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John E. Yerg

Objective Currently seeking full-time employment as molecular-microbiology research associate or technician

Education PhD Student/Graduate Assistant, Biomedical Sciences, Marshall University, 2007-2009
M.S. Physiology and Biophysics, Georgetown University, August 2003
B.S. Biological Sciences, Cornell University, May 1999
EMT-B Certified, Front Range Community College, Summer 2001

Research Experience **Graduate Student, Marshall University** 8/2007-12/2009

My most recent laboratory experience came while studying microbiology as a Ph.D graduate student in Biomedical Science. Utilizing *C.elegans* as a model host system, I studied the pathology of cystic fibrosis, focusing on the role of bacterial tissue colonization and biofilm formation. I have developed an extensive array of molecular microbiology skills, as well as an exceptional academic foundation. I have left the program for personal and professional reasons, but have *not* ruled out the possibility of returning to complete a Ph.D at a later date.

Research Assistant, Auburn University 10/2006-6/2007

Assisted in cloning of gene for generation of transgenic mouse lineage. Experiment designed to examine role of critical signal transduction pathway in pathology of Alzheimer's disease, and diabetes. Primary responsibility was to troubleshoot previous problems in generating desired construct, develop alternative strategy for experiment, optimize new protocol, and then follow through with cloning process and prepare construct for introduction into host.

Research Assistant, Institute for Behavioral Genetics 2003-2006

Worked in molecular genetics lab studying models of neurodegeneration in invertebrates and cell culture. General focus of studies was development of transgenic *C.elegans* strains expressing proteins suspected in pathology of neurodegenerative disease – mainly Alzheimer's Disease. Responsibilities included design and construction of expression vectors, microinjection and integration of desired transgene, and subsequent analysis of disease phenotype. Specific skills include DNA/RNA purification and extraction, PCR, immunohistochemistry, antibody staining, Western blotting, RT-PCR, transgenic nematode construction, and microarray analyses (See Publications below).

Research Assistant, Institute for Behavioral Genetics 1999-2001

Studied effects of caloric restriction on aging in mice. Research was based on the examination of several recombinant inbred strains, which were isolated according to differential sensitivity to alcohol. Individual strain variations in body weight, tail growth rate, and daily temperature regulation were analyzed using quantitative trait loci mapping in an attempt to identify genes involved in kinetics of aging. Developed skill in care and handling of small animals, DNA sequencing, and animal genotyping (See Publications below).

Intern, Human Genome Sciences, Inc. Summer 1998

Assisted in immunological studies of cell biology lab. Focus of laboratory was examination of monocyte proliferation and localization in response to various cytokines. Specific responsibilities included human blood elutriations, ELISA assays, calcium flux experiments, and various other bioassays.

Publications

1. "Conversion of Green Fluorescent Protein into a Toxic, Aggregation-prone Protein by C-terminal Addition of a Short Peptide." Christopher D. Link, Virginia Fonte, Brian Hiester, John Yerg, Jmil Ferguson, Susan Csontos, Michael A. Silverman, and Gretchen H. Stein. *J. Biol. Chem.* Jan 2006; 281: 1808 - 1816
2. "Suppression of *in Vivo*-Amyloid Peptide Toxicity by Over expression of the HSP-16.2 Small Chaperone." Virginia Fonte, D. Randal Kipp, John Yerg III, David Merin, Margaret Forrestal, Eileen Wagner, Christine M. Roberts, and Christopher D. Link, *J. Biol. Chem.* Jan 2006; 283: 784-791
3. "Microarray analysis of Alzheimer's disease *C.elegans* model." Wail M. Hassan, John E Yerg III, Christopher D. Link. *15th International C.elegans Meeting 2005*
4. "A Novel Regulator of beta-amyloid peptide-dependent hsp-16 expression." Brian Hiester, Brittany Ganser, Randy Kipp, Jey Yerg, Chris Link. *15th International C.Elegans Meeting 2005*
5. "Quantitative trait loci specifying the response of body temperature to dietary restriction." Rikke BA, Yerg JE 3rd, Battaglia ME, Nagy TR, Allison DB, Johnson TE. *J Gerontol A Biol Sci Med Sci.* 2004 Feb; 59(2): 118-25.
6. "Strain variation in the response of body temperature to dietary restriction." Rikke BA, Yerg JE 3rd, Battaglia ME, Nagy TR, Allison DB, Johnson TE. *Mech Ageing Dev.* 2003 May; 124(5): 663-78.

Related Medical Experience

- Emergency Medical Technician, Shryver Medical Transportation** Summer 2002
Worked as EMT for critical care ambulance unit in Denver, CO. Transported critically ill patients to-and-from doctor's appointments, including long-distance transports. Responsibilities included basic patient evaluations, oxygen therapy, and administration of intravenous fluids.
- Emergency Department Volunteer, Boulder Community Hospital** 2001
Spent 4-5 hours a week volunteering at the local hospital. Responsibilities included obtaining vital signs, maintenance, and patient transport.
- Intern, Physical Therapy Department Schoelkopf Hall, Cornell University** 1998
Participated in 10-week internship program. Received instruction on several therapeutic treatments and exercises implemented in rehabilitation programs. Interacted with patients of all ages and with a variety of physical ailments.
- Athletic Training Assistant, Friedman Fitness Center, Cornell University** 1997-1999
Aided varsity Strength and Conditioning Coach in training of collegiate athletic teams. Helped to develop and coordinate exercise programs for injured student-athletes, including individual and group instruction. Also performed various administrative duties.

References

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