François M. Abboud
Cardiovascular Research Center
DEDICATION AND 40TH ANNIVERSARY SYMPOSIUM – 2014

Celebrating Forty Years of Scientific Discovery
On December 4th, 2013, the Board of Regents, State of Iowa, named the University of Iowa’s Cardiovascular Research Center in honor of its founder, François M. Abboud, MD, MACP, noting that:

Dr. Abboud has devoted five decades to developing a world-class center of excellence in cardiovascular research and continues to this day his work at the University of Iowa as an internationally recognized physician-scientist. His career at Iowa has been characterized by an unparalleled commitment to excellence and leadership that led him through a steady progression of key leadership positions in the Roy J. and Lucille A. Carver College of Medicine.

In response, Dr. Abboud said:

“I am deeply humbled to be recognized in this manner. I firmly believe that this is an honor that I share with others who are too numerous to name, especially my mentors and colleagues with whom I was privileged to work throughout my entire career. My wife, Doris, and my family share an immense sense of gratitude for what Iowa has given us.”
THE CENTER

The François M. Abboud Cardiovascular Research Center was established in 1974 as the first major University of Iowa multidisciplinary, biomedical research initiative. The most extensive intercollegiate cardiovascular research application ever sent from Iowa to the National Institutes of Health was submitted at that time. It included a five-year $25 million grant proposal that ushered in an era of unprecedented growth and success of interdisciplinary team research. A prominent component of the new Center was an NIH Institutional Research Fellowship Training Grant, now nearing funding for 45 years, designed to support the training of physician-scientists as well as PhD scientists.

Over four decades, the Abboud Cardiovascular Research Center (ACRC) has been a powerhouse in the study of cardiovascular disease, making fundamental discoveries that have led to a greater understanding and more skillful management of heart disease and stroke. A key research theme has shown how the cardiovascular system and the nervous system regulate each other. This regulation has been the basis for the most effective therapies for treatment of patients with heart failure and hypertension. Another theme has been the discovery of key molecules and pathways that transmit electrical and chemical signals in the heart and are associated with hypertension, obesity, arteriosclerosis, and heart attacks.

Over the years, members have been awarded more than $450 million in federal grant support. The work of Center scientists has paved the way for innovative diagnostics, medicines, and treatment strategies while nurturing new generations of dedicated investigators.

The Center’s training programs have graduated hundreds of cardiovascular physicians and basic scientists including many who are now distinguished investigators and leaders at Iowa and around the world. These programs embrace four notable characteristics:

- The mix of physician-scientist in addition to PhD scientist trainees, often in the same laboratory;
- The exposure of trainees to a number of outstanding and experienced scientists in addition to their primary mentor;
- The careful nurturing of trainees by Center mentors, faculty and leadership during the critical transition from postdoctoral fellow to independent faculty scientist;
- The continuing support of former trainees during their faculty careers even at a distance and other institutions.

These former trainees are represented at the 2014 ACRC Symposium by David Gutterman and Howard Jacobs from the Medical College of Wisconsin; David Harrison from Vanderbilt University, and Virend Somers from the Mayo Clinic.
Today, the Center is comprised of nearly 200 researchers. A remarkable feature of the ACRC has been the multiplicity of faculty leadership that has led the Center’s research program development and mentoring in a spirit of independence infused with shared ideals, common goals, and collegial interaction. This breadth and depth of leadership under the extraordinary direction of Dr. Abboud has been pivotal to the prominence of the Center in virtually every field of cardiovascular research.

The Center has modeled a culture of collaboration, team research and mentoring that has been emulated across the UI campus and adopted by most successful academic research institutions. It attained a stunning development into world-class status as characterized recently by the National Heart, Lung, and Blood Institute.

