MINUTES
MEDICAL UNIVERSITY OF SOUTH CAROLINA
BOARD OF TRUSTEES MEETING
May 16, 2013

The Board of Trustees of the Medical University of South Carolina convened Thursday, May 16, 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.; Mr. William B. Hewitt; Dr. Harold W. Jablon; Dr. Donald R. Johnson II; 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, Vice President for Information Technology and CIO; Mr. Jim Fisher, Vice President for Development.

Item 1. Call to Order.

There being a quorum present, Chairman Stephenson called the meeting to order.

Item 2. Secretary to Report Date of Next Meeting.

The date of the next regularly scheduled meeting is Friday, August 9, 2013.

Item 3. Approval of Minutes of the Regular Meeting of the Medical University of South Carolina Board of Trustees of April 11, 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:


Statement: Dr. Greenberg reminded everyone about graduation-related events. Lunch will be provided today at the Country Club of Charleston to honor the Golden Grads. This evening, the dinner will recognize the honorary degree recipients: The Honorable Donna Christensen; The Honorable Thomas C. Alexander; The Honorable Paul G. Campbell; Ms. Kelley Smith O’Quinn and Dr. Bruce G. Pratt. He stated Representative Donna Christensen is the commencement speaker. She is the first female physician ever to be elected to the House of Representatives and the first female to represent the US Virgin Island in the House. She serves as the Assistant Minority Whip for the Democratic Caucus and has led the Healthcare Braintrust for the Congressional Black Caucus. She has been very involved with us in our health disparities work and she will be a great speaker tomorrow.
Tomorrow the graduation ceremony will be held again at the Citadel. Robing will be in Colcock and will begin at 8 a.m. There was a discussion about graduation at the Citadel and there was a feeling that graduation should be held at MUSC. Mr. Stephenson said there needs to be reconsideration of the location for next year. Dr. Greenberg reminded the board they had been unanimous in its decision to have the commencement this year at the Citadel. The decision can be reassessed for next year; however, if graduation is held on Friday at MUSC, the clinics must close due to parking issues and it is very costly to the institution. If the decision is to bring it back to campus, graduation could be held on Saturday in order not to interrupt the clinical operation. If was agreed to review the options for next year.

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. FISHBURN, JR.**

OLD BUSINESS: None.

NEW BUSINESS: Dr. Fishburne thanked everyone for their recognition earlier in the meeting. He stated he would be happy to continue as Chair of the committee if the board wanted him to. Dr. Rowland stated he would like to personally commend Dr. Fishburne for his work on the MUSC FRD Board and, if appropriate as an Emeritus Member, he would like to see Dr. Fishburne continue to represent MUSC Board on the Foundation Board. Mr. Stephenson said the board would work on that request.

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

**Statement:** Dr. Lanier said it was a great pleasure and honor to serve with Dr. Fishburne for the past six years. Also, $6 million became available for two SmartState centers so MUSC submitted two proposals – one in translational biomedical informatics and one in personalized cancer medicine. The centers are $4 million centers – with $2 million match from MUSC for each center. We should get the results of the site visit early next month.

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

Board Action: Received as information.

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

**Statement:** Mr. Jim Fisher echoed Dr. Lanier's comments regarding Dr. Fishburne. He went on to report that the University is 30% ahead of the same time last year. The University currently has about $55 million in private new gifts and pledges. Most
of the activity is in the material in the board agenda. He highlighted several recent gifts. The University received $1.5 million from the Wellin family to establish the Wendy and Keith Wellin Head and Neck Cancer Clinic and the Dr. Betsy K. Davis Endowed Chair in Maxillofacial Dentistry. Zeus Industrial Products contributed $700,000 toward their pledge to support the Frank P. Tourville Cardiac Arrhythmia Center. Dr. Lisa Saladin and her husband Dr. Michael Saladin recently committed $250,000 to the College of Health Professions. That epitomizes leadership by example so Mr. Fisher asked everyone to please take the opportunity to thank her for their gift if you see her this evening at the dinner.

There are now MUSC license plates that have been designed and are available. The plate is $70 and the University receives $40 from the DMV from any sale of those plates.

Mr. Fisher concluded by inviting everyone to join the Golden Grads for lunch at noon.

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

Board Action: Received as information.

Item 8. Other Business. None

EDUCATION, FACULTY AND STUDENT AFFAIRS COMMITTEE. CHAIRMAN: DR. E. CONYERS O’BRYAN, JR.

OLD BUSINESS: None.

NEW BUSINESS:


Statement: Dr. Sothmann reported tomorrow the University will graduate 75 BS students; 76 MS students and 404 doctoral students. They are graduating from 18 different degree programs. The college deans shared some highlights of their respective colleges. Dr. Halushka has resigned his position as Dean of the College of Graduate Studies. Dr. Sothmann thanked Dr. Halushka for his ten year service to the university and for taking the College to a higher level during his tenure.

Higher Education is in the kind of transformation that healthcare is in. Senior leaders are talking about how to position the University for the future. He suggested that the board have an education retreat to learn about changes to approaches to education.

There was a discussion about the PA program and lack of a SACS unqualified reaccreditation. Dr. Sothmann reported that It was not because of academic matters but was due to not turning in assessment reports. The students still pass their licensing exams far about the national levels. It was a function of changes in leadership as well as assessment issues. There is now an office in place to take
care of this going forward. The program is on probation and there will be a follow-up site visit in two years. In spite of the status, the program has the largest applicant pool in history.

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

Board Action: Report received as information.

**Item 10. Other Committee Business.** None

**Item 11. Conferring of Degree (Consent).**

Statement: Approval was requested to confer degrees upon those candidates who, pending successful completion of all requirements for their degrees by the conclusion of the spring semester, have the recommendation of their college dean and faculty.

Recommendation of Administration: That the conferring of degrees be approved.

Board Action: A motion was made seconded and unanimously voted to approve the conferring of degrees.

**Item 12. Changes in Faculty Senate Bylaws (Consent).**

Statement: Administration presents for approval modifications to the Faculty Senate bylaws regarding Senate election dates, to be effective May 16, 2013.

Recommendation of Administration: That these changes be approved.

Board Action: A motion was made, seconded and unanimously voted to approve the changes in the Faculty Senate Bylaws.

**Item 13. Faculty Appointments (Consent).**

Statement: At the request of the Dean of the College of Medicine, administration presents the following faculty appointments:

*College of Health Professions*

Craig A. Veloza, Ph.D., as Professor in the Department of Health Professions, Division of Occupational Therapy, effective July 1, 2013

*College of Medicine*

Lucian V. Del Priore, M.D., (dual appointment) as Professor in the Department of Regenerative Medicine and Cell Biology, effective May 1, 2013

Dr. Del Priore’s primary appointment rests in the Department of Ophthalmology.

Edward W. Trudo, Jr., M.D., as Clinical Associate Professor, in the Department of Ophthalmology, effective July 1, 2013
Recommendation of Administration: That these faculty appointments be approved.

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

Item 14. Changes in Faculty Status (Consent).

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

Eleanor K. Spicer, Ph.D., from Professor to Professor Emerita, in the Department of Biochemistry and Molecular Biology, effective July 1, 2013

Recommendation of Administration: 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 15. Endowed Chair Appointment (Consent).

Statement: At the request of the Dean of the College of Medicine, administration presents for approval the following endowed chair appointment effective May 16, 2013:

Patrick A. Flume, M.D., as the Powers-Huggins Endowed Chair for Cystic Fibrosis

Recommendation of Administration: That the Endowed Chair appointment be approved.

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

Item 16. Master in Science in Oral Sciences Degree Program (Consent).

Statement: At the request of the Dean of the James B. Edwards College of Dental Medicine administration presents for approval the proposed Master of Science in Oral Sciences, effective May 16, 2013.

Recommendation of Administration: That the Master in Science in Oral Sciences Degree Program be approved.

Board Action: A motion was made, seconded and voted to approve the Master in Science in Oral Sciences Degree Program. All approved with the exception of Mr. Hewitt who abstained.
FINANCE AND ADMINISTRATION COMMITTEE. CHAIRMAN: MR. CHARLES W. SCHULZE.

