

# **2019 AAMC Central and Southern GSA/OSR Joint Regional Spring Meeting Posters**

Submission ID#586995

## **Medical Student Engagement in a New Learning Communities Program: Association with Burnout and Wellness**

Submission Type: Posters

Submitter: Caroline Harada – University of Alabama School of Medicine

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### **Presenters**

Caroline Harada, MD

Role: Lead Presenter

Jason Noah, MEd

Role: Co-Presenter

James Baños, PhD

Role: Co-Presenter

### **Topic**

Student Personal and Professional Development

- Beyond Step scores and ward performance: redefining student success (resilience
- professionalism
- attainment of competencies)

### **Background/Context and Relevance of the presentation/session**

Medical students suffer from burnout at significantly higher rates than the general population.(1) Many medical schools have adopted learning communities (LC) to enhance the learning experience for students through both curriculum delivery and creation of networks through which students can enjoy social, academic, and student service support.(2) A recent multi-institutional study demonstrated an association between LCs and a more positive learning environment (3), but to date no study has demonstrated an association between LCs and student wellness or burnout. At our institution, we recently transitioned from an unfunded program with volunteer mentors and no participation requirement to a funded program with a structured curriculum, dedicated mentors, and an attendance requirement.

### **Objectives and purpose of the innovation/practice/program/idea**

We sought to determine whether rates of burnout were lower and general well-being higher among students who self-reported high levels of engagement in the new program compared to those who reported lower levels of engagement.

### **Methods**

In February of 2016, 2017, and 2018, all medical students at our institution were invited to complete a survey

that included self-rating of their engagement in the LC program, the 16-item Maslach Burnout Inventory, General Survey (MBI), and the Arizona Integrated Outcomes Scale (AIOS), a validated measure of global well-being. LC engagement was evaluated as a predictor of burnout and global well-being, controlling for demographic variables, class level (preclinical vs clinical), campus assignment (main versus regional), and self-rated level of stress in the current academic year.

### **Outcome/Significance**

A total of 2,180 surveys were distributed. Of those, 1,636 were completed (75% response rate). The analysis sample consisted of 1,311 surveys completed by students participating in the new funded LC program. Not surprisingly, self-rated level of stress for the year emerged as the strongest predictor of burnout and well-being. Higher engagement in LCs was associated with lower scores on the Emotional Exhaustion and Cynicism subscales of the MBI and higher scores on the AIOS. The effect sizes were modest, which is not surprising given the numerous and complex contributors to student burnout. It is not possible to discern whether LC engagement contributed to lower burnout or whether students with lower burnout are more likely to be engaged in LCs.

### **Contribution to the session participants and ability to be utilized by other institutions**

These findings offer support for a primary outcome of interest (student wellness) to schools implementing an LC program. Information regarding the structure of the program and specific efforts to address burnout and well-being will be presented, along with future research directions that might expand further on these findings.

### **References**

1. Dyrbye LN, West CP, Satele D, et al. Burnout among U.S. medical students, residents, and early career physicians relative to the general U.S. population. *Acad Med.* 2014;89(3):443-451.
2. Ferguson KJ, Wolter EM, Yarbrough DB, Carline JD, Krupat E. Defining and describing medical learning communities: results of a national survey. *Acad Med.* 2009;84(11):1549-1556.
3. Smith SD, Dunham L, Dekhtyar M, et al. Medical Student Perceptions of the Learning Environment: Learning Communities Are Associated With a More Positive Learning Environment in a Multi-Institutional Medical School Study. *Acad Med.* 2016;91(9):1263-1269.

Submission ID#587796

## **Communication and Collaboration Challenges of Distributed Leadership Teams**

Submission Type: Posters

Submitter: Deana Wilbanks – Michigan State University College of Human Medicine

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### **Presenters**

Deana M. Wilbanks, MS, LPC, NCC

Role: Lead Presenter

Julie P. Phillips, MD, MPH

Role: Co-Presenter

### **Topic**

The Medical School Environment

- Professionalism navigating evolving challenges

### **Background/Context and Relevance of the presentation/session**

The researchers identified a deficiency of communication and collaborative engagement between student organization leaders on two separate educational campuses at a geographically distributed medical school. Students perceived an inequity of informal learning experiences between the two campuses. This problem contributes to the incomparability of medical student learning experiences in the informal curriculum.

