
Looking your Best on Paper – Building a Resume and CV

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Similarities Between CVs and Resumes

- Include “big-picture” summaries of research experience
- Tell a story
- Tailor to position (layout and keywords)



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



Resumes: Do not include

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



Which to Submit?

	CV	Resume
Academic PI Role	X	
Academic Research Role	X	
Academic Administrative Role		X
Academic Postdoc	X	
Industry Postdoc (could be either, I prefer resume format)	X	X
Industry Research Role		X (with papers and presentations)
Industry non-research role		X (papers and presentations optional)
All other Non-Academic Roles		X (papers and presentations optional)



10 Seconds ...

The average time an HR looks at your resume or CV



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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



Making Connections

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

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
- **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



Making Connections that Fuel

Confide

Resume Formatting



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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



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



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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



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SOQ Example - Science

- Adaptable neuroscientist specializing in the molecular mechanisms underlying chronic neurodegeneration with a particular focus on the role traumatic brain injury in the disease pathogenesis.
- Disease experience includes Alzheimer's, ALS, and rare neuromuscular diseases (NM, CFTD, HCM, MPD-1 & GSD-V).
- Highly skilled in both *in vitro* (cellular and molecular biology, protein, histology and imaging) and *in vivo* (surgery, behavioral analysis) research techniques.
- Successful collaboration experience (2 external and 3 internal), detail oriented, and strong communication and presentation skills (>10 conference presentations)



What belongs in this section?

- Employment – salaried
- Postdoc, 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 ...

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?



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



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)



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**

PhD. 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 Deuterated Sodium Cobaltate Na_{0.35}CoO₂1.4D₂O

Universita' La Sapienza, Rome, Italy **2003**

B.S. in Physics

- **Thesis:** studied the superconducting properties of Sc-doped magnesium diboride (the title is super long!)

Additional Coursework:

Tufts University, Entrepreneurial Leadership Program, Gordon Institute, **2012**

Course Focus: High Technology Entrepreneurship and Business Planning



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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 Invited Talks and Scientific Abstracts (7 out of 13):

Selected Publications (8 out of 11):



Questions



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Two+ Positions under one Organization

PROFESSIONAL EXPERIENCE

University of SCHOOL, City, State

2004 – Present

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

Research Associate, XXX Department

Sept 2012 – Present

Postdoctoral Fellow, XXX Department

Aug 2009 – Sept 2012

- 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

Sept 2004 – Aug 2009

- 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



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Subheadings Can be Useful

- Break out experiences to highlight transferrable skills for certain roles

EXPERIENCE

University at Buffalo, Buffalo, NY

5/2009 - 6/2013

The Dubocovich lab focuses on the neuropharmacology of the MT1 and MT2 melatonin receptors with the specific goal of discovering novel drugs for the treatment of disorders of sleep, mood and drug abuse.

Postdoctoral Associate, Department of Pharmacology & Toxicology

Scientific Experience

- Discovered obligate role of MT1 and MT2 melatonin receptors in methamphetamine-induced behavioral sensitization and conditioned place preference in mice. Examined mouse behavior by digital video analysis, cell death pathways by Western blot, and *in vivo* catecholamine release by fast-scan cyclic voltammetry.
- Published two first-author journal articles on methamphetamine sensitization.
- Presented results at national and regional conferences via posters and podium talks (four awards).

Leadership Experience

- Managed collaborations with three partner laboratories at the University at Buffalo on projects investigating discriminative stimulus properties of methamphetamine, and neurotransmitter levels in brain (fast-scan voltammetry) and circulating blood (high-pressure liquid chromatography).
- Trained and supervised technicians and students on tasks associated with behavioral/molecular data collection, statistical analysis and laboratory maintenance.
- Co-facilitator and mentor for the Collaborative Learning and Integrated Mentoring in the Biosciences program, a professional development workshop series for graduate and undergraduate students in the biomedical sciences (9/09-7/12).

