Curriculum Vitae

K Underbrink
El Centro College
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Education

University of Texas Southwestern Graduate School, Dallas, TX
M.A. in Biochemistry (Molecular Biology/Genetics)
Thesis
Studies on a Mitochondrial Gene Required for the Biosynthesis of Yeast Mitochondrial tRNA

University of Dallas, Irving, TX
B.S. in Biology

Teaching Experience

Collin College, McKinney, TX August 2010 – May 2014
Associate Faculty - Biology 1406 Lecture & Lab – General Biology (majors), Biology 1408 Lecture – General Biology (non majors), Biology 2401 Lecture & Lab – Anatomy & Physiology I
Developed syllabi, provided lecture & laboratory learning activities, administered grades.

Cedar Valley College, Lancaster, TX August 2009 – May 2010
Adjunct Faculty - Biology 1406 Laboratory – General Biology (majors)
Adapted district syllabi, provided laboratory learning activities & laboratory grades.

Texas Woman's University, Denton, TX August 2005 – August 2008
Laboratory Coordinator & Instructor - Zoology 2011 & 2021 - Human Anatomy & Physiology Lab I & II
Developed syllabi for all Anatomy & Physiology laboratories, prepared & supplied all laboratories, supervised & mentored graduate student instructors. As adjunct faculty, provided laboratory learning activities, & administered laboratory grades, including grades of graduate instructors.

Richland College, Dallas, TX August 1998 – August 2005
Adjunct Faculty - Biology 1408 & 1409 - Biology for Non-Majors I & II; Lecture & Lab
Developed Laboratory & Research performance-based courses from existing curricula. Integrated student use of electronic media & communication, directed students in individual & group research projects & presentations. Provided lecture & laboratory learning activities, administered grades.

Booker T Washington High School for Performing & Visual Art, Dallas, TX August 1986-1991
Classroom Teacher – Biology, Honors Biology, Chemistry, Environmental Science, AP Biology, Anatomy & Physiology.
Developed syllabi, laboratories, & learning activities. Maintained Biology laboratory, provided instruction, administered grades.

Publications and Papers

Presentation
1983 Cold Spring Harbour Symposium on The Molecular Biology of Yeast, Cold Spring Harbour, New York.
K Underbrink-Lyon, D L Miller, N D Ross, and N C Martin. "Deletion and Restriction Mapping of a Mitochondrial Gene Required for Yeast Mitochondrial tRNA Biosynthesis."
Abstract published in Symposium Proceedings

Poster
1982 FASEB 66th Annual Meeting, New Orleans, Louisiana.
D L Miller, K Underbrink-Lyon, H Fukuhara, and N C Martin. "Location, Structure, and Products of the Region of Yeast Mitochondrial DNA Containing the tRNA Synthesis Locus."
Abstract published in FASEB Proceedings

Refereed Articles

N C Martin, D L Miller, K Underbrink, and X Ming. (1985) Structure of a Precursor to the Yeast Mitochondrial tRNA*fmet: Implications for the Function of the tRNA Synthesis Locus. J Biol Chem 260: 1479-1483.

K Underbrink-Lyon, D L Miller, N A Ross, H Fukuhara, and N C Martin (1983) Characterization of a Yeast Mitochondrial Locus Necessary for tRNA Biosynthesis: Deletion Mapping and Restriction Mapping Studies. Molec Gen Genet 191: 512-519.

M Li, A Tzagoloff, K Underbrink-Lyon, and N C Martin. (1982) Identification of the Paromomycin-resistance Mutation in the 15S rRNA Gene of Yeast Mitochondria. J Biol Chem 257: 5921-5928.

N C Martin and K Underbrink-Lyon. (1981) A Mitochondrial Locus is Necessary for the Synthesis of Mitochondrial tRNA in the Yeast Saccharomyces cerevisiae. Proc Nat Acad Sci USA 78: 4743-4747.

D Newman, H D Pham, K Underbrink-Lyon, and N C Martin. (1980) Characterization of tRNA Genes in tRNA Region II of Yeast Mitochondrial DNA. Nucl Acids Res 8: 5007-5016.

N C Martin, H D Pham, K Underbrink-Lyon,D L Miller, and J E Donelson. (1980) Yeast Mitochondrial tRNA*trp can Recognise the Nonsense Codon UGA. Nature 285: 579-581.

M R Culbertson, K M Underbrink, and G R Fink. (1980) Frameshift suppression in Saccharomyces cerevisiae. Genetics 95: 833-853.