### **Objectives and purpose of the innovation/practice/program/idea**

The purpose of the study was to understand the root causes contributing to the deficiency of communication and collaborative engagement between student organization leaders. Study objectives were to isolate underlying factors and circumstances perpetuating a lack of collaboration between the distributed leadership teams; and to identify strategic interventions to remove these barriers through active, transactional, and transformational leadership practice.

### **Methods**

The principal investigator used a design-based school improvement framework to identify, define, and explore the problem.<sup>1</sup> The study was conducted at a public medical school in the Midwest with two first and second year campuses. Quantitative and qualitative data were collected using an anonymous Qualtrics online survey of medical student organization and interest group leaders. Quantitative data were analyzed using counts and proportions. Open-ended student responses were qualitatively analyzed using a content analysis approach.

### **Outcome/Significance**

Of 123 eligible student leaders, 32 students responded (response rate 26%). The majority of students (17; 53%) indicated that activities should be comparable across campuses, but did not need to be identical. Leaders communicated across campuses only about once a semester. Barriers to collaboration included: geographic distance; difficulty accessing and using technology; unwillingness to share financial resources; weak transitions of leadership from one year to the next, disrupting relationships; lack of faculty advisor training for collaboration; and a perception of separateness of campuses by faculty and staff.

**Contribution to the session participants and ability to be utilized by other institutions**

In response to this needs assessment, the Office of Student Affairs and Services implemented several innovations. Students leaders were given better to access technology (including after-hours access) and offered more access to funding if they collaborated. A shared leadership training curriculum was implemented. Each organization was also required to develop a shared mission statement and have at least one shared leadership meeting. Future areas for growth include development of a shared online platform for use by student organizations.

**Contribution:** Other medical schools with multiple campuses could learn from the Colleges experience in creating a more unified, less fragmented medical school culture.

**References**

1. Mintrop, R. (2016). Design-based school improvement: A practical guide for educational leaders. Cambridge, MA: Harvard Education Press.

## Submission ID#588709

Self Care Month: Showing Students Practical Ways to Incorporate Wellness in their Everyday Lives

Submission Type: Posters

Submitter: Maria Siow – University of South Alabama

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### Presenters

Maria Siow

Role: Lead Presenter

Medical Student

Terry J. Hundley, M.D.

Role: Co-Presenter

Tyler Kaelin

Role: Co-Presenter

Medical Student

Aaron Dinerman

Role: Co-Presenter

Medical Student

### Topic

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### Background/Context and Relevance of the presentation/session

Medical student burnout and wellness are topics that are currently at the forefront of academic medicine. The Wellness Council at the University of South Alabama hosted a Self-Care Month for medical students which offered practical tips and daily challenges to students to encourage them to incorporate wellness into their everyday lives. This poster will highlight some of the daily challenges posed to our students as well as data from a survey given to students at the conclusion of the Self Care Month.

### Objectives and purpose of the innovation/practice/program/idea

- \* Discuss medical student burn out and wellness
- \* Review the self-care month hosted by the wellness council at the University of South Alabama

### Methods

The wellness council hosted a self-care month with a different theme to each week and daily challenges centered around the theme of the week. An anonymous survey was then sent to students after the conclusion of the month.

**Outcome/Significance**

The majority of students that filled out the survey found the challenges to be feasible to work into their schedules and gave good feedback about the challenges they enjoyed the most.

**Contribution to the session participants and ability to be utilized by other institutions**

Our hope is that other institutions will see value in the Self Care Month we implemented and will bring a piece of it back to their student bodies.

