

MINUTES
MEDICAL UNIVERSITY of South Carolina
BOARD OF TRUSTEES MEETING
April 11, 2013

The Board of Trustees of the Medical University of South Carolina convened Thursday, April 11, 2013 with the following members present: Thomas L. Stephenson, Esquire, Chairman; Dr. James E. Wiseman, Jr., Vice Chairman; Dr. Stanley C. Baker, Jr.; Mr. William H. Bingham, Sr.; Dr. Cotesworth P. Fishburne, Jr.; Dr. Harold W. Jablon; Dr. Donald R. Johnson II; Mr. William B. Hewitt; Dr. E. Conyers O'Bryan, Jr.; Dr. Thomas C. Rowland, Jr; Mr. Charles W. Schulze; The Honorable Robin M. Tallon and Dr. Charles B. Thomas, Jr.

The following administrative officials were present: Dr. Raymond S. Greenberg, President; Dr. Mark Sothmann, Vice President for Academic Affairs and Provost; Dr. Etta Pisano, Vice President for Medical Affairs, and Dean, College of Medicine; Ms. Lisa Montgomery, Executive Vice President for Finance and Operations; Dr. Pat Cawley, Vice President for Clinical Operations and Executive Director, MUHA; Dr. Frank Clark, MUHA; Vice President for Information Technology and CIO, Mr. Jim Fisher, Vice President for Development.

Item 1. Call to Order-Roll Call.

There being a quorum present, Chairman Stephenson called the meeting to order. Ms. Celeste Jordan called the roll.

Item 2. Secretary to Report Date of Next Meeting.

The date of the next regularly scheduled meeting is Thursday, May 16, 2013

Item 3. Approval of Minutes of the Regular Meeting of the Medical University of South Carolina Board of Trustees of February 7, 2013 and the Special Called Meeting February 28, 2013.

Board Action: It was moved that the Minutes be approved. The motion was seconded, voted on and unanimously carried.

RECOMMENDATIONS AND INFORMATIONAL REPORTS OF THE PRESIDENT.

OLD BUSINESS: None.

NEW BUSINESS:

Item 4. General Informational Report of the President.

No report.

Recommendations of Administration: That the report be received as information.

Board Action: Received as information.

Item 5. Other Business. None.

RESEARCH AND INSTITUTIONAL ADVANCEMENT COMMITTEE. CHAIRMAN: DR. COTESWORTH P. FISHBURNE, JR. (Detailed committee minutes are attached to these minutes).

OLD BUSINESS: None.

NEW BUSINESS:

Item 6. General Report of the Associate Provost for Research.

Statement: Report presented to committee.

Recommendation of Administration: That this report be received as information.

Recommendation of Committee: That this report be received as information.

Board Action: Received as information.

Item 7. General Report of the Vice President for Development.

Statement: Report presented to committee.

Recommendation of Administration: That this report be received as information.

Recommendation of Committee: That this report be received as information.

Board Action: Received as information.

Item 8. General Report of the CEO of the MUSC Foundation.

Statement: Report presented to committee.

Recommendation of Administration: That the report be received as information.

Recommendation of Committee: That the report be received as information.

Board Action: Received as information.

Item 9. General Report of the Executive Director of the MUSC Foundation for Research Development.

Statement: Report presented to committee.

Recommendation of Administration: That the report be received as information.

Recommendation of Committee: That the report be received as information.

Board Action: Received as information.

Item 10. Other Business.

Statement: Dr. Donato asked for approval of Dr. Rick Schnellmann as a new MUSC Foundation for Research Development Board member.

Recommendation of Committee: That the nomination be approved.

Board Action: A motion was made, seconded and unanimously voted to approve the appointment of Dr. Rick Schnellmann to the Board of the MUSC Foundation for Research Development.

EDUCATION, FACULTY AND STUDENT AFFAIRS COMMITTEE. CHAIRMAN: Dr. E. Conyers O'Bryan. (Detailed committee minutes are attached to these minutes).

OLD BUSINESS: None.

NEW BUSINESS:

Item 11. General Report of the Vice President for Academic Affairs and Provost.

Statement: Report presented to Committee.

Recommendation of Administration: That this report be received as information.

Recommendation of Committee: That this report be received as information

Board Action: Received as information.

Item 12. Tuition and Fees.

Statement: Changes to tuition and fees were presented for approval.

Recommendation of Administration: That the changes to tuition and fees be approved.

Recommendation of Committee: That the changes to tuition and fees be approved.

Board Action: a motion was made, seconded and unanimously voted to approve the changes to tuition and fees as presented.

Item 13. Other Committee Business.

A. Item 16. Endowed Chairs

Statement: At the request of the Dean of the College of Medicine, administration presented for approval the following endowed chair appointment:

Kevin F. Staveley-O'Carroll, M.D., Ph.D., as the Alice Ruth Reeves Folk Professor of Clinical Oncology Endowed Chair

Recommendation of Administration: That Dr. Staveley-O'Carroll be appointed as the Alice Ruth Reeves Folk Professor of Clinical Oncology Endowed Chair.

Recommendation of Committee: That Dr. Staveley-O'Carroll be appointed as the Alice Ruth Reeves Folk Professor of Clinical Oncology Endowed Chair.

Board Action: A motion was made, seconded and unanimously voted to approve the appointment as presented.

B. Item 15. Faculty Appointments

Statement: At the request of the Dean of the College of Medicine, administration presented for approval the following faculty appointments:

Donna M. Schwartz-Watts, M.D., as Clinical Professor in the Department of Psychiatry and Behavioral Sciences, effective April 1, 2013

Kevin F. Staveley-O'Carroll, M.D., Ph.D., (dual appointment) as Professor with tenure, on the Academic Clinician track, in the Department of Surgery, Division of General Surgery/Oncology, with dual appointment as Professor in the Department of Microbiology and Immunology, effective May 1, 2013.

Dr. Staveley-O'Carroll also will hold the Alice Ruth Reeves Folk Professor of Clinical Oncology Endowed Chair

Recommendation of Administration: That these faculty appointments be approved.

Recommendation of Committee: That these faculty appointments be approved.

Board Action: A motion was made, seconded and unanimously voted to approve the faculty appointments.

C. Item 16. Changes in Faculty Status

Statement: At the request of the Deans of the colleges of Dental Medicine and Medicine, administration presented for approval the following change in faculty status:

Frederic R. Boockfor, Ph.D., from Research Associate Professor to Adjunct Associate Professor, in the Department of Regenerative Medicine and Cell Biology, effective April 1, 2013

Recommendation of Administration: That this change in faculty status be approved.

Recommendation of Committee: That this change in faculty status be approved.

Board Action: A motion was made, seconded and unanimously voted to approve the change in faculty status.

Item 14. Master of Science in Health Informatics Degree Program (Consent Item).

Statement: At the request of the Dean of the College of Health Professions, administration presented for approval the proposed Master of Science in Health Informatics, effective April 12, 2013.

Recommendation of Administration: That the Master of Science in Health Informatics Degree Program be approved.

Recommendation of Committee: That the Master of Science in Health Informatics Degree Program be approved.

Board Action: A motion was made, seconded and unanimously voted to approve the Master of Science in Health Informatics Degree Program.

Item 15. Faculty Appointments (Consent Item).

Statement: At the request of the Deans of the Colleges of Health Professions and Medicine, administration presented the following faculty appointments:

College of Health Professions

Jacobo Enrique Mintzer, M.D., (joint appointments) as Professor, in the Departments of Neuroscience and Psychiatry and Behavioral Science in the College of Medicine, effective March 11, 2013.

Dr. Mintzer's primary appointment rests in the Department of Health Studies, College of Health Professions

College of Medicine

Vincent D. Pellegrini, Jr., as Professor with tenure, on the Clinician Educator track, in the Department of Orthopedic Surgery, effective April 1, 2013

Michael A. Taylor, M.D., as Clinical Professor in the Department of Pediatrics, Division of Violence Intervention and Protection, effective February 18, 2013

Graham W. Warren, M.D., Ph.D., (dual appointment) as Associate Professor in the Department of Cell and Molecular Pharmacology, effective January 1, 2013.

Dr. Warren's primary appointment resides in the Department of Radiation Oncology

Recommendation of Administration: That these faculty appointments be approved.

Recommendation of Committee: That these faculty appointments be approved.

Board Action: A motion was made, seconded and unanimously voted to approve the faculty appointments.

Item 16. Faculty Promotions (Consent Item).

Statement: At the request of the Deans of the colleges of Health Professions, Medicine, and Nursing, administration presented the following faculty promotions, to be effective July 1, 2013:

College of Medicine

From Associate Professor to Professor: Academic Clinician track without tenure

Marvella E. Ford, Ph.D., Department of Medicine, Division of Biostatistics and Epidemiology

Joyce S. Nicholas, Ph.D., Department of Medicine, Division of Biostatistics and Epidemiology; Dual: Department of Neurosciences, Division of Neurological Surgery

From Associate Professor to Professor: Clinician Educator track without tenure

David T. Marshall, M.D., Department of Radiation Oncology; Dual: Urology
Cassandra D. Salgado, M.D., M.S., Department of Medicine, Division of Infectious Diseases

From Clinical Associate Professor to Clinical Professor: Modified Clinical track

Paul J. Hietko, M.D., Department of Pediatrics, Division of General Pediatrics

From Assistant Professor to Associate Professor: Academic Investigator track

Zsolt Ablonczy, Ph.D., Department of Ophthalmology

Joe B. Blumer, Ph.D., Department of Cell and Molecular Pharmacology; Dual: Department of Neurosciences, Division of Neuroscience Research

Galina S. Bogatkevich, M.D., Ph.D., Department of Medicine, Division of Rheumatology and Immunology

Scott T. Eblen, Ph.D., Department of Cell and Molecular Pharmacology

Shahid Husain, Ph.D., Department of Ophthalmology

Jennifer S. Isaacs, Ph.D., Department of Cell and Molecular Pharmacology

Jeffrey A. Jones, Ph.D., Department of Surgery, Division of Cardiothoracic Surgery

Prakash Kara, Ph.D., Department of Neurosciences, Division of Neuroscience Research; Dual: Ophthalmology

Hainan Lang, M.D., Ph.D., Department of Pathology and Laboratory Medicine

Kristi Lynn Helke, D.V.M., Ph.D., Department of Comparative Medicine; Dual: Pathology and Laboratory Medicine

From Assistant Professor to Associate Professor: Academic Clinician track

J. Todd Purves, M.D., Ph.D., Department of Urology; Dual: Pediatrics, Division of General Pediatrics; and Regenerative Medicine and Cell Biology

From Assistant Professor to Associate Professor: Clinician Educator track

Evert A. Eriksson, M.D., Department of Surgery, Division of General Surgery
Kerry Lynn Hammond, M.D., Department of Surgery, Division of General Surgery
Nicholas C. Koch, M.D., Department of Radiation Oncology
Erik J. Lentsch, M.D., Department of Otolaryngology – Head and Neck Surgery
John W. McGillicuddy, M.D., Department of Surgery, Division of Transplant Surgery
Ted A. Meyer, M.D., Department of Otolaryngology – Head and Neck Surgery; Joint:
Department of Health Sciences Research, College of Health Professions
Jonathan C. Picard, M.D., Department of Urology
Chitharanjan C. Pullattrana, M.B.B.S., Department of Surgery, Division of General
Surgery
Natasha M. Ruth, M.D., M.S., Department of Pediatrics, Division of Rheumatology
and Immunology; Dual: Department of Medicine, Division of Rheumatology and
Immunology
David J. Sas, D.O., M.P.H., Department of Pediatrics, Division of Pediatric
Nephrology
Lancer A. Scott, M.D., Department of Medicine, Division of Emergency Medicine;
Dual: Department of Pediatrics, Division of Pediatric Emergency Medicine
Keisuke Shirai, M.D., M.S.C.R., Department of Medicine, Division of
Hematology/Oncology
Daniel H. Steinberg, M.D., Department of Medicine, Division of Cardiology
Marian H. Taylor, M.D., Department of Medicine, Division of Cardiology
Raymond D. Turner, IV, M.D., Department of Neurosciences, Division of
Neurological Surgery
William A. Vandergrift, III, M.D., Department of Neurosciences, Division of
Neurological Surgery
Shane K. Woolf, M.D., Department of Orthopaedic Surgery

From Research Assistant Professor to Research Associate Professor: Modified
Research track

Mushfiquddin Khan, Ph.D., Department of Pediatrics, Division of Developmental
Neurogenetics

From MUSC AHEC Assistant Professor to Associate Professor

Matthew R. Laye, M.D., (Spartanburg/ Ob/Gyn)
Michael J. Orseck, M.D., (Spartanburg/Surgery)

College of Health Professions

From Assistant Professor to Associate Professor, on the Academic Clinician Non-
Tenure Track

Joseph Sestino, Ph.D., C.C.P., Department of Health Professions, Division of
Cardiovascular Perfusion

From Assistant Professor to Associate Professor, on the Academic Educator Track

Patricia Coker-Bolt, Ph.D., OTR/L, Department of Health Professions, Division of
Occupational Therapy

From Assistant Professor to Associate Professor, on the Academic Research
Tenure Track

Heather Shaw Bonilha, Ph.D., CCC-SLP, Department of Health Sciences Research

College of Nursing

From Assistant Professor to Associate Professor, on the Educator/Researcher Track

Ida J. Spruill, Ph.D., College of Nursing

Recommendation of Administration: That these faculty promotions be approved.

Recommendation of Committee: That these faculty promotions be approved

Board Action: A motion was made, seconded and unanimously voted to approve the faculty promotions.

Item 17. Changes in Faculty Status (Consent Item).

Statement: At the request of the Dean of the College of Medicine, administration presented for approval, the following change in faculty status:

Stephen A. McLeod-Bryant, M.D., from Associate Professor to Clinical Associate Professor in the Department of Psychiatry and Behavioral Sciences, effective January 18, 2013

Recommendation of Administration: That these changes in faculty status be approved.

Recommendation of Committee: That these changes in faculty status be approved.

Board Action: A motion was made, seconded and unanimously voted to approve the changes in faculty status.

Item 18. Sabbatical Leave (Consent Item).

Statement: At the request of the Dean of the College of Medicine, administration presented for approval a one-year sabbatical for Mae Millicent Peterseim, M.D., beginning July 21, 2013.

Recommendation of Administration: That a one-year sabbatical for Dr. Mae M. Peterseim beginning July 21, 2013, be approved.

Recommendation of Committee: That a one-year sabbatical for Dr. Mae M. Peterseim beginning July 21, 2013, be approved.

