## I. PERSONAL


Name: **Raymond E. Shepherd, Ph.D., FACSM**

Rank: Professor Emeritus, Physiology

Affiliation: Louisiana State University Health Sciences Center
Department of Physiology
1901 Perdido Street
New Orleans, LA 70112

Phone: 504-568-6172
FAX: 504-568-6158
email: rsheph@lsuhsc.edu


Birthplace: Joliet, Illinois

Religion: Protestant (Episcopalian)


Home Address: 35 Pine Street
Covington, LA 70433

Phone: 985-892-0739 home
Phone: 985-237-5377 cell
Email: shepdog2@bellsouth.net


Education:

| | | |
|---|---|---|
| | 1947-1954 | Wilson Grade School, District 88A, Lockport, IL |
| | 1954-1958 | Lockport Township High School, Lockport IL |
| BA | 1958-1964 | Bethel University, St. Paul, MN<br>Teaching Certification 1964 |
| BS | 1966-1967 | University of Montana, Missoula, MN |
| MS | 1967-1968 | University of Montana, Missoula, MN |
| PhD | 1970-1974 | Washington State University, Pullman, WA |
| Postdoc | 1974-1978 | Brown University, Providence, RI |

Awards/Honors: Men and Women in Science 1972
Pfizer Award for excellence in Research, Education, Patient Care and Community Outreach 2003

## II. EDUCATION

1947-1954 **WILSON GRADE SCHOOL** (Lockport, Illinois)

1954-1958 **LOCKPORT HIGH SCHOOL** (Lockport, Illinois)

1958-1964 **BETHEL UNIVERSITY** (St. Paul, Minnesota)

B.S. 1962 Biological Science
1964 Teacher Education Certification

1966-1968 **UNIVERSITY OF MONTANA** (Missoula, Montana)

B.A. 1967 Physical Education
M.S. 1968 Major: Exercise Science
Minor: Physiology
Major Professor: Brian J. Sharkey, PhD

1970-1974 **WASHINGTON STATE UNIVERSITY**
(Pullman,Washington)

Ph.D. 1974 Major: Exercise Science
Minor: Zoophysiology
Biochemistry

Major Professor: Philip D. Gollnick, PhD - Deceased

1974-1978 **BROWN UNIVERSITY** (Providence, Rhode Island)

NIH-NIAMDD Postdoctoral Fellow 1974-1976
PROJECT: **MODE OF INSULIN ACTION ON FAT CELLS**
Department of Biology and Medicine
(Postdoctoral Advisor: Dr. John N. Fain)

Assistant Professor 1976-1978
Section of Physiological Chemistry

## III. ACADEMIC, PROFESSIONAL, AND RESEARCH APPOINTMENTS

1964-1966 **GRACEVILLE HIGH SCHOOL** (Graceville, Minnesota)
Teaching Responsibilities: Biological and Health Sciences
Head Football and Wrestling Coach

1966-1968 **UNIVERSITY OF MONTANA** (Missoula, Montana)
Research Assistant, Exercise Physiology Laboratories
Advisor: Dr. Brian J. Sharkey, Head of Exercise Physiology
Research: Metabolic Responses to Recreational Activity
Metabolic Responses to Stress of Firefighting

1968-1970 **DAKOTA STATE UNIVERSITY** (Madison, South Dakota)
**Instructor**, Departments of Biology and Physical Education

**Teaching Responsibilities:** Human Anatomy and Physiology
Exercise Physiology
Personal Health and Hygiene
Athletic Trainer; Wrestling Coach

1970-1974 **WASHINGTON STATE UNIVERSITY** (Pullman, Washington)
Research Assistant: Exercise Physiology Laboratories
Teaching Assistant: Exercise Science, Physical Education
Advisor: Dr. Philip D. Gollnick, Head of Exercise Physiology
Research: Glycogen Depletion during Exercise
Hormonal Regulation of Lipolysis
Energy Metabolism and Muscle Hypertrophy

1974-1978 **BROWN UNIVERSITY** (Providence, Rhode Island)
**NIH NIAMDD Postdoctoral Fellow**
Supervisor: Dr. John N. Fain, Chairman, Physiological Chemistry

**Instructor** (Research) 1976-1977
Division of Biology and Medicine
**Assistant Professor** 1977-1978
Section of Physiological Chemistry

Research: Lipids as Regulators of Lipolysis and Cyclic AMP
Hormonal Regulation of Metabolism in Adipocytes
Bilirubin and Fat Cell Metabolism
Regulation of Lipolysis and Metabolism in Obesity

1978-1980 **THE UNIVERSITY OF TOLEDO** (Toledo, Ohio)
**Associate Professor:** Department of Exercise Science
Dr. Charles W. Armstrong, Chairman

**Teaching Responsibilities:**
Undergraduate Exercise Physiology
Graduate Exercise Physiology
Nursing Human Anatomy and Physiology

**Committee Responsibilities**
Faculty Research and Fellowships 1979-1980
Board of Trustees Awards and Fellowships 1978-1980
Department of Exercise Science Research Awards 1978-1980
Institutional Animal Care and Use Committee 1978-1980

**Graduate School Responsibilities: Member of Graduate Faculty**
Graduate Students:

**Sandra Koralewski, M.S.** 1980.
Thesis: Aerobic Capacity of Racquetball Players of Different Levels of Ability.

**Michael D. Bah, Ph.D.** 1980.
Dissertation: Somatomedins in Cardiac and Skeletal Muscle Hypertrophy in Sedentary and Trained Rats.
Assistant Professor, Tulane University, 1980-1982
Medical Missionary to Abu Dhabi, UAE 1982-1998
Hospital Administrator, Christian Medical Hospital, Abu Dhabi, UAE 1984-1998

**Kenji A. Kenno, Ph.D.** 1981.
Dissertation: Characterization and Localization of Adenosine 3',5'-cyclic AMP Phosphodiesterase in Adipose Tissue from Trained and Sedentary Rats.
Postdoctoral Fellow - Department of Pharmacology, University of Calgary. 1981-1984
Assistant Professor, University of Windsor, Ontairo, Canada 1984-1988
Associate Professor, University of Windsor, Ontairo, Canada 1988-

**J. Larry Durstine, Ph.D.** 1981.
Dissertation: Serum Lipoproteins of the Zucker Rat in Response to 9 and 18 weeks Endurance Running
Assistant Professor, U. of South Carolina 1981-1987
Associate Professor, U. of South Carolina 1987-1996
Professor, U. Of South Carolina 1996-
Head, Cardiovascular Rehabilitation Programs 1982-
Chair, Department of Exercise Science 1998-

**Research Projects**

Regulation of Lipolysis and cyclic AMP accumulation in isolated fat cells from exercise trained rats.
Attenuation of hypertension by exercise training.
Regulation of Adipocyte Lipid Metabolism in Zucker Rats.

