Making Connections that Fuel Innovation!

Confidential; Not for Distribution. June 1, 2026

Entrepreneurial Resume

University of California, Davis, Davis CA

2009-2014

Graduate Research Assistant, Chemistry: PI: Dr. Shota Atsumi

- ➡ • First graduate student hired in to the lab. Helped to build the lab from scratch and develop procedures & protocols used by all future lab members.
- ➡ • Secured independent funding for research from grants. Developed ideas/directions and trained grad and undergrad students
- Research focused on developing new metabolic pathway to expand the products that can be made from *E. coli*. Research lead to 3 biotech patents & 3 publications
- Developed 2-dimensional ester pathways (published in *Nature Chemical Biology*) by engineering *E. coli* to simultaneously produce alcohol and acyl-CoA intermediates that are esterified in the cell to make esters. Produced 12 unique esters.
- Optimized production of berry flavor, Isobutyl Acetate, achieving 80% yield from glucose
- Collaborated with Japanese postdoc and performed an independent project to produce aldehyde from *E. coli*
- Techniques applied: pathway installation, gene deletion, enzyme assays, growth studies, in vivo screening, cloning, GC-FID & HPLC measurements, toxicity studies
- Idea left behind: Acetate co-utilization in *E. coli* (published in *Nat Comm.* by Yohei)
- Idea left behind: Ethylene / Ethane to biofuels using *E. coli* (patented)

Medical Writing Information

- Disease knowledge is important so highlight it
 - Research studies the Wnt pathway to identify pathways leading to cancer formation

Then write about communications /writing things

- Research summaries, grants, papers, presentations
- Protocols, SOP, annual reports
- Perhaps you critiqued lab members materials
- Engagement with clinicians and other backgrounds
- Developed materials for a non-profit group you are in



Alliance Management / Project Management Resume

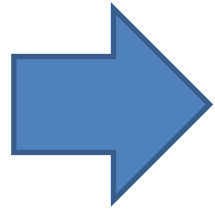
University of California Berkeley (Berkeley, CA)

2012 - 2015

Lab focuses on ion channel and neurotransmitter receptor biology

Postdoctoral Fellow

- 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.



You can have have multiple “experience sections”

- Research Experience
- Business Experience
- Clinically Relevant Experience
- Teaching Experience
- Writing Experience
- Leadership and Volunteer Experience
- Etc



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 non-dilutive 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

February – December 2008

Associate

- 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

Strategy Consulting Resume

Research Experience

Langer Lab (MIT Koch Institute), Massachusetts Eye and Ear Infirmary, and Draper Laboratory

Sept 2012– Present

Graduate Research (Ph.D.), supervised by Robert Langer

Initiated, launched and executed a multidisciplinary research collaboration between 3 PI's across Harvard, MIT, and Draper Labs to develop novel inner ear drug delivery technologies. Designed and conducted 4 inter-related projects. Present research results quarterly to academic and industry collaborator. Wrote grants (NIH, DOD). Led to 3 publications and 2 patent applications.

- Project 1: Develop first intracochlear-assembling hydrogel system for prolonged therapeutic delivery within the cochlea
 - Lead team of 3 Ph.D. students and postdocs; work closely with KOL's in materials science & auditory neuroscience
- Project 2: Developed first method of quantitatively measuring drug distribution in the cochlea's sensorineural cells along the tonotopic axis, using fluorescent tracer substances, resulting in a patent application
 - Led team of two postdocs and awarded \$50k "Bridge" Funding by the Massachusetts Eye and Ear Infirmary
 - Utilized by a startup developing surgical tool for inner ear drug perfusion. Work closely with scientific cofounders
- Project 3: Developed computational fluid dynamic model of cochlear pharmacokinetics and prolonged delivery to assist in optimization of drug delivery technology. Compares kinetics with and without extended drug release reservoir.
- Project 4: Develop advanced hydrogels for biomimetic 3-D cell culture applications (i.e. sensory epithelia of inner ear)
 - Demonstrated precise, hierarchical mechanical tuning capability in hydrogel system

Business Related Experience

Harvard Business School- Building Life Science Businesses, Boston, MA

Spring 2017

- Participate in case study discussions about healthcare-related entrepreneurship, venture capital, and business development with industry leaders including the founders of Vertex Pharmaceuticals and Intuitive Surgical.

