

# Jennifer Stevenson Moylan, Ph.D.

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## Summary of Qualifications

- ◆ Fifteen years scientific research experience
- ◆ Experience includes 6 years molecular biology research, 4 years cell biology and biochemistry research, 1 year immunology related technical service, and 3 years managerial and custom research
- ◆ Authored 6 scientific research publications in peer reviewed journals, 2 as first author and 4 as second author
- ◆ Independent research projects include studies of chloroplast molecular biology and RNA metabolism, and cell signaling of innate immunity and muscle wasting
- ◆ Managed the successful completion of over 300 custom research projects

## Accomplishments

- ◆ Managed the launch of the first comprehensive antibody based proteomics custom services product, June 2000
- ◆ Implemented efficiencies that improved throughput of custom services while reducing labor, materials, and standard cost of product by 1/3
- ◆ Managed 24% sales growth from \$250,000 in 2000, \$650,000 in 2001 and \$850,000 in 2002
- ◆ Edited scientific research articles for laboratory colleagues
- ◆ Discovered the presence of intercistronic introns in *Euglena gracilis* chloroplast DNA

## Experience

12/03 – present Assistant Professor

University of Kentucky, Department of Physiology, College of Medicine, Lexington, KY  
Currently researching the molecular mechanisms of muscle wasting in cancer cachexia, aging, loss of use and weightlessness.

06/00 – 07/03 **Manager, Custom Research Group**

BD Biosciences – Transduction Laboratories, Lexington, KY  
Directed 3 – 5 people in the daily process of custom western blotting for pharmaceutical, biotechnology, and university researchers. The group ran from 28-48 blots per day, my responsibilities included troubleshooting, customer interface, data analysis and data presentation. One of my main contributions was to process improvement and experimental design of custom research projects.

11/98 – 06/00 **Scientist I**

BD Biosciences – Pharmingen, San Diego, CA  
Managed cell biology product line.  
Served as radiation safety officer for entire San Diego site.  
Supported immunology product line and flow cytometry reagents.

03/98 – 11/98 **Product Manager, Cancer Drug Development**

Pacific Pharmaceuticals, San Diego, CA  
Co-managed pre-clinical studies of chemosensitizing agents and contributed to preparation of New Drug Applications for FDA approval.

09/86 – 05/87 **Laboratory Assistant**

PanLabs, Seattle, WA  
Prepared buffers, media and plasmid DNAs for research scientists.

## Education

**Post-Doctoral Fellowship**, 06/94 – 06/00

The Salk Institute, La Jolla, CA

Studied mechanisms of NF-kappa-B signal transduction.

*Education (continued)*

**Ph.D., Molecular and Cellular Biology**, 06/94

University of Arizona, Tucson, AZ

Dr. Richard Hallick, Advisor. Doctoral Dissertation: Transcription and intercistronic RNA processing of polycistronic operons of *Euglena gracilis* chloroplast.

**B.S., Biological Sciences**, 05/87

University of Washington, Seattle, WA

**Attended Baylor University, Department of Biological Sciences**, 09/82 – 05/85

Waco, TX

Invited Seminars

American Society for Cell Biology Conference Workshop. Title: BD PowerBlot: Multiplex Western Blotting for Proteomic Analysis of 900+ Signal Transduction Proteins. December 2002.

American Society for Cell Biology Conference Workshop. Title: Western Blot Screening of Over 800 Signal Transduction Proteins. December 2001.

American Society for Cell Biology Conference Workshop. Title: western Array Analysis of Protein Expression in Apoptotic Fibroblasts. December 2000.

Fred Hutchinson Cancer Research Center, Salk/Seattle Conference. Title: Purification of I-kappa-B kinases. October, 1995.

The International Society for Plant molecular Biology. Title: Intercistronic processing of a chloroplast pre-mRNA coding for protein component of photosystem I and II reaction centers. October, 1992.

UCLA Keystone Symposia (Molecular Evolution of Introns and Other RNA Elements). Title: Group III intercistronic introns in polycistronic ribosomal protein operons of *E. gracilis* chloroplast. February, 1991.

Publications

Verma IM and Stevenson JK (1997) I-kappa-B kinase: Beginning, not the end. *Proc Natl Acad Sci USA* 94:11758-11760.

Verma IM, Stevenson JK, Schwarz EM, Van Antwerp D and Miyamoto S (1995) Rel/NF-kappa-B/I-kappa-B family: intimate tales of association and dissociation. *Genes Dev* Cover and 9:2723-2735.

Barroga CF, Stevenson JK, Schwarz EM and Verma IN (1995) Constitutive phosphorylation of I-kappa-B alpha by casein kinase II. *Proc Natl Acad Sci USA* 92:7637-7641.

Hong L, Stevenson JK, Roth WB and Hallick RB (1995) *Euglena gracilis* chloroplast psbB, psbT, psbH and psbI gene cluster: Regulation of psbB-psbT pre-mRNA processing. *Mol Gen Genet* 247:180-188.

Stevenson JK and Hallick RB (1994) The psaA operon pre-mRNA of the *Euglena gracilis* chloroplast is processed into photosystem I and II mRNAs that accumulate differentially depending on the conditions of cell growth. *Plant J* 5:247-260.

Stevenson JK, Drager RG, Hallick RB et al., (1991) Intercistronic group III introns in polycistronic ribosomal protein operons of *Euglena gracilis* chloroplast. *Mol Gen Genet* 228:183-192.

## Research Support

American Cancer Society Institutional Research Grant, IRG-85-001-16. June 2004-June 2005

Molecular Mechanisms of Muscle Wasting in Cancer Cachexia

The goal of this project is to test for a direct effect of interleukins on muscle protein breakdown and to determine cellular and molecular mechanisms by which these effects are mediated. An additional goal of this project is to gather preliminary data to support an NIH grant application.

Role: Principal Investigator

The George E. Hewitt Foundation for Medical Research Post-Doctoral Fellowship Award, 1995-1997

Mechanisms of NF-kappa-B signaling

The purpose of this project was to delineate the events of NF-kappa-B signaling in innate immunity

Role: Post-doctoral Fellow