1979-1980 **MEDICAL COLLEGE OF OHIO** (Toledo, Ohio)
**Adjunct Associate Professor**
Supervisor: Dr. James N. Ross Jr., Director of Medical Physiology

**Teaching Responsibilities:**
Medical Physiology course

1980- **LOUISIANA STATE UNIVERSITY MEDICAL CENTER** (New Orleans)

**Assistant Professor of Physiology, (1980 - 1984)**
**Associate Professor of Physiology, tenure (1984 - 2001)**
**Professor of Physiology, tenure (2001 - present)**

Supervisor: John J. Spitzer, MD, Head Department of Physiology (1980 – 2003)
Robert Ashman Professor and Boyd Professor

Supervisor: Kathleen H. McDonough, PhD, Interim Head Department of Physiology (2003-2004)

Supervisor: William M. Chilian, PhD, Professor and Head (2004 – 2006)
Kenneth A. Ardoin/Pfizer Superchair of Basic Cardiovascular Research

Supervisor: Michael G. Levitzky, PhD, Interim Head Department of Physiology (2006-2008)

Supervisor: Patricia E. Molina, M.D., Ph.D., Professor and Head (2008 – present)
Richard Ashman Professor and Head Department of Physiology

## Teaching Responsibilities

**Med 211 – Medical Physiology 211 (1980-1996)**
Autonomic Nervous System, Special Regions of Circulation, Temperature Regulation, Exercise Physiology, Skeletal Muscle, Smooth Muscle, Cardiac Muscle

**Med 211 – Laboratory Responsibility in Medical Physiology 211 (1980-1996)**
Surgical Techniques, Skeletal Muscle, Smooth Muscle, Renal Physiology, G.I. Physiology, Energy Metabolism, Cardio-Respiratory Physiology, Circulatory Physiology, Shock

**Dent 1115 – Dental Physiology (1988-1996)**
Lecture: Cardiovascular Physiology
Lab: Skeletal Muscle; Cardiorespiratory Physiology; Energy Metabolism; cardiovascular Physiology;

**DENT 1115 – Dental Physiology (2011 – 2016)**
**Course Director, Spring Semester (2011 – 2016)**
Lecture: Homeostatic Regulatory Mechanisms; Autonomic Nervous System; Muscle Physiology; Endocrine Physiology
Lab: Skeletal Muscle; Respiratory Physiology; Energy Metabolism; Cardiovascular Physiology;

**DENT 1115 – Dental Physiology (2017 – )**
**Gratis Lecturer**
Lecture: Endocrine Physiology

**HLSC BSN2410 – Human Physiology for Nurses (1996 – 2016)**
**Course Director, Fall Semester**
**Course Director, Spring Semester**
Lecture: Homeostasis, CV Physiology, GI Physiology, Endocrine Physiology, Signal Transduction, Muscle Physiology, Exercise Physiology
Lab: Homeostasis, Neuromuscular, Cardiovascular, ECG, Renal, GI, Diabetes, Exercise, Hypertension

**HLSC BSN3410 – Pathophysiology for Nurses (2001 – 2011)**
**Course Director, Fall Semester**
**Course Director, Spring Semester**
Lecture: Cellular Disorders, Homeostasis and Signal Transduction

**HLSC CARE3410 – Pathophysiology for CARE (2004 – 2006)**
**Course Director, Fall Semester**
**Course Director, Spring Semester**
Lecture: Cellular Disorders, Homeostasis, Signal Transduction

**HLSC 6410 – Pathophysiology for Graduate Nursing**
**Co-Course Director, Fall Semester (2004-2005)**
Lecture: Stress Disorders; Neuromuscular Disorders

**Phys 3123 – Human Physiology for CardioPulmonary Sciences**
**Course Director, Summer Semester (1996 – 2006)**
Lecture: Homeostasis; Receptor signaling; Somato-Sensory Physiology, Endocrine Physiology, Muscle Physiology, GI Physiology, Renal Physiology, Exercise Physiology
Lab: Skeletal Muscle Physiology, ECG, Respiratory Function

**CPS 3220 – Human Physiology for CardioPulmonary Sciences**
**Instructor, Summer Semester (2007-2009)**
Lecture: Skeletal Muscle, Smooth Muscle and Cardiac Muscle Physiology

**Phys 6523 – Human Physiology for Physical Therapy**
**Course Director, Summer Semester (1996 – 2005)**
Lecture: Homeostasis, Receptor signaling, Somato-Sensory Physiology, Endocrine Physiology, Muscle Physiology, GI Physiology, Renal Physiology, Exercise Physiology
Lab: Skeletal Muscle Physiology, ECG, Respiratory Function

**PHYSIO 6523 – Human Physiology for Physician Assistant Program**
**Lecturer, Renal Physiology (Spring 2013)**

**OCCT 6523 – Human Physiology for Occupational Therapy**
**Course Director, Summer Semester (1996 – 2003)**
**Course Director, Spring Semester (2003 – 2016)**
Lecture: Homeostasis, Receptor signaling, Somato-Sensory Physiology, Endocrine Physiology, Muscle Physiology, GI Physiology, Renal Physiology, Exercise Physiology
Lab: Skeletal Muscle Physiology, ECG, PFT, Temperature Regulation Diabetes, Neurophysiology.

**PHYSIO 279, 280, 281 – Graduate Student Journal Club**
**Course Director, Fall Semester (2008 – 2011)**
**Course Director, Spring Semester (2009 – 2011)**
**Course Director, Summer Semester (2009 – 2011)**
Review papers of seminar speakers prior to seminar;
Review and present papers of Classic Physiology papers.

