

TEXAS STATE VITA
Last updated February 9, 2012

I. Academic/Professional BackgroundA. Name: Joseph R. Koke, Ph.D.Title: Professor**B. Educational Background**

Degree	Year	University	Major
Ph. D.	1971	University of Alberta, Edmonton	Cell Biology
MS	1968	University of Oregon	Biology
BS	1966	University of Oregon	Biology

C. University Experience

Position	University	Dates
Professor Emeritus	Texas State	2011 - continuing
Retired, adjunct Professor	Texas State	2011
Professor and Associate Chair	Texas State	2006 - 2011
Professor and Interim Chair	Texas State	2004 - 2006
Professor and Associate Chair	Texas State	2003 - 2004
Professor	Texas State	1988 - 2003
Visiting Professor of Medicine	University of Wisconsin	1988 - 2001
Associate Professor	Texas State	1983 - 1988
Assistant Professor	Texas State	1978 - 1983
Post-doctoral Fellow	University of Wisconsin	1973 - 1978
Post-doctoral Fellow	University of Alberta	1972 - 1973

D. Relevant Professional and Administrative Experience

Position	Entity	Dates
Consultant for Electron Microscopy	TRI (Texas Research Institute)	1985 - 1986
Director, Joint Admission Med. Program (JAMP)	Texas State and TMSDS	2002 - 2004
Director and Principal Investigator, Texas State-Science/Math/Technology Education Institute.	Texas State	1998 - 2002
Chair (1988 - 1996), member (1996 -2001), chair (2002 - 2004) of the Texas State Institutional Animal Care and Use Committee	Texas State	1988 - 2010

II. TEACHING**A. Teaching Honors and Awards:**

2010 Named Faculty Member of the Year, Catholic Student Center, Texas State University-San Marcos

2001 Comal Independent School District, 2001 Business Partner of the Year (mentoring program for high school students)

1997 Alpha Chi National Honor Society, Favorite Professor Award

1995 American Society for Cell Biology Teaching Award, Mentor Scientist

1994 American Society for Cell Biology Teaching Award, Mentor Scientist

1994 Beta Beta Beta Biology Honor Society, Excellence in Teaching Award

1993 The University of Texas Medical School in Houston, excellence in pre-medical education

B. Courses Taught:

BIO 1310 General Biology
 BIO 1430 Functional Biology
 BIO 2430 Human Anatomy and Physiology
 BIO 2460 Cell Biology
 BIO 3300 Cell and Molecular Biology
 BIO 4299 Undergraduate Research
 BIO 4315A Cell Biology of Cancer
 BIO 4441/5441 Cellular Physiology
 BIO 4480/5480 Cytology and Microtechnique
 BIO 5110A Seminar in Biology
 BIO 5110C Seminar in Cell Biology
 BIO 5110Q Seminar in Physiology
 BIO 5216 Research
 BIO 5350E Special Topics, Endocrinology
 BIO 5316 Research
 BIO 5399 Thesis
 BIO 5485 Scanning Electron Microscopy
 BIO 5699 Thesis

C. Supervised the following students, including Graduate Theses:**Major/Thesis Advising:****Former students with doctoral degrees**

1. Ali Abedi, MD 2010, in residency San Antonio, TX. MS Texas State 2006.
2. Greg Ramsey, MD 2009, in residency New Jersey. MS Texas State 2005.
3. Shannon Weigum. University of Texas, Austin, Chemistry and Biochemistry. Ph.D. summer 2008. MS Texas State May, 2002. Assistant Professor of Biology, Texas State University, San Marcos. 2011.
4. Kara Warner. Ph.D. 2006, Oregon State University, Molecular Pharmacology. MS Texas State May, 2001.
5. Sandra Bolanos. MD. 2006, currently in residence Virginia Beach, University of Texas-Southwestern, Dallas. Ph.D, University of Texas Medical Branch, Galveston 2003. MS Texas State 1997.
6. Tracy Glass. MD 2005, in residence Texas Tech Medical Center, Amarillio. MS Texas State 2000.
7. Sheila Kadura. Ph.D. cell biology, Baylor College of Medicine, Houston. BS Texas State 1997, Ph.D. 2004.
8. Jordan Hall. MD 2004, Armed Services Medical School, Bethesda. BS Texas State 2000.
9. Mark Hahn. D.O. 2002, Kirksville, Missouri. MS Texas State 1998.
10. Juan Herrera. Ph.D. 2002, University of Utah, Salt Lake. MS Texas State 1997. Now Post-doc University of Houston.
11. Sheila Jeffcoat. Practicing physician in Houston. MD, University of Texas Health Science Center, San Antonio, May 2001. MS Texas State 1994.
12. Stephanie Megden. Teaching faculty and practicing physician, New York University Medical Center. MD, UT-San Antonio, 2001. At Texas State as a graduate student 1997.

13. Fariba Javadi. Currently Physician in residence in Albany, New York. MD St. George's, Bahamas. MS Texas State 1994
14. Tracy Toliver. Assistant Professor in Anesthesiology, University of Texas Medical Branch, Galveston. Ph.D. University of Texas Medical Branch, Galveston, 1998. MS Texas State 1993
15. Kellous Price. Practicing physician in Longview, Texas. MD Texas Tech University 1997. MS Texas State 1993.
16. Camille Graham. Physician in Residence at the University of Texas Health Science Center in San Antonio. MD University of Texas Health Science Center in San Antonio 1997. MS Texas State 1993.
17. Brent Sanderlin. USAF Flight Surgeon, Fort Lauderdale, Florida. DO Texas College of Osteopathic Medicine (Fort Worth) 1997. BS Texas State 1993.
18. Rhoda Hamby. Ph.D. University of Texas Health Science Center in San Antonio 1997. MS Texas State 1991.
19. Timothy Raabe. Associate Professor of Biology, St. Mary's University San Antonio. Ph.D. University of Texas at Austin, 1995. MS Texas State 1991.
20. Nick Christodoulides. Associate Scientist, Dept. Chem and Biochem, University of Texas at Austin. Post-doctoral fellow at Rice University. Ph.D. University of Texas at Austin 1993. MS Texas State 1989.
21. Donna Vaughan. Self-employed. Post-doctoral fellow at the University of Texas Southwestern in Dallas. Ph.D. University of Wisconsin-Madison 1995. MS Texas State 1988.
22. Sy Griffey. Project Manager, Life Cell Corporation, The Woodlands, Houston. Ph.D. Baylor College of Medicine 1995. MS Texas State 1986.
23. Robb Sharon. Current location unknown. DO Texas College of Osteopathic Medicine (Fort Worth) 1994. At Texas State 1990.
24. Christine Haskin. Associate Professor UNLV Dental College. Ph.D. 1995 UTSA. DDS UT Health Science Center San Antonio 1989. MS Texas State 1986.
25. Paul Werchan. Director of Gravitational Research, Brooks Air Force Base, San Antonio. Ph.D. Louisiana State University 1986. MS Texas State, 1982.
26. Marsha Wills-Karp. Professor of Pediatrics and Director of Immunobiology, University of Cincinnati. Previously Associate Professor of Physiology at Johns Hopkins University, Baltimore, Maryland. Post-doctoral fellowship at Yale 1986-88. Ph.D. University of California Santa Barbara 1985. MS Texas State, 1982. Named Texas State Outstanding Alumnus, 2002.
27. Jason Hughes. MD. Current location unknown. BS Texas State 1984.
28. Cary Pruski. Current location unknown. DDS UT Health Science Center San Antonio 1984. MS Texas State 1981.
29. Mary Booth. Practicing veterinarian, Round Rock, Texas. At Texas State 1980

Former master's students in technical/professional positions

1. John Stecker, programmer, Austin. Awaiting admission into neurobiology PhD program. MS Texas State Dec., 2011.
2. Mayuri Patel, technician, Baylor College of Medicine, Houston, TX.
3. Amanda Mosier, high school biology teacher, MS Texas State August, 2009.
4. Katherine Saul, (co-supervised with Dana Garcia), MS summer 2008. Technician, University of Colorado at Denver.
5. Nina Jaffarad. Laboratory technician, MD Anderson, Houston. MS Texas State 2004.
6. Carlene Worthington. MS Texas State 2004.
7. Jacqueline Meyer, Tissue Culture Lab supervisor, Houston, TX. MS Texas State 2004.
8. Pamela White. Instructor Community College, Phoenix AZ. MS Texas State 2001.

