

# Graduate Education in the Biomedical Sciences Review

*Dr. Doug Paulsen*

*Associate Dean for Graduate Studies*

10/19/17

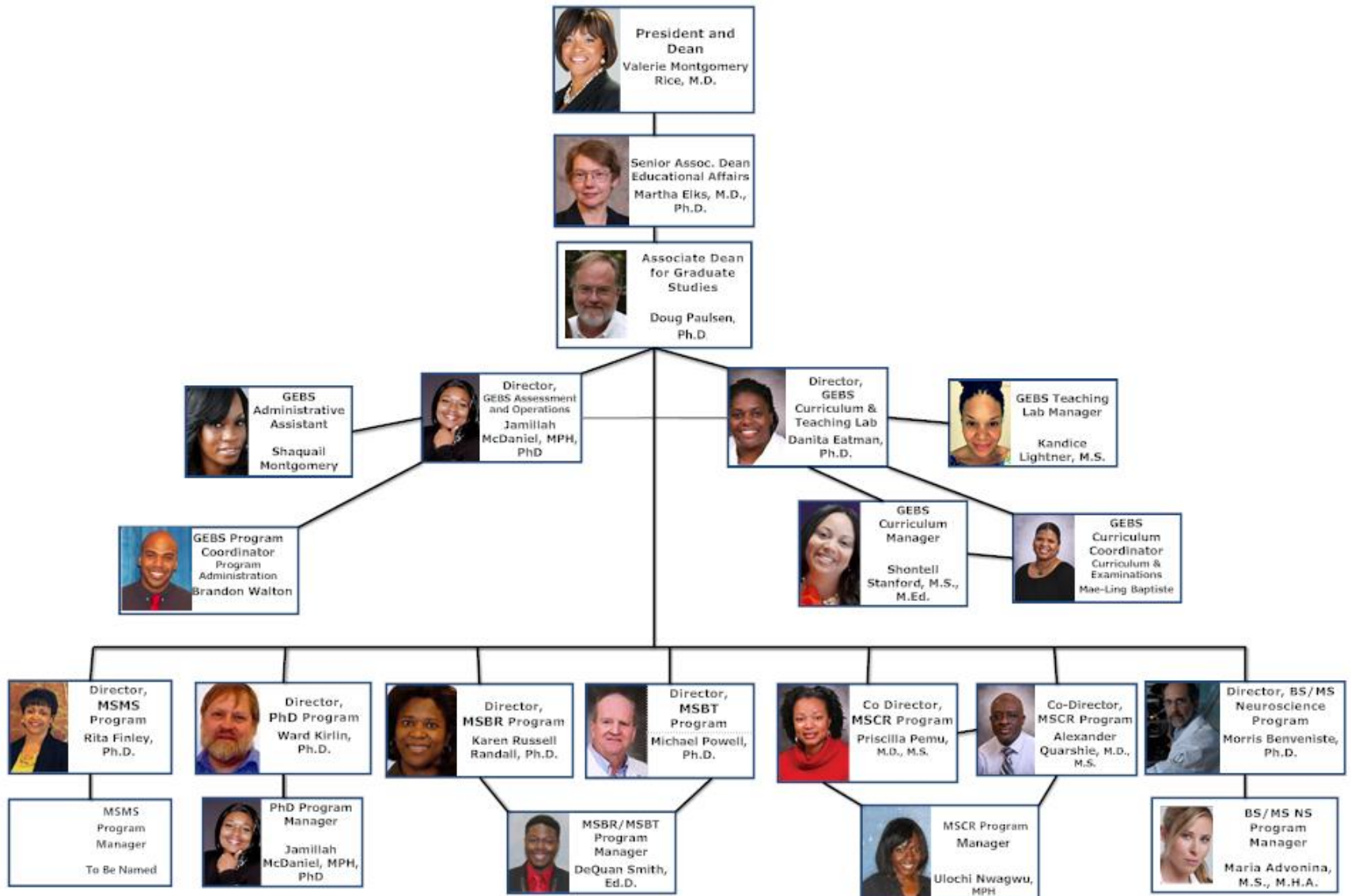
# Objectives

- Purpose of GEBS Review
- Brief overview of GEBS organizational structure (staffing)
- Brief overview of external review timeline and process
- Review significant findings and recommendations from external review
- Draft priorities for GEBS Strategic Plan

# Purpose of GEBS Review

- Assure the highest quality of graduate education at MSM
- Examine alignment of degree programs and research opportunities and identify actions to enhance cutting edge growth
- Anticipate the knowledge and skills needed by the leading health equity researchers of tomorrow

