Address

Department of Physiology
The University of Tennessee Health Science Center
College of Medicine
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Personal

Born 15 October 1957, Richland, Washington USA

Education

B.A. (with honors) University Major (Mathematical Modeling in Biochemical Systems), University of Virginia, 1980

Ph.D. Physiology and Biophysics, University of California, Irvine, 1986 Postdoctoral Fellow, Department of Physiology and Cell Biology, University of Texas

Medical School, Houston, 1986 - 1989

University Appointments

1 June 2012 – present

Dean, College of Graduate Health Sciences, University of Tennessee Health Science Center, Memphis.

1 July 2007 - present

Executive Director, Molecular Resource Center, University of Tennessee Health Science Center, Memphis.

1 July 2006 – present

Professor, Department of Physiology, University of Tennessee Health Science Center, College of Medicine, Memphis.

15 May 2007 – 31 May 2012

Associate Dean for Student Affairs, College of Graduate Health Sciences, University of Tennessee Health Science Center, Memphis.

1 July 1995 – 30 June 2006

Associate Professor, Department of Physiology, University of Tennessee Health Science Center, College of Medicine, Memphis.

1 September 1990 - 30 June 1995

Assistant Professor, Department of Physiology and Biophysics, University of Tennessee Health Science Center, College of Medicine, Memphis.

1 November 1989 - 31 August 1990

Research Assistant Professor, Department of Physiology and Cell Biology, University of Texas Medical School, Houston.

1 July 1986 - 31 October 1989

Postdoctoral fellow in the laboratories of Drs. Frank W. Booth and Norman W. Weisbrodt, Department of Physiology and Cell Biology, University of Texas Medical School, Houston.

1 March 1986 - 31 May 1986

Instructor, Human Physiology Laboratory Course, Department of Biology, Chapman College, Orange, CA.

1 September 1980 - 30 June 1986

Graduate student in the laboratory of Dr. Kenneth M. Baldwin, Department of Physiology and Biophysics, University of California, Irvine.

Research and Other External Support

"Molecular Resource Center of Excellence - FY 2012" (Tennessee Higher Education Commission)

Principal Investigator

7/1/11-6/30/12, \$626,100

"Molecular Resource Center of Excellence - FY 2008-2011" (Tennessee Higher Education Commission)

Principal Investigator

7/1/08-6/30/11, ~\$2,800,000

"Markers of Normoglycemic Remission in Obese Diabetics" (NIH DK073190-01)

Co-Investigator (Guillermo E. Umpierrez, Emory School of Medicine, PI)

9/1/2005-8/31/2007, \$88,000 available through consortium agreement

"Molecular Mechanism Underlying Hyperglycemia-Induced Insulin Resistance In Skeletal Muscle In Obese African Americans With History Of Hyperglycemic Crises" (NIH-funded Clinical Research Center of the University of Tennessee Health Science Center)

Principal Investigator

8/1/2002-7/31/2003, \$120,000

"G-protein-coupled mechanism of Na-K-2Cl cotransporter-mediated potassium uptake by skeletal muscle" (American Heart Association)

Principal Investigator

7/1/2001-6/31/2003, \$120,000

"Insulin-independent mechanism for skeletal muscle potassium uptake" (American Diabetes Association)

Principal Investigator

1/1/2000-12/31/2002, \$300,000

"Cloning and characterization of a unique Na⁺-K⁺-2Cl⁻ cotransporter expressed in cardiac and slow-twitch skeletal muscle" (UTMG Research Grant)

Principal Investigator

1/1/00-12/31/00 \$10,000

"Intracellular signal pathways in skeletal muscle" (Procter and Gamble Research Support)

Principal Investigator

1/1/00-12/31/00 \$5,000

"Initiation factor 2-α phosphorylation during rapid translational control and hypertrophy in the volume loaded heart" (American Heart Association #96006530)

Principal Investigator

7/1/96-6/30/98 \$80.000 direct costs

"Activity-dependent polypeptide elongation in muscle" (NIH R29AR40901)