9. Denise Malony-Smith. Chiropractic school, admitted summer 2001. MS Texas State 2000.
10. Teresa Taylor. Science teacher and chair, Smithson Valley High School. MS Texas State 1998.
11. Patricia Stevenson. Lab Manager/Technician, University of Texas Health Science Center, San Antonio. MS Texas State 1996.
12. Sullivan Fitzgerald. Director of Manufacturing, Biologics Division, Luminex Corporation, Austin, TX. MS Texas State, 1995.
13. Ruben Sandoval. Director of the Imaging Facility, Dept. Nephrology, Indiana U. Med. Center, Indianapolis. MS Texas State 1993.
14. Colene Drace. Scientist, Molecular Pharmacology, Alcon Research, LTD. Ft. Worth, TX. MS Texas State 1990.
15. Laurie Chudej-Leer. Pharmacist, Bryan, Texas. MS Texas State 1989.
16. Kathe Simpson. Technician, Seguin, Texas. MS Texas State 1988.
17. Carol Kyle. High School Teacher, Clear Lake, Texas. MS Texas State 1986.
18. Bruce Ziman. Lab Technician, Johns Hopkins University, Baltimore, Maryland. MS Texas State 1986.
19. Cynthia Westmoreland-Koutz. Physician's Assistant, Houston. MS Texas State 1985.
20. Dan Anderson, TransOcean Corporate Occupational Health Advisor. MS Texas State 1984.
21. Lynn Williams. Chemical Consultant. Midland, Texas. MS Texas State 1983.

Students in Progress

22. Sarah Jo Kane, Graduate Student, MS expected spring 2012.
(current total completed master's degrees = 44)

D. Courses Prepared and Curriculum Development:

- 1998 - 2004 Chair of the Biology Graduate Committee, Texas State University-San Marcos.
2003 - reorganized and reenrolled entire graduate faculty in alignment with new doctoral program.
1999 - 2002 Chair, Biology Ph.D. Committee, Texas State University-San Marcos. Responsible for initial program development and curriculum. Wrote initial proposal and "Guide to Graduate Programs" for the Department of Biology
1998 - 2000 Chair of Biology 2000 - Curriculum Committee, Texas State University-San Marcos.
Wrote and implemented the first complete revision of the Biology undergraduate curriculum in 30 years.

E. Funded External Teaching Grants and Contracts:

- 1999 - 2003 Principal Investigator, Southwestern Bell Corporation Foundation, "Teacher Enhancement Through Research," \$200,000. Education Award, helps support Texas State-Science/Math/Technology Institute.
1998 - 2000 Co-principal Investigator (PI Dana García) Texas Coordinating Board, Eisenhower Funds, "A Summer Research Experience for Science and Mathematics Teachers," \$88,500. Education award, used to help support Texas State-Science/Math/Technology Institute.
1998 - 2002 Principal Investigator, National Science Foundation, Teacher Enhancement Program, "A Summer Research and Teaching Experience for Science and Mathematics Teachers," \$754,000 (total budget \$1.4 million). This program established the Texas State-Science/Math/Technology Institute, the primary function of which was to provide a research experience to in-service teachers to improve scientific literacy and increase the number of students entering science/math/technology-related fields. Education award.
1996 - 1998 Principal Investigator, National Science Foundation, Instrumentation and Laboratory Improvement Program, "An Integrated And Networked Microscopy Center For Undergraduate Education," \$200,000. This grant provided funds for purchase of a confocal microscope system

and creation of a networked microscopy facility necessary to Biology undergraduate curriculum revisions. Education award.

1990 - 1993 Principal Investigator, National Science Foundation, Instrumentation and Laboratory Improvement Program, "Enhancement of Undergraduate Biology Education with Electron Microscopy," \$180,000. This grant supported integration of electron microscopy into the Biology undergraduate curriculum.

III. SCHOLARLY/CREATIVE

A. Works in Print

1. Books

a. Chapters in Books (refereed)

1. John G. Bruno, Maria P. Carrillo, Taylor Phillips, Alissa Savage, Joseph R. Koke. 2011. Aptamer-Based Detection and Therapeutics to Prevent and Treat *E. coli* Infections. In *E. coli Infections: Causes, Treatment and Prevention*. ISBN 978-1-61122-859-5, ed. Morgan C. Rogers and Nancy D. Peterson, Chapt. 3. New York: Nova Science Publishers, Inc.
2. García D. M., Koke, J. R. 1996. The cytoskeleton of the retinal pigmented epithelium. *Advances in Structural Biology* 4:151-174.
3. Sami H., Koke J. R. and Bittar N. 1985. Accelerated recovery of ischemic canine myocardium induced by AMP. *Adv. Myocardiol.* 6:483-90.
4. Bittar N., Shug A. L., Folts J. D. and Koke J. R. 1978. Ischemic-like changes produced in the heart by atractyloside: a chemical model. In "Recent Advances in Studies of Cardiac Structure and Metabolism", Volume 12, "Cardiac Adaptation". Eds: Kobayashi T., Ito Y. and Rona G. University Park Press, Baltimore.
5. Bittar N., Shug A. L., Koke J. R., Folts J. D. and Shrago E. S. 1976. Inhibited adenine nucleotide translocation in mitochondria isolated from ischemic myocardium. In "Recent Advances in Studies of Cardiac Structure and Metabolism", Volume 11, "Biochemistry and Pharmacology of Myocardial Hypertrophy, Hypoxia, and Infarction". Eds: Harris P., Bing R. J. and Fleckenstein A. University Park Press, Baltimore.
6. Shug A. L., Koke J. R., Folts J. D. and Bittar N. 1975. Role of adenine nucleotide translocase in metabolic change caused by ischemia. In "Recent Advances in Studies of Cardiac Structure and Metabolism", Volume 10, "The Metabolism of Contraction". Eds: Roy P.-E. and Rona G. University Park Press, Baltimore.
7. Bittar N., Pauly T. J. and Koke J. R. 1975. Changes in ischemic coronary vasodilation produced by blood, plasma, and saline infusions. In "Recent Advances in Studies of Cardiac Structure and Metabolism", Volume 10, "The Metabolism of Contraction". Eds: Roy P.-E. and Rona G. University Park Press, Baltimore.