**Teaching Involvement In Other Courses:**

**Endocrinology 216**
**Cardiovascular Physiology 212**
**Methods of Physiology 208**
**Exercise Physiology 298-299**
**Exercise and Rehabilitation to Physical Medicine Residents**
**Muscle Physiology to Pediatric Residents**
**Nutrition During Exercise and Training**
**Interdisciplinary Biology for Graduate Students**
**Renal Physiology in AHS_PA 6523 to Physician Assistants**

**Graduate School Responsibilities**

Member of Graduate Faculty
Member – Graduate Advisory Council (1988 – 2004)
Graduate Student Committee member for:

| | | |
|---|---|---|
| Mark Chapleau, Ph.D. | Physiology | 1986 |
| Jan Johnson, Ph.D. | Physiology | 1986 |
| Wayne Barbee, Ph.D. | Physiology | 1986 |
| Lani W. Smith, Ph.D. | Physiology | 1986 |
| Paul M. Werchan, Ph.D. | Physiology | 1986 |
| Roy A. Borchardt, Ph.D. | Physiology | 1986 |
| Jan Duttarer, Ph.D. | Physiology | 1988 |
| Ann Petropolous, Ph.D. | Pharmacology | 1989 |
| Mark P. Kelly, M.S. | Physiology | 1992 |
| Partick Campbell, Ph.D | Physiology | 1993 |
| Tracey Legros, Ph.D. | Physiology | 1993 |
| Todd Murry, Ph.D. | Physiology | 1994 |
| Larry Crouch, Ph.D. | Physiology | 1995 |
| Douglas McConnell, M.S. | Physiology | 1997 |
| Josie Edavettal, Ph.D. | Physiology | 1997 |
| Albert Swafford, Ph.D. | Physiology | 2004 |
| Amy Courville, M.S. | Physiology | 2005 |
| Nicole LeCapitane, Ph.D. | Physiology | 2006 |
| Robert Siggins, Ph.D. | Physiology | 2006 |

Committee Chairman:
Luis Raul Ramirez, Ph.D. Candidate 1988, Physiology (withdrew)

**Mark Patrick Kelly, M.S. (Physiology) 1992**
Thesis: Exercise-induced alterations in beta-adrenergic Responsiveness in alveolar macrophages of rats.
Personal Fitness Instructor and Health Consultant, New Orleans, Louisiana 1992-

## Departmental Responsibilities

Roheim Award: Graduate Research Day
Summer Fellowship Program Involvement

## Research Projects

Adrenergic Responsiveness in Adipocytes from SHR.
Adrenergic Responsiveness in SHR myocytes.
Regulation of lipolysis in spontaneously hypertensive rats.
Cardiac dysfunction in endotoxemia, sepsis, and burn.
Adrenergic responsiveness in leukocytes from septic patients.
Beta-adrenergic receptor adenylate cyclase coupling in
exercise-training and disease states
Exercise-Induced Immunosuppression
Physical Activity and Shock-Induced Myocardial Dysfunction
Exercise Training and Tumor Growth

My research emphasizes Physiological and Biochemical Adaptation to Exercise, Hormonal Regulation of Metabolism, Cardiac Function during Endotoxemia, and the Immunosuppressive actions of Exercise. One of my current research probes signal transduction mechanisms of endotoxin-induced cardiac dysfunction, and how it may be alleviated by physical activity. Cardiac function is decreased by endotoxemia, delayed in onset by physical training, but is attenuated by acute exercise. A possible mechanism may involve the cytokine TNF$\alpha$, a macrophage product released in response to endotoxin challenge. Exercise prior to endotoxin injection decreases the TNF response to endotoxin challenge, a cytokine which impairs cardiac function.

## Committee Responsibilities

Animal Care Committee 1981-1985
LSUMC Committee for Animal Care Education 1986-1992
LSUMC Animal Care Advisory Committee 1985-1996
Medical Student Summer Research Fellowships 1986-2004
Departmental Seminar Coordinator 1985-1999
Undergraduate Student Research Coordinator 1992-1998
LCME Institutional Self Study Committee on Resources 1993
Graduate Advisory Council 1994-2004
SACS Accreditation, Library 1994
SACS Accreditation, Course review (chair) 1999
Curriculum Committee Working Group on Evaluation 1997-2000
Committee on Computer Assisted Learning 1997-2000
LCME Accreditation Review, Graduate School 2000
Physiology Department Graduate Student advisory/mentoring committee 2010-2016
Physiology Department Junior Faculty advisory/mentoring committee 2010-2016

**Summer Research Director for Students**

Summer 1983 - **Maureen Brannon,** Medical Student. NIH-supported project,"Adrenergic Responsiveness in Adipocytes from $T_3$-treated SHR."

Summer 1985 - **Peter M.C. DeBlieux,** Medical Student. NIH-supported project "Protection of the heart from Endotoxin Shock by Exercise training."

Summer 1986 - **Peter M.C. DeBlieux,** Medical Student. AHA supported Project "Adrenergic Responsiveness in Myocytes from trained Rats during endotoxemia."

Summer 1986 - **Jimmy Ponder,** Medical Student. AHA support for "Time Course of Cardiac Dysfunction in trained rats during endotoxemia."

Summer 1986 - **Steven Pflug,** Medical Student. AHA support for "Effect of Exercise and Training on Cardiac performance during endotoxemia."

Fall 1986 - **Peter M.C. DeBlieux,** Medical Student. ADA support "Exercise Training in the Prevention of Type I Diabetic Cardiomyopathy."

Summer 1987 - **Eugene Limar, Jr.,** Minority Student, University of New Orleans. Minority Program supported research project, "Fat Cell Metabolism in Trained Rats During Endotoxemia."

Summer 1987 - **Kimiyo Harris,** Minority Student, Xavier University. Minority Program Research support, "The Role of Shock in Fat Cell Metabolism."

Summer 1987 - **Daniel J. Gallagher,** Medical Student. AHA support for "Effects of Anabolic Steroids on Cardiac Function after Exercise Training."

Summer 1987- **Patrick Gillespie,** Medical Student. LSUMC-NO Student Summer Research Fellowship support for "Adrenergic Responsiveness in Leukocytes from Endotoxemic Rats."

School Year 1987-1988. **Kimiyo Harris,** Minority Student, Xavier University. NIH support "Adrenergic Responsiveness in Hearts During Endotoxemia."

Summer 1988 - **Peter M.C. DeBlieux,** Medical Student. ADA support "The role of Exercise Training in Prevention of Type I Diabetic Cardiomyopathy."

Summer 1988 - **Kimiyo Harris,** minority student, Xavier University. NIH Supported project: "Adrenergic Responsiveness in Heart from Trained Endotoxemic Rats."

School Year 1988-1989: **Kimiyo Harris,** minority student, Xavier University. NIH support for "Adrenergic Responsiveness in Myocardium from Exercise-Trained Endotoxemic Rats."

Summer 1989 - **Kimiyo Harris**, minority student, Xavier University. NIH Supported project: "Adrenergic Responsiveness in Heart from Trained Endotoxemic Rats."

Summer 1989- **Cyril Morello**, 3rd year student, Univ. Southern Cal. NIH support for "Catecholamine Responses in Trained Endotoxemic Rats."

Summer 1989 - **Michael Rihner**, Medical Student. LSUMC Student Research Fellowship "Lethality in Sedentary and Trained Endotoxemic Rats."

School 1989-1990 - **Kimiyo Harris**, minority student, Xavier University. NIH Support for "Adrenergic Responsiveness in Heart from trained Endotoxemic Rats."