## Submission ID#589518

Student Perception of Usefulness of Available Match Resources

Submission Type: Posters

Submitter: Corey Koperski – Michigan State University College of Human Medicine

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### Presenters

Corey M. Koperski, M.S.

Role: Lead Presenter

Julie P. Phillips, MD, MPH

Role: Co-Presenter

### Topic

Student Personal and Professional Development

- Career Advising/Match/ NRMP Update

### Background/Context and Relevance of the presentation/session

The residency application process is highly competitive and complex, with a large number of applicants contending for a smaller number of positions. Over the last decade, residency applicants are applying to more programs, yet this does not lead to an improved match rate. 1 There is not a magic number of applications to submit, as application strategy will vary depending on applicant experiences, qualifications, and personal circumstances. 2 In order to be well-informed and adequately prepare their application, applicants utilize a variety of resources to determine their own competitiveness and best fit programs. There are a variety of resources available to help applicants understand the requirements of specific residency programs. However, there is a gap in knowledge about which resources applicants use most often and find most beneficial. Furthermore, little information is available about how students' strategies vary by medical specialty.

### Objectives and purpose of the innovation/practice/program/idea

The purpose of this study is to examine the resources fourth year medical students and graduates utilize most often to decide which programs to apply to during the residency match. The objectives are to 1) identify the most commonly used resources, 2) examine the perceived usefulness of a variety of resources, and 3) explore what information is not currently available to applicants.

### Methods

Research is in progress. All fourth year medical students and graduates from a single, Midwestern, public medical school, who are participating in the match, will receive an anonymous survey in December 2018 to assess frequency of use and perceived usefulness of a variety of resources. Additional open-ended questions will explore gaps in information available to applicants. Quantitative data will be analyzed using counts and proportions. Chi-square analyses, t-tests, and correlations will be used to analyze findings based on students specialty choices, academic performance, and demographics. Qualitative responses will be analyzed using content analysis.

### Outcome/Significance

Research is in progress. We anticipate that results will identify the most useful current resources for students,

illuminate differences in use by specialty and demographics, and identify gaps in information easily available and accessible to students. We anticipate that results will help students determine which tools are most useful, and will help the AAMC and other organizations develop better tools to guide students through the program selection process.

### **Contribution to the session participants and ability to be utilized by other institutions**

This preliminary study includes only one institution. However, as most of the resources used by students are internet-based, the findings will have some generalizability to students at other medical schools.

### **References**

1. Weissbart SJ, Kim SJ, Feinn RS, Stock JA. Relationship Between the Number of Residency Applications and the Yearly Match Rate: Time to Start Thinking About an Application Limit? *Journal of Graduate Medical Education*. 2015;7(1):81-85.
- 2.. AAMC. Researching Residency Programs and Building an Application Strategy. 2018; <https://students-residents.aamc.org/applying-residency/apply-smart-residency/researching-residency-programs-and-building-application-strategy/>. Accessed October 1, 2018, 2018.



## Submission ID#589597

CORD Advising Students Committee in Emergency Medicine: Helping Students Apply Smarter, not Harder

Submission Type: Posters

Submitter: Alexis Pelletier-Bui – Cooper Medical School of Rowan University

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### **Presenter(s)**

Kendra Parekh, MD

Role: Lead Presenter

### **Topic**

Student Personal and Professional Development

- Career Advising/Match/ NRMP Update

### **Background/Context and Relevance of the presentation/session**

The Council of Residency Directors (CORD) Advising Students Committee in Emergency Medicine (ASC-EM) was created in 2013 in response to the perceived crisis in the EM Match - 2012 was a year without an unmatched position in EM programs as well as the year that the over-applying phenomenon started becoming apparent. ASC-EMs goal is to help students apply smarter, not harder.

### **Objectives and purpose of the innovation/practice/program/idea**

ASC-EM provides consistent, quality advising resources to advisors and students applying to emergency medicine (EM) residency.

