

CURRICULUM VITAE

NAME: McKee, Edward E.

EDUCATION:

Undergraduate: B.S., Biochemistry; B.S., Biology; The Pennsylvania State University, 1968-1972.

Graduate: Ph.D., Physiology, The Milton S. Hershey Medical Center, The Pennsylvania State University, 1973-1977.

Thesis Advisor: Howard E. Morgan, M.D., Evan Pugh Professor and Chairman, Department of Physiology. Presently, Senior Vice-President, Research, Weis Research Center, Geisinger Clinic, Danville, Pa.

Postdoctoral: N.I.H. Postdoctoral Fellow, Department of Microbiology, University of Connecticut Health Center, Farmington, CT, 1978 to 1981. Mentor: Robert O. Poyton.

Research Associate, Department of Molecular, Cellular, and Developmental Biology, University of Colorado, Boulder, CO, 1981 to 1983. Mentor: Robert O. Poyton, Professor

PRESENT ACADEMIC APPOINTMENTS:

Associate Professor, Department of Biochemistry and Molecular Biology, Indiana University School of Medicine - South Bend IN 46617

Adjunct Associate Professor, Department of Biochemistry and Molecular Biology, Rosalind Franklin University of Health Sciences / The Chicago Medical School 2002-Present.

Adjunct Associate Professor, Department of Biological Sciences, University of Notre Dame, 1995 to present.

PAST ACADEMIC APPOINTMENTS:

Adjunct Associate Professor, Department of Chemistry/Biochemistry, University of Notre Dame, 1991 to 1994.

Assistant Professor, Department of Biological Chemistry and Structure, Rosalind Franklin University of Health Sciences/The Chicago Medical School, 1983 to 1991.

PROFESSIONAL CONSULTANTSHIPS:

1. Book review, Harwal Publishing, The National Medical Series for Independent Study, Biochemistry.

2. Rosalind Franklin University of Health Sciences/The Chicago Medical School, Dept. of Biological Chemistry, Invited to Present and Teach a 2 credit Human Genetics course to ~250 1st year Medical and Graduate Students, 1996-present.

3. Independent consultant for Pharmacia and Upjohn, Kalamazoo, MI, 1997-2002. Consulted regularly on potential toxicity of antibiotics to mitochondrial gene expression and on the development of mitochondrial in vitro assays as high throughput drug screening systems.
4. Independent consultant for Abbot Laboratories, North Chicago, Il 2000. Consulted on the development of mitochondrial assays as drug toxicity screening systems.
5. University of Notre Dame, Department of Biological Sciences, Directed and taught a 3 credit upperclassmen course in Cellular Biology, Spring 2003.
6. Independent Consultant for Actelion Percurex AG, Basel, Switzerland. Consult on toxicity of antibiotics to mitochondrial protein synthesis (2005-2006)
7. Independent Consultant for Trius Therapeutics, San Diego, Ca. Consult on toxicity of antibiotics to mitochondrial protein synthesis (2007).
8. Consulant for Rush Medical College, Chicago, Il. Consulted on establishing Team Based Learning modules in their Medical Biochemistry Course.

PROFESSIONAL ORGANIZATIONS:

American Association for the Advancement of Science 1981-present.
American Diabetes Association, Professional Section 1984-1986.
American Society of Cell Biology 1983-present.
American Heart Association, Basic Science Council 1984-present.
American Heart Association of Metropolitan Chicago 1984-1990.
American Heart Association, Indiana Affiliate 1992-1998.
American Society of Biochemistry and Molecular Biology 1994-present.
Mitochondrial Research Society 2000 – Present
United Mitochondrial Disease Foundation 2004-Present
American Society of Microbiology 2006-Present
Team Based Learning Collaborative 2006-Present
Association of Medical Biochemistry Course Directors, Meeting Organizing committee and Treasurer 2009-present.

HONORS AND AWARDS:

Alpha Zeta Professional Honorary Fraternity, 1970.

President Gerald R. Ford Feasibility Grant of the American Diabetes Association, 1984-1985.
Sigma Xi, 1988

Recognition of merit from the American Heart Association of Metropolitan Chicago for work on Fellowship and Grant-in-Aid review committees and the Basic Science Research Counsel (1991).

