

**BIOGRAPHICAL SKETCH**

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NAME Lynda J. Dieckman	POSITION TITLE Scientific Associate Sr./Molecular Biology/ESH/QA		
eRA COMMONS USER NAME			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
John Carroll University, University Heights, OH	B.S.	1981	Neuroscience
Case Western Reserve University	M.S.	1985	Neurobiology
University of Cincinnati, Cincinnati, OH	Ph.D.	1989	Physiology and Biophysics

**Positions :**

2002-pres. Molecular Biologist/Environmental Safety and Health and Quality Assurance Coordinator, Biosciences Division, Argonne National Laboratory, Argonne, IL  
 1997-2002 Special Term Appointee, Biosciences Division, Argonne National Laboratory, Argonne, IL  
 1993-1997 Adjunct Faculty and (Sabbatical Replacement) Assistant Professor Department of Natural Sciences, College of DuPage, Glen Ellyn, IL  
 1995-1996 Adjunct Faculty, Benedictine University, Department of Biology, Lisle, IL  
 1991-1993 Adjunct Faculty, Department of Biology, Elmhurst College, Elmhurst, IL  
 1990-1991 Research Associate, Loyola University, Maywood, IL  
 1981-1984 Research Assistant, Case Western Reserve University, Cleveland, OH

**ES&H Training:**

Over 30 Environmental Safety and Health Courses  
 NFPA 70E Electrical Safety (2005)  
 Fundamentals of Biosafety for OEHS Professionals (2004)  
 OSHA 30-Hour General Industry Safety and Health (2004)  
 U.S. DOT Infectious Substance Transportation Training (2002)

**Publications:**

Dieckman, L.J. Zhang, W. Rodi D. J. Donnelly, M. I. Collart, F. R. Bacterial Expression Strategies for Human Angiogenesis Proteins. (submitted) J. Struct Funct Genomics.

Dieckman, L.J., Hanly, W.C. and Collart, F.R. Strategies for high throughput gene cloning and expression. Genet Eng (N Y). 2005; 27: 171-182.

Moy, S., Dieckman, L.J., Schiffer, M., Maltsev, N., Yu, G.X., and Collart, F.R. Genome-scale expression of proteins from Bacillus subtilis. J Struct Funct Genomics. 2004; 5(1-2): 103-9.

Zhang, R-g., Dementieva, I., Duke, N., Collart, F.R., Quate-Randall, E., Alkire, L., Dieckman, L.J., Maltsev, N., Korolev, O., and Joachimiak, J. (2002) Crystal structure of Bacillus subtilis IolI shows Endonuclease IV fold with altered Zn-binding. Proteins 48, 423-426.

Dieckman, L.J., Gu, M., Stols, L., Donnelly, M.I. and Collart, F.R. (2002) High throughput methods for gene cloning and expression. Protein Expression and Purification 25, 1-7.

Principal Investigator/Program Director (Last, First, Middle):

Pokkuluri, P.R., Raffin, R., Dieckman, L.J., Boogard, C., Stevens, F.J., Schiffer M., (2002) Increasing protein stability by polar surface residues: domain-wide consequences of interactions within a loop. *Biophys. J.* Jan: 82 (1 Pt 1):391-398.

Stols, L., Gu, M, Dieckman, L., Raffin, R. Collart, F.R. and Donnelley, M.I. (2002) A new vector for high throughput, ligation independent cloning encoding a TEV protease cleavage site. *Protein Expression and Purification* 25 8-15.

Raffin R, Dieckman L.J., Szpunar M, Wunsch C., Pokkuluri P.R., Dave, P., Stevens P., Cai X., Schiffer M., Stevens F.J., (1999) Physicochemical consequences of amino acid variations that contribute to fibril formation by immunoglobulin light chains. *Protein Sci.* Mar 8 (3) 509-517.

Dieckman, L.J., Solaro R.J., (1990) The effect of thyroid status on the expression of cardiac troponin I and myofibrillar pH sensitivity in perinatal and adult rat hearts, *Circulation Research.* Aug; 67 (2): 344-51.

Dieckman, L.J., Transitions in Isoforms of Troponin I and Myofibrillar pH Sensitivity in the Developing Heart, Ph.D. Dissertation, December 1989.

Dieckman, L.J. Ritzmann, R.E., (1987) The effect of temperature on Flight Initiation in the Cockroach *Periplaneta americana*. *J. Neurobiol* 18 (60) 487- 496.

Davis P.B., Dieckman L.J., Boat T., Stern R.C., Doershuk C.F., (1984) The alpha-adrenergic system in platelets of patients with pulmonary disease. *Am. J. Med. Sci.* Vol 288 (3) 104-108.

