

Curriculum Vitae

A. Professional Preparation:

<u>Institution</u>	<u>Degree</u>	<u>Duration</u>	<u>Field of Study</u>
University of California at Davis	B.S.	1988-90	Biochemistry
Modesto Junior College		1986-88	
University of California at Riverside	Ph.D.	1990-94	Biochemistry

B. Appointment:

1. Associate Professor, Department of Biological Sciences, University of the Pacific (1994-Present)
 - a. Research Area: Tissue-Restricted Gene Expression and Spider Silk Biology
2. Graduate Research Assistant, Assistant Professor Christian Nelson and Stephen Spindler, Department of Biochemistry, University of California, Riverside (1990-1994)
 - a. Research Area: Mammalian Gene Expression/ Molecular Endocrinology
3. Undergraduate Research, Professor Chester Price, Department of Biochemistry, University of California, Davis

C. Publications:

Most closely related publications: (* indicates undergraduate student collaborators)

1. Hu, X., Yuan, J., Wang, X., Vasanthavada, K., Falick, A., Jones, P., *La Mattina, C., and Vierra, C. Analysis of aqueous glue coating proteins on the silk fibers of the cob weaver, *Latrodectus hesperus*. *Biochemistry*. 2007. 46: 3294-3303.
2. Hu, X., Vasanthavada, K., *Kohler, K., *McNary, S., Moore, M.F., and Vierra, C. Molecular Mechanisms of Spider Silk (Invited Review). *Cellular and Molecular Life Sciences*. 2006. 63: 1986-1999.
3. Hu, X., Kohler, K., Falick, A.M., Moore, A.M., Jones, P.R. and Vierra, C. (2006). Spider Egg Case Core Fibers: Trimeric Complexes Assembled from TuSp1, ECP-1, and ECP-2. *Biochemistry* 45, 3506-3516.
4. Hu, X., *Kohler, K., Falick, A.M., Moore, A.M., Jones, P.R., Sparkman, O.D., and Vierra, C. (2005). Egg case protein-1. A new class of silk proteins with fibroin-like properties from the spider *Latrodectus hesperus*. *J Biol Chem* 280, 21220-21230.
5. Hu, X., Lawrence, B., *Kohler, K., Falick, A.M., Moore, A.M.F., McMullen, E., Jones, P.R. and Vierra, C.A. (2005). Araneoid Egg Case Silk: A Fibroin with Novel Ensemble Repeat Units from the Black Widow Spider, *Latrodectus hesperus*. *Biochemistry* 44, 10020-10027.
6. *Kohler, K., *Thayer, W., *Le, T., *Sembhi, A., Vasanthavada, K., Moore, A.M., and Vierra, C.A. (2005). Characterization of a Novel Class II bHLH Transcription Factor from the Black Widow Spider, *Latrodectus hesperus*, with Silk-Gland Restricted Patterns of Expression. *DNA Cell Biol* 24, 371-380.
7. Lawrence, B.A., Vierra, C.A., and Moore, A.M. (2004). Molecular and mechanical properties of major ampullate silk of the black widow spider, *Latrodectus hesperus*. *Biomacromolecules* 5, 689-695.

8. *Mitchell, B., *Mugiya, M., Youngblomb, J., *Funes-Duran, M., *Miller, R., Ezpeleta, J., *Rigby, N. and Vierra, C. (2000). The genomic structure and promoter analysis of the human ABF-1 gene. *Biochim Biophys Acta* 1492: 320-329.

Other related publications:

1. *Wong, J., *Funes-Duran, M., *Ahlberg, J., Round, J., O'Connell, R., *Miller, R., *Chen, E., Richmond, P.A., and Vierra, C.A. (2001). Characterization of a basic helix-loop-helix protein, ABF-1: nuclear localization, transcriptional properties, and interaction with Id-2. *DNA Cell Biol* 20, 465-471.
2. *Nguyen, L., Round, J., *Wong, J., O'Connell, R., *Funes-Duran, M., Jongeward, G., and C. Vierra (2001). Isolation and Characterization of the ABF-1 homolog in *Caenorhabditis elegans*. *Nucleic Acid Research* 29: 4423-4432.
3. Vierra, C. A., Jacobs, Y. T., Ly, L., and Christian Nelson. (1994). Pan Expression and Endocrine Cell type-Specific Complex Formation. *Molecular Endocrinology* 8: 197-209.
4. Vierra, C. A., Xin-X. A., Jacobs, Y. T., Campbell, J. M., Rutter, W. J., Shen, L-P., and Christian Nelson. (1994). Purification of *E. coli*-Synthesized Pan Proteins and Development of a Pan-Specific Monoclonal Antibody. *Hybridoma* 13: 191-197.

*indicates undergraduate students that participated in the work

D. Synergistic Activities:

1. Ad hoc reviewer for Journal of Biotechnology, Biochemistry, and Biochimie
2. Development of Molecular Biological Technique Course for Advanced Biology Majors

E. Collaborators & Other Affiliations:

Collaborators:

Barbara Lawrence Department of Chemistry, Eastern Illinois University, Charleston IL (Black Widow Spider Research)

Anne Moore, Department of Biology, University of the Pacific, Stockton CA

Pat Jones Department of Chemistry, University of the Pacific, Stockton CA

Graduate Advisor: Stephen Spindler Professor of Biochemistry, UC Riverside