### **Methods**

ASC-EM creates evidence- and consensus-based resources in response to needs assessments of EM bound students and advisors, including applying guides and student planners for the general EM applicant and special applicant populations (couples, IMG, osteopathic, military, re-applicants into EM, students at risk for not matching, etc.). ASC-EM has collaborated with the Emergency Medicine Residents Association (EMRA) to create EMRA Match (filterable directory of EM residency programs and clerkships) and EMRA Hangouts (live webinars connecting students with advisors). An advisor consult service helps answer specific questions from advisors.

### **Outcome/Significance**

ASC-EM resources are endorsed by organizations in academic EM, are housed on our website and have been distributed through publications, conferences, listservs, and social media. Our Vocal CORD blog posts of our resources have had 50K views by 34K visitors. EMRA hangouts has been utilized by 2000 students and EMRA Match had >200K searches in just a 6 month period in 2017.

### **Contribution to the session participants and ability to be utilized by other institutions**

ASC-EMs model could be used by other specialties or medical school administration for creating their own tools for advising medical students.

### **References**

1. National Resident Matching Program, Results and Data: 2012 Main Residency Match. National Resident Matching Program,

Washington, DC. 2012.

2. Association of American Medical Colleges. (2017, December 12). Table C-4: Residency Applicants from U.S. MD-Granting Medical Schools to ACGME-Accredited Programs by Specialty, 2012-2013 through 2017-2018. Retrieved from <https://www.aamc.org/download/321564/data/factstablec4.pdf>
3. Association of American Medical Colleges. (2018, March 21). Apply smart in emergency medicine: New data to consider. Retrieved from <https://www.aamc.org/cim/478994/applysmartem.html>
4. Council of Residency Directors in Emergency Medicine (CORD). (2018, May 29). Advising Students Committee in EM. Retrieved from <https://www.cordem.org/communities/committees/advising-student-comm/>
5. Carle, D., Christensen, R., Jarou, Z., King, K., & Druck, J. (2018). Student Use and Perceived Reliability of Emergency Medicine Advising Sources. *Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health*, 19(4.1). Retrieved from <https://escholarship.org/uc/item/8tq1v5p7>

## Submission ID#589999

Initiating Exposure into Health Systems Science: Re-Envisioning the Premedical Shadowing Experience

Submission Type: Posters

Submitter: Carol Elam – University of Kentucky College of Medicine

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### Presenter(s)

Carol Elam, EdD

Role: Lead Presenter

Heather Ridinger, MD

Role: Co-Presenter

Elizabeth Nelson, MD

Role: Co-Presenter

### Topic

Recruitment and Admissions

- Admissions policies/ practices the evolving political/legal context

### Background/Context and Relevance of the presentation/session

Along with having competitive grades and Medical College Admission Test scores as well as strong letters of evaluation, most premedical students seek shadowing experiences in medicine. Admissions officers argue that adequate exposure helps students determine if medicine is the right fit for their intellectual, service, and professional interests.<sup>1</sup>

Unfortunately, students are often left to their own devices to determine what kind of shadowing or volunteer exposure to medicine is preferred by admissions committees, and how much exposure is enough.

Compounding the lack of clarity related to the desired learning outcomes and the nature and extent of shadowing experiences is the difficulty in obtaining placements.<sup>2</sup> Stringent policies at many hospitals and clinics restrict access that high school and college observers may have to the patient care setting. As a result, finding creative ways to introduce premedical students to the health care system may be a necessary option for exposing them to the medical profession and the environment in which medicine is practiced.

Objectives and purpose of the innovation/practice/program/idea

Review results of a literature review documenting the value of shadowing experiences.

Explore current policies and barriers at selected hospitals regarding premedical student exposure to patients in their settings.

Review components of health system science (HSS) as defined by the American Medical Association and discuss which areas may be applicable to the premedical student.

### Methods

Using concepts from the AMAs Accelerating Change initiative,<sup>3</sup> the poster will outline core and cross-cutting domains of Health Systems Science including health care structures, information technology, teamwork and interprofessional collaboration, population and public health, professionalism and ethics, and leadership and change. Referencing these domains, can we reframe and better define shadowing outcomes? Can we restructure opportunities for exposure to health care settings? Can we help premedical students develop a

preliminary understanding of selected aspects of health systems science that will be foundational to their medical studies?