Board Action: A motion was made, seconded and unanimously voted to approve the sabbatical.

Item 19. Post-Tenure Review (Consent Item).

Statement: At the request of the Dean of the College of Medicine, Administration presented as information, the following post-tenure review approvals.

- Ian A. Aaronson, M.D.**, Professor, Department of Urology
David B. Adams, M.D., Professor, Department of Surgery, Division of General Surgery
Raymond F. Anton, M.D., Distinguished University Professor, Department of Psychiatry and Behavioral Sciences
W. Scott Argraves, Ph.D., Professor, Department of Regenerative Medicine and Cell Biology
John Michael Arthur, M.D., Ph.D., Professor, Department of Medicine, Division of Nephrology
Gary S. Aston-Jones, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research
David L. Bachman, M.D., Professor, Department of Neurosciences, Division of Neurology
Howard C. Becker, Ph.D., Professor, Department of Psychiatry and Behavioral Sciences
Phillip Darwin Bell, Ph.D., Professor, Department of Medicine, Division of Nephrology
Connie L Best, Ph.D., Professor, Department of Psychiatry and Behavioral Sciences
Narayan R. Bhat, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research
Amy V. Blue, Ph.D., Professor, Department of Family Medicine
Kathleen T. Brady, M.D., Ph.D., Professor, Department of Psychiatry and Behavioral Sciences
L. Judson Chandler, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research
Joel Cook, M.D., Professor, Department of Dermatology and Dermatologic Surgery
Craig E. Crosson, Ph.D., Professor, Department of Ophthalmology
Lori M. Dickerson, Pharm.D., Professor, Department of Family Medicine
Judy R. Dubno, Ph.D., Professor, Department of Otolaryngology – Head and Neck Surgery
Brent M. Egan, M.D., Professor, Department of Medicine, Division of General Internal Medicine
Bruce M. Elliott, M.D., Professor, Department of Surgery, Division of Vascular Surgery
David R. Garr, M.D., Professor, Department of Family Medicine
Sebastiano Gattoni-Celli, M.D., Professor, Department of Radiation Oncology
Mark S. George, M.D., Distinguished University Professor, Department of Psychiatry and Behavioral Sciences
Gary S. Gilkeson, M.D., Professor, Department of Medicine, Division of Rheumatology
Leonie Gordon, M.B.,Ch.B., Professor, Department of Radiology and Radiological Science

Ann-Charles E. Granholm-Bentley, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research
Barry L. Hainer, M.D., Professor, Department of Family Medicine
Debra J. Hazen-Martin, Ph.D., Professor, Department of Pathology and Laboratory Medicine
John D. Hildebrandt, Ph.D., Professor, Department of Cell and Molecular Pharmacology and Experimental Therapeutics
Brenda J. Hoffman, M.D., Professor, Department of Medicine, Division of Gastroenterology
Stanley R. Hoffman, Ph.D., Professor, Department of Medicine, Division of Rheumatology
Bruce W. Hollis, Ph.D., Professor, Department of Pediatrics, Division of Neonatology
William J. Hueston, M.D., Professor, Department of Family Medicine
Thomas C. Hulsey, Sc.D., Professor, Department of Pediatrics, Division of Pediatric Epidemiology
Florence N. Hutchison, M.D., Professor, Department of Medicine, Division of Nephrology
Joseph M. Jenrette, M.D., Professor, Department of Radiation Oncology
Peter W. Kalivas, Ph.D., Distinguished University Professor, Department of Neurosciences, Division of Neuroscience Research
Dean G. Kilpatrick, Ph.D., Distinguished University Professor, Department of Psychiatry and Behavioral Sciences
Mark S. Kindy, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research
John M. Kratz, M.D., Professor, Department of Surgery, Division of Cardiothoracic Surgery
Markus J.P. Kruesi, M.D., Professor, Department of Psychiatry and Behavioral Sciences
Daniel T. Lackland, Dr.PH., Professor, Department of Neurosciences, Division of Neuroscience Research
Paul R. Lambert, M.D., Professor, Department of Otolaryngology – Head and Neck Surgery
Stephen M. Lanier, Ph.D., Professor, Department of Cell and Molecular Pharmacology and Experimental Therapeutics
John Lazarchick, M.D., Professor, Department of Pathology and Laboratory Medicine
David N.B. Lewin, M.D., Professor, Department of Pathology and Laboratory Medicine
Maria F. Lopes-Virella, M.D., Ph.D., Professor, Department of Medicine, Division of Endocrinology
Roger R. Markwald, Ph.D., Distinguished University Professor, Regenerative Medicine and Cell Biology
Jacqueline F. McGinty, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research
Donald R. Menick, Ph.D., Professor, Department of Medicine, Division of Cardiology

Roger B. Newman, M.D., Professor, Obstetrics and Gynecology, Division of Maternal Fetal Medicine
Patrick M. O'Neil, Ph.D., Professor, Department of Psychiatry and Behavioral Sciences
Steven M. Ornstein, M.D., Professor, Department of Family Medicine
G. Shashidhar Pai, M.D., Professor, Department of Pediatrics, Division of Pediatric Genetics
Janardan P. Pandey, Ph.D., Professor, Department of Microbiology and Immunology
K. Mark Payne, M.D., Professor, Department of Medicine, Division of Gastroenterology
William B. Pittard, M.D., Professor, Department of Pediatrics, Division of Pediatric Epidemiology
David W. Ploth, M.D., Professor, Department of Medicine, Division of Nephrology
Heidi S. Resnick, Ph.D., Professor, Department of Psychiatry and Behavioral Sciences
Adrian Reuben, M.B.B.S., Professor, Department of Medicine, Division of Gastroenterology
Jacob G. Robison, M.D., Professor, Department of Surgery, Division of Vascular Surgery
Steven A. Rosenzweig, Ph.D., Professor, Department of Cell and Molecular Pharmacology and Experimental Therapeutics
Robert M. Sade, M.D., Professor, Department of Surgery, Division of Cardiothoracic Surgery
Steven A. Sahn, M.D., Professor, Department of Medicine, Division of Pulmonary and Critical Care Medicine
Benjamin E. Saunders, Ph.D., Professor, Department of Psychiatry and Behavioral Sciences
Stephen I. Schabel, M.D., Professor, Department of Radiology and Radiological Science
John J. Schaefer, M.D., Professor, Department of Anesthesia and Perioperative Medicine
Michael G. Schmidt, Ph.D., Professor, Department of Microbiology and Immunology
Christian Schwabe, D.D.S., Ph.D., Professor, Department of Biochemistry and Molecular Biology
Ronald E. See, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research
Sally E. Self, M.D., Professor, Department of Pathology and Laboratory Medicine
Darlene L. Shaw, Ph.D., Professor, Department of Psychiatry and Behavioral Sciences
Richard M. Silver, M.D., Distinguished University Professor, Department of Medicine, Division of Rheumatology and Immunology
Inderjit Singh, Ph.D., Distinguished University Professor, Department of Pediatrics, Division of Developmental Neurogenetics
Edwin A. Smith, M.D., Professor, Department of Medicine, Division of Rheumatology and Immunology
M. Timothy Smith, M.D., Professor, Department of Pathology and Laboratory Medicine

Adam J. Smolka, Ph.D., Professor, Department of Medicine, Division of Gastroenterology
David E. Soper, M.D., Professor, Department of Obstetrics and Gynecology, Division of Benign Ob/Gyn
Charlton B. Strange, M.D., Professor, Department of Medicine, Division of Pulmonary and Critical Care Medicine
M. Michael Swindle, D.V.M., Professor, Department of Comparative Medicine
Bruce H. Thiers, M.D., Professor, Department of Dermatology and Dermatologic Surgery
Stephen Tomlinson, Ph.D., Professor, Department of Microbiology and Immunology
Michael E. Ullian, M.D., Professor, Department of Medicine, Division of Nephrology
Dennis K. Watson, Ph.D., Professor, Department of Pathology and Laboratory Medicine
M. Edward Wilson, M.D., Professor, Department of Ophthalmology
Michael R. Zile, M.D., Professor, Department of Medicine, Division of Cardiology

Recommendation of Administration: That these post-tenure approvals be received as information.

Recommendation of Committee: That these post-tenure approvals be received as information.

Board Action: Received as information.

FINANCE AND ADMINISTRATION COMMITTEE. CHAIRMAN: MR. CHARLES W. SCHULZE.
(Detailed committee minutes are attached to these minutes).

OLD BUSINESS: None.

NEW BUSINESS:

Item 20. Update on Cost Reductions.

Statement: Report provided to committee.

Recommendation of Administration: Received as information.

Recommendation of Committee: Received as information.

Board Action: Received as information.

Item 21. Financial Status Report of the Medical University of South Carolina.

Statement: Report presented to committee.

Recommendation of Administration: That this report be received as information.

Recommendation of Committee: That this report be received as information.

Board Action: Received as information.

Item 22. Financial Status Report of MUSC Physicians.

Statement: Report presented to committee.

Recommendation of Administration: That this report be received as information.

Recommendation of Committee: That this report be received as information.

Board Action: Received as information.

Item 23. Financial Status Report of the MUSC Foundation for Research Development.

Statement: Report presented to committee.

Recommendation of Administration: That this report be received as information.

Recommendation of Committee: That this report be received as information.

Board Action: Received as information.

Item 24. Other Committee Business.

Statement: A major purchase for a capital lease with Siemens for the purchase of an RS Artis Zee Floor at a cost of \$464,583 was presented for approval.

Recommendation of Administration: That the major purchase be approved.

Recommendation of Committee: That the major purchase be approved.

Board Action: a motion was made, seconded and unanimously voted to approve the major purchase as presented.

UNIVERSITY PHYSICAL FACILITIES COMMITTEE. CHAIRMAN: MR. WILLIAM H. BINGHAM, SR. (Detailed committee minutes are attached to these minutes).

OLD BUSINESS: None.

NEW BUSINESS:

Item 25. Facilities Procurement/Contracts Proposed.

Statement: The following Procurements/Contracts were presented for approval:

- Establish project to demolish the Bank Building and create additional parking. Total estimated budget: \$825,000.
- Establish project for College of Health Professions Research Building handicap ramp construction. Total estimated budget: \$365,000.
- Lease renewal for 4,574 square feet of office space located at 56 Courtenay Drive. Total cost of 5 year lease: \$440,000

Recommendation of Administration: That the procurements/contracts be approved.

Recommendation of Committee: That the procurements/contracts be approved.

Board Action: a motion was made, seconded and unanimously voted to approve the procurements/contracts as presented.

Item 26. Other Business. None

Item 27. Facilities Contracts Awarded (Consent Item).

Statement: The facilities contracts awarded since the last meeting were presented for information.

Recommendation of Administration: That the report be received as information.

Recommendation of Committee: That the report be received as information.

Board Action: Received as information.

MEDICAL UNIVERSITY OF SOUTH CAROLINA AUDIT COMMITTEE. CHAIRMAN: MR. WILLIAM B. HEWITT (Detailed committee minutes are attached to these minutes).

OLD BUSINESS: None.

NEW BUSINESS:

Item 28. Entrance Conference with KPMG.

Statement: Report provided to committee.

Recommendation of Administration: That this report be received as information.

Recommendation of Committee: That this report be received as information.

Board Action: Received as information.

Item 29. Report of the Office of Internal Auditor.

Statement: Report provided to committee.

Recommendation of Administration: That this report be received as information.

Recommendation of Committee: That this report be received as information.

Board Action: Received as information.

Item 30. Other Committee Business. None

OTHER BUSINESS FOR THE BOARD OF TRUSTEES:

Item 31. Approval of Consent Agenda.

Statement: Approval of the University Consent Agenda was requested.

Recommendation of Administration: That the consent agenda be approved.

Board Action: It was moved, seconded and unanimously voted that the consent agenda be approved.

Item 32. New Business for the Board of Trustees.

Item 33. Report from the Chairman.

Mr. Stephenson asked for an executive session to receive information on contractual and legal matters. At the conclusion of the session and with no action being taken and there being no further business, the meeting of the University Board of Trustees was adjourned.

Respectfully submitted,



Hugh B. Faulkner III
Secretary

Medical University of South Carolina

RESEARCH AND INSTITUTIONAL ADVANCEMENT COMMITTEE

MINUTES

April 11, 2013

Committee Members Present: Dr. Cotesworth P. Fishburne, Jr., (Chair), Dr. Harold W. Jablon, Dr. Thomas C. Rowland, Jr., The Honorable Robin Tallon, Dr. James E. Wiseman, Jr.

Other Trustees Present: Dr. Stanley C. Baker, Mr. William H. Bingham, Sr., Mr. William B. Hewitt, Dr. Donald R. Johnson, Dr. Conyers O'Bryan, Jr., Mr. Charles W. Schulze, Thomas L. Stephenson, Esq., Dr. Charles B. Thomas, Jr.

University Officers and Committee Staff Present: Mr. Tom Anderson, Dr. Pat Cawley, Dr. Phillip Costello, Mr. Robert Donato, Mr. Jim Fisher, Dr. Raymond S. Greenberg, Dr. Stephen Lanier, Ms. Lisa Montgomery, Dr. Etta Pisano, Dr. Darlene Shaw, Dr. Mark Sothmann, Dr. Gail Stuart, Dr. Joann Sullivan

Meeting Time: 8:30 – 8:50 am

Regular Agenda

Item 6. General Report of the Associate Provost for Research

Dr. Stephen Lanier presented the research activities report and a graph comparing extramural funding from NIH, ARRA funds and other sources. He noted that extramural awards were up by 7.8%. For the period ending March 31, 2013 \$161.2 million in awards were received, compared to FY2012 year-to-date of \$149.5 million. Corporate and other federal (non-NIH) funding both increased, demonstrating diversification of our research funding portfolio.

Dr. Lanier noted that two new SmartState Endowed Chairs have joined MUSC. Dr. Carol Feghali-Bostwick, recruited from the University of Pittsburgh, will be the first to hold the Kitty Trask Holt SmartState Endowed Chair in the SmartState Center for Inflammation and Fibrosis Research, and will serve as Associate Director of Scleroderma Research in Division of Rheumatology. Dr. Xue-Zhong Yu, recruited from the University of South Florida / H. Lee Moffitt Cancer Center, will hold the Robert K. Stuart Distinguished Endowed Chair in Hematology/Oncology, the second chair within the SmartState Cancer Stem Cell Biology and Therapy Center of Economic Excellence. Dr. Yu's research is the biology of graft-versus-host disease and graft-versus-leukemia after allogeneic hematopoietic stem cell transplantation.