OLD BUSINESS: None.

NEW BUSINESS: Mr. Schulze said we need to set a date for the June Finance and Administration Committee Budget Meeting. This is for the preliminary budget approval prior to the final presentation of the budget at the August meeting. It was decided the meeting would be at 10 a.m. on June 20. Members can attend in Charleston or dial in.

**Item 17. Parking Rate Increase.**

**Statement:** Mr. Lisa Montgomery presented proposed parking fee increases for approval. Administration is recommending approval of a five year plan which is based on salary levels.

**Recommendation of Administration:** That the parking fee increases be approved as presented.

**Board Action:** A motion was made, seconded and voted to the employee parking fee increases effective July 1, 2013.

**Item 18. Financial Status Report of the Medical University of South Carolina.**

**Statement:** Mr. Patrick Wamsley reported that as of March 31, the University has a strong cash balance with $115.1 million and 75 days operating cash on hand. The profit and loss statement has a $7.9 million bottom line. Tuition was up slightly from last year. Federal grants and contracts are down primarily due to the reduction of ARRA funding which was anticipated. The bottom line for current funds is $2.4 million which is up from $1.7 million from February and is up $1.5 million from a year ago. The April numbers are continuing to be strong and increasing.

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

**Board Action:** Received as information.

**Item 19. Financial Status Report of M USC Physicians.**

**Statement:** Ms. Gina Ramsey reported for March 31st, M USC Physicians has done well. March was a very good month for M USC Physicians. The Total Margin is still negative but with the April numbers that is improving substantially. M USC Physicians expects to receive another $6.7 million in supplemental Medicaid before the end of May. It is projected that M USC Physicians will make budget.

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

**Board Action:** Received as information.

Statement: Mr. Schulze noted that the MUSC FRD on the income statement is ahead of budget on revenues; under budget on expenses and the bottom line is ahead of budget.

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

Board Action: Received as information.

Item 21. Other Committee Business. None

UNIVERSITY PHYSICAL FACILITIES COMMITTEE. CHAIRMAN: MR. WILLIAM H. BINGHAM, SR.

OLD BUSINESS: None.

NEW BUSINESS:

Item 22. Update on Projects.

Statement: None.

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

Board Action: The report was received as information.

Item 23. Other Committee Business. None.

Item 24. 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.

Board Action: Received as information.

OTHER BUSINESS FOR THE BOARD OF TRUSTEES:

Item 25. 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 26. New Business for the Board of Trustees.

Item 27. Report from the Chairman.

Dr. Fishburne asked for an update on how the Pharmacy merger has worked. Dr. DiPiro commented that the institutions have been working on this for 8 years. As the two schools came together the two schools have been fully accredited as one institution. There is a fully cooperative curriculum taught on both campuses. We are also sharing resources with the Greenville Hospital System so students from Columbia and Charleston are gaining experience at The Greenville Hospital System. We have had a very large increase in NIH research funding due to the merger. The faculty numbers are about the same on both campuses. There are more students on the Columbia campus. Dr. DiPiro said the reason for the merger was to do more and do better with the limited resources we have. He believes it was the right decision to merge.

Mr. Stephenson asked for a motion to go into Executive Session to discuss contractual matters with other educational institutions. A motion was made, seconded and unanimously voted to go into executive session.

At the conclusion of the session, the board went back into open session and it was stated the session was only to receive information with no vote being taken.

There being no further business, the meeting of the University Board of Trustees was adjourned.

Respectfully submitted,

Hugh B. Faulkner III
Secretary

HBF:wcj
Medical University of South Carolina
May 2013 Graduates

Bachelor of Science in Cardiovascular Perfusion

William John Anderson
Ruth Anne Burnette
Dale Thomas Feldman
Mark Thomas Fenker
Dannerly Harvin Hall Jr.
Todd Ephraim Hixson
Jennifer Michele Hutchinson
Adam Alexander Mattison

Robert Clayton Murrell Jr.
Phuong Ziem Nguyen
Stephen Thomas Price
Margaret Anderson Relle
Sally Kirsten Stoner
Jason Matthew Tatum
Catherine J. Yeager

Bachelor of Science in Nursing

Osman Awil Abdi
Juanetta Jeanette Acevedo
Allison Suber Adrian
Taylor King Alexander
Laurie Blythe Benedict
Christine Maria Bickford
Megan Elise Blackburn
Britany Nicole Brown
Lauren Simone Carroll
Ellen Burnett Cary
Hayne Mackenzie Clifton
Matthew Anthony Couture
Kaylin Michele Currie
Corie Olivia Dillon
April Paris Dove
Dawn-jana Elizabeth Dressman
Andre Charles Alagon Estrada
Nadia Hall
Brian Thomas Harley
Erica Shaquan Haynes
Alexander Cochran Herlocker
Amanda Leigh Hogan
Emory Elizabeth Howle
Roxanne Johnson
Zora Kinshasa Johnson
Kristin Gardner Kastendike
Jamie Kirby Keigens
Meagan Denise Kirkley
Elizabeth Jane Kreuze
Christy Jean Kyle
Joshua Alan Larsen

Jennifer Annette Lowe
Ashley R. Martin
Michelle Alina Mejia
Natalie Forester Murphy
Ashleigh Nagel
Chloe Caroline Oaks
Martha Anne Peake
Holly Elizabeth Ralston
Carolyn Raquel Ramos
Courtney Jones Renault
Amancio Romeo Roca
Jamie L. Russo
Jacob Bishop Schubert
Amanda Joy Singleton
Anna Heyward Smith
Jacquelyn Lee Smith
Kylie Laurin Smith
Whitney Lorene Smoak
Autumn Lewis Staley
Michael P. Stephens
Shechinah Stewart
Mary Josephine Stone
Christina R. Sweatman
Marie Craig Thomas
Jennifer Marie Undari
Tara Jean Watkins
Ellen Paige Way
Amy Beth Wilkerson
Shaquinta Denise Wright
Margaret Elizabeth Yu
Master in Health Administration

Ebony Jade Adams
Kelly Dahlstrand Ameduri
Laura Lyall Ballerstedt
Clayton Ferguson Bazzle
Cacey James Black
Daniel Lee Brinton
Sheena Kennon Callihan
Andrew William Campbell
Catherine O'Shields Carmichael
Erin Frances Comar
Joanna Cameron Cone
Matthew Peter Conrad
Samuel Davis Jr.
Elizabeth Ann Elmore
Margaret Firebaugh
William Sloan Garrett
Alexandra Hope Hails
Chayla Michelle Handley
Brian Bill Hayes
Andrew Eric Holsinger
Elizabeth Jean Jones
William Legare Jones Jr.
Andrew Jonathan Kraemer
Harry Han Kuo
Katelyn Mary Murphy Lawrence
Kelly Michelle Little
Todd Garrett Loebs
David Lawrence Manco
Nicole Shannon Martin
Abby Caroline McDougall
Andrew Ryan Morgan
Travis Ian Poole
Jason Glen Redd
Robert Whitfield Rhame III
Cory O'Neal Burnside Robinson
Nicole Evans Roskill
Leah Susan Schattenfield
Cory Smith
Cameron Holt Steadman
Philip Thomas Talcott
Bao Ngoc Chau To
Ryan Jeffery Tober
Lin Lin Annie Tsui
Ryan Paul Waga
Bolden Lee Walters
Samuel Connor West
Ulrika Renee White

Master of Science in Occupational Therapy

Tara Lynne Scott

Master of Science in Nursing

Jessica Suber Hall
Elizabeth McGee Klixbull
Lauren Lynch
Anna Davis Newell
Mary Reames Rinehart
Veronica Kem Smalheiser

Master of Science in Biomedical Sciences

Adam William Akerman
Emily Margaret Allen
Danielle Eulata Brandon
Eva Karam
Nicole Sztokman
Master of Science in Clinical Research

Marques Levar Bradshaw
Andrew J. Goodwin
Angela F. Hawk
Kimberly Elaine McHugh
Roberto Pisoni
Hussein Abdullah Rajab
Nichole Tripician Tanner
Daniel Clay Williams
Chang Long Wu