Harvard Biotech Incubator, Boston, MA

October 2016-Present

- Worked with academic faculty (Dana Farber) and venture capitalist mentors to evaluate and position Dana Farber epigenetic modification I.P. for commercialization as immune-oncology therapy for Ovarian Cancer
- Creation of product profile sheets and business plans through technical due diligence market research.

Healthcare Innovation and Commercialization, Boston, MA

September 2013 - Present

Course Director and Annual Course Organizer for course at Harvard Medical School (HMS)

- Taught to > 500 students since 2013. Recruited > 50 world-class professionals (CEO's, CSO's, VC's) to teach course.
- Raised >\$60K from sponsors. Lead team of 4 Ph.D. students and 3 administrators to design and conduct course.

Irish Eagle Partners, GP

May 2013 - Present

Founding Partner, Treasurer

- Perform scientific/market due diligence and financial modeling on preclinical, clinical, and commercial stage pipelines for potential healthcare & biotech investment opportunities. Focus includes specialty pharma, diabetes, surgical devices
- Responsible for finances, tax filings, and trading activities. Write quarterly and annual reports for partners

Personal

- Interests: Acoustic guitar building (luthier), Bluefin tuna fishing, brewing, photography, waterskiing
- Tutoring math to underprivileged students through Boston Partners in Education put in years year

Summary of Qualifications



Making Connections that Fuel Innovation!

Confidential; Not for Distribution. June 1, 2026

Summary of Qualifications vs Objective

- 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



Genomics / Bioinformatics or Clinical Role

Summary 1: Genomicist with expertise utilizing NGS techniques and molecular biology assays to study disease pathways involved in epilepsy, neurodegeneration, traumatic brain and spinal cord injury, and neuromuscular disorders. Established bioinformatic pipelines for RNA-Sequencing analysis for four different scientific teams at three different institutions and generated, sequenced and analyzed > 10 RNA-Seq libraries from HiSeq and MiSeq Illumina technologies. Successfully worked on multiple preclinical and clinical stage projects simultaneously with multiple industry and academic collaborators. 13 papers and numerous presentations.

Summary 2: Neuroscientist with experience performing clinical research (phase I/II) studies and contributing to FDA submissions such as IND's to develop therapeutics for neurological diseases including ALS, SMA and Batten. Experience developing clinical protocols and SOP's and working closely with clinicians to conduct trials. Successfully collaborated with 2 Pharma companies and more than 10 academic labs working in cross-functional teams.



Do you have a summary of qualification in your resume or summary/research interests in your CV

Yes

67%

No

33%

I never thought of it

0%

Additional Sections



Making Connections that Fuel Innovation!

Confidential; Not for Distribution. June 1, 2026

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** **2003**
B.S. in Physics
- **Thesis:** Scandium doping of superconducting magnesium diboride.

Additional Coursework

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



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 Resume 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 EXPERIENCE

Bioengineering Graduate Student Advisory Committee (BGSAC) Chair 2012 – 2014

- Served as liaison between bioengineering graduate students & program faculty at Georgia Tech
- Implemented professional development & recruitment activities for BioE graduate program

Bioengineering & Bioscience Unified Graduate Students (BBUGS) Co-Chair 2011 – 2013

- Organized & executed activities coordinating 400+ attendees & 20+ graduate student peers
- Education & outreach events included laboratory tours, presentations, & on-site demonstrations

Biomedical Engineering Recruitment Committee Co-Chair 2011, 2012

- Coordinated student mentoring & transportation for graduate student recruitment

Biotechnology Career Fair Co-Chair 2012

- Co-chair for Georgia Tech Biotechnology Career Fair advertising responsibilities



58

Contact Details: Connect with Propel

**Full time
jobs and
Internships**

Coaching:
Resume,
LinkedIn, Job
Search, etc

Newsletter

**Networking
Events**

Lauren Celano

Founder and CEO

Propel Careers

cell: 215-370-2285

email: Lauren@propelcareers.com

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

Facebook: [Propel Careers](https://www.facebook.com/PropelCareers)

LinkedIn: [Propel Careers](https://www.linkedin.com/company/propelcareers)

Web: www.propelcareers.com



Making Connections that Fuel Innovation!

Confidential; Not for Distribution. June 1, 2026