Dr. Lanier reported that the National Postdoctoral Association Annual Conference was hosted by MUSC on March 15-17th, with >290 national and international postdoctoral fellows and attendees attending the conference. Dr. Ed Krug, Associate Dean for Postdoctoral Affairs, was instrumental in organizing this meeting.

Dr. Lanier also reported that MUSC is hosting the US-Israel Neurotechnology Business Exchange on May 6-7 to facilitate research and technology development partnerships.

Recommendation of Administration: That the report be received as information.

Recommendation of Committee: That the report be received as information.

Board Action:

Item 7. General Report of the Vice President for Development

Mr. Fisher reported that through April 1, 2013, we received more than \$50.3 million in new gifts and pledges. Progress to date compares very favorably to our results for this same time period last year of \$41.2 million, placing us at 22% ahead of last year's pace.

Mr. Fisher reported on several gifts. Susan Pearlstine has committed \$5 million to establish the Susan Pearlstine Sarcoidosis Center of Excellence. Dr. John Colwell made an additional gift to meet the \$1 million goal to establish the John A. Colwell Endowed Chair in Diabetes. Tom Cameron established an \$800,000 charitable remainder trust to provide future funding for four endowments for the Dr. Allen H. Johnson, Jr. Endowed Chair and to honor Drs. Pete Gazes, Mark Green and Fred Crawford. The College of Medicine received \$650,000 from the estate of Dr. Marie Roberts for the Rodman-Rhode Scholarship Fund, as well as \$250,000 from the Fullerton Foundation of Gaffney in support of an angioneurovascular suite. The Storm Eye Institute received a commitment of \$525,000 from Dr. Bill Johnson to support the Neuro-ophthamology Endowed Chair. Dr. Leo Brueggeman confirmed a commitment of \$300,000 towards the Building the Future of Pharmacy campaign. Two pledges of \$1.6 million and \$500,000 were received from the estate of Nat and Hannah Rosenfeld earmarked for the Department of Neurosciences and Alzheimer's Research.

Mr. Fisher reported that the inaugural meeting of the new class of MUSC Board of Visitors will be held tomorrow. The meeting will include a student panel, presentations by Dr. Pat Cawley on MUSC's clinical enterprise and Dr. Layton McCurdy on MUSC's history, and a tour of Ashley River Tower.

Recommendation of Administration: That the report be received as information.

Recommendation of Committee: That the report be received as information.

Board Action:

Item 8. General Report of the CEO of the MUSC Foundation

Mr. Tom Anderson reported on the investment returns as of 2/28/13, noting that total assets increased by \$36 million or 8.7% for trailing 12 months to a record \$449 million. He also reported that the MUSC Foundation Board at its February 15th meeting approved a 4.25% endowed payout for 2013-2014. He also noted that the MUSC Foundation reduced the interest rate floor by 25 basis points to 1.866% on \$37.3 million for three properties, resulting in a reduction in debt service of \$96,000 annually.

Mr. Anderson reported that two finalists have been named in the Master Developer selection process for Horizon Redevelopment Project: Hughes Development from Greenville, SC, and Gateway Partners from Atlanta, GA, and negotiations with both are currently being conducted. The findings will be presented on May 3rd to the MUSC Foundation Board. There were several questions about the Horizon Redevelopment Project, for which a more detailed presentation and discussion is needed when time permits.

Mr. Anderson respectfully requested the Board of Trustees to consider a successor appointee to the MUSC Foundation Board to replace Dr. Thomas C. Rowland who will complete his third term in August 2013. The new appointee term would begin November 2013.

Recommendation of Administration: That this report be received as information.

Recommendation of Committee: That this report be received as information.

Board Action:

Item 9. General Report of the Executive Director of the MUSC Foundation for Research Development

Mr. Robert Donato referred to the Tech Transfer Statistics in the Board's agenda, noting that the FRD has set a new record in the number of invention disclosures as a result of marketing and outreach efforts.

Mr. Donato noted that a new faculty appointee to the FRD Board is needed to replace Dr. Charles Smith. The Board made a motion to appoint Dr. Rick Schnellmann, Professor in the College of Pharmacy, to replace Dr. Smith. The motion was seconded and approved.

Recommendation of Administration: That this request be approved.

Recommendation of Committee: That this request be approved.

Board Action:

EDUCATION, FACULTY AND STUDENT AFFAIRS COMMITTEE. CHAIRMAN: DR. CONYERS O'BRYAN
April 12, 2013
MINUTES

Item 11. General Report of the Vice President for Academic Affairs

Statement: The Vice President for Academic Affairs and Provost will give a report.

SGA Update

SGA President, Brandon Hagan, introduced Danny Vo, a Dental Medicine student, as the new President-Elect of the Student Government Association. Brandon will be moving to Washington Hospital Center in Washington, D.C. Dr. Sothmann announced that Brandon was the recipient of the Student 2013 Earl B. Higgins Diversity award.

Student Reports – College of Nursing

Dean Gail Stuart introduced Crystal Bell (accelerated BSN program) and Heather Riley (On-Line DNP program), students in the College of Nursing, who talked briefly about their personal and educational backgrounds, their reasons for choosing MUSC, and their positive experiences at the Medical University of South Carolina.

College of Nursing Update

Dean Gail Stuart announced that the MUSC College of Nursing (among 700 colleges) ranked #21 nationwide in the NIH ranking of research programs. The US News and World Report ranked the MUSC College of Nursing's on-line graduate programs among the top 20. The College now has more than 250 on-line students, 60% of the student body.

Dr. O'Bryan congratulated Dean Stuart on the excellence of the College.

College of Dental Medicine Global and Local Outreach

Dr. Mark Barry, Professor and Associate Dean for Clinical Affairs in the College of Dental Medicine, gave a brief overview of the College's Dental Mission Trip to Quito, Ecuador, as a part of its dental community fellowship program. Over Spring Break, Dr. Barry accompanied a party of 76 faculty and students to Ecuador for a dental mission serving many who do not have access to dental care. Much was accomplished during the 4.5 days spent serving this community.

In collaboration with the SC Dental Association, faculty, residents, and students from MUSC's College of Dental Medicine participate in the Dental Access Days (DAD) Program serving many people in need. The next event will be held in August 2013 here in Charleston. The free clinic offers extractions, fillings, root canal treatment, limited anterior tooth replacement and cleanings.

Other Outreach Programs include: Greenville Free Medical, partnering with Saint Francis Bon Secours; Lady of Mercy at Johns island; East Cooper Community Outreach; Special Needs Clinic at Coastal Center in Ladson; and a new program in Georgetown Horry County at Georgetown Technical College providing pediatric dental care.

Regular and Consent Agendas

All items on the Regular, Addendum, and Consent Agendas were recommended for approval.

Recommendation of Administration: That this report be received as information.

Recommendation of Committee: That this report be received as information

Board Action:

Item 12. Tuition and Fees

Statement: Dr. Mark Sothmann will present tuition and fees changes for approval.

Recommendation of Administration: That these changes be approved.

Recommendation of Committee: That these changes be approved.

Board Action:

Item 13. Other Committee Business

A. Item 16. Endowed Chairs

Statement: At the request of the Dean of the College of Medicine, administration presented for approval the following endowed chair appointment:

Kevin F. Staveley-O'Carroll, M.D., Ph.D., as the Alice Ruth Reeves Folk Professor of Clinical Oncology Endowed Chair

Recommendation of Administration: That Dr. Staveley-O'Carroll be appointed as the Alice Ruth Reeves Folk Professor of Clinical Oncology Endowed Chair.

Recommendation of Committee: That Dr. Staveley-O'Carroll be appointed as the Alice Ruth Reeves Folk Professor of Clinical Oncology Endowed Chair.

Board Action:

B. Item 15. Faculty Appointments

Statement: At the request of the Dean of the College of Medicine, administration presented for approval the following faculty appointments:

Donna M. Schwartz-Watts, M.D., as Clinical Professor in the Department of Psychiatry and Behavioral Sciences, effective April 1, 2013

Kevin F. Staveley-O'Carroll, M.D., Ph.D., (dual appointment) as Professor with tenure, on the Academic Clinician track, in the Department of Surgery, Division of General Surgery/Oncology, with dual appointment as Professor in the Department of Microbiology and Immunology, effective May 1, 2013.

Dr. Staveley-O'Carroll also will hold the Alice Ruth Reeves Folk Professor of Clinical Oncology Endowed Chair

Recommendation of Administration: That these faculty appointments be approved.

Recommendation of Committee: That these faculty appointments be approved.

Board Action:

C. Item 16. Changes in Faculty Status

Statement: At the request of the Deans of the colleges of Dental Medicine and Medicine, administration presented for approval the following change in faculty status:

Frederic R. Boockfor, Ph.D., from Research Associate Professor to Adjunct Associate Professor, in the Department of Regenerative Medicine and Cell Biology, effective April 1, 2013

Recommendation of Administration: That this change in faculty status be approved.

Recommendation of Committee: That this change in faculty status be approved.

Board Action:

**EDUCATION, FACULTY AND STUDENT AFFAIRS COMMITTEE. CHAIRMANDR.
CONYERS O'BRYAN**
April 13, 2013

CONSENT AGENDA

Item 14. Master of Science in Health Informatics Degree Program

Statement: At the request of the Dean of the College of Health Professions, administration presented for approval the proposed Master of Science in Health Informatics, effective April 12, 2013.

Recommendation of Administration: That the Master of Science in Health Informatics Degree Program be approved.

Recommendation of Committee: That the Master of Science in Health Informatics Degree Program be approved.

Board Action:

Item 15. Faculty Appointments

Statement: At the request of the Deans of the Colleges of Health Professions and Medicine, administration presented the following faculty appointments:

College of Health Professions

Jacobo Enrique Mintzer, M.D., (joint appointments) as Professor, in the Departments of Neuroscience and Psychiatry and Behavioral Science in the College of Medicine, effective March 11, 2013.

Dr. Mintzer's primary appointment rests in the Department of Health Studies, College of Health Professions

College of Medicine

Vincent D. Pellegrini, Jr., as Professor with tenure, on the Clinician Educator track, in the Department of Orthopedic Surgery, effective April 1, 2013

Michael A. Taylor, M.D., as Clinical Professor in the Department of Pediatrics, Division of Violence Intervention and Protection, effective February 18, 2013

Graham W. Warren, M.D., Ph.D., (dual appointment) as Associate Professor in the Department of Cell and Molecular Pharmacology, effective January 1, 2013.

Dr. Warren's primary appointment resides in the Department of Radiation Oncology

Recommendation of Administration: That these faculty appointments be approved.

Recommendation of Committee: That these faculty appointments be approved.

Board Action:

Item 16. Faculty Promotions

Statement: At the request of the Deans of the colleges of Health Professions, Medicine, and Nursing, administration presented the following faculty promotions, to be effective July 1, 2013:

College of Medicine

From Associate Professor to Professor: Academic Clinician track without tenure

Marvella E. Ford, Ph.D., Department of Medicine, Division of Biostatistics and Epidemiology

Joyce S. Nicholas, Ph.D., Department of Medicine, Division of Biostatistics and Epidemiology; Dual: Department of Neurosciences, Division of Neurological Surgery

From Associate Professor to Professor: Clinician Educator track without tenure

David T. Marshall, M.D., Department of Radiation Oncology; Dual: Urology

Cassandra D. Salgado, M.D., M.S., Department of Medicine, Division of Infectious Diseases

From Clinical Associate Professor to Clinical Professor: Modified Clinical track

Paul J. Hletko, M.D., Department of Pediatrics, Division of General Pediatrics

From Assistant Professor to Associate Professor: Academic Investigator track

Zsolt Ablonczy, Ph.D., Department of Ophthalmology

Joe B. Blumer, Ph.D., Department of Cell and Molecular Pharmacology; Dual: Department of Neurosciences, Division of Neuroscience Research

Galina S. Bogatkevich, M.D., Ph.D., Department of Medicine, Division of Rheumatology and Immunology

Scott T. Eblen, Ph.D., Department of Cell and Molecular Pharmacology

Shahid Husain, Ph.D., Department of Ophthalmology

Jennifer S. Isaacs, Ph.D., Department of Cell and Molecular Pharmacology

Jeffrey A. Jones, Ph.D., Department of Surgery, Division of Cardiothoracic Surgery

Prakash Kara, Ph.D., Department of Neurosciences, Division of Neuroscience Research; Dual: Ophthalmology

Hainan Lang, M.D., Ph.D., Department of Pathology and Laboratory Medicine

Kristi Lynn Helke, D.V.M., Ph.D., Department of Comparative Medicine; Dual: Pathology and Laboratory Medicine

From Assistant Professor to Associate Professor: Academic Clinician track

J. Todd Purves, M.D., Ph.D., Department of Urology; Dual: Pediatrics, Division of General Pediatrics; and Regenerative Medicine and Cell Biology

From Assistant Professor to Associate Professor: Clinician Educator track

Evert A. Eriksson, M.D., Department of Surgery, Division of General Surgery

Kerry Lynn Hammond, M.D., Department of Surgery, Division of General Surgery

Nicholas C. Koch, M.D., Department of Radiation Oncology

Erik J. Lentsch, M.D., Department of Otolaryngology – Head and Neck Surgery

John W. McGillicuddy, M.D., Department of Surgery, Division of Transplant Surgery

Ted A. Meyer, M.D., Department of Otolaryngology – Head and Neck Surgery; Joint: Department of Health Sciences Research, College of Health Professions

Jonathan C. Picard, M.D., Department of Urology

Chitharanjan C. Pullattrana, M.B.B.S., Department of Surgery, Division of General Surgery

Natasha M. Ruth, M.D., M.S., Department of Pediatrics, Division of Rheumatology and Immunology; Dual: Department of Medicine, Division of Rheumatology and Immunology

David J. Sas, D.O., M.P.H., Department of Pediatrics, Division of Pediatric Nephrology

Lancer A. Scott, M.D., Department of Medicine, Division of Emergency Medicine; Dual: Department of Pediatrics, Division of Pediatric Emergency Medicine

Keisuke Shirai, M.D., M.S.C.R., Department of Medicine, Division of Hematology/Oncology

Daniel H. Steinberg, M.D., Department of Medicine, Division of Cardiology

Marian H. Taylor, M.D., Department of Medicine, Division of Cardiology

Raymond D. Turner, IV, M.D., Department of Neurosciences, Division of Neurological Surgery

William A. Vandergrift, III, M.D., Department of Neurosciences, Division of Neurological Surgery

Shane K. Woolf, M.D., Department of Orthopaedic Surgery

From Research Assistant Professor to Research Associate Professor: Modified Research track

Mushfiquddin Khan, Ph.D., Department of Pediatrics, Division of Developmental Neurogenetics

From MUSC AHEC Assistant Professor to Associate Professor

Matthew R. Laye, M.D., (Spartanburg/ Ob/Gyn)

Michael J. Orseck, M.D., (Spartanburg/Surgery)

College of Health Professions

From Assistant Professor to Associate Professor, on the Academic Clinician Non-Tenure Track

Joseph Sistino, Ph.D., C.C.P., Department of Health Professions, Division of Cardiovascular Perfusion

From Assistant Professor to Associate Professor, on the Academic Educator Track

Patricia Coker-Bolt, Ph.D., OTR/L, Department of Health Professions, Division of Occupational Therapy

From Assistant Professor to Associate Professor, on the Academic Researcher Tenure Track

Heather Shaw Bonilha, Ph.D., CCC-SLP, Department of Health Sciences Research

College of Nursing

From Assistant Professor to Associate Professor, on the Educator/Researcher Track

Ida J. Spruill, Ph.D., College of Nursing

Recommendation of Administration: That these faculty promotions be approved.