2. Articles

a. Refereed Journal Articles and Presentations (*graduate and †undergraduate student-authors are indicated):

1. *Stecker, J R, Savage, A, Bruno, J G, Koke, J R. 2012. Dynamics and visualization of MCF7 adenocarcinoma cell death mediated by aptamer-C1q catalyzed membrane attach complex formation. Submitted Jan. 31, 2012.
2. *Stecker, J R, Bruno, J G, Koke, J R. 2012. Receptor-mediated endocytosis of a murine hepatoma-specific aptamer. BBRC, Submitted Jan. 31, 2012.
3. *Luis D. Neve, Alissa A. Savage, Joseph R. Koke, Dana M. García. Activating Transcription Factor 3 and Reactive Astrocytes Following Optic Nerve Injury in Zebrafish. *Comparative Biochemistry and Physiology, Part C.* (2011), doi:[10.1016/j.cbpc.2011.08.006](https://doi.org/10.1016/j.cbpc.2011.08.006)

4. John Bruno, Alissa Savage, Maria Carrillo, Taylor Phillips, Allison Edge, Joseph Koke. Anti-N-acetylglucosamine DNA aptamers bind chitin on *Penicillium* cell walls to enable fluorescent and gold staining microscopy techniques. *J Bionanoscience* 4, 45-52, 2010.
5. Joseph Koke, Alissa Savage, and Dana García. Optic Nerve Regeneration in Zebrafish (*Danio rerio*): Cell-Specific Responses and Expression of Activating Transcription Factor 3 (Atf3). *Proceedings of the 5th Aquatic Animal Models of Human Disease Conference*, Sept. 20, Oregon State University, Corvallis, Oregon.
6. *Nirmala Karunarathna, Sunethra Dharmasiri, *Thilanka Jayaweera, *Beitiris Devolld, †Kevyn Hartgrove, Joseph R. Koke, Nihal Dharmasiri. 2010. Domain II mutation in PIC11/IAA28 causes pleiotropic growth and developmental defects in *Arabidopsis*. *Plant Physiology*, submitted August 24, 2010.
7. Joseph R Koke, Amanda L Mosier and Dana M García. 2010. Intermediate Filaments of Zebrafish Retinal and Optic Nerve Astrocytes and Mueller Glia: Differential Distribution of Cytokeratin and GFAP. *BMC Research Notes*, Volume 3, <http://www.biomedcentral.com/1756-0500/3/50> .
8. Saul, Katherine E., Koke, Joseph R., García, Dana M. 2010. Activating Transcription Factor 3 (ATF3) Expression in the Neural Retina and Optic Nerve of Zebrafish during Optic Nerve Regeneration. *Comparative Biochemistry and Physiology, Part A* 155 (2010) 172–182.
4. García, D.M., *K.E. Saul, †S.G. Soto, J.R. Koke. 2009. Specific Genetic Signals for Optic Nerve Regeneration in Adult Zebrafish (*Danio rerio*). *ARVO/ISOCB 2009 Meeting*, September 10, 2009, Ericeira, Portugal. Peer reviewed platform presentation (by DMG).
5. *Katherine E. Saul, Joseph R Koke, Dana M. García. 2008. Dissection of Specific Genetic Signals from a Background of Tissue repair and Inflammatory Response Noise During Optic Nerve Regeneration in *Danio rerio*. *ISDN*, June 2008. Peer-reviewed poster presentation.
6. García D. M. and Koke, J. R. 2009. Astrocytes as Gate-Keepers in Optic Nerve Regeneration – a Mini-Review. *Comparative Biochemistry and Physiology, Part A*, 152:135-138; doi: 10.1016/j.cbpa.2008.09.026 . Published on-line in November of 2008.
7. Menger GM, Koke JR and Cahill GM. 2005. Diurnal and Circadian Retinomotor Movements in Zebrafish. *Visual Neuroscience* 22:203-209.
8. García DM, *Weigum SE and Koke JR. GFAP and Nuclear Lamins Share an Epitope Recognized by Monoclonal Antibody J1-31. *Brain Res* 2003, 976:9-21.
9. SE Weigum, DM García, TD Raabe, NJ Christodoulides, JR Koke: Discrete Nuclear Structures in Actively Growing Neuroblastoma Cells are Revealed by Antibodies Raised Against Phosphorylated Neurofilament Proteins. *BMC Neuroscience* 2003 4:6 (published 2 April 2003) .
10. *Glass TL, Raabe TD, García DM and Koke, JR. 2002. Phosphorylated Neurofilaments and SNAP-25 in Cultured SH-SY5Y Neuroblastoma Cells. *Brain Research* 934 (1): 43 - 48 .
11. Westerlund J F, García D M, Koke J R, Taylor T A, and Mason D S. 2002. Summer scientific research for teachers: the experience and its effects. *Journal of Science Teacher Education* 13(1): 63-83.
12. Rose F L, Koke J R, Koehn R, and *Smith D. 2001. Identification of the etiological agent for necrotizing scute disease in the Texas tortoise. *Journal of Wildlife Diseases*, 37(2) 223-228.
13. *Hahn M., *Glass T, and Koke J. R. 2000. Extracellular Matrix Effects on a Neuroblastoma Cell Line. *Cytobios* 102:7-12.
14. *Bolanos, S. H., *Zamora, D. O., García, D. M., and Koke, J. R. 1998. An α -actinin isoform that may cross-link intermediate filaments and microfilaments. *Cytobios*. 94:39-61.
15. Malhotra S. K., Bhatnagar R., Shnitka, T.K., †Herrera, J.J., Singh, M.V., Koke, J. R. 1995. Astrogliosis In Vitro in 9L Rat Glioma Cells. *Cytobios* 82:39-51.
16. *Jeffcoat S. R., *Givens L., *Bolanos S., Malhotra S. K. and Koke J. R. 1995. A novel intermediate filament-associated protein: further characterization of the G.3.5 antigen. *Cytobios* 82:81-99.

17. *Toliver T. E., †Sneed S. M. and Koke J. R. 1994. Intra-pericardial injection of superoxide dismutase cDNA and myocardial stunning. *Biomedical Letters* 49:169-177.
18. *Toliver T. E. and Koke J. R. 1994. In situ transfer of human superoxide dismutase into rat cardiac myocytes. *Biomedical Letters* 49:161-168.
19. Singh S., Koke J. R., Gupta P. D. and Malhotra S. K. 1994. Multiple roles of intermediate filaments. *Cytobios* 77:41-57.
20. *Price K. A., Malhotra S. K. and Koke J. R. 1993. Localization and characterization of an intermediate filament associated protein. *Cytobios* 76:157-173.
21. *Graham C., *Raabe T. D. and Koke J. R. 1993. Plasmid DNA in Skeletal Muscle. *Biomedical Letters* 48:319-327.
22. Koke J. R., Zheng H-N, †Jeffcoat S., Wu J-R. and Bittar N. 1993. The cardiac renin-angiotensin system and myocardial stunning. *Biomedical Letters* 48:97-113.
23. Koke J. R., *Christodoulides N. J., *Chudej L. L. and Bittar N. 1990. Exogenous superoxide dismutase and catalase promote recovery of function in isolated rat heart after regional ischemia and may be transported from capillaries into myocytes. *Molec. and Cell. Biochem.* 96:97-105.
24. *Chudej L. L., Koke J. R. and Bittar N. 1990. Evidence for movement of exogenous superoxide dismutase and catalase from coronary capillaries into myocytes in dogs. *Cytobios* 63:41-53.
25. *Koke J. R., Fu L. M., *Vaughan D. M., *Sun D. and Bittar N. 1989. Improved recovery of dog myocardium induced by adenosine and inhibitors of adenosine catabolism. *Molec. and Cell. Biochem.* 86:107.
26. *Vaughan D. M. and Koke J. R. 1988. Histochemical evidence for free radical-mediated lipid peroxide formation in ischemic myocardium. *Cytobios* 55:71-80.
27. Wu S. Q., Fu L. M., Koke J. R. and Bittar N. 1987. Contractility, ATP, and creatine phosphate during myocardial ischemia: the effects of adenosine and inhibition of adenosine catabolism in the dog heart. *Cytobios* 50:107-116.
28. Koke J. R., *Kyle C. T. and Bittar N. 1987. Visualization of endocytotic pits in capillary endothelia of dog hearts by scanning electron microscopy. *Cytobios* 50:163-168.
29. Koke J. R. and Bittar N. 1987. Recovery of myocardial function after ischemia: the effects of AMP and inhibition of endocytosis. *Cytobios* 50:107-116.
30. Brandt T., Jones R. and Koke J. R. 1986. Corneal cloudiness in transported Largemouth Bass. *Prog. Fish Cult.* 48:199-201.
31. Koke J. R. and *Anderson D. R. 1985. Changes in metabolite levels and morphology of teleost ventricular myocytes due to hypoxia, ischemia, and metabolic inhibitors. *Cytobios* 45:97-108.
32. Koke J. R., *Werchan P. M., *Sami H. and Bittar N. 1984. Endocytotic activity induced in myocardial capillary endothelia and myocytes by adenine and AMP. *Cytobios* 42:81.
33. Koke J. R., *Wills M. A. and Bittar N. 1982. Contractile activity and oxidative metabolism in single adult myocytes during normoxia and hypoxia. *Cytobios* 35:149.
34. Koke J. R., Wiley W. and *Wills M. 1981. Sensitivity of flavoprotein fluorescence to oxidative state in single isolated adult heart cells. *Cytobios* 32:139.
35. Koke J. R. and *Pruski C. A. 1980. Release of lactate dehydrogenase during isolation of adult rat heart cells. *Cytobios* 29:183.
36. Koke J. R. and *Williams L. L. 1979. Fluorometric measurements of changes in the NADH/NAD⁺ ratio in single isolated adult heart cells: effects of cyanide and 2,4-dinitrophenol. *Microbios L.* 45:15.
37. Shug A. L., Thomsen J. R., Folts J. D., Bittar N., Klein M. L., Koke J. R. and Huth P. J. 1978. Changes in tissue levels of carnitine and other metabolites during myocardial ischemia and anoxia. *Arch. Biochem. Biophys.* 187:25.