Master of Science in Dentistry

Angela Halverson Canales
Dustin Craig Hedgpeth
Patrick B. Holmes
Trent Cooke Pierce
Justin D. Ward

Doctor of Health Administration

David L. Church
Amy Wilkerson Clary
Gwyndolan LaVergne Swain
Sabrina Suber Vereen
Mary Robbins Wylie

Doctor of Physical Therapy

Jonathan McKeown Ahearn
Emily Virginia Albright
Kelsey Marie Allen
Amanda Delaine Argoe
Thomas Adam Auten
Margaret Smart Balleh
Rachel Sonya Binder
Kayla Elizabeth Bishop
Jacqueline Danielle Boyter
Davis Burr Bradley
Alison Michele Bunchman
Jordan Alexander Bunn
Brittany Kay Cannon
Heidi Joy Christensen
Bethany Dianne Clark
Sarah Kathryn Cline
Patrick William Colpitt
Nathan Harrison Cripps
Haley Melinda Culbertson
Jody Richard Davis
Thomas Allen Edwards
Adeela Lorraine Farisi
Laura Elizabeth Fitzgerald
Lisa Michele Floyd
Jillian Lorene Galan
Sara Therese Geisman
Kristen Geneva Greene
Rachel Arnette Hardy
Susanna Parker Hearn
Kelly Elizabeth Hersh
Shauna Erin Holland
Taylor Caroline Holmes
Jessica Erin House
Caitlin Anne Judd
Megan Alexandra Kochman
Ashlynn Asnip Koon
Natasha La'sha Lecque
Samantha Jo Linder
Jane Alexander Holmes Lucas
Katherine M. Maher
Ashley Megan Mainones
Shannon Marie McGahan
Ariel McNeil
Rebecca Wallis Moore
Sarah Elizabeth Nameth
Aunya Frankiesha Nance
Mark Stevens Noble
Jeffrey Thomas Noelcke
Rachel Whitney Paull
Liana Marie Plexico
Anna Lockamy Randall
Kaitlyn Rae Rickher
Alexandra K. Rohrback
Laura Brookshire Romeo
Corey Lyn Savas
Kathleen Elise Scheele

Amie Jeanne Sheppard
Katherine Ray Steifle
Cooper Theodore Strong
Whitney Jo Tabbert
Robin Rachel Verjans
Molly Ann Wellinghoff
Jeffrey S. Williams Jr.

Doctor of Nursing Practice

Frank Uche Akpatic
Ashleigh Marie Benda
Amanda Quinn Boniface
Kathleen Laird Brown
Donna G. Buist
Sonia Marie Campbell
Diana Cizmadija
Elizabeth Ann Devereaux
Annamarie Sipkes Donato
Gaye Moore Douglas
Tiffany K. Garris
Elizabeth Deenihan Harmon
J’Vonne Denise Hunter
Courtney Virginia Jordan
Susan Nicole Kennemur
Edward John Knuth Sr.

Sara Kramer-Wallace
Rachel Nicole Ness
Evelyn Dannette Porter
Kristen McDaniel Poston
Sarah Ramberg
Jessica G. Rivera
Misty Leigh Seawright
Anna Derrick Smith
Lya Michele Stroupe
Danielle Tardiff
Amanda Grace Oswald Taylor
Bonnie Gymph Treado
Suzanne Catherine Trinkl
Amber Lee Walston
Kate Imperial White
Heather Kristina Williams

Doctor of Pharmacy

Carrie Jaye Alderman
Erica Rene Anderson
Mia Brittnie Asmer
Laurin Frances Ballowe
Andrew Boyd Bodiford
Alissa Jean Bradley
Mary Adelaide Brown
Jenna Gabrielle Byrd
Grace Kathleen Byrnes
Casey Lee Clark
Jacqueline Nicole Clinger
Lesli Hunnicutt Clyborne
Megan Renee Creech
Jerome Paul Ramos Curameng
Andrew Harrison Curtis
Renee Jane D’Antonio

Justin Howard Davis
Thomas Victor DiPiro
Anyanime Asuquo Edem
Andrew David Finley
Anastasia Elise Finn
Lacy Ann Gallagher
Jeff Garris
Mina George Georgy
Jacob Lee Gibbs
Samantha Denise Giles
Sarah L. Glaholt
Caroline Elizabeth Griggs
Willie Marvin Grooms III
Martha Ledbetter Haines
Virginia Elizabeth Holley
Anna Caroline Hoover
Kathleen Jean Hunter
Molly S. Hurst
Bethann Fleenor Johnson
Fred Otto Kessler IV
Bradley Paul Knight
Brittany Marian Lanford
Rachel Keels Lanier
Molly Corley Leach
Katsiaryna Maroz
Alison Whitehurst Martin
Daniel James McGraw
Michael A. Nanni
Christina Marie Nelson
Shiva Nikravesh-Green
John Edward Oatis III
Daniel Miguya Odongo
Diane Nneka Okpala
Bhoomi M. Patel
Sneha Patel
Carolyn Jean Pfeifer
Nicholas Willard Rainey

Michael Grant Robinson
Britney Michelle Runyon
Thomas Jordan Sadowski
Sara Katherine Shugart
Ashley Carr Sims
Tran Nguyen Shugart
Bridgit Lee Skipper
Leslie Ann Sparovic
Sylendra Stephanie Stephens
Leslie Phillips Strickland
Brandee Cupp Stukes
Honor Kristen Taylor
Joseph Simon Taylor, Sr.
Joseph C. Vallone
Allison Paige Weaver
Abbie Sandel Williams
Jennifer Marie Wingfield
Ashley Tiera Wright
James Burton Wright Jr.
Christian Elizabeth Younts
Elisabeth Emilia Zummo

Doctor of Dental Medicine

Derrick Dean Bell
Scott Timothy Brown
Douglas Collin Bryant
Elizabeth Saunders Burgess
Jillian Leigh Byrd
Allison Poole Caldwell
Margaret Maclin Cannon
Andrea Carrieri
Lindsay Elizabeth Cash
Shelly Morgan Catlett
Jami Davina Cokley
Amber Houston Connar
Marie Elizabeth Cross
Christopher Blane Daniel
John Breeden Early Jr.
Jennifer Kristen Fiorica
William Michael Forrester
Travis Maxwell Frawley
Brandon J. Hagan
Sarah Anne Harmon Knowlton
Kathryn Lynn Harrison
Golden Rose Hartley

Daniel Sullivan Henderson
Cason Thomas Hund
Brian Lewis Jaques
Paul Ray Lambert III
Daniel Graham Lee
Hayan Lee
Alison Anne Llewelyn
Trevy Kyle Martin
Mark Jackson Mizzell Jr.
Matthew Allen Nettles
Matthew Charles Nimmich
Casi Lyn Noel
Jennie Whilden Odom
Samir Dilip Patel
Jonathan Michael Brown Petersen
Ryan Richard Phillips
Katherine Dean Plunkett
Jonathan Joseph Puza
Kristin Marie Reilly
Steven Andrew Richards
Rachel Barbara Rittenberg
Anna Elise Roberts
Doctor of Medicine

Timothy Mark Adams
Neena Stephanie Agrawal
Krystal Danielle Airola
Louise Anne Alexander
Melissa Mundy Allen
Lauren Elyse Baccari
Christina Sepedah Baraty
MacKenzie Johanna Bartz
Duncan Eaves Berry
Bassim Samadani Birkland
Matthew L. Blackburn
Sarah Wade Boatwright
Leah Ashley Bonaparte
Patricia Mae Bosnic
Brent Adrew Boyer
David Matthew Braddy
Matthew Haynie Bradshaw
Aly D. Branstiter
Bonnie Akao Brooks
Amy Elizbeth Brown
Jessica Brittany Bush
Austen Lane Carter
Katherine Therese Charles
Humera Chaudhary
Zachary Joseph Coffman
Jack Messenger Condrey III
Jessica Scheel Connett
Patrick Alan Courtney
David H. Craig III
Thomas Adam Criswell
Jason Jonathan Crumpler
Thomas Christopher Cunningham
Mark Benjamin Currin
Charles Thomas Darragh
Sarah Joy Dean
Krupa Dilip Desai
Carl David DuBose