Summer 1991 - **Christopher A. Haas,** Medical Student.LSUMC Student Summer Research Fellowship support for "Hormonal Regulation of MetabolismDuring Endotoxin Shock."

Summer 1992 - **Christopher A. Haas**, Medical Student. LSUMC Student Summer Research Fellowship support for "Exercise-induced alterations in cardiac function during endotoxemia."

School year 1991-1993. **Christopher A. Haas**, Honors Program Research Project, "Cytokine Modulation of Cardiac Performance During Endotoxemia
In Exercised Rats."

Spring 1995 - **Gerry Fernandez,** Fourth year University of New Orleans student, Howard Hughes Research Fellowship. "Hormonal Regulation of Lipolysis and Cyclic AMP Accumulation in Adipocytes from Endotoxemic Rats."

Summer 1996 - **Karl Dunbar**, LSUMC Student Summer Research Fellowship support for "Exercise Preconditions the Heart to Endotoxin."

Fall 2001 – **Brandon Thomas**, Ben Franklin High School Student Research Project “Effects of cardiopulmonary support and non-support on *Rana Pipiens’* gastrocnemius muscle fatigue recovery.”

Spring 2002 - **Brandon Thomas**, Ben Franklin High School Student Research Project “Effects of cardiopulmonary support and non-support on *Rana Pipiens’* gastrocnemius muscle fatigue recovery.” Third place, District competition, State of Louisiana.

## IV. PROFESSIONAL: PUBLICATIONS (Reviewed Papers)

1. Saubert CW, IV, RB Armstrong, **RE Shepherd**, PD Gollnick. Anaerobic enzyme adaptations to sprint training in rats. **Pfluegers Archiv**. 341:305-312, 1973.

2. Gollnick PD, RB Armstrong, WL Sembrowich, **RE Shepherd**, B Saltin. Glycogen depletion in human skeletal muscle fibers after heavy exercise. **Journal of Applied Physiology** 34:615-618,1973.

3. Gollnick PD, RB Armstrong, B Saltin, CW Saubert IV, WL Sembrowich, **RE Shepherd** Effect of training on enzyme activity and fiber composition of human skeletal muscle. **Journal of Applied Physiology** 34:107-111, 1973.

4. Gollnick PD, RB Armstrong, CW Saubert IV, WL Sembrowich, **RE Shepherd**, B Saltin Glycogen depletion patterns in human skeletal muscle fibers during prolonged work. **Pfluegers Archiv**. 344:1-12, 1973.

5. Sembrowich WL, CD Ianuzzo, CW Saubert IV, **RE Shepherd**, PD Gollnick. Substrate mobilization during prolonged exercise in 6-hydroxydopamine treated rats. **Pfluegers Archiv**. 349:57-62, 1974.

6. Armstrong RB, CW Saubert IV, WL Sembrowich, **RE Shepherd**, PD Gollnick. Substrate utilization in rat skeletal muscle fibers during running and prolonged swimming. **Pfluegers Archiv**. 352:243-256, 1974.

7. Sembrowich WL, **RE Shepherd**, PD Gollnick. Effects of Exhaustive Exercise on Heart Mitochondria from Trained and Sedentary Rats. **Med.Sci.Sport.**7:69,1975.

8. Fain JN, **RE Shepherd**. Free fatty acids as feedback regulators of adenylate cyclase and cyclic AMP in rat fat cells. **Journal Of Biological Chemistry** 250:6586-6592, 1975.

9. Malgieri JA, **RE Shepherd**, JN Fain. Lack of feedback regulation of cyclic AMP by free fatty acids in chicken fat cells. **Journal Of Biological Chemistry**. 250:6593-6598, 1975.

10. Armstrong RB, CW Saubert, WL Sembrowich, **RE Shepherd**, PD Gollnick. Glycogen depletion in rat skeletal muscle fibers during exercise. **International Conference on Adapation to Prolonged Exercise.** Ed: H Howald. 1975, 397-401.

11. Fain JN, **RE Shepherd**. Inhibition of adenosine 3':5'- cyclic monophosphate accumulation in white fat cells by short chain fatty acids, lactate, and beta-hydroxybutyrate. **Journal of Lipid Research** 17:377-385, 1976.

12. **Shepherd RE**, PD Gollnick. Oxygen consumption of rats at different exercise intensities. **Pfluegers Archiv.** 362:219-222, 1976.

13. **Shepherd RE**, WL Sembrowich, HE Green, PD Gollnick. Physical training and control

mechanisms of lipolysis in rat fat cell ghosts. **Journal of Applied Physiology** 42:884-888,1977.

14. **Shepherd RE**, CC Malbon, CJ Smith, JN Fain. Lipolysis and adenosine 3'5' monophosphate metabolism in isolated white fat cells from genetically obese-hyperglycemic mice (ob/ob). **Journal Of Biological Chemistry** 252:7243-7248, 1977.

15. Fain JN, **RE Shepherd**. Adenosine, cyclic AMP metabolism and glycogenolysis in rat liver cells. **Journal of Biological Chemistry** 252:8066-8070, 1977.

16. **Shepherd RE**, JN Fain. Inhibition of rat fat cell triglyceride lipase by sulfonylureas. **Federation Proceedings** 36:2732-2734, 1977.

17. **Shepherd RE.** Hormonal Regulation of Lipolysis. Invited paper presented to American College of Sports Medicine, National Convention, May 1978.

18. Fain JN, **RE Shepherd**. Hormonal regulation of lipolysis: role of cyclic nucleotides, adenosine and free fatty acids. **Experimental Medicine and Biology** 111:43-77, 1979.

19. Moreno FJ, **RE Shepherd**, JN Fain. NAD, nicotinamide and nicotinic acid affects cyclic AMP accumulation by fat cells. **N.S.Archiv Pharmacology** 306:179-183,1979.

20. Fain JN, **RE Shepherd**, CC Malbon, FJ Moreno. Hormonal regulation triglyceride breakdown in adipocytes. In: **The Physiology of Lipids and Lipoproteins in Health and Disease.** Ed: JN Dietschy. Bethesda: Am.Physiol.Soc. 1979. pp 213-228.

21. **Shepherd RE**, FJ Moreno, WJ Cashore, JN Fain. Bilirubin as an antilipolytic agent in isolated rat fat cells. **American Journal of Physiology** 237:E504-E508, 1979.

22. **Shepherd RE**, EG Noble, GA Klug, PD Gollnick. Lipolysis and cyclic AMP in adipocytes in response to training. **Journal of Applied Physiology** 50:143-148, 1981.

23. **Shepherd RE**, JP Rapp. Prevention of hypertension in Dahl salt-sensitive rats by exercise. In: **Salt and Hypertension.** Ed: J Iwai, New York:Igaku-Shoin 1981. pp 293-306.