38. Koke J. R. and Bittar N. 1978. Functional role of collateral flow in the ischemic dog heart. *Cardiovascular Res.* 12:309.
39. Folts J. D., Shug A. L., Koke J. R. and Bittar N. 1978. Protection of the ischemic myocardium with L-carnitine. *Amer. J. Cardiol.* 41:1209.
40. Shug A. L., Koke J. R., Folts J. D. and Bittar N. 1977. Atractyloside induced myocardial cell injury. *J. Molec. and Cell. Cardiol.* 9:489.
41. Koke J. R., Shug A. L., Folts J. D. and Bittar N. 1977. Ultrastructural and physiological changes induced in the canine myocardium by atractyloside. *Cytobios* 17:211.
42. Koke J. R., Berkoff H. A., Kronke G. M. and Bittar N. 1976. Linear densities in mitochondria of human myocardial cells. *Brit. Heart. J.* 38:790.
43. Shug A. L., Shrago E. S., Bittar N., Folts J. D. and Koke J. R. 1975. Acyl CoA inhibition of adenine nucleotide translocation in the ischemic myocardium. *Amer. J. Physiol.* 228:680.
44. Bittar N., Koke J. R., Berkoff H. A. and Kahn D. R. 1975. Histochemical and ultrastructural changes in human myocardial cells after cardiopulmonary bypass. *Circulation* 51:16.
45. Koke J. R., Gupta P. D. and Malhotra S. K. 1971. A succinic dehydrogenase activity in mesosomes of *N. crassa*. *Biophys. Biochem. Res. Commun.* 42:576.
46. Gupta P. D., Koke J. R. and Malhotra S. K. 1971. Remarks on the membranes of *N. crassa* after embedding in glycol methacrylate. *Cytobios* 3:117.
47. Koke J. R., Malhotra S. K. and Bryan L. E. 1970. Factors influencing incorporation of 3H-TTP into an acid insoluble product in isolated mitochondria of *N. crassa*. *Cytobios* 5:19.

b. Non-refereed Articles:

Helen Pearson. Blame it on the bugs: Squid harbour live-in lighting to keep predators in the shade. *Nature, Science Update.* American Society for Cell Biology Meeting, Washington, December 2001. <http://www.nature.com/nsu/011220/011220-2.html>. 13 December 2001

3. Published Abstracts (*graduate and †undergraduate student-authors are indicated):

1. Sarah Jo Kane, Dana M Garcia, and Joseph R Koke. Evidence for multiple cAMP-dependent pathways for activation of F98 cells to the reactive state *FASEB J March 17, 2011 25:957.1*
2. Luis Daniel Neve, Alissa A Savage, Joseph R Koke, and Dana M Garcia. An anti-bystin antibody labels hypertrophic astrocytes in zebrafish following optic nerve injury: possible marker for reactivity *FASEB J March 17, 2011 25:lb524*
3. John R Stecker, John G Bruno, and Joseph R Koke. Internalization of the DNA TLS-11a aptamer in MEAR liver hepatoma cells *FASEB J March 17, 2011 25:622.5*
4. John R Stecker, John G Bruno, and Joseph R Koke. Aptamer-mediated complement system killing of MCF-7 and MEAR cancer cells *FASEB J March 17, 2011 25:622.4*
5. *Ayme S. Cardwell, Amanda L. Mosier, Joseph R. Koke, Dana M. Garcia. ATF3 and intermediate filament expression after optic nerve injury in zebrafish. *Experimental Biology, Anaheim, CA 2010.* *FASEB J.*, A243.
2. *Mayuri P Patel, Dana M Garcia, Joseph R Koke. Phosphorylation of GFAP and lamin B is an early event in reactive astrocytes and may be stimulated by cAMP. *Experimental Biology, New Orleans 2009.* *FASEB J.*, April 2009.
3. *Amanda L Mosier, *Katherine E Saul, Joseph R Koke, Dana M. Garcia. 2008, Optic Nerve Re-Growth in *Danio rerio*. *FASEB Journal*, April 2008.
4. *James Neece, Dana M Garcia, Joseph R. Koke. 2006. Optimal Treatment Period for Forskolin Induction of a Reactive-like Condition in F98 Glioma Cells. *Mol. Biol. Cell* 17 (suppl), L3797.

5. *Katherine Saul, Joseph Koke. 2006. Monoclonal G3.5 antibody and Cytoplasmic alpha-Actinin Antibody Label the Same Antigen in Rat Brain. *Mol. Biol. Cell* 17 (suppl), L3731.
6. *Ali Abedi, Dana García, Joseph Koke. 2005. *Molecular Biology of the Cell* (supp.)
7. *Gregory R. Ramsey, Dana García, Joseph Koke. Is reactive astrogliosis regulated by a cAMP-dependent CaMK pathway? *The FASEB Journal*, April 2005, 19(5), part II. Abstract 680.13.
8. *Carlene Worthington, Joseph Koke. Timing and pathway of IL6 secretion in cultured astroglioma cells. *FASEB April*, 2004, Washington, DC.
9. *Nina Jaffaradz, Seana Davidson, David Stahl, Joseph Koke. 2004. Cytoskeletal effects of symbiotic associations in earthworm nephridia. *FASEB April*, 2004, Washington, DC.
10. *Jacqueline D Meyer, Timothy D. Raabe, Joseph R. Koke. 2004. Does hyperglycemia induce Schwann cell apoptosis in vitro?. *FASEB April*, 2004, Washington, DC.
11. *Gregory R. Ramsey, Dana M. García, Joseph R. Koke. 2004. Phosphorylation regulates the epitope for mAB J1-31 in reactive glial cells. *FASEB April*, 2004, Washington, DC.
12. †Medley D, †Preiss G, *Weigum S, and Koke J. 2002. Connexin 43 Expression in Cultured Astrocytes. *Molecular Biology of the Cell*, (supp.) 13:1203a
13. †Priess G, Young D, †DeSimone I, Rahe H, and Koke, J. 2002. Localization of gonadotropin-releasing hormone neurons in fetal bovine brain. *Molecular Biology of the Cell*, (supp.) 13:631a.
14. *Weigum S, Christodoulides N, McDevitt J, Koke J. 2001. Use of Cultured Glioma Cells As Sensors in Chip-Based Assay for Astrogliosis. *Molecular Biology of the Cell*, 12, 2834a.
15. †Perdue N, *White P, Davidson S, and Koke J R. 2001. Oxygen, cell enlargement, and light production by *Vibrio fischeri* in squid *Euprymna scolopes*. *Molecular Biology of the Cell*, 12, 1792a.
16. Taylor T, Westerlund J, García D, and Koke J R. 2001. Teachers as Researchers: Does a Summer Research Experience Improve Education in Science? *Molecular Biology of the Cell*, 12 512a.
17. *Dixon J., Needham J, Koke J and García D. 2000. Molecular characterization of a possible a-actinin isoform. *Molecular Biology of the Cell*, 11 (Supplement), 397A.
18. *Glass, T and Koke J. 2000. Development of Neurites from SH-SY5Y Neuroblastoma Cells in Vitro. *Molecular Biology of the Cell*, 11 (Supplement), 227A.
19. *White P, Taylor T, Davidson S, McFall-Ngai M and Koke J. 2000. Cytoskeletal changes in epithelial cells of *Euprymna scolopes* during symbiotic infection by *Vibrio fischeri*. *Molecular Biology of the Cell*, 11 (Supplement), 1833A.
20. *Warner K, Rahe H, Koke J. 2000. Lamprey gonadotropin-releasing hormone in the bovine brain. *Molecular Biology of the Cell*, 11 (Supplement), 2155A.
21. Westerlund J F, Koke J R, García D M, Taylor, T A and Mason D. 2000. Summer scientific research for teachers: the experience and its effects. Presented at the North Central Association for the Education of Teachers in Science, Eau Claire, WI.
22. Westerlund, J.F., T. Taylor, D. M. García and J. R. Koke. (2000, March). Teachers as summer scientific researchers: Transformative experiences. *Proceedings of the Texas Academy of Science*, in press.
23. Westerlund, J.F., T. Taylor, D. M. García and J. R. Koke. (2000, April) Teachers as summer scientific researchers: Transformative experiences. *NARST*, 440.21a.
24. *Maloney-Smith D., Brewer D., Hall J., Warner, K., and Koke J. 2000. Differential Pathogenicity of a Fungal Dermatophyte. *FASEB J.*, 495.21a.
25. *Glass T., *Hahn M., *White P., †Patel S. and Koke, J. 2000. "Three-Dimensional" cell culture - effects on a neuroblastoma cell line. *FASEB J.*, 495.
26. *Hahn, M S and Koke J R. 1999. The extracellular matrix and differentiation of SH-SY5Y cells. *FASEB J.* 13(I) A349 (266.15).