Stephen Craig Thomas
Laura Marie Tulga
Benjamin Thomas Wietecha
Jeanette Savant Wingate
Kenneth Bryan Wingate Jr.
Aleksey Zelenko

Bobbi Jean Dulcie
Forrest Campbell Duncan
Andre St. Christopher Dyer
Yekaterina Eichel
Brandon Maxwell Firestone
Chelsea Webb Fox
Hussein Christopher Gaafary
William Foster Gaillard Jr.
Fernando Nicolas Galan
Nicholas Young Gallagher
William Bryan Gamble II
Andrea Shipp Garrick
Benjamin Graham Garrick
Melanie Blaschke Gates
Grace Lucta Gerald
Alex DeForest Gleason
Sarah Jane Grayce
Candice Whitaker Greenan
Calvin Grubbs III
S. Chad Hayes
Katherine Elizabeth Hicks
Alexander David Hill
Michael Jermaine Hinton
Brett Michael Hoffercker
Amanda Lynn Jainchill
Theodore William James
Elizabeth Renee Johnson
Renee Darlene Joseph
Evan Daniel Kane
Elaine Kristen Kao
Joseph John Kavolus II
Jocelyn H. Kerpelman
Garrick Leonard Klaybor
Ryan Keith Furman Kohout
Ryan Mark Kroll
Adam Edward Larkins
Alicia Jill Latham Schwark
Brett Greenwood Lewis
Amanda Lee Limbaugh
Scott Steven Lloyd
Spencer Charles Lovelace
Forrest Justin Lowe
Paul Timothy Maddux
Jordan Asher Magarak
Rachel Dianna Maree
Poppy Markwell
Christina Mae McConnell
Thomas Christopher McCurry
Misty Lee McDowell
Kevin Michael McElligott
Conor William McLaughlin
Travis Vincent Meadows
Anthony Meelan
Ravi Prashant Mishra
Haley E. Moore
Neil Dolatrai Naik
Archanar. Durga Narla
Felix Joseph Nepveux V
Thomas Elliot Niemeier
Ashley Noisette
Amanda Faye Northup
Luke Hollis O'Steen
Shane Jit Singh Oberoi
Lewis Joseph Overton
Matthew David Parks
Ankur Nalin Patel
Bimal A. Patel
Mohammad Faizan Pathan
Travis Michael Patterson
Quyen H. Pham
Richard Andrew Philipp II
Asheka Ronique Pinckney
Stephen Myles Potter
Roxana Pourdeyhimi
Kyle Phillip Radack
Stephen James Ramey
Adriana Gabriela Ramirez
Daniel Hampton Reed
Julie Caroline Rembold
Irfan Ali Rhentulla
Phillip Patrick Rideout
Guillermo Louis Rivell
Elizabeth Ashley Robinson
Stefanie Mitchell Robinson
Phillip Andres Rodriguez
Kendra Mollette Scott
Richard Andrew Sedlak
Maria Evelyn Shtessel
Suzanne Marie Simkovich
Charles Colston Sims
Ryan Stewart Slipe
Mary Darcy Herlong Slizewski
Christine Joan Tennant
John Graham Theisen
Leslie Jessica Burke Thomas
W. Walsh Thomas III
Reggie Rashad Thomasson
Jessica Carol Tolley
Amy Michelle Turner
Jeffrey John Tutman
Thomas McLean Tyner
Saujanya Vadoothker
Elizabeth Milne Van Cott
Seth Patrick Vining
James Rex Walker
Kelsey Angeline Walsh
Nichole McCullough Watson
Kristin Assey West
Emily Nicole Williams
Matthew William Wilson
Rahim Hassan Wooley
Hugh Emmett Wright III
William Carl Wyatt
Jennifer Lee Yehl

Doctor of Medicine & Master in Health Administration

Shakaria Deanna Johnson
Craig Alton Thomas
Doctor of Philosophy in Health Rehabilitation Science

Nicole Marguerite Marlow

Doctor of Philosophy

Kevin James Bigham
Andrew Franklin Elvington
Carmine Gentile
Shannon Marie Hudson
Christopher William Marshall

Vondina Renee/ Moseley
Janet Elizabeth Saunders
Justin Schwartz
Yanqiu Weng

Doctor of Medicine & Doctor of Philosophy

Andre Chioke Eaddy
Joseph Alexander Palatinus
Amena Weston Smith

Kyle Craig Strickland
Peter Hao Tang
Parker Callaway Wilson
PROPOSED

Faculty Senate Bylaws

Article IV

A. Election of Officers

Election of the Officers for the upcoming year (October – September) will be held at the July meeting. In May the Governance Committee shall call for nomination of Officers from the members of the Faculty Senate (Senators and Alternate Senators). Any member of the Faculty Senate may nominate either another member of the Faculty Senate or himself or herself. All Senators are eligible to be slated regardless of time remaining on their current term unless a maximum of three terms has been reached. The Governance Committee will then draw up a slate of qualified individuals who agree to serve as President, Vice President, and Secretary. The Governance Committee shall oversee the voting process and report the results to the full Faculty Senate.

Faculty Senate Constitution

Article IV

Officers of the Faculty Senate: Election and Duties

The Officers of the Faculty Senate shall be the President, Vice President, and Secretary. Officers of the Senate are considered to be at-large Senators and do not stand for re-election to the Senate from their Electoral Unit in October even if their Senate term is scheduled to expire. If an Officer-Elect’s term is not scheduled to expire when they become Officers at the October meeting, their Electoral Unit seat shall become vacant, and an Alternate Senator shall take over that representative role. The alternate position shall then be replaced according to standard procedures.

Article VII

Committees

A. Executive Committee

The Executive Committee shall be composed of one Senator from each of the seven Electoral Units, the Officers of the Faculty Senate, and the immediate Past President of the Faculty Senate who shall serve as a non-voting, consultative member. The Executive Committee member from the respective Electoral Unit shall be elected by the Senators of that unit as stipulated in the Bylaws. The Officers-Elect (President-Elect, Vice President-Elect and Secretary-Elect) of the Faculty Senate shall be non-voting members of the Executive Committee from July through September. The Executive Committee may go into executive session when discussing sensitive issues as permitted by state law.
Article IV

A. Election of Officers

Election of Officers for the upcoming year (October – September) will be held at the October meeting. The Governance Committee shall call for nomination of Officers from the members of the Faculty Senate (Senators and Alternate Senators) after the election results become available. Any member of the Faculty Senate may nominate either another member of the Faculty Senate or himself or herself. The Governance Committee will then draw up a slate of individuals who agree to serve as President, Vice President, and Secretary. The Governance Committee shall oversee the voting process and report the results to the full Faculty Senate.

Article IV

Officers of the Faculty Senate: Election and Duties

The Officers of the Faculty Senate shall be the President, Vice President, and Secretary.