### **Outcome/Significance**

Determine key concepts in health systems science to include in a template used for designing appropriate learning experiences for premedical students.

### **Contribution to the session participants and ability to be utilized by other institutions**

To initiate the development of a guidebook of learning objectives, settings, roles for students and preceptors, activities, and outcomes for shadowing experiences that frame pertinent health systems issues. Having a clearer concept of health systems science may help future physicians be better prepared to practice effectively in 21st century health systems and possess the insight and skills to be effective advocates and change agents to improve health care at patient and systems levels. 3

### **References**

1. Wang JY, Lin H, Lewis PY, Fetterman DM, Gesundheit N. Is a career in medicine the right choice? The impact of a physician shadowing program on undergraduate premedical students. *Acad Med.* 2015 May; 90(5):629-33.
2. Kitsis EA, Goldsammler M. Physician shadowing: a review of the literature and proposal for guidelines. *Acad Med.* 2013 Jan; 88(1):102-10.
3. Skochelak, S. E., Hawkins, R. E., Lawson, L. E., Starr, S. R., Borkan, J., & Gonzalo, J. D. (2016). *Health Systems Science* (Vol. 1). Elsevier Health Sciences. doi:10.1186/2047-2501-1-1

## Submission ID#590545

OSR Workshop on Sexual Assault

Submission Type: Posters

Submitter: Teodora Stoikov – University of South Carolina School of Medicine Greenville

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### **Presenter(s)**

Teodora S. Stoikov

Role: Lead Presenter

Medical Student

Bryan P. Knoedler

Role: Co-Presenter

Medical Student

Kathryn Dumas

Role: Co-Presenter

Medical Student

Dillon Isaac, MSBS

Role: Co-Presenter

Medical Student

### **Topic**

Diversity, Inclusion, and Social Justice

- Holistic support to match holistic review admissions efforts
- Empowering students and creating the climate and context for success

### **Background/Context and Relevance of the presentation/session**

Contact sexual violence (CSV) affects nearly half of women and a quarter of men in the United States. These individuals are victims of rape, forced penetration, sexual coercion, and/or unwanted sexual contact. The consequences of CSV are devastating and innumerable, including bodily injury, psychological trauma and suicide, sexually transmitted infections, cervical cancer, pregnancy, chronic pain, and substance use disorder.

### **Objectives and purpose of the innovation/practice/program/idea**

In order to deliver humanistic and compassionate care to patients, students need to develop a thorough understanding of sexual violence. This is difficult to achieve through didactic training alone, so the USCSOMG OSR organized a student workshop on sexual violence. The ultimate goal of this workshop was to foster compassion and respect, as well as to equip students with the necessary tools for medical and shared decision-making.

### **Methods**

The workshop was led by an expert panel, consisting of a pediatrician, nurse, and counselor who all specialized in abuse and sexual violence. Following an open, Q&A format, panelists shared their experiences and recommendations on best practices for caring for victims of sexual violence.

At the end of the workshop, participating students were asked to complete an anonymous, online survey about their experience. Specifically, students were asked how competent they felt about caring for victims of sexual violence before and after participating in the workshop.

### **Outcome/Significance**

Students indicated that they felt significantly more comfortable caring for victims of sexual violence after their participation in this workshop.

### **Contribution to the session participants and ability to be utilized by other institutions**

This workshop was very well-received by students and can be easily reproduced at other institutions.

### **References**

Smith, Sharon G., Xinjian Zhang, Kathleen C. Basile, Melissa T. Merrick, Jing Wang, Marcie-jo Kresnow, and Jieru Chen.

"National Intimate Partner and Sexual Violence Survey: 2015 Data Brief." CDC: Centers for Disease Control and Prevention. October 25, 2018. Accessed November 29, 2018. <https://www.cdc.gov/violenceprevention/nisvs/2015NISVSdatabrief.html>.