Recommendation of Committee: That these faculty promotions be approved

Board Action:

Item 17. Changes in Faculty Status

Statement: At the request of the Dean of the College of Medicine, administration presented for approval, the following change in faculty status:

Stephen A. McLeod-Bryant, M.D., from Associate Professor to Clinical Associate Professor in the Department of Psychiatry and Behavioral Sciences, effective January 18, 2013

Recommendation of Administration: That these changes in faculty status be approved.

Recommendation of Committee: That these changes in faculty status be approved.

Board Action:

Item 18. Sabbatical Leave

Statement: At the request of the Dean of the College of Medicine, administration presented for approval a one-year sabbatical for Mae Milicent Peterseim, M.D., beginning July 21, 2013.

Recommendation of Administration: That a one-year sabbatical for Dr. Mae M. Peterseim beginning July 21, 2013, be approved.

Recommendation of Committee: That a one-year sabbatical for Dr. Mae M. Peterseim beginning July 21, 2013, be approved.

Board Action:

Item 19. Post-Tenure Review

Statement: At the request of the Dean of the College of Medicine, Administration presented as information, the following post-tenure review approvals.

Ian A. Aaronson, M.D., Professor, Department of Urology

David B. Adams, M.D., Professor, Department of Surgery, Division of General Surgery

Raymond F. Anton, M.D., Distinguished University Professor, Department of Psychiatry and Behavioral Sciences

W. Scott Argraves, Ph.D., Professor, Department of Regenerative Medicine and Cell Biology

John Michael Arthur, M.D., Ph.D., Professor, Department of Medicine, Division of Nephrology

Gary S. Aston-Jones, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research

David L. Bachman, M.D., Professor, Department of Neurosciences, Division of Neurology

Howard C. Becker, Ph.D., Professor, Department of Psychiatry and Behavioral Sciences

Phillip Darwin Bell, Ph.D., Professor, Department of Medicine, Division of Nephrology

Connie L Best, Ph.D., Professor, Department of Psychiatry and Behavioral Sciences

Narayan R. Bhat, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research

Amy V. Blue, Ph.D., Professor, Department of Family Medicine

Kathleen T. Brady, M.D., Ph.D., Professor, Department of Psychiatry and Behavioral Sciences

L. Judson Chandler, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research

Joel Cook, M.D., Professor, Department of Dermatology and Dermatologic Surgery

Craig E. Crosson, Ph.D., Professor, Department of Ophthalmology

Lori M. Dickerson, Pharm.D., Professor, Department of Family Medicine

Judy R. Dubno, Ph.D., Professor, Department of Otolaryngology – Head and Neck Surgery

Brent M. Egan, M.D., Professor, Department of Medicine, Division of General Internal Medicine

Bruce M. Elliott, M.D., Professor, Department of Surgery, Division of Vascular Surgery

David R. Garr, M.D., Professor, Department of Family Medicine

Sebastiano Gattoni-Celli, M.D., Professor, Department of Radiation Oncology

Mark S. George, M.D., Distinguished University Professor, Department of Psychiatry and Behavioral Sciences

Gary S. Gilkeson, M.D., Professor, Department of Medicine, Division of Rheumatology

Leonie Gordon, M.B.,Ch.B., Professor, Department of Radiology and Radiological Science

Ann-Charles E. Granholm-Bentley, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research

Barry L. Hainer, M.D., Professor, Department of Family Medicine

Debra J. Hazen-Martin, Ph.D., Professor, Department of Pathology and Laboratory Medicine

John D. Hildebrandt, Ph.D., Professor, Department of Cell and Molecular Pharmacology and Experimental Therapeutics

Brenda J. Hoffman, M.D., Professor, Department of Medicine, Division of Gastroenterology

Stanley R. Hoffman, Ph.D., Professor, Department of Medicine, Division of Rheumatology

Bruce W. Hollis, Ph.D., Professor, Department of Pediatrics, Division of Neonatology

William J. Hueston, M.D., Professor, Department of Family Medicine

Thomas C. Hulsey, Sc.D., Professor, Department of Pediatrics, Division of Pediatric Epidemiology

Florence N. Hutchison, M.D., Professor, Department of Medicine, Division of Nephrology

Joseph M. Jenrette, M.D., Professor, Department of Radiation Oncology

Peter W. Kalivas, Ph.D., Distinguished University Professor, Department of Neurosciences, Division of Neuroscience Research

Dean G. Kilpatrick, Ph.D., Distinguished University Professor, Department of Psychiatry and Behavioral Sciences

Mark S. Kindy, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research

John M. Kratz, M.D., Professor, Department of Surgery, Division of Cardiothoracic Surgery

Markus J.P. Kruesi, M.D., Professor, Department of Psychiatry and Behavioral Sciences

Daniel T. Lackland, Dr.PH., Professor, Department of Neurosciences, Division of Neuroscience Research

Paul R. Lambert, M.D., Professor, Department of Otolaryngology – Head and Neck Surgery

Stephen M. Lanier, Ph.D., Professor, Department of Cell and Molecular Pharmacology and Experimental Therapeutics

John Lazarchick, M.D., Professor, Department of Pathology and Laboratory Medicine

David N.B. Lewin, M.D., Professor, Department of Pathology and Laboratory Medicine

Maria F. Lopes-Virella, M.D., Ph.D., Professor, Department of Medicine, Division of Endocrinology

Roger R. Markwald, Ph.D., Distinguished University Professor, Regenerative Medicine and Cell Biology

Jacqueline F. McGinty, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research

Donald R. Menick, Ph.D., Professor, Department of Medicine, Division of Cardiology

Roger B. Newman, M.D., Professor, Obstetrics and Gynecology, Division of Maternal Fetal Medicine

Patrick M. O’Neil, Ph.D., Professor, Department of Psychiatry and Behavioral Sciences

Steven M. Ornstein, M.D., Professor, Department of Family Medicine

G. Shashidhar Pai, M.D., Professor, Department of Pediatrics, Division of Pediatric Genetics

Janardan P. Pandey, Ph.D., Professor, Department of Microbiology and Immunology

K. Mark Payne, M.D., Professor, Department of Medicine, Division of Gastroenterology

William B. Pittard, M.D., Professor, Department of Pediatrics, Division of Pediatric Epidemiology

David W. Ploth, M.D., Professor, Department of Medicine, Division of Nephrology

Heidi S. Resnick, Ph.D., Professor, Department of Psychiatry and Behavioral Sciences

Adrian Reuben, M.B.B.S., Professor, Department of Medicine, Division of Gastroenterology

Jacob G. Robison, M.D., Professor, Department of Surgery, Division of Vascular Surgery

Steven A. Rosenzweig, Ph.D., Professor, Department of Cell and Molecular Pharmacology and Experimental Therapeutics

Robert M. Sade, M.D., Professor, Department of Surgery, Division of Cardiothoracic Surgery

Steven A. Sahn, M.D., Professor, Department of Medicine, Division of Pulmonary and Critical Care Medicine

Benjamin E. Saunders, Ph.D., Professor, Department of Psychiatry and Behavioral Sciences

Stephen I. Schabel, M.D., Professor, Department of Radiology and Radiological Science

John J. Schaefer, M.D., Professor, Department of Anesthesia and Perioperative Medicine

Michael G. Schmidt, Ph.D., Professor, Department of Microbiology and Immunology

Christian Schwabe, D.D.S., Ph.D., Professor, Department of Biochemistry and Molecular Biology

Ronald E. See, Ph.D., Professor, Department of Neurosciences, Division of Neuroscience Research

Sally E. Self, M.D., Professor, Department of Pathology and Laboratory Medicine

Darlene L. Shaw, Ph.D., Professor, Department of Psychiatry and Behavioral Sciences

Richard M. Silver, M.D., Distinguished University Professor, Department of Medicine, Division of Rheumatology and Immunology

Inderjit Singh, Ph.D., Distinguished University Professor, Department of Pediatrics, Division of Developmental Neurogenetics

Edwin A. Smith, M.D., Professor, Department of Medicine, Division of Rheumatology and Immunology

M. Timothy Smith, M.D., Professor, Department of Pathology and Laboratory Medicine

Adam J. Smolka, Ph.D., Professor, Department of Medicine, Division of Gastroenterology

David E. Soper, M.D., Professor, Department of Obstetrics and Gynecology, Division of Benign Ob/Gyn

Charlton B. Strange, M.D., Professor, Department of Medicine, Division of Pulmonary and Critical Care Medicine

M. Michael Swindle, D.V.M., Professor, Department of Comparative Medicine

Bruce H. Thiers, M.D., Professor, Department of Dermatology and Dermatologic Surgery

Stephen Tomlinson, Ph.D., Professor, Department of Microbiology and Immunology

Michael E. Ullian, M.D., Professor, Department of Medicine, Division of Nephrology

Dennis K. Watson, Ph.D., Professor, Department of Pathology and Laboratory Medicine

M. Edward Wilson, M.D., Professor, Department of Ophthalmology

Michael R. Zile, M.D., Professor, Department of Medicine, Division of Cardiology

Recommendation of Administration: That these post-tenure approvals be received as information.

Recommendation of Committee: That these post-tenure approvals be received as information.

Board Action:

Medical University of South Carolina
Current (FY13) and Proposed (FY14) Schedule of Academic Charges
College of Dental Medicine

	CURRENT ACADEMIC CHARGE		PROPOSED ACADEMIC CHARGE		% Increase	
	In-State	Out-of-State	In-State	Out-of-State	In-State	Out-of-State
Dental Medicine						
Semester	\$ 15,360	\$ 26,855	\$ 15,821	\$ 27,661	3%	3%
Summer	11,754	20,888	12,107	21,515	3%	3%
Dental Scientist Training Program(DSTP)						
Semester	\$ 15,360	\$ 26,855	\$ 15,821	\$ 27,661	3%	3%
Summer	11,754	20,888	12,107	21,515	3%	3%
Full-Time (Each Term) Master of Science in Dentistry						
Semester	\$ 1,392	\$ 1,392	\$ 1,448	\$ 1,448	4%	4%
Summer	1,280	1,280	1,331	1,331	4%	4%
Full-Time (Each Term) Master of Oral Science - <i>New</i>						
Semester	\$ -	\$ -	\$ 9,500	\$ 11,875	100%	100%
Summer	-	-	5,000	6,250	100%	100%

Medical University of South Carolina
Current (FY13) and Proposed (FY14) Schedule of Academic Charges
College of Medicine

	CURRENT ACADEMIC CHARGE		PROPOSED ACADEMIC CHARGE		% Increase	
	In-State	Out-of-State	In-State	Out-of-State	In-State	Out-of-State
Full-Time (Each Term)						
Semester	\$ 16,694	\$ 29,926	\$ 17,195	\$ 30,824	3%	3%
Third Year	20,815	34,473	21,439	35,507	3%	3%

Medical University of South Carolina
Current (FY13) and Proposed (FY14) Schedule of Academic Charges
College of Graduate Studies

	CURRENT ACADEMIC CHARGE		PROPOSED ACADEMIC CHARGE		% Increase	
	In-State	Out-of-State	In-State	Out-of-State	In-State	Out-of-State
Full-Time (Each Term)						
Master in Biomedical Sciences						
Semester	\$ 6,490	\$ 10,128	\$ 6,490	\$ 10,128	0%	0%
Summer	5,220	7,973	5,220	7,973	0%	0%
Master in Clinical Research						
Semester	\$ 6,490	\$ 10,128	\$ 6,490	\$ 10,128	0%	0%
Summer	5,220	7,973	5,220	7,973	0%	0%
Ph.D. Program						
Semester	\$ 6,474	\$ 9,590	\$ 6,798	\$ 10,070	5%	5%
Summer	5,305	7,602	5,570	7,982	5%	5%
Ph.D. Program - Dental Scientist Training Program(DSTP)						
Semester	\$ 6,474	\$ 9,590	\$ 6,798	\$ 10,070	5%	5%
Summer	5,305	7,602	5,570	7,982	5%	5%
Ph.D. Program - Medical Scientist Training Program(MSTP)						
Semester	\$ 6,474	\$ 9,590	\$ 6,798	\$ 10,070	5%	5%
Summer	5,305	7,602	5,570	7,982	5%	5%
Certificate Programs						
Semester	\$ 6,490	\$ 10,128	\$ 6,490	\$ 10,128	0%	0%
Summer	5,220	7,973	5,220	7,973	0%	0%
Part-Time (Per Semester Hour)						
Master in Biomedical Studies						
Semester	\$ 546	\$ 838	\$ 546	\$ 838	0%	0%
Summer	546	838	546	838	0%	0%
Master in Clinical Research						
Semester	\$ 546	\$ 838	\$ 546	\$ 838	0%	0%
Summer	546	838	546	838	0%	0%
Ph. D. Program						
Semester	\$ 578	\$ 882	\$ 607	\$ 926	5%	5%
Summer	578	882	607	926	5%	5%
Certificate Programs						
Semester	\$ 546	\$ 838	\$ 546	\$ 838	0%	0%
Summer	546	838	546	838	0%	0%

Medical University of South Carolina
Current (FY13) and Proposed (FY14) Schedule of Academic Charges
College of Health Professions

