

# Executive Summary

## Blueprint for Academic Excellence School of Medicine - Columbia AY2020-2021

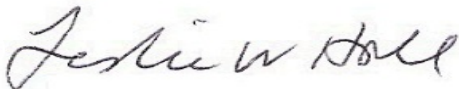
### Introduction

The School of Medicine Columbia (SOMC) continues to implement the goals and objectives outlined in our five year strategic plan. Our medical student curriculum continues to be updated, with our student board pass rates and residency match rates continuing to improve. We graduated the first class from our PA program in 2019, and our nurse anesthesia program is preparing for the upcoming transition to a doctoral level program. Our clinical training sites continue to grow in number, and our Florence campus is more robust than ever. Although the Palmetto Health-USC Medical Group has transitioned to ownership of Prisma Health, our partnership with Prisma Health remains strong as we expand our shared academic programs. As the planning for construction of the new health sciences center becomes a reality, we are preparing to move into a very active phase of fundraising in the School of Medicine Columbia. Our federal research dollars received by the SOMC were among the highest ever in the past year.

### Highlights

The SC Center for Rural and Primary Health Care continues to advance rural health professions education, care and research in meaningful ways. The joint VA/SOM simulation center opened this past year, significantly expanding opportunities for experiential learning. A new assistant dean was named for the Florence Branch Campus this year. We have seen expansion of research funding in the SOMC this year, both in basic science and clinical areas. The Research Center for Transforming Health is strengthening the collaborative research environment with Prisma Health and other UofSC schools. We have had another successful year of fundraising, and will soon be announcing our first \$1 million donor for the new School of Medicine building.

Les Hall, M.D. Dean, School of Medicine,  
Chief Academic Officer, Prisma Health Midlands  
School of Medicine - Columbia



# Table Of Content

<b>Executive Summary</b>	1
Introduction	1
Highlights	1
<b>Foundation for Academic Excellence</b>	4
Mission Statement	4
Vision Statement	4
Values Statement	4
<b>Goals - Looking Back</b>	5
<b>Goals - Real Time</b>	6
<b>Goals - Looking Ahead</b>	29
<b>Academic Programs</b>	31
Program Rankings	31
Instructional Modalities	31
Program Launches	32
Program Terminations	32
<b>Academic Initiatives</b>	34
Experiential Learning for Undergraduates	34
Experiential Learning For Graduate Students	34
Affordability	35
Reputation Enhancement	35
Challenges	36
<b>Faculty Population</b>	38
Faculty Employment by Track and Title	38
Faculty Diversity by Gender and Race/Ethnicity	39
<b>Faculty Information</b>	41
Research and Scholarly Activity	41
Faculty Development	42
Other Activity	43
Supplemental Info - Faculty	43
<b>Teaching</b>	44
Analysis of Ratio	44
Analysis of Ratio	44
<b>Student Recruiting and Retention</b>	45
Student Recruitment	45
Student Retention	46
<b>Student Enrollment &amp; Outcomes</b>	48
Student Enrollments	48
Enrollment by Time Status	50
Student Diversity by Gender	51
Student Retention, Transfer, and Graduation	54
<b>Faculty Awards Nominations</b>	57

- Teaching Award Nominations ..... 57
- Other Award Nominations ..... 57
- Faculty Awards Received ..... 58**
  - Research Awards ..... 58
  - Service Awards ..... 59
  - Teaching Awards ..... 61
  - Other Awards ..... 63
- Alumni Engagement & Fundraising ..... 65**
  - Alumni ..... 65
  - Development, Fundraising and Gifts ..... 66
- Community Engagement ..... 68**
  - Community Engagements and Community - Based Activities ..... 68
  - Community Perceptions ..... 76
  - Incentivizing Faculty Engagement ..... 76
- Collaborations ..... 77**
  - Internal Collaborations ..... 77
  - External Collaborations ..... 77
  - Other Collaborations ..... 78
- Equity and Diversity Plan ..... 79**
- Concluding Remarks ..... 81**
  - Quantitative Outcomes ..... 81
  - Cool Stuff ..... 81
- Appendix 3. Research & Scholarly Activity ..... 83**
- Appendix 4. Faculty Information ..... 87**

# Foundation for Academic Excellence

---

## Mission Statement

We serve the people of South Carolina and beyond through exemplary medical and health education, transformative research, and compassionate patient care.

Updated: 02/28/2018

## Vision Statement

To be part of a vibrant academic health center that provides access to the best evidence-based medical care and biomedical education, supported by research and cutting edge technologies.

Updated: 02/28/2018

## Values Statement

**Excellence:** We are committed to achieving the highest levels of personal and professional performance in all our endeavors.

**Professionalism:** We adhere to the highest standards of behavior guided by the values and practices of our professions.

**Collaboration:** We partner with individuals, teams, institutions and communities to enhance the value of our efforts.

**Diversity and Inclusion:** We create and sustain an inclusive and diverse environment, demonstrating in word and deed our commitment to valuing and supporting each other and those whom we serve.

**Compassion:** We are resolute in our efforts to relieve suffering and promote fairness.

Updated: 02/28/2018

## **Goals - Looking Back**

**No goals have been entered for this section.**

# Goals - Real Time

Goals for the current Academic Year.

## Goal 1 - Curriculum Innovation

<b>Goal Statement</b>	Implement Curriculum Innovation Task Force recommendations as approved by Curriculum Committee.
<b>Linkage to University Goal</b>	<ul style="list-style-type: none"> <li>• Educating the Thinkers and Leaders of Tomorrow</li> <li>• Building Inclusive and Inspiring Communities</li> <li>• Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>
<b>Alignment with Mission, Vision, and Values</b>	<p>Mission - Exemplary medical and health education.</p> <p>Vision - A vibrant academic health center that provides access to the best biomedical education</p> <p>Values - Excellence, professionalism, collaboration</p>
<b>Status</b>	Progressing as expected (multi-year goal)
<b>Action Plan</b>	<p>Hire curriculum leaders to oversee implementation of Health Systems Science and ACE curriculums.</p> <p>Curriculum Committee and Subcommittees, Course Directors, and Clerkship Directors finalizing action plans and curriculum for implementation of approved curriculum changes.</p>
<b>Achievements</b>	<p>Curriculum Committee approved the recommendations of the Curriculum Innovation Task Force in fall 2018 with anticipated implementation of curriculum changes beginning in fall 2020 and proceed over the course of two years.</p> <p>Curriculum leaders for the Health Systems Science and ACE curriculums have been identified.</p>
<b>Resources Utilized</b>	<p>School of Medicine faculty, staff, and students</p> <p>Associate Dean for Medical Education</p> <p>Office of Medical Education and Academic Affairs</p>
<b>Goal Continuation</b>	Completion of the goal is anticipated in 2021/2022.
<b>Goal Upcoming Plans</b>	<p>Submit information on curricular change to CHE.</p> <p>Curriculum Committee and Subcommittees, Course Directors, and Clerkship Directors will implement approved curriculum changes.</p>
<b>Resources Needed</b>	<p>Curriculum Committee</p> <p>Course and clerkship directors</p>

# Goals - Real Time

	Office of Medical Education and Academic Affairs Teaching faculty
<b>Goal Notes</b>	Due to the loss of a key faculty member and delay in identifying a project leader, implementation of some of the proposed areas of curricular change has been delayed.

# Goals - Real Time

## Goal 2 - Student Success and Wellness Center

<b>Goal Statement</b>	Establish a Student Success and Wellness Center.
<b>Linkage to University Goal</b>	<ul style="list-style-type: none"> <li>• Educating the Thinkers and Leaders of Tomorrow</li> <li>• Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>• Building Inclusive and Inspiring Communities</li> <li>• Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>
<b>Alignment with Mission, Vision, and Values</b>	<p>Mission - Exemplary medical and health education</p> <p>Vision - A vibrant academic health center that provides access to the best biomedical education</p> <p>Values - Excellence, professionalism, collaboration, diversity and inclusion, compassion</p>
<b>Status</b>	Progressing as expected (multi-year goal)
<b>Action Plan</b>	<p>Identify and renovate space.</p> <p>Identify leader, faculty coaches, and staff to work in center.</p> <p>Hire student tutors.</p> <p>Plan and implement services to increase student success and wellness.</p> <p>Partner with the School of Education to provide additional learning resources and evaluate best practices</p>
<b>Achievements</b>	<p>Renovated space in Building 3.</p> <p>Hired Assistant Dean for Preclinical Curriculum and administrative assistant to coordinate Student Success and Wellness Center.</p> <p>Tutoring - offering weekly tutoring sessions taught by M2s, M4s, masters NA and PA students (near peer teaching).</p> <p>USMLE Step 1 exam prep - offering prep sessions for M2s.</p> <p>Student performance on the USMLE Step 1 exam improved with the first-time pass rate increasing 99% (national 97%) and average scores at 230 (national 231).</p> <p>UWorld board preparation resource - arranged for discounted subscriptions for students.</p> <p>Study help peer sessions - small groups set up with 25-30 students per session.</p> <p>USC Counseling Center - set up intake appointments for students</p>



# Goals - Real Time

	<p>who want web-based counseling services.</p> <p>Quiet room - created a quiet room in Success &amp; Wellness Center.</p> <p>Stress reduction activities - puzzle in 3rd floor big open study area, etc.</p> <p>Added additional wellness activities including therapy pets and exercise competitions in coordination with the Wellness Promotion Committee.</p>
<p><b>Resources Utilized</b></p>	<p>Faculty and staff time A funds</p>
<p><b>Goal Continuation</b></p>	<p>While most of the initial goals have been completed, components of the Success and Wellness Center continue to evolve.</p>
<p><b>Goal Upcoming Plans</b></p>	<p>Identify faculty coaches to work in center.</p> <p>Partner with the School of Education to provide additional learning resources and evaluate best practices.</p> <p>Plan pre-orientation sessions for incoming M1s focused on study skills, housing, food.</p> <p>Explore provision of academic support between M1 and M2 year for M1s who struggled academically.</p> <p>Set up a Success Center Advisory Board.</p> <p>Expand wellness opportunities for students in coordination with the Wellness Promotion Committee.</p> <p>Refine the process for hiring academic support leaders (formerly tutors).</p> <p>Collaborate with SOM-Greenville to identify ways to collaborate on student success and wellness.</p>
<p><b>Resources Needed</b></p>	<ul style="list-style-type: none"> <li>• A funds</li> <li>• E-funds</li> <li>• Faculty and staff time</li> </ul>

# Goals - Real Time

Goal Notes	
------------	--

# Goals - Real Time

## Goal 3 - Doctoral Program in Nurse Anesthesia

<b>Goal Statement</b>	Transition nurse anesthesia master's program to a doctoral program.
<b>Linkage to University Goal</b>	<ul style="list-style-type: none"> <li>• Educating the Thinkers and Leaders of Tomorrow</li> <li>• Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> </ul>
<b>Alignment with Mission, Vision, and Values</b>	<p>Mission - Exemplary medical and health education.</p> <p>Vision - A vibrant academic health center that provides access to the best biomedical education</p> <p>Values - Excellence, professionalism, collaboration</p>
<b>Status</b>	Progressing as expected (multi-year goal)
<b>Action Plan</b>	<p>The Masters of Nurse Anesthesia program is currently undergoing a mandatory transition to a doctoral program in 2019, as mandated by AANA/COA.</p> <p>Continue to develop partnership with College of Nursing to integrate existing MNA and DNP curricula to confer a doctoral degree.</p> <p>Develop a solid organizational plan that enhances open communication and strategic decision-making with USC SOM, CON, program administrators, and clinical partners.</p>
<b>Achievements</b>	<p>New doctoral prepared program director hired.</p> <p>Completed Council on Accreditation of Nurse Anesthesia Programs re-accreditation self-study.</p> <p>Approval of DNP Program and courses from BOT and Graduate School.</p> <p>Held meetings with College of Nursing leadership to efficiently pool teaching resources.</p>
<b>Resources Utilized</b>	<p>Association Dean for Research and Graduate Education</p> <p>Nurse Anesthesia Program Director</p> <p>Faculty and staff time</p>
<b>Goal Continuation</b>	Goal is anticipated to be completed in 2020.
<b>Goal Upcoming Plans</b>	<p>Successfully complete re-accreditation process with Council on Accreditation of Nurse Anesthesia Programs.</p> <p>Continue to meet with College of Nursing leadership to efficiently pool teaching resources.</p>

# Goals - Real Time

	Renovate office space to accommodate faculty and staff needs.
<b>Resources Needed</b>	Faculty and staff time. Funding for office renovation.
<b>Goal Notes</b>	Continue to grow the Greenville campus and strengthen the UofSC and clinical Partnerships.

# Goals - Real Time

## Goal 4 - School of Medicine Five Year Strategic Plan (2017-2022)

<b>Goal Statement</b>	Implement School of Medicine Five Year Strategic Plan (2017-2022)
<b>Linkage to University Goal</b>	<ul style="list-style-type: none"> <li>• Educating the Thinkers and Leaders of Tomorrow</li> <li>• Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>• Spurring Knowledge and Creation</li> <li>• Building Inclusive and Inspiring Communities</li> <li>• Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>
<b>Alignment with Mission, Vision, and Values</b>	<p>Mission - Exemplary medical and health education, transformative research, and compassionate patient care.</p> <p>Vision - A vibrant academic health center that provides access to the best evidence-based medical care and biomedical education, supported by research and cutting edge technologies.</p> <p>Values - Excellence, professionalism, collaboration, diversity and inclusion, compassion</p>
<b>Status</b>	Progressing as expected (multi-year goal)
<b>Action Plan</b>	<p>Strategic Planning Steering Committee meets three to four times yearly to review goals and objectives and refresh the plan as needed.</p> <p>Responsible leaders will continue to work with teams to implement action plans for goals and objectives as assigned.</p>
<b>Achievements</b>	Strategic Planning Steering Committee met several times during the year to review progress on objectives.
<b>Resources Utilized</b>	<p>Office of the Dean</p> <p>Office of Continuous Professional Development and Strategic Affairs</p> <p>Faculty and staff from all departments</p>
<b>Goal Continuation</b>	Goal is progressing on time with expectation that Strategic Plan 2017-22 goals and objectives will be appropriately revised between 2020-2022 as the local, regional, and national environment of academic health centers shifts and changes.
<b>Goal Upcoming Plans</b>	<p>Strategic Planning Steering Committee will meet during 2020-21 to review goals and objectives and refresh the plan as needed.</p> <p>Responsible leaders will continue to work with teams to implement action plans for goals and objectives as assigned.</p>

# Goals - Real Time

	A summary of progress toward our strategic goals will be included in an annual report that the School of Medicine will release in fall of 2020.
<b>Resources Needed</b>	Faculty and staff from all departments.
<b>Goal Notes</b>	

# Goals - Real Time

## Goal 5 - Master of Physician Assistant Studies Program

<b>Goal Statement</b>	Establish a Master's in Physician Assistant Studies Program
<b>Linkage to University Goal</b>	<ul style="list-style-type: none"> <li>• Educating the Thinkers and Leaders of Tomorrow</li> <li>• Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> </ul>
<b>Alignment with Mission, Vision, and Values</b>	<p>Mission - Exemplary medical and health education.</p> <p>Vision - A vibrant academic health center that provides access to the best biomedical education</p> <p>Values - Excellence, professionalism, collaboration</p>
<b>Status</b>	Progressing as expected (multi-year goal)
<b>Action Plan</b>	<p>Recruit new program director and two faculty.</p> <p>Conduct mock site visit summer 2018.</p> <p>Prepare for December 2018 accreditation site visit.</p> <p>Successfully achieve full accreditation status.</p>
<b>Achievements</b>	<p>Inaugural class graduated May 2019 with graduation rate of 100%.</p> <p>Inaugural class achieved Physician Assistant National Certifying Exam (PANCE) pass rate of 95%, exceeded national average of 91%.</p> <p>Full faculty and staff retained.</p> <p>Clinical sites expanded over three-fold to 100+ sites.</p> <p>Class of 2020 began clinical rotations in May 2019, Class of 2021 will begin clinical rotations in May 2020.</p> <p>Over 1,000 applications received for class size of 30 for fourth year in a row.</p> <p>Matriculated fourth cohort in January 2019.</p> <p>Submitted responses and action plan to ARC-PA in September 2019 regarding provisional monitoring site visit citations.</p>
<b>Resources Utilized</b>	<p>PA Program faculty and staff</p> <p>Associate Dean for Research and Graduate Education</p>

# Goals - Real Time

<b>Goal Continuation</b>	Goal is progressing on time with the expectation that full accreditation status will be achieved in 2021.
<b>Goal Upcoming Plans</b>	Graduate second cohort in May 2020 with graduation rate of 95% or better.  Second cohort PANCE pass rate exceeding the national average.  Successfully achieve full, continuing accreditation status.
<b>Resources Needed</b>	PA Program faculty and staff Associate Dean for Research and Graduate Education
<b>Goal Notes</b>	



# Goals - Real Time

## Goal 6 - Palmetto Health-USC Medical Group

<b>Goal Statement</b>	Optimize Performance of Palmetto Health-USC Medical Group.
<b>Linkage to University Goal</b>	<ul style="list-style-type: none"> <li>• Educating the Thinkers and Leaders of Tomorrow</li> <li>• Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>• Spurring Knowledge and Creation</li> <li>• Building Inclusive and Inspiring Communities</li> <li>• Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>
<b>Alignment with Mission, Vision, and Values</b>	<p>Mission - Compassionate patient care.</p> <p>Vision - A vibrant academic health center that provides access to the best evidence-based medical care.</p> <p>Values - Excellence, professionalism, collaboration, compassion</p>
<b>Status</b>	Completed successfully
<b>Action Plan</b>	<p>Key operational and business functions within the Medical Group have slowly been assumed by Prisma Health over the past 12 months, in order to improve alignment and take advantage of the efficiency that comes from larger scale.</p> <p>In February, 2020, the UofSC SOM Educational Trust, with support from the UofSC Board of Trustees, voted to relinquish its ownership in the Medical Group, thus dissolving the joint venture, with Prisma Health remaining the sole owner of the corporation. This aligns ownership and governance with the reality of operations, while preserving opportunities to continue building collaboration around the academic missions of teaching and research.</p>
<b>Achievements</b>	Prisma Health has assumed sole ownership of the Medical Group as of February, 2020. Thus, this goal is being retired.
<b>Resources Utilized</b>	Legal counsel from UofSC has provided ongoing guidance and legal support during these deliberations.
<b>Goal Continuation</b>	Prisma Health has assumed sole ownership of the Medical Group as of February, 2020. Thus, this goal is being retired.
<b>Goal Upcoming Plans</b>	Prisma Health has assumed sole ownership of the Medical Group as of February, 2020. Thus, this goal is being retired.
<b>Resources Needed</b>	Funds and personnel are in place and sufficient.
<b>Goal Notes</b>	

# Goals - Real Time

## Goal 7 - LCME Accreditation Response

<b>Goal Statement</b>	Provide status reports to the LCME regarding accreditation standards/elements.
<b>Linkage to University Goal</b>	<ul style="list-style-type: none"> <li>• Educating the Thinkers and Leaders of Tomorrow</li> <li>• Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>• Spurring Knowledge and Creation</li> <li>• Building Inclusive and Inspiring Communities</li> <li>• Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>
<b>Alignment with Mission, Vision, and Values</b>	<p>Mission - Exemplary medical and health education</p> <p>Vision - A vibrant academic health center that provides access to the best biomedical education</p> <p>Values - Excellence, professionalism, collaboration, diversity and inclusion, compassion</p>
<b>Status</b>	Progressing as expected (multi-year goal)
<b>Action Plan</b>	<p>Implement continuous quality improvement program to ensure effective monitoring of the medical educational program's compliance with accreditation standards.</p> <p>Conduct focus group with medical students regarding feedback in LCME self-study independent student analysis.</p> <p>Update Appointment, Promotion, and Tenure guidelines for approval by the Provost's Office.</p>
<b>Achievements</b>	<p>School of Medicine remains fully accredited after 2017 LCME site visit for a full eight years with the next site visit scheduled to be 2024-25.</p> <p>In response to LCME request for an action plan for cited elements, action plans were developed and submitted in April 2018. Action plans accepted by LCME in June 2018. Progress report submitted to LCME in April 2019.</p> <p>Faculty Appointment, Promotion and Tenure Policies approved by University Committee on Tenure and Promotion for both the basic science and clinical units as well as the NTT guidelines for basic science faculty.</p> <p>Conducted surveys of students in November 2018 focused on cited elements in LCME site visit. Results showed improvement in majority of elements.</p> <p>Initiated an incentive package for the hiring of underrepresented</p>

## Goals - Real Time

	basic scientists and post-docs to address a cited element about faculty diversity.
<b>Resources Utilized</b>	Executive Dean Associate Dean for Medical Education Office of Medical Education and Academic Affairs Faculty and staff from all departments
<b>Goal Continuation</b>	Goal is progressing on time with expectation that the LCME will request annual status report updates.
<b>Goal Upcoming Plans</b>	Monitor progress on cited elements.  School wide survey of cited elements to be conducted in March 2020.  Provide status report to the LCME in August 2020.
<b>Resources Needed</b>	Executive Dean Associate Dean for Medical Education Office of Medical Education and Academic Affairs Faculty and staff from all departments
<b>Goal Notes</b>	

# Goals - Real Time

## Goal 8 - Rural Health Center of Excellence

<b>Goal Statement</b>	Support and develop rural and primary care education, delivery, and sustainability in South Carolina through clinical practice, training and research.
<b>Linkage to University Goal</b>	<ul style="list-style-type: none"> <li>• Educating the Thinkers and Leaders of Tomorrow</li> <li>• Building Inclusive and Inspiring Communities</li> <li>• Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>
<b>Alignment with Mission, Vision, and Values</b>	<p>Mission - Compassionate patient care.</p> <p>Vision - A vibrant academic health center that provides access to the best evidence-based medical care.</p> <p>Values - Excellence, professionalism, collaboration, compassion</p>
<b>Status</b>	Progressing as expected (multi-year goal)
<b>Action Plan</b>	<p>Establish a rural health center of excellence.</p> <p>Engage statewide partners in enhancing the delivery of healthcare in rural areas of S.C.</p> <p>Seek recurring funding for center of excellence.</p> <p>Expand programs in a spoke and hub fashion for provision of clinical care, education of health professions students and research.</p>
<b>Achievements</b>	<p>Proposal for Center of Excellence and ICARED funding for rural health in 2019 legislative cycle finalized and funds from SC DHHS allocated - total \$31.0M -\$7.5M recurring 2017-18, 2018-19, 2019-20.</p> <p>Coordinated meetings of Rural Health Center of Excellence statewide committee October 2017 to present.</p> <p>Established state-supported health professions scholarships/forgivable loans for medical students, physician assistants, advanced practice registered nurses as part of pipeline program in South Carolina Center for Rural and Primary Care.</p> <p>Funded primary care residency program in Sumter. Slated to begin July 2019.</p> <p>Developed a rural residency continuity track in Winnsboro, SC for one additional Family Medicine resident per year.</p> <p>Established rural practice information hub.</p> <p>Implemented rural practitioner/staff development and practice enhancement micro-grant program.</p> <p>Expanded capacity for rural clinical training sites at School of</p>

## Goals - Real Time

	Medicine to increase student and resident interest in rural practice.
<b>Resources Utilized</b>	
<b>Goal Continuation</b>	Goal is progressing on time with expectation that three to four additional years will be required to fully accomplish it.
<b>Goal Upcoming Plans</b>	<p>Pilot a rural clinical pharmacy and behavioral extension service for four SC AHEC zones.</p> <p>Fully implement primary care residency program in Sumter which is slated to begin July 2019.</p>
<b>Resources Needed</b>	<p>Legislative appropriations</p> <p>Faculty and staff time</p> <p>Associate Dean for Clinical Affairs</p>
<b>Goal Notes</b>	

# Goals - Real Time

## Goal 9 - Research and Collaborations

<b>Goal Statement</b>	Foster research and promote collaborations and interdisciplinary research.
<b>Linkage to University Goal</b>	<ul style="list-style-type: none"> <li>• Educating the Thinkers and Leaders of Tomorrow</li> <li>• Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>• Spurring Knowledge and Creation</li> <li>• Building Inclusive and Inspiring Communities</li> <li>• Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>
<b>Alignment with Mission, Vision, and Values</b>	<p>Mission - Transformative Research</p> <p>Vision - A vibrant academic health supported by research and cutting edge technologies.</p> <p>Values - Excellence, professionalism, collaboration</p>
<b>Status</b>	Progressing as expected (multi-year goal)
<b>Action Plan</b>	<p>Streamline clinical research submissions.</p> <p>Increase pre-proposal support for clinicians/residents.</p> <p>Reduce turnaround times for IRB reviews.</p> <p>Unify language and policies for IP, subject injury and COI.</p> <p>Plan MS biomedical technology program to fill need for well-trained research technicians.</p> <p>Complete recruitment and open the cardiovascular translational research center as part of the Excellence Initiative.</p> <p>Strategic utilization of Bldg 9 for joint VA recruitments and programmatic efforts.</p> <p>Explore clinical research opportunities with affiliate campuses and hospitals.</p> <p>Foster new initiatives in technology transfer, IP generation and strategies for NIH SBIR and STTR funding.</p>
<b>Achievements</b>	<p>The Center for Transforming Health (RCTH) was established in the Fall 2017, and is now in full operation under the direction of the Center Director, Dr. Kevin Bennett. The RCTH has launched several initiatives which directly address the above action plan. This includes the Emerging Physician Scientist program, which has graduated 2 physicians and currently has 3 additional physicians enrolled. These participants have developed research agendas that range in topics from Parkinson's disease to renal disease. The RCTH also supports a formal summer research program targeting medical students: Student Opportunities for Academic Achievement through Research (SOAR). Since 2016, SOAR has enrolled 86 medical students in these experiences, resulting in 22 regional and national presentation, 8 manuscripts, 47 UofSC Graduate seminar presentations, and 38 poster presentations at Discover USC. For 2020, more than 55 applicants applied for the 25 available spots. The RCTH is also expanding its role through formal partnerships with the Wm.</p>

# Goals - Real Time

Jennings Bryan Dorn VA Medical Center, the SC Center for Rural & Primary Healthcare, and Prisma Health. The RCTH will continue to serve its mission by seeking collaborations within the School of Medicine, and connecting its researchers to those across the UofSC campus and the state as a whole.