Article VII

Committees

A. Executive Committee

The Executive Committee shall be composed of one Senator from each of the seven Electoral Units, the Officers of the Faculty Senate, and the immediate Past President of the Faculty Senate who shall serve as a non-voting, consultative member. The Executive Committee member from the respective Electoral Unit shall be elected by the Senators of that unit as stipulated in the Bylaws. The Executive Committee may go into executive session when discussing sensitive issues as permitted by state law.
Proposal to the
South Carolina Commission on Higher Education

1. Cover Page:

a. Proposing Institution:
Medical University of South Carolina

b. Program Title, Concentrations, Options and Tracks:
Master of Science (M.S.) in Oral Sciences. There will be two tracks within the MS in Oral Sciences program: Thesis and Non-thesis. Thesis track students will complete a minimum of 30 credit hours of coursework including at least 10 credit hours of independent research. Students in the non-thesis track will be required to take additional didactic course work in lieu of completing a full research project but will be required to complete a condensed research project and present their findings in an oral presentation and in writing. Both tracks will require oral qualifying examinations.

c. Submission Date:
May 15, 2013

d. Program Contact:
Keith L. Kirkwood, D.D.S., Ph.D.
Associate Dean for Research
Professor and Chair of Craniofacial Biology
Professor of Microbiology and Immunology
Director, MUSC Center for Oral Health Research
Diplomate, American Board of Periodontology

Raymond S. Greenberg, M.D., Ph.D.
President
Medical University of South Carolina
2. Classification:

a. Program Title:
   Master of Science in Oral Sciences

b. Concentrations, Options and Tracks:
   There will be two tracks within the MS in Oral Sciences program: Thesis and
   Non-thesis. Thesis track students will complete a minimum of 30 credit hours of
   coursework including at least 10 credit hours of independent research. Students
   in the non-thesis track will be required to take additional course work in lieu of
   completing a full research project but will be required to complete a condensed
   research project and present their findings in an oral presentation and in writing.
   Both tracks will require oral qualifying examinations.

c. Academic Unit:
   Department of Craniofacial Biology, College of Dental Medicine, Medical
   University of South Carolina

d. Designation, Type and Level of Degree:
   Successful completion of the proposed program will lead to a Master’s of Science
   degree in Oral Sciences.

e. Proposed Date of Implementation:
   Fall 2015

f. CIP Code:
   51.0503 – Oral Biology and Oral and Maxillofacial Pathology

g. Site:
   The MS in Oral Sciences program will be offered on the Medical University of
   South Carolina campus in Charleston, SC

h. The program does not qualify for supplemental Palmetto Fellows Scholarship or
   LIFE Scholarship awards.

i. Delivery mode:
   The program will be offered through traditional instruction.

3. Institutional Approval:

The MS in Oral Sciences program proposal has been approved by:

MUSC Deans’ Council      January 13, 2013
MUSC Vice Presidents:     January 23, 2013
Board of Trustees:        May 16, 2013

4. Purpose:

The MUSC Master’s of Science in Oral Sciences program has three main goals. The first
purpose of the overall program is to train personnel for careers in basic, translational
and clinical research methodologies in the field of oral health. The other goals of this
program is to complement existing training opportunities that currently reside in Center
for Oral Health Research (COHR) under the T-COHR (Training in Craniofacial and Oral
Health Research) (see Justification below) and well as provide new programing in order
to help establish a stable pipeline into both the PhD in Craniofacial Biology program and
the DMD/PhD (Dentist Scientist Training Program) in the Colleges of Graduate Studies
and Dental Medicine, respectively.
With this MS in Oral Sciences program, there is an opportunity to recruit foreign dentists (having DDS or BDS degrees) into this program for basic and translational research training. These potential trainees would be able to apply for both programs in the future increasing existing program candidate pools. Also, this program will provide an opportunity for students to receive additional training and experience in oral health-related research before or after submission of an application to dental school at MUSC or other U.S. institutions. Foreign dental graduates with an MS in Oral Sciences will have a competitive edge in earning faculty positions in their home countries. Likewise, graduates who remain in the U.S. will likely be competitive for acceptance in additional programs including Ph.D. programs and dental school.

5. Justification:

Post matriculation of the MS in Oral Sciences program, students will have a variety of options for employment within the State. The following bulleted job opportunities and information was obtained from the U.S. Bureau of Labor Statistics 2012-13 Occupational Outlook Handbook http://www.bls.gov/ooh/.

- Employment of biological technicians is projected to grow 14 percent from 2010 to 2020, as fast as the average for all occupations. Continued growth in biotechnology and medical research is expected to increase demand for these workers.

- Employment of microbiologists is expected to increase by 13 percent from 2010 to 2020, about as fast as the average for all occupations. More microbiologists will be needed to apply knowledge from basic research to develop biological products and processes that improve our lives.

- Employment of biomedical engineers is expected to grow by 62 percent from 2010 to 2020, much faster than the average for all occupations. Biomedical engineers typically need a bachelor’s degree in biomedical engineering from an accredited program to enter the occupation. Alternatively, they can get a bachelor’s degree in a different field of engineering and then either get a graduate degree in biomedical engineering or get on-the-job training in biomedical engineering.

- Employment of biological technicians is projected to grow 14 percent from 2010 to 2020, as fast as the average for all occupations.

- Employment of medical laboratory technicians is expected to grow by 15 percent between 2010 and 2020, about as fast as the average for all occupations.

- Employment of biochemists and biophysicists is projected to increase by 31 percent from 2010 to 2020, much faster than the average for all occupations.

- Employment of dentists is expected to grow by 21 percent from 2010 to 2020, faster than the average for all occupations. Dentists will continue to see an
increase in public demand for their services as studies continue to link oral health to overall health.

The MS in Oral Sciences is thematically aligned with the Medical University of South Carolina (MUSC) which is a public institution of higher learning the “purpose of which 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”.

The MS in Oral Sciences directly aligns with the education of students to “become caring, compassionate, ethical, and proficient health care professionals and creative biomedical scientists”. This later part is the central mission of the program and thus directly supports the University mission relative to creating biomedical scientists. The MS of Oral Sciences program also aligns with multiple other mission statements relative to research and interprofessionalism, diversity, and economic development for the State of South Carolina.

The Department of Craniofacial Biology was established in 2008 and currently provides administrative housing for the MUSC Board of Trustee-designated MUSC Center for Oral Health Research (COHR). Currently, the COHR provides the umbrella for research services as well as training for PhD, DMD/PhD, and postdoctoral fellows through T-COHR (Training in Craniofacial and Oral Health Research). In addition, T-COHR currently supports an undergraduate research experience during the summer through the MUSC Summer Undergraduate Research Program (SURP).

There are no similar programs offered by institutions of higher education in the State of South Carolina. Similar programs, however, are offered in other academic health centers/Schools of Dentistry in many other states. The closest similar program is offered at University of North Carolina at Chapel Hill. There are no other similar programs in states in the Southeast that have dental schools, including Alabama, Georgia, Virginia, and Florida. Other dental schools that offer a Masters of Science in Oral Sciences include the University at Buffalo, University of Missouri-Kansas City, University of Washington, New York University, Temple University and Boston University.

The proposed MS in Oral Sciences program will augment and strengthen existing academic programming within the T-COHR program and College of Dental Medicine (CDM). While T-COHR provides DMD/PhD, PhD and postdoctoral training as well as short-term summer undergraduate training, there is not a MS program. The Master of Science in Dentistry (MSD) program is restricted to dentists enrolled in clinical specialty training and is therefore not open to students with bachelor’s or foreign dental degrees unless they are also accepted and enrolled in a dental clinical specialty e.g. periodontics or orthodontics.

CDM is one of six colleges within MUSC, an academic health center in the State of South Carolina, and has active collaborations with the Colleges of Medicine, Nursing, and Graduate Studies with joint academic and research programs. In addition to the courses offered within CDM, the MS in Oral Sciences will take advantage of some excellent courses offered through the College of Graduate Studies and offer research opportunities through other MUSC colleges for partial fulfillment of requirements of the proposed program.
6. Admission Criteria:

All applicants must have completed a Bachelor’s degree or its equivalent, or a doctorate degree from an institution of higher education. Applicants are expected to have a cumulative GPA of at least 3.0 (on a 4.0 scale) and have taken coursework in biology and/or biological engineering. All applicants must also take the Graduate Record Examination (GRE) and have a combined score (verbal + quantitative) above the 65th percentile.

Official original records of academic achievement (transcript, diploma, degree, certificate, and/or official statements showing the class or quality of marks compared with those possible to achieve) are required all institutes of higher education attended.

Academic records from foreign institutions must be provided in English and must be certified or validated as true by a university or government official.

Foreign applicants whose native language is not English will be required to submit a score report of the Test of English as a Foreign Language (TOEFL) to demonstrate proficiency in English. Exceptions may be made if a student has attended a United States institution for an extended period of time. Scores must be sent directly from the Education Testing Service (ETS) to the university.

7. Enrollment:

The duration of the MS in Oral Sciences program is anticipated to be 24 months. This time is adequate for candidates to complete the requirements for the MS in Oral Sciences program including the completion of a research project and writing and defense of an original thesis. The program will only be offered to students who have obtained a bachelor’s degree with coursework in the field of biology or a dental degree (DDS, DMD or BDS).