Student Research Poster entitled “Effect of potential insulin mediators on heart mitochondrial

protein synthesis” (Kendra Good, and E. E. McKee) won first prize at Indiana State Medical Association Meeting, October, 1994, Indianapolis, IN.

Student Research Poster entitled “Transport of guanine nucleotides into isolated heart mitochondria.” (Ronald Smith, and E. E. McKee) won first prize at Indiana State Medical Association Meeting, October, 1995, Indianapolis, IN.

Outstanding Basic Science Professor, South Bend Center, Awarded by Medical School Class of 1995.

Outstanding Basic Science Professor, South Bend Center, Awarded by Medical School Class of 2003.

Trustee Teaching Award, Indiana University School of Medicine, 2003.

Outstanding Basic Science Professor, South Bend Center, Awarded by Medical School Class of 2008

Trustee Teaching Award, Indiana University School of Medicine, 2009.

TEACHING: Indiana University School of Medicine

1991-Present Medical Biochemistry and Molecular Biology, 667. Responsible for directing and teaching entire 7 credit medical school course to 22-24 1st year medical students: 75 lecture hours, 20 Team based Learning hours, and preparing and grading examinations for 22-24 students. Course evaluations in the top 10% of IU courses Fall of 2002.

1992- Present Medical Genetics, Q602. Responsible for directing and teaching entire 2 credit medical genetic course: 22 lecture hours, 8 Team Based Learning hours, and preparing and grading examinations for 22-24 students. Course evaluations in the top 10% of IU courses 2 of the last 3 years.

1996-Present, Rosalind Franklin University of Health Sciences/The Chicago Medical School, Dept. of Biological Chemistry, Consulted and taught the Medical Genetics course to 1st year Medical Students, 17 lecture hours, 12 conference hours and preparing examination for 200-250 students.

2003 – University of Notre Dame, Department of Biological Sciences – Responsible for directing and teaching entire 3 credit undergraduate upperclass course in Cellular Biology (BIOS 341), 45 lecture hours and preparing examinations for 60 Juniors/Seniors.

1991-Present Attended annual statewide teaching conference in Biochemistry. 1992, Led discussion of Oxidative phosphorylation and electron transport, how much should we teach? 1995, presented talk on Signal transduction, how much should we teach?

2002-Present - Actively involved in contributing to the statewide exam in Biochemistry and Molecular Biology.

1992-Present Attended annual statewide teaching conference in Medical Genetics.

2003-Present - Actively involved in contributing to the statewide exam in Medical Genetics.

2008 – Presented Workshop on Team Based Learning in the Basic Medical Sciences at the International Association of Medical Science Education and TBL Collaborative Meeting in Salt Lake City, UT, July, 2008.

2008 – Presented 2 workshops on Team Based Learning at Rush Medical School, September, 11, and 18, 2008.

2009 – Consulted with Faculty at Rush Medical School to successfully implement TBL modules in their Medical Biochemistry Course, January 20-21, 2009.

1992-Present Mentor for Indiana University School of Medicine Summer Research Fellows. Research supervision of 2nd year medical students. 1992, Michael Inman; 1994, Kendra Good; 1995, Ronald Smith, and Christopher Nelson; 1998, Joel Gingerich; 2002, Matt Hatch; 2003, Matt Lynx; 2005, Kevin Stiver, Cristopher Benner, and Joe D’Haenens; 2007, Gerald Moris

2004 – 2007 Graduate Student Advisor: Matt Lynx, MD-Ph.D. student; David Williams, MS student; and mentor to Post-Baccalaureate Student Gerald Morris

1996-Present Undergraduate Research Dept. of Biological Sciences Univ. Notre Dame (1-2 credits per semester, typically 1-2 students per semester), research supervision. 1995, Jonathan Kraas; 1997, Jonathan Kraas and Crissy Ciacco, 1998, Crissy Ciacco and Belinda Aber, 2001, Erica Marin, 2002, Erica Marin and Dana Cullen, 2003, Dana Cullen, 200, Matthew Doherty.

1998 Mentor – University of Notre Dame Honors Thesis in Biological Sciences, Crissy Ciacco

2003 Mentor - University of Notre Dame Honors Thesis in Biological Sciences, Erica Marin

1995 Mentor for Michael Hall, Indiana University, Bloomington undergraduate as part of the Undergraduate Research Initiative. Research Supervision

1992 Attended American Association of Medical Colleges Central Group on Educational Affairs. April 9-11.

1991-1994 Undergraduate Research Dept. of Chemistry/Biochemistry Univ. Notre Dame (1-2 credits per semester, typically 1-2 students per semester), research supervision. 1992, Chris Storvos (3 credits); 1993, Richard Salvino (3 credits) and Richard Wood (2 credits).