Basic research at the ACRC is the wellspring from which translation and innovation flow. In line with the deep tradition at Iowa, the Center fosters new collaborative partnerships among programs, investigators, and cores, both within and outside the University in areas such as drug, device, and biotech development. Recent activities on that front include partnerships with the Institute of Molecular Medicine at Beijing University and the Institute for Molecular and Translational Cardiology, University of Heidelberg in Germany.
Dr. Abboud’s professional biography is an American success story - one that began in the 1950s in a third-world medical school in Cairo, Egypt. With serendipity and good advice, he moved in 1955, to Milwaukee, Wisconsin to serve as Assistant Resident in Internal Medicine at Milwaukee County Hospital. In 1960 he was appointed to an Advanced Research Fellowship in the Department of Internal Medicine at the University of Iowa. After progressing through academic levels and professional positions, he rose rapidly to key leadership positions: 1970-1976: Director of the Cardiovascular Division and Chief of Cardiology; 1974-2012: Founder and Director of the Cardiovascular Research Center; and, in 1976, appointment to Professor and Head (Chairman and CEO) of the UI Department of Internal Medicine, a position he held for the longest tenure of 26 years while leading the department to elite national status. In tribute the University created the François M. Abboud Distinguished Professor and Endowed Chair in Internal Medicine to be held by future Departmental Heads.

His research work has led to better understanding and management of cardiovascular disease and stroke, pioneered the use of multidisciplinary teams throughout biomedical science, and significantly advanced the University of Iowa’s national and international reputation for excellence in patient care, research, and education. Funded by the NHLBI since 1971, Dr. Abboud’s program project grant is the longest continuously funded grant under the direction of the same principal investigator for over 45 years.

As one of the University’s premier “scientific ambassadors,” Dr. Abboud’s contributions extend far beyond the university and the state of Iowa. He has served as president of the Association of American Physicians, American Clinical and Climatological Association, American Federation for Clinical Research, Central Society for Clinical Research, and American Heart Association, which named him a Distinguished Scientist for 2007. In 2009, he was awarded the foremost award in academic internal medicine, the George M. Kober Medal from the Association of American Physicians. He is a member of the Institute of Medicine of the National Academy of Sciences and of the American Academy of Arts and Sciences.

Dr Abboud’s contributions extend far beyond the Center, the University, and even the great state of Iowa…Thanks to the accomplishments realized through [his] pioneering spirit, [the University of Iowa] is now well positioned to continue and lead cardiovascular research in the country.

Jean E. Robillard, MD
Vice President for Medical Affairs, The University of Iowa
**EXCERPTS OF SELECTED TRIBUTES ON THE OCCASION OF THE NAMING**

[Frank] is one of a very small cadre of icons in academic medicine with a legacy that will span generations and stand the test of time.

**Gary H. Gibbons, MD**  
Director, National Heart, Lung, and Blood Institute

My friend Frank Abboud has been a venerated, treasured colleague and role model for nearly the past half century. [He is] a vigorous, dedicated, enthusiastic, and path-breaking advocate for the central importance of clinical investigation in academic medicine. And he remains as charismatic and inspiring today as ever.

**William R. Hazzard, MD**  
Professor and Chairman of Internal Medicine, and Director of the J.P. Sticht Center on Aging  
Wake Forest University School of Medicine

[Frank] is a rare combination of scientific innovation, emotional intelligence, and interpersonal charm.

**Lee Goldman, MD**  
Professor and Executive Vice President for Health and Biomedical Sciences, and Dean of the Faculties of Health Sciences and Medicine, Columbia University Medical Center

Frank asked me several tough questions, as did the other members of the committee. The difference between him and the rest of the panel was that he would break into a smile if I answered the question well.

**Helen H. Hobbs, MD**  
Investigator  
Howard Hughes Medical Institute  
UT Southwestern Medical Center

I look to [Frank] for continuing inspiration.

**Eugene Braunwald, MD**  
Distinguished Hersey Professor of Medicine, and Faculty Dean for Academic Programs in the Partners Health Care System; Former Chairman of Medicine at Brigham and Women’s Hospital, Harvard Medical School

There is only one Frank Abboud. He is a unique treasure of American academic medicine, a man of brilliant personal achievement who has also been its uncompromisingly decent and captivating leader and its conscience...

**Andrew I. Schafer, MD**  
Professor of Medicine in Hematology/Oncology, and Director of the Richard T. Silver Center for Myeloproliferative Neoplasms  
Weill Cornell Medical College

Frank Abboud’s passion for excellence, both clinical and preclinical, and respect for the members of the UI Healthcare enterprise was front and center in all our discussions.

