Sherri A. Dovico

2005 S. Paris Way Apt#205
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Phone: (970)218-9127
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Objective: To obtain a position in a research laboratory and/or biotechnology company that requires experience with scientific and analytical techniques.

Education: **The University of Iowa;** Iowa City, IA; *Graduated August 2003*

Course Highlights:

Biochemistry	Cell Biology
Fundamental Genetics	Cell Physiology
Molecular Genetics	Microbiology

Computer Skills: Operating Systems: Microsoft Windows 1998, 2000, XP
Software: Microsoft (Word, PowerPoint, Access, Excel, Outlook), Adobe Photoshop, & Adobe Acrobat

Experience:

Nov. 2006 – Present

Professional Research Associate
University of Colorado Health Sciences Center; Aurora, CO
Supervisor - Dr. Brian Tseng

- Performed experiments investigating proteins involved in Duchenne Muscular Dystrophy
  - **Project**: Investigating the potential role of Poloxamer 407 in membrane patching in Duchenne Muscular Dystrophy
  - Molecular Biology Techniques: PCR (animal model mutational analysis) & RT-PCR; DNA Extraction; Agarose Gel Electrophoresis; Genotyping
  - Biochemical Techniques: SDS-PAGE & Western Blotting Techniques; Chemiluminescence; Protein Concentration Assays
  - Immunological/ Histological Techniques: Freezing & Sectioning of Tissue Samples (mouse & human); Cryosectioning; Immunofluorescence & Histological Staining; *In Situ* Denaturation; Fab Immunofluorescence; Familiar with Microscopes (Zeiss & Leica) & Digital Imaging
  - Animal Handling Experience; Knockout & Transgenic Mice Experience; *In Vivo* Adenovirus & Evans Blue Dye Injections
    - Functional Assays: Grip Strength Measurements, Treadmill Running, Activity Monitoring, & Gait Analysis

Sept. 2004 – June 2006

Professional Research Associate
University of Colorado Health Sciences Center; Denver, CO
Supervisor - Dr. Karen Fagan

- Performed experiments investigating the proteins involved in Genetic Lung Diseases
  - **Project**: Investigated the role of Interleukin-6 in Pulmonary Hypertension
  - Molecular Biology Techniques: PCR (animal model mutational analysis) & RT-PCR; Restriction Digestions/ Ligations; DNA Extraction; Cloning/ Subcloning; Agarose Gel Electrophoresis
  - Biochemical Techniques: SDS-PAGE & Western Blotting Techniques; Chemiluminescence; Protein Concentration Assays

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- Cell Culture Techniques: Stimulation/Inhibition Experiments, ^{3}H-Thymidine Incorporation, Immunocytochemistry, Familiar with HPAEC, hPASMC, CHO, *tsA*201, Myotubule & Fibroblast cell lines
- Immunological/ Histological Techniques: Parafin-Embedded Tissue; Immunofluorescence & Histological Staining; Fab Immunofluorescence; Familiar with Microscopes (Zeiss & Leica) & Digital Imaging

March 2004 – June 2004

Research Associate I
Colorado State University; Ft. Collins, CO
Supervisor - Dr. Gary Pickard

❖ Maintained experiments investigating the brain's response to photic stimulation
- Maintained Animal Colonies

June 2003 – Sept. 2003

Research Associate I
Colorado State University; Ft. Collins, CO
Supervisor - Dr. William Horne

❖ Performed experiments investigating the protein-protein interactions of calcium channel subunits
- ➢ **Project**: Investigated the role of protein binding involved in voltage-dependent calcium channels
- Molecular Biology Techniques: Yeast Two-Hybrid System; PCR (plasmid preps) & RT-PCR; Transformations; Restriction Digestions/ Ligations; DNA Extraction; Cloning/ Subcloning; Agarose Gel Electrophoresis

Nov. 1998 – May 2003

Student Lab Assistant
University of Iowa; Iowa City, IA
Supervisor - Dr. Kevin Campbell