The proposed program will be fully operational within a two-year period with an expected average of 4-6 graduates per year. This number is estimated based on enrollment in other MS programs at MUSC and the space available for additional students in the currently offered courses. It is expected that approximately one third of the students accepted to the program will have a foreign dental degree, such as a BDS, and will utilize the program to increase the chance of admission to a US DMD or DDS program. As the number of faculty the department increases and becomes more nationally and internationally recognized, it is anticipated that the number of graduates will increase.

Table A – Projected Total Enrollment
Assumptions made for the following projections:
1. No students will transfer in from other programs.
2. *2 students will be accepted in the first year the program is offered.
3. **3 students will be accepted the second year the program is offered.
4. All students will graduate after 24 months (six semesters) in the program.
5. ***5 students will be accepted in the third year the program is offered.
6. ****6 students will be accepted the fourth year the program is offered.
### PROJECTED TOTAL ENROLLMENT

<table>
<thead>
<tr>
<th>YEAR</th>
<th>FALL</th>
<th>SPRING</th>
<th>SUMMER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Headcount</td>
<td>Credit Hours</td>
<td>Headcount</td>
</tr>
<tr>
<td>2014-15</td>
<td>2*</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>2015-16</td>
<td>5**</td>
<td>45</td>
<td>5</td>
</tr>
<tr>
<td>2016-17</td>
<td>8***</td>
<td>72</td>
<td>8</td>
</tr>
<tr>
<td>2017-18</td>
<td>11****</td>
<td>99</td>
<td>11</td>
</tr>
</tbody>
</table>

### 8. Curriculum:

The MS in Oral Sciences curriculum will require successful completion of a minimum of 30 credit hours of coursework and research for successful completion of the degree. All students will be required to register for 9 credit hours of coursework each semester they are enrolled in the program. The majority of the coursework is currently offered by CDM (applicable course numbers of available courses indicated below; new/proposed courses are in **bold**) and there is room available in the classes for additional students in the MS in Oral Sciences Program. Students will be able to select either a thesis or non-thesis track. Students electing to enter the thesis track will be required to complete at least ten credit hours of Thesis Research (new course described below), while students choosing the non-thesis track will be required to complete at least 22 credit hours of didactic coursework.

All students will be required to register for Topics in Craniofacial Biology (CRFB-745) and Craniofacial Biology Seminar Series (CRFB-747) each semester. Both of these courses are currently offered within the College and have space available for additional registered students. In addition, students in both thesis and non-thesis tracks will be required to complete courses in research design (Introduction to Research Methodologies, CRFB-901), research ethics (offered through the MUSC College of Graduate Studies, CGS-710) and biostatistics. There is currently no biostatistics course available in the College for MS students, so a new course will be designed to include with the program. The new course will be a 2-credit course offered in the fall of each year entitled “Biostatistics for Dental Research” (CRFB-90X). The course will be taught by a faculty member with an advanced degree in biostatistics and will include lectures on the appropriate use of statistical analysis in oral research methodologies including in vitro studies, in vivo animal models and clinical research. The course will also be available to DMD students and MSD students as an elective and students will receive merit grades.

The MS in Oral Sciences program will include three foundational courses already offered in the College, Cell & Molecular Biology of Mineralized Tissue (CRFB-801), Oral Immunobiology (CRFB-624) and Biochemical Aspects of Oral Biology (CRFB-902), to provide enrolled students with a broad background in the biological sciences and oral biology. Students selecting the thesis track will be required to take and pass two of the three foundational courses while students selecting the non-thesis track will be required to complete all three foundational courses.

Students in both the thesis and non-thesis tracks will be encouraged to rotate through at least two laboratories during their first semester before selecting a research mentor. All students will be required to identify a research mentor and research project at the
beginning of their second semester in the program. The College does not currently have a course offered to that would cover the optional laboratory rotations so a new course will be designed for this purpose (CRFB-91x). The new course will be a 3 credit course available in the fall of each year. Students will be required to submit a brief description of the research questions addressed during the two rotations and complete an evaluation of the rotation experience at the end of the semester. The course will be graded as pass-no pass and the selected mentors will submit grades for each rotation to the program director.

Once the student has selected a mentor for their research project, non-thesis track students will be required to register in CRFB-900, Independent Research and will complete a research project. The students will be required to submit a written summary of their research project to the graduate committee and present their work to the faculty. Students choosing the thesis track will register for a new course to be created (CRFB-99x; Thesis Research). Both courses will be graded as pass-no pass by the research advisor chosen by the student.

Elective courses will be selected upon discussion with the student’s graduate committee, and typically cover the area of research pertinent to the student’s thesis work or specific research interests. Before completion of the second semester, all students will be required to select a graduate examination committee and pass an oral qualifying exam covering the general oral sciences. Students choosing the thesis option will be required to write and defend a thesis describing the independent research that they performed prior to completion of the program. Students choosing to complete the non-thesis option will be required to submit a written report of their research project to the graduate examination committee and present their research findings orally to the program faculty in the last semester of the program.

Sample Curriculum:

<table>
<thead>
<tr>
<th>Thesis Track</th>
<th>Non-thesis track</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 1</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
</tr>
<tr>
<td>0.5 cr</td>
<td>CRFB-745 Topics in Craniofacial Biology</td>
</tr>
<tr>
<td>0.5 cr</td>
<td>CRFB-747 Craniofacial Biology Seminar Series</td>
</tr>
<tr>
<td>1 cr</td>
<td>CGS-710 Essential Scientific Practices I</td>
</tr>
<tr>
<td>2 cr</td>
<td>CRFB-901 Introduction to Research Methodologies</td>
</tr>
<tr>
<td>(3 cr)</td>
<td><strong>CRFB-91x Laboratory Rotation (optional)</strong></td>
</tr>
<tr>
<td>(3 cr)</td>
<td>CRFB-900 Independent Research (in lieu of CRFB-91x)</td>
</tr>
<tr>
<td>2 cr</td>
<td><strong>CRFB-90x Biostatistics for Dental Research</strong></td>
</tr>
</tbody>
</table>

|              |                  |
| **Spring Semester** |       |
| 0.5 cr       | CRFB-745 Topics in Craniofacial Biology | 0.5 cr                   |
| 0.5 cr       | CRFB-747 Craniofacial Biology Seminar Series | 0.5 cr  |
| 3 cr         | CRFB-902 Biochemical Aspects of Oral Biology | 3 cr              |
| (2 cr)       | Optional elective |             |
| 3-5 cr       | CRFB-900 Independent Research | 3-5 cr       |

|              |                  |
| **Summer Semester** |       |
| 9 cr         | CRFB-900 Independent Research | 9 cr         |
Year 2
Fall Semester
0.5 cr  CRFB-745 Topics in Craniofacial Biology  0.5 cr
0.5 cr  CRFB-747 Craniofacial Biology Seminar Series  0.5 cr
3 cr  CRFB-801 Cell & Molecular Biology of Mineralized Tissue  3 cr
-  CRFB-900 Independent Research  3-5 cr
(2 cr)  Optional elective  (2 cr)
3-5 cr  CRFB-99x Thesis Research  -

Spring Semester
0.5 cr  CRFB-745 Topics in Craniofacial Biology  0.5 cr
0.5 cr  CRFB-747 Craniofacial Biology Seminar Series  0.5 cr
-  CRFB-624 Oral Immunobiology  4 cr
(2 cr)  Optional elective  (2 cr)
-  CRFB-900 Independent Research  2-4 cr
6-8 cr  CRFB-99x Thesis Research  -

Summer Semester
-  CRFB-900 Independent Research  9 cr
9 cr  CRFB-99x Thesis Research  -

New Course Descriptions:
CRFB-910 Laboratory Rotation, 3 credit hours, fall
Students will rotate through 2 independent research labs of their choosing during the semester to identify a research mentor for their independent or thesis research project. Students will be required to write a brief summary of their research at the end of each 6 week rotation and will be allowed to evaluate the laboratory experience. Mentors will submit a pass/no pass grade and evaluation of the student at the end of each rotation. Grades will be pass/no pass and will be determined by averaging the two mentor evaluations.