One of the major accomplishments during this period and aligned with our strategic goals, is growing the research collaboration with the VA. Over this past period, UofSC faculty in biomedical engineering, public health and at the SOM have received funding and VA eligibility. Specifically, UofSC now has the highest number of VA funded faculty with approximately \$8 million in research dollars now coming to the Columbia VA campus.

The objective for the 4th floor, Bldg 1 on the strategic plan, has been completed and more importantly formed a key resource to successfully recruit the director for the cardiovascular translational research center, which was part of the UofSC Excellence Initiative. This will be an important report out for the 2020 BluePrint report.

In terms of fostering SBIR/STTR NIH funding, an early stage incubator laboratory was established on the SOM campus and has driven several new SBIR Phase I funding applications and this is an area of great potential growth for the SOM and UofSC.

New opportunities for growth also are occurring with collaborative research such as investigators at the Greenwood Genetics Center. Joint faculty appointments have now been established and medical students as part of the SOAR program are now doing summer research rotations at this site.

School of Medicine continues to serve as lead institution for NIH-funded South Carolina IDeA Networks of Biomedical Research Excellence (SC INBRE) with the goal of increasing NIH research capacity of the state. With Dr. Edie Goldsmith as the SOM PI, this program received a high priority score during the recent renewal which virtually assures this program is to be sustained.

Graduate students continue to excel in publishing and presenting at national meetings and peer reviewed journals and continue to receive competitive research support which includes NIH predoctoral awards and USC SPARC awards.

In terms of streamlining and improving clinical research, this is an area that remains a challenge as our health system partner continues to evolve. However, it is expected that significant progress will be made this year as efforts are underway to unify and remove redundancies/obstacles in the Prisma clinical

# Goals - Real Time

	research environment.
<b>Resources Utilized</b>	A funds E funds Associate Dean for Research and Graduate Education All departments faculty and staff
<b>Goal Continuation</b>	Goal is progressing as expected and viewed as an ongoing goal into the foreseeable future.
<b>Goal Upcoming Plans</b>	Successfully launch and open the CV translational research center as part of the Excellence Initiative.  Expand collaboration with the Columbia VA Medical Center in terms of clinical research proposals and submissions.  Examine effectiveness of new SOAR program and identify areas for improvement.  Identify how to engage tenured SOM faculty in submission of research grant proposals and manuscripts for publication.
<b>Resources Needed</b>	Continued support from Office of the Provost and Vice President for Research for recruitment of researchers is needed.
<b>Goal Notes</b>	



# Goals - Real Time

## Goal 10 - Diversity and Inclusion Pipeline Programs

<b>Goal Statement</b>	Expand pipeline programs that increase likelihood of under-represented students entering the health professions workforce.
<b>Linkage to University Goal</b>	<ul style="list-style-type: none"> <li>• Educating the Thinkers and Leaders of Tomorrow</li> <li>• Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>• Spurring Knowledge and Creation</li> <li>• Building Inclusive and Inspiring Communities</li> <li>• Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>
<b>Alignment with Mission, Vision, and Values</b>	<p>Mission - Exemplary medical and health education, transformative research, and compassionate patient care.</p> <p>Values - Excellence, professionalism, collaboration, diversity and inclusion, compassion</p>
<b>Status</b>	Newly Established Goal
<b>Action Plan</b>	<p>Initiate the Claflin University pipeline program to increase admissions to the Masters of Biomedical Science Program.</p> <p>Partner with Orangeburg High School for Health Professions on the establishment of an MOU to formalize collaboration of School of Medicine support for expansion of their programs.</p>
<b>Achievements</b>	<p>Finalized MOU with Claflin University for pipeline program to increase admissions to the Masters of Biomedical Science Program.</p> <p>Meeting held with Orangeburg High School for Health Professions in December 2019 to explore School of Medicine support for expansion of their programs. Identified activities that the high school students could participate in at School of Medicine including the Healthy Strides Run/Walk and summer visits to the Ultrasound Institute and Simulation Interactive Learning Center (SILC).</p>
<b>Resources Utilized</b>	
<b>Goal Continuation</b>	Goal is anticipated to be completed within next three years.
<b>Goal Upcoming Plans</b>	<p>Strategize with Claflin University leaders on identified financial barriers to the pipeline program to the Masters of Biomedical Science Program.</p> <p>Continue meetings with Orangeburg High School for Health Professions on identification of possible collaborations for expansion of their programs.</p>
<b>Resources Needed</b>	Associate Dean for Diversity and Inclusion

# Goals - Real Time

	Assistant Dean for Diversity and Inclusion Faculty and staff time.
<b>Goal Notes</b>	

# Goals - Real Time

## Goal 11 - New Medical School Facilities

<b>Goal Statement</b>	Refine vision and plan for new medical school facilities.
<b>Linkage to University Goal</b>	<ul style="list-style-type: none"> <li>• Educating the Thinkers and Leaders of Tomorrow</li> <li>• Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>• Spurring Knowledge and Creation</li> <li>• Building Inclusive and Inspiring Communities</li> <li>• Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>
<b>Alignment with Mission, Vision, and Values</b>	<p>Mission - Exemplary medical and health education, transformative research, and compassionate patient care.</p> <p>Vision - A vibrant academic health center that provides access to the best evidence-based medical care and biomedical education, supported by research and cutting edge technologies.</p>
<b>Status</b>	Progressing as expected (multi-year goal)
<b>Action Plan</b>	<p>In partnership with UofSC and other UofSC health sciences schools, advance the planning for new medical facilities on the new health and biosciences campus.</p> <p>Work with UofSC Facilities Department and Architect to participate in the early planning phase of the medical education building on the new health sciences campus.</p> <p>In partnership with USC Office of Development, obtain pledges toward the development of new medical school facilities as part of a new health and biosciences campus.</p> <p>Educate School of Medicine alumni about plans for new medical school facilities and opportunities for input and support.</p>
<b>Achievements</b>	UofSC and School of Medicine leaders have engaged numerous legislators and state officials to advocate for the creation of the new health sciences campus. We remain optimistic that this will result in additional funding allocation during the 2020 legislative session.
<b>Resources Utilized</b>	
<b>Goal Continuation</b>	Over the next year, if plans progress as anticipated, this goal may evolve from a goal for advocacy and involvement in early planning to a goal for a large number of SOM leaders, faculty, staff, and students to participate in a comprehensive planning process..
<b>Goal Upcoming Plans</b>	In partnership with USC and other health sciences schools, continue to participate in and facilitate the refinement of the vision for new medical facilities on the new health and biosciences campus.

## Goals - Real Time

	<p>Work with UofSC Facilities Department and Architect to participate in the early planning phase of the medical education building on the new health sciences campus.</p> <p>Continue to partner with the USC Office of Development to obtain pledges toward the development of new medical school facilities as part of a new health and biosciences campus.</p> <p>Continue to educate School of Medicine alumni about plans for new medical school facilities and opportunities for input and support.</p>
<b>Resources Needed</b>	A and E funds, recurring and nonrecurring state appropriations, philanthropy.
<b>Goal Notes</b>	

# Goals - Looking Ahead

Goals for the next Academic Year.

## Goal 1 - Organizational Climate

<b>Goal Statement</b>	Enhance and sustain an organizational culture, and climate that consistently promotes a welcoming and inclusive environment throughout all levels of the organization.
<b>Linkage to University Goal</b>	<ul style="list-style-type: none"> <li>• Educating the Thinkers and Leaders of Tomorrow</li> <li>• Assembling a World-Class Faculty of Scholars, Teachers, and Practitioners</li> <li>• Building Inclusive and Inspiring Communities</li> <li>• Ensuring Institutional Strength, Longevity, and Excellence</li> </ul>
<b>Alignment with Mission, Vision, and Values</b>	<p>Mission - Exemplary medical and health education, transformative research, and compassionate patient care.</p> <p>Vision - A vibrant academic health center that provides access to the best biomedical education.</p> <p>Values - Professionalism, collaboration, diversity and inclusion, compassion.</p>
<b>Status</b>	Newly Established Goal
<b>Action Plan</b>	<p>Dean will establish a Climate Task Force, with representation from students, staff, and faculty, to advise School of Medicine leadership on opportunities to enhance and sustain an organizational culture, environment, and climate that consistently promotes a welcoming and inclusive environment throughout all levels of the organization.</p> <p>This work will be complemented by the contributions of the Committee on Women in Science and Medicine, which was reactivated this year. Based upon a recommendation arising from this group, an Ad Hoc Committee on Diversity in the Arts was established, to increase the diversity of individuals honored within School of Medicine Columbia facilities through the display of portraits, photographs, or other types of images.</p>
<b>Achievements</b>	
<b>Resources Utilized</b>	
<b>Goal Continuation</b>	
<b>Goal Upcoming Plans</b>	<p>Dean will appoint members to Climate Task Force and issue charge. Task force will meet, develop, and recommend strategies to meet the charge.</p> <p>Ad Hoc Committee on Diversity in the Arts will forward recommendations to SOM leadership within the next few months.</p>

# Goals - Looking Ahead

<b>Resources Needed</b>	Faculty, staff, and students time.
<b>Goal Notes</b>	

# Academic Programs

---

## Program Rankings

*Academic programs that were nationally ranked or received external recognition during the Academic Year.*

### Medical Degree (M.D.) Program

Association of American Medical Colleges (AAMC)

March 2, 2020 notification

The AAMC Missions Management Tool (MMT) provides comparative outcomes data for medical education programs with full LCME accreditation as of January 1, 2020. The MMT is issued annually.

Ranks nationally in the 86th percentile for Percent of graduates practicing in primary care.

## Instructional Modalities

*Innovations and changes to Instructional Modalities in unit's programmatic and course offerings that were implemented during the Academic Year.*

**Medical Degree:** Curriculum Committee approved a framework for a new 2020 curriculum that includes increased focus on early clinical experiences, health systems science, and social determinants of healthcare. The second year curriculum is being reorganized from the current foundational sciences to an organ system approach that more closely aligns and integrates learning of clinical material. The first elements of the new curriculum will be introduced in the Fall 2020. Computerized testing has been instituted across all four years to better match learning objectives with assessment.

**Biomedical Sciences (MS/PhD):** Didactic courses are mostly lecture based, although some courses in Applied Biotechnology concentration and anatomy have a hands-on, lab based component. All research based courses (identified as "780") as well as thesis/dissertation preparation (identified as either "799/899") are hands-on research training in current biomedical methods and techniques.

**Master's in Nurse Anesthesia:** Embedded freshman clinical experiential learning into several didactic courses. Courses PHPH 761 & PHPH762 in place more than one year with great success & positive student response. Changing PHPH 773 (Physical Assessment for Anesthesia Providers) to a flipped classroom style has had resounding success over the past year. Program 100% distance education approved for all didactic courses to continue to better serve upstate area. Full time clinical coordinator positioned at Palmetto Health Richland to further strengthen student experiential learning.

**Masters of Physician Assistant Studies:** Didactic phase includes instruction in cadaveric anatomy, interprofessional physiology, and point-of-care ultrasound with practice on

# Academic Programs

---

standardized patients occurring in multiple courses. In addition, unique courses in genetics, research, law, and ethics are also included in the program curriculum. Clinical Immersion and Clinical Skills Lab expose the students to numerous, hands-on learning experiences in the simulation lab and other settings prior to clinical rotations. We continue to focus on active learning.

**Masters of Arts (M.A.) in Counseling and Rehabilitation:** Instructional modalities in the 60 credit hour MA degree program, which accepted its first students in Fall 2018, include classroom-based learning, pre-clinical practice, and field experiences. For most classes, students have the option of attending in-person or in real-time via an online webinar-style platform. In addition, all students are required to attend in-person full-day Learning Community workshops held on a Saturday in each of the major semesters.

**Master's in Rehabilitation Counseling (MRC):** Instructional modalities in the 48 credit hour MRC degree program continue to include classroom-based learning, pre-clinical practice, and field experiences. The MRC program is no longer accepting new students and will phase out in the 2020-2021 academic year. Certificate of Graduate Study (CGS) in Psychiatric Rehabilitation. Instructional modalities in the Certificate program includes classroom-based learning and a capstone project in which the student, with a faculty advisor, completes a comprehensive independent study.

**Master's in Genetic Counseling:** Has continued to include more experiential learning in the HGEN 725, 726 Human Developmental Biology Courses. Students are frequently expected to come to class after reading/reviewing recorded powerpoint lectures with in-class activities focused on applications via case based learning. This has allowed for increased content into this course such that more clinical approaches to prenatal and pediatric genetic assessment are applied in the classroom, for what has traditionally been a didactic, lecture based course. Outcome includes first year students better prepared to enter clinical rotation at completion of first year of education.

**Post-Baccalaureate Certificate in Biomedical Sciences:** To enhance the academic success rate of students enrolled in post baccalaureate certificate in biomedical sciences program, the current didactic curriculum is being modified to meet the individual student needs.

## Program Launches

*Academic Programs that were newly launched during the Academic Year; those that received required approvals but which had not yet enrolled students are not included.*

## Program Terminations

*Academic Programs that were newly terminated or discontinued during the Academic Year.*



# Academic Programs

---

As mentioned above, the Master's in Rehabilitation Counseling (MRC) program is no longer accepting new students and will phase out in the 2020-2021 academic year after the last students graduate. At that time, the program will be officially terminated.

# Academic Initiatives

---

## Experiential Learning for Undergraduates

*Initiatives, improvements, challenges, and progress with Experiential Learning at the Undergraduate level.*

## Experiential Learning For Graduate Students

*Initiatives, improvements, challenges, and progress with Experiential Learning at the Graduate or Professional level.*

**Medical Degree:** In preparation for new 2020 curriculum, Curriculum Committee approved increasing clinical experiences in first two years. Physical diagnosis has been moved from the second year curriculum to the first year curriculum. A pilot program was initiated using first & second-year students as health leads advocates in outpatient clinics at Prisma Health with a focus on access to food and transportation (social determinants of health).

**Biomedical Sciences (MS/PhD):** Experiential learning occurs in didactic courses with hands-on laboratory sessions which provide students the opportunity to gain expertise in multiple biomedical research techniques. Research courses facilitate development of problem solving skills as students design and carry out experiments. Students also develop writing skills by preparing manuscripts which describe the results of their experiments and presentation skills through participation in our seminar course.

**Master's in Nurse Anesthesia:** Embedded freshman clinical experiential learning into several didactic courses to better reinforce knowledge being learned. Courses PHPH 761 & PHPH762 (replacing PHPH 791, 792 & 775) have been in place for two years with great success & positive student response. Have a full time clinical coordinator for Columbia campus positioned at Palmetto Health Richland on full time basis to strengthen experiential learning. Student continue to get an average of about 30% more clinical experiences than required by the accreditation agencies and national averages.

**Masters of Physician Assistant Studies:** Clinical Phase includes core rotations in Family Medicine, Internal Medicine, Emergency Medicine, General Surgery, Women's Health, Orthopedics, Behavioral Health, Pediatrics & two elective rotations providing PA students with excellent experiential learning. We continue to expand our sites in rural and underserved settings aligning with our mission.

**Masters of Arts in Counseling and Rehabilitation:** Experiential learning in the MA program takes place in pre-clinical course work & in formal clinical field experiences that include a 150-hour practicum and a 600-hour internship that take place in clinical & vocational rehabilitation service agencies. **Master's in Rehabilitation Counseling:** Experiential learning takes place in pre-clinical course work & in formal clinical field experiences that include 150-hour practicum and 600-hour internship that take place in clinical & vocational rehabilitation service agencies.

**Certificate of Graduate Study in Psychiatric Rehabilitation:** Concludes with Independent Study capstone project. Some students choose to visit psychiatric rehabilitation

# Academic Initiatives

---

sites & others choose to conduct a research project. For either option, a designated faculty member oversees all capstone projects.

**Master's in Genetic Counseling:** Embeds experiential learning throughout curriculum from first year Community Engagement/Service Learning outreach to Role Play Workshops with Actors to in-class assignments requiring student interaction with national genetic laboratories. Each activity is assessed for learning opportunity as it relates to development of Practice Based Competencies as defined by Accreditation Council for Genetic Counseling.

## Affordability

*Assessment of affordability and efforts to address affordability.*

**Medical Degree:** As the cost of medical education and student debt continues to rise, the School of Medicine continues to look for ways to allow a medical education to remain affordable for all students. Tuition increases have been modest, and as noted in our goals, the SOM continues to make increases in endowments and scholarships a high priority.

**Biomedical Sciences (MS/PhD):** The cost of attendance is comparable to other regional MS and PhD programs. PhD students receive a stipend from their research mentor and are provided full tuition by the Biomedical Sciences Graduate Program. MS students are required to cover their own tuition and living expenses.

**Physician Assistant Studies:** Continues to be the best value of the six PA programs in the state consisting of, three public and three private institutions.

**Master of Arts (M.A.) in Counseling and Rehabilitation:** The cost of attendance is comparable to other 60 credit hour counseling degree programs. The program is mindful of student expenses when selecting textbooks and supplemental materials, insuring students invest in quality educational materials that have utility throughout their studies and in professional practice.

**Certificate of Graduate Study (CGS) in Psychiatric Rehabilitation:** The updated 18 credit hour certificate includes all the essential learning elements that had been in the previous 24 credit hour certificate. The certificate is now more affordable and can be completed in one year.

**Masters of Genetic Counseling:** Program accepts nine students per year and has a record number of applicants for Fall 2020 admissions. We have two tracks with financial support in the national match for admission to genetic counseling programs. We will match one applicant to a graduate research assistantship in the SOM Center for Disability Resources (provides stipend and in state tuition) and we will match two applicants to the SC Leadership Education in Neurodevelopmental Disorders training program (Provides second year stipend).

## Reputation Enhancement

*Contributions and achievements that enhance the reputation of UofSC Columbia regionally and nationally.*

# Academic Initiatives

---

**Biomedical Sciences:** Faculty and students present research at regional, national & international conferences. Program provides travel awards to promote student attendance & presentation at professional society meetings. Several PhD students obtained extramurally funded fellowships (NIH F31 predoctoral fellowships), NSF predoctoral fellowship, & NCI Predoctoral to Postdoctoral fellowship transition award.

**Nurse Anesthesia:** Recruits approximately 40% of each class from out of state. Discussions continue with Prisma Health to strengthen local & regional placement of graduates. These graduates often return to place of origin & with the quality, knowledgeable care they provide we have health care institutions nationally seeking graduates for employment.

**Physician Assistant Studies:** The inaugural graduating Class of 2019 posted an outstanding 95% pass rate on national board exam. Students placed in top 10 in 2019 National Medical Challenge Bowl at American Academy of Physician Assistants conference. Students won second consecutive Student Challenge Bowl at SC Academy of Physician Assistants 2019 conference.

**Counseling and Rehabilitation:** Program continuously accredited by Council on Rehabilitation Education (CORE) since 1976 & when CORE merged with Council on Accreditation of Counseling & Related Educational Programs (CACREP) in 2017, MRC accreditation transferred to CACREP. CACREP is most highly regarded accrediting body for counselor education programs. Program is currently seeking reaccreditation as a 60 credit hour M.A. program and expects to re-accredit as a clinical rehabilitation counseling program.

**Genetic Counseling:** Faculty continue to practice clinically & participate in national/international profession. Whitney Dobek is a certification exam writer for American Board of Genetic Counseling. Jessica Fairey is working on National Society of Genetic Counselors Outcomes Committee. Janice Edwards is facilitating a one week short course on genetics & genomics for early career maternal fetal medicine faculty in collaboration with Columbia University & University of California San Francisco.

**Post-Baccalaureate Certificate in Biomedical Sciences:** SOM and Claflin University initiating pipeline academic program. Claflin students will matriculate in UofSC graduate school to earn MS degree in biomedical sciences. This additional training & degree will facilitate their potential advancement to medical/dental school. MOU in final stages of consideration.

## Challenges

*Challenges and resource needs anticipated for the current and upcoming Academic Years, not noted elsewhere in this report and/or those which merit additional attention.*

Overall, the SOM faces challenges with limited scholarships, aging facilities, limited classroom space, increasing in-state competition for student recruitment and clinical training sites.

**Master's in Nurse Anesthesia:** The Graduate Program in Nurse Anesthesia completed its accreditation site visit in 2019 and received a full 10 year re-accreditation, this re-accreditation is from the Council on Accreditation of Nurse Anesthesia Educational Programs. Program has moved to School of Medicine from a more shared Prisma Health/UofSC

# Academic Initiatives

---

program. Several positions changed with the greater university involvement. Affiliation partnering with Prisma Health hospital system will continue to be developed to ensure the continued high quality experiential experiences that the program has enjoyed. Conversion to a doctoral level (DNP) program is underway, with the expectations of implementation in 2021.

**Master of Physician Assistant Studies:** The program remains on probationary accreditation, pending the completion of a site visit later this year. We are working to ensure that our student assessments for each portion of the curriculum are tightly linked with the course learning objectives, as recommended by our accrediting body. Faculty turnover in the program has stabilized. Now, the major focus will be on the challenges of competition within the state for clinical sites, as well as faculty/staff development, satisfaction, and retention. Office space, classroom space, and parking are also global challenges in the School of Medicine.

# Faculty Population

---

## Faculty Employment by Track and Title

The following data was provided by UofSC's Office of Institutional Research, Assessment, and Analytics.

**Table 1. Faculty Employment by Track and Title.**

	<b>Fall 2019</b>	<b>Fall 2018</b>	<b>Fall 2017</b>
<b>Tenure-track Faculty</b>	42	40	40
Professor, with tenure	17	18	17
Associate Professor, with tenure	16	15	14
Assistant Professor	9	7	9
Librarian, with tenure	0	0	0
<b>Research Faculty</b>	8	9	8
Research Professor	3	2	2
Research Associate Professor	1	2	2
Research Assistant Professor	4	5	4
<b>Clinical/instructional Faculty</b>	159	160	179
Clinical Professor	23	22	22
Clinical Associate Professor	56	55	56
Clinical Assistant Professor	76	76	93
Instructor	4	6	7
Lecturer	0	0	0
Visiting	0	0	0
<b>Adjunct Faculty</b>	36	52	52

# Faculty Population

## Faculty Diversity by Gender and Race/Ethnicity

Note: UofSC follows US Department of Education IPEDS/ National Center for Education Statistics guidance for collecting and reporting race and ethnicity. See [https://nces.ed.gov/ipeds/Section/collecting\\_re](https://nces.ed.gov/ipeds/Section/collecting_re)

**Table 2. Faculty Diversity by Gender and Race/Ethnicity.**

	<b>Fall 2019</b>	<b>Fall 2018</b>	<b>Fall 2017</b>
<b>Gender</b>	234	218	239
Female	96	89	104
Male	138	129	135
<b>Race/Ethnicity</b>	234	218	239
American Indian/Alaska Native	1	0	0
Asian	28	27	31
Black or African American	13	11	12
Hispanic or Latino	5	4	6
Native Hawaiian or Other Pacific Islander	0	0	0
Nonresident Alien	12	4	6
Two or More Races	1	2	2
Unknown Race/Ethnicity	1	1	1
White	173	169	181

Illustrations 1 and 2 (below) portray this data visually.