1992-1994 Participant in Summer Notre Dame/NSF-Science Experience for Talented Seniors program. Research supervision of a high school senior for 8 weeks in the summer. 1993, Heather Wingard; 1994, Todd DeCook and Jessica Smied

Ph.D Committees:

Ryan Dombkowi
Matt Lynx

Kevin Johnson
Nathan Whitfield

Masters Committee: David Williams

Thesis Advisor: Matt Lynx (Ph.D completed May, 2007); David Williams (M.S. completed May, 2009)

PROFESSIONAL SERVICE:

American Heart Association of Metropolitan Chicago Grant Review Committee, 1984, 1985, 1987, 1988.

American Heart Association of Metropolitan Chicago Fellowship Review Committee, 1984, 1986, 1989.

American Heart Association of Metropolitan Chicago Research Council, 1988-1991. Council representative to American Heart Association North Central Regional Research Committee, 1990-1991. Member, Reviewer Selection Committee, 1990.

Board of Directors, American Heart Association, Indiana Affiliate-St. Joseph County 1994-present. President, 1997-2000, Vice-President, 1996-1997, Chairman: Community Site Committee 1994-1995, Chairman: Twogether for Life Committee. 1994-1996.

Chairman, Northwest Indiana Regional Management Team of American Heart Association, Indiana Affiliate and Member Delegate Assembly and State Board of Directors, 1997-1998.

Presented Lecture on "DNA and Disease" as part of the South Bend Center for Medical Education's Mini-Medical School program, open to the public. 1995.

Regular invited speaker of the American Heart Association-Indiana Affiliate describing our present funding dilemmas and the importance of American Heart Sponsored research to volunteers and potential donors in radio interviews (Community Action Show, WSBT, Mishawaka, and the Tom Pagna show, WNDU, South Bend); television interviews, The Medical Minute, WSBT News; and at various meetings and banquets around the state, including South Bend, Mishawaka, Granger, Elkhart, Indianapolis, and Valparaiso 1994-present to audiences from a dozen to over 200.

Organized American Heart Association Donor Symposium and tour of University of Notre Dame research laboratories and animal facility for a lay audience, May 1999. Gave two invited presentations at the meeting, a research seminar geared to a lay audience, and a seminar describing the recent advances in cardiovascular medicine.

Textbook review for the 4th edition of the Biochemistry text of the National Medical Series for Independent Study, Harwal Publishing, 1995.

Ad-Hoc Reviewer for: *J. Biol. Chem.*, *Amer. J. Physiol.*, *Proc. Natl. Acad. Sci.*, *Environmental and Molecular Mutagenesis*, *Expert Opinion on Drug Metabolism and Toxicology*, *Antiviral Research*, *Biochemical Pharmacology*, and *Antimicrobial Agents and Chemotherapy*. 1989-present.

Served on National Institute of Health Special Emphasis Review Panel on Proteomics Initiative, June 13-14, 2002.

Served on National Institute of Health Special Emphasis Review Panel on International Research funding in Infectious Disease, March 21-23, 2007.

Organized American Heart Association Board of Directors Research Meeting and tour of Indiana university School of Medicine South Bend laboratories and Raclin-Carmichael animal facility

for the AHA local boards of St. Joseph and Elkhart County. April 2008. Gave two invited presentations at the meeting, a research seminar geared to a lay audience, and a seminar describing the mechanism of AHA.

University Administrative Service:

South Bend Center for Medical Education:

1996-Present Chair, Computer and network technology committee - Charged with deciding how to best spend departmental and student resources for computer technology.

1995-1996 Liaison for Ariel Grant - Involved writing and re-writing the South Bend Center's portion of a Federal Ariel grant (Funded) to obtain computer resources for searching and retrieving documents via scanned images from the Ruth Lilly Medical School library. (Submitted by Peggy Richwine, Indiana University School of Medicine Librarian.)

1997-1998 Liaison for re-submission of National Library of Medicine Ariel Grant for continued funding.