24. **Shepherd RE**, ML Keuhne, KA Kenno, JL Durstine, TW Balon, JP Rapp. Attenuation of blood pressure increases in Dahl salt-sensitive rats by exercise. **Journal of Applied Physiology** 52:1608-1613,1982.

25. Claycomb WC, AH Burns, **RE Shepherd**. Culture of the terminally differentiated ventricular cardiac muscle cell. Characterization of exogenous substrate oxidation and the adenylate cyclase system.
26. **FEBS Letters** 169:261-266, 1984.

27. McDonough KH, **RE Shepherd**, JJ Spitzer. Metabolic changes in isolated myocytes following hypoxia. **Pathobiology of Cardiovascular Injury.** Ed: H.L. Stone and W.B.Weglicki.

Boston: Martinus Nijhoff Publishing, 1985. pp. 164-174.

28. **Shepherd RE,** JL Durstine, RA Davis. Lipoprotein and apolipoproteins in Zucker rats following an endurance running program. **Atherosclerosis.** 57:107-117, 1985.
29. Spitzer JJ, CH Lang, KM McDonough, AH Burns, AJ Romanosky, **RE Shepherd**. Myocardial metabolism and function in shock. **Circulatory Shock**: Basic and Clinical Implications. Ed: HE Jensen, CD Barnes. Academic Press: New York, 1985. pp. 47-74.

30. Bagby GJ, JL Johnson, BW Bennett, **RE Shepherd**. Muscle lipoprotein lipase activity in voluntarily exercising rats. **Journal of Applied Physiology**. 60:1623-1627, 1986.

31. **Shepherd RE**, MD Bah, KM Nelson. Enhanced lipolysis is not evident in adipocytes from exercise-trained SHR. **Journal of Applied Physiology** 61:1301-1308, 1986.

32. Kenno KA, JL Durstine, **RE Shepherd**. Cyclic AMP Phosphodiesterase in isolated fat cells from trained and sedentary rats. **Journal of Applied Physiology** 61:1546-1551,1986.

33. Romanosky AJ, ME Giaimo, **RE Shepherd**, AH Burns. The effect of in vivo endotoxin on myocardial function in vitro. **Circulatory Shock** 19:1-12, 1986.

34. **Shepherd RE**, KH McDonough, AH Burns. Mechanism of cardiac dysfunction in hearts from endotoxin-treated rats. **Circulatory Shock** 19:371-384, 1986.

35. **Shepherd RE**, CH Lang, BA Brumfield, NW Robie, KR DuSapin, KH McDonough. Myocardial performance and adrenergic modulation of cAMP following endotoxin administration. In: **Immunobiology and Immunopharmacology of Bacterial Endotoxins** Ed: A Szentivanyi. Plenum Publishing Corp. 1986. pp. 171-185.

36. Durstine JL, KA Kenno, **RE Shepherd**. Serum lipoproteins of the Zucker rat in response to an endurance running program. **Medicine and Science in Sport** 17:567-573, 1985.

37. **Shepherd RE**, AH Burns, PMC DeBlieux, CH Lang, KH McDonough. Heart function and metabolism in shock due to sepsis and endotoxin. **Pathophysiology of Heart Disease**. Ed: Dhalla, Singal,Beamish. Boston: Martinus Nijhoff Publishing, 1987. pp. 335-356.

38. Nelson KM, **RE Shepherd**, JA Spitzer. Beta-adrenergic receptor binding and adenylate cyclase activity in adipocytes of spontaneously hypertensive rats. **Biochemical Medicine** 37:51-60,1987.

39. **Shepherd RE**, CH Lang, KH McDonough. Myocardial adrenergic responsiveness after lethal and nonlethal doses of endotoxin. **American Journal of Physiology** 252:H410-H416, 1987.

40. Barbee RW, **RE Shepherd**, AH Burns. T3 treatment does not prevent myocardial dysfunction in chronically diabetic rats. **American Journal Of Physiology** 254:H265-H273, 1988.

41. Burns AH, WR Summer, LAR Burns, **RE Shepherd**. Inotropic interactions of dichloroacetate

with amrinone and ouabain in isolated hearts from endotoxin shocked rats. **Journal of Cardiovascular Pharmacology** 11:379-386, l988.

42. **Shepherd RE**, MD Bah. Cyclic AMP Regulation of Fuel Metabolism During Exercise: Regulation of Adipose Tissue Lipolysis During Exercise. **Medicine and Science in Sport and Exercise** 20:531-538, 1988.

43. DeBlieux PMC, RW Barbee, KH McDonough, **RE Shepherd**. Exercise training and the protection of the heart to endotoxin shock. **Journal of Applied Physiology** 66:2805-2810,1989.

44. Burns LAR, AH Burns, WR Summer, **RE Shepherd**. The Effect of Dichloroacetate on the Isolated No Flow Arrested Rat Heart. **Life Sciences.** 44:2015-2023, 1989.

45. Stephens JM, GJ Bagby, PH Pekala, **RE Shepherd**, JJ Spitzer, CH Lang. Differential Regulation of Glucose Transporter Gene Expression In Adipose Tissue Of Septic Rats. **Biochemical and Biophysical Research Communications** 183:417-422,1992.

46. Barbee RW, PMC DeBlieux, KH McDonough, **RE Shepherd**. Exercise Training Improves Cardiac Function in Diabetic Rats. **Proceedings for the Society of Experimental Biology and Medicine** 203:209-213, 1993.

47. Bagby GJ, D Sawaya, LD Crouch, **RE Shepherd**. Prior exercise suppresses the serum tumor necrosis factor- response to bacterial lipopolysaccharide. **Journal of Applied Physiology** 77:1542-1547, 1994.

48. Bagby GJ, LD Crouch, **RE Shepherd**. Exercise and Cytokines: Spontaneous and Elicited Responses. **Exercise and Immune Function.** Ed: L Hoffman-Goetz. Boca Raton: CRC Press, 1996. pp. 55-77.

49. LeGros, Tracey, Douglas McConnell, Todd Murry, Mathew Edavettal, Louise A. Racey-Burns, **Raymond E. Shepherd** and Alastair H. Burns. The Effects of 17$\alpha$-Methyltestosterone on Myocardial Function in vitro. **Med.Sci.Sport Exer.** 32:897-903, 2000.

## IV. PROFESSIONAL: PUBLICATIONS (In Preparation)

**NONE**

## IV. PROFESSIONAL: PUBLICATIONS (Abstracts)

**Shepherd RE** Regulation of Protein Kinase Activity in Isolated Cells by Oleate. **Fed. Proc.** 34:262 (abs #248), 1975.