# Faculty Population

## Illustration 1. Faculty Diversity by Gender

### 2019 Faculty Gender

Male Female



### 2018 Faculty Gender

Male Female



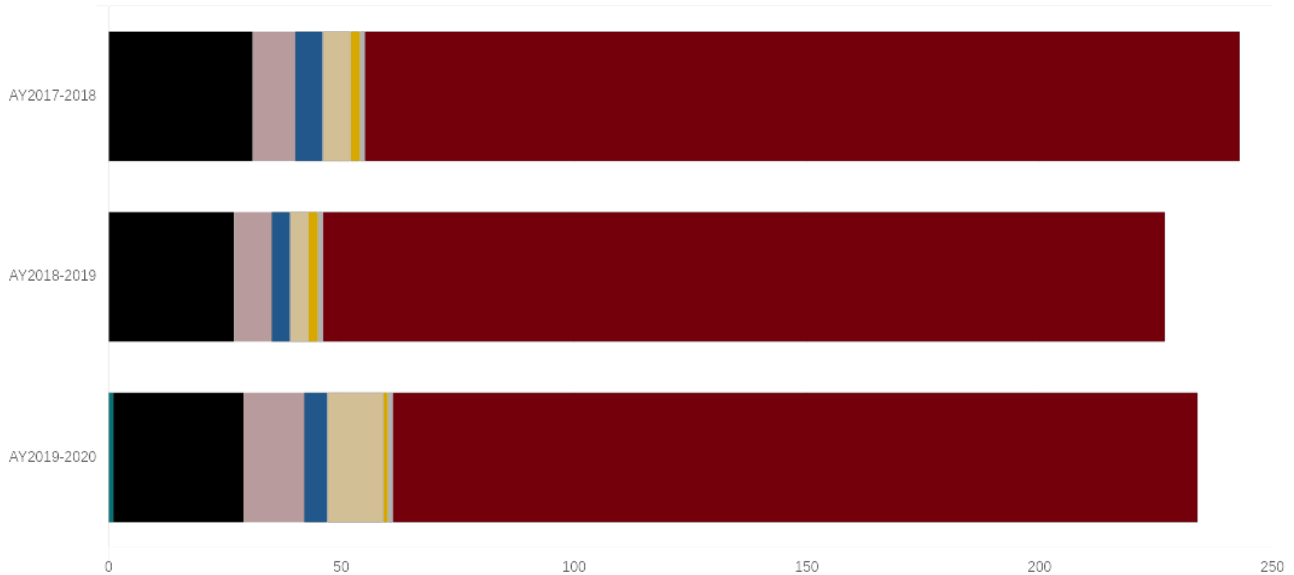
### 2017 Faculty Gender

Male Female



## Illustration 2. Faculty Diversity by Race & Ethnicity

American Indian/Alaskan Native Asian Black Hispanic Native Hawaiian or Other Pacific Islander Nonresident Alien  
Two Or More Races Unknown Race White





# Faculty Information

## Research and Scholarly Activity

*Please refer to Appendix 3, which provides detailed information from the Office of the Vice President for Research, department of Information Technology and Data Management, including:*

- 1) The total number and amount of externally sponsored research proposal submissions by funding source for the appropriate Fiscal Year.*
- 2) Summary of externally sponsored research awards by funding source for the appropriate Fiscal Year. Total extramural funding processed through Sponsored Awards Management (SAM) in the Fiscal Year, and federal extramural funding processed through SAM in the Fiscal Year. (Available at: <http://sam.research.sc.edu/awards.html>) Amount of sponsored research funding per faculty member for the appropriate fiscal year (by rank, type of funding; e.g., federal, state, etc., and by department if applicable).*
- 3) Number of patents, disclosures, and licensing agreements for three most recent Fiscal Years.*

The School of Medicine continues to be the leader in NIH extramural funding with over \$50M in the 2019 academic year which is an approximately 7% increase from FY2018. Several of these NIH awards were to junior faculty with several receiving a first time NIH grant. It should also be emphasized that many of these funded research programs are multidisciplinary and reach across a number of USC colleges which include Engineering, Arts and Sciences, Public Health and Pharmacy. More importantly, and what does not appear in the SAM financial report in a uniform manner, is the significant federal funding received by SOM faculty through the VA Merit program and the DOD. These figures will be provided for AY 2020, but for the final quarter of 2019, this source of federal funding was approximately \$10M in direct costs.

As with any academic medical center, a number of challenges confront us, with the most significant being how to engage clinicians in our medical research mission. Accordingly, the Research Center for Transforming Health (RCTH) was formally launched in 2018 and given UofSC center status in 2019 and continues to represent a significant financial investment by the SOM. The RCTH has launched several initiatives. This includes the Emerging Physician Scientist program, which has graduated 2 physicians and currently has 3 additional physicians enrolled. The RCTH also supports a formal summer research program targeting medical students: Student Opportunities for Academic Achievement through Research (SOAR). Since 2016, SOAR has enrolled 86 medical students in these experiences, resulting in 22 regional and national presentation, 8 manuscripts, 47 UofSC Graduate seminar presentations, and 38 poster presentations at Discover USC. For 2020, more than 55 applicants applied for the 25 available spots.

The RCTH is also expanding its role through formal partnerships with the Columbia VA Medical Center, in order to enhance medical research in areas of common medical priorities.

Another challenge is to develop competitive state of the art medical research programs and initiatives in our crumbling infrastructure. To address this issue, several initiatives were put in place which included ~\$450,000 in renovating and improving the animal research facilities on this campus. In addition, and in collaboration with the VA, new state of the art imaging instrumentation has been put in place (microCT system) which is available to all USC faculty. We also have had an external advisory board site visit to evaluate the effectiveness of one of our core resources- the IRF. This instrumentation facility faces multiple challenges which include financial sustainability, infrastructure improvements and instrumentation upgrades,

# Faculty Information

---

and internal competition due to redundant instrumentation purchases on the SOM and UofSC campus as a whole. We are following the recommendations provided in a written report by this external review, and hope to report out progress on this initiative during the AY20 report.

Demonstration of increased scholarly activity is not only demonstrated by continued levels of extramural funding, but by scientific publications and the summary report for this period is attached. The SOM faculty continue to publish in high impact journals and it is notable that many are co-authored by junior faculty, fellows and students. Moreover, SOM graduate students continue to be awarded USC SPARC awards. Another benchmark for scholarly activity over and above publications and funding, is intellectual property (IP) disclosures. Approximately 10 disclosures have been submitted to the UofSC technology transfer office and several are moving forward to the provisional patent status.

The SOM continues to expand collaborations which now include formal medical student rotations at the Greenwood Genetics Center and the Grand Strand Hospital system. Challenges which confront the SOM and our health care partners, is a streamlined, efficient method to perform clinical translational research-notably clinical trials. This remains an area of significant untapped potential and a major opportunity to advance medical research and health care using state of the art, evidenced based approaches. As Prisma Health System matures, it is hoped that this important area of any vibrant health care system is revisited.

One major activity which will be reported in the AY20 report, is the formation and successful startup of the Cardiovascular Translational Research Center. This center will synergize with the RCTH and our partners to form a true “bench to bedside” approach to cardiovascular disease and encourage clinical trials by our SOM faculty and affiliates.

## Faculty Development

*Efforts at Faculty Development, including investments, activities, incentives, objectives, and outcomes. Optional*

During the past year, the Office of Continuous Professional Development and Strategic Affairs (OCPDSA) has developed and implemented 2 cycles of PELI – Physician Executive Leadership Institute. Led by Dr. Moss Blachman and Matt Orr, the program promises to benefit leadership for clinical and educational efforts of UofSC SOM and Prisma Health in the Midlands.

In response to the national call of the Association of American Medical Colleges (AAMC) for robust educational responses to the opioid crisis, three faculty members were appointed by the Dean to represent and lead our institutional efforts. Since that time, Dr. Paul Bornemann in Family Medicine, Dr. Christopher Goodman in Internal Medicine and Dr. Donna Ray in the OCPDSA have led efforts in medical student, residency and continuing medical education respectively with an interprofessional task force, the OPA (opioids, pain and addiction) Work Group. Medication assisted treatment (MAT) training, establishment of an inpatient consultative service and collaboration with the SOM library for a resource page <https://uscmcd.sc.libguides.com/opioidsinmeded> are a few of the broad educational and clinical efforts completed. Our office is supporting the task force and providing CME planning and activities, which are ongoing. We are partnering with colleagues at SOM Greenville in both curricular and clinical efforts, as well as assessment methods to capture outcomes and shared

# Faculty Information

---

lessons learned.

At the SOM Columbia campus, efforts include department-level offerings, especially responding to the new requirements of the ACGME who accredit graduate medical education (GME). Core clinical faculty are expected to engage in annual faculty development, not only in teaching, but also in other skill areas such as quality improvement and patient safety and wellness and resilience. Series are being offered to support GME leaders in collaboration with the Prisma Health Department of Medical Education. We have supported the development of GME programs and faculty in Plastic Surgery, the new Sumter Family Medicine Residency as well as Hospice & Palliative Care, Psychiatry and others. For medical student curricular changes in progress at the SOM, educational support has been primarily through direct mentoring of faculty for the following curricular components: Introduction to Clinical Medicine (ICM), Evidence in Medicine, Health & Society (social determinants of health) and Health Systems Science. In addition, support is being provided to a community of practice for motivation interviewing in clinical practice and learner coaching – the MI CoP.

Our office supports the Prisma Health Maintenance of Certification (MOC) Portfolio Program, approved by the American Board of Medical Specialties (ABMS). Meeting board re-certification requirements in this way allows physician faculty to enhance patient safety and quality of care.

Our maturing Florence Regional Campus continued faculty development efforts in its fifth year. With the new Assistant Dean at the regional campus, plans are being made to re-offer our teaching series (iTEACH! Medical Students) and explore other ways to continue to support and enhance learning and teaching. We are working to grow the numbers of Florence faculty and students who engage in QUEST (quality improvement education and systems training) and presenting their projects at Discover USC along with Columbia colleagues.

## Other Activity

*Efforts at Faculty Development, including investments, activities, incentives, objectives, and outcomes. Optional*

Supplemental Faculty Info attachment:

SCHOOL OF MEDICINE-COLUMBIA FACULTY PUBLICATIONS  
ACADEMIC YEAR 2018-19

## Supplemental Info - Faculty

*Any additional content on Faculty Information appears as Appendix 4. (bottom)*

# Teaching

## Faculty to Student Ratio

The following data was provided by UofSC's Office of Institutional Research, Assessment, and Analytics.

The formula used to compute the ratio uses data from Faculty Population by Track and Title and Student Enrollment by Time Basis, as follows:

$$\frac{\text{(Total Full-time Students + 1/3 Part-time Students)}}{\text{((Total Tenure-track Faculty + Total Research Faculty + Total Clinical/Instructional Faculty) + (1/3 Adjunct Faculty))}}$$

**Table 4. Faculty-to-Student Ratio.**

	<b>Fall 2019</b>	<b>Fall 2018</b>	<b>Fall 2017</b>
<b>Analysis of Ratio</b>	01:2.8	01:2.6	1:2.19

## Analysis of Ratio

Analysis of the ratio, agreement with the data, and plans for the future to impact this ratio.

With a faculty to student ratio of 1:2.8 plus an additional 635 volunteer faculty members, the School of Medicine continues to have sufficient breadth of knowledge and expertise to educate our students both in the basic sciences and in the clinical arena. Continued affiliation with Prisma Health and other clinical partners will allow the SOM to continue to expand the number of clinical educators available for our students.

# Student Recruiting and Retention

---

## Student Recruitment

*Efforts, including specific actions, to recruit students into College/School programs.*

**Medical Degree:** Current students organized a second-look day for accepted applicants.

**Biomedical Sciences (MS/PhD):** After screening applications, promising applicants are invited to visit campus for a two-day recruitment visit. We bring in small groups of prospective students so they can meet with current students and faculty within our program as well as tour campus and research facilities. We provide materials and support to faculty who attend the Annual Biomedical Research Conference for Minority Students (ABRCAMS) as a mechanism to inform minority students about our program and the opportunities we offer. Through emails to primarily undergraduate institutions in SC, SC INBRE meetings, Discover USC and SC Science Fair we advertise our program to students across the state.

**Master's in Nurse Anesthesia:** Website modifications now provide more user friendly access to program information for potential candidates. Nurse Anesthesia faculty have been speaking with area nursing schools to better inform the potential future candidates of the program of the opportunities that exist in the anesthesia field. This effort will continue to increase and the presence of faculty and student at job fairs been utilized the past few years, with a very positive response. Identifying and encouraging registered nurses in the hospitals by encouraging job shadowing and application to the program, is an area of opportunity that both current students and faculty have been encouraging.

**Master of Physician Assistant (PA) Studies:** The program website is frequently updated and offers specific information on program requirements for admission and details about curriculum, faculty, and accreditation. The website provides a link to the Central Application Service for Physician Assistants (CASPA) which all applicants to the program must utilize. Our website advertises Open House information for the program, and a link to the program Facebook page. PA faculty continue to meet with pre-med undergraduate student groups to provide information about the program. The Program Director, Admissions Chair, Medical Director and other faculty will be participating in recruitment events at USC, Clemson University, and other universities throughout South Carolina striving to improve our diversity and inclusion. We will continue advertising our program on the South Carolina Academy of Physician Assistants website as well as other electronic and social media platforms.

**Master's in Rehabilitation Counseling/Certificate of Graduate Study in Psychiatric Rehabilitation:** We continue to recruit students through the provision of updated program information to state and local agencies serving persons with disabilities and to undergraduate programs and career counseling services of all colleges and universities in South Carolina. Faculty also attend career fairs at USC and other South Carolina colleges and promote the program at national counseling conferences.

**Master's in Genetic Counseling:** We offer a competitive six week, full time summer internship to an undergraduate with focus on diverse candidates. For USC undergraduates, we offer a Genetic Counselor Assistant position each semester for qualified students interested in exploring the career. Since 2015, we have offered an online course for individuals interested in pursuing genetic counseling education. Over 300 students from across the country and

# Student Recruiting and Retention

---

internationally have completed this course, which introduced the Program and core faculty. Many applicants reflect on the course experience in their applications for admission.

## Student Retention

*Efforts at retaining current students in College/School programs.*

**Medical Degree:** We expanded the offerings of the Student Success and Wellness Center to provide student academic support leaders for all basic science courses as well as preparation for USMLE Step 1. Increased attention to student wellness was made a priority through coordination of efforts with the Wellness Promotion Committee.

**Biomedical Sciences (MS/PhD):** In general, the Biomedical Sciences MS and PhD programs do not have a problem with retention. The overwhelming majority of students who start in one of these programs will complete their degree. The SOM established a Student Success and Wellness Center (as noted above), and we are encouraging graduate students in the MS and PhD programs to take advantage of resources offered by this center. All of the students who enrolled in Fall 2019 are still in their respective programs.

**Master's in Nurse Anesthesia:** Providing extra didactic and experiential learning support/review session sessions. With the addition of clinical coordinator, at Columbia site and restructuring at Greenville site, now better able to recognize students with opportunities for improvement and thus intervene earlier to ensure continued success. A National Certification preparation course was modified to begin earlier, with more focus on individual student areas for improvement, to increase the success rate on this final exam, modules are assigned every week with 4 exams and a two different comprehensive finals. This testing method is given under computerized model thus creating an atmosphere very similar to NBCRNA exam model. Graduate response to this preparation method has been very positive and program continues to have a 100% certification pass and employment rate.

**Masters of Physician Assistant Studies:** Our program continues with faculty-to-mentor assignments where each student is paired with a faculty mentor who guides them throughout the program. Students meet with mentors a minimum of once per semester or more frequently if academic or professional issues arise. During the Didactic Phase, the Director of Didactic Education monitors all student grades and provides faculty mentors with regular updates and notifications when a student's grade drops below 80. During the Clinical Phase, the Director of Clinical Education provides these student updates. Our retention rate is 97.2%.

### **Master's in Rehabilitation Counseling (MRC and MA):**

For students who started the 48 credit-hour program in 2016-2017 (N=8):

- 2 graduated in 2.5 years
- 1 graduated in 3 years (with additional coursework for the professional counselor examination)
- 2 are on track to graduate in 3.5 years (with additional coursework for eligibility for professional counselor examination)
- 2 transferred to the 60-credit hour M.A. degree program; one graduated in 2.5 years and one graduated in 3 years.
- 1 is working with persons with disabilities in another capacity

# Student Recruiting and Retention

---

For students who started the 48 credit-hour master's degree program in 2015-2016 (N=16):

- 5 graduated in 2 years.
- 7 graduated in 2.5 years.
- 2 are on track to graduate with 60 credit-hours of study in 3.5 years.
- 2 are working with persons with disabilities in other capacities.

**Master's in Genetic Counseling:** We currently have a first year class of nine students and a second year class of 8 students (17 total). We have a record number of applicants for this admission cycle and expect to matriculate 9 for an incremental program expansion to 18 students.

# Student Enrollment & Outcomes

The following data was provided by UofSC's Office of Institutional Research, Assessment, and Analytics.

Note: Student enrollment and outcomes data are calculated by headcount on the basis of primary program of student only.

## Student Enrollment by Level & Classification

**Table 5. Student Enrollment by Level & Classification.**

	Fall 2019	Fall 2018	Fall 2017
<b>Undergraduate Enrollment</b>			
Freshman	0	0	0
Sophomore	0	0	0
Junior	0	0	0
Senior	0	0	0
<b>Sub Total</b>	0	0	0
<b>Graduate Enrollment</b>			
Masters	211	180	153
Doctoral	43	51	57
Graduate Certificate	0	28	24
<b>Sub Total</b>	254	259	234
<b>Professional Enrollment</b>			
Medicine	391	380	378
Law	0	0	0
PharmD	0	0	0
<b>Sub Total</b>	391	380	378
<b>Total Enrollment (All Levels)</b>	645	639	612



# Student Enrollment & Outcomes

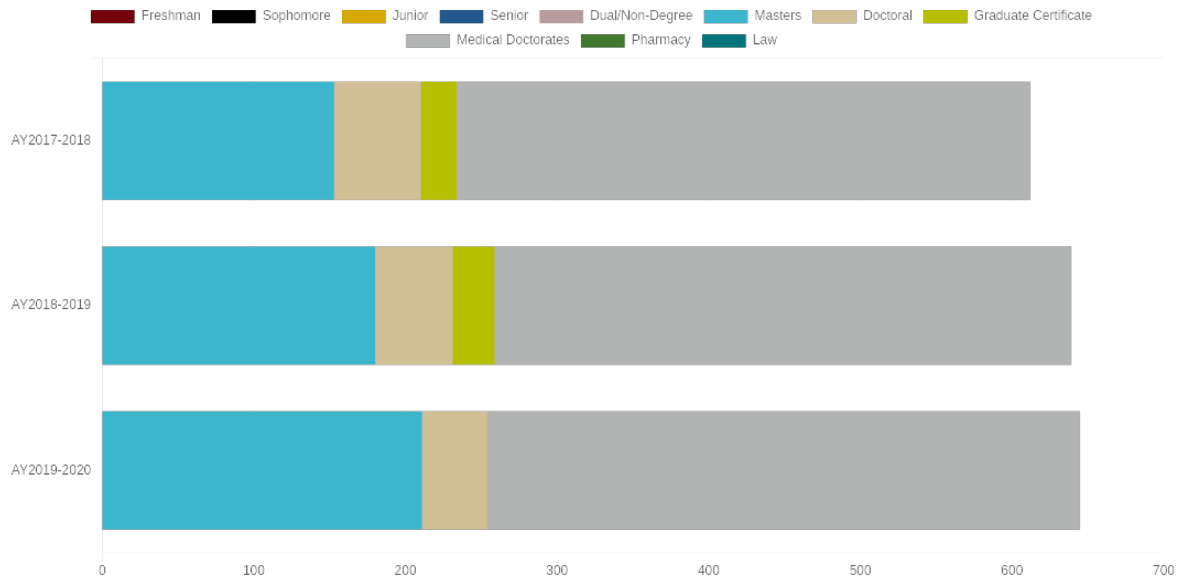
---

## **Illustration 3. Undergraduate Student Enrollment by Classification**

## **Illustration 4. Graduate/Professional Student Enrollment by Classification**

# Student Enrollment & Outcomes

**Illustration 5. Total Student Enrollment by Classification (All Levels)**



## Enrollment by Time Status

**Table 6. Student Enrollment by Level and Time Status.**

	Fall 2019	Fall 2018	Fall 2017
<b>Undergraduate</b>	0	0	0
Full-Time	0	0	0
Part-Time	0	0	0
<b>Graduate/Professional</b>	645	639	612
Full-Time	621	615	572
Part-Time	24	24	40
<b>Total - All Levels</b>	645	639	612
Full-Time	621	615	572
Part-Time	24	24	40

# Student Enrollment & Outcomes

## Student Diversity by Gender

Table 7. Student Enrollment by Gender.

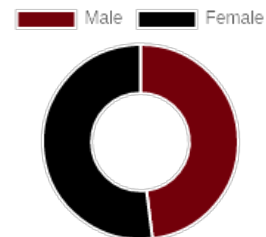
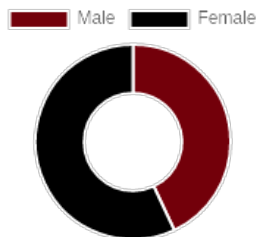
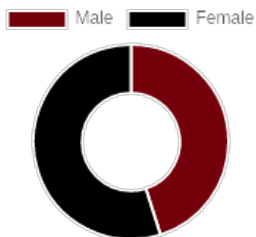
	Fall 2019	Fall 2018	Fall 2017
<b>Undergraduate</b>	0	0	0
Female	0	0	0
Male	0	0	0
<b>Graduate/Professional</b>	645	639	612
Female	354	364	318
Male	291	275	294

Illustration 6. Undergraduate Student Diversity by Gender

2019 Undergrad Gender    2018 Undergrad Gender    2017 Undergrad Gender

Illustration 7. Graduate/Professional Student Diversity by Gender

2019 Graduate Gender    2018 Graduate Gender    2017 Graduate Gender



# Student Enrollment & Outcomes

## Student Diversity by Race/Ethnicity

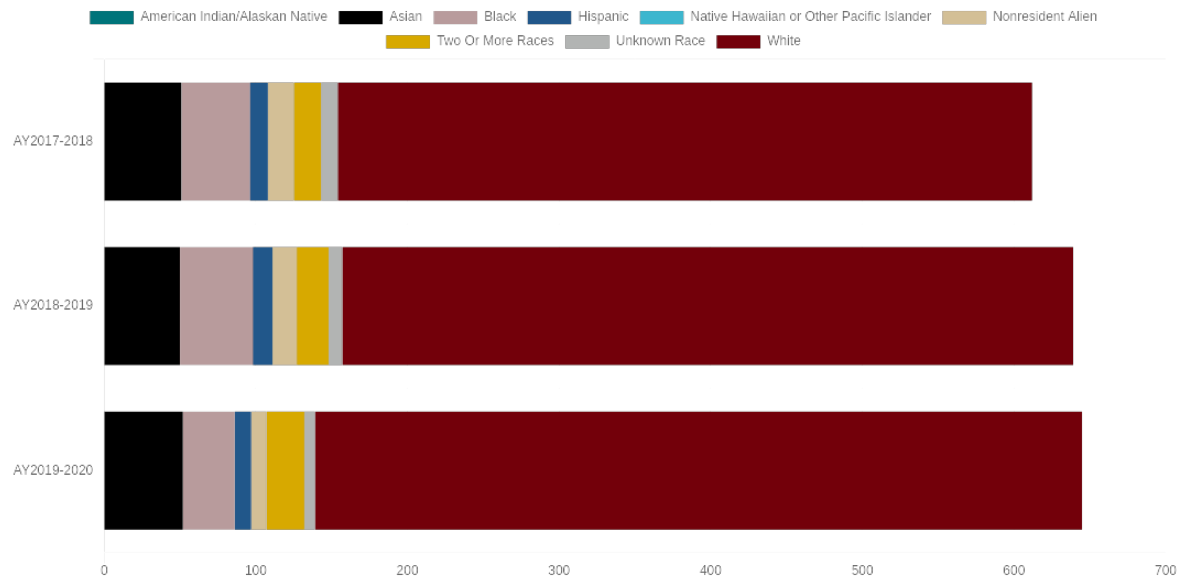
**Table 8. Student Enrollment by Race/Ethnicity.**

	Fall 2019	Fall 2018	Fall 2017
<b>Undergraduate</b>	0	645	0
American Indian/Alaska Native	0	0	0
Asian	0	0	0
Black or African	0	0	0
Hispanic or Latino	0	0	0
Native Hawaiian or Other Pacific Islander	0	0	0
Nonresident Alien	0	0	0
Two or More Races	0	0	0
Unknown Race/Ethnicity	0	0	0
White	0	0	0
<b>Graduate/Professional</b>		639	612
American Indian/Alaska Native	0	0	0
Asian	52	50	51
Black or African	34	48	45
Hispanic or Latino	11	13	12
Native Hawaiian or Other Pacific Islander	0	0	0
Nonresident Alien	10	16	17
Two or More Races	25	21	18
Unknown Race/Ethnicity	7	9	11
White	506	482	458

# Student Enrollment & Outcomes

**Illustration 8. Undergraduate Student Diversity by Race/Ethnicity**

**Illustration 9. Graduate/Professional Student Diversity by Race/Ethnicity**



# Student Enrollment & Outcomes

## Undergraduate Retention

**Table 9. Undergraduate Retention Rates for First-time Full-time Student Cohorts**

	<b>First Year</b>	<b>Second Year</b>
<b>Fall 2017 Cohort</b>	<b>0%</b>	<b>N/A</b>
<b>Fall 2016 Cohort</b>	<b>0%</b>	<b>N/A</b>
<b>Fall 2015 Cohort</b>	<b>0%</b>	<b>0%</b>
<b>Fall 2015 Cohort</b>	<b>0%</b>	<b>0%</b>

**Illustration 10. Undergraduate Retention, First and Second Year**

**First Year**

**Second Year**

## Student Completions Graduation Rate - Undergraduate

**Table 10. Undergraduate Graduation Rates for First-time Full-time Student Cohorts at 4-, 5-, and 6 Years.**

	<b>Fall 2011</b>	<b>Fall 2010</b>	<b>Fall 2009</b>
<b>4-Year Same</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>4-Year Diff</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>4-Year Total</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>5-Year Same</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>5-Year Diff</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>5-Year Total</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>6-Year Same</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>

# Student Enrollment & Outcomes

<b>6-Year Diff</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>6-Year Total</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>

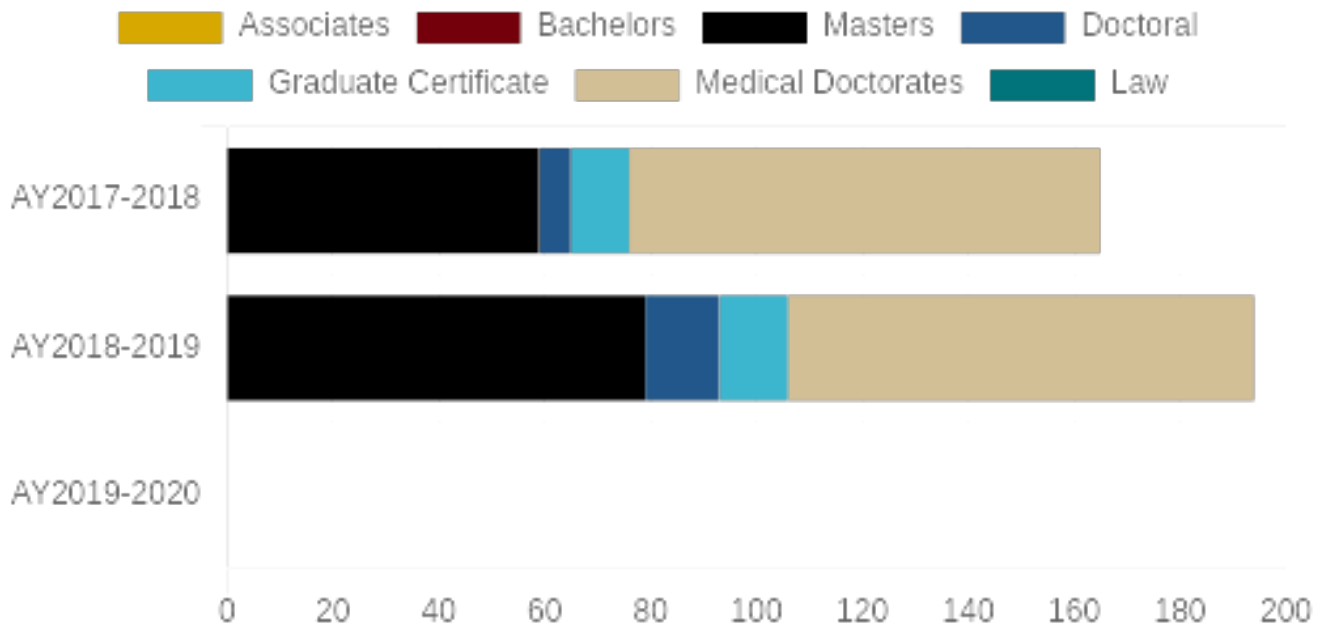
# Student Enrollment & Outcomes

## Degrees Awarded by Level

Table 11. Degrees Awarded by Level.