Principal Investigator

4/1/91-3/31/96 \$350,000 direct costs

"Damaged heart muscle regeneration by gene-labeled myoblasts" (American Heart Association #92013800)

Principal Investigator

7/1/92-6/30/95 \$86,700 direct costs

"Novel densitometric techniques for osteoporosis research" (NIH R01AR41376)

Co-Principal Investigator

9/30/91-8/31/94 \$513,398 direct costs

"Renovation of Physiology Space and Acquisition of Molecular Biology Equipment" (NSF STI-9214633)

Co-Principal Investigator

3/15/93-2/28/95 \$495,795 direct costs (University matched for total of \$991,590)

"Cardiac muscle regeneration by gene-labelled myoblasts" (UTMG Research Grant)

Principal Investigator

10/1/91-9/30/92 \$12,170 direct costs

Honors and Awards

Eagle Scout Award, Boy Scouts of America.

University Major Program, University of Virginia.

NIH Predoctoral Training Grant Recipient, School of Biological Sciences, University of California, Irvine.

Regent's Dissertation Fellowship Recipient, University of California, Irvine.

NIH Postdoctoral Training Grant Recipient, Department of Physiology and Cell Biology, University of Texas Medical School, Houston.

- National Aeronautics and Space Administration Postdoctoral Fellowship Grant Recipient, laboratory of Dr. Frank W. Booth, Department of Physiology and Cell Biology, University of Texas Medical School, Houston.
- Excellence in Teaching Award (College of Graduate Health Sciences), Student Government Association Executive Council, University of Tennessee Health Science Center, Memphis, 1991-1992.
- Nomination for Excellence in Teaching Award (College of Medicine), Student Government Association Executive Council, University of Tennessee Health Science Center, Memphis, 1991-1992.
- Nomination for Excellence in Teaching Award (College of Graduate Health Sciences), Student Government Association Executive Council, University of Tennessee Health Science Center, Memphis, 1994-1995.
- Symposium Organizer "Post-Translational control of Gene Expression," American College of Sports Medicine Annual Meeting, Denver, 1997.
- Excellence in Teaching Award (College of Medicine), Student Government Association Executive Council, University of Tennessee Health Science Center, Memphis, 1996-1997.

Nomination for Excellence in Teaching Award (College of Graduate Health Sciences), Student Government Association Executive Council, University of Tennessee Health Science Center, Memphis, 1996-1997.

Teacher of the Year Award (College of Pharmacy, First year class), 1999-2000.

Nomination for Excellence in Teaching Award (College of Medicine), Student Government Association Executive Council, University of Tennessee Health Science Center, Memphis, 1999-2000.

Nomination for Excellence in Teaching Award (College of Pharmacy), Student Government Association Executive Council, University of Tennessee Health Science Center, Memphis, 2000-2001.

Chairman-elect and Chairman, 41st and 42nd Annual Biological Transport meeting (an American Physiological Society-sponsored symposium), 2005 and 2006.

Golden Apple Award (Physiology), College of Medicine Class of 2007.

Golden Apple Award (Physiology), College of Medicine Class of 2012.

Vice-President and founding member, Tennessee Physiological Society, 2009.

President-elect, Tennessee Physiological Society, 2009.

President, Tennessee Physiological Society, 2010.

Professional Societies

American Association for the Advancement of Science American Chemical Society American Physiological Society

Teaching Experience

Medical Curriculum Foundations 1 (2011-present): 1 recitation hour (acid-base)

Medical Curriculum Foundations 3 (2012-present): 1 lecture hour (angiogenesis)

Medical Physiology (1991-2011): 5 lecture hours, 4-12 small group conference hours (co-Course Director 2007-2009, Course Director 2009-2011)

Dental Physiology (2001-present): 10 lecture hours, 2 small group conference hours Tennessee Institute for Preprofessionals (2007-present): 12 lecture hours, 2 small group conference hours (Course Director)

Tennessee Institute for Preprofessionals (2003-2006): 5 lecture hours, 2 small group conference hours