Another 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



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Listing Multiple Projects

REFERENCE

WAKE FOREST INSTITUTE FOR REGENERATIVE MEDICINE (WFIRM), Winston-Salem, NC 01/10 - Current
WFIRM focuses on translational research of regenerating various tissues and organs to develop healing cell therapies
Postdoctoral Research Fellow, Wake Forest University Health Sciences

- **Project 1** used stem cell therapy to enhance bone formation using amniotic fluid-derived stem cells.
 - Studied *in vitro* osteogenic differentiation of the stem cells seeded on bladder submucosa matrix/PLGA hybrid scaffolds.
 - Used 2 murine models (femur/calvarial critical defect models), to evaluate the effect on bone formation.
 - Used techniques including decellularization, fabrication of natural and synthetic composite scaffolds, scanning electron microscopic, measurement of pore size and porosity, mechanical testing, 2D and 3D osteogenic differentiation, biocompatibility, cell adhesion and proliferation, and RT-qPCR.
- **Project 2** focused on stem cell therapy and 3D-printing technology for skin wound healing.
 - Developed skin substitutes using amniotic fluid-derived stem cells and 3D-printing technology.
 - Developed, designed and implemented a prototype of a skin bioprinter that could be applied to future clinical trials.
 - Showed that the skin bioprinter can accurately deliver cells and biomaterials onto defined skin wounds.
 - Evaluated skin wound healing by amniotic fluid-derived stem cells in combination with keratinocytes. Also evaluated gross image analysis (wound size, contraction, re-epithelialization) and histology.
 - Collaborated with GMP staff within WFIRM to develop SOPs for isolation and expansion of skin and cartilage cells.
 - Managed and led a multi-million dollar AFIRM-funded project of 10 graduate students, Ph.D.'s, MD's, engineers and technicians to utilize primary skin cells in pig and preclinical studies for development of dermal and epidermal skin substitutes for skin regeneration.
- **Project 3** used tissue engineering to build clinically relevant sized tissues and organs by prolonging cell and tissue survival under hypoxic conditions. Previously, inadequate oxygen supply was a limiting factor.
 - Identified novel use for existing pharmacologic agents to induce metabolic downregulation.
 - Research techniques used include cell biology assays (measurement of metabolic activity, ATP content, viability and proliferation), cell culture, histology, immunohistochemistry, and imaging techniques.
 - Participated in preparing and writing of grant applications (i.e. Armed Forces Institute for Regenerative Medicine; AFIRM). Also received two patents.
- Used statistical methods such as t test or ANOVA.
- Trained graduate students, postdocs, technicians and medical doctors.
- Reviewed > 50 manuscripts and academic grant proposals. Wrote book chapters on tissue regeneration, digit and

Highlight Teaching, Writing, Leadership Skills

- Teaching experience
- Grants
- Journal reviewer
- Additional writing: university paper, conference, non-profit, etc
- Leadership roles within your institution
- Leadership role in a local or national chapter of a scientific organization or networking group
 - AWIS, AAPS, ACS, AAPS, HBA, AACR, etc.
- Community Service



RESUME EXAMPLES



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Scientific Role

University, City State

09/2010 - present

Research Fellow, Department of Bioengineering

- Develop microfluidic device to identify sensitizers of contact dermatitis and point-of-care diagnostics.
- Develop microfluidic gradient device to conduct assays to study protein mediated activation of glucose metabolism pathways in type I diabetes.
- Multiplexing real-time optical measurement of secreted cellular metabolites in MEMS format.
- Diagnostic sensor winner at Healthcare Innovation and Commercialization workshop.
- Hands-on experience with biological techniques including primary cell culture, cell lines, immunoassays, transfection, ELISA, imaging, and lipid analysis.

University of XX

07/2007 - 09/2010

Postdoctoral Fellow, Department of Mechanical Engineering

- Developed sensors and mathematical models to identify biomarkers in exhaled breath for clinical diagnostics.
- Developed organometallic films. Startup formed around idea (XX Company) won 2nd place in University Business Plan competition.

University of XX

08/2002 – 06/2007

Ph.D. Research, Mechanical Engineering Department

- Led team on a DoD funded project to develop microfluidic gas sensors to detect toxic gases and metabolites of disease biomarkers. Performed annual reporting.



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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.