	CURRENT ACADEMIC CHARGE		PROPOSED ACADEMIC CHARGE		% Change In-State	% Change Out-of-State
	In-State	Out-of-State	In-State	Out-of-State		
Full-Time (Each Term)						
Graduate						
Semester	\$ 7,647	\$ 10,955	\$ 7,724	\$ 11,065	1%	1%
Summer	7,647	10,955	7,724	11,065	1%	1%
Cardiovascular Perfusion						
Semester	\$ 7,167	\$ 10,955	\$ 7,239	\$ 11,065	1%	1%
Summer	7,167	10,955	7,239	11,065	1%	1%
Anesthesia for Nurses						
Semester	\$ 7,647	\$ 10,955	\$ 7,647	\$ 10,955	0%	0%
Summer	7,647	10,955	7,647	10,955	0%	0%
Masters in Healthcare Administration (Executive)						
Semester	\$ 7,647	\$ 8,268	\$ 7,724	\$ 8,516	1%	3%
Summer	7,647	8,268	7,724	8,516	1%	3%
Masters in Healthcare Administration (Residential)						
Semester	\$ 7,647	\$ 10,955	\$ 7,724	\$ 11,284	1%	3%
Summer	7,647	10,955	7,724	11,284	1%	3%
Occupational Therapy						
Semester	\$ 7,847	\$ 11,155	\$ 7,926	\$ 11,267	1%	1%
Summer	7,847	11,155	7,926	11,267	1%	1%
Physician Assistant						
Semester	\$ 7,647	\$ 10,955	\$ 7,647	\$ 11,503	0%	5%
Summer	7,647	10,955	7,647	11,503	0%	5%
Doctorate in Health Administration						
Annual Tuition	\$ 29,097	\$ 29,097	\$ 29,097	\$ 29,097	0%	0%
Doctorate in Health Administration - Interprofessional						
Annual Tuition	\$ 16,538	\$ 16,538	\$ 17,034	\$ 17,034	3%	3%
Doctorate in Health Administration - Information Systems						
Annual Tuition	\$ 16,538	\$ 16,538	\$ 17,034	\$ 17,034	3%	3%
Doctorate in Health and Rehabilitation Science (PhD)						
Semester	\$ 6,037	\$ 6,395	\$ 6,098	\$ 6,459	1%	1%
Summer	6,037	6,395	6,098	6,459	1%	1%
Doctorate in Physical Therapy						
Semester	\$ 7,847	\$ 11,155	\$ 7,926	\$ 11,267	1%	1%
Summer	7,847	11,155	7,926	11,267	1%	1%
Part-Time (Per Semester Hour)						
Graduate						
Semester	\$ 870	\$ 1,446	\$ 879	\$ 1,461	1%	1%
Summer	870	1,446	879	1,461	1%	1%
Masters in Healthcare Administration (Executive)						
Semester	\$ 775	\$ 838	\$ 783	\$ 864	1%	3%
Summer	775	838	783	864	1%	3%
Masters in Healthcare Administration (Residential)						
Semester	\$ 870	\$ 1,446	\$ 879	\$ 1,490	1%	3%
Summer	870	1,446	879	1,490	1%	3%
Doctorate in Health and Rehabilitation Science (PhD)						
Semester	\$ 870	\$ 1,446	\$ 879	\$ 1,461	1%	1%
Summer	870	1,446	879	1,461	1%	1%
Physician Assistant						
Semester	\$ 870	\$ 1,446	\$ 870	\$ 1,519	0%	5%
Summer	870	1,446	870	1,519	0%	5%

Medical University of South Carolina
Current (FY13) and Proposed (FY14) Schedule of Academic Charges
College of Nursing

	CURRENT ACADEMIC CHARGE		PROPOSED ACADEMIC CHARGE		% Increase	
	In-State	Out-of-State	In-State	Out-of-State	In-State	Out-of-State
Full-Time (Each Term)						
Undergraduate						
Semester	\$ 7,149	\$ 12,150	\$ 7,292	\$ 11,000	2%	-9%
Summer	7,149	12,150	7,292	11,000	2%	-9%
Graduate and Ph.D.						
Semester	\$ 7,725	\$ 9,553	\$ 7,957	\$ 9,553	3%	0%
Summer	7,725	9,553	7,957	9,553	3%	0%
Part-Time (Per Semester Hour)						
Undergraduate						
Semester	\$ 647	\$ 1,124	\$ 660	\$ 1,124	2%	0%
Summer	647	1,124	660	1,124	2%	0%
Graduate and Ph.D.						
Semester	\$ 795	\$ 985	\$ 819	\$ 985	3%	0%
Summer	795	985	819	985	3%	0%

Medical University of South Carolina
Current (FY13) and Proposed (FY14) Schedule of Academic Charges
South Carolina College of Pharmacy - MUSC Campus

	CURRENT ACADEMIC CHARGE			PROPOSED ACADEMIC CHARGE			% Increase		
	In-State	Out-of-State	Out-of-State with Scholarship	In-State	Out-of-State	Out-of-State with Scholarship	In-State	Out-of-State	Out-of-State with Scholarship
Full-Time (Each Term)*									
Semester	\$ 9,781	\$ 14,652	\$ 12,415	\$10,075	\$ 15,092	\$ 12,788	3%	3%	3%
Summer	2,884	4,223	3,605	2,970	4,350	3,713	3%	3%	3%
Part-Time (Per Credit Hour)*									
Semester	\$ 815	\$ 1,221	\$ 1,035	\$ 840	\$ 1,258	\$ 1,066	3%	3%	3%
Summer	815	1,221	1,035	840	1,258	1,066	3%	3%	3%

*** All tuition and fee increases are subject to change due to the joint SCCP program with USC. The USC tuition and fee rates have not yet been determined.**

Medical University of South Carolina
Current (FY13) & Proposed Changes (FY14) Schedule of Fees
(IN DOLLARS)

	<u>CURRENT (FY13)</u>	<u>PROPOSED (FY14)</u>	<u>\$ Increase</u>	<u>% Increase</u>
COLLEGE OF DENTAL MEDICINE				
Student Disability Insurance (annual)				
First and Second Year Students	\$ 80	\$ 95	\$ 15	19%
Third and Fourth Year Students	120	135	15	13%
Student Instrument Fee (annual)				
First through Fourth Year Students	4,500	4,650	150	3%
Clinical & Lab Support Fee (annual)	7,700	7,900	200	3%
Gross Anatomy (First Year Students only)	950	1,000	50	5%
Histology Lab (First Year Students only)	200	250	50	25%
Dental Informatics Fee (annual)	6,200	6,400	200	3%
Master of Science in Dentistry (annual)	8,500	8,750	250	3%
Master of Oral Science (annual) - <i>New</i>	-	8,750	8,750	100%
COLLEGE OF GRADUATE STUDIES				
Histology Fee (In-State, Certificate in Biomedical Sciences Program, annual)	1,221	1,274	53	4%
Histology Fee (Out-of-State, Certificate in Biomedical Sciences Program, annual)	3,246	3,419	173	5%
COLLEGE OF HEALTH PROFESSIONS				
Nurse Anesthesia (AFN)	1,355	1,500	145	11%
Application Fee (Per Application)	95	100	5	5%
Matriculation Fee (Applicant Accepted)	485	500	15	3%
COLLEGE OF MEDICINE				
Student Disability Insurance (annual)				
Third and Fourth Year Students	82	85	3	4%
Examination and Technical Support Fee (annual)				
First Year Students	225	200	(25)	-11%
Second Year Students	200	150	(50)	-25%
Third Year Students	405	435	30	7%
Radiation Safety Badge Fee (Third and Fourth Year Students, annual)	18	25	7	39%
Physical Diagnosis Fee (First Year Students, annual)	700	720	20	3%
COLLEGE OF NURSING				
Program Fees - Graduate/PHD - FT	420	-	(420)	-100%
Program Fees - Graduate/PHD - PT	210	-	(210)	-100%
Undergraduate Lab Fee	300	330	30	10%
COLLEGE OF PHARMACY				
Application Fee (Per Application)	95	65	(30)	-32%
Institutional Charges				
Part-Time Student Fee*	861	861	-	0%

* This is not a new fee, it is the consolidation of the Library Fee (\$158), Informatics Fee (\$193), and the Student Services Fee (\$510) charged to part time students.

February 28, 2013

Proposal to the
South Carolina Commission on Higher Education

from

Medical University of South Carolina

For the program:

Master of Science in Health Informatics

May 15, 2013

Raymond Greenberg, MD, PhD
President
Medical University of South Carolina

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College of Health Professions
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CLASSIFICATION

Program Title: Master of Science (MS) in Health Informatics

Academic Unit: Medical University of South Carolina
College of Health Professions
Department of Healthcare Leadership and Management

Designation, Type, and Level: Master of Science in Health Informatics

Proposed Implementation Date: Fall 2014

Program Identification: New

CIP code:

Site: Medical University of South Carolina (MUSC)

Program qualifies for supplemental Palmetto Fellows Scholarship and LIFE Scholarship Awards: No

Delivery Mode: Blended format (primarily online with one on-campus session per semester)

INSTITUTIONAL APPROVAL

This proposal has been reviewed and approved by the following internal review bodies at MUSC.

College of Health Professions (CHP) Leadership Council
Office of the Provost and Vice President for Academic Affairs
MUSC Board of Trustees

PURPOSE

In response to the high demand for educated and skilled professionals in health care information technology (IT) and data analytics, the Department in Healthcare Leadership and Management in the College of Health Professions (CHP) at the Medical University of South Carolina (MUSC) proposes to offer a 36-credit hour Master of Science in Health Informatics, designed primarily for working health care professionals. [Note: Our initial proposal was 45-credit hours. Upon closer review of comparable health informatics programs nationally, we found that most were approximately 36 credit hours. We believe the change from 45 to 36 credit hours will make the proposed curriculum more manageable for working health professionals (target student), while still providing ample coverage of key content. Course content was restructured slightly to accommodate the reduction in credit hours.]

Informatics is the science of information. Within the context of health care, the terms health informatics and biomedical informatics are often used interchangeably. For our purposes, we refer to biomedical informatics as “the interdisciplinary field that studies and pursues the effective use of biomedical data, information, and knowledge for scientific inquiry, problem

solving and decision making, motivated by efforts to improve health.”¹ Individuals trained in biomedical informatics study the collection, organization and application of information in health care and medical research. They are frequently involved in *theoretical research* and in the conceptual design and building of health care information systems including decision support applications. Many biomedical informatics professionals work at universities, academic medical centers, and in biotech and pharmaceutical industries. Health informatics is an *applied field* and individuals trained in health informatics generally work in health care provider organizations and settings and are skilled in the application and use of health information and data analytics. They are generally involved in applied research that examines issues such as the impact of health information technology on quality of care, patient safety and efficiency. They often focus on patient-level and population health data and comparative effectiveness research.

Our proposed MS in Health Informatics program is designed to ensure graduates are prepared (a) to select, implement, use, and evaluate health care information systems such as electronic health records (EHRs) and data management and analytic systems; (b) to lead organizational efforts in health informatics and IT; and (c) to apply data analytical skills to transform patient care and the care delivery process. The program will offer a thesis option to students interested in conducting health informatics research.

Biomedical informatics, including health informatics, is central to the State and MUSC. As South Carolina’s *only* Clinical and Translational Science Award (CTSA) center and one of 60 centers nationally, the CTSA goals are to accelerate the translation of basic sciences into treatments for patients, to engage communities in clinical research efforts, and to train a new generation of clinical and translational researchers. The proposed MS in Health Informatics is vital to MUSC’s overall strategic plan in bolstering its biomedical informatics activities, the CTSA renewal process, and in ensuring that South Carolina is competitive nationally in biomedical sciences and a knowledge-driven economy.

Program Objectives

The proposed MS in Health Informatics is designed to prepare graduates to:

1. Effectively lead health information system selection, implementation and evaluation projects.
2. Assume a leadership role in strategy planning and ensure alignment of information systems plan with overall organizational strategic plan.
3. Evaluate and optimize workflow and design efficient systems and processes.
4. Assess the value and potential impact of new and emerging informatics approaches in health care delivery.
 - a. Optimize the use of health information technologies such as EHRs, clinical decision support, health information exchange and data warehouses.
 - b. Understand various coding systems, terminology/nomenclatures, and relevant health information standards used in analyzing health data and in facilitating health information exchange.
5. Conduct evaluation studies examining the impact of health IT on quality, safety, efficiency and costs.
 - a. Make data-driven decisions
 - b. Evaluate comparative effectiveness research.
6. Effectively manage health IT staff and project teams.

¹ Kulikowski, CA, Shortliffe, EH, Currie, LM, et al. (2012). AMIA Board white paper: definition of biomedical informatics and specification of core competencies for graduate education in the discipline. *J Am Med Inform Association*, 19: 931-938.

7. Participate in and/or conduct research in health informatics; analyze data from large datasets (e.g., clinical data warehouse) for decision-making.
8. Work effectively with health IT vendors and business associates including health information exchange organizations.
9. Discuss current health policy, privacy and security regulations relevant to the use and adoption of health information technology.
10. Communicate effectively with systems designers, programmers, network engineers, and other technical personnel as well as clinicians and health care administrators.

JUSTIFICATION

A. Need for Program and Contributions to Economic Development in State

The United States is in the midst of its largest health IT investment ever as the majority of health care organizations are in the throes of implementing or upgrading their EHR systems. Driven largely by the influx of federal incentive dollars available through the Health Information Technology for Economic and Clinical Health Information (HITECH) Act of 2009, eligible hospitals and physician practices seek not only to adopt EHR systems but to demonstrate “meaningful use,”² indicating that providers have achieved certain thresholds and quality indicators.³ Providers who fail to achieve meaningful use by 2015 will experience a reduction in Medicare payments. Furthermore, with impending changes in reimbursement, a shift from fee-for-service to fees determined by outcomes/quality, health care providers must have the tools to easily capture, analyze, and act on patient- and population-level health information. Individuals trained in health informatics with strong leadership and data analytical skills will be critical to the organization’s success⁴ and ultimately, to the nation, in improving quality of care and containing health care costs.

Graduates of the program will be prepared to assume positions as data analytics officers, clinical system analysts, health IT project managers, and chief medical/nursing information officers in hospitals, physician practices, and other health care settings. We conducted a market analysis survey of major hospitals in South Carolina with responding hospitals ranging in size from 90 to 1200 beds. Based on a ratio of staff to hospital beds, we found a reported statewide need of at least 415 new certificate-trained and 71 master’s degree trained health informatics specialists in South Carolina within the next two years alone. National reports indicate a high demand for health information professionals at all levels. A recent national survey found that 70% of health insurers, 48% of hospitals, and 39% of pharmaceutical/life sciences plan to increase hiring of health informatics professionals over the next several years⁵. Although the Bureau of Labor Statistics does not currently report on health informatics as a designated profession, it predicts employment in computer systems design and related services will grow by 48% by 2018. Concurrently, health care jobs will grow by four million, accounting for 26% of all jobs in the US economy⁶. Chief information officers indicate their biggest barrier to implementing EHRs is a shortage of IT staff, including those with clinical expertise.