Sembrowich WL, **RE Shepherd**, PD Gollnick. LDH Isozymes in Rat Heart Following Aortic Constriction. **Fed. Proc.** 34:448 (abs #1286), 1975.

**Shepherd RE**, JN Fain. Inhibition of Adenosine 3':5' Monophosphate Accumulation in White Fat Cells by Short Chain Fatty Acids. **Fed.Proc.**35:424(abs #1211),1976.

**Shepherd RE**, WL Sembrowich, PD Gollnick. Enzyme and Metabolite Change in Rat Skeletal Muscle Following Tenotomy of a Synergist. **Med.Sci.Sport.** 8:66, 1976.

**Shepherd RE**, JN Fain. Effect of Oleate on guany1-5'-y1 Imidodiphosphate-Stimulated Adenylate Cyclase Activity from Rat Fat Cell Ghosts. **Fed. Proc.** 36, 685(abs #2176), 1977.

**Shepherd RE.** Control of Lipolysis and Cyclic AMP Levels in Obese Hyperglycemic Mice (ob/ob). **Med. Sci. Sport.** 9:64, 1977.

**Shepherd RE**, EG Noble, GA Klug, PD Gollnick. Control Mechanisms of Lipolysis and Cyclic AMP Accumulation in Adipocytes in Response to Training. **Med. Sci. Sport.** 11:108, 1979.

**Shepherd RE,** ML Kuehune, KA Kenno, JL Durstine, JP Rapp. Normalization of Resting Blood Pressure in Hypertensive Rats by Endurance Running. **Med. Sci. Sport.** 12:123, 1980.

Durstine JL, KA Kenno, **RE Shepherd.** Lipoprotein Profiles in Exercise Trained Zucker Rats. **Med. Sci. Sport.** 13:126, 1981.

Kenno KA, JL Durstine, **RE Shepherd.** Cyclic AMP Phosphodiesterase in Fat Cells from Trained Rats. **Med. Sci. Sport.** 14:181, 1982.

Durstine JL, KA Kenno, **RE Shepherd.** Characterization of Serum Lipoproteins of the Zucker Rat in Response to an Endurance Running Program. **Med. Sci. Sport** 14:103,1982.

**Shepherd RE**, AH Burns. Metabolic Responsiveness in Hearts from Exercise Trained Rats. **Med. Sci. Sport.** 15:125, 1983.

Bagby GJ, BW Bennett, JL Johnson, JR Porter, **RE Shepherd.** Tissue Lipoprotein Lipase Activities in Sedentary and Active Rats. **Med.Sci. Sport.** 15:184, 1983.

Romanosky AJ, AH Burns, **RE Shepherd.** In Vitro Myocardial Performance Following In Vivo Administration of E. coli Endotoxin. **Fed.Proc.** 42:1849,1983.

**Shepherd RE.** Lipolysis and Cyclic AMP Accumulation in Adipocytes from Endurance Trained Spontaneously Hypertensive Rats. **Fed. Proc.** 42:2587, 1983.

Romanosky AJ, AH Burns, **RE Shepherd.** Palliative Effects of Insulin and Ibuprofen on in vitro Myocardial Performance Following in vivo Endotoxin Administration. **Circ. Shock** 10:32, 1983.

Bennett BW, GJ Bagby, J Johnson, JR Porter, **RE Shepherd.** Lipoprotein Lipase Activity in Sedentary and Active Rats. **Proc.Soc.Exptl.Biol.Med.** 172:2367,1983.

**Shepherd RE**, CH Lang, KH McDonough. Myocardial Adrenergic Responsiveness Following Varying Doses of Endotoxin. **XXX Congress Inter. Union of Physiol. Sci.**,V.16, pp.340,1986.

**Shepherd RE**, KH McDonough, AH Burns. Mechanism of Cardiac Dysfunction in Hearts from Endotoxin Treated Rats. **Circ. Shock** 13:95, 1984.

**Shepherd RE**, KM Nelson. Gluconeogenesis in Sedentary, Exercised and Trained Rats. **Med. Sci. Sport** 16:119, 1984.

Bagby GJ, JL Johnson, **RE Shepherd**. Voluntary Exercise-Induced Changes in Muscle LPL and and Succinate Dehydrogenase Activities in Rats. **Med.Sci.Sports** 16:147, 1984.

Smith LW, KH McDonough, **RE Shepherd.** Chronotropic Response to Isoproterenol Stimulation in Early Sepsis. **Fed. Proc.** 44:1578 (abs. 6828), 1985.

**Shepherd RE**, CH Lang, KH McDonough. Myocardial Performance and Adrenergic Modulation of cyclic AMP Levels Following Endotoxin Administration. **Circ. Shock** 16:82, 1985.

DeBlieux PMC, KH McDonough, RW Barbee, **RE Shepherd**. Exercise Training and the Resistance of the Heart to Shock. **Med. Sci. Sport** 18:S29 (abs. 144), 1986.

**Shepherd RE**, CH Lang, KH McDonough. Myocardial Adrenergic Responsiveness Following Lethal and Nonlethal Doses of Endotoxin. **Circ Shock** 18:368 (abs106), 1986.

Spitzer JJ, **RE Shepherd**, KH McDonough. Metabolic Changes in Isolated Myocytes following Hypoxia. **Proc. IUPS** 16:338, 1986.

DeBlieux PMC, SF Pflug, JN Ponder, **RE Shepherd**. Exercise Training and the Resistance of the

heart to Shock. **Circ. Shock** 21:310 (abs.48), 1987.

DeBlieux PMC, RW Barbee, KH McDonough, **RE Shepherd**. Does exercise training attenuate the cardiomyopathy of Type I Diabetes. **Med. Sci Sport Exercise** 19:abs.248, 1987.

Burns LAR, AH Burns, WR Summer, **RE Shepherd**. Dichloroacetate markedly improves the isolated working heart following global anoxia. **Ann.Rev.Resp.Dis.** 135:A114(abs.4), 1987.

**Shepherd RE**, AH Burns, HG Lippton, A Hyman, WR Summer. Biphasic effects of endothelin on the isolated working perfused heart and cAMP accumulation by myocytes. **Circ.Shock** 27:356, 1989.

Ramirez LR, **RE Shepherd**. Mechanism of Enhanced Lipolysis in Exercise-trained rats: protein Kinase-Hormone Sensitive Lipase Activity. **Med Sci Sport Exer** 21:abs.531,1989.

Bagby GJ, **RE Shepherd**. Prior exercise suppresses bacterial lipopolysaccharide (LPS) induced increases in serum tumor necrosis factor-$\alpha$. **Med.Sci.Sport Exer.** 23:S61 (abs364),1991.