	AY2019-2020	AY2018-2019	AY2017-2018
<b>Associates Degree</b>		0	0
<b>Bachelors</b>		0	0
<b>Masters</b>		79	59
<b>Doctoral</b>		14	6
<b>Medical</b>		88	89
<b>Law</b>		0	0
<b>Pharmacy Doctorate</b>		0	0
<b>Graduate Certificate</b>		13	11

Illustration 11. Degrees Awarded by Level





# Faculty Awards Nominations

---

Faculty nominated for the following awards in the categories of Research, Service, Teaching, or Other.

## Teaching Award Nominations

Recipient(s)	Award	Organization
Battle, Sean	Clinical Practice Teaching Award	Office of the Provost
Sides, Andrew	2020 Clinical Practice Teaching Award	Office of the Provost
Hall, Jeff	Clinical Practice Teaching Award	Office of the Provost

## Other Award Nominations

Recipient(s)	Award	Organization
Catropo, James F.	Margaret Grimes, MD Medical Student Interest Group Grant	Intersociety Council for Pathology Information

# Faculty Awards Received

---

Faculty of SOM-C were recognized for their professional accomplishments in the categories of Research, Service, and Teaching.

## Research Awards

<b>Recipient(s)</b>	<b>Award</b>	<b>Organization</b>
Kelly, Michy	Fall 2019 Faculty International Travel Grant	Office of the Provost, Global Carolina
Mott, David	2019 Distinguished Research Service Award	Office of the Vice President for Research
Tomlin, Kristi	2019-20 Emerging Scientist Faculty Fellowship	School of Medicine Research Center for Transforming Health
LaVoie, Holly	Fellow of the Society for Experimental Biology and Medicine	Society for Experimental Biology and Medicine
Busbee, Philip Brandon	AAI Early Career Faculty Travel Grant Award	American Association of Immunologists
Oskeritzian, Carole	Global Carolina Faculty International Travel Grant	Office of the Provost
Singh, Narendra	Travel Award to attend 17th International Congress of Immunology in Beijing	American Association of Immunologists
Allen, Kari-Claudia	Research Writing Scholarship for Early Career URM Faculty	Society for Teachers of Family Medicine

# Faculty Awards Received

## Service Awards

<b>Recipient(s)</b>	<b>Award</b>	<b>Organization</b>
Frierson, Richard	Career Achievement Award	School of Medicine Office of the Dean
Anderson, William	Dean's Leadership Award	School of Medicine Office of the Dean
McDonald, Alexander	Sustained School of Medicine Service Award	School of Medicine Office of the Dean
Goldsmith, Edie	Diversity and Inclusion Leadership Award	School of Medicine Office of the Dean
Bais, Rajeev	Leonard Tow Humanism in Medicine Award	Gold Foundation
Hester, William	Benjamin Rush Award for Citizenship and Community Service	American Medical Association
Frizzell, Norma	10 Year State Service Award	University of South Carolina
Kaigler, Kris	20 Year State Service Award	University of South Carolina
Wilson, Marlene	30 Year State Service Award	University of South Carolina
McElmurray, Charles	Dean's Leadership Award	School of Medicine Office of the Dean
McDonald, Alexander	40 Year State Service Award	University of South Carolina
Pirisi-Creek, Lucia	Diversity and Inclusion Leadership Award	School of Medicine Office of the Dean
Riley, Ruth	Gerald J. Oppenheimer Cornerstone Award	Association of Academic Health Sciences Libraries
Narasimhan, Meera	2019 C3 Prisma Health Award (Care, Compassion and Collaboration)	Prisma Health
Narasimhan, Meera	2020 Care South Partner Award for Telehealth	Care South
Stallworth, James	Career Achievement Award	South Carolina Chapter of the American Academy of Pediatrics
Yallapragada, Anil	Community Service Award	School of Medicine Office of the Dean

# Faculty Awards Received

Tallente, Gregg	Leadership and Mentorship in General Internal Medicine	Society of General Internal Medicine, Southern Region
Holloway, Jeffrey	Special Achievement Award - SC Brain Injury Safety Net Task Force	South Carolina Chapter of the American Association of Pediatrics
Averch, Timothy	2020 Distinguished Contribution Award	American Urological Association
Moran, Michael	William P. Didusch Art and History Award	American Urological Association
Humphrey, Mark	Fellow	American Academy of Family Physicians

# Faculty Awards Received

## Teaching Awards

<b>Recipient(s)</b>	<b>Award</b>	<b>Organization</b>
Stallworth, James	Teacher of the Year	MD Class of 2019
Sides, Andrew	Teacher of the Year	MD Class of 2020
Bertollo, Suzanne	Teacher of the Year	MD Class of 2021
Bertollo, Suzanne	Teacher of the Year	MD Class of 2022
Wilson, Britt	Arthur C. Guyton Educator of the Year	American Physiological Society
Reagan, Lawrence	Alpha Omega Alpha Honor Medical Society Member	Alpha Omega Alpha Honor Medical Society
Bell, Floyd	O'Neill Barrett Teaching Excellence Award	MD Class of 2019
Fadel, Jim	Pearls of Wisdom 2019 Lecture	School of Medicine
Reagan, Lawrence	Pearls of Wisdom 2019 Lecture	School of Medicine
Cook, James	2019 APGO Faculty Teaching Award	Association of Professors of Gynecology and Obstetrics (APGO)
Adams, Morgan	Faculty Teacher of the Year	School of Medicine Department of Family and Preventive Medicine
Aguirre, Frank	2019 CREOG National Faculty Award	Council on Resident Education in Obstetrics and Gynecology (CREOG)
Grabowski, Greg	Dr. Angus Murdoch McBryde Jr. Faculty Teaching Award	Prisma Health - UofSC Orthopedic Surgery Residency Program
Giovannini, David	2019 Teacher of the Year	Prisma Health/School of Medicine General Internal Medicine/Internal Medicine Residency Program
Gray, Maggie	Newcomer Award	Prisma Health/School of Medicine Resident Education
Lindsey, Sara	Frank Bower Teaching Award	Prisma Health/School of Medicine Resident Education
Stallworth, James	String of Pearls 2019 Lecture	School of Medicine

# Faculty Awards Received

Blackburn, Melanie	Alpha Omega Alpha Faculty Inductee	School of Medicine
Humphrey, Mark	2019 Preventive Medicine Faculty Teaching Award	School of Medicine
Sides, Andrew	O'Neill Barrett Teaching Excellence Award	Class of 2019

# Faculty Awards Received

## Other Awards

<b>Recipient(s)</b>	<b>Award</b>	<b>Organization</b>
Azhar, Mohomad	Editorial Board of Laboratory Investigation journal	Nature Publishing Group
Dumont, Guillaume	SC State Counselor	American Orthopaedic Society for Sports Medicine
Gonzalez, Tyler	President & Founder	Orthopaedic Foot and Ankle Society
Gonzalez, Tyler	Vice-Chair, Resident Session, 2019 Annual Meeting	American Orthopaedic Foot & Ankle Society
Gonzalez, Tyler	Chair, Resident Session, 2020 Annual Meeting	American Orthopaedic Foot & Ankle Society
Grabowski, Greg	Board of Directors	Southern Orthopaedic Association
Grabowski, Greg	Co-Chair, Augusta Spine Conference	Augusta University
Grabowski, Greg	Vice President	South Carolina Orthopaedic Association
Guy, Jeffrey	President-Elect	Southern Orthopaedic Association
Holmes, S. Wendell	Board of Councilors	South Carolina Orthopaedic Association
Horan, Michael	Board Member	Medical Missions Ecuador
Horan, Michael	SC State Counselor	Southern Orthopaedic Association
Jackson III, J. Benjamin	Vice-President	South Carolina Orthopaedic Association
Jackson III, J. Benjamin	Emerging Leader	American Orthopaedic Association
Koon, David	President	South Carolina Orthopaedic Association Foundation
Mazoue, Chris	Leadership Council	South Carolina Orthopaedic Association
Testerman, Traci	Think Tank Member, Innovation Lab: Systems Biology for the Cancer Microbiome	National Cancer Institute and Memorial Sloan Kettering Cancer Center

# Faculty Awards Received

Oskeritzian, Carole	Session Chair	9th International Mast Cell and Basophil/European Mast Cell and Basophil Research Network Congress, 2019, Uppsala, Sweden
Frierson, Richard	President	American Academy of Psychiatry and the Law (AAPL)
Frierson, Richard	Isaac Ray Award Committee	American Psychiatric Association
Joshi, Kaustubh	Distinguished Fellow	American Psychiatric Association
Srinivasan, Shilpa	Past President	South Carolina Psychiatric Association
Srinivasan, Shilpa	Board Member	American Association of Geriatric Society
Pirich, Laura	Alpha Omega Alpha Faculty Inductee	School of Medicine
Friedman, Harold	President	Beth Shalom Synagogue
Strayer, Scott	President	American Association of Primary Care Endoscopy
Hasek, Malgorzata	Board of Governors	Central States Occupational and Environmental Medicine Association



# Alumni Engagement & Fundraising

---

## Alumni

*Substantial activities, engagements, and initiatives with alumni, focusing on relationships and activities with alumni.*

AY 2019-2020 was a year of reevaluating and restructuring old models, implementing new methods for digital alumni engagement, intentionally collaborating with the Office of Student and Career Services, focusing on smarter workflow and scheduling, and emphasizing the importance of inclusivity in all messaging, interactions and events. The Black Tie White Coat Gala was indefinitely put on pause. This gave the Associate Director of Alumni Relations and Alumni Engagement and Marketing Manager the ability to implement a new tradition of celebrating one of our five graduate programs individually during the Alumni Reunion Weekend. For the first time ever, the alumni weekend honored not only MD milestone classes (1985, 1990, 1995, 2000, 2005, 2010, 2015), but also alumni from the Nurse Anesthesia program.

The Office of Development and Alumni Relations also conducted the following activities: 1) distributed The Garnet Microscope alumni e-newsletter on a monthly basis; 2) grew the alumni Facebook group to 562 members; 3) initiated a new alumni engagement management software, called Almabase, which will provide alumni an online, interactive community and an all-in-one location for giving, connecting, researching, registering for events, etc; 4) collaborated with the Office of Student and Career Services to plan Match Day, securing a \$6,500 sponsorship and spearheading the event planning to ensure an exciting reveal of match results; 5) launched the first White Coat Sponsorship program, raising enough to fully fund all white coats for the Class of 2023; 6) planned and implemented the second MIV Residency Interview Preparation Session & Etiquette Dinner 7) participated in second and third Give4Garnet university-wide fundraising day (2019-2020); 8) Filled 17 At-Large member positions on the Alumni Association Board, which included eight graduate program alumni. 9) Planning to launch alumni chapters in regions with high concentration of alumni, beginning next fall with an event for the Midlands chapter. We have received leadership interest for the Midlands, Atlanta and Coastal chapters.

AY 2020 alumni reunion weekend was held March 6-7, and it was the first year without the Black Tie White Coat Gala. With staff no longer focusing so much time and energy on planning the Gala, which was primarily focused on MD alumni, they were able to create an entire weekend of special events, inclusive to all alumni. which our alumni appeared to greatly appreciate and genuinely enjoy. The Nurse Anesthesia 50th Anniversary Event, which took place on Friday, March 6 was attended by 103 individuals. Five MD reunion classes (1985, 1990, 1995, 2000 and 2005) also held socials that evening, with a total of 70 alumni and guests in attendance. On the morning of Saturday, March 7 an MD reunion brunch was held at Hendrix Restaurant in downtown Columbia, with 53 alumni and their guests in attendance. Finally, on Saturday evening, the School of Medicine hosted a Shuck-n-Shag Event at Central Energy, open to all alumni. In all, there were 149 individuals in attendance. Beyond experiencing an increase in attendance, we additionally raised more money from the reunion class fundraising initiative, than in any prior year, with a total of \$34,355 being generated to

# Alumni Engagement & Fundraising

support the school's alumni scholarship fund.

## Development, Fundraising and Gifts

*Substantial development initiatives and outcomes, including Fundraising and Gifts.*

In FY 2019 the School of Medicine generated a total of \$10,019,740. This included: \$2,200,000 in gifts; and \$7,800,000 via SAM/SPAR; from this, \$9,700,000 was spendable dollars, while \$300,000 supported the endowment. As of third quarter FY 2020, we have raised \$3,474,394. This includes: \$3,100,000 in gifts and \$400,000 via SAM/SPAR. Of this, \$2,200,000 is spendable dollars, \$1,000,000 is designated for capital projects, and \$300,000 supports the endowment.

In 2019, we continued to increase stewardship efforts -- introducing a new student scholar stewardship program -- and continued other popular stewardship initiatives, such as: 1) sending birthday email and card greetings to alumni, donors and friends of the school on a monthly basis; 2) sending donors an annual holiday card; 3) delivering holiday gifts to top donors; and 4) sending window decals to annual donors. These efforts have been well received & will hopefully lead to better donor & alumni relations & increased giving. We are planning a donor event on April 30, during which time we will announce the first million dollar gift to the future medical education building initiative. We are utilizing the gift to officially kick-off fundraising for the capital project.

The Office of Development & Alumni Relations & Office of the Dean have continued to engage the Dean's Executive Advisory Council, whose primary role consists of fundraising & helping identify sources & prospects to enable us to achieve the goals & objectives outlined in the SOM strategic plan. The council consists of 16 individuals & holds two meetings per year (fall/spring). Meetings were held in March 2019, October 2019 & one is scheduled for May 2020. The March and October meetings focused on continuing to educate council members about all of the school's various clinical and basic sciences programs, with a focus on the Ultrasound Institute, Simulation and Interactive Learning Center, Foodshare SC program, our infectious diseases and genetic counseling programs and the school's Instrument Resource Facility. The council further served as a sounding board for a statement of support we are drafting, providing valuable feedback. The May meeting will be held at the Office of Central Carolina Community Foundation in their board room, which directly overlooks the site of our future medical education building and the university's health sciences campus.

In AY 2019-2020, there will be increased emphasis on building our annual giving programs, including the Dean's Circle program. The Associate Director of Alumni Relations & Annual Giving will focus more on meeting face-to-face with alumni & soliciting those with strong annual giving histories for annual gifts. The Alumni Engagement & Marketing Manager will focus on creating a strategic and comprehensive annual giving program & creating a systematic approach to prioritizing crowdfunding & special appeal projects. Our major gift efforts will include working more closely with offices of Corporate & Foundation Philanthropy, Principal Gifts & Gift Planning to diversify our portfolio of gifts, and to pursue gifts for the capital project. With less attention to onboarding & training new employees, greater attention to fundraising by the Senior Director of Development & Alumni Relations, and support from

# Alumni Engagement & Fundraising

---

the Senior Director of Regional Development for Health Sciences, we will continue to expand our reach across the country & generate more leads & visits, which should result in increased annual and major gifts.

It's projected that SOM is once again likely to receive funding from the state legislature this year to support building a new medical education building, potentially a new biosciences research facility and parking garage, all of which are estimated to cost \$280,000. The medical education building is the top priority, with a projected completion and opening in the fall of 2025. In preparation for fundraising activities around this initiative, a case statement & other relative marketing materials are currently in development, a social media strategy is being created and a building initiative landing page is in the planning stages - all of which are to be ready by fall of 2020. It is likely that moving forward, major gift efforts for AY 2020-2021 will focus most intensely on securing leadership gifts for the future SOM education building, while fundraising for our other key priorities: underrepresented scholarships and endowed faculty positions.

# Community Engagement

---

## Community Engagements and Community - Based Activities

*Community engagement and community based research, scholarship, outreach, service or volunteerism conducted, including activities at the local, state, regional national and international levels.*

### **Ultrasound Institute:**

Adventures in Medicine Ultrasound Camp - summer camp for 9th-12th grade students as part of UofSC Carolina Masters Scholars Adventure Series.

iCARED - project for training rural health providers in SC in point-of-care ultrasound to better serve their communities.

Ultrasound workshop for home-schooled students through Dr. Easterling at Dorn VA - hands-on workshop for 15 home-schooled children using ultrasound simulator and looking into body with ultrasound.

Ultrasound project to teach biology students about heart and sudden death in young athletes - provided ultrasound support for UofSC Sumter faculty (Dr. Daniel Kiernan) with his biology students. He uses a case of collapse of star football player as a cardiac case of sudden death in an athlete (Marcus collapses but does not die).

Support of Finding Your Future summer program for pre-med students. Dr. Mary Beth Poston talks about ultrasound in classroom then we move to labs and students scan each other's carotid artery and thyroid.

### **Cell Biology and Anatomy:**

Directed by Erika Blanck, the Human Anatomy program is heavily engaged in community activities to provide an educational resource to non-university groups - practicing physical therapists, physician assistants, military chaplains, paramedics and others. Dr. Blanck also served as faculty representative for UofSC exhibit on "Art of Healthy" living at Artisphere in Greenville. She and a team of students engaged Artisphere attendees in interactive sessions demonstrating normal human anatomy and alterations in anatomy associated with disease and trauma.

### **Pharmacology, Physiology & Neuroscience:**

Faculty and Graduate students judging research at Local/State Science Fairs:

- Judges for Lexington Richland District Five High School Science, Engineering Fair and Research Symposium at Dutch Fork High School: (Richard McCain, J., Jennifer Erichson)
- Judge for Lexington Richland District Five Elementary/Intermediate/Middle School Science and Engineering Fair at Dutch Fork High School (Jennifer Erichson)
- Judge for Junior Science and Humanities Symposium (high school students). (Janet Fisher)

# Community Engagement

---

- Judge for oral presentations and grant review committee for Dept. of Defense SC Junior Science & Humanities Symposium (David Mott)
- Head Judge for Junior and Senior Divisions at the Central South Carolina Region II Science and Engineering Fair (David Mott)
- Science Presentation Judge, Spring Valley High School's Research Symposium. (Sarah Kitty Tryon)

Faculty/students mentoring high school students in research:

- Mentor for Research Project: South Carolina Junior Science & Humanities Symposium and SC Science and Engineering Fair; High School Students (David Mott)
- Mentored local high school student, Caitlin Kunchur, in summer research project. Caitlin has been named a top 40 finalist in the national 79th Regeneron Science Talent Search (Previously Westinghouse Science Talent Search). (David Mott)
- Careers in Science presentation to 25 AP Biology and 25 Honors Biology High School Students from Lexington Richland District Five (Jennifer Erichson)

## **Genetic Counseling Program:**

Social Media Presence: Blog posts-Through Our Eyes: Experience from Genetic Counseling Students at the University of South Carolina- Blogs are posted monthly for nine months of year. Topics consist of disease awareness and interest stories about student activities. Facebook posts- Genetic Counseling Graduate Program site- 77 posts in 2019 with 214 likes. Instagram posts: USCGP Instagram site - 73 posts in 2019 with 160 current followers. Tweets- @USCGCprogram- 27 tweets in 2019 with many being retweets with 366 followers.

Leo' Pride Walk (Spinal Muscular Atrophy), Cathy B Novinger Butterfly Release for Ovarian Cancer, CHARGE syndrome conference, Healthy Strides Community Health Fair, Rare Disease Day participation, Tree of Life Congregation Brunch for the Battle, Columbia SC Buddy Walk, HSDA Walk Educational Outreach Attendance (2019), HOSA Educational Outreach Spring Valley High School, Columbia College Biology Students Genetic Presentation, Richland 2 School Medical Fair, Discover USC presentations, 26th Annual South Carolina Assistive Technology Expo, Chapin Middle School lecture

## **Orthopedics and Sports Medicine:**

SMART Physicals: Provide pre-participation physicals to area high school students prior to organized athletic participation.

PH-UofSC Concussion Program: Program streamlines evaluation, treatment & recovery & combines expertise of a pediatric sports medicine physician, the UofSC Concussion & Health Neuroscience Laboratory & Prisma Health Physical Therapy Specialists, including physical, occupational & speech therapy. Dr. Jeff Holloway leads program through a research grant from Emerging Physician Scientist Faculty Fellowship from SOM Center for Transforming Health.

Haiti Global Orthopaedic Surgery Resident Initiative: Prisma Health-USC Orthopaedic Residency enters its third year of participation. With leadership from SC Orthopaedic Association Foundation, orthopaedic teams from MUSC, Prisma Health-USC Orthopaedics, &

# Community Engagement

---

Greenville Health System travel to Bon Finne, Haiti six times per year to provide orthopaedic care for Haitian people and provide clinical & surgical training for Haitian orthopaedic residents.

Medical Mission Ecuador: Dr. Michael Horan and volunteers, travel to Ecuador to provide free surgeries of different types to impoverished Ecuadorian children.

## **Obstetrics and Gynecology:**

- Judy Burgis – Committee Chair on SC Maternal Morbidity and Mortality Review Committee (SC DHEC), South Carolina Section Chair, District IV of American College of Obstetricians and Gynecologists (ACOG), Taskforce to Increase Childhood Immunization Rates – SC Institute of Medicine and Public Health
- Berry Campbell - SC Birth Outcomes Initiative Committee (SC Department of Health and Human Services- SC DHHS), SC DHEC OB (Obstetrics) Task Force
- Kerry Sims – Richland School District One Health and Education Committee.

## **Internal Medicine:**

Good Samaritan Clinic: Local free clinic. Offers care to many uninsured patients, including large Spanish-speaking population. Internal Medicine faculty and residents volunteer there. Medical directors include Dr. Christopher Goodman and Dr. Emilio Perez-Jorge.

South Carolina Association of Physicians of Indian Origin – Many community physicians are involved and several PH-USC physicians are members or leaders of this organization, including Dr. Suchita Pancholi. Held a free community health fair. 501(c)(3) organization.

Camp Adam Fisher for children with Diabetes in South Carolina: Weeklong overnight camp for children with diabetes, ages 6-18. Held on a 110-acre peninsula on Lake Marion in Summerton. Kids come from southeast to have a traditional camp experience, while learning about managing their diabetes. Camp requires a 24-hour volunteer medical staff; including, pediatric and adult endocrinologist, pediatricians, nurse practitioners, registered dietitians, and insulin pump trainers. Participation by Dr. Brooke McAdams and Dr. Ribal Al Aridi.