27. *Fass, K B and Koke J R 1999. Visualization of a-actinin and the G.3.5 antigen in developing chick embryos. *FASEB J.* 13(II) A1009 (725.5).
28. Taylor T., Fass K. and Koke J. 1998. Visualization of actin and myosin arrays in *Xenopus* embryos using laser scanning confocal microscopy. *FASEB J.* 12 (II): 5483a.
29. Hahn M., Mengden S., Merkel T., Deiterle G. and Koke J. R. 1998. Use of laser scanning confocal microscopy for tracking volume changes in single cells. *FASEB J.* 12 (II): 5484a.
30. †Kadura S. C., *P. A. Stevenson, and J. R. Koke 1997. The J1-31 antigen - IFAP or GFAP *FASEB J.* April, 1997: 629A.
31. *Taylor TA, *Herrera JJ, and J. R. Koke. 1997. Intermediate filaments in astrogliosis in vitro. *FASEB J.* April, 1997: 630A.
32. †Kadura S. C., *P. A. Stevenson, and J. R. Koke 1996. The J1-31 antigen may be a modified form of GFAP. *Mol. Biol. Cell* 7S:557a.
33. *Bolanos, S. H. and Koke, J. R. 1996. Analysis of a novel IFAP that may cross-link intermediate filaments and microfilaments. *Mol. Biol. Cell* 7S:557a.
34. *Herrera, J. and Koke, J. R. 1996. Further characterization of an in vitro model of astrogliosis. *Mol. Biol. Cell* 7S:557a.
35. *Zamora, D., †Perez, Jr., E., Koke, J., García, D. 1996. Localization of cytoskeletal elements in teleost retinal pigment epithelium. *Mol. Biol. Cell* 7S:382a.
36. †McCalip B. L., †Zamora D. O., †Perez E., Koke J. R. and Garc'a D. M. 1995. Localization of an intermediate filament associated protein and identification of intermediate filament proteins in teleost retinal pigment epithelium. *Molecular Biology of the Cell*, 6(suppl.): 2192a
37. *Herrera J. J., *Taylor T. A., Malhotra S. K. and Koke J. R. 1995. In vitro astrogliosis: chronology of J1-31 antigen expression in reactive 9L astrocytes. *Molecular Biology of the Cell*, 6(suppl.): 748a
38. *Bolanos S. H. and Koke J. R. 1995. The G3.5 antigen, an intermediate filament-associated protein (ifap), is not a-actinin.. *Molecular Biology of the Cell*, 6(suppl.): 2189
39. *Stevenson P. A., Malhotra S. K. and Koke, J. R. 1995. Purification of an astrocyte-specific intermediate filament-associated protein (IFAP). *Molecular Biology of the Cell*, 6(suppl.): 2190a.
40. †Zamora D., Koke J. R. and Garc'a D. M. 1994. Localization of G.3.5 antigen in fish retina. *Mol. Biol. of the Cell* 5:1740A.
41. †Sneed S., †Sanderlin B. and Koke J. R. 1993. In situ transformation of myocytes: a rapid method of isolating milligram quantities of pure plasmid DNA.. Denton, Texas.
42. †Sneed S. M., *Price K. A., †Jeffcoat S. R. and Koke J. R. 1994. Uptake of gold-conjugated plasmid DNA by neonatal myocytes in culture. *FASEB J.* 8:3586A.
43. †Jeffcoat S. R., Price K. A., Malhotra S. K. and Koke J. R. 1994. An a-actinin-like cytoskeletal protein that may cross-link actin and intermediate filaments. *FASEB J.* 8:606a.
44. *Fitzgerald S., *Javadi F. and Koke J. R. 1994. Post-natal ventricular development and the role of the cardiac renin-angiotensin system. *FASEB J.* 8:3598A.
45. *Toliver T. E., Graham C. and Koke J. R. 1993. In situ transfer of human superoxide dismutase (SOD) cDNA into rat ventricular myocytes by injection: expression and cDNA location. *FASEB J.* 7:A651.
46. *Toliver T. E. and Koke J. R. 1993. The feasibility of decreasing heart attack damage by in situ genetic alteration of myocytes. *Proceedings of the Texas Academy of Science*, Denton, Texas.
47. *Sandoval R., Koke J. R. and Bittar N. 1993. Ultrastructure of ischemia/reperfusion injury in the dog heart. *Proceedings of the Texas Academy of Science*, Denton, Texas.
48. *Sandoval R. and Koke J. R. 1993. Long-term ultrastructural changes in cardiac myocytes caused by 15 minutes of ischemia. *Mol. Biol. of the Cell* 4:2582A.