Bagby GJ, D Sawaya, **RE Shepherd**. Exercise suppression of the lipopolysaccharide (LPS) induced tumor necrosis factor (TNF) response. **Med Sci Sport Exer** 24:S65 (abs385),1992.

Kelly MP, **RE Shepherd**. Cyclic AMP accumulation in rat alveolar macrophages is decreased by exercise. **Med. Sci. Sport Exer.** 25:S103 (abs574),1993.

Crouch LD, Bagby GJ, D Sawaya, **RE Shepherd**. Glucocorticoid modulation of LPS-induced increases in serum TNF-□ during exercise. **Med.Sci.Sport Exer.** 25:S79 (abs443),1993.

**Shepherd RE**, DP Mokry, LD Crouch, GJ Bagby. Glucocorticoids, but not prior exercise, suppress the lipopolysaccharide-induced tumor necrosis factor (TNF) response in whole blood. **Med.Sci.Sport.Exer.** 26:S148(abs.825),1994.

Crouch LD, **RE Shepherd**, IV Deaciuc, JK Kolls, GJ Bagby. Exercise suppression of the hepatic tumor necrosis factor response to lipopolysaccharide. **Med.Sci.Sport Exer.** 26:S147(abs.824),1994.

Bagby GJ, LD Crouch, S Nelson, **RE Shepherd**. Divergent exercise effects on the tumor necrosis factor (TNF) response to systemic and intrapulmonary lipopolysaccharide (LPS) challenge. **Med Sci Sport Exer** 26:S147(abs.823),1994.

Crouch LD, **RE Shepherd**, GJ Bagby. Exercise suppression of the plasma tumor necrosis factor response to lipopolysaccharide: mediation by □-adrenergic stimulation. **Med.Sci.Sport Exer.** 27:S174(abs.979),1995.

Bagby, GJ, LD Crouch, JR Porter, **RE Shepherd**. Rapid Suppression of the LPS-induced TNF response by physical exercise and ether stress through a $\beta_2$-adrenergic mechanism. **Circ. Shock** (To be presented June 2003).

## V. PROFESSIONAL: INVITED PAPERS

Shepherd, Raymond E. **Hormonal Regulation of Lipolysis.** Presented to American College of Sports Medicine, National Convention, May 1978, at a symposium titled "Control Mechanisms of Lipid Metabolism During Exercise."

Shepherd, Raymond E., and John P. Rapp. **Prevention of hypertension in Dahl salt-sensitive rats by exercise.** Presented at Brookhaven National Laboratories, May 1981, at the Lewis K. Dahl Symposium on Salt and Hypertension.

Shepherd, R.E., C.H. Lang and K.H. McDonough. **Myocardial Performance and Adrenergic Modulation of cAMP Generation Following Endotoxin Administration.** Presented at "The Immunobiology and Immunopharmacology of Bacterial Endotoxins. Basic and Clinical Aspects." January, 1985.

Shepherd, Raymond E. **Heart Function and Metabolism in Shock Due To Sepsis and Endotoxin Administration.** Eighth Annual Meeting of the International Society for Heart Research (American Section) and Satellite Symposium of the XXX International Physiological Congress in Winnipeg, Canada. July, 1986.

Shepherd, Raymond E. **Regulation of Adipose Tissue Lipolysis during Exercise.** Presented to American College of Sports Medicine, National Convention, May 1987, Las Vagas, Nevada, at a symposium titled "Cyclic AMP Regulation of Fuel Metabolism During Exercise".

Shepherd, Raymond E. **Plasticity of Muscle.** Presented to the American Academy of Otolaryngology, National Convention, September 1989, New Orleans, Louisiana.

## IV. PROFESSIONAL: RESPONSIBILITIES

### A. Memberships

| | |
|---|---|
| American Physiology Society | 1975- |
| American College of Sports Medicine | 1968- |
| Phi Epsilon Kappa | 1974- |

### B. Honors-

| | |
|---|---|
| NIH Postdoctoral Fellowship | 1974-1976 |
| American Men and Women of Science | 1976 |
| Bel Memorial Award for Heart Research | 1982, 1993 |

### C. Journal Reviewer

American Journal of Physiology
Journal of Applied Physiology
Metabolism
Proceedings, Society of Exptl. Biol. Med.
Medicine and Science in Sport and Exercise
Diabetes
Circulatory Shock
Alcohol

### D. Study Sections

| | |
|---|---|
| NIH-NIADDK | Special Study Section May 1982 |
| NHLBI | Special Study Section October 1983 |
| NSF | Solicited Grant Reviewer 1980,1981,1982,1983,1984 |
| AHA | Southeast Regional Review 1985 |
| AHA-La,Inc. | Study section 1988-1993 |
| NIH-NHLBI | Ad hoc reviewer 1985,1986,1987,1988 |
| NIH-NIAMDD | Ad hoc reviewer September 1986 |
| NSERC | Ad hoc reviewer December 1987,1988 |
| NIH-NIGMS | Ad hoc reviewer February 1988, 1989, 1991<br>Site Visit Team Member December 1992 |
| ADA-La,Inc. | Study Section 1989 |

E. **Grants and Awards**

NIH-Postdoctoral Fellowship. Insulin Action in Isolated Fat Cells. 1974-1976.
Salary and travel support. $13,000.

NIH-HD 11343. Bilirubin and Fatty Acids in Infants of Diabetic
Mothers. Project #6 of NICHDD Research application. 1977-1979.
Co-PI, total funds $84,113.

Ohio State University Systems, 1979. Exercise Physiology, Exercise Science, and Physical Education. Basic Science Equipment needs for Exercise Physiology Research. $50,000. Project Director.

NIH-AM 21912. Exercise, Training and Regulation of Lipid metabolism. 1979- 1980. PI.
Total funds $39,898.

AHA-Northwest Ohio Heart Association. Exercise, Training, and Amelioration of Hypertension. 1980. PI. Total funds $10,210.

FRAF-University of Toledo. Exercise, Training and Insulin Resistance.
1980. Principal Investigator. Total funds $3900.

CHAMP-Toledo Heart Assoc. Lipoprotein Metabolism in Long Distance Runners.
1979-1980. PI. Total funds $5000.

NIH-AM 28521. Exercise, Training and Regulation of Lipid Metabolism. 1980- 1983.
Principal Investigator. Total funds $90,555.

AHA-Louisiana, Inc. Mechanism of the Prevention of Hypertension by Exercise.
1981-1982. PI. Total funds $10,000.

AHA-Louisiana, Inc. Bel Memorial Award. Prevention of Hypertension by Exercise.
1983-1984. PI. Total funds $10,000.