"Sexual Violence: Consequences." CDC: Centers for Disease Control and Prevention. April 10, 2018. Accessed November 30, 2018. <https://www.cdc.gov/violenceprevention/sexualviolence/consequences.html>.

## Submission ID#590658

The COM Cup: Promoting Student Wellness and Resilience through Competition and Team Building in the MUSC Student Wellness Program

Submission Type: Posters

Submitter: Adrienne Edge – Medical University of South Carolina College of Medicine

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### **Presenter(s)**

Adrienne M. Edge, M.Ed.

Role: Lead Presenter

Myra Haney Singleton, EdD

Role: Co-Presenter

Gabrielle Redding, MS

Role: Facilitator

Alexzandrea Sanders

Role: Facilitator

### **Topic**

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### **Background/Context and Relevance of the presentation/session**

Research has shown that students experience a myriad of challenges related to their transition to medical school that could lead to deterioration in their emotional wellbeing. These findings are concerning, especially against the backdrop of the already established high rates of burnout, depression, and suicide amongst practicing physicians. Due to the prevalence of stress, medical schools must identify strategies to reduce attrition and help students adjust to new roles, responsibilities, and environment. The Medical University of South Carolina (MUSC) has responded to this call by creating a program aimed at improving student health and wellness. The MUSC College of Medicine Wellness Program is designed to promote resiliency through support programs, educational programming, and promoting existing institutional support resources; especially ones which empower medical students to foster their own personal growth and development.

### **Objectives and purpose of the innovation/practice/program/idea**

Our student wellness initiatives are culminated by our annual COM Cup, which is a health and wellness field day to celebrate and encourage student wellness. This event fosters camaraderie, team building and the implantation of healthy lifestyles for students, faculty and staff through various Olympic-style competitions. The final competition includes a team-based cooking competition, using ingredients from the MUSC Urban Farm. This poster provides insight into how the program was developed and how other campuses may implement a similar event on their campus.

## **Methods**

This event is student-driven by the College of Medicine Student Wellness Leaders. Competitions are between students, faculty and administrators in the College of Medicine. Effectiveness is assessed through the annual student wellness survey developed and distributed through the Office of Assessment, Evaluation and Quality Improvement.

## **Outcome/Significance**

Students in the MUSC College of Medicine feel a sense of pride, camaraderie and engagement as a result of this event. It provides an opportunity for all four years of medical students to engage in team building and networking. This event also promotes the importance of personal wellness in the life of future physicians.

## **Contribution to the session participants and ability to be utilized by other institutions**

This poster presentation provides insight into how the annual COM Cup was developed and how other campuses may connect this type of event to the student wellness program and implement a similar event on their campus.

## **References**

- [1] Brazeau CM, Shanafelt T, Durning SJ, et al. Distress among matriculating medical students general population. *Academic Medicine*. 2014;89:1520-1525
- [2] Dyrbye LN, Thomas MR, Massie FS, et al. Burnout and suicidal ideation among U.S. medical students. *Ann Intern Med*. 2008;149:334-341
- [3] Schernhammer E. Taking their own lives: the high rate of physician suicide. *N Engl J Med*. 2005;352:2473-2476
- [4] Cutting MF & Saks NS. Twelve tips for utilizing medical education. *Medical Teacher*. 2012;34:20-24



## (30) Submission ID#590660

The ARC Program: Assistance for Resilience and Confidence at MUSC

Submission Type: Posters

Submitter: Adrienne Edge – Medical University of South Carolina College of Medicine

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### **Presenter(s)**

Adrienne M. Edge, M.Ed.