Systems Biology (2004-2007): 1.5 lecture hours

Pharmacy Physiology (1999-2004): 10 lecture hours, 2 small group conference hours Cell Biology (1991-1999): 10 lecture hours (Physiology section Course Director) Advanced Physiology (1993, 1997, 2001, 2003): 1 semester, 3 hours per week Human Physiology Laboratory (1986): 1 quarter, 4 lecture and lab hours per week Overall score of 3.5 (out of 4) in CourseEval as lecturer for Dental Physiology (Physiology 101)

Overall score of 4.92 (out of 5) for effectiveness as a lecturer in survey conducted by College of Medicine

Visiting Professorships and Invited Lectures

Invited speaker, National Aeronautics and Space Administration, Ames Research Center, Moffet Field, November, 1988

Invited speaker, Department of Kinesiology, University of Illinois, Chicago, May 1989.

- Invited speaker, International Society for Myochemistry Third General Congress, Nice (France), October 1989.
- Invited speaker, American College of Sports Medicine Annual Meeting, Salt Lake City, May 1990.
- Invited speaker, Sigma Xi Graduate Student Forum, November 1993.
- Invited Speaker, Department of Pharmacology, University of Tennessee, Memphis, 25 May, 1994.
- Invited speaker, American College of Sports Medicine Annual Meeting, Indianapolis, June 1994.
- Invited speaker, Gordon Research Conference "Gravitational Effects on Living Systems," Colby-Sawyer College, New London, NH, July 18-22, 1994.
- Invited speaker, International Society for the Biochemistry of Exercise, Aberdeen, Scotland, July 21-26 1994.
- Invited speaker, Hypertension Research Day, University of Tennessee, Memphis, November 9, 1994.
- Invited speaker, Department of Physiology, University of Illinois, Chicago, March 14, 1995.
- Visiting Lecturer, University of Jyväsklä, Jyväsklä, Finland, 6-10 November 1995.
- Invited speaker (declined), 17th Annual International Gravitational Physiology Meeting, Warsaw, Poland, 14-19 April 1996.
- Invited speaker, XVIII Annual Meeting of the International Society of Heart Research, Chicago, IL, 9-13 June 1996.
- Invited speaker, American Physiological Society Intersociety Meeting, Vancouver, B.C., 16-19 October 1996.
- Invited speaker, ITEC-MECCA Conference, "Making Research Tools Available as Teaching Tools in Molecular Biology," Memphis, 10 June 1998.
- Invited speaker, Third International Congress of Pathophysiology, Lahti, Finland, 28 June- 3 July, 1998.
- Invited Speaker, High School Research Seminar, American Heart Association, 19 February 2000.
- Invited Speaker, Department of Pharmacology, University of Tennessee, Memphis, 15 March 2000.
- Invited Speaker, Interhospital Rounds in Endocrinology, University of Tennessee, Memphis, 1 March 2001.
- Visiting Lecturer, Department of Human Movement Sciences, University of Memphis, April, 2001
- Invited Speaker, High School Research Seminar, Am. Heart Association, February 2002.
- Invited Speaker, Board of Directors, Am. Heart Association (Memphis), November 2002.
- Invited Speaker, High School Research Seminar, Am. Heart Association, February 2003.
- Invited Speaker, Rotary Club, Jackson, TN, March 6, 2003.
- Invited Speaker, "Frontiers in Life Science: From DNA to Organism," Marshall University, March 29, 2004.
- Invited Speaker, Symposium on conversion of physical loading to functional adaptation in muscle, Royal Danish Academy of Science, Copenhagen, August 20, 2004.
- Invited Speaker, HigherEd Web Development Conference 2006: Collective Intelligence, Rochester, NY, October 24, 2006.
- Invited Speaker, University of Central Florida College of Medicine, Orlando, August 21, 2007.