49. *Price K. A., Malhotra S. K. and Koke J. R. 1993. Partial characterization of G3.5 Antigen, a cytoskeletal binding protein.. Denton, Texas. Proceedings of the Texas Academy of Science, Denton, Texas.
50. *Price K. A., Malhotra S. K. and Koke J. R. 1993. Localization and partial characterization of a cytoskeletal-associated protein in muscle. FASEB J. 7:A4827.
51. †Jeffcoat S. R., Price K. A., Malhotra S. K. and Koke J. R. 1993. Partial characterization of a cytoskeletal-associated protein in muscle. TSEM J. 24:35a.
52. †Jeffcoat S. R., Koke J. R., Zheng H. N., Wu J. R. and Bittar N. 1993. Losartan reduces myocardial stunning, angiotensin-2 mimics it. FASEB J. 7:A693.
53. *Javadi F., Bittar N. and Koke J. R. 1993. Post-natal development of the left ventricle: effect of angiotensin-2. Proceedings of the Texas Academy of Science, Denton, Texas.
54. *Javadi F. and Koke J. R. 1993. The angiotensin receptor (AT1) inhibitor, losartan, slows post-natal thickening of the left ventricle. Mol. Biol. of the Cell 4:498A.
55. *Graham C. and Koke J. R. 1993. Direct gene transfer in muscle: what happens to the DNA Proceedings of the Texas Academy of Science, Denton, Texas.
56. *Fitzgerald S., Bittar N. and Koke J. R. 1993. Characteristics of angiotensinogen and preparation of anti-angiotensinogen. Proceedings of the Texas Academy of Science, Denton, Texas.
57. Wu J. R., Zheng H. N., Bittar N. and Koke J. R. 1992. Beneficial effects of Dup 753, an angiotensin receptor antagonist on cardiac output and coronary flow in ischemic rat heart. Circ. Research 86:I-302.
58. *Toliver T. E., Rolig R., Walter R. and Koke J. R. 1992. Detection and localization of human superoxide dismutase in rat myocardium induced by injection of DNA. TSEM J. 23:31a.
59. *Toliver T. E., *Graham C. G. and Koke J. R. 1992. In situ transfer of human Cu-Zn super oxide dismutase (SOD) cDNA into rat ventricular myocytes by injection: expression and cDNA location. FASEB J. 7:A653.
60. *Toliver T. E. and Koke J. R. 1992. Investigation of expression of exogenous DNA taken up by skeletal and cardiac myocytes in situ.. Proceedings of the Texas Academy of Science, Wichita Falls, Texas.
61. *Price K. A., *Toliver T. E. and Koke J. R. 1992. Localization of a new exosarcomeric cytoskeletal protein in muscle. FASEB J. 6:A4001.
62. *Price K. A., Koke J. R. and Malhotra S. K. 1992. Localization and characterization of a new exosarcomeric cytoskeletal protein in muscle. TSEM J. 23:31a.
63. †Jeffcoat S. R., †Sandoval R. and Koke J. R. 1992. Preparation of biotinylated angiotensin II as a probe for the localization of the myocardial angiotensin II receptor. Proceedings of the Texas Academy of Science, Wichita Falls, Texas.
64. †Jeffcoat S. R., Bittar N. and Koke J. R. 1992. Angiotensin II and cardiac myocytes. TSEM J. 23:32.
65. *Graham C. and Koke J. R. 1992. Investigation of the mechanism of exogenous DNA entry into skeletal and cardiac myocytes. TSEM J. 23:31.
66. *Graham C. and Koke J. R. 1992. Investigation of exogenous DNA uptake in skeletal and cardiac myocytes in situ. Proceedings of the Texas Academy of Science, Wichita Falls, Texas.
67. *Toliver T., *Raabe T., Walter R. and Koke J. R. 1991. Location and expression of DNA taken up by myocytes. The Physiologist 34:233a.
68. *Raabe T., *Hamby R., Walter R. and Koke J. R. 1991. Uptake of DNA by myocytes.. Proceedings of the Texas Academy of Science, Nacogdoches, Texas.
69. *Raabe T., *Hamby R., Walter R. and Koke J. R. 1991. Exogenous DNA is taken up by skeletal and cardiac myocytes in vivo. FASEB J. 5:A1746.

70. †Toliver T. and Koke J. R. 1990. A new method of staining endogenous DNA. Proceedings of the Texas Academy of Science, Nacogdoches, Texas.
71. †Raabe T., *Hamby R., Sherron R., Bittar N. and Koke J. R. 1990. DNA repair and protein synthesis caused by reperfusion injury in rabbit myocardial cells. Proceedings of the Texas Academy of Science, San Marcos, Texas.
72. *Hamby R., †Raabe T., Walter R. and Koke J. R. 1990. Localization of Exogenous Prokaryotic DNA taken up by skeletal and cardiac muscle cells in vivo. TSEM J. 21:29a.
73. *Hamby R., *Drace C., Raabe T., Bittar N. and Koke J. R. 1990. Immunohistochemical localization of superoxide dismutase in myocardial cells. Proceedings of the Texas Academy of Science, San Marcos, Texas.
74. *Hamby R., Bittar N. and Koke J. R. 1990. Location of exogenous superoxide dismutase in myocardial cells. FASEB J. 4:A426.
75. *Drace C., *Hamby R., †Raabe T., Bittar N. and Koke J. R. 1990. Localization of xanthine oxidase in myocardial cells with diaminobenzidine-linked histochemistry. Proceedings of the Texas Academy of Science, San Marcos, Texas.
76. *Drace C., *Hamby R., †Raabe T., Bittar N. and Koke J. R. 1990. Localization of endogenous peroxides in myocardial cells with diaminobenzidine-linked histochemistry. Proceedings of the Texas Academy of Science, San Marcos, Texas.
77. *Drace C., Bittar N. and Koke J. R. 1990. Location of endogenous peroxidase, peroxides, and xanthine oxidase in rat myocardium. FASEB J. 4:A1138.
78. *Drace C. and Koke J. R. 1990. Histochemistry of oxidase activities in rat myocardium during ischemia and reperfusion. TSEM J 21:30.
79. *Chudej L. L., *Christodoulides N., Koke J. R. and Bittar N. 1989. Reduction of reperfusion injury in dog heart and evidence for transcapillary movement of superoxide dismutase and catalase into myocytes. FASEB J. 3:A621.
80. Zheng H., Bittar N., *Chudej L. L. and Koke J. R. 1989. Angiotensin converting enzyme (ACE) inhibitors improve function of dog heart during and after a short period of regional ischemia. The Physiologist 32:219a.
81. *Vaughan D., Yu D., Bittar N. and Koke J. R. 1989. Angiotensin converting enzyme (ACE) inhibitors improve recovery of rat heart after short periods of ischemia. The Physiologist 32:219a.
82. *Christodoulides N., *Chudej L. L., Koke J. R. and Bittar N. 1989. Exogenous superoxide dismutase and catalase prevent reperfusion injury in rat myocardium and may be transported from capillaries into myocytes. FASEB J. 3:A622.
83. *Sun D., Koke J. R. and Bittar N. 1988. Increased lipid peroxidation in rat hearts during myocardial ischemia and reperfusion. FASEB J. 2:A488.
84. *Simpson K., †Senn G., Koke J. R. and Bittar N. 1988. The distribution of xanthine oxidase activity and lipid peroxidation in ischemic and reperfused rat myocardium. Proceedings of the Texas Academy of Science, Commerce, Texas.
85. *Simpson K., †Senn G., Koke J. R. and Bittar N. 1988. A histochemical method for location of lipid peroxides and H₂O₂ resulting from xanthine oxidase activity. Proceedings of the Texas Academy of Science, Commerce, Texas.
86. *Simpson K., Koke J. R., *Chudej L. L., *Christodoulides N., †Senn G. and Bittar N. 1988. Distribution of xanthine oxidase activity and lipid peroxidation in ischemic and reperfused rat myocardium. FASEB. J. 2:A487.
87. Koke J. R., Fu L.-M., *Sun D., *Vaughan D. M. and Bittar N. 1988. Improved recovery of dog myocardium after ischemia induced by adenosine and inhibitors of adenosine catabolism.. Texas Academy of Science, Commerce, Texas.