University of South Carolina/University of West Indies Infectious Diseases Twinning project. Developed a ID fellowship training for UWI with shared rotations and conferences. Participation by Dr. Sharon Weissman.

## **Neuropsychiatry and Behavioral Science:**

Suzanne Hardeman

- Mission trip to lead a family conference for Montana-Cree First Nation People on grief recovery. Topic was requested by the Chief's counsel following a number of teen and adult deaths related to suicide.
- Co-lead a weekly Grief Recovery program at St. Andrews Presbyterian Church
- Co-led group for sibling loss for Camp Shield, a family camp presented by Jacoby's Shield for families who have lost children.

# Community Engagement

---

- Board member and point of contact for health projects for Engadi, a ministry to boys and families in Zone 18 of Guatemala City, Guatemala. This program supports education, health education and life skills training in one of the poorest and most fractured areas of the city.
- Coordinated gift bag project for ACT program
- Presenter SCTA Summit

Brandon Kilgore

- As sub-contracted through USC, serve as consulting psychiatrist for primary care at Eau Claire Cooperative Health Centers (FQHC), working to implement the Collaborative Care Model in that system and thereby make specialty expertise available to patients in their medical home.
- One day a week, volunteer with GRC, a non-profit ministry in Columbia, which provides (via audio-video teleconferencing) professional mental health care (counseling and psychiatry) to Christian global workers residing abroad. Provide tele-psychiatric care and work toward extending this capacity to all English-speaking global workers who have need.

Shilpa Srinivasan

- Committee member: Prisma Foundation Festival of Trees Committee
- Team Captain: Walk to End Alzheimer's 2019

Ashley Jones

- Appointed to the South Carolina Maternal Mortality Review Committee
- Prisma Health Behavioral Health Council
- Prisma Health Behavioral Health Council Integrated Care Subcommittee

Meera Narasimhan

- Palmetto Care Connection, Board Member
- South Carolina Telehealth Alliance, Board Member
- SC Behavioral Health Council, Board Member
- SC Suicide Prevention Coalition Board Member

## **Family Medicine:**

Kari-Claudia Allen

- Voices of Birth Equity Research Project - South Carolina Birth Outcomes Initiative
- South Carolina Statehouse Legislative Advocacy for H.4712 Maternal Mortality Bill

Brian Keisler

- Faculty advisor for Healthy Strides – medical student community outreach event
- Medical coverage for Columbia Run Hard Marathon
- Volunteer for SMART pre-participation physicals for local middle and high school students

Paul Bornemann

# Community Engagement

---

- American Institute of Ultrasound in Medicine (AIUM) Board of Governors
- AIUM Ultrasound Practice Accreditation Council
- Director, ICARED Rural Primary Care Ultrasound Training
- Volunteer Judge, 63rd Central SC Region II Science and Engineering Fair. Columbia, SC
- Volunteer Content Creator/Judge, AIUM Medical Student SonoSlam, Orlando

Andrew Vaughan

- US Institute ICARED Project where we have been teaching US to rural Family Medicine physicians across the state.

Mark Shaffer

- The Addis Clinic- Telemedicine for the Developing World
- Specialist Consultant Volunteer: 3 hours monthly
- Point of Care Ultrasound Certificate Academy (Producer). Creating Impact in Rural Areas Using POCUS. Podcast.

Mark Humphrey

- Cyprus partnership with Univ of Nicosia - focusing on Unaccompanied Minors seeking Asylum
- OneWorld Health partnership, focusing on Hypertension treatment within mobile clinics as part of a volunteer brigade.
- Medical Director for Epworth Children's Home - foster care group home for children ages 10-18
- Medical Director for Burton and Chesco centers - providing care for mentally handicapped adults
- Volunteer by sponsoring a cottage at Epworth Children's Home - planning social events for middle school aged girls
- Ezekiel Farms nonprofit board member - help to guide organization as they work to mentor youth in lower socioeconomic youth in Columbia
- Serve as a small group Bible study leader at Midtown Fellowship church
- Serve as a small group leader coach - mentoring small group leaders at Midtown Fellowship church

Audrey Billeaud Gleaton

- University of Nicosia Cyprus Mobile clinic outreach volunteer. Oversaw medical students performing general health screening clinics in rural villages in Cyprus.

Zoe Foster

- PPE coverage for local high schools and universities in collaboration with orthopedics department
- Event coverage for local races (Governor's Cup marathon, RunHard marathon), local high school wrestling tournaments, as well as University of South Carolina varsity athletic events.



# Community Engagement

---

Patricia Witherspoon

- Richland School District 1 health science advisory committee
- Chronic Disease Prevention Symposium planning committee
- Diabetes Advisory Council Executive Community (DAC)
- DAC Pillar 1 Chairperson- Physician Engagement
- SC Birth Defect Advisory Council
- SC Birth Outcome Access and Coordinator Workgroup Chairperson SC Center for Rural and Primary Healthcare Advisory Committee
- Volunteer: Columbia Free Medical Clinic
- Good Samaritan Clinic
- Legislators Doctor of the Day Care provider

Jeff Hall

- Volunteer Physician, Good Samaritan Clinic
- Boy Scouts of America Troop Committee, Troop 48
- American Academy of Family Physicians: Center for Global Health Initiatives Advisory Board member
- One World Health, CFCI, San Jose, Costa Rica (Supervised) Mentorship and organization for interprofessional Resident/Student Brigade working in field clinics in partnership with Ministry of Health workers.

## **Surgery:**

Stop the Bleed - Our trauma surgeons participate in this effort by American College of Surgeons Committee on Trauma to save lives by teaching civilian population to provide initial response to stop uncontrolled bleeding in emergency situations.

Project READY (Realistic Education About Dying Young - Reality-based education that exposes adolescents to Prisma Health Richland Level I Trauma Center. The 5.5 hour session helps young people make better choices and deviate them from risky behaviors that result in trauma related injury or death. Program can be brought to high schools using SimCOACH, a mobile simulation truck. Four attending trauma surgeons (Bynoe, Luis, Watson, Fitzgerald) and AAPs (Bailey, La Russa, Iseman, Schneider, Kirkley, Payne, Barefoot, Tapler) and one resident (Hittson) provided presentations.

ThinkFirst for Teens - program offered by Prisma Health Trauma Center that teaches youth and teens how to reduce their risk for traumatic brain and spinal cord injuries through an evidence-based curriculum. Health educators and VIP (Voices for Injury Prevention) speakers explain how injuries occur, how they affect body and how they can be prevented. VIP speakers are people who sustained a brain or spinal cord injury.

ThinkFirst to Prevent Falls - offered by Prisma Health Trauma Center to educate older adults concerned about falling. Offers educational sessions to faith-based organizations, senior centers and at community events.

## **Pediatrics:**

# Community Engagement

---

DHEC and partners award Grant - SC Department of Health and Environmental Control, and partners, including Rao, of Palmetto Health-UofSC Pediatric Cardiology, is one of six groups in nation to be awarded \$2 million grant to study how congenital heart defects impact patients and identify ways to support impacted families.

Flu Shot Campaign - Free flu shots made available for children (6 months and older) and adults in Children's Hospital Rainey Room.

MED Two - Partnered with Richland County School District 2 to provide volunteers to present career-related information at MED Two Healthcare Career Expo. Exposes high school students to variety of healthcare fields and helps foster interest in health professions.

University 201: Healthcare in Action -Partnership with UofSC Office of Pre-Professional Advising, continued with a fall program and provided 20 pre-health students time in 6 division clinics.

Children's Hospital Family Advisory Council -Formed due to efforts of Dr. Melanie Blackburn, Children's Hospital quality leader, to foster "co-production" of health services and is comprised of patient parents and caregivers actively using Prisma Health Children's Hospital outpatient and inpatient services.

South Carolina Child Well-Being Coalition - SC Department of Health and Environmental Controls (DHEC) and SC Children's Trust partnered to establish a multi-sector, statewide Coalition focused on mitigating impact of poverty on child outcomes across SC.

VDORA Project - TRANSFORM SC NIH project, Vitamin D Supplementation in Children with Obesity Related Asthma is led by Lisa Knight, Trey Brown, and Dan Brown. They have exceeded initial target for phase 1, and are working to identify/recruit individuals for phase 2. Overall goal is to improve outcomes for patients with obesity-related asthma. Heather Staples is engaged with a national writing group doing a systematic review.

Evaluation of a Comprehensive Clinical Examination for Concussive Injuries and Return-to-Activity Management led by Dr. Jeff Holloway - project sponsored by SOM Research Center for Transforming Health's Emerging Physician Scientist Faculty Fellowship Award - currently enrolling individuals with concussive injury.

POPS - Pharmacokinetics of Understudied Drugs in Children project has been highly successful. Project targets better understanding the drugs we are using in everyday practice, that have been understudied in kids. Lisa Knight leading national writing group.

Pediatric Migraine Registry - FDA sponsored study establishing a national registry of children affected by migraines. Will aid in developing trials, and enable potential future enrollment in research.

COG - Children's Oncology Group research program continues to seek improvements to outcomes for children with cancer. Members of group attended annual study meeting, which allows them to learn about newest treatments and participate in shaping future of children's cancer treatment and care.

# Community Engagement

---

ATHNS - Member of Acute Thrombosis and Hemostasis Network - have numerous children enrolled in national registry. Opening a new project, ATHN 9, looking at natural history of children with severe von Willebrand's disease.

Severe Chronic Neutropenia - Follow children and enroll newly identified in national registry.

My life Our Future, Hemophilia registry - Study is closed to new enrollment but we continue to follow large cohort of children in Midlands.

DISPLACE - Evaluating Barriers to Stroke Screening and Prevention in Children with Sickle Cell Disease - Our Center has highest rate of Transcranial Doppler screening of all participating sites.

Sickle Cell Disease Research Network - Midland's participation in submitting a statewide network application went in through our Upstate hematology research team. Program is in review at national level and an example of strong collaboration occurring at state level.

SEARCH for Diabetes in Youth - Program is following children and young adults across SC and four other states to understand earliest biological impact of disease and to develop new understanding of impact of environmental influences on disease, glycemic control and outcomes.

TRANSFORM SC - NIH sponsored program to enhance research capacity for pediatric clinical trials. Program to establish a network across SC to increase access to clinical trials for rural and underserved populations.

FORWARD Families (FOsteRing Wise and HeAlthy ScReen MeDia Use in Families (FORWARD Families) - Project is targeted at improving digital media use in children and families. It is a multi-part program, starting with providers and networking with families in 13 primary care settings across state. Goals are to develop and evaluate toolkit of interventions to increase healthy digital media use and increase parental efficacy, and improve child outcomes including sleep, physical activity and self-regulating behaviors.

Hospitalist Program in Sumter - A new pediatric hospitalist service has been established at Prisma Health Tuomey Hospital in partnership with Prisma Health Children's Hospital-Midlands.

Treasurer of Children's Center at UofSC PTO - One of our faculty volunteers as treasurer in a 501(c)3 with preschool children who have disabilities and focus on bringing a disability perspective to the center.

SC Children's Hospital Collaborative - Have obtained support for telehealth programs which will expand our ability to provide care coverages to referring hospitals, satellite clinics and hospital.

Volunteer work - Two weeks in Nigeria with Novick Cardiac Alliance doing 12 free heart surgeries on children, teach local doctors, help develop hospital system for conducting pediatric open heart surgery program and screen 50-60 children for heart disease.

# Community Engagement

---

## Community Perceptions

*How unit assesses community perceptions of engagement, as well as impact of community engagement on students, faculty, community and the institution.*

The Office of Development and Alumni Relations, along with the Office of the Dean, has a Dean's Executive Advisory Council. This council's primary role is fundraising and helping the School of Medicine identify sources and prospects to enable us to achieve our goals and overarching strategic vision.

The Department of Pediatrics, in partnership with Children's Hospital, has a community meeting of private physicians and a community board that are asked for input, and have a required longitudinal advocacy /community program and that medical students and residents can join.

## Incentivizing Faculty Engagement

*Policies and practices for incentivizing and recognizing community engagement in teaching and learning, research, and creative activity.*

The Office of the Dean provides an annual Community Service Award as part of the Dean's Distinguished Service Awards Program. It's awarded to a member(s) of the faculty, staff, or student body whose contributions to the local, regional, or global community has demonstrated a commitment to improving the welfare of all people and has upheld the highest traditions of servant leadership.

School of Medicine tenure and promotion criteria note that faculty members are expected to perform service in support of the mission and goals of the School of Medicine, the University, and the scientific community. Relevant community service, support and assistance to community groups, and involvement in civic activities are included as evidence of accomplishment of service.

The School of Medicine encourages faculty to participate in the annual United Way campaign sponsored by the university.

# Collaborations

---

## Internal Collaborations

*Our most significant academic collaborations and multidisciplinary efforts characterized as internal to the University.*

- BARSC-MD Program
- Biomedical Engineering Program
- Center for Colon Cancer Research
- Center for Dietary Supplements and Inflammation
- Interprofessional Education Program
- Medical-Legal Partnership (MLP) Clinic
- NIH Complementary Alternative Medicine Center
- Office of Pre-Professional Advising Collaboration on Health Sciences Student Clinical Rotations
- School of Medicine-Columbia and School of Medicine-Greenville Collaboration
- South Carolina IDeA Networks of Biomedical Research Excellence (INBRE)
- Ultrasound Institute

## External Collaborations

*Our most significant academic collaborations and multidisciplinary efforts characterized as external to the University.*

- Claflin University
- Columbia VA Health Care System
- FoodShareSC
- Grand Strand Regional Medical Center
- Greenwood Genetic Center
- Lexington Medical Center
- McLeod Regional Medical Center
- Medical University of South Carolina
- Medical University of South Carolina-Florence
- Orangeburg High School for Health Professions
- Prisma Health
- Prisma Health-Midlands
- Prisma Health-Upstate
- Providence Health
- SC Center for Rural and Primary Healthcare
- SC Area Health Education Consortium
- SC Department of Health and Human Services
- SC Office of Rural Health
- Simulation and Interactive Learning Center with Columbia VA Health Care System

# Collaborations

---

## Other Collaborations

Our most significant academic collaborations and multidisciplinary efforts that are not otherwise accounted for as Internal or External Collaborations.

None.

# Equity and Diversity Plan

---

## **Improve Under-Represented Minority (URM) Student Enrollment**

The Office of Diversity & Inclusion (SOM-C) continues to work with the Admissions Committees for both the physician and physician assistant programs to advocate for under-represented students. It also provides implicit/unconscious bias training to the membership of both committees during annual orientation, as needed. The Office has also been working with the Office of Development and Alumni Relations to expand scholarships and to ensure that recipients of Corbett funds -- Corbett Scholars -- represent an inclusive group, as specified in the SOM Diversity Statement. Efforts to develop pipeline programs with regional high schools (Lower Richland, C.A. Johnson and the High School for the Health Professions in Orangeburg) have been initiated and are being pursued.

## **Improve The Number Of Full-Time URM Faculty Across Academic Units**

Office of Diversity and Inclusion will continue to work with the PRISMA Family Medicine and Diversity Task Force to promote its elective for 4th year URM medical students and thereby potentially recruit them as residents and groom them as prospective faculty members. To continue to develop, support, retain and attract faculty from under-represented groups, the SOM will sponsor attendance of URM faculty at annual AAMC Minority Faculty Leadership Development Conferences geared to new and mid-career professionals. In addition, to address the lack of under-represented groups in the biomedical sciences, the innovative proposals launched by the Dean's Office to create diversity hiring initiatives for both a basic science faculty position and a post-doctoral fellow position have begun and will continue to be pursued.

## **Enhance Outcomes For URM Undergraduate and Graduate/Professional Students**

The Office of Diversity & Inclusion will continue to work with the Office Curricular Affairs to enhance supplemental instruction efforts and assist at risk students early on through the SOM Student Success and Wellness Center.

## **Improve Post-Graduate Outcomes For URM Undergraduate and Graduate/Professional Students**

## **Increase the engagement of students, faculty, staff, administrators in Equity and Inclusion**

To advance the goals of equity, engagement and involvement, the Office of Diversity and

# Equity and Diversity Plan

---

Inclusion will continue biannual diversity forums by inviting speakers directly or participating and encouraging participation in diversity activities sponsored by other departments within the University of South Carolina and at the School of Medicine (SOM).

## **Improve The Sense Of Inclusion Amongst All University Community Members**

To improve the goal of inclusion, the Office of Diversity and Inclusion will continue biannual diversity forums by inviting speakers directly or participating and encouraging participation in diversity activities sponsored by other departments within the University of South Carolina and at the School of Medicine (SOM). It will also collaborate with other UofSC schools/colleges and community partners in striving to eliminate health disparities in the local area.

The School of Medicine has established a new strategic goal this year to enhance and sustain an organizational culture, and climate that consistently promotes a welcoming and inclusive environment throughout all levels of the organization.

The Dean will establish a Climate Task Force, with representation from students, staff, and faculty, to advise School of Medicine leadership on opportunities to enhance and sustain an organizational culture, environment, and climate that consistently promotes a welcoming and inclusive environment throughout all levels of the organization.

This work will be complemented by the contributions of the Committee on Women in Science and Medicine, which was reactivated this year. Based upon a recommendation arising from this group, an Ad Hoc Committee on Diversity in the Arts was established, to increase the diversity of individuals honored within School of Medicine Columbia facilities through the display of portraits, photographs, or other types of images.



# Concluding Remarks

---

## Quantitative Outcomes

*Explain any surprises regarding data provided in the quantitative outcomes modules throughout this report.*

## Cool Stuff

*Describe innovations, happy accidents, good news, etc. that occurred within your unit not noted elsewhere in your reporting.*

The School of Medicine has trained 2,474 medical doctors since opening our doors in 1977. More than half of those graduates (1,349) live and practice in South Carolina.

The American Medical Association (AMA) presented William H. Hester, M.D., Assistant Dean of Medical Education - Florence Regional Campus, with the Benjamin Rush Award for Citizenship and Community Service for a lifetime of service to his country and community. The award recognizes physicians who have gone above and beyond their professional call of duty to make an outstanding public service contribution. Dr. Hester is the first physician from South Carolina to be awarded the prestigious award.

The School of Medicine was the first in the Southeast to develop a genetic counseling training program, and it was just the 10th program in the nation at the time when it matriculated its first class in 1985. The training program remains the only one of its kind in South Carolina. Of the 50 programs across the US, more than 25 percent have had School of Medicine alumni in leadership roles. Twelve graduates have gone on to become directors and assistant directors at other programs; five of those are founding directors, building programs from the ground up.

The new 6,355-foot Simulation and Interactive Learning Center (SILC) opened in fall 2019 and features nearly \$1 million of training equipment, including four advanced mannequins that can talk, cry and sweat, three mannequins designed to teach advanced cardiac life support, and more than 50 additional training tools. The center even includes a realistic operating room, modeled after those in which the students will be practicing. The facility was developed in partnership with the Columbia VA Health Care System and is located at the School of Medicine campus, adjacent to the VA Medical Center, making it easily accessible for all health care learners at both the School of Medicine and the VA.

In addition to having School of Medicine students, faculty and staff involved in managing and staffing FoodShare South Carolina, we also partnered to develop a culinary medicine program for our students.

# Concluding Remarks

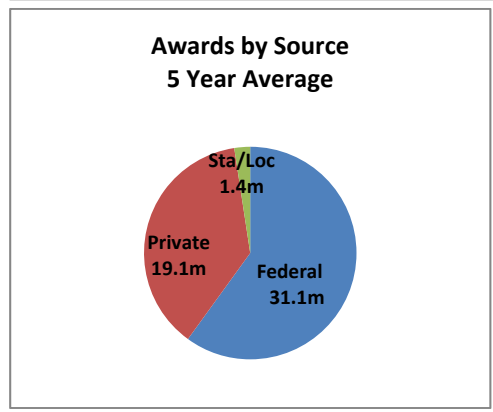
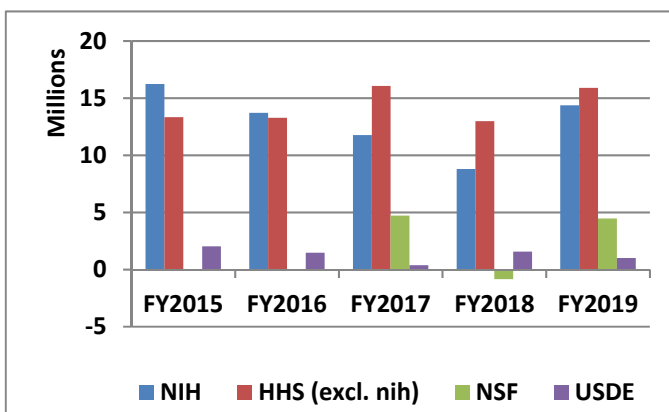
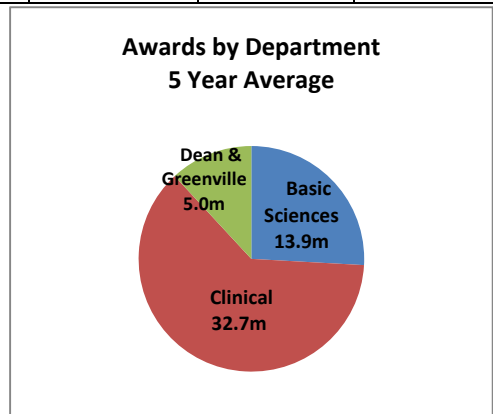
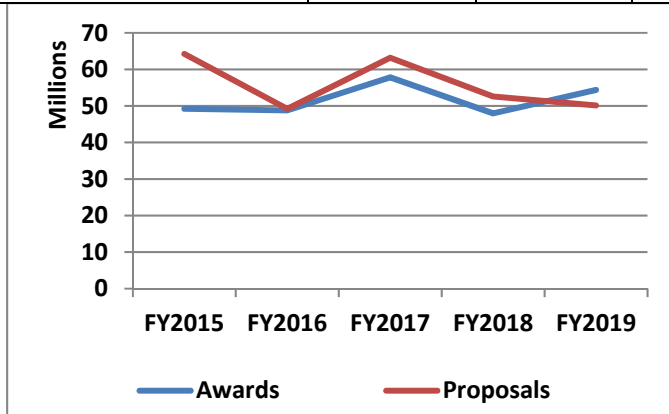
---

# Appendix 3. Research & Scholarly Activity

# Office of Research IT and Data Management Office

## School of Medicine Summary of Awards

SAM ACTIVITY	FY2015	FY2016	FY2017	FY2018	FY2019	5 Year % Change Avg. (14-18) & 2019
<b>Division Award Totals</b>	<b>49,210,511</b>	<b>48,766,397</b>	<b>57,825,873</b>	<b>47,967,680</b>	<b>54,401,972</b>	<b>6.8</b>
<b>Unit Totals</b>						
Basic Sciences	15,140,369	12,532,681	15,548,589	7,897,160	18,550,606	45.2
Clinical	30,152,571	35,546,860	32,662,353	30,618,236	34,494,179	7.0
Dean / Greenville Campus	3,917,571	686,856	9,614,931	9,452,284	1,357,187	(77.1)
<b>Source</b>						
Federal	31,613,200	30,031,540	33,818,757	23,318,464	36,846,179	24.1
Private	14,682,728	17,417,577	22,881,701	24,039,843	16,440,307	(16.8)
State/Local	2,914,583	1,317,280	1,125,415	588,023	1,115,486	(25.0)
<b>Proposals</b>						
Submissions	252	216	267	206	198	(15.8)
Dollars Requested	64,242,594	49,196,133	63,198,342	52,591,553	50,117,287	(12.5)



## SCHOOL OF MEDICINE

	<b>Invention Disclosures</b>	<b>Provisional Patent Applications</b>	<b>Non-Provisional Patent Applications</b>	<b>Issued Patents</b>
<b>TOTALS:</b>	<b>14</b>	<b>14</b>	<b>10</b>	<b>5</b>
<b>Department Breakdown</b>				
Cell Biology & Anatomy	<b>5</b> <i>(ID no. 1355, 1370, 1368 (shared w/ Engineering &amp; Computing), 1406 (shared w/ Internal Medicine), 1407 (shared w/ Internal Medicine))</i>	<b>5</b> <i>(ID no. 1355, 1370, 1313, 1370, 1368 (shared w/ Engineering &amp; Computing))</i>	<b>2</b> <i>(ID no. 1355, 1294 (shared w/ Pathology...))</i>	<b>2</b> <i>(ID no. 928, 885)</i>
School of Medicine Greenville	<b>0</b>	<b>1</b> <i>(ID no. 1340)</i>	<b>0</b>	<b>0</b>
Pathology, Microbiology & Immunology	<b>5</b> <i>(ID no. 1346, 1347, 1371, 1419, 1403 (shared w/ Arts &amp; Sciences))</i>	<b>6</b> <i>(ID no. 1319, 1238, 1371, 1346, 1347, 1403 (shared w/ Arts &amp; Sciences))</i>	<b>2</b> <i>1294 (shared w/ Cell Biology &amp; Anatomy), 1150 (shared w/ Pharmacy)</i>	<b>2</b> <i>(ID no. 1010, 1165)</i>
Pharmacology, Physiology, Neuroscience	<b>0</b>	<b>0</b>	<b>2</b> <i>(ID no. 1221, 1290)</i>	<b>0</b>
Internal Medicine	<b>2</b> <i>1406 (shared w Cell Biology &amp; Anatomy), 1407 (shared w Cell Biology &amp; Anatomy)</i>	<b>1</b> <i>(ID no. 1323)</i>	<b>5</b> <i>(ID no. 987, 1266, 1276, 959 (shared w Administration), 1301 (shared w Ultrasound Institute))</i>	<b>1</b> <i>(ID no. 959 (shared w Administration))</i>
Food Share Carolina	<b>1</b> <i>(ID no. 1381)</i>	<b>0</b>	<b>0</b>	<b>0</b>
Biomedical Sciences	<b>3</b> <i>(ID no. 1398, 1399, 1400)</i>	<b>1</b> <i>(ID no. 1400)</i>	<b>0</b>	<b>0</b>
Ultrasound Institute	<b>0</b>	<b>0</b>	<b>1</b> <i>(ID no. 1301 (shared w Internal Medicine))</i>	<b>0</b>

## SCHOOL OF MEDICINE (continued)

	<b>Invention Disclosures</b>	<b>Provisional Patent Applications</b>	<b>Non-Provisional Patent Applications</b>	<b>Issued Patents</b>
Administration	<b>0</b>	<b>0</b>	<b>1</b> <i>(ID no. 959 (shared w Internal Medicine))</i>	<b>1</b> <i>(ID no. 959 (shared w Internal Medicine))</i>

# **Appendix 4. Faculty Information**

UNIVERSITY OF SOUTH CAROLINA SCHOOL OF MEDICINE-COLUMBIA FACULTY PUBLICATIONS  
ACADEMIC YEAR 2018 – 2019 (July 1, 2018 – June 30, 2019)

**TOTAL: 176**

1: Abougergi MS, Peluso H, Saltzman JR. Thirty-Day Readmission Among Patients With Non-Variceal Upper Gastrointestinal Hemorrhage and Effects on Outcomes. *Gastroenterology*. 2018 Jul;155(1):38-46.e1. doi: 10.1053/j.gastro.2018.03.033. Epub 2018 Mar 28. PubMed PMID: 29601829.