**K. Frank Austen, MD**  
Astra Zeneca Chair and Professor of Respiratory and Inflammatory Diseases, Department of Medicine, Brigham and Women’s Hospital  
Harvard Medical School

Frank is kind, soft spoken, and supportive. But, in addition to these “gentlemanly” qualities he is brilliant. [He] exemplified leadership at its very best. [He] is truly one of those “giants” who make academic medicine so very special and unique...

**Arthur H. Rubenstein, MBBCh**  
Former Executive Vice President for the Health System, and Dean of the University of Pennsylvania School of Medicine

Although I knew about Frank Abboud, when I first met him I was surprised by his warmth and friendliness. Over the years we became warm colleagues and interacted as chairs of medicine and in organizations such as the IOM, ACCA, etc. It is remarkable to see such an accomplished person keep both feet on the ground with clarity of vision.

**Donald E. Wilson, MD, MACP**  
John Z and Akiko J Bowers Distinguished Professor and Dean, Emeritus  
University of Maryland School of Medicine
I consider [Frank] a role model, colleague, mentor and friend. He has inspired excellence, integrity and perseverance in cardiovascular science for his own faculty and for those at other centers.

Robert M. Carey, MD, MACP
Dean, Emeritus, and University Professor,
University of Virginia Health System

As an early proponent of interdisciplinary research, [Frank] made possible shoulder-to-shoulder collaborations of physicians, basic scientists, and clinical scientists...[and] launched the careers of hundreds of investigators whose work will impact...the world.

Darrell G. Kirch, MD
President and CEO
Association of American Medical Colleges

“He’s a gentleman and a scholar,” describes Frank Abboud perfectly – constantly inquiring, seeking to understand..., sometimes pushing but always with grace and civility.

Carol A. Aschenbrener, MD
Chief Medical Education Officer
Association of American Medical Colleges

Frank Abboud is a force of nature. To me he is a mentor and to physician-scientists everywhere he is an inspirational figure.

Mark E. Anderson, MD, PhD
Sir William Osler Professor and Chair of Medicine,
Johns Hopkins Medicine

Frank has spirit and determination... He is in the great tradition of Wiggers, Sarnoff, and Braunwald and stands with them at the pinnacle of our great field.

Myron L. Weisfeldt, MD
University Distinguished Service Professor
Former William Osler Professor and Chair of Medicine,
Johns Hopkins Medicine

(Frank) is a master builder with the wisdom to build great Institutions ... a mentor and judge of talent... a man of great integrity... he always sought to do the right thing for the right reasons no matter the pressures or the politics.

Ken Shine, MD
Past President Institute of Medicine
National Academy of Sciences
Past Executive Vice Chancellor for Health Affairs, UT System
Dean Emeritus, UCLA School of Medicine

Dr. Abboud has been a role model for the triple threat academician — mentor and teacher, researcher, and clinician...I am honored to join in the tribute to one of the most distinguished leaders of American medicine whom I cherish as a colleague and a friend.

Antonio M. Gotto, Jr., MD, DPhil
Former Dean of Weil Cornell Medical College

[Frank] is a rare academic. Not only [is] he supremely informed about medicine and his specialty, but he [is] always in good humor; always smiling, always happy to see his colleagues...

Jerome P. Kassirer, MD
Distinguished Professor
Tufts University School of Medicine
Editor-in-Chief Emeritus, New England Journal of Medicine

[Frank] is one of the finest exemplars of Academic Medicine that I have known and we all learned a great deal from his calm and wise judgment.

Robert M. Glickman, MD
Professor of Medicine, former Saul J. Farber Dean of the New York University School of Medicine and CEO of the NYU Hospitals Center

[Frank has] been a shining light in the arena of cardiovascular research for decades.

Anthony S. Fauci, MD
Director, National Institute of Allergy and Infectious Diseases

* For full text of letters and messages go to: http://tinyurl.com/ACRC40-Tributes
ABBOUD CARDIOVASCULAR RESEARCH CENTER
40th ANNIVERSARY INTERNATIONAL SYMPOSIUM*

On October 9 and 10, 2014, as many as three hundred scientists, physician-scientists and trainees attended the annual international symposium of the University of Iowa ACRC. First held in 2013, this symposium provides a special forum for ACRC partners from the University Heidelberg in Germany and from Peking University, China, to meet with UI scientists and leaders. In addition to presenting at the symposium, partners participated in informal discussions of current and plans for future collaborative research projects.