# Organizational Structure



# External Review Timeline

June 3,  
2016

- **GEBS Review Planning Meeting**

August,  
2016

- **Identify external reviewers and propose review dates**

October,  
2016

- **Review list of external reviewers; update on compilation of review materials by Dr. Paulsen**

December,  
2016

- **Assemble review packets and finalize logistics for on-site GEBS External Review Meeting**

March,  
2016

- **GEBS External Review Meeting, Morehouse School of Medicine**

April, 2016

- **GEBS External Review Report to Vice President and Executive Vice Dean for Research and Academic Administration**

# Graduate Education in Biomedical Sciences (GEBS) Review

- Conducted March 20-22, 2017
- Included the following degree programs:
  - *PhD in Biomedical Sciences*
  - *MS in Biomedical Research*
  - *MS in Biomedical Technology*
  - *MS in Clinical Research*
  - *MS in Medical Science*
  - *BS/MS Neuroscience*
  - *Dual Degree Programs*

# GEBS Review Committee

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**Ritu Aneja**, PhD Program Director at Georgia State University

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**Nick Cianciotto**, Director of the Driskell Graduate Program in the Life Sciences, Northwestern University Feinberg School of Medicine

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**Maria Fatima Lima**, Dean of the School of Graduate Studies at Meharry Medical College

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**David Schneider**, Associate Dean for Graduate Biomedical Sciences at the University of Alabama, Birmingham

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**Paula Traktman**, Dean, College of Graduate Studies, Medical University of South Carolina

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**Tabia Akintobi**, Associate Professor in the Department of Community Health and Preventive Medicine, and Director of Evaluation and Institutional Assessment at Morehouse School of Medicine

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**Janice Herbert-Carter**, Chair and Associate Professor, Department of Medical Education at Morehouse School of Medicine.

# Graduate Education in the Biomedical Sciences Review: Initial and On-Site Data Reviewed



# GEBS Review Process

## Initial Data Requested

- *2015-16 Annual Report*
- *GEBS Organization and Function*
- *Degree Program Curriculum*
- *GEBS Faculty Profiles*
- *Research Profile*
- *Student Profile*
- *Finances*
- *Goals and Directions for GEBS*

# GEBS Review Process

## On-Site Data Request

- *Examples of Course and Comprehensive Examination questions*
- *Examples of Course Syllabi for graduate programs*
- *Additional budget information including funding for students in graduate programs*
- *Group meetings with students, faculty, and program leadership*
- *Individual meetings with leadership and select staff members*

# Graduate Education in the Biomedical Sciences Review: Findings and Recommendations

# GEBS Review Recommendations

## Curriculum

- *Define learning outcomes/competencies for all programs;*
- *Reduce the focus on didactic lecture; start lab rotations earlier*
- *Rework the structure and content of Qualifying Exams*
- *Define the portfolio of electives and promote the ability of students to take electives off-site (ARCHE);*
- *Appoint a non-faculty student counselor to gather feedback from students for ongoing process improvement;*
- *Add a requirement for an “external examiner” on PhD theses;*
- *Recruit new faculty and seek collaborative opportunities with faculty at local universities to increase the number of available mentors;*

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# GEBS Review Recommendations

## Resources

- *MSM is to be applauded for support of GEBS administration (staffing, tuition, and stipend)*
- *Embark on a large faculty recruitment effort;*
- *Encourage faculty to target a fuller range of funded opportunities;*
- *Encourage those faculty who are currently extramurally-funded to submit supplements for training students;*
- *Ensure economic viability by leveraging the potential for expanding enrollment in the MSMS and MSBT programs;*
- *Provide seed monies to small groups of faculty to help conceptualize new projects, obtain preliminary data and transition into new areas of research.*

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# GEBS Review Recommendations

## Applicant Pool

- *More collaboration between GEBS Program Directors, staff and faculty in recruitment of applicants;*
- *Ensure that program offerings match emerging student needs and demand;*
- *Support and coordinate campus visit efforts;*
- *Strategically focus recruitment efforts on programs with potential to grow in today's economy and market;*
- *Analyze collected recruitment data, and use insights to guide/revise future recruitment efforts.*

# GEBS Review Recommendations

## Graduate Career Paths

- *Strengthen the Office of Career Connections by providing strong administrative staff and additional professional staff to support the director;*
- *Institute a structured curriculum to expose GEBS students to alternative careers. This could continue to be offered in the Learning Communities; however, Career Connections should also have strong input.*
- *Remember though that underrepresented faculty are sorely needed nationwide.*