1991-present Heavily involved with Center's computer network, including: recommending purchase of hardware and software, setting up and maintaining staff and student workstations and network printers, and troubleshooting an endless variety of computer glitches.

2001-2002 Member of Indiana University School of Medicine - South Bend Animal Care Committee

2003-2006 Chairman of Indiana University School of Medicine - South Bend Animal Care Committee

2006-Present Member, Indiana University School of Medicine – South Bend Faculty Search Committee

2007-Present Chairman Mentoring committee for Dr. Robert Stahelin.

2007-Present Member Mentoring committee for Dr. Suzanne Bohlon

2007-Present Member Mentoring committee for Dr. Molly Sheels

2007-2008 Member Building Committee for Harper Hall (Cancer Research Center)

2008-Present Chairmen Mentoring committee for Dr. Tracy Vargo-Gogola

Indiana University Committee Service:

1994 Chair, Graduate Student Writing Award Committee, Dept. of Biochemistry and Molecular Biology.

1996-2001 Associate Member of Indiana University School of Medicine Animal Care Committee

2005 Member of Committee to evaluate and set guidelines for Poly Com conferencing,

University of Notre Dame Committee Service:

2006-Present Member, University of Notre Dame Institutional Animal Care and Use Committee.

2007 Chairman (Interim), University of Notre Dame Institutional Animal Care and Use Committee.

CURRENT GRANT SUPPORT

Agency: NIH National Heart, Lung, and Blood Institute Grant # R01 HL72710-06
 Title: Mitochondrial toxicity of antiviral nucleosides
 Project Period: 7/01/2009 to 6/30/20
 Total Costs: \$803,915 Direct Costs: \$547,971

PAST GRANT SUPPORT: (3 years)

Agency: NIH National Heart, Lung, and Blood Institute Grant # R01 HL72710-01
 Title: Heart mitochondrial toxicity of antiviral nucleosides
 Project Period: 9/30/2002 to 10/1/2008
 Total Costs: \$1,432,764 Direct Costs: 8/1/2006 – 7/31/2008 \$284,383

Agency: NIH National Heart, Lung, and Blood Institute Grant # R01 HL72710-01
 Title: Heart mitochondrial toxicity of antiviral nucleosides
 Supplement to Support Diversity in Biomedical Research (Gerald Morris)
 Project Period: 8/1/2005 to 7/31/2006
 Total Costs: \$43,389 Direct Costs: 8/1/2006 – 7/31/2007 \$273,976

Agency: American Heart Association Mid-West Affiliate Pre-Doctoral Fellowship
 Sponsor to Matthew Lynx
 Project Period: 7/1/2005-6/30/2007
 Total Costs: \$52,000

Agency: Indiana University School of Medicine Research Enhancement Grant
 Title: Toxicity of antiviral nucleosides used in the treatment of AIDS.
 Project Period 11/1/2007 – 10/30/2008
 Direct Costs: \$40,000

PRESENTATIONS: Invited Seminars:

- 1984 Regulation of mitochondrial protein synthesis in yeast, University of Chicago
- 1986 Cytoplasmic regulation of mitochondrial protein synthesis in yeast, University of Colorado
- 1986 Regulation of mitochondrial gene expression in yeast and mammalian tissues, UHS/CMS Department of Physiology
- 1987 Regulation of mitochondrial gene expression in yeast and mammalian tissues, University of Chicago
- 1988 Hormonal regulation of heart mitochondrial biogenesis, American Heart Association of Metropolitan Chicago Research Forum
- 1988 Hormonal regulation of heart mitochondrial protein synthesis, UHS/CMS Dept. of