Editorial Duties and Manuscript Review

Editorial Board of the American Journal of Physiology: Regulatory and Integrative Physiology (American Physiological Association)

Acta Physiologica Scandinavica

American Journal of Physiology: Cell Physiology

American Journal of Physiology: Endocrinology and Metabolism

American Journal of Physiology: Heart and Circulatory American Journal of Physiology: Regulatory and Integrative

American Physiological Society Curriculum and Teaching Resource

BioTechniques

Biochimica et Biophysica Acta

Canadian Journal of Applied Physiology

Cellular Physiology and Biochemistry

FASEB Journal

Handbook of Physiology (American Physiological Association)

Hypertension

Journal of Applied Physiology (American Physiological Association)

Journal of Biological Chemistry

Journal of Cellular Physiology

Journal of Gravitational Physiology

Medicine and Science in Sports and Exercise

Physiological Reviews (American Physiological Association)

Proceedings of the Society for Experimental Biology and Medicine

Grant review

National Institutes of Health

National Science Foundation

American Cancer Society

American Heart Association, Tennessee Affiliate

American Heart Association, Southeastern Consortium

Veteran's Administration

Israel Science Foundation

National Sciences and Engineering Research Council of Canada

Fondazione Mariani Neurologia Infantile, Milan, Italy

University Service

SACS Accreditation Steering Committee (Feb 2012 – present)

Institutional Effectiveness Committee (Feb 2012 – present)

Basic Science Curriculum Revision Committee, College of Medicine (Sept 2008 – present)

Curriculum Revision Task Force, College of Medicine (August 2008 – present)

Associate Dean, College of Graduate Health Sciences (May 2007 – present)

Executive Director, Molecular Resource Center (July 2007 – present)

Molecular Resource Center Internal Advisory Group (2004 – present)

Curriculum Committee, College of Graduate Health Sciences (June 1995 - present)

Hypertension Research Day Organizing Committee (2003 – present)

Chairman, Chief Information Officer Advisory Committee (July 2009 – June 2010)

Chairman, Curriculum Committee, College of Graduate Health Sciences (May 2005 – August 2007)

Chairman, Information Technology Committee, University of Tennessee Health Science Center (Sept 2004 – July 2006)

Chairman, Chief Information Officer Search Committee, University of Tennessee Health Science Center (June 2005 – February 2006)

Chairman, Chief Information Officer Advisory Committee (December 2006 – July 2007)

Chief Information Officer Advisory Committee (December 2006 – June 2008)

Animal Care and Use Committee (March 2003 – January 2008)

Chairman, Equipment Committee, Department of Physiology (Oct 2001 – Oct 2007)

Faculty Senate (June 1996 – July 2006)

University of Tennessee Board of Trustees, Student Affairs Committee (July 1999 – June 2000)

Faculty Senate Research Committee (June 1996 – June 2004)

Recombinant DNA Committee (October 1990 - 2002)

Generalist and Curriculum Reform Task Force, College of Medicine (1992 - 1994)

Faculty Search Committee, Department of Physiology and Biophysics

Graduate Training Committee, Department of Physiology and Biophysics

Designed, wrote, and implemented software and database for the submission and review of animal care and use protocols (IACUC)

Designed, wrote, and implemented software and database for the submission and review of new course proposals, and publication of course catalog (College of Graduate Health Sciences)

Designed, wrote, and implemented software and database for the credentialed faculty, student faculty committees, and student progress (College of Graduate Health Sciences)

Designed, wrote, and implemented content management software for the Faculty Senate and Chancellor's office to allow rapid dissemination of information through the Faculty Senate web page

Students Trained

Post-Doctoral advisor:

Dr. Aidar R. Gosmanov, 6/00-7/04.