² Centers for Medicare and Medicaid Services (CMS), EHR Incentive Programs; Accessed online at <https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/index.html?redirect=/EHRIncentivePrograms/>

³ CMS EHR Meaningful Use Criteria, Accessed online at https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful_Use.html

⁴ Needles in a Haystack—Seeking Knowledge with Clinical Informatics, PwC Health Research Institute, February 2012.

⁵ Needles in a Haystack—Seeking Knowledge with Clinical Informatics, PwC Health Research Institute, February 2012.

⁶ Bureau of Labor Statistics, Accessed online http://www.bls.gov/news.release/archives/ecopro_12102009.pdf

Hersh and Wright estimate over 40,000 health informatics professionals are needed nationally⁷
⁸ Using Hersh's methodology and extrapolating by state, we calculate between 1,100 and 2,800 full time equivalent health IT professionals are currently needed in SC hospitals alone, not including other types of health care organizations. This range of need accounts for varying levels of health IT use in hospitals and is likely to increase to the higher end as more organizations adopt advanced EHR systems. Organizations are particularly in demand for individuals skilled in data analytics to effectively manage patient care and populations of patients in a cost-effective manner⁴.

The field of biomedical informatics is the intellectual foundation of current health IT systems (including effective organization, analysis, management and use of information) and is essential to any progressive vision for 21st century health care delivery. Strategically placed investments across the state will enable South Carolina to attract the best clinicians and scientists consolidating its role as a leader in the health/biomedical informatics field leading to substantial economic development gains through large research grants, industry partnership and entrepreneurial opportunities.

B. Centrality of Program to Institutional Mission

The proposed MS in Health Informatics is directly aligned with the mission of MUSC. As an academic medical center and a public institution of higher learning, MUSC's mission is to preserve and optimize human life in South Carolina and beyond. The university provides an interprofessional environment for learning and discovery through education of health care professionals and biomedical scientists, research in the health sciences, and provision of comprehensive health care. As mentioned earlier, MUSC is also one of 60 CTSA funded centers nationally. Translational research is increasingly data intensive. An integral part of the CTSA program is a robust informatics program for enabling and advancing translational research⁹. The data required for translating basic discoveries into clinical therapeutics and diagnostics and their testing and use in appropriate patients requires collaboration across many disciplines, including health care, research, and public health. Moreover, the amount and types of data (e.g. clinical, laboratory and genomics) that need to be integrated to generate knowledge is growing. Such integration would not be possible without informatics expertise. Additionally, in order to bridge the communication gap, educating translational researchers in informatics processes and procedures is a growing need in the CTSA program nationally.

One of the strategic goals of MUSC is to enhance its standing nationally as a top academic medical center. In order to compete as premier academic medical center and institution of higher education in the country, the development of informatics expertise and an informatics program must be accelerated. Most other top biomedical research institutions in the country either already have or are currently building strong academic and research informatics programs. The proposed MS in Health Informatics program will add a critical element to the growing informatics effort at MUSC, will provide a catalyst for future recruitment of top informatics educators and experts to the state, and will enhance growth in biomedical informatics statewide by providing expertise in integration of clinical, genetic/genomic and metabolomic data, placing South Carolina at the forefront of the field of biomedical sciences.

⁷ Hersh, W. and Wright, A. (2008). Characterizing the health information technology workforce: Analysis from the HIMSS Analytics Database.

⁸ Hersh, W. (2010). The health information technology workforce: Estimations of demands and a framework for requirements. *Applied Clinical Informatics*, 197-212.

⁹ Institutional Clinical and Translational Science Award. RFA: <http://grants.nih.gov/grants/guide/rfa-files/RFA-TR-12-006.html>.

C. Relationship of the Proposed Program to Other Related Programs within Institution

The Department of Healthcare Management and Leadership (DHLM) within the College of Health Professions at MUSC is ideally suited to offer this master's degree program. The Department currently offers a Master in Health Administration (MHA) program in two formats, residential and executive, and a Doctoral program in Health Administration and Leadership (DHA), delivered in an executive format and online. Three faculty who currently teach in the MHA and/or DHA programs have expertise in health informatics and/or data analytics, and will have a teaching role in the new program. One has done extensive research using national databases to assess the impact of health IT on quality, safety and efficiency. A second faculty member is primary author on a leading textbook in managing healthcare information systems and has expertise in evaluation of health IT projects. The third faculty member has extensive data analytics experience using archival clinical databases. All are outstanding educators; in fact, two have received MUSC Health Sciences Foundation awards for their excellence in teaching.

In collaboration with DHLM, key faculty from the College of Medicine at MUSC participated in the design of the proposed curriculum--Jihad Obeid, MD Associate Professor and SmartState¹⁰ Endowed Chair for Biomedical Informatics and Robert Warren, MD, PhD Professor and Chief Medical Information Officer. Both are trained in biomedical informatics, and have expressed interest in teaching and/or mentoring students in the new program. MUSC is also establishing a new Center for Biomedical Informatics and actively recruiting a Center Director (to fill a vacant SmartState Endowed Chair position in Informatics). The Center Director should be appointed by summer 2013. The new Center for Biomedical Informatics intends to recruit two new faculty to bolster the research and academic missions in informatics. The new Center Director and faculty will be advisory to the program, and serve as mentors to students. Other faculty across campus (e.g., in nursing, pharmacy) with expertise in informatics may serve as guest lecturers.

The proposed program is also strongly aligned with MUSC Medical Center, which has a long and distinguished history of health IT use, maintains a large clinical data warehouse, and is a key player in the Health Sciences South Carolina (HSSC) initiative. In addition, the success of MUSC's CTSA is heavily reliant on having a strong academic program in informatics. The program intends to work closely with faculty in the Center for Biomedical Informatics at MUSC.

D. List of Similar Programs in the State

According to the SC Commission on Higher Education directory, two other master degree programs in health information technology and informatics with a focus on health information management exist. The College of Hospitality, Retail and Sport Management (in collaboration with the Arnold School of Public Health) at the University of South Carolina recently started a Master's in Health Information Technology. This 36 credit hour program is designed for working professionals and includes five core courses and five electives. Students are also required to complete a minimum of 250 hours of approved health information technology experience.

A second related program at USC Upstate, recently requested approval by the CHE for a MS in Informatics with tracks in Health Information Management and Information Resource Management, to be offered at its Spartanburg and Greenville campuses. This 30 credit hour

¹⁰ SmartState Endowed Chairs are renowned scientists and engineers who lead centers for excellence and economic development in South Carolina (more at <http://smartstatesc.org/>).

program will accept its first class in the fall 2013. Courses will be offered in the evenings and supplemented with Web based instruction. The program is targeted to meeting the workforce health information management needs in the Upstate. The focus of this curriculum is business oriented.

The University of South Carolina, Clemson University and the College of Charleston all offer graduate programs in computer science, information systems and/ or discovery informatics. None of the programs have a health care focus. We intend to contract with faculty from the Department of Computer Science at the College of Charleston to teach one or two data management courses in the curriculum.

E. Description of Similarities and Differences between Proposed Program and Other Similar Programs at Other Institutions

Similarities and differences exist between our proposed MS in Health Informatics and the Masters in Health Information Technology offered by USC Columbia and the MS in Informatics (with tracks in information resource management and health information management) offered at USC Upstate. All programs offer core course work in the use and management of health information systems (such as EHR, health information exchange), strategic planning, project management, database management, and privacy and security regulations/standards, and are designed to prepare individuals to assume pivotal roles in health care provider organizations with the expansion and use of EHR systems.

Based upon our discussions with the directors of both programs and our review of their course descriptions, we believe our proposed curriculum has a greater emphasis on data analytics and preparing graduates who are able to mine large clinical databases and warehouses, and analyze clinical data for decision-making and research purposes. As an academic medical center and the only CTSA in the state, MUSC is equipped to provide students with firsthand experience in working with our clinical data warehouse and in conducting health informatics research. Our proposed program is also closely aligned with MUSC medical center complex, where clinical and administrative information systems are widely deployed. Students may gain firsthand experience with EHR systems, telemedicine/telehealth, patient portals, mobile technologies, and health information exchange, while collaborating with expert clinicians and researchers in the field. From our assessment of the other two similar programs in the state, we believe our emphasis on data analytics and our alignment with the medical center and CTSA are distinguishing features. Otherwise, the programs are similar in focus, and are all designed to address growing workforce demands in the field.

We do expect to collaborate with faculty from both programs in terms of research. The DHLM at MUSC intends to host regular research seminars for faculty engaged in health informatics research or interested in collaborating on research. In addition, USC Upstate has expressed interest in possibly collaborating with us by enabling students from both our programs to enroll in joint courses.

Collectively, we believe the three programs offer prospective students a range of graduate school opportunities in a field that is rapidly expanding and help to address the workforce demands within the state. As EHR systems become widely used, the need for individuals who can optimize the management of patient information and can analyze population health data

effectively will become vital to improving quality and reducing health care costs. Estimates indicate the demand for graduates will continue to be strong¹¹.

ADMISSION CRITERIA

Candidates considered for admission into the MS in Health Informatics program are to have earned a baccalaureate degree from an accredited college or university. A GPA of 3.0 on a 4.0 scale is necessary to be competitive. Previous graduate work should reflect a GPA of 3.0 or above. The applicant is also to submit a resume, personal statement indicating how this degree fits in with his/her career goals, and three references from individuals who can comment on the applicant's professional background, academic ability, and personal qualifications. Applicants are to demonstrate basic computer skills (proficient in using word processing, spreadsheet, and presentation software; knowledge of databases) and a demonstrated interest in health IT. Applicants should have at least one year of working experience in health care. Qualified candidates will be interviewed by the Admissions Committee and/or program director; the interviews will be held in person or via Skype.

ENROLLMENT

All students enrolled in the MS in Health Informatics program will be post-bachelors individuals. Students will have degrees in computer sciences, information technology, health information management, informatics, or health professions (such as medical, pharmacy, nursing or allied health). At least one year of related work experience will be required for admission.

Enrollment was projected primarily based on:

- 1) job demand projections made from the results of a state survey of hospitals. We conducted a market analysis survey of major hospitals in South Carolina with responding hospitals ranging in size from 90 to 1200 beds. Based on a ratio of staff to hospital beds we found a reported statewide need of at least 71 new master degree trained healthcare informatics specialists in South Carolina within the next 2 years alone.
- 2) extrapolation methods developed by Hersh and Wright in 2008. Using Hersh's methodology and extrapolating by state, we calculate between 1,100 and 2,800 full time equivalent health IT professionals are currently needed in SC hospitals alone, not accounting for other types of health care organizations¹². Approximately 15% of these professionals will require master's degrees.

These enrollment projections assume that MUSC will successfully communicate the demand for program graduates to potential students. This demand for graduates will translate into sufficient applications to meet enrollment projections.

Enrollment assumptions:

1. The program is four semesters long
2. New students will enter fall of each year
3. All students will be full-time, i.e. 9 credit hours per semester (although we plan to eventually have a part-time option)
4. There may be some student attrition.

¹¹ Hersh, W. (2010). The health information technology workforce: Estimations of demands and a framework for requirements. *Applied Clinical Informatics*, 197-212.

¹² Hersh, W. and Wright, A. (2008). Characterizing the health information technology workforce: Analysis from the HIMSS Analytics Database

Based on discussions with unit representatives within MUSC, we have identified 15-20 individuals interested in enrolling in the first program cohort. Therefore we are confident of the program demand projections.

Table A – Projected Total Enrollment

PROJECTED TOTAL ENROLLMENT						
YEAR	FALL		SPRING		SUMMER	
	Headcount	Credit Hours	Headcount	Credit Hours	Headcount	Credit Hours
2014 – 15	15	135	15	135	15	135
2015 – 16	40	360	25	225	25	225
2016 – 17	50	450	25	225	25	225
2017 – 18	50	450	25	225	25	225
2018 – 19	50	450	25	225	25	225

CURRICULUM

The 36-credit hour program will be offered in an executive format. Students will come to campus once a semester for a long weekend and the remaining course work will be delivered via the College’s state-of-the-art educational technology. Each semester, two of the courses will require a face-to face component; the other course will be entirely web-based. *Note:* This is the same format as the Executive MHA program at MUSC which has been quite successful in effectively accommodating the needs of working professionals.

The curriculum includes nine new courses. Health Care Delivery Systems (HAP721), Health Care Management (HAP719), and Project Management (HAP732) are currently offered by DHLM. The proposed curriculum and descriptions of courses are listed below. Each course is linked to the program objectives listed on page 3 of this proposal. Students with demonstrated background in IT will be exempt from the Database Management course. Those with backgrounds in health related professions such as nursing, pharmacy, medicine, or allied health will be exempt from the Health Care Delivery Systems course.