CRFB-90x Biostatistics for Dental Research, 2 credit hours, fall
This course will introduce students to the use of biostatistics in the area of dental research. Topics will include how to use statistical methods during experimental design and data analysis as well as the limitations of commonly used statistical methodologies. Statistical methods covered will include those most frequently used in both basic and clinical research methodologies. The course is open to all MS, MSD, DMD and PhD students. The course will be merit graded.

CRFB-99x Thesis research, 1-9 credit hours, fall/spring/summer
MS students who have chosen the thesis-track will be allowed to register for this course after successful completion of their oral qualifying exam when they being their formal thesis research project. The course will be pass/no pass graded by the chosen research mentor.

9. Assessment:
In non-merit graded courses such as research and laboratory rotations, mentors/research supervisors will complete and evaluation form detailing the student's abilities in several areas such as knowledge in the area of research, participation in laboratory meetings and discussions, ability to communicate research questions and methodologies, and general work ethic at the end of each semester. The results of the
evaluation will be shared with the student to allow for improvement in the future. Students will also evaluate mentors/research supervisors at the end of rotations. These evaluations will be confidential but will provide program administrators to identify mentors that do not meet the expectations of the program. The anonymous evaluations will also be made available to future students to assist with their selection of appropriate laboratories for completion of their thesis research or independent studies.

Oral qualifying exams will be graded by completion of a table by each committee member detailing whether the student fails to meet, meets or exceeds expectations in the areas being tested. The evaluation will include whether the student responds adequately to questions in their chosen research area, demonstrates knowledge of the field, can critically evaluate the research in the field, and can clearly communicate their ideas to others.

The oral defense for students choosing the thesis-track will be evaluated similarly to the oral qualifying. In addition to the review criteria listed above, the student will be rated as does not meet, meets or exceeds expectations on their ability to respond to questions regarding their project and can respond to challenges professionally.

The MS in Oral Sciences program will be assessed regularly through several methods. For merit-graded courses, all students will be given the opportunity to complete an E-value evaluation at the end of the course. The evaluations will include metrics such as instructors, quality and adequacy of instructional materials provided, clarity of presentations, fairness of tests/assignments, and clarity of course objectives. The data collected from these evaluations will be used by the MS in Oral Sciences curriculum committee (detailed below) to modify and improve courses for subsequent years. Comments on instructor quality will be forwarded to the appropriate instructors and course directors.

A curriculum committee will be formed to assess the quality of individual courses within the program, approve new courses prior to their implementation, and modify the program requirements if necessary based on evaluations and outcomes. The committee will consist of seven faculty members with representatives from both basic and clinical research areas within the College of Dental Medicine, the Education Specialist employed by the College, and at least one faculty member from the College of Graduate Studies.

In order to assess the effectiveness of the program in achieving its goals, students will be asked to provide administrative staff with a non-MUSC, permanent e-mail address (such as Gmail or Yahoo) at the time of acceptance. This e-mail address will be used to communicate with graduates after completion of the program. Students will be asked their goals following completion of the program at the time of admission to allow individual assessment of program success. Success for each student may be defined as acceptance to an accredited DMD or DDS program, acceptance to a PhD program, full-time employment in dental research.

For students whose goal is to obtain a DMD or DDS degree, students will be asked to provide the program administration with the total number of dental school applications submitted, DAT scores (or an increase in prior DAT scores), number of interviews at dental schools, number of offers of acceptance. Later data that will be collected could include successful completion of a dental degree, participation in dental research,
membership in dental societies, and current employment (e.g. private dental practice, academic faculty, alternate career in dental research, specialty training).

Students whose goal is to obtain a PhD will be asked for similar information regarding graduate school applications, interviews, GRE scores and acceptance. Longer term data will include postdoctoral positions offered/accepted, grant funding status, and obtaining employment in dental education or oral health-related research.

Success of the program for students not desiring to pursue an advanced degree will be monitored on an individual basis with regards to achievement of their goal(s) at the time of matriculation into the program. Students may be interested in pursuing a career in oral health-related research, but not in obtaining an advanced degree and success will be defined as achievement of that goal upon graduation and into the future.

Recent program graduates will also be asked to complete a brief survey covering their opinion on the program. Students will be asked to comment on the amount of didactic coursework required, the topics and appropriateness of the core curriculum, availability of appropriate mentors and electives, and the oral qualifying and defense (thesis track only) required by the program.

The above data regarding outcomes following completion of the program will be collected and the curriculum committee will use the results to determine if the current structure and focus of the program is adequate to allow students to achieve success after graduation. If students identify gaps or overlaps in the core courses, we will work with the course directors to adjust the curriculum to minimize these areas. Students may also identify areas of interest that are not addressed in the core curriculum or available as electives providing the committee with the opportunity to develop additional courses that would be beneficial to the program and potentially other programs within the College. In addition to regular review of the curriculum and student success, all faculty participating in teaching of the core curriculum will attend an annual retreat jointly with the DMD and MSD program faculty within the college. This will provide opportunities for aligning the courses in all three curricula and provide continuing training in educational methods.

10. Faculty:
   Table B – Faculty List

<table>
<thead>
<tr>
<th>Faculty by Rank</th>
<th>Highest Degree Earned</th>
<th>Field of Study</th>
<th>Teaching in Field (Yes/No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor #1</td>
<td>Ph.D.</td>
<td>Oral Biology/Immunology</td>
<td>Yes</td>
</tr>
<tr>
<td>Professor #2</td>
<td>Ph.D.</td>
<td>Cell Biology</td>
<td>Yes</td>
</tr>
<tr>
<td>Professor #3</td>
<td>Ph.D.</td>
<td>Cell Biology</td>
<td>Yes</td>
</tr>
<tr>
<td>Professor #4</td>
<td>Ph.D.</td>
<td>Biochemistry</td>
<td>Yes</td>
</tr>
<tr>
<td>Professor #5</td>
<td>Ph.D.</td>
<td>Immunology</td>
<td>Yes</td>
</tr>
<tr>
<td>Professor #6</td>
<td>Ph.D.</td>
<td>Biochemistry</td>
<td>Yes</td>
</tr>
<tr>
<td>Faculty Title</td>
<td>Degree</td>
<td>Major</td>
<td>Required</td>
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<td>--------</td>
<td>------------------------------</td>
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<tr>
<td>Associate Professor #1</td>
<td>Ph.D.</td>
<td>Microbiology</td>
<td>Yes</td>
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<tr>
<td>Associate Professor #2</td>
<td>Ph.D.</td>
<td>Biochemistry</td>
<td>Yes</td>
</tr>
<tr>
<td>Associate Professor #3</td>
<td>Ph.D.</td>
<td>Biomedical Engineering</td>
<td>Yes</td>
</tr>
<tr>
<td>Associate Professor #4</td>
<td>Ph.D.</td>
<td>Cell Biology</td>
<td>Yes</td>
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<td>Associate Professor #6</td>
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<td>Immunology</td>
<td>Yes</td>
</tr>
<tr>
<td>Assistant Professor #1</td>
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<td>Cell Biology/Mineralized Tissue Biology</td>
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<td>Ph.D.</td>
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<tr>
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<td>Biostatistics</td>
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<tr>
<td>Assistant Professor #5</td>
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</tr>
<tr>
<td>Assistant Professor #5</td>
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</tr>
<tr>
<td>Research Professor #2 Assistant</td>
<td>M.D.</td>
<td>Oral Pathology</td>
<td>No</td>
</tr>
</tbody>
</table>

All faculty necessary to implement the MS in Oral Sciences program are currently within the College of Dental Medicine faculty. Additional faculty are being sought by the College with research expertise in oral microbiology, mineralized tissue biology or biostatistics at this time to strengthen the research program within the College and University. While these new positions are not essential for initiation of the program, they will enhance the educational mission of the MS in Oral Sciences program in the future.

Any new faculty hires necessary for the program will be required to hold a professional degree (DMD, PhD, DMD/PhD, or MD/PhD) from an accredited institution and have experience in basic, translational or clinical oral health-related research. New appointees will be required to be fluent in both written and spoken English.