88. Koke J. R., Fu L.-M., *Sun D., *Vaughan D. M. and Bittar N. 1988. Improved recovery of dog myocardium after ischemia induced by adenosine and inhibitors of adenosine catabolism. *FASEB J.* 2:A919.
89. *Chudej L., *Christodoulides N., Koke J. R. and Bittar N. 1988. Reduction of reperfusion injury in dog heart and evidence for transcapillary movement of superoxide dismutase and catalase into myocytes. *Proceedings of the Texas Society for Electron Microscopy, Galveston, Texas.*
90. *Chudej L. L., Koke J. R. and Bittar N. 1988. Reperfusion injury in heart: effect of superoxide dismutase and catalase on metabolites and contractility. *Proceedings of the Texas Academy of Science, Commerce, Texas.*
91. *Christodoulides N., Koke J. R. and Bittar N. 1988. Immunohistochemical localization of xanthine oxidase (XO) and superoxide dismutase (SOD) in myocardial tissue. *Proceedings of the Texas Academy of Science, Commerce, Texas.*
92. *Vaughan D. M., Koke J. R. and Bittar N. 1987. Histochemical localization of peroxisomes and evidence for free radical-mediated lipid peroxide formation in ischemic myocardium. *Proceedings of the Texas Academy of Science, Huntsville, Texas.*
93. *Vaughan D. M., Koke J. R. and Bittar N. 1987. Histochemical evidence for free radical-mediated lipid peroxide formation in ischemic myocardium. *Federation Proceedings* 46:2399a.
94. *Vaughan D. M., Koke J. R. and Bittar N. 1987. Absence of evidence for free-radical mediated hydrogen peroxide release from ischemic myocardium. *Proceedings of the Texas Academy of Science, Huntsville, Texas.*
95. *Simpson K., Koke J. R. and Bittar N. 1987. Adenosine transport in myocytes: detection of 3H-adenosine in endocytotic vesicles of coronary capillaries by autoradiography. *Proceedings of the Texas Academy of Science, Huntsville, Texas.*
96. †Senn G., Koke J. R., Wu S.-Q., Fu L.-M. and Bittar N. 1987. The effects of adenosine and inhibition of adenosine catabolism on post-ischemic recovery in the dog heart. *Proceedings of the Texas Academy of Science, Huntsville, Texas.*
97. *Chudej L. L., Koke J. R. and Bittar N. 1987. The effects of AMP and inhibition of endocytosis on recovery of myocardial function after ischemia. *Proceedings of the Texas Academy of Science, Huntsville.*
98. *Vaughan D. M., Koke J. R. and Bittar N. 1986. Localization of peroxisomes (microbodies) and possible demonstration of peroxide levels in ischemic mammalian myocytes. *Proceedings of the Texas Academy of Science, Kingsville, Texas.*
99. *Kyle C. T., Koke J. R. and Bittar N. 1986. Visualization of the inner surface of coronary capillary endothelial cells in dog hearts: possible quantitation of endocytotic rate. *Proceedings of the Texas Academy of Science, Kingsville, Texas.*
100. *Haskin C., Koke J. R. and Bittar N. 1986. Primary cultures of adult rat myocytes in serum-free medium: the effects of mitogenic and insulin-like growth factors. *Proceedings of the Texas Academy of Science, Kingsville, Texas.*
101. *Griffey S. and Koke J. R. 1986. The ultrastructural effects of hypoxia and ischemia on teleost myocytes. *Proceedings of the Texas Academy of Science, Kingsville, Texas.*
102. *Westmoreland C. A., Koke J. R., *Werchan P. M., *Sami H. and Bittar N. 1985. Endocytosis and exocytosis as a transport mechanism for ATP precursors from coronary capillaries into myocytes. *Proceedings of the International Society for Cardiac Research Houston, Texas.*
103. *Westmoreland C. A., Koke J. R. and Bittar N. 1985. Endocytosis and exocytosis as a transport mechanism for ATP precursors from coronary capillaries into canine myocytes. *Proceedings of the Texas Academy of Science, Dallas, Texas*
104. *Westmoreland C. A. and Koke J. R. 1985. Stimulation of endocytosis in normal and ischemic heart tissue. *Proceedings of the Texas Academy of Science, Dallas, Texas.*

- 105.*Haskin C., Koke J. R. and Bittar N. 1985. Extended culture of adult rat myocytes improved by adding insulin and using collagen-fibronectin coated dishes. Proceedings of the International Society for Cardiac Research, Houston, Texas.
- 106.Koke J. R. and *Anderson D. R. 1984. Ultrastructure of normal and hypoxic fish hearts. Proceedings of the Texas Academy of Science, San Antonio, Texas.
- 107.Koke J. R. and *Anderson D. R. 1984. Biochemical changes in fish hearts during normoxia and hypoxia. Proceedings of the Texas Academy of Science, San Antonio, Texas.
- 108.*Sami H., Koke J. R. and Bittar N. 1983. Enhanced recovery of ischemic canine myocytes induced by provision of AMP. FASEB Proceedings 42:5651a.
- 109.Bittar N., *Sami H. and Koke J. R. 1983. Accelerated recovery of ischemic myocardium induced by AMP. J. Molec. and Cell. Cardiol. 15:298a.
- 110.*Anderson D. and Koke J. R. 1983. Isolation of working fish hearts from bass. Proceedings of the Texas Academy of Science, Nacogdoches, Texas.
- 111.*Wills M. A. and Koke J. R. 1982. Contractility measurements in isolated heart cells. Proceedings of the Texas Academy of Science, San Angelo, Texas.
- 112.†Hughes J. and Koke J. R. 1982. Ultrastructural aspects of corneal cloudiness in largemouth bass. Proceedings of the Texas Academy of Science, San Angelo, Texas.
- 113.†Wiley W. and Koke J. R. 1981. Sensitivity of flavoprotein fluorescence to oxidative state in single isolated adult heart cells. Proceedings of the Texas Academy of Science, Austin, Texas.
- 114.*Williams L. and Koke J. R. 1980. Fluorometric measurements in isolated adult rat heart cells. Proceedings of the Texas Academy of Science, Corpus Christi, Texas.
- 115.Koke J. R. and Bittar N. 1975. Functional role of collateral flow in ischemic dog heart. Clinical Research 27:512a.
- 116.Shug A. L., Folts J. D., Koke J. R. and Bittar N. 1975. Ischemic-like changes and myocardial injury induced by inhibition of adenine nucleotide translocase. Circulation 51:505a.
- 117.Folts J. D., Shug A. L., Koke J. R. and Bittar N. 1975. Ischemic-like changes induced by atractyloside. The Physiologist 19:
- 118.Koke J. R. and Malhotra S. K. 1969. Mesosome-like structures in mitochondria of Neurospora. J. Cell Biol. 43:71a.

B. Works not in Print

1. Invited Talks, Lectures, Presentations:

1. Koke, J. R. 2010. Careers in Neurobiology. Department of Neurobiology, University of Texas at Austin, Feb. 17.
2. Katherine E. Saul, Joseph R Koke, Dana M. García. 2008. Dissection of Specific Genetic Signals from a Background of Tissue repair and Inflammatory Response Noise During Optic Nerve Regeneration in Danio rerio. ISDN, June 2008.
3. Koke, J. R. 2007. The Cellular Biology and Phylogenetics of Speech and Language. Department of Biology, St. Mary's University, San Antonio, TX. February 9.
4. Koke, J. R. 2006. Speculations on the Developmental Biology and Phylogenetics of Language. Northern Virginia Community College - Annandale Campus. Oct. 20.
5. Koke, J. R. 2003. Cells as Transducers in Detection Systems for Neural Pathologies. Department of Physics, Texas State Jan. 29.
6. Koke, J. R. 2002. Phosphorylated intermediate filaments in nuclei. Bridges Seminar, San Antonio College, April 22.