- Medicine Research Symposium
- 1990 Regulation of heart mitochondrial protein synthesis during cardiac hypertrophy, City University of New York, Staten Island.
 - 1990 Regulation of mitochondrial biogenesis in the rat heart, College of West Georgia
 - 1990 Insulin stimulation of mitochondrial protein synthesis in the rat heart, Susquehanna University.
 - 1990 Regulation of mitochondrial biogenesis in the heart. New York Osteopathic Medical School, New York Institute of Technology
 - 1990 Regulation of mitochondrial biogenesis in the heart. Chicago Osteopathic Medical School, Downers Grove, Il.
 - 1990 Regulation of mitochondrial gene expression in the heart. Jefferson Medical School, Philadelphia, Pa.
 - 1991 Regulation of mitochondrial biogenesis during cardiac hypertrophy, Univ. of Missouri Veterinary School, Columbia, Mo.
 - 1991 Regulation of mitochondrial biogenesis in the heart. South Bend Center for Medical Edu., Univ. of Notre Dame, Notre Dame, IN.
 - 1991 Regulation of mitochondrial biogenesis in the heart. Kirksville Osteopathic Medical School, Kirksville, Mo.
 - 1992 Hormonal Regulation of Heart Mitochondrial Protein Synthesis. Indiana University School of Medicine, Indianapolis, IN
 - 1992 Coupling of Mitochondrial metabolism to mitochondrial translation. Dept. of Biochemistry and Molecular Biology, Camp Shawnee Bluff Retreat, Indiana University School of Medicine
 - 1993 Coupling of Mitochondrial Protein Synthesis and Mitochondrial Metabolism. Dept. of Chemistry/Biochemistry, Univ. of Notre Dame.
 - 1994 Coupling of Mitochondrial Protein Synthesis and Mitochondrial Metabolism. Indiana University School of Medicine Symposium, Indianapolis, IN
 - 1994 Research and the American Heart Association, Radio Show "Community Involvement" WBMR, South Bend, IN
 - 1994 Regulating the Number of Power Plants in Heart. Luncheon Keynote Speaker, Board of Directors American Heart Association - South Bend/Mishawaka, IN.
 - 1995 Funding mechanisms of the American Heart Association: Where the money goes. American Heart Association, Indiana Affiliate, statewide meeting of Heart Walk Chairs and volunteers, Indianapolis, IN.
 - 1995 Funding of cardiovascular research and the American Heart Association, Speaker at American Heart Association, Indiana Affiliate "Research Initiative" program and banquet, Valparaiso, IN.
 - 1996 Transport of guanine nucleotides into the mitochondrial matrix. Northwest Center for Medical Education, Gary, Indiana.
 - 1997 Mammalian mitochondrial protein synthesis: Potential site of antibiotic toxicity. Pharmacia and Upjohn, Kalamazoo, MI.
 - 1998 Antibiotic toxicity in mitochondria from rat tissues. Pharmacia and Upjohn, Kalamazoo, MI.
 - 1999 Mitochondrial Biogenesis and Nucleotide Transport. American Heart Association Research Update, University of Notre Dame.
 - 1999 Recent advances in Cardiovascular Research. American Heart Association Reserach Update. University of Notre Dame.
 - 1999 Transport and efflux of oxozolidinones into isolated heart mitochondria and relationship to

- toxicity. Pharmacia and Upjohn, Kalamazoo, MI.
- 2000 The Top-Ten List of recent cardiovascular breakthroughs. American Heart Association Research Initiative Program, Michiana Region.
- 2000 Uptake and efflux of oxozolidinones in the isolated perfused rat heart and subsequent effects on isolated mitochondria. Pharamcy and Upjohn, Kalamazoo, MI.
- 2001 Effect of oxozoldinone enantiomers on uptake and mitochondrial protein synthesis Pharamcy and Upjohn, Kalamazoo, MI.
- 2001 Uptake and phosphorylation of thymidine and AZT in isolated heart mitochondria. Mitochondria 2001 meeting, February 28-March 4, San Diego, CA.
- 2001 Molecular Genetics and Genetic Testing A Primer for Physcians, Clinical Practice Conference, St. Joseph Regional Medical Center, South Bend , IN.
- 2002 Inhibition of thymidine phosphorylation by AZT in isolated heart mitochondria, Keystone Symposia, Mitochondria and Pathogenesis, April 6-11, 2002, Copper Mountain, CO.
- 2003 Your Dollars at Work - Recent Discoveries in Cardiovascular and Stroke Research Supported by the AHA American Heart Association St. Joseph County Board of Directors Meeting, January 29, 2003.
- 2003 Thymidine and AZT Metabolism in the Heart and the Cardiac Toxicity of AZT, Aug 8, 2003 meeting of NIH Highly active retroviral therapy (HAART) grantees, NIH, Bethesda, MD.
- 2003 Novel Mechanism of Mitochondrial Toxicity of AZT in the Adult Rat Heart, September 19, 2003, Northwest Center for Medical Education, Indiana University School of Medicine, Gary, IN.
- 2004 Mitochondrial transport and metabolism of deoxynucleosides and deoxynucleoside analogs used in HAART. Annual Grantees Meeting for the RFA "Highly Active Antiretroviral Therapy", NIH, Bethesda, MD, August 10.
- 2004 Thymidine and AZT metabolism in the isolated perfused rat heart: AZT inhibition of thymidine phosphorylation. Abstract # 60, Oral presentation at Mitochondrial Medicine, August 4-6, Pittsburgh, PA..
- 2004 Zidovudine inhibits thymidine phosphorylation: a novel site of potential toxicity in non-mitotic cells. Oral Presentation at 6th International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV, Oct. 25-28, Washington D.C. *Antiviral. Therapy* 9:L9.
- 2005 Pyrimidine and Pyrimidine Analog Metabolism in Isolated Mitochondria and the Perfused Heart. Annual Grantees Meeting for the RFA "Highly Active Antiretroviral Therapy", NIH, Bethesda, MD, July 14.
- 2008 Improving Patient Care: Self and peer evaluation in a team setting at Indiana University School of Medicine, South Bend (with S. Jackson and R. Navari co-authors). Oral presentation at Association of American Medical Colleges, Central Region Group on Education Affairs, April 10-12, Columbus OH.
- 2008 Origin of deoxypyrimidine nucleotides and AZT mediated TTP depletion in the perfused rat heart. Oral presentation at Setting the Pace in Mitochondrial Medicine, June 25-28, Indianapolis, IN
- 2008 Team Based Learning in Medical Biochemistry, Rush Medical College, September .