# GEBS Review Recommendations

## Expansion Plans

1. ***Create an independent MD/PhD dual-degree program within Morehouse School of Medicine***
  - *The committee does not recommend creation of an independent MD/PhD program:*
    - *Lack of clear curricular plans for a new program;*
    - *Relatively limited training capacity by extramurally-funded biomedical researchers;*
    - *Exceptional expense of MSTP programs;*
    - *A partnership with the University of Washington that could mature or expand.*

# GEBS Review Recommendations

## Expansion Plans

### ***2. Enhance the curriculum without increasing time to degree***

- *The committee recommends:*
  - *Get students into research labs sooner; Summer lab boot camp, earlier lab rotations;*
  - *Incorporate seminars, workshops, short courses, symposia and other opportunities (e.g., entrepreneurship) for independent learning;*
  - *Make some opportunities/courses optional, based on student needs and interests*

# GEBS Review Recommendations

## Expansion Plans

### **3. *Expand the graduate student population by 20%***

- *The committee recommends:*
  - *Focusing the increase on the MSMS and MSBT programs;*
  - *MSBR and PhD expansion plans will require substantial investments*

### **4. *Create a freestanding graduate school ?***

- *A new graduate school with the required administrative support is not warranted at this time*
- *Reorganization of the leadership/reporting structure for GEBS may be warranted*

# Graduate Education in the Biomedical Sciences Review: *Draft* Strategic Plan Vision Imperatives and Goals

# ***Draft*** Strategic Plan *Vision Imperatives* for the Division of Graduate Education in Biomedical Sciences

## **Vision Imperatives**

1. A graduate faculty well-trained, institutionally supported and extramurally funded to support biomedical science and research training
2. Portfolio of graduate training programs well-designed and supported to prepare graduates to meet projected state and national needs in biomedical research, teaching, and workforce diversity
3. State-of-the-art teaching and research facilities and equipment
4. Program operations that facilitate student progress, faculty efficacy, and program success

*A graduate faculty well trained, institutionally supported and extramurally funded to support biomedical science and research training*

## Vision Imperative I

- **Goal 1:** Increase the number of faculty with long-term research funding (i.e. R01 and R01-type grants)
- **Goal 2:** Increase the variety of research topics available to graduate students in fields appropriate to the MSM research enterprise and mission
- **Goal 3:** Enhance the training and experience of MSM research faculty in mentoring graduate students.
- **Goal 4:** Enhance the commitment of MSM research faculty to training the next generation of biomedical researchers and health professionals

*Portfolio of graduate training programs well-designed and supported to prepare graduates to meet projected state and national needs in biomedical research, teaching, and workforce diversity*

**Vision  
Imperative  
II**

- **Goal 1:** Provide a curriculum for each graduate degree program that prepares students for their prospective roles in the scientific and health professions workforce.
- **Goal 2:** Enroll students in each degree program of appropriate numbers and quality to optimize educational efficacy.
- **Goal 3:** Assure fiscal sustainability and marketability

# *State-of-the-art teaching and research facilities and equipment*

## **Vision Imperative III**

- **Goal 1:** Classrooms of appropriate number, size and with appropriate equipment and furnishings to flexibly accommodate a variety of teaching modalities
- **Goal 2:** Graduate student access to research and teaching laboratories well-equipped to teach and conduct state-of-the-art biomedical research
- **Goal 3:** Incorporation of appropriate online and digital learning technologies to enhance the delivery of quality education.
- **Goal 4:** Wi-Fi-supported desk space near respective research labs for research students to land and work when not carrying out experiments.

*Program operations that facilitate student progress, faculty efficacy, and program success*

**Vision  
Imperative  
IV**

- **Goal 1:** Well-designed, staffed, and executed applicant recruitment plan for each degree program
- **Goal 2:** Consistent admissions-committee structures, processes, and oversight across all GEBS degree programs
- **Goal 3:** Effective and efficient curriculum management
- **Goal 4:** Effective and efficient budget planning and management across all GEBS degree programs.

# *Research Retreat Activity*

## **BREAKOUT GROUPS**

- **Group 1: Envision the Future Researcher in Biomedical Sciences:** As related to Health Equity
- **Group 2: Enhance Student Pipeline and Recruitment:** Recommended characteristics and approaches to recruiting
- **Group 3: Expand Faculty Recruitment and Retention:** Recommended disciplines and approaches to recruitment and retention
- **Group 4: Interlink Curricular and Extracurricular Innovations to Support Career Connections:** Recommended curricular and extracurricular innovations to support career success