Curriculum*

Year 1	Year 2
<p><i>Fall Semester, Year 1</i></p> <ul style="list-style-type: none"> • Health Care Delivery Systems (3) or Database Management (3) depending on student’s background • Introduction to Health Care Information Systems (3) • Health Care Management and Leadership (3) <p><i>Spring Semester, Year 1</i></p> <ul style="list-style-type: none"> • Health Care Data—Content, Standards and Knowledge Discovery (3) • Applied Statistical and Research Methods (3) • Ethical, Legal and Regulatory Issues in Health Informatics (3) <p><i>Summer Semester, Year 1</i></p> <ul style="list-style-type: none"> • Systems Analysis and Design (3) • Advanced Health Information Technology (3) • Elective (3 SH)—from approved listing; or thesis option 	<p><i>Fall Semester, Year 2</i></p> <ul style="list-style-type: none"> • Data Mining and Analytics (3) • Project Management (3) • Practicum/Field Project (3) or Thesis Option (3)

**part-time option will also be available*

Health Care Delivery Systems (HAP-721)

This course provides an introduction to the organization and utilization of health services as well a brief overview of health policy and politics in the United States. Students explore the historical development of the US health care system, private and public health insurance, and current and future modes of care delivery and payment reform (e.g., accountable care). Current issues related to health care quality, access and cost are examined. Other important topics include population health, changing demographics, technological advances, emerging regulatory patterns, and role of comparative effectiveness research. (Students with health care background may exempt this course). (Objective 9)

Database Management

This course focuses on the fundamentals of database design, data organization and utilization. Topics include database applications in health care settings, end user needs analysis, logical database design, data integrity and database security. Students will be exposed to popular business database programs and real-world examples of databases in health care settings. Other topics include data types, data standards, information classification, and data management practices. (Students with an IT background may exempt this course.) (Objectives 5, 8, 10)

Introduction to Health Care Information Systems

This course provides students with an overview of various clinical and administrative information systems and critical functions used in health care. Key topics include electronic health records, computerized provider order entry, decision support, e-prescribing, telemedicine/telehealth, and revenue cycle. Students explore the history, adoption and use of various types of health care information systems and gain insight into the process of selecting and implementation of health IT systems. Reporting requirements and senior level management issues related to the adoption, use and management of health care information systems are also discussed. (Objectives 1, 2, 3, 4, 8, 10)

Health Care Management and Leadership (HAP-719)

This course focuses on health care management principles and effectively leading and managing change in today's health care environment. Students gain insight into the importance of integrating health information technology into the design of patient care delivery. Leadership traits and theories, organizational behavior, strategy formulation and implementation, change management, team building, and the role of leaders in managing health IT system projects/initiatives are discussed. Other important topics include IT governance, IT capital and operational budgeting, and IT asset management. (Objectives 1, 2, 6, 8, 10)

Health Care Data—Content, Standards and Knowledge Discovery

This course provides an overview of various types of health care data, different strategies for representing data, information and knowledge including terminologies and ontologies, database concepts (data modeling, relational databases, and structured query language), clinical data warehouses and data mining. Students explore the differences between transactional systems and analytical systems. (Objectives 4, 5, 7)

Applied Statistical and Research Methods

This course provides a working knowledge of approaches to the analysis of archival data for research and quality improvement purposes. Students gain practice in reading, understanding, and presenting statistical materials. Topics include data set and variable descriptions; issues of ascertainment bias associated with retrospective data; criteria for the selection of descriptive statistics; visual presentation of parameters; formulation of hypotheses appropriate for the data; multivariable analysis for continuous dependent variables; log transformation and gamma distribution models; logistic regression; Kaplan Meier curves; controls for selection bias; use of factor and cluster analysis for data reduction. SPSS and/or SAS required. Students are also introduced to research methods and how to critically evaluate the literature. Pre-requisite: Undergraduate statistics course. (Objectives 5, 7)

Systems Analysis and Design

This course provides the student with a fundamental understanding of the systems life cycle, and key processes involved in the analysis, design, implementation, evaluation and ongoing maintenance and support of health care information systems. Students participate in a hypothetical system selection and implementation process and gain experience in defining system requirements, evaluating vendor products, and negotiating contracts. Students also gain experience in mapping clinical workflow and process improvement, and in optimizing the use of health IT to facilitate patient care and improve efficiency. Additionally, students will study different methods for assessing the value of health IT investments. *Pre-requisite:* Introduction to Health Care Information Systems (Objectives 1, 3, 4, 5, 6, 8, 10)

Ethical, Legal and Regulatory Issues in Health Informatics

This course introduces students to the ethical, legal and regulatory issues relevant to the use of information technology in health care. Key topics include protecting patient confidentiality and securing health information; HIPAA privacy and security regulations; legal medical record; licensure and accreditation standards; health information exchange; preventing and managing breaches; business continuity and disaster planning; managing contracts with business associates. (Objective 9)

Data Mining and Analytics (originally entitled Data Management and Data Analytics)

With the continued influx of computers into every aspect of the healthcare environment, huge amounts of data are being generated and stored. To translate the vast amount of data into information and knowledge, health care provider organizations need to be able to extract information knowledge and patterns from data to remain competitive in the market and promote advances in health care (e.g. comparative effectiveness). Students will gain an understanding of the principles of data mining and will gain hands-on experience in implementing data mining projects. This course will cover techniques and topics that are widely used in real-world data mining projects including classification, clustering, dimension reduction, feature selection, and open-ended knowledge discovery. Class assignments and projects will use real-world data sets and tools to challenge the data analytical skills being learned. Pre-requisite: Applied Statistical Methods for Decision-Making; Database Management. (Objectives 4, 5, 7, 10)

Project Management (HAP-730)

This course is designed to provide students with an overview of how to effectively manage projects within a healthcare organization, with an emphasis on health IT projects. Project management fundamentals such as planning, goal setting, scheduling, resource allocation and management, monitoring and reporting are explored. The importance of governance is discussed. Students will be expected to demonstrate project management tools and techniques through the implementation of a semester-long project. Students gain experience in using project management software. (Objectives 1, 2, 6, 8, 10)

Advanced Health Information Technology

This course provides the students with an in-depth look at concepts in information technology as applied to health care. Topics include electronic medical records, knowledge-based systems, systems integration, human-computer interfaces, decision theory and decision support, digital libraries, and educational applications. Students will also be exposed to advanced topics in the information technology and health informatics literature. Faculty engaged in health informatics research will also share current research for which they are engaged (Objectives 1, 4, 7)

Practicum/Capstone Project

Students will complete a practicum in a health care facility or an approved capstone project. The practicum will provide the student with hands on experience in participating in some aspect of a health IT project. Students are expected to enhance their knowledge and skills in areas such as project management, workflow analysis, system evaluation and system optimization, and data analytics. Students are expected to apply and synthesize concepts presented throughout the curriculum. (Objectives 1-10)

Thesis Option

Students who are interested in conducting research in health informatics should opt for the thesis option. The student will work with a faculty research advisor (and least two other committee members) in developing a research proposal with well-defined problem statement,

hypothesis/research question, review of the literature, and methods. Student will present proposal and conduct independent research study. Thesis requires final defense of research to thesis committee. May span more than one semester. Prerequisite: Applied Statistical and Research Methods.)

Elective (from approved listing):

Informatics and Data Management for Clinical Research (MCR746)
Quality Management in Health Care (HAP632)
Reimbursement Methods for Health Care Organizations (HAP630)
Other approved course

ASSESSMENT

The MS in Health Informatics Program prepares students for careers in healthcare informatics in health services organizations. The program prepares students who are currently working in healthcare to advance in health care informatics positions. Concepts presented in class are reinforced and applied in students' workplace practice settings throughout the students' program of study. Students will take classes in a hybrid model with an on-campus session each semester and through online presentations, readings, postings, assignments, and discussions. The program will assess both program outcomes and student learning outcomes.

Program Outcomes

Assessment of program outcomes will consist of metrics measuring student perceptions of program quality. The following metrics will be monitored:

1. Percent of students who graduate on time.
2. Percent of graduating students who agreed that they made the right choice in selecting MUSC for their education.
3. Percent of graduating students who agreed that they would recommend the MUSC MSHI program to other prospective students.
4. Percent of graduating students who rated the quality of their education as satisfactory or excellent.

Data for these measures will be collected through surveys conducted by the university at time of program completion.

Student Competencies

Specific competencies related to the program objectives will be developed by the program faculty with input from a selection of practitioners. Achievement of these competencies will be assessed using three methods:

1. Student self-assessments performed at the beginning of the program and at the end of the program. This will demonstrate the student's perception of their progress through the program.
2. Faculty evaluation of satisfactory demonstration of competencies during the Practicum/Capstone project.
3. Internship preceptor evaluation of the key competencies demonstrated during required summer internship.

Program faculty will establish target values for all measures of program outcomes and student competencies. All Program Outcomes and summaries of student competency achievement will be presented to the program faculty annually. The faculty will review the measures and make

recommendations to program administration for adjustments in program content and delivery where indicated.

FACULTY

Table B – Faculty List

List Staff by Rank (e.g. Professor #1, Professor #2, Associate Professor #1, etc.)	Highest Degree Earned	Field of Study	Teaching in Field (Yes/No)
Professor #1	DBA	Health Information Administration/Information Systems	Yes
Professor #2	PhD	Health Services	Yes
Associate Professor #1	PhD	Health Informatics	Yes
Associate Professor #2	PhD	Health Services	Yes
Associate Professor #3	PhD	Computer Science	Yes
Associate Professor #4	PhD	Informatics	No
Associate Professor #5	MD	Biomedical Informatics	Yes
Assistant Professor #1	PhD	Data Analytics	Yes
Assistant Professor #2	PhD	Health Informatics	No
Assistant Professor #3	PhD	Health Informatics	No

One new full-time doctoral level member will be added to the College of Health Professions faculty as the Program Director. This individual will be recruited new to the university and will have training and experience in health informatics. The program director is expected to teach four of the 12 didactic courses in the program. 20% of the Program Director's effort will be administrative.

A second full-time Health Informatics faculty member will be recruited to the university to teach courses in the program. This individual will have training in health informatics with a terminal degree in the field and be appointed as an Assistant or Associate Professor in the College of Health Professions. Both the new Program Director and the second program faculty member will participate in research and other scholarly activities in the health informatics field.

The balance of the curriculum will be taught by affiliated adjunct faculty from across the MUSC campus including the Department of Healthcare Leadership & Management, Center for Biomedical Informatics, and from the College of Charleston. All program course directors will have terminal degrees in their respective field of study and be eligible for faculty appointment in the College of Health Professions. Appropriate compensation will be arranged by the MS in Health Informatics program to the home departments of adjunct faculty members for efforts contributed to the program. We have secured agreement from all concerned departments that adequate capacity is available to satisfy the necessary teaching needs.

MUSC supports the professional development of its faculty by providing release time for research and certain special project such as curriculum development. Colleges and departments administer funds to enable faculty to travel to conferences and seminars for the presentation of research papers. MUSC has developed guidelines for each department to conduct a formal mentoring program for junior faculty. The program included an annual review of the mentee's professional progress and a formal plan for continued success.

One FTE represents a full-time faculty member. A full-time faculty member is a person who has been appointed to the faculty with rank by the Vice President for Academic Affairs and Provost and has an official record in that office; engages in clinical, instruction, research, and/or administrative activities on the campus of MUSC or any of its affiliated locations; may or may not be tenure eligible, receives monetary compensation for professional services solely from MUSC or an MUSC-sanctioned source, including any of MUSC's affiliates and the VA Hospital; and is engaged 100% in MUSC-sanctioned activities during the specified period of performance.

Table C – Unit Administration, Faculty & Staff Support

UNIT ADMINISTRATION, FACULTY, AND STAFF SUPPORT						
YEAR	NEW		EXISTING		TOTAL	
	Headcount	FTE	Headcount	FTE	Headcount	FTE
Administration						
2014 – 15	1 ¹	0.2	0	0	1	0.2
2015 – 16	0	0	1	0.2	1	0.2
2016 – 17	0	0	1	0.2	1	0.2
2017 – 18	0	0	1	0.2	1	0.2
2018 – 19	0	0	1	0.2	1	0.2
Faculty						
2014 – 15	4	1.35	8	1.2	12	2.55
2015 – 16	0	0	12	2.55	12	2.55
2016 – 17	0	0	12	2.55	12	2.55
2017 – 18	0	0	12	2.55	12	2.55
2018 – 19	0	0	12	2.55	12	2.55
Staff						
2014 – 15	1	.5	4	.9	5	1.4
2015 – 16	0	0	5	1.4	5	1.4
2016 – 17	0	0	5	1.4	5	1.4
2017 – 18	0	0	5	1.4	5	1.4
2018 – 19	0	0	5	1.4	5	1.4

¹20% of Program Director's effort

PHYSICAL PLANT

The College of Health Professions moved into its new 80,000 square feet educational complex at 151 Rutledge Ave in August 2005. For FY 2006, the college occupied 78,408 assignable square feet (ASF) with 40,274 ASF designated for administration, 6,887 ASF designated for clinical, 9,989 ASF designated for research, and 21,258 ASF designated for teaching. In the area of technology, the college has implemented a wireless technology plan, 11 advanced "smart" classrooms, and the use of a simulation lab.

On-campus program class sessions will be delivered using the physical facilities of the College of Health Professions at the Medical University of South Carolina. Adequate classrooms exist and are available in the College of Health Professions to provide adequate seating for the projected enrollment and are equipped with all necessary audio-visual capability to accommodate effective teaching.

Online interaction with students between on-campus sessions will transpire over the internet via the existing Moodle learning management system. All current DHLM faculty members are familiar with the Moodle system which is used extensively throughout the DHLM programs. Faculty members that are new to the program will be trained on the use of Moodle.

EQUIPMENT

No equipment beyond existing classroom and faculty office facilities will be necessary. On-campus classes will be held in the College of Health Professions facilities in Charleston. Online interaction will be facilitated using the MUSC Moodle online learning management system that is currently used by virtually all DHLM faculty members.

LIBRARY RESOURCES

Students will have access to the MUSC library resources. The Library acquires, manages, and maintains resources of knowledge in the biomedical and health sciences in support of the University's overall mission of educating health care professionals, delivering high quality clinical care, advancing medical science through biomedical research and serving the public of South Carolina. The MUSC Library has a primary mission to serve the greater MUSC family of faculty, residents, fellows, students, researchers, and staff. The Library is open to the public.

COLLECTIONS	<i>Updated</i>	
Size	97, 326 items	02/19/13
Books	6,787 print books and 33,598 e-books	02/19/13
Journals	19,911 e-journals, 13 current print-only subscriptions	02/19/13
Databases	220 electronic databases and clinical collections, including MEDLINE (PubMed), CINAHL, PsycINFO	02/19/13

SERVICES

Reference	Reference services include answering ready reference questions, e-reference, performing medical literature searches including evidence-based searching, and personal research assistance in-person, on the phone and Skype. Reference offers tours, orientations, course related instruction, various programs on special topics for specific groups, and individual instruction.
Document Delivery / Interlibrary Loan	The MUSC Library Document Delivery / Interlibrary Loan service provides books, journal articles and other materials not available in the Library's collections.
Library Hours	The Library's 2nd and 3rd floors are open 24 hours a day, 7 days a week for MUSC students, faculty and selected staff. The library is staffed 72 hours per week. The 4 th floor is open the same hours as when the library is staffed.
Computer Labs	The Library has two computer labs, the Second Floor Lab, open 24/7, and the Fourth Floor Lab, both equipped with scholar workstations. They offer access to Library resources as well as open Internet access, and have standard software applications such as word processing, presentation, spreadsheet, and e-mail. Some workstations have specialized courseware or specialized software applications for multimedia, reference management, and statistics.