PUBLICATIONS:

1. Mumma, R.O., McKee, E.E., Verlangieri, A.J. and Barron, G.P. (1972) The antiscourbutic effect of ascorbic acid-2-sulfate in the guinea pig. *Nut. Report Int.* 6: 133-137.
2. Liu, D.K., McKee, E.E. and Fritz, P.J. (1975) Increase in rat liver ribonuclease inhibitor levels during the neonatal period. *Growth* 39: 167-175.

3. Liu, D.K., McKee, E.E. and Fritz, P.F. (1976) Transfer RNA and aminoacyl transfer RNA in developing rats. *Bio. Neonate* 28: 27-35.
4. Rannels, D.E., McKee, E.E. and Morgan, H.E. 1977) Regulation of protein synthesis and degradation in heart and skeletal muscle. In: *Biochemical Action of Hormones* (G. Litwack, ed.) Academic Press, New York, Vol. IV, pp. 135-195.
5. McKee, E.E., Cheung, J.Y., Rannels, D.E. and Morgan, H.E. (1978) Measurements of the rate of protein synthesis and compartmentation of heart phenylalanine. *J. Biol. Chem.* 253: 1030-1040.
6. Morgan, H.E., McKee, E.E. and Cheung, J.Y. (1978) Effect of compartmentation of heart phenylalanine on measurements of protein synthesis and amino acid transport. In: *The Role of Compartmentation in Metabolic Regulation: Microenvironmental Aspects* (P.A. Srere and R.W. Estabrook, eds.) Academic Press, New York, pp. 97-109.
7. Morgan, H.E., Rannels, D.E. and McKee, E.E. (1979) Protein metabolism of the heart. In: *The Handbook of Physiology, The Cardiovascular Systems, American Physiological Society Section 2.* (R. Berne, ed.) Vol. I, 845-871.
8. McKee, E.E., Clark, M.G., Beinlich, C.J., Lins, J.A. and Morgan, H.E. (1979) Neutral -alkaline proteases and protein degradation in rat hearts. *J. Molecular and Cellular Cardiology* 11: 1033-1051.
9. LaNoue, K.F., Duszynski, J., Watts, J. and McKee, E.E. (1979) Kinetic properties of aspartate transport in rat heart mitochondrial inner membrane. *Arch. Biochem. Biophys.* 195: 578-590.
10. Clark, M.G., Beinlich, C.J., McKee, E.E., Lins, J.A. and Morgan, H.E. (1980) Relationship between alkaline proteolytic activity and protein degradation in rat heart. *Fed. Proc.* 39: 26-30.
11. Beinlich, C.J. Clark, M.G., McKee, E.E., Lins, J.A. and Morgan, H.E. (1981) Neutral-alkaline proteolytic activity in rat cardiac muscle cells. *J. Molec. and Cell. Cardiol.* 13: 23-36.
12. McKee, E.E., Sevarino, K.A., Bellus, G. and Poyton, R.O. (1981) Use of an optimized mitochondrial protein synthetic system to characterize a precursor to subunit II of cytochrome c oxidase. In: *Advances in Biotechnology* (G.G. Stewart, C. Robinow, B. Johnson, E.R. Tustanoff, M.A. LaChance, and J. Russel, eds.) Pergamon Press, Toronto, pp. 357-362.
13. McKee, E.E. and Poyton, R.O. (1984) Mitochondrial gene expression in *Saccharomyces cerevisiae*. 1. Optimal conditions for protein synthesis in isolated mitochondria. *J. Biol. Chem.* 259: 9320-9331.
14. McKee, E.E., McEwen, J. and Poyton, R.O. (1984) Mitochondria gene expression in *Saccharomyces cerevisiae*. 2. Fidelity of translation in isolated mitochondria from wild-type and mutant petite strains of yeast. *J. Biol. Chem.* 259: 9332-9338.
15. Czerwinski, S.M., McKee, E.E. and Hickson, R.C. (1988) Glucocorticoid receptor activation in isolated rat hearts. *Amer. J. Phys.* 256: C219-225.