Dr. Julie A. Johnson (sabbatical), 1/98-6/98

Doctoral advisor:

Dr. Jiwei Yang, 7/91 - 7/94 (post-doc at University of Pittsburgh, Stanford)

Dr. Vandana Menon, 7/93 - 1/96 (MPH at Harvard University 9/96)

Dr. Jennifer Wong, 7/96 – 4/00 (post-doc at NIH)

Graduate Advisory Committees:

Doctoral Advisory Committee, Pauline Hsu, Dept. of Physiology, 9/90 - 5/94

Doctoral Advisory Committee, Edgar Fincher, Dept. of Physiology, 9/90 - 8/94

Masters Advisory Committee, Dona Kambayanda, Dept. of Biomed. Eng., 5/93 - 10/94

Doctoral Advisory Committee, Tracy Adair-Kirk, Dept. of Microbiol., 2/93 - 4/99

Masters Advisory Committee, Peter Davis, Dept. of Biomed. Eng., 5/93 - 12/94

Doctoral Advisory Committee, Dennis Rice, Dept. of Neuroanatomy, 12/93 - 10/96

Doctoral Advisory Committee, Ali Banan, Department of Physiology, 12/93 - 10/95

Doctoral Advisory Committee, Bill Lester, Department of Physiology, 2/95 - 8/97

Doctoral Advisory Committee, Jianyi Zhang, Dept. of Physiology, 4/95 - 10/98

Doctoral Advisory Committee, Nick Ragsdale, Dept. of Physiology, 10/95 – 12/99

Masters Advisory Committee, Vivek Gupta, Dept. of Biomed. Eng., 10/95-12/98

Doctoral Advisory Committee, Glen Pyle, Department of Physiology 10/97-11/99

Masters Advisory Committee, Yifan Zhang, Dept, of Physiology 10/98-10/01

Doctoral Advisory Committee, Yi Lin, Dept. of Physiology 10/98-3/03

Doctoral Advisory Committee, Brian Schilling, U. of Memphis 6/04

Doctoral Advisory Committee, Bradford Blunt, Dept. of Physiology 3/03-4/05

Doctoral Advisory Committee, Chunying Li Blunt, Dept. of Physiology 3/03-4/05

Doctoral Advisory Committee, Yi Zhang, Dept. of Pharmacology 3/04-7/05

Masters Advisory Committee, Andy Galpin, U. of Memphis 4/07-5/08

Doctoral Advisory Committee, Kevin Marrs, Dept. of Physiology 12/05-10/07

Doctoral Advisory Committee, Suneet Jain, Dept. of Physiology 12/05-present

Doctoral Advisory Committee, Himabindu Penmatsa, Dept. of Physiology 12/07present

Doctoral Advisory Committee, Veronica Garcia-Conoley, Dept. of Physiology 10/07-present

Graduate student research rotations:

Dr. Jiwei Yang, 9/90-1/91

Shiwei Tong, 1/91-4/91

Xiao-hui Chen, 9/91-12/91, 6/92-8/92

Bill Lester, 1/93-5/93

Dr. Vandana Menon, 6/93-8/93

Barbara Tabor, 8/94-12/94

Jennifer Wong, 6/96-8/96

Summer research interns (Minority High School Research Apprentice Program):

Maury Cox, 1991 (sophomore)

Summer research interns:

Santita Slaughter, 1992-1994

Otis Anderson, 1995, 1996, 1997

Nekkia Sanders, 1996

Brad Langston, 1998

Jamie Johnson, 2000

Richard Brown, 2001

Nicholas Nordtvedt, 2001

Summer research interns (Medical Student Research Fellowships):

Shilpa Patel, 1992 (M-2)

Dexter Woods, 1993 (M-2)

David Brandon Williams, 1997 (M-2)

Ben Powell, 2000 (M-2)

Terry Sanders, 2002 (M-2)

Summer research interns (Memphis Challenge and Young Memphis Scholar Programs):

Carmen Alexis Smith, 1991 (senior, matriculated to MIT)

Carmen Alexis Smith, 1992 (freshman, MIT)

Victoria Shannon, 1995 (freshman)