Co-directors of the ACRC, Drs. Barry London and Peter Gruber chaired the sessions. Symposium speakers included ACRC alumni and former faculty who have become national leaders in cardiovascular research. Nobel Laureate, Martin Chalfie provided the keynote address. A highlight of the morning session was Dr. Abboud’s perspective on the accomplishments of the Center over the 40 years of its evolution under his leadership, entitled “What is a Legacy?”.

“...any legacy I leave is in your dreams, your aspirations...”

FRANÇOIS M. ABBOUD

October 9, 2014, Prem Sahai Auditorium, Medical Education Research Facility, University of Iowa.

* Presentations at the Symposium were videotaped and can be accessed at: http://tinyurl.com/ACRC40-presentations
For a full agenda with speaker bios, visit this site: http://tinyurl.com/ACRC40-agenda
François Abboud and Martin Chalfie discussing the interdisciplinary evolution of the ACRC.

Dean Debra Schwinn introducing keynote speaker Martin Chalfie.

François Abboud with Irving Zucker.

From left to right: Barry London, Martin Chalfie, Dean Debra Schwinn and Peter Gruber.
SYMPOSIUM SPEAKERS AND TITLES OF PRESENTATIONS

François M. Abboud, MD
Edith King Pearson Chair of Cardiovascular Research
Chair Emeritus and Professor of Internal Medicine
and Molecular Physiology and Biophysics
Roy J. & Lucille A. Carver College of Medicine
Founding Director, Cardiovascular Research Center

Chad Grueter, PhD
Assistant Professor
Division of Cardiovascular Medicine
Department of Internal Medicine
Roy J. & Lucille A. Carver College of Medicine

Mediating Cardiac Transcriptional Regulation of Metabolic Homeostasis

Martin Chalfie, PhD
William R. Kenan, Jr., Professor
Chair, Department of Biological Sciences
Columbia University
Nobel Laureate in Chemistry, 2008
New York City, New York

Mechanosensation and its Modulation in C. elegans

David Gutterman, MD
Senior Associate Director, Cardiovascular Center
Northwestern Mutual Professor of Cardiology
Medical College of Wisconsin
Milwaukee, Wisconsin
ACRC Alumnus, UI Carver College of Medicine, 1980-1998

The Human Coronary Microcirculation: Small Vessels, Big Impact

Justin Grobe, PhD, FAHA
Assistant Professor
Department of Pharmacology
ACRC Alumnus, Roy J. & Lucille A. Carver College of Medicine

Divergent Control of Blood Pressure and Metabolism by the Brain Renin-angiotensin System

David Harrison, MD
Betty and Jack Bailey Professor of Medicine
Director, Division of Clinical Pharmacology and Center for Vascular Biology
Vanderbilt University Medical Center
Nashville, Tennessee
ACRC Alumnus, UI Carver College of Medicine, 1980-1990

Howard Jacob, PhD
Professor, Physiology and Human and Molecular Genetics
Director, Human and Molecular Genetics Center
Warren P. Knowles Chair of Genetics
Medical College of Wisconsin
Milwaukee, Wisconsin
ACRC Alumnus, UI Carver College of Medicine, 1984-1989

It All Started in Iowa: From the CVRC to Helping Change the Practice in Medicine

Peter Gruber, MD, PhD
Johan L. Ehrenhaft Professor in Cardiothoracic Surgery
Chair, Department of Cardiothoracic Surgery
Roy J. & Lucille A. Carver College of Medicine
Co-Director, François M. Abboud Cardiovascular Research Center

Introduction/Session Chair

* The text of Dr. Abboud’s presentation of the evolution and accomplishments of the ACRC over 40 years (1974-2014) is available at: http://tinyurl.com/ACRC40-AbboudLegacy
Debra A. Schwinn, MD
Dean, Roy J. & Lucille A. Carver College of Medicine
Professor of Anesthesiology, Pharmacology & Biochemistry
University of Iowa
Welcome and Introduction of Dr. Martin Chalfie

Virend K. Somers, MD, PhD
Professor of Medicine
Consultant in Cardiovascular Diseases
Mayo Clinic College of Medicine
Rochester, Minnesota
ACRC Alumnus, UI Carver College of Medicine, 1988-1999
Sleep Deprivation and Cardiometabolic Dysregulation – Does Sleeping Less Make you Fat?