16. McKee, E. E., Grier, B. L. Thompson, G. S. and McCourt, J.D. (1990) Isolation and incubation conditions to study heart mitochondrial protein synthesis. *Amer. J. Phys.* 258: E492-E502.
17. McKee, E. E., Grier, B. L., Thompson, G. S., Leung, A. C. F. and McCourt, J. D. (1990) Coupling of mitochondrial metabolism and protein synthesis in heart mitochondria. *Amer. J. Phys.* 258: E503-E510.
18. Leung, A.L. and McKee, E.E. (1990) Mitochondrial protein synthesis during thyroxin-induced cardiac hypertrophy. *Amer J. Phys.* 258: E511-E518.
19. McKee, E. E. and Grier, B. L. (1990) Insulin stimulates mitochondrial protein synthesis and respiration in isolated perused rat heart. *Amer. J. Physiol.* 259: E413-E421.
20. Black-Schafer, C.L., McCourt, J.D., Poyton, R. O., and McKee, E.E. (1991) Mitochondrial gene expression in *Saccharomyces cerevisiae*. III. Proteolysis of nascent chains in isolated mitochondria optimized for protein synthesis. *Biochem. J.* 274: 199-205.
21. Czerwinski, S. M. T. T. Kurowski, E. E. McKee, R. Zak, and R. C. Hickson. (1991) Myosin heavy chain turnover during cardiac mass changes by glucocorticoids. *J. Applied Physiol.* 70: 300-305.
22. McKee, E.E. Mitochondrial gene expression in *Saccharomyces cerevisiae*. IV. Effect of yeast cytosol on mitochondrial protein synthesis, degradation, and respiration. (1994) *Biochim. Biophys. Acta* 1201: 235-244.
23. Poyton, R. O., K. A. Sevarino, E. E. McKee, D. J. M. Duhl, V. Cameron, and B. Goehring. (1996) Export of protein from mitochondria. *Advances in Molecular and Cell Biology* 17: 245-277.
24. Poyton, R. O., G. Bellus, E. E. McKee, K. A. Sevarino, and B. Goehring (1996) In Organello mitochondrial protein and RNA synthesis. *Methods in Enzymol.* 264: 36-42.
25. McKee, E. E., Bentley, A. T. Smith, R.M., Jr., and Ciaccio, C. E. (1999) Origin of Guanine Nucleotides in Isolated Heart Mitochondria *Biochem. Biophys. Res. Comm.* 257: 466-472.
26. McKee, Edward E., Alice T. Bentley, Ronald M. Smith, Jr. Jonathan R. Kraas, and Christina E. Ciaccio (2000) Guanine Nucleotide Transport by Atractyloside Sensitive and Insensitive Carriers in Isolated Heart Mitochondria, *American J. Physiology, Cell Physiology*, 279: 1870-1879.
27. McKee, E. E. Bentley, A. T., Hatch, M., Gingerich, J. and Susan-Resiga, D. Phosphorylation of thymidine and AZT in heart mitochondria. Elucidation of a novel mechanism of AZT cardiotoxicity. (2004) *Cardiovascular Toxicology* 4:155-167.
28. Lynx, M. D., Bentley, A. T., and McKee, E. E. 3'-Azido-3'-deoxythymidine (AZT) inhibits thymidine phosphorylation in isolated rat liver mitochondria: A possible mechanism of AZT hepatotoxicity. (2006) *Biochem. Pharm.* 71:1342-1348. (doi:10.1016/j.bcp.2006.01.003)
29. McKee, E. E., Ferguson, M., Bentley, A. T., and Marks, T. A. Inhibition of mitochondrial protein synthesis by oxazolidinones. (2006) *Antimicrobial Agents and Chemo* 50:2042-2049. (doi:10.1128/AAC.01411-05)