No changes in duties for faculty or administrative staff are expected following implementation of the MS in Oral Sciences program. The administrative staff currently handles the corresponding duties for the DMD/PhD and DMD program in the College and has sufficient staff to accommodate the additional students. Faculty are currently teaching the offered courses and no changes will be necessary to their allotted time for teaching relative to other duties.

The Institutional plan for faculty development will be based on the existing program. Faculty member time is allotted according to the needs of the didactic course component and will include time allotted for research activities, curriculum development, and
administrative duties such as mentoring. The University currently offers many activities for faculty development including seminars and interprofessional programs.

The Institutional definition of a full time equivalent (FTE) is a faculty position requiring at least forty hours per week of commitment.

Table C – Unit Administration, Faculty and Staff Support Table

<table>
<thead>
<tr>
<th>UNIT ADMINISTRATION, FACULTY, AND STAFF SUPPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>YEAR</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Administration</td>
</tr>
<tr>
<td>2014-15</td>
</tr>
<tr>
<td>2015-16</td>
</tr>
<tr>
<td>2016-17</td>
</tr>
<tr>
<td>2017-18</td>
</tr>
<tr>
<td>2018-19</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Faculty

| YEAR          | NEW | EXISTING | TOTAL |
|               | Headcount | FTE  | Headcount | FTE  | Headcount | FTE  |
| 2014-15       | 3   | 0.05    | 16     | 0.15  | 19       | 0.2  |
| 2015-16       | 0   | 0       | 19     | 0.2   | 19       | 0.2  |
| 2016-17       | 0   | 0       | 19     | 0.2   | 19       | 0.2  |
| 2017-18       | 0   | 0       | 19     | 0.2   | 19       | 0.2  |
| 2018-19       | 0   | 0       | 19     | 0.2   | 19       | 0.2  |
| Total         | 3   | 0.05    | 16     | 0.15  | 19       | 0.2  |

Staff

| YEAR          | NEW | EXISTING | TOTAL |
|               | Headcount | FTE  | Headcount | FTE  | Headcount | FTE  |
| 2014-15       | 0   | 0       | 2      | .15   | 2       | .15   |
11. Physical Plant:

The proposed MS in Oral Sciences program will not require any changes or additions to the physical plant in place at the Medical University of South Carolina, College of Dental Medicine. Adequate classroom space is already available and most of the courses included in the program are currently offered in the College. Additionally, the Administrative staff and office space currently in place for the DMD/PhD program within the College will support the new MS in Oral Sciences program.

12. Equipment:

The University and college currently operate sufficient equipment for the proposed MS in Oral Sciences program so no additions to equipment will be necessary for implementation of the program. Lecture halls, conference rooms, computer-equipped offices are currently available within the College of Dental Medicine for implementation of the program. Research facilities are available in the Center for Oral Health Research and mentors are provided with research space and equipment sufficient to conduct their studies that the students will have access to.

13. Library Resources:

The proposed MS in Oral Sciences program will not require any changes or additions in Library facilities already in place at the Medical University of South Carolina. The existing Library facilities offer both print and online journals and other publications appropriate and necessary for any scholarly activities anticipated. Regular innovations in Library technologies are anticipated but would be completed regardless of the addition of this program. Such innovations in Library technologies will only serve to enhance access to necessary scholarly works and reference materials to facilitate both student and faculty activities.

14. Accreditation, Approval, Licensure, or Certification:

The Medical University of South Carolina is fully accredited by the Southern Association of Colleges and Schools (SACS).

The proposed MS in Oral Sciences program is not designed to be linked to any certification or licensure program and as such, no certification or licensure will be obtained upon completion of the program.
15. Articulation:

The MUSC Center for Oral Health Sciences (COHR) has been on significant growth trajectory for the past five years. With the Dept. of Craniofacial Biology as the academic home, the Center currently administers over $4,000,000 in federal grants for fiscal year 2013. Dental Schools in the US are often ranked by federal (NIH) research dollars. In the past several years, the College of Dental Medicine has gone from being unranked in NIH funding to now 23rd in the US amongst 64 dental schools currently conferring either a DMD or DDS degree. In addition, MUSC and Clemson University have an active collaborative relationship in the area of bioengineering through the MUSC-Clemson Bioengineering Program. Joint faculty positions and recruitments are part of this programmatic alignment. The CDM faculty actively collaborate with Clemson faculty on research projects, mentoring of students, and serve on students’ thesis committees currently. Clemson students are already part of T-COH (Training in Craniofacial and Oral Health Research). MS of Oral Sciences students will be allowed to take Clemson Bioengineering courses and work directly with Clemson faculty who conduct research in the areas of oral and craniofacial bioengineering. Finally, the dental school has forged a strong alliance with the Hollings Cancer Center at MUSC becoming a pivotal component of this NCI-designated center through support of the research services, internal administration, joint recruitments, and grants administration. Thus, the MUSC COHR is truly a campus-wide and statewide interdisciplinary and interprofessional center that fosters research and education in a highly interactive and collaborative environment.

16. Estimate of costs:

The MS in Oral Sciences program will be implemented with existing faculty and staff resources. The majority of the courses are currently offered in the College of Dental Medicine. Partial faculty and staff salary compensation is needed to fully commit and implement this program along with partial salary compensation for the program director.

Table D – Estimated Costs and Sources of Financing by Year

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
<th>TOTALS</th>
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<tbody>
<tr>
<td>Program Administration</td>
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<td>33,000</td>
<td>33,000</td>
<td>33,000</td>
<td>33,000</td>
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<td>Faculty Salaries</td>
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<td>20,000</td>
<td>20,000</td>
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<td>Clerical/Support Personnel</td>
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<td>20,000</td>
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<td>100,000</td>
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<td>Library Resources</td>
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<td>Equipment</td>
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<td>6,200</td>
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<td>Other – outcomes assessment</td>
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<td>---</td>
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<td>---</td>
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</tr>
<tr>
<td>Other – Consultant</td>
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<tr>
<td>TOTALS</td>
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<td>92,680</td>
<td>92,680</td>
<td>92,680</td>
<td>92,680</td>
<td>467,893</td>
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</table>

**SOURCES OF FINANCING BY YEAR**

<table>
<thead>
<tr>
<th>Tuition Funding*</th>
<th>46,429</th>
<th>111,058</th>
<th>185,716</th>
<th>250,345</th>
<th>250,345</th>
<th>843,893</th>
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<td>Program Specific Fees</td>
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<td>Reallocation of Existing Funds</td>
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<tr>
<td>Other Funding (Specify)</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTALS</td>
<td>46,429</td>
<td>111,058</td>
<td>185,716</td>
<td>250,345</td>
<td>250,345</td>
<td>843,893</td>
</tr>
</tbody>
</table>

*Assumes 50% of students in-state and 50% of students out-of-state. For years with odd student numbers in Table A, the majority of the students are estimated to be in-state. Tuition numbers are based on full time tuition for MUSC MS in Biomedical Sciences 2012-2013.
## Proposed Parking Fee Increases

<table>
<thead>
<tr>
<th>Salary Range</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
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</thead>
<tbody>
<tr>
<td>Less than $60,000</td>
<td>$58</td>
<td>$61</td>
<td>$64</td>
<td>$67</td>
<td>$70</td>
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<tr>
<td>On-Campus</td>
<td></td>
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</tr>
<tr>
<td>$60,000 to $120,000</td>
<td>$63</td>
<td>$71</td>
<td>$79</td>
<td>$87</td>
<td>$95</td>
</tr>
<tr>
<td>On-Campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$120,000 to $200,000</td>
<td>$67</td>
<td>$79</td>
<td>$91</td>
<td>$103</td>
<td>$115</td>
</tr>
<tr>
<td>On-Campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than $200,000</td>
<td>$120</td>
<td>$122</td>
<td>$125</td>
<td>$127</td>
<td>$130</td>
</tr>
<tr>
<td>On-Campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

- Effective July 1, 2013

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**Changing What’s Possible**