2: Al-Ghezi ZZ, Singh N, Mehrpouya-Bahrami P, Busbee PB, Nagarkatti M, Nagarkatti PS. AhR Activation by TCDD (2,3,7,8-Tetrachlorodibenzo-p-dioxin) Attenuates Pertussis Toxin-Induced Inflammatory Responses by Differential Regulation of Tregs and Th17 Cells Through Specific Targeting by microRNA. *Front Microbiol*. 2019 Oct 18;10:2349. doi: 10.3389/fmicb.2019.02349. eCollection 2019. PubMed PMID: 31681214; PubMed Central PMCID: PMC6813193.

3: Al-Ghezi ZZ, Miranda K, Nagarkatti M, Nagarkatti PS. Combination of Cannabinoids,  $\Delta^9$ -Tetrahydrocannabinol and Cannabidiol, Ameliorates Experimental Multiple Sclerosis by Suppressing Neuroinflammation Through Regulation of miRNA-Mediated Signaling Pathways. *Front Immunol*. 2019 Aug 21;10:1921. doi: 10.3389/fimmu.2019.01921. eCollection 2019. PubMed PMID: 31497013; PubMed Central PMCID: PMC6712515.

4: Al-Hasan MN, Baddour LM. Resilience of the Pitt Bacteremia Score: Three Decades and Counting. *Clin Infect Dis*. 2019 Jun 19. pii: ciz535. doi: 10.1093/cid/ciz535. [Epub ahead of print] PubMed PMID: 31219546.

5: Al-Hasan MN, Justo JA. Ignoring the Elephant: Does the Infectious Diseases Society of America Support Sepsis-3 or Pre-sepsis Criteria? *Clin Infect Dis*. 2019 Apr 8;68(8):1431. doi: 10.1093/cid/ciy678. PubMed PMID: 30102340.

6: Al-Jaghbeer MJ, Justo JA, Owens W, Kohn J, Bookstaver PB, Hucks J, Al-Hasan MN. Risk factors for pneumonia due to beta-lactam-susceptible and beta-lactam-resistant *Pseudomonas aeruginosa*: a case-case-control study. *Infection*. 2018 Aug;46(4):487-494. doi: 10.1007/s15010-018-1147-z. Epub 2018 May 11. PubMed PMID: 29752649.

7: Alharris E, Singh NP, Nagarkatti PS, Nagarkatti M. Role of miRNA in the regulation of cannabidiol-mediated apoptosis in neuroblastoma cells. *Oncotarget*. 2019 Jan 1;10(1):45-59. doi: 10.18632/oncotarget.26534. eCollection 2019 Jan 1. PubMed PMID: 30713602; PubMed Central PMCID: PMC6343753.



8: Alhasson F, Seth RK, Sarkar S, Kimono DA, Albadrani MS, Dattaroy D, Chandrashekar V, Scott GI, Raychoudhury S, Nagarkatti M, Nagarkatti P, Diehl AM, Chatterjee S. High circulatory leptin mediated NOX-2-peroxynitrite-miR21 axis activate mesangial cells and promotes renal inflammatory pathology in nonalcoholic fatty liver disease. *Redox Biol.* 2018 Jul;17:1-15. doi: 10.1016/j.redox.2018.04.002. Epub 2018 Apr 7. PubMed PMID: 29660503; PubMed Central PMCID: PMC6006523.

9: Arya R, Schrift D, Choe C, Al-Jaghbeer M. Real-time Tracheal Ultrasound for the Confirmation of Endotracheal Intubations in the Intensive Care Unit: An Observational Study. *J Ultrasound Med.* 2019 Feb;38(2):491-497. doi: 10.1002/jum.14723. Epub 2018 Jul 29. PubMed PMID: 30058190.

10: Barash JR, Castles JB 3rd, Arnon SS. Antimicrobial Susceptibility of 260 *Clostridium botulinum* Type A, B, Ba, and Bf Strains and a Neurotoxicogenic *Clostridium baratii* Type F Strain Isolated from California Infant Botulism Patients. *Antimicrob Agents Chemother.* 2018 Nov 26;62(12). pii: e01594-18. doi: 10.1128/AAC.01594-18. Print 2018 Dec. PubMed PMID: 30275093; PubMed Central PMCID: PMC6256804.

11: Barber JL, Zellars KN, Barringhaus KG, Bouchard C, Spinale FG, Sarzynski MA. The Effects of Regular Exercise on Circulating Cardiovascular-related MicroRNAs. *Sci Rep.* 2019 May 17;9(1):7527. doi: 10.1038/s41598-019-43978-x. PubMed PMID: 31101833; PubMed Central PMCID: PMC6525243.

12: Barron KR, Wagner MS, Hunt PS, Rao VV, Bell FE, Abdel-Ghani S, Schrift D, Norton D, Bornemann PH, Haddad R, Hoppmann RA. A Primary Care Ultrasound Fellowship: Training for Clinical Practice and Future Educators. *J Ultrasound Med.* 2019 Apr;38(4):1061-1068. doi: 10.1002/jum.14772. Epub 2018 Sep 4. PubMed PMID: 30182369.

13: Barron KR, Lai JC, MenkinSmith LP, Lee JS, Humphrey ME, Hall JW. Point-of-Care Ultrasound as Part of a Short-Term Medical Mission to Rural Nicaragua. *South Med J.* 2018 Jul;111(7):434-438. doi: 10.14423/SMJ.0000000000000826. PubMed PMID: 29978230.

14: Battle SE, Augustine MR, Watson CM, Bookstaver PB, Kohn J, Owens WB, Baddour LM, Al-Hasan MN. Derivation of a quick Pitt bacteremia score to predict mortality in patients with Gram-negative bloodstream infection. *Infection.* 2019 Aug;47(4):571-578. doi: 10.1007/s15010-019-01277-7. Epub 2019 Feb 8. PubMed PMID: 30737765.

15: Bell FE 3rd, Neuffer FH, Haddad TR, Epps JC, Kozik ME, Warren BC. Active Learning of the Floor of Mouth Anatomy with Ultrasound. *Anat Sci Educ*. 2019 May;12(3):310-316. doi: 10.1002/ase.1839. Epub 2018 Nov 9. PubMed PMID: 30414266.

16: Bennett CL, Schooley B, Taylor MA, Witherspoon BJ, Godwin A, Vemula J, Ausdenmoore HC, Sartor O, Yang YT, Armitage JO, Hrushesky WJ, Restaino J, Thomsen HS, Yarnold PR, Young T, Knopf KB, Chen B. Caveat Medicus: Clinician experiences in publishing reports of serious oncology-associated adverse drug reactions. *PLoS One*. 2019 Jul 31;14(7):e0219521. doi: 10.1371/journal.pone.0219521. eCollection 2019. PubMed PMID: 31365527; PubMed Central PMCID: PMC6668902.

17: Bilal M, Tayyem O, Saraireh H, Chowdhry M, Guturu P, Abougergi MS. Upper gastrointestinal hemorrhage is associated with poor outcomes among patients with acute cholangitis: a nationwide analysis. *Eur J Gastroenterol Hepatol*. 2019 May;31(5):586-592. doi: 10.1097/MEG.0000000000001378. PubMed PMID: 30741727.

18: Bornemann P, Barreto T. Point-of-Care Ultrasonography in Family Medicine. *Am Fam Physician*. 2018 Aug 15;98(4):200-202. PubMed PMID: 30215979.

19: Boujaoude Z, Arya R, Shrivastava A, Pratter M, Abouzgheib W. Impact of Moderate Sedation versus Monitored Anesthesia Care on Outcomes and Cost of Endobronchial Ultrasound Transbronchial Needle Aspiration. *Pulm Med*. 2019 May 9;2019:4347852. doi: 10.1155/2019/4347852. eCollection 2019. PubMed PMID: 31210988; PubMed Central PMCID: PMC6532291.

20: Boutboul D, Kuehn HS, Van de Wyngaert Z, Niemela JE, Callebaut I, Stoddard J, Lenoir C, Barlogis V, Farnarier C, Vely F, Yoshida N, Kojima S, Kanegane H, Hoshino A, Hauck F, Lhermitte L, Asnafi V, Roehrs P, Chen S, Verbsky JW, Calvo KR, Husami A, Zhang K, Roberts J, Amrol D, Sleaseman J, Hsu AP, Holland SM, Marsh R, Fischer A, Fleisher TA, Picard C, Latour S, Rosenzweig SD. Dominant-negative IKZF1 mutations cause a T, B, and myeloid cell combined immunodeficiency. *J Clin Invest*. 2018 Jul 2;128(7):3071-3087. doi: 10.1172/JCI98164. Epub 2018 Jun 11. PubMed PMID: 29889099; PubMed Central PMCID: PMC6026000.

21: Bryan CS. The centenary of 'The Old Humanities and the New Science,' the last public address of Sir William Osler (1849-1919). *J Med Biogr*. 2019 Nov;27(4):197-204. doi: 10.1177/0967772018800799. Epub 2018 Oct 18. PubMed PMID: 30334668.

22: Cahue SR, Etkin CD, Stryker LS, Voss FR. Procedure coding in the American Joint Replacement Registry. *Arthroplast Today*. 2019 May 30;5(2):251-255. doi:

10.1016/j.artd.2019.04.003. eCollection 2019 Jun. PubMed PMID: 31286052; PubMed Central PMCID: PMC6588816.

23: Calva CB, Fayyaz H, Fadel JR. Effects of Intranasal Orexin-A (Hypocretin-1) Administration on Neuronal Activation, Neurochemistry, and Attention in Aged Rats. *Front Aging Neurosci.* 2020 Jan 22;11:362. doi: 10.3389/fnagi.2019.00362. eCollection 2019. PubMed PMID: 32038222; PubMed Central PMCID: PMC6987046.

24: Calva CB, Fadel JR. Intranasal administration of orexin peptides: Mechanisms and therapeutic potential for age-related cognitive dysfunction. *Brain Res.* 2018 Aug 24:145921. doi: 10.1016/j.brainres.2018.08.024. [Epub ahead of print] Review. PubMed PMID: 30148983; PubMed Central PMCID: PMC6387866.

25: Carbonell AM. Discussion: A Current Review of Synthetic Meshes in Abdominal Wall Reconstruction. *Plast Reconstr Surg.* 2018 Sep;142(3 Suppl):72S-73S. doi: 10.1097/PRS.0000000000004883. PubMed PMID: 30138271.

26: Carrick-Ranson G, Spinale FG, Bhella PS, Sarma S, Shibata S, Fujimoto N, Hastings JL, Levine BD. Plasma matrix metalloproteinases (MMPs) and tissue inhibitors of MMPs and aging and lifelong exercise adaptations in ventricular and arterial stiffness. *Exp Gerontol.* 2019 Aug;123:36-44. doi: 10.1016/j.exger.2019.05.004. Epub 2019 May 13. PubMed PMID: 31095969; PubMed Central PMCID: PMC6559842.

27: Chakrabarti S, Tella SH, Kommalapati A, Huffman BM, Yadav S, Riaz IB, Goyal G, Mody K, Borad M, Cleary S, Smoot RL, Mahipal A. Clinicopathological features and outcomes of fibrolamellar hepatocellular carcinoma. *J Gastrointest Oncol.* 2019 Jun;10(3):554-561. doi: 10.21037/jgo.2019.01.35. PubMed PMID: 31183207; PubMed Central PMCID: PMC6534717.

28: Chapman CD, Schiöth HB, Grillo CA, Benedict C. Intranasal insulin in Alzheimer's disease: Food for thought. *Neuropharmacology.* 2018 Jul 1;136(Pt B):196-201. doi: 10.1016/j.neuropharm.2017.11.037. Epub 2017 Nov 24. Review. PubMed PMID: 29180222.

29: Chennubhotla S, Hertog R, Williams JE, Hanna D, Abell TL. An Algorithmic Approach to Nutritional Difficulties in People With Developmental Disabilities. *Intellect Dev Disabil.* 2019 Feb;57(1):14-25. doi: 10.1352/1934-9556-57.1.14. PubMed PMID: 30716006.

30: Chitala KN, Yang X, Busbee B, Singh NP, Bonati L, Xing Y, Nagarkatti P, Nagarkatti M. Computational prediction and in vitro validation of VEGFR1 as a novel protein target for 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Sci Rep.* 2019 May 2;9(1):6810. doi: 10.1038/s41598-019-43232-4. PubMed PMID: 31048752; PubMed Central PMCID: PMC6497656.

31: Chitala KN, Nagarkatti M, Nagarkatti P, Yeguvapalli S. Analysis of the TP53 Deleterious Single Nucleotide Polymorphisms Impact on Estrogen Receptor Alpha-p53 Interaction: A Machine Learning Approach. *Int J Mol Sci.* 2019 Jun 18;20(12). pii: E2962. doi: 10.3390/ijms20122962. PubMed PMID: 31216622; PubMed Central PMCID: PMC6627686.

32: Coffin JD, Homer-Bouthiette C, Hurley MM. Fibroblast Growth Factor 2 and Its Receptors in Bone Biology and Disease. *J Endocr Soc.* 2018 May 28;2(7):657-671. doi: 10.1210/js.2018-00105. eCollection 2018 Jul 1. Review. PubMed PMID: 29942929; PubMed Central PMCID: PMC6009610.

33: Costa AR, Carvalho P, Flik G, Wilson SP, Reguenga C, Martins I, Tavares I. Neuropathic Pain Induced Alterations in the Opioidergic Modulation of a Descending Pain Facilitatory Area of the Brain. *Front Cell Neurosci.* 2019 Jun 28;13:287. doi: 10.3389/fncel.2019.00287. eCollection 2019. PubMed PMID: 31316354; PubMed Central PMCID: PMC6610065.

34: Crouch E, Radcliff E, Hung P, Bennett K. Challenges to School Success and the Role of Adverse Childhood Experiences. *Acad Pediatr.* 2019 Nov - Dec;19(8):899-907. doi: 10.1016/j.acap.2019.08.006. Epub 2019 Aug 9. PubMed PMID: 31401231.

35: Crouch E, Eberth JM, Probst JC, Bennett K, Adams SA. Rural-Urban Differences in Costs of End-of-Life Care for the Last 6 Months of Life Among Patients with Breast, Lung, or Colorectal Cancer. *J Rural Health.* 2019 Mar;35(2):199-207. doi: 10.1111/jrh.12301. Epub 2018 Apr 15. PubMed PMID: 29656565.

36: Crouch E, Probst JC, Radcliff E, Bennett KJ, McKinney SH. Prevalence of adverse childhood experiences (ACEs) among US children. *Child Abuse Negl.* 2019 Jun;92:209-218. doi: 10.1016/j.chiabu.2019.04.010. Epub 2019 Apr 16. PubMed PMID: 31003066.

37: Crouch E, Probst JC, Bennett K, Eberth JM. Differences in Medicare Utilization and Expenditures in the Last Six Months of Life among Patients with and without Alzheimer's Disease and Related Disorders. *J Palliat Med.* 2019

Feb;22(2):126-131. doi: 10.1089/jpm.2018.0147. Epub 2018 Oct 17. PubMed PMID: 30328762.

38: Crouch E, Probst J, Bennett K, Eberth J. Gender and geographic differences in Medicare service utilization during the last six months of life. *J Women Aging*. 2018 Nov-Dec;30(6):541-552. doi: 10.1080/08952841.2018.1398897. Epub 2017 Nov 7. PubMed PMID: 29111953.

39: Crowe W, Allsopp PJ, Nyland JF, Magee PJ, Strain JJ, Doherty LC, Watson GE, Ball E, Riddell C, Armstrong DJ, Penta K, Todd JJ, Spence T, McSorley EM. Inflammatory response following in vitro exposure to methylmercury with and without n-3 long chain polyunsaturated fatty acids in peripheral blood mononuclear cells from systemic lupus erythematosus patients compared to healthy controls. *Toxicol In Vitro*. 2018 Oct;52:272-278. doi: 10.1016/j.tiv.2018.05.008. Epub 2018 May 17. PubMed PMID: 29778720.

40: Davda D, Schrift D. Posterior Wall Punctures Between Long- and Short-Axis Techniques in a Phantom Intravenous Model. *J Ultrasound Med*. 2018 Dec;37(12):2891-2897. doi: 10.1002/jum.14650. Epub 2018 Apr 23. PubMed PMID: 29683200.

41: Dellon EP, Helms SW, Hailey CE, Shay R, Carney SD, Schmidt HJ, Brown DE, Prieur MG. Exploring knowledge and perceptions of palliative care to inform integration of palliative care education into cystic fibrosis care. *Pediatr Pulmonol*. 2018 Sep;53(9):1218-1224. doi: 10.1002/ppul.24073. Epub 2018 Jun 3. PubMed PMID: 29862668.

42: DiPette DJ, Skeete J, Ridley E, Campbell NRC, Lopez-Jaramillo P, Kishore SP, Jaffe MG, Coca A, Townsend RR, Ordunez P. Fixed-dose combination pharmacologic therapy to improve hypertension control worldwide: Clinical perspective and policy implications. *J Clin Hypertens (Greenwich)*. 2019 Jan;21(1):4-15. doi: 10.1111/jch.13426. Epub 2018 Nov 27. PubMed PMID: 30480368.

43: Dou J, Zeng J, Wu K, Tan W, Gao L, Lu J. Microbiosis in pathogenesis and intervention of atopic dermatitis. *Int Immunopharmacol*. 2019 Apr;69:263-269. doi: 10.1016/j.intimp.2019.01.030. Epub 2019 Feb 8. Review. PubMed PMID: 30743202.

44: Eberly JB Jr. Making Honey. *J Relig Health*. 2019 May 4. doi: 10.1007/s10943-019-00805-x. [Epub ahead of print] PubMed PMID: 31055686.

45: Eichelberger KY, Chescheir NC, Riley LE. Institutional Responses to Harassment and Discrimination in Obstetrics and Gynecology. *Obstet Gynecol.* 2018 Oct;132(4):828-832. doi: 10.1097/AOG.0000000000002867. PubMed PMID: 30204692.

46: Elliott DM, Singh N, Nagarkatti M, Nagarkatti PS. Cannabidiol Attenuates Experimental Autoimmune Encephalomyelitis Model of Multiple Sclerosis Through Induction of Myeloid-Derived Suppressor Cells. *Front Immunol.* 2018 Aug 3;9:1782. doi: 10.3389/fimmu.2018.01782. eCollection 2018. PubMed PMID: 30123217; PubMed Central PMCID: PMC6085417.

47: Ferrario CR, Reagan LP. Insulin-mediated synaptic plasticity in the CNS: Anatomical, functional and temporal contexts. *Neuropharmacology.* 2018 Jul 1;136(Pt B):182-191. doi: 10.1016/j.neuropharm.2017.12.001. Epub 2017 Dec 5. Review. PubMed PMID: 29217283; PubMed Central PMCID: PMC5988909.

48: Finnell JE, Moffitt CM, Hesser LA, Harrington E, Melson MN, Wood CS, Wood SK. The contribution of the locus coeruleus-norepinephrine system in the emergence of defeat-induced inflammatory priming. *Brain Behav Immun.* 2019 Jul;79:102-113. doi: 10.1016/j.bbi.2019.01.021. Epub 2019 Jan 29. PubMed PMID: 30707932; PubMed Central PMCID: PMC6591045.

49: Finnell JE, Muniz BL, Padi AR, Lombard CM, Moffitt CM, Wood CS, Wilson LB, Reagan LP, Wilson MA, Wood SK. Essential Role of Ovarian Hormones in Susceptibility to the Consequences of Witnessing Social Defeat in Female Rats. *Biol Psychiatry.* 2018 Sep 1;84(5):372-382. doi: 10.1016/j.biopsych.2018.01.013. Epub 2018 Jan 31. PubMed PMID: 29544773; PubMed Central PMCID: PMC6067999.

50: Finnell JE, Wood SK. Putative Inflammatory Sensitive Mechanisms Underlying Risk or Resilience to Social Stress. *Front Behav Neurosci.* 2018 Oct 26;12:240. doi: 10.3389/fnbeh.2018.00240. eCollection 2018. Review. PubMed PMID: 30416436; PubMed Central PMCID: PMC6212591.

51: Fix C, Carver-Molina A, Chakrabarti M, Azhar M, Carver W. Effects of the isothiocyanate sulforaphane on TGF- $\beta$ 1-induced rat cardiac fibroblast activation and extracellular matrix interactions. *J Cell Physiol.* 2019 Aug;234(8):13931-13941. doi: 10.1002/jcp.28075. Epub 2019 Jan 4. PubMed PMID: 30609032; PubMed Central PMCID: PMC6478523.

52: Foster RA, Troficanto C, Bookstaver PB, Kohn J, Justo JA, Al-Hasan MN. Utility of Combination Antimicrobial Therapy in Adults with Bloodstream Infections due to Enterobacteriaceae and Non-Fermenting Gram-Negative Bacilli

Based on In Vitro Analysis at Two Community Hospitals. *Antibiotics (Basel)*. 2019 Feb 8;8(1). pii: E15. doi: 10.3390/antibiotics8010015. PubMed PMID: 30744080; PubMed Central PMCID: PMC6466593.

53: Gamoh S, Shiba T, DiPette DJ, Yamamoto R. Differences in the response to periarterial nerve stimulation or exogenous noradrenaline infusion in the mesenteric vascular bed with the intestinal tract harvested from commonly used rat models of hypertension. *Clin Exp Pharmacol Physiol*. 2019 May;46(5):427-434. doi: 10.1111/1440-1681.13068. Epub 2019 Feb 25. PubMed PMID: 30697784.

54: Genau MC, Perreault PE, Romito E, Doviak H, Logdon CB, Ruble S, Spinale FG. Institution of localized high-frequency electrical stimulation targeting early myocardial infarction: Effects on left ventricle function and geometry. *J Thorac Cardiovasc Surg*. 2018 Aug;156(2):568-575. doi: 10.1016/j.jtcvs.2018.01.104. Epub 2018 Mar 12. PubMed PMID: 29609885.

55: Glasser JG, Nottingham JM, Haney ME, Mancini EA. Case series: Five pediatric germ cell/sex cord stroma tumors. *Ann Med Surg (Lond)*. 2018 Nov 28;37:11-20. doi: 10.1016/j.amsu.2018.11.011. eCollection 2019 Jan. PubMed PMID: 30581564; PubMed Central PMCID: PMC6287085.

56: Gomez G. Current Strategies to Inhibit High Affinity FcεRI-Mediated Signaling for the Treatment of Allergic Disease. *Front Immunol*. 2019 Feb 7;10:175. doi: 10.3389/fimmu.2019.00175. eCollection 2019. Review. PubMed PMID: 30792720; PubMed Central PMCID: PMC6374298.

57: Goodman CW, Brett AS. A Clinical Overview of Off-label Use of Gabapentinoid Drugs. *JAMA Intern Med*. 2019 May 1;179(5):695-701. doi: 10.1001/jamainternmed.2019.0086. Review. PubMed PMID: 30907944.