30. Lynx, M. D. and McKee, E. E. 3'-Azido-3'deoxythymidine (AZT) is a competitive inhibitor of thymidine phosphorylation in isolated rat heart and liver mitochondria. (2006) *Biochem. Pharm.* 72:239-243.
31. Donnino, M., Miller, J., Garcia, J., Walsh, M., and McKee, E. E. Distinctive Acid-Base Pattern in Wernicke's Encephalopathy *Annals Emerg. Med* (doi:10.1016/j.annemergmed.2006.09.019).
32. Susan-Resiga, D., Bentley, A. T., Lynx, M. D., LaClair, D. D., and McKee, E. E. Thymidine and Zidovudine Metabolism in the isolated perfused rat heart. (2007) *Antimicrobial Agents and Chemo* 51: 1142-1149.
33. [Madariaga MG](#), [Swindells S](#), [McKee EE](#). Oxazolidinones and human immunodeficiency virus. (2007) *Antimicrobial Agents and Chemo*. 51:1130.
34. Lynx, M. D., Kang, B-K., and McKee, E. E. Effect of AZT on thymidine phosphorylation in cultured H9c2, U-937, and Raji cell lines (2008), *Biochem. Pharm.* 75: 1610-1615
35. McKee, E. E. Assessing mitochondrial protein synthesis in drug toxicity screening. (2008) In *Drug Induced Mitochondrial Dysfunction*, Edited by J. Dykens, and Y. Will, Wiley-Liss, pp 463-472.
36. M. D. Lynx, D. D. LaClair, and E. E. McKee Effect of Zidovudine and Stavudine on mitochondrial DNA of differentiating 3T3-F442a cells is not associated with imbalanced deoxynucleotide pools. (2009) *Antimicrobial Agents and Chemo*. 53: 1252-1255 doi:10.1128/AAC.01115-08.
37. Gerald W. Morris, Tyler A. Iams, Kira G. Slepchenko, and Edward E. McKee Origin of Pyrimidine Deoxyribonucleotide Pools in the Rat Heart: Implications for 3' azido 5'thymidine (in press).

Abstracts (Representative)

- McKee, E.E., Rannels, D.E. and Morgan, H.E. (1977) Compartmentation of the intracellular pool of free phenylalanine (phe) and the specific activity of phe-tRNA in perfused rat heart. *Fed. Proc.* 36: 1980.
- McKee, E.E., Beinlich, C.J., Lins, J.A., Clark, M.G. and Morgan, H.E. (1979) Role of phenylalanine-releasing neutral proteolytic activity of rat heart. *Fed. Proc.* 38: 3199.
- McKee, E.E. and Poyton, R.O. (1980) Regulation of protein synthesis in isolated yeast mitochondria. *Fed. Proc.* 39: 1872.
- McKee, E.E., Power, S.D., Bellus, G., McEwen, J. and Poyton, R.O. (1981) In vitro synthesis and membrane insertion of mitochondrial gene products. In: *Mitochondrial Genes*, Cold Spring Harbor Symposium, pp. 92.
- McKee, E.E., Bellus, G., Moore, C., Kerner, A.L., Trueblood, C.E. and Poyton, R.O. (1982) Yeast mitochondrial gene expression in vitro. *J. Cell Biol.* 95: Part 2, 278a.
- McKee, E.E., McCourt, J.D., and Black, C.L. (1985) Regulation of yeast mitochondrial protein synthesis by a yeast cytoplasmic fraction. *J. Cell Biol.* 101: Part 2, 447a.
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