High School Students

Rushina Cholera, 2000-2001

Book Chapters, Conference Proceedings, and other Publications

- 1. Baldwin, K. M., D. B. Thomason, H. Phan, R. R. Roy, V. R. Edgerton. Myosin isoform distribution in mammalian skeletal muscles: effects of altered usage. in *Biochemical Aspects of Physical Exercise*, G. Benzi, L. Packer, and N. Siliprandi, eds., New York: Elsevier, 15-26, 1986.
- 2. Booth, F. W., P. Babij, D. B. Thomason, T. S. Wong, P. R. Morrison. Contractile activity and gene expression in skeletal muscle. in *World Symposium on Doping in Sport*, P. Bellotti, G. Benzi, A. Lundqvist, eds., Rome: FIDAL Centro Studi & Ricerche, 39-44, 1988.
- 3. Zeman, H. D., F. A. DiBianca, D. B. Thomason, J. I. Sebes, and G. Lovhoiden. Bone mineral density in the rat using a cooled CCD. *Proc. BME Conf.*: 1992.
- 4. Booth, F. W., V. S. Oganov, E. I. Ilyina-Kakueva, K. V. Smirnov, P. A. Morrison, and D. B. Thomason. mRNA levels in skeletal and smooth muscle. Part I. *NASA Tech. Mem.* **108802:** 357-362, 1994.
- 5. Thomason, D. B., V. S. Organov, E. I. Ilyina-Kakueva, F. W. Booth, K. M. Baldwin. Altered myosin expression in rat ventricular muscle during exposure to microgravity. *NASA Tech. Mem.* **108802:** 453-459, 1994.
- Thomason, D. B., and Z. Ku. Use of 5-azido-UTP-labelled transcripts to determine RNAprotein interactions. Invited Technical Review, Research Products International Corp., Mt. Prospect, IL, 1995.
- 7. Thomason, D. B., J. Yang, Z. Ku, and V. Menon. Translational control of skeletal and cardiac muscle in response to energy status. in *Biochemistry of Exercise*, R. Maughan and S. Shirreffs, eds., Champaign: Human Kinetics Publishers, 199-204, 1996.
- 8. Thomason, D.B. and V. Menon. HSPs and protein synthesis in striated muscle. In: Exercise and Stress Response: The Role of Stress Proteins, edited by M. Locke and E.G. Noble. Boca Raton: CRC Press, 2002, 79-96.

Peer-Reviewed Publications (as of 3/1/2012, these publications had been cited 1726 times)

- 1. Gillis, J-M., D. Thomason, J. Lefevre, R. H. Kretsinger. Parvalbumins and muscle relaxation: a computer simulation study. *J. Muscle Res. Cell Motil.* **3**: 377-398, 1982.
- 2. Gillis, J-M., D. Thomason, J. Lefevre, R. H. Kretsinger. Formation of calcium-parvalbumin complex during contraction. A source of "unexplained heat"? *Adv. Exp. Med. Biol.* **170**: 573-579, 1984.
- 3. Thomason, D. B., K. M. Baldwin, R. E. Herrick. Myosin isozyme distribution in rodent hindlimb skeletal muscle. *J. Appl. Physiol.* **60**: 1923-1931, 1986.
- 4. Shaw, S. R., R. F. Zernicke, A. C. Vailas, D. DeLuna, D. B. Thomason, K. M. Baldwin. Mechanical, morphological, and biochemical adaptations of bone to hindlimb suspension and exercise. *J. Biomech.* **20**: 225-234, 1987.
- 5. Thomason, D. B., R. E. Herrick, K. M. Baldwin. Time course of soleus muscle myosin expression during hindlimb suspension and recovery. *J. Appl. Physiol.* **63**: 130-137, 1987.
- 6. Thomason, D. B., K. M. Baldwin, R. E. Herrick. Activity influences on soleus muscle myosin during rodent hindlimb suspension. *J. Appl. Physiol.* **63**: 138-144, 1987.