ACCREDITATION, APPROVAL, LICENSURE OR CERTIFICATION

After the program is fully established and has at least two cohorts of students, the program intends to seek accreditation through the Commission on Accreditation for Health Informatics and Information Management (CAHIIM) Education.

ARTICULATION

Since students will be employed and have completed bachelor degrees prior to admission, no articulation arrangements are necessary.

ESTIMATED COSTS AND SOURCES OF FINANCING

Table D – Estimated Costs and Sources of Financing by Year

ESTIMATED COSTS BY YEAR						
CATEGORY	1st	2nd	3rd	4th	5th	TOTALS
Program Administration	21,120	21,754	22,406	23,078	23,771	112,129
Faculty Salaries	158,810	217,369	222,643	228,077	233,668	1,060,567
Graduate Assistants	0	0	0	0	0	0
Clerical/Support Personnel	58,446	75,823	78,098	80,441	82,854	375,662
Supplies and Materials	750	772	795	820	845	3,982
Library Resources	0	0	0	0	0	0
Equipment	0	0	0	0	0	0
Facilities	0	0	0	0	0	0
Other: recruitment, accreditation	27,500	28,326	32,176	30,050	30,951	149,003
TOTALS	266,626	344,044	356,118	362,466	372,089	1,701,343
SOURCES OF FINANCING BY YEAR						
Tuition Funding	360,455	743,377	850,946	876,474	902,768	3,734,020
Program-Specific Fees	22,050	44,100	49,000	49,000	49,000	213,150
State Funding*	0	0	0	0	0	0
Reallocation of Existing Funds**	0	0	0	0	0	0
Federal Funding	0	0	0	0	0	0
Other Funding (Specify)	0	0	0	0	0	0
TOTALS	382,505	787,477	899,946	925,474	951,768	3,947,170

Table D assumptions:

1. Based on student enrollment described in Table A
2. 100% in-state enrollment
3. Costs and tuition inflation by 3% per year

The MS in Health Informatics program will be financed through tuition and program fees once full enrollment has been achieved. Initial deficits will be supported by the College of Health Professions.

COMMITTEE ON FINANCE AND ADMINISTRATION
April 11, 2013
Minutes

Attendees:

Mr. Charles W. Schulze, Chair	Dr. Pat Cawley
Dr. Stanley C. Baker, Jr.	Dr. Phil Costello
Mr. William H. Bingham, Sr.	Ms. Annette Drachman
Dr. Cotesworth P. Fishburne, Jr.	Ms. Susie Edwards
Mr. William B. Hewitt	Mr. Jim Fisher
Dr. Harold W. Jablon	Ms. Lisa Montgomery
Dr. Donald R. Johnson II	Ms. Jody O'Donnell
Dr. E. Conyers O'Bryan, Jr.	Dr. Etta Pisano
Dr. Thomas C. Rowland, Jr.	Ms. Gina Ramsey
Thomas L. Stephenson, Esquire	Dr. Mark Sothmann
The Honorable Robin M. Tallon	Mr. Steve Valerio
Dr. Charles B. Thomas, Jr.	
Dr. James E. Wiseman, Jr.	
Dr. Raymond S. Greenberg	
Ms. Susan H. Barnhart	
Mr. John Cooper	

Mr. Schulze called the meeting to order.

REGULAR Items

Item 20 Update on Cost Reductions.

Ms. Lisa Montgomery and Dr. Mark Sothmann provided an update on cost reductions in executive session.

Recommendation of Committee: That this report be received as information

Item 21 Financial Status Report of the Medical University of South Carolina.

Ms. Susie Edwards presented the February 28, 2013 Interim University Financials. She reported that at February 28th the University had 80 Days of Operating Cash and a Change in Net Assets of \$7.3 million. She also reported a Current Funds margin of .15%.

Recommendation of Committee: That this report be received as information

Item 22 Financial Status Report of the MUSC Physicians.

Ms. Gina Ramsey presented a report on the financial status of MUSC Physicians. She reported on the financials as of 2/28/13 with Total operating revenues of \$186,049,930 and total expenses of \$166,623,695. She reported billing has been delayed due to the implementation of the new computer system. As a result, revenues are down but

expenses are being controlled to offset the slowed revenues.

Recommendation of Committee: That this report be received as information

Item 23 Financial Status Report of the MUSC Foundation for Research Development

Mr. Schulze stated Ms. Deanne Lucas was unable to attend the meeting and noted that the financials were presented in the printed agenda. Dr. Greenberg commented the Foundation has done well in the last year and believes the increase in the volume of activity is a tribute to hard work.

Recommendation of Committee: That this report be received as information

Item 24 Other Committee Business.

Ms. Lisa Montgomery presented a major purchase for approval as follows:
A capital lease with Siemens for the purchase of and RS Artis Zee Floor at a cost of \$464,583.

Recommendation of Committee: That the purchase be approved.

CONSENT AGENDA

None.

There being no further business, the meeting was adjourned.

**ACADEMIC
MAJOR PURCHASES FOR
BOARD OF TRUSTEES' APPROVAL
April 11, 2013**

Description of Purchase: *RS Artis Zee Floor*

Estimated Cost of Purchase: \$464,583

Requisition Number: 38311368 (RQ453394)

Department Name(s) and UDAK numbers(s):

Neurosciences 2272000 36200 5123 (**Fullerton Foundation Grant**) \$250,000
Neurosciences 2258000 28533 8125 (**Research Residuals**) \$214,583

Department Contact Person: *Chrissy Anderson/Monica Gardner*

Name of Procurement Specialist: *Sylvia Kelly*

Method of Purchase: *Capital Lease*

Vendor Name (If Sole Source): *Siemens*

New Purchase XX Yes No

New Contract for Existing Services? Yes XX No

Extension of Existing Contract? Yes XX No

Replacement of Existing Item(s) Yes XX No

Name of Item(s) Being Replaced: *n/a*

How Will This Purchase Benefit MUSC: *Enhance research capability*

Why and How This Purchase Will Benefit MUSC By Having a Vendor Provide This Service vs. MUSC Staff Providing the Service: *n/a-Equipment purchase*

**ACADEMIC
FINANCIAL INFORMATION
MAJOR PURCHASES
BOARD OF TRUSTEES' APPROVAL
April 11, 2013**

Item to be approved for purchase:

1. **Source of Revenue/Savings:** *Research Residuals and Grant from Fullerton Foundation*
2. **Amount of Revenue/Savings to be generated:** *Increase in the number of research grants.*
3. **Initial cost:**
 - a. **Item:** \$464,583
 - b. **Physical Plant Requirements (renovations):** \$258,000 up-fit for 8th floor Strom Thurmond (UMA reserves)
4. **Annual cost (Maintenance, supplies, etc.):** \$82,120 service agreement
5. **Personnel Cost (to include base salary, fringes, training, etc.):** Engineer \$80,000 salary, \$24,000 (UMA reserves)
5. **Financial Analysis:**

It is anticipated that the purchase of this equipment will secure multiple grant applications and Research grants for our Neuroscience faculty. The grants will offset the salary and fringe cost and annual service fee. It is anticipated that the purchase and placement of this piece of equipment could result in over \$750,000 in Research studies that we could otherwise have not have participated in.

**Medical University of South Carolina
Physical Facilities Committee
April 11, 2013
Minutes**

Attendees:

Mr. William H. Bingham, Chair	Dr. Frank Clark
Dr. Stanley C. Baker	Ms. Annette Drachman
Dr. Cotesworth P. Fishburne, Jr.	Ms. Susie Edwards
Mr. William B. Hewitt	Mr. Dennis Frazier
Dr. Harold W. Jablon	Mr. Jim Fisher
Dr. Donald R. Johnson II	Mr. Bob Marriott
Dr. E. Conyers O'Bryan, Jr.	Ms. Lisa Montgomery
Dr. Thomas C. Rowland, Jr.	Dr. Etta Pisano
Mr. Charles W. Schulze	Dr. Darlene Shaw
Thomas L. Stephenson, Esquire	Ms. Reece Smith
The Honorable Robin M. Tallon	Dr. Mark Sothmann
Dr. Charles B. Thomas, Jr.	
Dr. James E. Wiseman, Jr.	
Dr. Raymond S. Greenberg	

Mr. Bingham called the meeting to order.

REGULAR Items

Item 25 Facilities Procurements/Contracts Proposed.

Ms. Lisa Montgomery presented the following for approval:

- Establish project to demolish the Bank Building and create additional parking. Total estimated budget: \$825,000.
- Establish project for College of Health Professions Research Building handicap ramp construction. Total estimated budget: \$365,000.
- Lease renewal for 4,574 square feet of office space located at 56 Courtenay Drive. Total cost of 5 year lease: \$440,000.

Recommendation of Committee: That this report be received as information.

Item 26 Other Committee Business. None

CONSENT Items for Information:

Item 27 Facilities Contracts Awarded

The facilities contracts since the last board meeting were presented for information.

Recommendation of Committee: That this report be received as information.

With no further business, the meeting was adjourned.

Respectfully submitted,
Celeste Jordan

FACILITIES
ACADEMIC/RESEARCH
ESTABLISH PROJECT
FOR APPROVAL

April 11, 2013

PROJECT TITLE: Demolish Bank Building & Create Additional Parking

PROJECT NUMBER: To Be Determined

TOTAL ESTIMATED BUDGET: \$825,000

SOURCE(S) OF FUNDS: Parking Capital Projects Reserve Fund

JUSTIFICATION: This project involves demolition of the existing Bank Building located at 165 Cannon Street. This steel frame with brick veneer exterior building was constructed in 1972 and is five stories tall with a total of approximately 36,650 gross square feet. The building has numerous severe problems and is beyond economical repair. These building problems include the structural integrity of the exterior brick facade, HVAC, elevators, asbestos, and roofing and waterproofing issues. The exterior perimeter of the building is currently barricaded due to concerns over falling brick veneer. After demolition the entire area will be converted to additional parking.

The project budget includes \$170K for asbestos abatement, \$440K for building and site demolition, \$140K for utility and pavement repair and restriping, \$75K for design and other soft costs. Costs include a 10% construction contingency. The cost estimate for this project was prepared by Aiken Cost Consultants.

The project will be funded by Parking Management's Capital Projects Reserve Fund and Board of Trustees approval is requested.

FACILITIES

ACADEMIC/RESEARCH

ESTABLISH PROJECT

FOR APPROVAL

April 11, 2013

PROJECT TITLE: College of Health Professions Research Building Handicap Ramp

PROJECT NUMBER: To Be Determined

TOTAL ESTIMATED BUDGET: \$365,000

SOURCE(S) OF FUNDS: College of Health Professions Dean's Strategic Fund

JUSTIFICATION: This project involves construction of a new ADA accessible ramp at the front entrance, wrapping along the south side, of the College of Health Professions Research Building located at 77 President Street. The existing handicap access ramp is located at the rear entrance on the Building's west side off of a gravel parking area. This ramp, constructed of both concrete and wood sections, does not meet all of the current requirements for an ADA accessible ramp. Significant research involving handicap patients is ongoing within the Building. A new ramp is needed to provide proper access to the Building for these patients, as well as faculty and staff. In addition to the new ramp construction, the project will include new front steps, curbs and gutters, and parking lot restriping, as well as new landscaping.

The design of this new ramp was completed in January 2011 by Schmitt-Walker Architects. The original cost estimate for the project was made by Aiken Cost Consultants in February 2011. The current cost estimate of \$365,000 is based on that original estimate times an escalation multiplier provided by Aiken Cost Consultants. The project will be funded by the College of Health Professions Dean's Strategic Fund.

**FACILITIES
ACADEMIC
LEASE RENEWAL
FOR APPROVAL**

APRIL 11, 2013

DESCRIPTION OF LEASE RENEWAL: This lease renewal is for 4,574 square feet of office space located at 56 Courtenay Drive. The cost per square foot for this renewal is \$19.24 (rounded). The monthly rental rate will be \$7,333.33 (rounded), resulting in an annual rent amount of \$88,000.00.

This property is owned by the Medical University of South Carolina Foundation and leased in its entirety to the Medical University of South Carolina.

NEW LEASE AGREEMENT _____
RENEWAL LEASE AGREEMENT X

LANDLORD: Medical University of South Carolina Foundation

LANDLORD CONTACT: Tom Anderson, Chief Executive Officer, 792-2677

TENANT NAME AND CONTACT: Rachel Jones, Leasing Manager, 792-5996

SOURCE OF FUNDS: University General Institution Funds

LEASE TERMS:

TERM: Five (5) years [2/1/2013-1/31/2018]
AMOUNT PER SQUARE FOOT: \$19.24
ANNUALIZED LEASE COST: \$88,000.00
TOTAL COST OF RENEWAL TERM: \$440,000.00

EXTENDED TERM(S): To be negotiated

OPERATING COSTS:
FULL SERVICE _____
NET X

**Medical University of South Carolina
Audit Committee
April 11, 2013
Minutes**

Attendees:

Mr. William B. Hewitt, Chair
Dr. Stanley C. Baker
Mr. William H. Bingham, Sr.
Dr. Cotesworth P. Fishburne, Jr.
Dr. Harold Jablon
Dr. Donald R. Johnson II
Dr. E. Conyers O'Bryan, Jr.
Dr. Thomas C. Rowland, Jr.
Mr. Charles W. Schulze
Thomas L. Stephenson, Esquire
The Honorable Robin M. Tallon
Dr. Charles B. Thomas, Jr.
Dr. James E. Wiseman, Jr.

Mr. Hugh B. Faulkner, III
Dr. Raymond S. Greenberg
Ms. Susan H. Barnhart
Dr. Frank Clark
Dr. Phil Costello
Ms. Annette Drachman
Mr. Jim Fisher
Ms. Lisa Montgomery
Dr. Etta Pisano
Dr. Darlene Shaw
Dr. Mark Sothmann

Mr. Hewitt called the meeting to order.

REGULAR Items

Item 28. Entrance Conference with KPMG.

Mr. Milford McGuirt, Partner with KPMG, presented the 2013 External Audit Plan for MUSC, MUHA and MUSC Physicians. He presented a summary of professional services to be provided during the audit. He reviewed KPMG's audit approach; timing of fieldwork, audit and focus areas. He also provided updates on higher education and healthcare industry as well as other regulatory and technical accounting updates.

Recommendation of Committee: That the report be received as information.

Item 29. Report of the Office of Internal Audit.

Ms. Susan Barnhart had distributed the results of internal audit reports and there being no questions, the reports were received as information.

Recommendation of Committee: That the report be received as information

Item 30. Other Committee Business. None

Respectfully Submitted,

Celeste Jordan