AHA-Louisiana, Inc. Bel Memorial Award. Adrenergic Responsiveness in Shock.
July 1985 - June 1986. PI. Total Funds $15,000.

AHA #851256. Adrenergic Responsiveness During Sepsis and Burn Shock.
1985 - 1988. PI. Total funds $99,000.

NIH-GM35390 Altered Myocardial Adrenergic Responsiveness in Shock.
$336,957. 1 Sept 86 - 31 Aug 91. PI, 40% Effort.

NIH-HL35632 Hypertrophy of Cultured SHR Cardiac Myocytes. $321,964.
1 July 86 - 30 June 89. Co-I, 25% Effort.

NIH-BRSG SO-RR-5376 Exercise Training Reduces the Severity of LPS Induced Cardiac Dysfunction. $5,000. 7/90-3/91. PI, 10% effort.

NIH - Small Instrument Program. 1 Sept 91 - 31 Aug 92. $28,340.
Grass Model 7 Polygraph. Principle Investigator.

AHA-Louisiana, Inc. Bel Award. Altered Myocardial Adrenergic Responsiveness in Shock.
7/93-6/96. $30,000. PI, 25% effort.

F. **Grants Pending Submission**

**NONE**

## V. COMMUNITY INVOLVEMENT

1941 – 1958 Joliet, Illinois
Bethel Baptist Church: Choir member; Sunday School Teacher
Boy Scout Troop 25: Life Scout; Explorer Scout;
Order of the Arrow; Junior Assistant Scoutmaster

1958 – 1964 St. Paul, Minnesota - Calvary Baptist Church, member
1964 – 1966 Graceville, Minnesota - Graceville Covenant Church, member
1966 – 1968 Missoula, Montana - Calvary Baptist Church, member

1968 – 1970 Madison, South Dakota
First Baptist Church: Choir member, Choir director,
Sunday School Teacher
Kiwanis Club: Member; Lecturer, health benefits of exercise

1970 – 1974 Pullman, Washington
First Baptist Church: Choir member, Soloist

1974 – 1978 Providence, Rhode Island
Barrington Baptist Church: Choir Member, Soloist
Sunday School Teacher; Chairman Board of Trustees

1978 – 1980 Toledo, Ohio
Perrysburg Alliance Church: Choir member, Deacon,
Sunday School Teacher
Perrysburg Health and Racquet Club: Fitness consultant
Consultant to Law Firm of George Scott

1980 – 1988 New Orleans, Louisiana
Memorial Baptist Church: Choir member, Soloist
Kenner YMCA: Individual Fitness Consultant
Consultant to Law Firm of George Scott, Toledo, Ohio
Louisiana Racquetball Association: Rules and Regulations Committee
Consultant to Arden Medical Systems, Inc, St.Paul, Minn.

1989 – Covington, Louisiana
Christ Episcopal Church: Choir member, Soloist, Cantor
Hospice of St. Tammany Parish - Volunteer
North Shore Performing Artists - Chorale member

Louisiana Vocal Arts Society - Chorale member, President (1998-2000)
Orleans Chamber Singers – Chorale member
Louisiana Decentralized Arts Council member

## VI. REFERENCES


Patricia E. Molina, MD, PhD
Richard Ashman Professor
Head, Department of Physiology
Louisiana State University
Health Sciences Center
1901 Perdido Street
New Orleans, LA 70112
(504)568-6171 pmolin@lsuhsc.edu

Michael G. Levitzky, Ph.D.
Chairman, Med Sch Curr Comm
Department of Physiology
Louisiana State University
Health Sciences Center
1901 Perdido Street
New Orleans, LA 70112
(504)568-6177 mlevit@lsuhsc.edu

Demetrius Porche, DNSc
Dean, School of Nursing
Louisiana State University
Health Sciences Center
1900 Gravier Street
New Orleans, LA 70112
(504)568-4220 dporch@lsuhsc.edu

Kathleen H. McDonough, Ph.D.
Professor of Physiology
Louisiana State University
Health Sciences Center
1901 Perdido Street
New Orleans, LA 70112
(504)568-6197 kmcdon@lsuhsc.edu

Jimmy M. Cairo, Ph.D.
Dean, School of Allied Health
Louisiana State University
Health Sciences Center
1900 Gravier Street
New Orleans, LA 70112
(504)568-4235 jcairo@lsuhsc.edu

Gregory J. Bagby, PhD.
Department of Physiology
Louisiana State University
Health Sciences Center
1901 Perdido Street
New Orleans, LA 70112
(504)568-6171 gbabgy@lsuhsc.edu

William C. Claycomb, PhD
Dept. Biochem. And Molec. Biol.
Louisiana State University
Health Sciences Center
1901 Perdido Street
New Orleans, LA 70112
Phone: (504)568-4737
FAX: (504)568-7649
wclayc@lsuhsc.edu

John L. Durstine, Ph.D.
Chair, Dept of Exercise Science
Director, Clinical Exercise Programs
School of Public Health
University of South Carolina
Columbia, SC 29208
Phone: 803-777-7680
FAX: 803-777-8422
ldurstine@sph.sc.edu

John N. Fain, Ph.D.
Chair, Dept. of Biochemistry
501 Pathology Bldg
University of Tennesee
College of Medicine
858 Madison Avenue
Memphis, TN 38163
Phone: (901)448-6150
Fax: (901)448-7360
jfain@utmem1.utmem.edu

Brian J. Sharkey, Ph.D.
USDA Forest Service
Technology & Development Center
Bldg 1 Ft. Missoula
Missoula, MT 59804
Ph 406-329-3989, fax 329-3719
bsharkey@fs.fed.us

Gary A. Klug Ph.D
Department of Exercise and Movement Science
University of Oregon
Eugene OR 97403
Phone: 541-346-0936
Fax: 541-346-0935
gklug@oregon.uoregon.edu

Glen F. Tibbits, PhD
Cardiac Membrane Res. Lab
Simon Fraser University
Burnaby, BC, Canada V5A 1S6
Phone: (604)291-3658
Fax: (604)291-3040
tibbits@sfu.ca

Robert B. Armstrong, Ph.D.
Chair, Department of Health and
Kinesiology (Retired)
Texas A & M University
158 Read Building
College Station, TX 77843
(615) 343-2920
rba1161@tamvm1.tamu.edu

Walter L. Sembrowich, Ph.D.
Chief Executive Officer
Diametrics Medical Inc.
2658 Patton Road
Roseville, Minnesota 55113
(612) 669-2844 cell
wsem@aviexinc.com

Russell L. Moore, Ph.D.
Department of Kinesiology
University of Colorado, CB #354
Boulder, CO 80309
(303) 492-5209
moore@spot.colorado.edu