❖ Performed experiments investigating the proteins involved in Limb-Girdle Muscular Dystrophies
- ➢ **Project**: Developed all laboratory antibodies (monoclonal & polyclonal); Assisted postdoctoral fellows with projects: **Rachelle Crosbie**: Investigated the potential role of Aquaporin-4 & Sarcospan in Limb-Girdle Muscular Dystrophy; **Federica Piccolo**: Investigated the potential role of a point-mutation in the Sarcoglycan Complex in Limb-Girdle Muscular Dystrophy; **Rita Barresi**: Investigated the potential role of α-Dystroglycan Glycosylation in Congenital Muscular Dystrophies.
- Molecular Biology Techniques: PCR (plasmid preps, ES Cells, human & animal model mutational analysis) & RT-PCR; Transformations; Restriction Digestions/ Ligations; DNA Extraction; Cloning/ Subcloning;

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Agarose Gel Electrophoresis; Genotyping

- Biochemical Techniques: SDS-PAGE & Western Blotting Techniques; Antibody Purification (fusion proteins, peptide coupling, & peptide competition); Chemiluminescence; Immunoprecipitation; Protein Concentration Assays
- Cell Culture Techniques: Electroporation; Surface Biotinylation; Adenovirus Infections; Familiar with CHO, *ts*A201, Myotubule & Fibroblast cell lines
- Immunological/ Histological Techniques: Freezing & Sectioning of Tissue Samples; Cryosectioning; Immunofluorescence & Histological Staining; *In Situ* Denaturation; Fab Immunofluorescence; Familiar with Microscopes (Zeiss, Leica, & Confocal) & Digital Imaging
- Animal Handling Experience; Transgenic Mice Experience; *In Vivo* Adenovirus & Evans Blue Dye Injections

Publications and Acknowledgements:

I. Barresi R, Michele DE, Kanagawa M, Harper HA **Dovico SA**, Satz JS, Moore SA, Zhang W, Schachter H, Dumanski JP, Cohn RD, Nishino I, and Campbell KP. LARGE can functionally Bypass α-Dystroglycan Glycosylation Defects in Distinct Congenital Muscular Dystrophies. *Nature Medicine*. 2004 Jul; 10(7): 696-703.

II. Saito F, Moore SA, Barresi R, Henry MD, Messing A, Ross-Barta SE, Cohn RD, Williamson RA, Sluka KA, Sherman DL, Brophy PJ, Schmelzer JD, Low PA, Wrabetz L, Feltri ML, and Campbell KP. Unique Role of Dystroglycan in Peripheral Nerve Myelination, Nodal Structure, and Sodium Channel Stabilization. *Neuron*. 2003 Jun 5; 38(5): 747-758. (**acknowledged**)

III. Piccolo F, **Dovico SA**, Holt KH, and Campbell KP. Redirecting Point-Mutated Sarcoglycan Complex to the Sarcolemma: New Approaches for Limb-Girdle Muscular Dystrophy Treatment.
Manuscript in Preparation.

IV. Durbeej M, Sawatzki SM, Barresi R, Schmainda KM, Michele DE, and Campbell KP. Gene Transfer Establishes Primacy of Striated Versus Smooth Muscle Sarcoglycan Complex in Limb-Girdle Muscular Dystrophy.
Proc Natl Acad Sci USA. 2003 Jul, 22; 100(15): 8910-8915. (**acknowledged**)

V. Crosbie RH, Barresi R, and Campbell KP. Loss of Sarcolemma nNOS in Sarcoglycan-Deficient Muscle. *FASEB J*. 2002 Nov; 16(13):1786-91. (**acknowledged**)

VI. Crosbie RH, Lim LE, Moore SA, Hirano M, Hays AP, Maybaum SW, Collin H, **Dovico SA**, Stolle CA, Fardeau M, Tome FM, and Campbell KP. Molecular and Genetic Characterization of Sarcospan: Insights into Sarcoglycan-Sarcospan Interactions. *Hum Mol Genet*. 2000 Aug 12; 9(13):2019-27.

VII. Crosbie RH, **Dovico SA**, Flanagan JD, Chamberlain JS, Ownby CL, and Campbell KP. Characterization of Aquaporin-4 in Muscle and Muscular Dystrophy. *FASEB J*. 2002 Jul; 16(9):934-9.

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References

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