Virend K. Somers, MD, PhD
Professor of Medicine
Consultant in Cardiovascular Diseases
Mayo Clinic College of Medicine
Rochester, Minnesota
ACRC Alumnus, UI Carver College of Medicine, 1988-1999
Sleep Deprivation and Cardiometabolic Dysregulation – Does Sleeping Less Make you Fat?

Barry London, MD, PhD
Professor and Director
Division of Cardiovascular Medicine
Potter Lambert Chair in Internal Medicine
Department of Internal Medicine
Roy J. & Lucille A. Carver College of Medicine
Co-Director, François M. Abboud Cardiovascular Research Center
Introduction/Session Chair

Jing-Wei Xiong, PhD
Professor and Head
Laboratory of Cardiovascular Development
Institute of Molecular Medicine
Peking University
Beijing, China
Using Model Organisms to Approach Heart Regeneration

Patrick Most, MD
Professor of Medicine and Molecular and Translational Cardiology
Center for Molecular and Translational Cardiology
University of Heidelberg
Heidelberg, Germany
International Partner Meeting Discussion

Irving H. Zucker, PhD
Theodore F. Hubbard Professor of Cardiovascular Research
Chairman, Department of Cellular and Integrative Physiology
University of Nebraska Medical Center
Former President of the American Physiological Society
Cardiac Sympathetic Afferents in Heart Failure: It's Not Just About the Pain

Amy Lee, PhD
Assistant Dean for Scientific Affairs
Associate Professor
Departments of Molecular Physiology and Biophysics, Otolaryngology Head-Neck Surgery, and Neurology
Roy J. & Lucille A. Carver College of Medicine
Member, François M. Abboud Cardiovascular Center Executive Committee
Macromolecular Distinctions Between L-type Ca^{2+} Channels in the Brain and Heart

Michael J. Welsh, MD
Howard Hughes Medical Institute Investigator
Director, Cystic Fibrosis Research Center and the Pappajohn Biomedical Discovery Institute
Roy J. Carver Biomedical Research Chair
Professor of Medicine, Molecular Physiology and Biophysics, and Neurosurgery
Roy J. & Lucille A. Carver College of Medicine
Member, François M. Abboud Cardiovascular Center Executive Committee
Comments on ACRC

Irving H. Zucker, PhD
Theodore F. Hubbard Professor of Cardiovascular Research
Chairman, Department of Cellular and Integrative Physiology
University of Nebraska Medical Center
Former President of the American Physiological Society
Cardiac Sympathetic Afferents in Heart Failure: It's Not Just About the Pain
More than 70 posters were presented covering a broad array of fundamental, clinical and epidemiological science representing 9 different departments and 5 colleges.
A highlight of the two-day symposium was the dedication of the François M. Abboud Cardiovascular Research Center, a formal recognition of the 2013 naming by the Iowa State Board of Regents and a celebration of the Center's founder and guiding spirit, Frank Abboud.

Held at University of Iowa President Sally Mason's home, the dedication included a special visit by Dr. Victor J. Dzau, current president of the Institute of Medicine of the National Academy of Sciences. Dzau joined President Sally Mason for the dedication, summarizing Abboud's scientific career and contributions to cardiovascular research, saying that Abboud had “transformed cardiovascular medicine through [his] own research…” and that of the many scientists he mentored.

President Mason remarked that “…Thanks to Frank Abboud’s amazing achievements, and global reach, the Center is poised to expand its leadership in cardiovascular research in the country even further.” She continued it was “…a most appropriate time to permanently establish the extraordinary legacy of a truly exceptional leader who has served the university, our state, and our nation for more than half a century.”