Davis P.B., Dieckman L.J., Boat T., Stern R.C., Doershuk C.F., (1984) Effect of alpha tocopherol on platelet membrane function in cystic fibrosis. *J. Lab. Clin Med* 104, 203-212.

Davis P.B., Dieckman L.J., Boat T., Stern R.C., Doershuk C.F., (1983) Beta adrenergic receptors in lymphocytes and granulocytes from patients with cystic fibrosis. *J. Clin. Invest* June (71) 1787-1795.

Davis P.B., DelRio, S., Muntz J.A., Dieckman L.J., (1983) Sweat chloride concentration in adults with pulmonary disease, *Am J. Med Sci.*, Vol 288 (3) 104-108.

#### **Presentations:**

Expression of Secretory/Periplasmic proteins and soluble domains of membrane proteins. NIGMS PSI Protein Production and Crystallization Workshop, March 28, 2004.

Introduce a Girl to Engineering Day (IGED), Argonne National Laboratory, February 26, 2004, High-Throughput Biology Facility Tour Given by Lynda Dieckman.

Collart F, Dieckman L, Gu M, Poulos M. (Argonne National Laboratory, Department of Energy, Division of Biology, Argonne, IL; Pfizer Global Research & Development) "High throughput gene cloning and expression - opportunities and limitations". *Keystone Symposia: Structural Genomics: From Gene Sequence to Function*; Breckenridge, CO; Jan 5-11, 2002.

Pokkuluri, P.R., Raffin, R., Dieckman, L., Boogard, C., Stevens, F.J., and Schiffer, M. 2002. Increasing protein stability by polar surface residues: Domain-wide consequences of interactions within a loop. *Biophys. J.*, 82: 391-398.

Stevens, F.J., Raffin, R., Dieckman, L.J., Szpunar, M., Pokkuluri, P.R., Wilkins Stevens, P., and Schiffer, M. 1999. Characterization of immunoglobulin light chain pathogenic aggregation and amyloidosis by site-directed mutagenesis. 4th Annual Midwest Stress Response and Chaperone Meeting, Jan 16.

Raffin, R., Dieckman, L.J., Szpunar, M., Wunsch, C., Pokkuluri, P.R., Dave, P., Wilkins Stevens, P., Schiffer, M., and Stevens, F.J. 1999. Physicochemical consequences of amino acid variations that contribute to fibril formation by immunoglobulin light chains. *Protein Sci.* 8: 509-517.

Pokkuluri, P.R., G. Johnson, X. Cai, L. Dieckman, F.J. Stevens, and M. Schiffer. 1998. Domain flips resulting from single amino acid substitutions. American Crystallographic Association Meeting.

Principal Investigator/Program Director (Last, First, Middle):

Raffen, R., Dieckman, L.J., Wilkins Stevens, P., Pokkuluri, P.R., Schiffer, M., and Stevens F.J. 1997. Characterizing primary structural determinants of immunoglobulin light chain amyloidosis with recombinant light chain variable domains. FASEB Summer Research Conference: Amyloid and other Abnormal Protein Assembly, Copper Mt., CO, July 13-18.

"Transforming Growth Factor –Beta Inhibits Expression of Cardiac Troponin I in Cultured Cardiomyocytes," Dieckman L.J., Murphy A.M., and Engelman G.E., presented at UCLA Symposia: Cellular and Molecular Biology of Muscle Development, Keystone, CO., January 1991.

"Gene Switching Regulates Troponin I Expression in Rat Cardiac Development: Influence of Thyroid Status," Murphy A.M., Dieckman L.J., Solaro R.J., Strauss A.W., Soc. For Ped. Res., Ped. Res. 27, T306A, 1990.

"The Effect of Thyroid Status on the Expression of Troponin I in Perinatal and Adult Rat Hearts," 1989 FASEB Meeting New Orleans, LA., Session 214 #2744.

"Development Transitions in Troponin I Isoforms," L.J. Dieckman, R.J. Solaro, 1989 Cardiovascular Research Forum, American Heart Association of Metro, Chicago, May 31, 1989, Chicago, IL.

"Expression of Cardiac Thin Filament Proteins During Development of Euthyroid and Hypothyroid Rates," Dieckman L.J. and Solaro R.J., Poster presented at the 17<sup>th</sup> Annual UCLA Symposia: Cellular and Molecular Biology of Muscle Development. April 1988 Steamboat Springs, CO.

"The Effects of Bilateral Hippocampal Lesions on Maternal Behavior in the Sprague Dawley Rat," Lynda Dieckman, Helen Murphy, and Cyrilla Wideman, Presented at Ohio Academy of Science 91<sup>st</sup> Annual Meeting April 1982.