Role: Lead Presenter

Myra Haney Singleton, EdD

Role: Co-Presenter

Spenser Staub,

Role: Facilitator

Medical Student

Emma Kofmehl

Role: Facilitator

Medical Student

Kyle Toth

Role: Facilitator

Medical Student

### **Topic**

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### **Background/Context and Relevance of the presentation/session**

Medical students have been found to have depression rates that are significantly higher than those of the same age in the general population. These findings are concerning, especially against the backdrop of the already established high rates of burnout, depression, and suicide amongst practicing physicians and the known effects this has on the physician workforce, patient safety, and public health. These issues are even more concerning for the percentage of students who are required to repeat an academic year or who have had other academic setbacks during their medical student career.

### **Objectives and purpose of the innovation/practice/program/idea**

The MUSC Assistance for Resilience and Confidence (ARC) Program is a group of students who have faced, and successfully overcome, academic difficulties and leaves of absences. These students work with the Group on Student Affairs to partner with students who faced similar challenges. This group meets regularly and discusses ways students can successfully return to school after leaves of absence or remediation. These students also interact with faculty who themselves repeated a year or faced academic difficulties in an effort to

encourage current students to continue moving forward towards graduation.

### **Methods**

Student leaders are identified from the previous year's returning students. The Group on Student Affairs provides returning students with the group's information and they are allowed to reach out to them on a voluntary basis. The student leaders then serve as mentors to these returning students. Effectiveness is assessed through on-going monitoring meetings with the participating returning students.

### **Outcome/Significance**

As a result of this program, returning students or students with academic difficulties are connecting with campus resources and their peers, and are able to develop a realistic academic plan for successfully moving forward in medical school.

### **Contribution to the session participants and ability to be utilized by other institutions**

This poster presentation will provide insight into how to garner support and involvement from student leaders develop a similar program on other campuses.

### **References**

- [1] Brazeau CM, Shanafelt T, Durning SJ, et al. Distress among matriculating medical students general population. *Academic Medicine*. 2014;89:1520-1525
- [2] Dyrbye LN, Thomas MR, Massie FS, et al. Burnout and suicidal ideation among U.S. medical students. *Ann Intern Med*. 2008;149:334-341
- [3] Schemhammer E. Taking their own lives -the high rate of physician suicide. *N Engl J Med*. 2005;352:2473-2476
- [4] Cutting MF & Saks NS. Twelve tips for utilizing medical education. *Medical Teacher*. 2012;34:20-24

## Submission ID#590908

Near-Peer Academic Services: Creating student-led and student-directed academic support programs in pre-clinical undergraduate medical education

Submission Type: Posters

Submitter: Jason Onugha – University of Miami Leonard M. Miller School of Medicine

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### Presenter(s)

Jason K. Onugha

Role: Lead Presenter  
Medical Student

Erik Dove, MD/MPH Student

Role: Co-Presenter  
Medical Student

Jasmine Lawrence, M.S.

Role: Co-Presenter  
Medical Student

Ryan Azarrafiy, n/a

Role: Co-Presenter  
Medical Student

Hilit Mechaber, M.D.

Role: Co-Presenter

### Topic

The Medical School Environment

- Creative academic support with limited resources

### Background/Context and Relevance of the presentation/session

Medical education has recently experienced a shift from the traditional paradigm of didactic teaching. Modalities such as near-peer-assisted learning and problem-based learning have gained a more prominent role in the medical school curriculum. These strategies promote active learning and foster student engagement. While graduate medical education has traditionally featured elements of peer-assisted learning (PAL) with senior residents mentoring and supervising junior residents, this use of PAL is not consistently used in undergraduate medical education. The Near-Peer Academic Services (NPAS) program at University of Miami Miller School of Medicine (UMMSM) was piloted in fall 2017 as an academic support intervention based on a more contemporary body of evidence regarding student engagement and active learning methods.

### Objectives and purpose of the innovation/practice/program/idea

To create a student-led and directed teaching experience 2) To enable peer teachers to learn to develop curriculum 3) To foster a collaborative culture and community-centered learning environment by enhancing student ownership over medical education 4) To provide early exposure to a culture of mentorship and collaboration within the medical program.