Dr. Dzau began his remarks by referring to Frank's remarkable story of success as an immigrant and to his move to Iowa saying...

“…Where most people saw cornfields, Frank saw opportunity and built an empire … he does not go to places that the rest of the world sees as glamorous but instead, he took a chance and ended up building a powerhouse of CV research at Iowa.”

“…most people would agree that much of what contributes to Frank’s great leadership are his strong people skills -- his ability to give a person his full attention and his genuine interest in the lives of others. I have heard stories of his disregard for time, because he becomes so immersed in his discussions and in a world of constant distractions, it is truly a skill to be focused and attentive on everyone who crosses your path.

Frank has the very unique ability of being able to develop everyone around him. -- It seems as if everyone around him becomes a leader- Don Heistad, Allyn Mark, Gerald Dibona, Mike Welsh, Curt Sigmund and others. He is a wonderful mentor and has the golden touch. He takes bets on young people. Frank believes in people, advocates for them, and in doing so, leads them to realizing that they can achieve great things.”

Following the dedication ceremony, 100 colleagues, friends and family were hosted by Dr. and Mrs. Abboud in their home, extending the celebration into the evening.

* For the text of the dedication remarks by President Mason, Drs. Victor Dzau, and François Abboud go to: http://tinyurl.com/ACRC40-dedication
President Mason ended the dedication ceremony with a presentation of a commemorative mural to Dr. Abboud. It was an artistic rendition of portraits of (from left to right) Drs. Phillip Schmid, Alan Kim Johnson, the late Dr. Michael Brody, the late Dean John Eckstein, Drs. François Abboud, Allyn Mark, Donald Heistad and Gerald DiBona. It is a most meaningful expression of the collaborative culture that dominated the forty years of discovery in the Center.
Two hundred attended the final event of the symposium and 40th anniversary celebration – a banquet hosted by University of Iowa Vice President for Medical Affairs, Jean Robillard at the Sheraton Hotel in downtown Iowa City.

Dr. Robillard spoke about how the decades of hard work by Dr. Abboud and his colleagues through the Abboud Cardiovascular Center “...have led to a deeper understanding of how the heart works, how it interacts with other organs and systems, and how it malfunctions. It has also paved the way for innovative diagnostics, medicines, and treatment strategies.”

Former University of Iowa President Willard Boyd also spoke at the event and noted “Frank’s visionary and humane leadership permeates the entire University.” He called Dr. Abboud a “university-wide treasure.”

* For the texts of remarks by Vice President Robillard, President Emeritus Boyd, and Dr. Abboud go to: http://tinyurl.com/ACRC40-banquet
HISTORICAL HIGHLIGHTS OF THE CENTER

LEADERSHIP
Director
François M. Abboud, 1974-2012
Mark E. Anderson, 2012-2014
Co-Directors
Barry London, 2012-
Peter J. Gruber, 2014-
Deputy Director
Donald D. Heistad, 1990-2012
Associate Directors
Michael Brody, 1974-1990
Allyn L. Mark, 1974-2012
Mark E. Anderson, 2005-2012

EXAMPLES OF KEY SCIENTIFIC CONTRIBUTIONS
- Foundational discoveries about how the cardiovascular and nervous systems regulate each other
- Regression of atherosclerosis and restoration of endothelial function by dietary cholesterol restriction
- Identification of key molecules and pathways that transmit electrical and chemical signals in the heart and are involved in cardiovascular response to high blood pressure, obesity, diabetes and ischemia
- Linking molecular defects to human diseases, including arrhythmia, hypertension and diabetes
- Advancing our understanding of calmodulin-dependent kinase II (CaMKII)
- Identification of a new gene mutation that causes an inherited form of atrial fibrillation
- Assessment of the effects of maternal diabetes on fetal and postnatal heart development – as well as risk of diabetes later in life for the child
- Illuminating the common molecular mechanisms (e.g., abnormal ion channel activity) underlying diseases that affect disparate systems and organs, such as the heart and the sensory organs
- Pioneer work outside cardiology, such as discovery of a gene that causes a form of muscular dystrophy
- Linkage of the autonomic nerves and the immune system is a major cause of cardiovascular disease and mortality

