

## SUMMARY

Cell biologist with 10 years experience managing multiple research projects in the following areas:

- 6 years experience in membrane trafficking and heterotrimeric G-protein signaling
- 4 years experience in cell shape and motility, G-protein signaling, mitochondria biochemistry

## EDUCATION

- University of California, San Francisco, Ph.D. Biomedical Sciences (focus in Cell Biology and Pharmacology) 0000-0000
- Yale University, Masters Program in Biological Sciences 0000-0000
- University of Maryland, B.A. Physiology 0000-0000

## RESEARCH AND PROFESSIONAL EXPERIENCE

### Department of Medicine, Yale University

Mentor: Ansel Adams, Ph.D.

Postdoctoral Research Fellow

0000-present

- **Project:** Investigate the role of plasma membrane transporters and EM proteins in multiple cell functions including cell motility, cell shape determination, invasion, proliferation, and survival. Opened a new field of research related to the bifunctionality of membrane anchoring proteins.
- **Responsibilities:** Responsible for design, implementation and management of multiple research projects; Concurrently advise three junior postdoctoral fellows; Supervise and direct the research projects of graduate and medical students; Review grant proposals and manuscript submissions; Train and supervise technical and research staff; Assist in the hiring of technical staff; Teaching Assistant, Cell Biology. Led ad hoc discussion section; Set up time-lapse video system.
- **New Methodologies:** time lapse video and live cell fluorescence imaging, DNA Microarray analysis, adhesion and invasion assays, kinase assays, FACS and TUNEL analysis.

### Program in Biomedical Sciences, University of California, San Francisco

Dissertation chair: Georgia O'Keefe, M.D.

Doctoral Research

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- **Project:** Investigated the function of XXXXXX and XXXXXX coupled receptors in mitochondria membranes in the rat kidney. Developed a biochemical purification strategy that led to the discovery that X and Y subunits of XXXXXXXX are differentially expressed on mitochondria membranes.
- **Responsibilities:** Developed a strategy for bulk separation of plasma and mitochondria membranes based on subcellular fractionation using sucrose gradients; Provided research advice and supervision to junior graduate and undergraduate students; Developed a lectin-based system for the removal of contaminating plasma membranes from mitochondria membranes; Teaching Assistant, Pharmacology and Toxicology. Assisted in course development, led discussion sections and lectured on Basic Principles of Toxicology.
- **New Methodologies:** animal surgery, tissue sectioning, subcellular fractionation, antibody production, yeast two-hybrid analysis, bacterial and yeast cell culture, protein purification, biochemical and molecular techniques.

### Center for Biomedical Research on Aging, University of Arizona

Advisor: Charles Monet, M.D.

Research Assistant

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- **Project:** Compared the XXXXXX Receptor heterotrimeric G-protein signaling pathways in primary osteoblasts to that of osteoblast cell lines and found differential sensitivities to PTH.
- **Responsibilities:** Obtained XXXX bones from fetal mice, used enzyme digestion to generate osteoblasts for primary cell culture; Graduate Assistant, *Human Anatomy*: Organized study materials, lectured, and led discussion sections.
- **New Methodologies:** microdissection, immunocytochemistry, adenylyl cyclase assays, cell culture.

### Immunology & Environmental Medicine Clinic, Tempe, Arizona

Employer: Smokey Bear, M.D.

Clinical Technician

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- **Responsibilities:** Performed and analyzed allergen sensitivity exams. Taught patients self-injection techniques; Listened to patients discuss allergen sensitivities and worked with them to develop lifestyles to minimize their exposures; Prepared antigen solutions by serial dilution.

## PUBLICATIONS

### Invited

Muir, J. Earp, W, and London, J., 0000. Name of Publication Here. In preparation for Current Opinions in Science.

Earp, W, Muir, J., and London, J. 0000. Name of Publication Here. In: Annual Review of Pharmacology and Toxicology (L. Baranov, A, eds.), 00:000-00, Annual Review, Palo Alto, CA.

### Reviewed

Muir, J., Earp, W and London, J.. 0000. Name of Publication Here. Molecular Cell 0:0000-00.

Muir, J. and London, J., 0000. Name of Publication Here (Baranov, A, eds.), 000:000-000, Academic Press, San Diego, CA.

Muir, J., and London, J., 0000. Name of Publication Here. Journal of Cell Biology 000(0):0000--0000.

### In Preparation

Muir, J. and London, J. Name of Publication Here. A description of this current project together with a Quicktime movie of mitochondria migrating into a wound can be viewed at: <http://www.sciencevideo.com/>

Earp, W, Muir, J., and London, J. Name of Publication Here

## MEETING ABSTRACTS

Muir, J. and Earp, W., Name of Abstract Here (ASCB Meeting in Washington, D.C., December, 0000). Mol. Biol. Cell (S12): 0000.

Muir, J. and Earp, W.,. Name of Abstract Here (French-American Colloquium on the Mitochondria and Human Disease, Universite de la Mediterranee, Marseille, France, 0000).

Muir, J. and Earp, W., Name of Abstract Here (Keystone Meeting: The Dynamics of the Cytoskeleton, Keystone, CO, 0000).

Muir, J., Earp, W., Name of Abstract Here (ASCB Meeting in San Francisco, CA, December, 0000). Mol. Biol. Cell (S9):0000.

Wyneberg, T., Earp, W.. Name of Abstract Here (ASCB Meeting in San Francisco, CA, December, 0000). Mol. Biol. Cell (S7):0000.

## MENTORING EXPERIENCE

- Present, Molecular Cell Biology undergraduate AWIS (California Chapter) mentoring program
- 0000, Yale Dental Student Role of proteins in cell adhesion and migration
- 0000, Yale Biomedical Sciences Graduate Student Role of apoptosis in the proliferative action of adhesion
- 0000, Yale Medical Student Association of actin-binding proteins with the plasma membrane

## INVITED CONFERENCE ORAL PRESENTATIONS

- Minisymposium on Cell Adhesion, American Society for Cell Biology Annual Meeting, Washington, DC, 0000
- French-American Colloquium on the Mitochondria and Human Disease, Marseille, France, 0000
- Bay Area Research in the Cytoskeleton, 0000
- Minisymposium on Small GTPases and Control of the Cytoskeleton, American Society for Cell Biology Annual Meeting, San Francisco, CA, 0000

## COMMITTEES

- Judge, Siemens Westinghouse National Science & Technology Competition, 0000-present
- Future of the Plaza Coalition: A neighborhood development committee, 0000-0000
- Admissions Committee, Student Representative, Graduate Program in Biomedical Sciences, 0000-0000

## HONORS AND AWARDS

- NIH Travel Award, Mitochondria and Human Disease, French-American Colloquium, France, 0000
- NIH Postdoctoral Training Grant, 0000-present
- Ares-Serono Symposia Travel Award, GTPases as Molecular Machines, Mario Negri Sud Institute, Italy, 0000
- Syntex Fellowship in Molecular Pharmacology, 0000-0000
- NIH Predoctoral Traineeship in Cellular and Molecular Pharmacology, 0000-0000
- Graduate Equity Fellowship, 0000-0000
- Faculty/Staff Nominee, Outstanding Senior Award, 0000