

PI on NIH Academic Research Enhancement Award (AREA, R-15) "Mitochondrial Function and Aging in *S. cerevisiae*" (1 R15 AG021956-01) - \$202,565, Start Date May 2003. Completed May 2007.

Co-PI on NSF CCLI-Adaptation and Implementation Grant, "Discovery-Based Science and Mathematics in an Environmental Context" (NSF-0088211) - \$187,054, Start Date May 15, 2001.

Research Initiati

Kim, S., J.C. Jiang, **P.A. Kirchman**, I. Rubelj, E.G. Helm, and S.M. Jazwinski. (1998).

Kirchman, P.A. and S.M. Jazwinski. (1998). Intracellular Signalling: A Determinant of Yeast Longevity. Gordon Research Conference on the Biology of Aging, Il Ciocco, Italy.

Jazwinski S.M., **P.A. Kirchman**, R.L. West, J.C. Jiang, S. Kim, C.-Y. Lai, A. Benguria, and S. Shama. (1998). Longevity determining processes in Yeast. Meeting on Genetics of Aging, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, p. 3.

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Jazwinski S.M., **P.A. Kirchman**, S. Kim, S. Shama, J.C. Jiang, R.L. West, C.-Y. Lai, and A. Benguria. (1997). Genes of Youth: Genetic analysis of Aging using yeast. *The Gerontologist* **37**:47.

Kirchman, P.A., S. Shama, R.L. West, S. Kim and S.M. Jazwinski. (1997). Interaction of factors affecting the life span of *Saccharomyces cerevisiae*. *Mol. Biol. Cell.* **8**:151a.

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Jazwinski, S.M., **P.A. Kirchman**, S. Kim, S. Shama, J.C. Jiang, R.L. West, C-Y Lai, A. Benguria. (1997). Genes of Youth: Genetic Analysis of Aging Using Yeast. 16th Congress of the International Association of Gerontology, Adelaide, Australia. p. 28-29.

Titilola Sode – Active telomerase export to the mitochondria in *S. cerevisiae*

Mario Mayes – Nuclear Suppression of Mitochondrial Defects in *Saccharomyces cerevisiae*

Ricardo Martin – Construction of Mitochondrion-targeted Telomerase for Analysis in *Saccharomyces cerevisiae*

Zachary Virgin – Generation of Hyperactive Manganese Superoxide Dismutase Mutants by Error-Prone PCR

Therese Rytz – Cloning *SOD2* from the Red-eared Slider *T. scripta*

Robert Linder - Assaying Iron Content of *Saccharomyces cerevisiae*

Kateryna Kiselova - Analysis of Manganese Superoxide Dismutase Mutants in Yeast

Robert Anderson - Optimizing Atrazine Catabolism in *Pseudomonas* sp. strain ADP

Alejandro Landa – Cloning of the Manganese Superoxide Dismutase Gene (*SOD2*) from *T. scripta*

Richard Kolibas - Developing an Assay to Assess the Activity of Yeast Superoxide Dismutase in *E. coli*

Paloma Reiter – Activity Analysis of Manganese Superoxide Dismutase Mutants

Evgeny Idrisov - Antisense RNA Transcripts

Sarah Salem – Analysis of Mutant Manganese-Superoxide Dismutase on the Lifespan of *Saccharomyces cerevisiae*

Didier Alexander - Assaying Mutant Marine Bacteria for Lithium Extraction

Eric Bishop – Isolation of the methionine sulfoxide reductase B3 (*MSRB3*) gene from the red-eared slider, *Trachemys scripta elegans*

Melissa Kwan - The Effect of Mutated Aconitase on Yeast Longevity

Jairo Sanchez – Cloning of the Manganese Superoxide Dismutase Gene (*SOD2*) from *T. scripta*

Steve Nunes - Creation of an Aconitase Overexpression Strain of *Saccharomyces cerevisiae* for Lifespan Analysis

Rafael Paez - Iron and Mitochondrial Aging

Jessica Battle - Lowering oxidative stress with increased methionine content of mitochondrial aconitase

Daniel Velásquez - Lifespan Analyses of Yeast Strains Harboring Mutations Affecting Metabolism

Imarhia Enogieru – Some Like it Hot: The Isolation of an Aconitase Mutant Resistant to Heat Shock-Induced Oxidative Stress