EDITORSHIPS OF PREMIER SCIENTIFIC JOURNALS HELD BY ACRC MEMBERS
- Circulation Research, 1981-1986
  Editor in Chief: François M. Abboud
- Hypertension, 1989-1993
- Arteriosclerosis, Thrombosis, Vascular Biology, 1999 – 2007
  Editor in Chief: Donald D. Heistad
  Editor in Chief: Arthur Spector
  Editor: François M. Abboud
- American Journal of Physiology (Regulatory), 2007- 2013
  Editor in Chief: Curt Sigmund
NATIONAL PRESIDENCIES HELD BY ACRC MEMBERS

- American Autonomic Society
  - Mark Chapleau, 2008-2010
- American Clinical and Climatological Association
  - François M. Abboud, 2007
- American Federation for Clinical Research
  - François M. Abboud, 1971
  - Gary Hunninghake, 1986
  - Gerald F. DiBona, 1978
  - Francis Miller, 2010
- American Heart Association
  - Lewis E. January, 1966
  - John W. Eckstein, 1978
  - François M. Abboud, 1990
- American Physiological Society
  - Gerald F. DiBona, 2000
- American Society of Echocardiography
- American Society for Clinical Investigation
  - Michael Welsh, 1996
- Association of American Physicians
  - François M. Abboud, 1990
  - Michael Welsh, 2002
- Association of University Cardiologists
  - Allyn L. Mark, 1995
  - Donald D. Heistad, 2002
- Central Society for Clinical Research
  - John W. Eckstein, 1974
  - François M. Abboud, 1986
  - James B. Martins, 2007
- Federation of the American Society of Experimental Biology
  - William Talman, 2011
- Society of General Physiologists
  - Kevin Campbell, 2004-2005

MAJOR NIH-FUNDED PROGRAMS, 1971-PRESENT

Program Project Grants

INTEGRATIVE NEUROBIOLOGY OF CARDIOVASCULAR REGULATION
François M. Abboud, MD, Program Director, 1971-2019

FATTY ACIDS, LIPOPROTEINS & LIPID OXIDATION
Arthur A. Spector, MD, Program Director, 1992-2002

GENETIC AND SIGNALING MECHANISMS IN THE CENTRAL REGULATION OF BLOOD PRESSURE
Curt D. Sigmund, PhD, Program Director, 2007-2018

CEREBRAL BLOOD VESSELS
Donald D. Heistad, MD, Program Director, 1987-2008
Frank M. Faraci, PhD, Program Director, 2008-2013

MECHANISMS OF CARDIOVASCULAR PROTECTION AND DISEASE
(Formerly Oxidative Mechanisms in Vascular Disease) (Formerly Vascular Mechanisms of Atherogenesis) Donald D. Heistad, MD, Program Director, 2000-2016

GENE THERAPY FOR CYSTIC FIBROSIS LUNG DISEASE
Michael J. Welsh, MD, Program Director, 1993-2009
Paul B. McCray, Program Director, 2009-2014
HISTORICAL HIGHLIGHTS OF THE CENTER

AIRWAY PHYSIOLOGY AND PATHOPHYSIOLOGY IN A PORCINE CF MODEL
Michael J. Welsh, MD, Program Director, 2008-present

Specialized Centers Of Research (SCOR)

SCOR IN LIPIDS, Atherosclerosis AND THROMBOSIS
Arthur A. Spector, MD, Program Director, 1971-1992

SCOR IN ISCHEMIC HEART DISEASE
Melvin L. Marcus, MD, Program Director, 1984-1989

SCOR IN CORONARY & VASCULAR DISEASES
David J. Skorton, MD, Program Director, 1990-1995

SCOR IN OCCUPATIONAL & IMMUNOLOGIC LUNG DISEASE
Gary W. Hunninghake, MD, Program Director, 1986-1997

SCOR IN ACUTE LUNG INJURY
Gary W. Hunninghake, MD, Program Director, 1998-2003

SCOR IN HYPERTENSION
Michael J. Brody, PhD, Program Director, 1989
Allyn L. Mark, MD, Program Director, 1990-1995