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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



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SKILLS AND TECHNIQUES



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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**

PhD. 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**

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- **Thesis:** Neutron Diffraction Study of Heavy Water Intercalation in Superconducting Deuterated Sodium Cobaltate Na_{0.35}CoO₂1.4D₂O

Universita' La Sapienza, Rome, Italy **2003**

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Course Focus: High Technology Entrepreneurship and Business Planning



Additional Sections

- These sections vary from person to person.

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- 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 Invited Talks and Scientific Abstracts (7 out of 13):

Selected Publications (8 out of 11):



RESUME FORMATTING



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Attention to Detail...

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. Fluency in Spanish

EXPERIENCE

University of SCHOOL, Boston MA

Sept 2006-2012

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 (NCI of Canada).
- Trained graduate student, post docs and technicians in mouse dissection and surgical procedures.
- Trained and supervised technicians in the management of the mouse colony.

- Formatting is off - Attention to detail lacking



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Full Use of Pages

Page 1

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-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

Page 2

- If using 2 pages, use the full second page



Use Bullet Points

EXPERIENCE

University of SCHOOL, Boston MA

Sept 2006-2012

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 (NCI of Canada).

Trained graduate student, post docs and technicians in mouse dissection and surgical procedures.

Trained and supervised technicians in the management of the mouse colony.

- This is hard to read.



Writing a Cover Letter

- Put job # or title in the cover letter
- Include your contact details – email and phone number
- Reiterate the job requirements
- Tailor your cover letter
- Don't put in random irrelevant information
- Keep to 1 page

Make sure the company knows that you have read the job description



Example

Job Requirements:

- >3 years of oncology research experience
- Experience with PCR, ELISA, Transfection, etc
- Good communication and presentation skills
- At least 1 first author paper

Cover Letter Statements:

- I have over 3 years of oncology research experience having performed XX research in the lab(s) of XX
- I have experience with a wide variety of techniques including PCR, ELISA, and Transfection
- I have presented my research at over 5 international meetings
- I have three first author papers in Nature, Cell and PNAS



Example

Date

Company X.
Street Address,
Town, State, Zip Code

Re: *Job Title/ID*

Dear Human Resources Manager:

I am writing to submit my application for job title at **company**. **One sentence description of yourself**. Based upon the job description, I believe my experience and skill-set is an excellent match for this position.

I have over 5 years of research experience through my Ph.D. that relates to pathways involved in oncology and innate immunity. During my Ph.D. Specifically, I studied how epigenetic modulation has an effect on alcohol-mediated immune dysregulation. I am very familiar with XX pathways and XX.

I have experience working on XX.

I have experience prioritizing and managing multiple activities at the same time and have strong communication skills, having presented my research at over 10 international conferences.

While I have not yet done XX, I believe that my skills are transferrable and I would be able to get up to speed quickly in this area.

I'm ready for a new career challenge and have been looking for a dynamic and rewarding environment where I can use my skills. **Company X** is exactly the type of company that I would like to work for.

I am happy to supply any other information you may need and answer any questions you have about my potential candidacy. I look forward to next steps. Thank you very much for your time and consideration.

Sincerely,

Name

Address

Phone

Email



Making Connections

WHAT HAPPENS TO YOUR RESUME AND COVER LETTER AFTER YOU APPLY?



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What happens to your job application

HR Person



Hiring Manager



Interviewers



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Recruitment Database



- Used by many firms, both large and small
- Key word searchable
 - Details in resume = searchable
 - Searches for key words in job description
- User created profile (typically)
- Systems can track applications over time

- **Do not get too fancy with resume formatting!!!**



Key Word Search

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)



HR want to see ... Focus



**Do not apply
for many
different jobs
at the same
time**



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Job Search Timeframes

- 2 years out: Self-awareness, Informational interviewing, networking
- 1-2 years out: Informational interviewing and networking
- **Academic Roles:** 12 months out: actively apply
- **Industry Roles:** 3-6 months out: actively apply
 - Be aware of certain application deadlines
 - Large Consulting / Investment Banks: apply Fall 2014; start ~ June 2015
 - Boutique consulting firms / investment banks: Some fall application process, other rolling hiring
 - Time to decide upon an offer: as short as 48 hours
 - Industry start date: as short as 2-4 weeks after acceptance



Contact Details: Connect with Propel



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