58: Goyal G, Kommalapati A, Bartley AC, Gunderson TM, Adjei AA, Go RS. Association between hospital volume and mortality of patients with metastatic non-small cell lung cancer. *Lung Cancer*. 2018 Aug;122:214-219. doi: 10.1016/j.lungcan.2018.06.025. Epub 2018 Jun 19. PubMed PMID: 30032834.

59: Greenberg MH, Fant JW Jr. Comparison of the Effectiveness of Ultrasound-Guided Steroid Injections and Blind Steroid Injections in the Treatment of Carpal Tunnel Syndrome: Comment on the Article by Evers et al. *Arthritis Care Res (Hoboken)*. 2018 Nov;70(11):1717-1718. doi: 10.1002/acr.23450. PubMed PMID: 29045073.

60: Greenberg MH, Boughton J, Talente GM. "Old Dogs" Can Learn Ultrasound. *South Med J*. 2018 Jul;111(7):421-423. doi: 10.14423/SMJ.0000000000000825. PubMed PMID: 29978228.

61: Grillo CA, Woodruff JL, Macht VA, Reagan LP. Insulin resistance and hippocampal dysfunction: Disentangling peripheral and brain causes from consequences. *Exp Neurol*. 2019 Aug;318:71-77. doi: 10.1016/j.expneurol.2019.04.012. Epub 2019 Apr 24. Review. PubMed PMID: 31028829.

62: Hardee JP, Fix DK, Wang X, Goldsmith EC, Koh HJ, Carson JA. Systemic IL-6 regulation of eccentric contraction-induced muscle protein synthesis. *Am J Physiol Cell Physiol*. 2018 Jul 1;315(1):C91-C103. doi: 10.1152/ajpcell.00063.2018. Epub 2018 Apr 11. PubMed PMID: 29641213; PubMed Central PMCID: PMC6087730.

63: Harris CM, Abougergi MS, Wright S. Clinical outcomes among morbidly obese patients hospitalized with diabetic foot complications. *Clin Obes*. 2019 Feb;9(1):e12285. doi: 10.1111/cob.12285. Epub 2018 Oct 4. PubMed PMID: 30288938.

64: Harris CM, Albaeni A, Thorpe RJ, Norris KC, Abougergi MS. Racial factors and inpatient outcomes among patients with diabetes hospitalized with foot ulcers and foot infections, 2003-2014. *PLoS One*. 2019 May 29;14(5):e0216832. doi: 10.1371/journal.pone.0216832. eCollection 2019. PubMed PMID: 31141534; PubMed Central PMCID: PMC6541346.

65: Hekman KE, Wohlauser MV, Magee GA, Shokrzadeh CL, Brown KR, Carsten CG 3rd, Chaer R, Jazaeri O, Lee AM, Singh N, Coleman DM. Current issues and future directions for vascular surgery training from the results of the 2016-2017 and 2017-2018 Association of Program Directors in Vascular Surgery annual training survey. *J Vasc Surg*. 2019 Dec;70(6):2014-2020. doi: 10.1016/j.jvs.2019.02.050. Epub 2019 May 27. PubMed PMID: 31147127; PubMed Central PMCID: PMC6878124.

66: Hernandez AR, Hernandez CM, Truckenbrod LM, Campos KT, McQuail JA, Bizon JL, Burke SN. Age and Ketogenic Diet Have Dissociable Effects on Synapse-Related Gene Expression Between Hippocampal Subregions. *Front Aging Neurosci*. 2019 Sep 13;11:239. doi: 10.3389/fnagi.2019.00239. eCollection 2019. PubMed PMID: 31607897; PubMed Central PMCID: PMC6755342.

67: Hernandez NS, O'Donovan B, Ortinski PI, Schmidt HD. Activation of glucagon-like peptide-1 receptors in the nucleus accumbens attenuates cocaine seeking in rats. *Addict Biol*. 2019 Mar;24(2):170-181. doi: 10.1111/adb.12583.



Epub 2017 Dec 11. PubMed PMID: 29226617; PubMed Central PMCID: PMC5995617.

68: Holmes SW Jr, Huff LW, Barnes AJ, Baier AJ. Anatomic Reinforced Medial Meniscal Root Reconstruction With Gracilis Autograft. *Arthrosc Tech*. 2019 Feb 5;8(3):e209-e213. doi: 10.1016/j.eats.2018.10.014. eCollection 2019 Mar. PubMed PMID: 31016123; PubMed Central PMCID: PMC6470346.

69: Horan MP, Williams K, Hughes D. The Role of Vitamin D in Pediatric Orthopedics. *Orthop Clin North Am*. 2019 Apr;50(2):181-191. doi: 10.1016/j.ocl.2018.10.002. Review. PubMed PMID: 30850077.

70: Huang X, Li Y, Li X, Fan D, Xin HB, Fu M. TRIM14 promotes endothelial activation via activating NF- $\kappa$ B signaling pathway. *J Mol Cell Biol*. 2019 May 9. pii: mjz040. doi: 10.1093/jmcb/mjz040. [Epub ahead of print] PubMed PMID: 31070748.

71: Iftikhar IH, Schimmel M, Bender W, Swenson C, Amrol D. Iftikhar and Colleagues Reply: Methodology Clarified. *Lung*. 2019 Feb;197(1):107-109. doi: 10.1007/s00408-018-0185-8. Epub 2018 Dec 5. PubMed PMID: 30519773.

72: Iftikhar IH, Schimmel M, Bender W, Swenson C, Amrol D. Comparative Efficacy of Anti IL-4, IL-5 and IL-13 Drugs for Treatment of Eosinophilic Asthma: A Network Meta-analysis. *Lung*. 2018 Oct;196(5):517-530. doi: 10.1007/s00408-018-0151-5. Epub 2018 Aug 23. PubMed PMID: 30167841.

73: Imeh-Nathaniel A, Orfanakos V, Wormack L, Huber R, Nathaniel TI. The crayfish model (*Orconectes rusticus*), epigenetics and drug addiction research. *Pharmacol Biochem Behav*. 2019 Aug;183:38-45. doi: 10.1016/j.pbb.2019.06.003. Epub 2019 Jun 14. Review. PubMed PMID: 31202808.

74: Jackson JB 3rd, Chu CH, Williams KA, Bornemann PH. Normal Ultrasonographic Parameters of the Posterior Tibial, Peroneal, and Achilles Tendons. *Foot Ankle Spec*. 2019 Oct;12(5):480-485. doi: 10.1177/1938640018800785. Epub 2018 Sep 28. PubMed PMID: 30264576.

75: Josey MJ, Eberth JM, Mobley LR, Schootman M, Probst JC, Strayer SM, Sercy E. Should Measures of Health Care Availability Be Based on the Providers or the Procedures? A Case Study with Implications for Rural Colorectal Cancer Disparities. *J Rural Health*. 2019 Mar;35(2):236-243. doi: 10.1111/jrh.12332. Epub 2018 Nov 14. PubMed PMID: 30430641; PubMed Central PMCID: PMC6436979.

76: Justice A, Keilani Z, Tribble J. A unique case report of jejunoileal bypass reversal with review of the literature. *Int J Surg Case Rep.* 2018;50:88-91. doi: 10.1016/j.ijscr.2018.07.028. Epub 2018 Jul 31. PubMed PMID: 30092540; PubMed Central PMCID: PMC6086214.

77: Kadhim S, Singh NP, Zumbun EE, Cui T, Chatterjee S, Hofseth L, Abood A, Nagarkatti P, Nagarkatti M. Resveratrol-Mediated Attenuation of Staphylococcus aureus Enterotoxin B-Induced Acute Liver Injury Is Associated With Regulation of microRNA and Induction of Myeloid-Derived Suppressor Cells. *Front Microbiol.* 2018 Dec 17;9:2910. doi: 10.3389/fmicb.2018.02910. eCollection 2018. PubMed PMID: 30619104; PubMed Central PMCID: PMC6304356.

78: Khan MAW, Stephens WZ, Mohammed AD, Round JL, Kubinak JL. Does MHC heterozygosity influence microbiota form and function? *PLoS One.* 2019 May 16;14(5):e0215946. doi: 10.1371/journal.pone.0215946. eCollection 2019. PubMed PMID: 31095603; PubMed Central PMCID: PMC6522005.

79: Kimono D, Sarkar S, Albadrani M, Seth R, Bose D, Mondal A, Li Y, Kar AN, Nagarkatti M, Nagarkatti P, Sullivan K, Janulewicz P, Lasley S, Horner R, Klimas N, Chatterjee S. Dysbiosis-Associated Enteric Glial Cell Immune-Activation and Redox Imbalance Modulate Tight Junction Protein Expression in Gulf War Illness Pathology. *Front Physiol.* 2019 Oct 14;10:1229. doi: 10.3389/fphys.2019.01229. eCollection 2019. PubMed PMID: 31680990; PubMed Central PMCID: PMC6802578.

80: Kollath-Cattano C, Dorman T, Albano AW Jr, Jindal M, Strayer SM, Thrasher JF. E-cigarettes and the clinical encounter: Physician perspectives on e-cigarette safety, effectiveness, and patient educational needs. *J Eval Clin Pract.* 2019 Oct;25(5):761-768. doi: 10.1111/jep.13111. Epub 2019 Feb 19. PubMed PMID: 30784164.

81: Kommalapati A, Tella SH, Appiah AK, Smith L, Ganti AK. Association Between Treatment Facility Volume, Therapy Types, and Overall Survival in Patients With Stage IIIA Non-Small Cell Lung Cancer. *J Natl Compr Canc Netw.* 2019 Mar 1;17(3):229-236. doi: 10.6004/jnccn.2018.7086. PubMed PMID: 30865920.

82: Kommalapati A, Tella SH, Goyal G, Borad M, Alberts SR, Roberts L, Hubbard JM, Durgin L, Cleary S, Mahipal A. Association between treatment facility volume, therapy types and overall survival in patients with intrahepatic cholangiocarcinoma. *HPB (Oxford).* 2019 Mar;21(3):379-386. doi: 10.1016/j.hpb.2018.08.004. Epub 2018 Sep 25. PubMed PMID: 30266490.

83: Kommalapati A, Tella SH, Go RS, Goyal G. Predictors of survival, treatment patterns, and outcomes in histiocytic sarcoma. *Leuk Lymphoma*. 2019 Feb;60(2):553-555. doi: 10.1080/10428194.2018.1492128. Epub 2018 Jul 22. PubMed PMID: 30032691.

84: Kommalapati A, Tella SH, Go RS, Bennani NN, Goyal G. A population-based analysis of second primary malignancies in T-cell neoplasms. *Br J Haematol*. 2019 Apr;185(2):338-342. doi: 10.1111/bjh.15451. Epub 2018 Jul 5. PubMed PMID: 29974935.

85: Kommalapati A, Tella SH, Go RS, Nowakowski GS, Goyal G. T cell/histiocyte-rich large B cell lymphoma: incidence, demographic disparities, and long-term outcomes. *Br J Haematol*. 2019 Apr;185(1):140-142. doi: 10.1111/bjh.15391. Epub 2018 May 30. PubMed PMID: 29845599.

86: Kommalapati A, Wallam S, Tella SH, Qureshi ZP, Bennett CL. Fluoroquinolone-associated suicide. *Eur J Intern Med*. 2018 Sep;55:e21-e22. doi: 10.1016/j.ejim.2018.07.012. Epub 2018 Jul 18. PubMed PMID: 30031596.

87: Kommalapati A, Kushchayeva Y, Tella SH. Incidence, racial disparities and survival outcomes of mast cell malignancies: analysis from a national database. *Leuk Lymphoma*. 2018 Sep;59(9):2254-2257. doi: 10.1080/10428194.2017.1416370. Epub 2018 Jan 3. PubMed PMID: 29295648.

88: Kommalapati A, Tella SH, Ganti AK, Armitage JO. Natural Killer/T-cell Neoplasms: Analysis of Incidence, Patient Characteristics, and Survival Outcomes in the United States. *Clin Lymphoma Myeloma Leuk*. 2018 Jul;18(7):475-479. doi: 10.1016/j.clml.2018.04.009. Epub 2018 May 4. PubMed PMID: 29752210.

89: Kommalapati A, Tella SH, Goyal G, Ganti AK, Krishnamurthy J, Tandra PK. A prognostic scoring model for survival after locoregional therapy in de novo stage IV breast cancer. *Breast Cancer Res Treat*. 2018 Aug;170(3):677-685. doi: 10.1007/s10549-018-4802-2. Epub 2018 May 2. PubMed PMID: 29721715.

90: Kordus RJ, Hossain A, Corso MC, Chakraborty H, Whitman-Elia GF, LaVoie HA. Cumulus cell pappalysin-1, luteinizing hormone/choriogonadotropin receptor, amphiregulin and hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 1 mRNA levels associate with oocyte developmental competence and embryo outcomes. *J Assist Reprod Genet*. 2019 Jul;36(7):1457-1469. doi: 10.1007/s10815-019-01489-8. Epub 2019 Jun 11. PubMed PMID: 31187330; PubMed Central PMCID: PMC6657401.

91: Kushchayev SV, Kushchayeva YS, Tella SH, Glushko T, Pacak K, Teytelboym OM. Medullary Thyroid Carcinoma: An Update on Imaging. *J Thyroid Res.* 2019 Jul 7;2019:1893047. doi: 10.1155/2019/1893047. eCollection 2019. Review. PubMed PMID: 31360432; PubMed Central PMCID: PMC6642782.

92: Kushchayeva YS, Tella SH, Kushchayev SV, Van Nostrand D, Kulkarni K. Comparison of hyperparathyroidism types and utility of dual radiopharmaceutical acquisition with Tc99m sestamibi and (123)I for localization of rapid washout parathyroid adenomas. *Osteoporos Int.* 2019 May;30(5):1051-1057. doi: 10.1007/s00198-019-04846-6. Epub 2019 Jan 31. PubMed PMID: 30706095.

93: Kushchayeva YS, Kushchayev SV, Glushko TY, Tella SH, Teytelboym OM, Collins MT, Boyce AM. Fibrous dysplasia for radiologists: beyond ground glass bone matrix. *Insights Imaging.* 2018 Dec;9(6):1035-1056. doi: 10.1007/s13244-018-0666-6. Epub 2018 Nov 27. Review. PubMed PMID: 30484079; PubMed Central PMCID: PMC6269335.

94: Lai B, Wang J, Fagenson A, Sun Y, Saredy J, Lu Y, Nanayakkara G, Yang WY, Yu D, Shao Y, Drummer C 4th, Johnson C, Saaoud F, Zhang R, Yang Q, Xu K, Mastascusa K, Cueto R, Fu H, Wu S, Sun L, Zhu P, Qin X, Yu J, Fan D, Shen YH, Sun J, Rogers T, Choi ET, Wang H, Yang X. Twenty Novel Disease Group-Specific and 12 New Shared Macrophage Pathways in Eight Groups of 34 Diseases Including 24 Inflammatory Organ Diseases and 10 Types of Tumors. *Front Immunol.* 2019 Nov 14;10:2612. doi: 10.3389/fimmu.2019.02612. eCollection 2019. PubMed PMID: 31824480; PubMed Central PMCID: PMC6880770.

95: Lamb MM, Cai B, Royer J, Pandya S, Soim A, Valdez R, DiGuseppi C, James K, Whitehead N, Peay H, Venkatesh SY, Matthews D; Muscular Dystrophy Surveillance, Research, and Tracking Network (MD STARnet). The effect of steroid treatment on weight in nonambulatory males with Duchenne muscular dystrophy. *Am J Med Genet A.* 2018 Nov;176(11):2350-2358. doi: 10.1002/ajmg.a.40517. Epub 2018 Sep 26. PubMed PMID: 30256515.

96: Liese AD, Ma X, Reid L, Sutherland MW, Bell BA, Eberth JM, Probst JC, Turley CB, Mayer-Davis EJ. Health care access and glycemic control in youth and young adults with type 1 and type 2 diabetes in South Carolina. *Pediatr Diabetes.* 2019 May;20(3):321-329. doi: 10.1111/pedi.12822. Epub 2019 Feb 19. PubMed PMID: 30666775; PubMed Central PMCID: PMC6456401.

97: Lindsey ML, Gray GA, Wood SK, Curran-Everett D. Statistical considerations in reporting cardiovascular research. *Am J Physiol Heart Circ Physiol.* 2018 Aug 1;315(2):H303-H313. doi: 10.1152/ajpheart.00309.2018. Epub 2018 Jul 20. PubMed

PMID: 30028200; PubMed Central PMCID: PMC6139626.

98: Macht VA, Woodruff JL, Maissy ES, Grillo CA, Wilson MA, Fadel JR, Reagan LP. Pyridostigmine bromide and stress interact to impact immune function, cholinergic neurochemistry and behavior in a rat model of Gulf War Illness. *Brain Behav Immun*. 2019 Aug;80:384-393. doi: 10.1016/j.bbi.2019.04.015. Epub 2019 Apr 3. PubMed PMID: 30953774; PubMed Central PMCID: PMC6790976.

99: Macht VA, Woodruff JL, Grillo CA, Wood CS, Wilson MA, Reagan LP. Pathophysiology in a model of Gulf War Illness: Contributions of pyridostigmine bromide and stress. *Psychoneuroendocrinology*. 2018 Oct;96:195-202. doi: 10.1016/j.psyneuen.2018.07.015. Epub 2018 Jul 10. PubMed PMID: 30041099.

100: Mahboob R, Rizvi AA. VISUAL VIGNETTE. *Endocr Pract*. 2018 Dec;24(12):1110. doi: 10.4158/EP-2018-0209. Epub 2018 Aug 14. PubMed PMID: 30106631.

101: Mahipal A, Tella SH, Kommalapati A, Goyal G, Soares H, Neuger A, Copolla D, Kim J, Kim R. Phase 1 trial of enzalutamide in combination with gemcitabine and nab-paclitaxel for the treatment of advanced pancreatic cancer. *Invest New Drugs*. 2019 Jun;37(3):473-481. doi: 10.1007/s10637-018-0676-8. Epub 2018 Oct 9. PubMed PMID: 30298303.

102: Mahipal A, Tella SH, Kommalapati A, Anaya D, Kim R. FGFR2 genomic aberrations: Achilles heel in the management of advanced cholangiocarcinoma. *Cancer Treat Rev*. 2019 Aug;78:1-7. doi: 10.1016/j.ctrv.2019.06.003. Epub 2019 Jun 22. Review. PubMed PMID: 31255945.

103: Mahipal A, Kommalapati A, Tella SH, Lim A, Kim R. Novel targeted treatment options for advanced cholangiocarcinoma. *Expert Opin Investig Drugs*. 2018 Sep;27(9):709-720. doi: 10.1080/13543784.2018.1512581. Epub 2018 Aug 30. Review. PubMed PMID: 30124336.

104: McDonald AJ, Mascagni F. Cholecystokinin immunoreactive neurons in the basolateral amygdala of the rhesus monkey (*Macaca mulatta*). *J Comp Neurol*. 2019 Nov 1;527(16):2694-2702. doi: 10.1002/cne.24700. Epub 2019 Apr 22. PubMed PMID: 30980540; PubMed Central PMCID: PMC6721981.

105: McHale C, Mohammed Z, Gomez G. Human Skin-Derived Mast Cells Spontaneously Secrete Several Angiogenesis-Related Factors. *Front Immunol*. 2019 Jun 25;10:1445. doi: 10.3389/fimmu.2019.01445. eCollection 2019. PubMed PMID: 31293594; PubMed

Central PMCID: PMC6603178.

106: Mediwala KN, Kohn JE, Bookstaver PB, Justo JA, Rac H, Tucker K, Lashkova L, Dash S, Al-Hasan MN. Syndrome-specific versus prospective audit and feedback interventions for reducing use of broad-spectrum antimicrobial agents. *Am J Infect Control*. 2019 Nov;47(11):1284-1289. doi: 10.1016/j.ajic.2019.04.175. Epub 2019 Jun 18. PubMed PMID: 31221448.

107: Mehrpouya-Bahrami P, Miranda K, Singh NP, Zumbun EE, Nagarkatti M, Nagarkatti PS. Role of microRNA in CB1 antagonist-mediated regulation of adipose tissue macrophage polarization and chemotaxis during diet-induced obesity. *J Biol Chem*. 2019 May 10;294(19):7669-7681. doi: 10.1074/jbc.RA118.005094. Epub 2019 Mar 25. PubMed PMID: 30910812; PubMed Central PMCID: PMC6514622.

108: Merrell DS, McAvoy TJ, King MC, Sittig M, Millar EV, Nieroda C, Metcalf JL, Blum FC, Testerman TL, Sardi A. Pre- and post-operative antibiotics in conjunction with cytoreductive surgery and heated intraperitoneal chemotherapy (HIPEC) should be considered for pseudomyxoma peritonei (PMP) treatment. *Eur J Surg Oncol*. 2019 Sep;45(9):1723-1726. doi: 10.1016/j.ejso.2019.01.223. Epub 2019 Jan 30. PubMed PMID: 30770164.

109: Merritt M, Kline H, Garimella S, Seigler R. Pseudohyperkalemia in a Patient with T-Cell Acute Lymphoblastic Leukemia and Hyperleukocytosis. *J Pediatr Intensive Care*. 2018 Sep;7(3):166-168. doi: 10.1055/s-0038-1624569. Epub 2018 Feb 1. PubMed PMID: 31074466; PubMed Central PMCID: PMC6260356.

110: Mohammed AD, Khan MAW, Chatzistamou I, Chamseddine D, Williams-Kang K, Perry M, Enos R, Murphy A, Gomez G, Aladhami A, Oskeritzian CA, Jolly A, Chang Y, He S, Pan Z, Kubinak JL. Gut Antibody Deficiency in a Mouse Model of CVID Results in Spontaneous Development of a Gluten-Sensitive Enteropathy. *Front Immunol*. 2019 Oct 23;10:2484. doi: 10.3389/fimmu.2019.02484. eCollection 2019. PubMed PMID: 31708923; PubMed Central PMCID: PMC6820504.

111: Morrow D, Cupp J, Schrifft D, Nathanson R, Soni NJ. Point-of-Care Ultrasound in Established Settings. *South Med J*. 2018 Jul;111(7):373-381. doi: 10.14423/SMJ.0000000000000838. PubMed PMID: 29978220.

112: Mujadzic T, Gober CA, Nahabedian DB, Ritter EF, Mujadzic M. Innervated Pedicled Gracilis Flap for Dynamic Abdominal Wall Reconstruction. *Plast Reconstr Surg Glob Open*. 2018 Sep 6;6(9):e1852. doi: 10.1097/GOX.0000000000001852. eCollection 2018 Sep. PubMed PMID: 30349769; PubMed Central PMCID: PMC6191209.

- 113: Mumtaz K, Issak A, Porter K, Kelly S, Hanje J, Michaels AJ, Conteh LF, El-Hinnawi A, Black SM, Abougergi MS. Validation of Risk Score in Predicting Early Readmissions in Decompensated Cirrhotic Patients: A Model Based on the Administrative Database. *Hepatology*. 2019 Aug;70(2):630-639. doi: 10.1002/hep.30274. Epub 2019 Feb 19. PubMed PMID: 30218583.
- 114: Nguyen V, Hochman M, Mihm MC Jr, Nelson JS, Tan W. The Pathogenesis of Port Wine Stain and Sturge Weber Syndrome: Complex Interactions between Genetic Alterations and Aberrant MAPK and PI3K Activation. *Int J Mol Sci*. 2019 May 7;20(9). pii: E2243. doi: 10.3390/ijms20092243. Review. PubMed PMID: 31067686; PubMed Central PMCID: PMC6539103.
- 115: Novick WM, Molloy F, Bowtell K, Forsberg B, Pavanić M, Polivenok I, Rao S, Muñoz Y, Cardarelli M. Pediatric Cardiac Service Development Programs for Low- and Middle-Income Countries in Need of Improving or Initiating Local Services. *Front Pediatr*. 2019 Sep 20;7:359. doi: 10.3389/fped.2019.00359. eCollection 2019. Review. PubMed PMID: 31616645; PubMed Central PMCID: PMC6763596.
- 116: Oatmen KE, Toro-Salazar OH, Hauser K, Zellars KN, Mason KC, Hor K, Gillan E, Zeiss CJ, Gatti DM, Spinale FG. Identification of a novel microRNA profile in pediatric patients with cancer treated with anthracycline chemotherapy. *Am J Physiol Heart Circ Physiol*. 2018 Nov 1;315(5):H1443-H1452. doi: 10.1152/ajpheart.00252.2018. Epub 2018 Aug 24. PubMed PMID: 30141982.
- 117: Oatmen KE, Zile MR, Burnett JC Jr, Spinale FG. Bioactive Signaling in Next-Generation Pharmacotherapies for Heart Failure: A Review. *JAMA Cardiol*. 2018 Dec 1;3(12):1232-1243. doi: 10.1001/jamacardio.2018.3789. Review. PubMed PMID: 30484834.
- 118: Ohayon MM, Black J, Krystal AD, Shapiro CM, Swick TJ, Bogan R, Wells CC. Longitudinal study of narcolepsy symptoms in first, second, and third-degree relatives of simplex and multiplex narcolepsy families. *Sleep Med*. 2019 Jan;53:88-93. doi: 10.1016/j.sleep.2018.06.015. Epub 2018 Jul 6. PubMed PMID: 30496948.
- 119: Pandi-Perumal SR, Zeller JL, Parthasarathy S, Edward Freeman R, Narasimhan M. Herding cats and other epic challenges: Creating meaningful stakeholder engagement in community mental health research. *Asian J Psychiatr*. 2019 Apr;42:19-21. doi: 10.1016/j.ajp.2019.03.019. Epub 2019 Mar 26. Review. PubMed PMID: 30939395.