SCOR IN MOLECULAR GENETICS OF HYPERTENSION
Allyn L. Mark, MD, Program Director, 1996-2000
Curt D. Sigmund, PhD, Program Director, 2001-2006

SCOR IN CONGENITAL HEART DISEASE
Ronald M. Lauer, MD, Program Director, 1990-1998

SCOR IN PEDIATRIC CARDIOVASCULAR DISEASE
Ronald M. Lauer, MD, Program Director, 1999-2003

O’BRIEN KIDNEY DISEASE CENTER
John B. Stokes III, MD, Program Director, 1997-2007

SCOR IN CHILDHOOD AIRWAY DISEASES
David A. Schwartz, MD, Director, 1998-1999
Gary W. Hunninghake, MD, Director, 2000-2003

SCOR IN CYSTIC FIBROSIS
Michael J. Welsh, MD, Program Director, 1988-2008

Training & Career Development Grants

INTERDISCIPLINARY CARDIOVASCULAR RESEARCH FELLOWSHIP
François M. Abboud, MD, Director, 1975-2016

TRAINING PROGRAM IN HEMATOLOGY: MOLECULAR AND CELL BIOLOGY OF BLOOD CELLS
C. Patrick Burns, MD, Director, 1978-2006
Steven R. Lentz, MD, Director, 2006-2019
RESEARCH TRAINING PROGRAM IN PEDIATRIC CARDIOLOGY  
Ronald M. Lauer, MD, Director, 1978-2003
Postdocs

MULTIDISCIPLINARY LUNG RESEARCH CAREER DEVELOPMENT PROGRAM  
Gary W. Hunninghake, MD, Director, 1986-2008
Michael J. Welsh, MD, Director, 2008-2016

TRAINING GRANT IN KIDNEY DISEASE, HYPERTENSION, AND CELL BIOLOGY  
John B. Stokes III, MD, Director, 1997-2012
Christie Thomas, MD, Director, 2012-2018

Community-Based Research  
THE MUSCATINE HEART STUDY  
Ronald M. Lauer, MD, Director, 1970-2005
Trudy Burns, PhD, Director, 2005-present

NOTE: The Muscatine Heart Study gained international prominence as the pediatric counterpart of the renowned Framingham Heart Study of risk factors for disease in adults. Begun with and sustained in part through NIH funding, in 2009, the Muscatine Study joined with six other international childhood observational cohort studies to form the International Childhood Cardiovascular Cohort Consortium. Data from the more than 41,000 childhood participants across the cohorts have been pooled to evaluate associations between childhood CV risk factors and adult subclinical disease.

Clinical Research Trials  
SHARED RESEARCH FACILITY  
François M. Abboud, MD, Director, 1986-87

LIPID RESEARCH CLINIC  
François M. Abboud, MD, Program Director, 1972-1990

SODIUM SENSITIVITY AND BLOOD PRESSURE RESPONSE  
Allyn L. Mark, MD, Program Director, 1984-1990

CHILDHOOD DETERMINANTS OF ADULT HYPERTENSION AND CARDIOVASCULAR RISK  
Ronald M. Lauer, MD, Program Director, 1985-1991

Acknowledgement  
The planning and execution of these celebratory events and the production of the brochure are gratefully credited to the admirable efforts of Brenda Duell (Associate Chair, Internal/External Relations), Shawn Roach (Creative Coordinator), and William Radd (Writer/Editor) in the Department of Internal Medicine.
FRANÇOIS M. ABBOUD CARDIOVASCULAR RESEARCH CENTER

ACRC EXECUTIVE COMMITTEE

Barry London, MD, PhD
Professor of Internal Medicine
Director, Division of Cardiovascular Medicine
Co-Director – ACRC

Peter J. Gruber, MD, PhD
Professor and Chair
Department of Cardiothoracic Surgery
Co-Director – ACRC

E. Dale Abel, MD, PhD
Professor and Director
Endocrinology and Metabolism
Director – Fraternal Order of Eagles Diabetes Research Center

Charles Brenner, PhD
Professor and Chair
Department of Biochemistry

Kevin P. Campbell, PhD
Professor and Chair
Department of Molecular Physiology & Biophysics

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