- 7. Booth, F. W., P. Babij, D. B. Thomason, T. S. Wong, P. R. Morrison. Adaptation of muscle gene expression to changes in contractile activity. *Adv. Myochem.* 1: 205-216, 1987.
- 8. Graham, S. C., R. R. Roy, S. P. West, D. Thomason, K. M. Baldwin. Exercise effects on the size and metabolic properties of soleus fibers in hindlimb-suspended rats. *Aviat. Space Environ. Med.* **60**: 226-234, 1989.
- 9. Thomason, D. B., R. B. Biggs, F. W. Booth. Protein metabolism and β-myosin heavy chain mRNA in unweighted soleus muscle. *Am. J. Physiol.* **257** (*Regulatory Integrative Comp. Physiol.* **26**): R300-R305, 1989.
- 10. Thomason, D. B. and F. W. Booth. Influence of performance on gene expression in skeletal muscle effects of forced inactivity. *Adv. Myochem.* **2**: 79-82, 1989.
- 11. Lai, M., D. B. Thomason, N. W. Weisbrodt. Effect of intestinal bypass on the expression of actin mRNA in ileal smooth muscle. *Am. J. Physiol.* **258** (*Regulatory Integrative Comp. Physiol.* 27), R39-R43, 1990.
- 12. Thomason, D. B. and F. W. Booth. Atrophy of the soleus muscle by hindlimb unweighting (Brief Review). *J. Appl. Physiol.* **68**, 1-12, 1990.
- 13. Thomason, D. B. and F. W. Booth. Stable incorporation of a bacterial gene into adult rat skeletal muscle *in vivo*. *Am. J. Physiol.* **258** (*Cell Physiol.* 27), 578-581, 1990.
- 14. D'Aunno, D.S., D. B. Thomason, F. W. Booth. Centrifugal intensity and duration as countermeasures to soleus muscle atrophy. *J. Appl. Physiol.* **69**: 1387-1389, 1990.
- 15. Booth, F. W., and D. B. Thomason. Molecular and cellular adaptation of muscle in response to exercise: perspectives of various models. *Physiol. Rev.* **71**: 541-585, 1991.
- D'Aunno, D. S., R. R. Robinson, G. S. Smith, D. B. Thomason, and F. W. Booth. Intermittent acceleration as a countermeasure to soleus muscle atrophy. *J. Appl. Physiol.* 72: 428-433, 1992.
- 17. Thomason, D. B., P. R. Morrison, V. W. Oganov, E. Ilyina-Kakueva, F. W. Booth, and K. M. Baldwin. Altered actin and myosin expression in muscle during exposure to microgravity. *J. Appl. Physiol.* **73**: 90S-93S, 1992.
- 18. Yang, J., and D. B. Thomason. An easily synthesized, photolyzable luciferase substrate for *in vivo* luciferase activity measurement. *BioTechniques* **15**: 848-850, 1993.
- 19. Zeman, H. D., F. A. DiBianca, D. B. Thomason, J. I. Sebes, G. Lovhoiden, D-Z. Liao, and D. Kombayanda. High accuracy X-ray imaging: screen, lens, and CCD. *Proc.SPIE* **1896**: 225-235, 1993.
- 20. Ku, Z., and D. B. Thomason. Soleus muscle nascent polypeptide chain elongation slows protein synthesis rate during non-weightbearing. *Am. J. Physiol.* (*Cell Physiol.*) **267**: C115-126, 1994.
- 21. Thomason, D. B. Appendix: Models of nascent polypeptide elongation, initiation, and termination for the control of soleus muscle protein synthesis during non-weightbearing. *Am. J. Physiol.* (*Cell Physiol.*) **267**: C123-125, 1994.
- 22. Jordan, L. M., F. A. DiBianca, J. I. Sebes, D. B. Thomason, H. D. Zeman, P. Davis, D. Kombayanda, G. Li, and G. Lovhoiden. Detection of demineralization in rat legs using multiple angle X-ray bone densitometry. *Proc. SPIE* **2132**: 234-241, 1994.
- 23. Jordan, L. M., G. Li, P. Davis, F. A. DiBianca, J. I. Sebes, D. B. Thomason, H. D. Zeman, and G. Lovhoiden. Improved image-processing techniques for multiple-angle x-ray bone densitometry. *Proc. SPIE* **2434**: 530-539, 1995.