120: Parrott ME, Aljrbi E, Biederman DL, Montalvo RN, Barth JL, LaVoie HA. Feature Article: Maternal cardiac messenger RNA expression of extracellular matrix proteins in mice during pregnancy and the postpartum period. *Exp Biol Med* (Maywood). 2018 Nov;243(15-16):1220-1232. doi: 10.1177/1535370218818457. Epub 2018 Dec 12. PubMed PMID: 30541349; PubMed Central PMCID: PMC6384446.

121: Patel SV, Gill H, Shahi D, Rajabalan A, Patel P, Sonani R, Bhatt P, Rodriguez RD, Bautista M, Deshmukh A, Gonzalez JV, Patel S. High risk for obstructive sleep apnea hypopnea syndrome predicts new onset atrial fibrillation after cardiac surgery: a retrospective analysis. *Sleep Breath*. 2018 Dec;22(4):1117-1124. doi: 10.1007/s11325-018-1645-3. Epub 2018 Feb 19. PubMed PMID: 29460195.

122: Patti AM, Nikolic D, Magan-Fernandez A, Giglio RV, Castellino G, Chianetta R, Citarrella R, Corrado E, Provenzano F, Provenzano V, Montalto G, Rizvi AA, Rizzo M. Exenatide once-weekly improves metabolic parameters, endothelial dysfunction and carotid intima-media thickness in patients with type-2 diabetes: An 8-month prospective study. *Diabetes Res Clin Pract*. 2019 Mar;149:163-169. doi: 10.1016/j.diabres.2019.02.006. Epub 2019 Feb 10. PubMed PMID: 30759365.

123: Peluso H, Jones WB, Parikh AA, Abougergi MS. Treatment outcomes, 30-day readmission and healthcare resource utilization after pancreatoduodenectomy for pancreatic malignancies. *J Hepatobiliary Pancreat Sci*. 2019 May;26(5):187-194. doi: 10.1002/jhbp.621. Epub 2019 Apr 8. PubMed PMID: 30900403.

124: Peluso H, Abougergi MS, Caffrey J. Impact of primary payer status on outcomes among patients with burn injury: A nationwide analysis. *Burns*. 2018 Dec;44(8):1973-1981. doi: 10.1016/j.burns.2018.06.009. Epub 2018 Jul 11. PubMed PMID: 30005990.

125: Prevot TD, Li G, Vidojevic A, Misquitta KA, Fee C, Santrac A, Knutson DE, Stephen MR, Kodali R, Zahn NM, Arnold LA, Scholze P, Fisher JL, Marković BD, Banasr M, Cook JM, Savic M, Sibille E. Novel Benzodiazepine-Like Ligands with Various Anxiolytic, Antidepressant, or Pro-Cognitive Profiles. *Mol Neuropsychiatry*. 2019 Apr;5(2):84-97. doi: 10.1159/000496086. Epub 2019 Jan 23. PubMed PMID: 31192221; PubMed Central PMCID: PMC6528097.

126: Purcell BP, Barlow SC, Perreault PE, Freeburg L, Doviak H, Jacobs J, Hoenes A, Zellars KN, Khakoo AY, Lee T, Burdick JA, Spinale FG. Delivery of a matrix metalloproteinase-responsive hydrogel releasing TIMP-3 after myocardial infarction: effects on left ventricular remodeling. *Am J Physiol Heart Circ Physiol*. 2018 Oct 1;315(4):H814-H825. doi: 10.1152/ajpheart.00076.2018. Epub 2018



Jul 6. PubMed PMID: 29979624; PubMed Central PMCID: PMC6230910.

127: Rac H, Gould AP, Bookstaver PB, Justo JA, Kohn J, Al-Hasan MN. Evaluation of early clinical failure criteria for gram-negative bloodstream infections. *Clin Microbiol Infect.* 2020 Jan;26(1):73-77. doi: 10.1016/j.cmi.2019.05.017. Epub 2019 May 31. PubMed PMID: 31158519.

128: Ramsey EG, Royer J, Bookstaver PB, Justo JA, Kohn J, Albrecht H, Al-Hasan MN. Seasonal variation in antimicrobial resistance rates of community-acquired *Escherichia coli* bloodstream isolates. *Int J Antimicrob Agents.* 2019 Jul;54(1):1-7. doi: 10.1016/j.ijantimicag.2019.03.010. Epub 2019 Mar 15. PubMed PMID: 30885805.

129: Ray SK. Nonradioactive and Radioactive Telomerase Assays for Detecting Diminished Telomerase Activity in Cancer Cells after Treatment with Retinoid. *Methods Mol Biol.* 2019;2019:257-273. doi: 10.1007/978-1-4939-9585-1\_18. PubMed PMID: 31359402.

130: Reaume M, Siuba M, Wagner M, Woodwyk A, Melgar TA. Prevalence and Scope of Point-of-Care Ultrasound Education in Internal Medicine, Pediatric, and Medicine-Pediatric Residency Programs in the United States. *J Ultrasound Med.* 2019 Jun;38(6):1433-1439. doi: 10.1002/jum.14821. Epub 2018 Sep 26. PubMed PMID: 30255947.

131: Reichelt AC, Stoeckel LE, Reagan LP, Winstanley CA, Page KA. Dietary influences on cognition. *Physiol Behav.* 2018 Aug 1;192:118-126. doi: 10.1016/j.physbeh.2018.02.052. Epub 2018 Mar 1. PubMed PMID: 29501837; PubMed Central PMCID: PMC6071323.

132: Riddle PJ Jr, Shetty A, Brock AS. Confirmatory Visualization of an Aorto-enteric Fistula With Esophagogastroduodenoscopy. *Clin Gastroenterol Hepatol.* 2019 Dec;17(13):e157. doi: 10.1016/j.cgh.2018.08.070. Epub 2018 Sep 7. PubMed PMID: 30196161.

133: Rizzo M, Nikolic D, Patti AM, Mannina C, Montalto G, McAdams BS, Rizvi AA, Cosentino F. GLP-1 receptor agonists and reduction of cardiometabolic risk: Potential underlying mechanisms. *Biochim Biophys Acta Mol Basis Dis.* 2018 Sep;1864(9 Pt B):2814-2821. doi: 10.1016/j.bbadis.2018.05.012. Epub 2018 May 18. Review. PubMed PMID: 29778663.

134: Sarkar S, Kimono D, Albadrani M, Seth RK, Busbee P, Alghetaa H, Porter DE, Scott GI, Brooks B, Nagarkatti M, Nagarkatti P, Chatterjee S. Environmental microcystin targets the microbiome and increases the risk of intestinal inflammatory pathology via NOX2 in underlying murine model of Nonalcoholic Fatty Liver Disease. *Sci Rep.* 2019 Jun 19;9(1):8742. doi: 10.1038/s41598-019-45009-1. PubMed PMID: 31217465; PubMed Central PMCID: PMC6584534.

135: Sawyer KN, Mooney M, Norris G, Devlin T, Lundbye J, Doshi PB, Hewett JK, Kono AT, Jorgensen JP, O'Neil BJ. COOL-ARREST: Results from a Pilot Multicenter, Prospective, Single-Arm Observational Trial to Assess Intravascular Temperature Management in the Treatment of Cardiac Arrest. *Ther Hypothermia Temp Manag.* 2019 Mar;9(1):56-62. doi: 10.1089/ther.2018.0007. Epub 2018 Jun 8. PubMed PMID: 29883298.

136: Saylor RA, Hersey M, West A, Buchanan AM, Berger SN, Nijhout HF, Reed MC, Best J, Hashemi P. Corrigendum: In vivo Hippocampal Serotonin Dynamics in Male and Female Mice: Determining Effects of Acute Escitalopram Using Fast Scan Cyclic Voltammetry. *Front Neurosci.* 2019 Jul 9;13:726. doi: 10.3389/fnins.2019.00726. eCollection 2019. PubMed PMID: 31354425; PubMed Central PMCID: PMC6630529.

137: Saylor RA, Hersey M, West A, Buchanan AM, Berger SN, Nijhout HF, Reed MC, Best J, Hashemi P. In vivo Hippocampal Serotonin Dynamics in Male and Female Mice: Determining Effects of Acute Escitalopram Using Fast Scan Cyclic Voltammetry. *Front Neurosci.* 2019 Apr 23;13:362. doi: 10.3389/fnins.2019.00362. eCollection 2019. Erratum in: *Front Neurosci.* 2019 Jul 09;13:726. PubMed PMID: 31110471; PubMed Central PMCID: PMC6499219.

138: Sharon D, Allen RP, Martinez-Martin P, Walters AS, Ferini Strambi L, Högl B, Trotti LM, Buchfuhrer M, Swieca J, Bogan RK, Zak R, Hensley JG, Schaefer LA, Marelli S, Zucconi M, Stefani A, Holzknicht E, Olvera V, Meaklim H, Laska I, Becker PM; International RLS Study Group. Validation of the self-administered version of the international Restless Legs Syndrome study group severity rating scale - The sIRLS. *Sleep Med.* 2019 Feb;54:94-100. doi: 10.1016/j.sleep.2018.10.014. Epub 2018 Oct 29. PubMed PMID: 30529783.

139: Shen-Wagner J, Wagner M, Hughes A. A Patient's Perspective: Pairing the Stethoscope with POCUS to Evaluate Acute Dyspnea in the Clinic. *South Med J.* 2018 Jul;111(7):401-403. doi: 10.14423/SMJ.0000000000000839. PubMed PMID: 29978224.

140: Shidal C, Singh NP, Nagarkatti P, Nagarkatti M. MicroRNA-92 Expression in CD133(+) Melanoma Stem Cells Regulates Immunosuppression in the Tumor Microenvironment via Integrin-Dependent Activation of TGF $\beta$ . *Cancer Res.* 2019 Jul

15;79(14):3622-3635. doi: 10.1158/0008-5472.CAN-18-2659. Epub 2019 Apr 23. PubMed PMID: 31015227; PubMed Central PMCID: PMC6635067.

141: Shivappa N, Wirth MD, Murphy EA, Hurley TG, Hébert JR. Association between the Dietary Inflammatory Index (DII) and urinary enterolignans and C-reactive protein from the National Health and Nutrition Examination Survey-2003-2008. *Eur J Nutr.* 2019 Mar;58(2):797-805. doi: 10.1007/s00394-018-1690-5. Epub 2018 Apr 19. PubMed PMID: 29675557.

142: Shokoohi H, LeSaux MA, Roohani YH, Liteplo A, Huang C, Blaivas M. Enhanced Point-of-Care Ultrasound Applications by Integrating Automated Feature-Learning Systems Using Deep Learning. *J Ultrasound Med.* 2019 Jul;38(7):1887-1897. doi: 10.1002/jum.14860. Epub 2018 Nov 13. PubMed PMID: 30426536.

143: Singh NP, Miranda K, Singh UP, Nagarkatti P, Nagarkatti M. Diethylstilbestrol (DES) induces autophagy in thymocytes by regulating Beclin-1 expression through epigenetic modulation. *Toxicology.* 2018 Dec 1;410:49-58. doi: 10.1016/j.tox.2018.08.012. Epub 2018 Aug 25. PubMed PMID: 30153466; PubMed Central PMCID: PMC6463288.

144: Skeete J, Connell K, Ordunez P, DiPette DJ. The American College of Cardiology/American Heart Association 2017 hypertension guideline: Implications for incorporation in Latin America, the Caribbean, and other resource-limited settings. *J Clin Hypertens (Greenwich).* 2018 Sep;20(9):1342-1349. doi: 10.1111/jch.13343. Epub 2018 Jul 10. PubMed PMID: 29992727.

145: Smith DK, Chang MH, Duffus WA, Okoye S, Weissman S. Missed Opportunities to Prescribe Preexposure Prophylaxis in South Carolina, 2013-2016. *Clin Infect Dis.* 2019 Jan 1;68(1):37-42. doi: 10.1093/cid/ciy441. PubMed PMID: 29790923.

146: Song W, Zhang J, Gao N, Tan W, Wang G, Gao L. A combination of 2940-nm laser and photodynamic therapy for treatment of recalcitrant facial flat warts. *Photodiagnosis Photodyn Ther.* 2019 Jun;26:97-100. doi: 10.1016/j.pdpdt.2019.03.002. Epub 2019 Mar 2. PubMed PMID: 30836209.

147: Spinale FG, Meyer TE, Stolen CM, Van Eyk JE, Gold MR, Mittal S, DeSantis SM, Wold N, Beshai JF, Stein KM, Ellenbogen KA; SMART-AV Trial Investigators. Development of a biomarker panel to predict cardiac resynchronization therapy response: Results from the SMART-AV trial. *Heart Rhythm.* 2019 May;16(5):743-753. doi: 10.1016/j.hrthm.2018.11.026. Epub 2018 Nov 24. PubMed PMID: 30476543; PubMed Central PMCID: PMC6540994.

148: Stallworth JL, Dy ME, Buchanan CB, Chen CF, Scott AE, Glaze DG, Lane JB, Lieberman DN, Oberman LM, Skinner SA, Tierney AE, Cutter GR, Percy AK, Neul JL, Kaufmann WE. Hand stereotypies: Lessons from the Rett Syndrome Natural History Study. *Neurology*. 2019 May 28;92(22):e2594-e2603. doi: 10.1212/WNL.0000000000007560. Epub 2019 May 3. PubMed PMID: 31053667; PubMed Central PMCID: PMC6556084.

149: Stevenson RE, Vincent V, Spellicy CJ, Friez MJ, Chaubey A. Biallelic deletions of the Waardenburg II syndrome gene, SOX10, cause a recognizable arthrogyrosis syndrome. *Am J Med Genet A*. 2018 Sep;176(9):1968-1971. doi: 10.1002/ajmg.a.40362. Epub 2018 Aug 16. PubMed PMID: 30113773.

150: Swartz AW, Eberth JM, Strayer SM. Preventing colorectal cancer or early diagnosis: Which is best? A re-analysis of the U.S. Preventive Services Task Force Evidence Report. *Prev Med*. 2019 Jan;118:104-112. doi: 10.1016/j.ypmed.2018.10.014. Epub 2018 Oct 24. PubMed PMID: 30367971.

151: Tampi RR, Zdanys KF, Srinivasan S, Yarns BC. Advice on How to Choose a Geriatric Psychiatry Fellowship. *Am J Geriatr Psychiatry*. 2019 Jul;27(7):687-694. doi: 10.1016/j.jagp.2019.01.013. Epub 2019 Jan 21. PubMed PMID: 30819610.

152: Taylor MA, Khathayer F, Ray SK. Quercetin and Sodium Butyrate Synergistically Increase Apoptosis in Rat C6 and Human T98G Glioblastoma Cells Through Inhibition of Autophagy. *Neurochem Res*. 2019 Jul;44(7):1715-1725. doi: 10.1007/s11064-019-02802-8. Epub 2019 Apr 22. PubMed PMID: 31011879.

153: Taylor MA, Das BC, Ray SK. Targeting autophagy for combating chemoresistance and radioresistance in glioblastoma. *Apoptosis*. 2018 Dec;23(11-12):563-575. doi: 10.1007/s10495-018-1480-9. Review. PubMed PMID: 30171377; PubMed Central PMCID: PMC6193815.

154: Taylor SS, Olsen MK, McVay MA, Grubber J, Gierisch JM, Yancy WS Jr, Voils CI. The role of group cohesion in a group-based behavioral weight loss intervention. *J Behav Med*. 2019 Feb;42(1):162-168. doi: 10.1007/s10865-018-9953-4. Epub 2018 Aug 3. PubMed PMID: 30076501; PubMed Central PMCID: PMC6360135.

155: Tella SH, Kommalapati A, Yadav S, Bergquist JR, Truty MJ, Durgin L, Ma WW, Cleary SP, McWilliams RR, Mahipal A. Survival and prognostic factors in patients with pancreatic squamous cell carcinoma. *Eur J Surg Oncol*. 2019 Sep;45(9):1700-1705. doi: 10.1016/j.ejso.2019.05.011. Epub 2019 May 15. PubMed

PMID: 31118133.

156: Tella SH, Kommalapati A, Rech KL, Go RS, Goyal G. Incidence, Clinical Features, and Outcomes of Langerhans Cell Sarcoma in the United States. *Clin Lymphoma Myeloma Leuk*. 2019 Jul;19(7):441-446. doi: 10.1016/j.clml.2019.03.026. Epub 2019 Apr 1. PubMed PMID: 31005630.

157: Tella SH, Mahipal A, Kommalapati A, Jin Z. Evaluating the Safety and Efficacy of Nivolumab in Patients with Advanced Hepatocellular Carcinoma: Evidence to Date. *Onco Targets Ther*. 2019 Nov 28;12:10335-10342. doi: 10.2147/OTT.S214870. eCollection 2019. Review. PubMed PMID: 31819517; PubMed Central PMCID: PMC6886547.

158: Tella SH, Kommalapati A, Yaturu S, Kebebew E. Predictors of Survival in Adrenocortical Carcinoma: An Analysis From the National Cancer Database. *J Clin Endocrinol Metab*. 2018 Sep 1;103(9):3566-3573. doi: 10.1210/jc.2018-00918. PubMed PMID: 29982685.

159: Testerman TL, Semino-Mora C, Cann JA, Qiang B, Peña EA, Liu H, Olsen CH, Chen H, Appt SE, Kaplan JR, Register TC, Merrell DS, Dubois A. Both diet and *Helicobacter pylori* infection contribute to atherosclerosis in pre- and postmenopausal cynomolgus monkeys. *PLoS One*. 2019 Sep 6;14(9):e0222001. doi: 10.1371/journal.pone.0222001. eCollection 2019. PubMed PMID: 31490998; PubMed Central PMCID: PMC6730863.

160: Torres WM, Jacobs J, Doviak H, Barlow SC, Zile MR, Shazly T, Spinale FG. Regional and temporal changes in left ventricular strain and stiffness in a porcine model of myocardial infarction. *Am J Physiol Heart Circ Physiol*. 2018 Oct 1;315(4):H958-H967. doi: 10.1152/ajpheart.00279.2018. Epub 2018 Jul 13. PubMed PMID: 30004234; PubMed Central PMCID: PMC6230914.

161: Tree MO, Londono-Renteria B, Troupin A, Clark KM, Colpitts TM, Conway MJ. Dengue virus reduces expression of low-density lipoprotein receptor-related protein 1 to facilitate replication in *Aedes aegypti*. *Sci Rep*. 2019 Apr 23;9(1):6352. doi: 10.1038/s41598-019-42803-9. PubMed PMID: 31015516; PubMed Central PMCID: PMC6478881.

162: Uhlig PN, Doll J, Brandon K, Goodman C, Medado-Ramirez J, Barnes MA, Dolansky MA, Ratcliffe TA, Kornswad K, Raboin WE, Hitzeman M, Brown J, Hall L. Interprofessional Practice and Education in Clinical Learning Environments: Frontlines Perspective. *Acad Med*. 2018 Oct;93(10):1441-1444. doi:

10.1097/ACM.0000000000002371. PubMed PMID: 30024477.

163: VanderVeen BN, Fix DK, Montalvo RN, Counts BR, Smuder AJ, Murphy EA, Koh HJ, Carson JA. The regulation of skeletal muscle fatigability and mitochondrial function by chronically elevated interleukin-6. *Exp Physiol*. 2019 Mar;104(3):385-397. doi: 10.1113/EP087429. Epub 2019 Jan 15. PubMed PMID: 30576589; PubMed Central PMCID: PMC6750733.

164: Vinnakota RD, Brett AS. Iron Deficiency Anemia Associated With Acid-Modifying Medications: Two Cases and Literature Review. *Am J Med Sci*. 2019 Feb;357(2):160-163. doi: 10.1016/j.amjms.2018.10.014. Epub 2018 Nov 1. Review. PubMed PMID: 30528320.

165: Wagner M, Shen-Wagner J, Zhang KX, Flynn T, Bergman K. Point-of-Care Ultrasound Applications in the Outpatient Clinic. *South Med J*. 2018 Jul;111(7):404-410. doi: 10.14423/SMJ.0000000000000835. Review. PubMed PMID: 29978225.

166: Wagner M, Boughton J. PEARLS for an Ultrasound Physical and Its Routine Use as Part of the Clinical Examination. *South Med J*. 2018 Jul;111(7):389-394. doi: 10.14423/SMJ.0000000000000834. PubMed PMID: 29978222.

167: Wagner M. Point-of-Care Ultrasound: At the Crossroads of General Medicine. *South Med J*. 2018 Jul;111(7):372. doi: 10.14423/SMJ.0000000000000836. PubMed PMID: 29978219.

168: Wang H, Wei X, Wu B, Su J, Tan W, Yang K. Tumor-educated platelet miR-34c-3p and miR-18a-5p as potential liquid biopsy biomarkers for nasopharyngeal carcinoma diagnosis. *Cancer Manag Res*. 2019 Apr 17;11:3351-3360. doi: 10.2147/CMAR.S195654. eCollection 2019. PubMed PMID: 31114371; PubMed Central PMCID: PMC6489554.

169: Wang L, De Solis AJ, Goffer Y, Birkenbach KE, Engle SE, Tanis R, Levenson JM, Li X, Rausch R, Purohit M, Lee JY, Tan J, De Rosa MC, Doege CA, Aaron HL, Martins GJ, Brüning JC, Egli D, Costa R, Berbari N, Leibel RL, Stratigopoulos G. Ciliary gene RPGRIP1L is required for hypothalamic arcuate neuron development. *JCI Insight*. 2019 Feb 7;4(3). pii: 123337. doi: 10.1172/jci.insight.123337. [Epub ahead of print] PubMed PMID: 30728336; PubMed Central PMCID: PMC6413800.

170: Wang X, Lane BA, Eberth JF, Lessner SM, Vyavahare NR. Gold nanoparticles that target degraded elastin improve imaging and rupture prediction in an AngII

mediated mouse model of abdominal aortic aneurysm. *Theranostics*. 2019 May 31;9(14):4156-4167. doi: 10.7150/thno.34441. eCollection 2019. PubMed PMID: 31281538; PubMed Central PMCID: PMC6592177.

171: Wilson MA, Liberzon I, Lindsey ML, Lokshina Y, Risbrough VB, Sah R, Wood SK, Williamson JB, Spinale FG. Common pathways and communication between the brain and heart: connecting post-traumatic stress disorder and heart failure. *Stress*. 2019 Sep;22(5):530-547. doi: 10.1080/10253890.2019.1621283. Epub 2019 Jun 4. PubMed PMID: 31161843; PubMed Central PMCID: PMC6690762.

172: Wirth MD, Robinson C, Murphy EA, Shivappa N, Hébert JR. The dietary inflammatory index is associated with gastrointestinal infection symptoms in the national health and nutrition examination survey. *Int J Food Sci Nutr*. 2020 Feb;71(1):106-115. doi: 10.1080/09637486.2019.1614539. Epub 2019 May 20. PubMed PMID: 31106619.

173: Wosiski-Kuhn M, Bota M, Snider CA, Wilson SP, Venkataraju KU, Osten P, Stranahan AM. Hippocampal brain-derived neurotrophic factor determines recruitment of anatomically connected networks after stress in diabetic mice. *Hippocampus*. 2018 Dec;28(12):900-912. doi: 10.1002/hipo.23018. Epub 2018 Nov 6. PubMed PMID: 30098276; PubMed Central PMCID: PMC6544163.

174: Yelton CJ, Ray SK. Histone deacetylase enzymes and selective histone deacetylase inhibitors for antitumor effects and enhancement of antitumor immunity in glioblastoma. *Neuroimmunol Neuroinflamm*. 2018;5. pii: 46. doi: 10.20517/2347-8659.2018.58. Epub 2018 Nov 12. PubMed PMID: 30701185; PubMed Central PMCID: PMC6348296.

175: Yin R, Rice SJ, Wang J, Gao L, Tsai J, Anvari RT, Zhou F, Liu X, Wang G, Tang Y, Mihm MC Jr, Belani CP, Chen DB, Nelson JS, Tan W. Membrane trafficking and exocytosis are upregulated in port wine stain blood vessels. *Histol Histopathol*. 2019 May;34(5):479-490. doi: 10.14670/HH-18-051. Epub 2018 Oct 10. PubMed PMID: 30302745; PubMed Central PMCID: PMC6594380.

176: Zheng J, Tabung FK, Zhang J, Murphy EA, Shivappa N, Ockene JK, Caan B, Kroenke CH, Hébert JR, Steck SE. Post-cancer diagnosis dietary inflammatory potential is associated with survival among women diagnosed with colorectal cancer in the Women's Health Initiative. *Eur J Nutr*. 2019 Apr 6. doi: 10.1007/s00394-019-01956-z. [Epub ahead of print] PubMed PMID: 30955051; PubMed Central PMCID: PMC6778721.