7. Koke, J. R. 2001. The intermediate filament cytoskeleton in reactive astrocytes. Bridges Seminar, San Antonio College, November 22.
8. Westerlund J, García D and Koke, J. R. 2001. Closing the Gaps and the Texas State SMTEI Summer Teacher Research Experience. Presented at the 17th annual conference on student retention, The Texas Higher Education Coordinating Board, Austin, TX.
9. Koke J. R. 2000. Confocal microscopy can reveal cytoskeleton changes during symbiotic relationship between *Vibrio fischeri* and *Euprymna scolopes* (Hawaiian squid). Pacific Biomedical Research Laboratory, University of Hawaii-Manoa.
10. Koke J. R. 1995. Novel intermediate filament-associated proteins found in astrocytes. Virginia Commonwealth University, Richmond.
11. Koke J. R. 1995. Plasmid DNA in striated muscle. Department of Zoology, University of Alberta, Edmonton.
12. Koke J. R. 1994. The G.3.5 antigen; a cytoskeletal cross-linker. Department of Zoology, University of Alberta, Edmonton.
13. Koke J. R. 1993. A new cytoskeletal protein that links intermediate filaments and actin. Department of Biology, Texas State University-San Marcos.
14. Koke J. R. 1992. A "cure" for myocardial stunning. Incarnate Word College, San Antonio, Texas.
15. Koke J. R. 1989. The role of free radicals in heart attacks. Presidential Seminar Award, Texas State University-San Marcos, San Marcos.
16. Koke J. R. 1986. Superoxide dismutase and myocardial ischemia. Department of Biology, Texas State University-San Marcos.

C. Grants and Contracts

1. Funded External Grants and Contracts:

- 2008 Principal Investigator, Principal Investigator, NSF-MRI, \$334,800. Acquisition of a Multiphoton-Ready Microscope at Texas State University.
- 2003 Project Director, JAMP (Joint Admission Medical Program). \$15,000. Administrative award to Texas State from the Texas Medical School System.
- 2002 Project Director, JAMP (Joint Admission Medical Program). \$66,000. Administrative award to Texas State from the Texas Medical School System.
- 2002 Principal Investigator, Advanced Technology Program Supplemental Award for High School Teachers, \$5,600. Education Award.
- 2002 Principal Investigator, Texas Advanced Technology Program, "Micro-array based Neuropathology Studies," \$51,000. Research Award.
- 2001 Principal Investigator, Advanced Technology Program Supplemental Award for High School Teachers, \$5,600. Education Award.
- 2000 - 2001 Principal Investigator, Coca Cola Corporation Foundation, "Summer Research Experiences for Teachers," \$50,000. Education Award in support of SMTEI program.
- 2000 Principal Investigator, Advanced Technology Program Supplemental Award for High School Teachers, \$8,100. Education Award.
- 2000 - 2002 Principal Investigator, Texas Advanced Technology Program, "Rapid repair of severed axons," \$59,000. Research Award.
- 1999 - 2003 Principal Investigator, Southwestern Bell Corporation Foundation, "Teacher Enhancement Through Research," \$200,000. Education Award, helps support Texas State-Science/Math/Technology Institute.
- 1998 - 2000 Co-principal Investigator (with Dana García) Texas Coordinating Board, Eisenhower Funds, "A Summer Research Experience for Science and Mathematics Teachers," \$88,500.

Education award, used to help support Texas State-Science/Math/Technology Institute.

- 1998 - 2002 Principal Investigator, National Science Foundation, Teacher Enhancement Program, "A Summer Research and Teaching Experience for Science and Mathematics Teachers," \$754,000 (total budget \$1.4 million). This program establishes the Texas State-Science/Math/Technology Institute, the primary function of which is to provide a research experience to in-service teachers to improve scientific literacy and increase the number of students entering science/math/technology-related fields. Education award.
- 1996 - 1998 Principal Investigator, National Science Foundation, Instrumentation and Laboratory Improvement Program, "An Integrated And Networked Microscopy Center For Undergraduate Education," \$200,000. This grant provided funds for purchase of a confocal microscope system and creation of a networked microscopy facility necessary to Biology undergraduate curriculum revisions. Education award.
- 1990 - 1993 Principal Investigator, National Science Foundation, Instrumentation and Laboratory Improvement Program, "Enhancement of Undergraduate Biology Education with Electron Microscopy," \$180,000. This grant supported the integration of electron microscopy into the Biology undergraduate curriculum. Education award.
- 1991 - 1993 Principal Investigator, Texas Advanced Technology Program, "Reduction of reperfusion injury by genetic alteration of heart cells in situ," \$190,000. Research award.
- 1989 - 1991 National Institutes of Health, Principal Investigator, "Histochemistry of Reperfusion Injury," \$75,000.
- 1979 - 1998 Principal Investigator, Texas State Faculty Research Enhancement Awards (internal grants). Fifteen awards totalling approximately \$90,000. Research awards.
- 1976 - 1978 Principal Investigator, American Heart Association, "Ultrastructure of Myocardial Ischemia," \$10,952. Post-doctoral Fellowship research support award.

2. Submitted, but not Funded, External Grants and Contracts (2008, 2009 only):

Prior to retirement, I submitted grant proposals to NIH, NSF and other agencies on a regular basis, at least 1 each year. I only report successful proposals.

3. Funded Internal Grants and Contracts:

- 2008 Principal Investigator, REP, \$8,000. "Understanding nerve regeneration." Research award.
- 1979 – 1998. Principal Investigator, Texas State Faculty Research Enhancement Awards (internal grants). Fifteen awards totaling approximately \$90,000. Research awards.

D. Fellowships, Awards, Honors:

- 1989 Presidential Research Seminar Award, Texas State
 1988 Presidential Award for Excellence in Research, Texas State
 1987 Named Fellow, Texas Academy of Science

IV. SERVICE

A. University (only chaired, major impact committees):

- 2002 - 2004 Director of the Texas State Joint Admission Medical Program (JAMP)

- 1998 - 2002 Director and Principal Investigator, Texas State-Science/Math/Technology Education Institute.
- 1988 - 2010 Chair (1988 - 1996), member (1996 -2001, 2005 - present), chair (2002 - 2004) of the Texas State Institutional Animal Care and Use Committee
- 1997 - 1999 Chair, Biology Master Plan; Member, Texas State University-San Marcos Steering Committee for Southern Association of Colleges and Universities ten-year review and accreditation committee

B. Departmental (only chaired, major impact administrative positions and committees):

- 2007 - 2011 Associate Chair for Undergraduate Affairs. Includes chairmanship of the Biology Curriculum Committee and membership on the College of Science Curriculum Committee, and preparation of the fall and spring semester teaching schedules for the Biology Department. Also overseeing of undergraduate advising and catalog revisions.
- 2004 - 2006 Interim Chair, Department of Biology
- 2003 - 2004 Associate Chair for Graduate Programs, beginning fall semester 2003.
- 1996 - present Director, Integrated Microscopy Facility, Department of Biology, Texas State University-San Marcos
- 1998 - 2004 Chair of the Biology Graduate Committee, Texas State University-San Marcos. 2003 - reorganized and reenrolled entire graduate faculty in alignment with new doctoral program.
- 1999 - 2002 Chair, Biology Ph.D. Committee, Texas State University-San Marcos. Responsible for initial program development and curriculum. Wrote initial proposal and "Guide to Graduate Programs" for the Department of Biology
- 1998 - 2000 Chair of Biology 2000 - Curriculum Committee, Texas State University-San Marcos. Wrote and implemented the first complete revision of the Biology undergraduate curriculum in 30 years.
- 1997 - 1999 Chair, Biology Master Plan; Member, Texas State University-San Marcos Steering Committee for Southern Association of Colleges and Universities ten-year review and accreditation committee
- 1997 - 1998 Chair, Post-tenure Review (Annual Review Policy and Procedure), Department of Biology, Texas State University-San Marcos. Member, University Post-Tenure Review Committee. Policy developed in compliance with State legislative mandate.

D. Professional -

Editorial - Associate Editor, BMC Journal *Research Notes*, 2010 - Continuing

Grant Review Panels:

- 1990 National Institutes of Health, Heart, Lung and Blood review panel
- 1992 National Science Foundation, Department of Undergraduate Education (DUE)
- 2000 National Science Foundation, ESI, Teacher Enhancement Programs
- 2002 National Science Foundation, ESI, Teacher Enhancement Programs