- 24. Ku, Z., J. Yang, V. Menon, and D. B. Thomason. Decreased polysomal HSP70 may slow nascent polypeptide elongation during skeletal muscle atrophy. *Am. J. Physiol.* (*Cell Physiol.*) **268**: C1369-C1374, 1995.
- 25. Menon, V., J. Yang, Z. Ku, and D. B. Thomason. Decrease in heart peptide initiation during head-down tilt may be modulated by HSP70. *Am. J. Physiol.* (*Cell Physiol.*) **268**: C1375-C1380, 1995.
- 26. Menon, V. and D. B. Thomason. Head-down tilt increases cardiac muscle eIF-2α phosphorylation. *Am. J. Physiol.* (*Cell Physiol.*) **269**: C802-C804, 1995.
- 27. Dunlap, A., D. B. Thomason, V. Menon and P. A. Hofmann. Decreased Ca²⁺ sensitivity of isometric tension in skinned cardiac myocytes from tail-suspended rats. *J. Appl. Physiol.* **80**: 1612-1617, 1996.
- 28. Thomason, D. B., O. Anderson, V. Menon. Fractal analysis of cardiac muscle cytoskeletal rearrangement during volume-loading. *J. Appl. Physiol.* **81**: 1522-1527, 1996.
- 29. Goldspink, P. H., D. B. Thomason, B. Russell. Beating affects the post-transcriptional regulation of α-myosin mRNA in cardiac cultures. *Am. J. Physiol.* (*Heart*) 271: H2584-2590, 1996.
- 30. Thomason, D. B. Translational control of gene expression in muscle. *Exercise Sports Sci. Rev.* **26**: 165-190, 1998.
- 31. Lima, J.J., D.B. Thomason, M.H.N. Mohamed, L.V. Eberle, T.H. Self, J.A. Johnson. Impact of genetic polymorphisms of the β₂-adrenergic receptor on albuterol bronchodilator pharmacodynamics. *Clin. Pharmacol. Ther.* **65**: 519-525, 1999.
- 32. Wong, J., L. Fu, E.G. Schneider, and D.B. Thomason. Molecular and functional evidence for Na-K-2Cl cotransporter expression in rat skeletal muscle. *Am. J. Physiol.* **277** (*Regulatory Integrative Comp. Physiol 46*): R154-R161, 1999.
- 33. Fu, L., J. Wong, E.G. Schneider, and D B. Thomason. Unique 5'-end of a Na-K-2Cl cotransporter-like mRNA expressed in rat skeletal muscle. *DNA Sequence* **10**: 127-132, 1999.
- 34. Kuykindoll, R.J., H. Nishimura, D.B. Thomason, and S.K. Nishimoto. Osteopontin expression in spontaneously developed neointima in fowl (*Gallus gallus*). *J. Exp. Biol.* **203**: 273-282, 2000.
- 35. Wong, J.A., A.R. Gosmanov, E.G. Schneider, and D.B. Thomason. Insulin-independent, MAPK-dependent stimulation of NKCC activity in skeletal muscle. *Am. J. Physiol. Regulatory Integrative Comp. Physiol.* **281**: R561-71, 2001.
- 36. Gosmanov, A.R., and D.B. Thomason. Insulin and isoproterenol differentially regulate MAP kinase-dependent Na⁺-K⁺-2Cl⁻ cotransporter activity in skeletal muscle. *Diabetes* **51**: 615-623, 2002.
- 37. Chockalingam, P.Y., R Cholera, S.A. Oak, Y. Zheng, H.W. Jarrett, and D.B. Thomason. Dystrophin-glycoprotein complex and Ras and Rho GTPases signaling are altered in muscle atrophy. *Am. J. Physiol. Cell Physiol.* **283**: C500-C511, 2002.
- 38. Gosmanov, A.R., N.C. Nordtvedt, R. Brown, and D.B. Thomason. Exercise effects on muscle β-adrenergic signaling for MAPK-dependent NKCC activity are rapid and persistent. *J. Appl. Physiol.* **93**: 1457-1465, 2002.

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