### Methods

NPAS small-group review sessions are both student-led and student-directed. MS2s are responsible for the design of educational materials and facilitating small-group sessions for MS1s. Before each session, MS1s identify, through survey response, the content that would be most beneficial for their review. MS1s received

pre and post surveys assessing their motivation for participating in review sessions, their attitude towards peer-led academic support programs and their perceptions of the pilot program.

### **Outcome/Significance**

We assessed the experience of participants in the NPAS pilot program and its impacts, exploring the potential role of a near-peer-assisted learning model for the core, preclinical curriculum. Results showed students had an overall positive experience engaging in NPAS review sessions. Students identified they were more motivated to participate by peer recommendations than recommendations from faculty/administration. Factors driving participation included: trouble understanding material, maintaining a passing grade and getting grades lower than expected more than avoiding course failure. The majority of respondents felt that review sessions improved their understanding of material and better prepared them for exams.

### **Contribution to the session participants and ability to be utilized by other institutions**

NPAS provides a unique framework for other institutions to implement student-centered academic support programs. These programs will encourage mentorship, collaboration, and student engagement. Future studies will investigate the impact of NPAS on improving academic performance and reducing medical student burnout.

### **References**

Koles, P. G., Stolfi, A., Borges, N. J., Nelson, S., & Parmelee, D. X. (2010). The impact of team-based learning on medical students' academic performance. *Academic Medicine*, 85(11), 1739-1745.

Michaelson, L., Peterson, T., & Sweet, M. (2009). Building learning teams: The key to harnessing the power of small groups in management education. *The SAGE handbook of management learning, education and development*, 325-343.

Haidet P, O'Malley KJ, Richards BF. An initial experience with team learning in medical education. *Acad Med*. 2002;77:4044.

Neville, A. J. (2009). Problem-based learning and medical education forty years on. *Medical Principles and Practice*, 18(1), 1-9.

Herrmann-Werner, A., Gramer, R., Erschens, R., Nikendei, C., Wosnik, A., Griewatz, J., ... & Junne, F. (2017). Peer-assisted learning (PAL) in undergraduate medical education: An overview. *Zeitschrift für Evidenz, Fortbildung und Qualität im Gesundheitswesen*.

Topping, K., & Ehly, S. (1998). Introduction to peer-assisted learning. *Peer-assisted learning*, 1, 1-23.

Williams, B., & Reddy, P. (2016). Does peer-assisted learning improve academic performance? A scoping review. *Nurse education today*, 42, 23-29.

## Submission ID#591171

The Effects of the Implementation of a Wellness Calendar: Do Small Changes Really Make a Difference

Submission Type: Posters

Submitter: Meagan Tinsley – LSU Shreveport School of Medicine

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### Presenters

Meagan Tinsley

Role: Lead Presenter

Medical Student

Youmna Moufarrej

Role: Co-Presenter

Medical Student

### Topic

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### Background/Context and Relevance of the presentation/session

In March of 2018, LSU Shreveport School of Medicine had its first Mental Health Awareness Week, with great success following. Such momentum prompted our Executive Council to create a new position that would be dedicated solely to monitoring and encouraging the wellness of our students. Youmna and I were selected as the first Wellness Co-Chairmen for both the graduate and medical schools. A goal of ours was to keep the topic of self-care, mental health and overall wellness at the forefront throughout the year, not just one week a year. As such, our Wellness Calendar Breakdown came into being. Each month, we focus on a specific topic with events centered around said topic. Since August, we have focused on suicide, depression, vaccines, domestic violence and LGBTQA+ health with events such as talks with physicians skilled in navigating the vaccine conversation, discussing sexual history and safety with LGBTQA+ youth, free depression screening self-tests, a round table on domestic violence and a 10-minute meal nutrition class. Our aim has been to help medical students take small steps each day for a grander effect regarding their own health.

### Objectives and purpose of the innovation/practice/program/idea

We aim to create an easy to follow calendar for continuing mental health education and encouragement. Offering monthly activities like open discussions and small activities for self-care, students and faculty will feel that their mental health is a priority going deeper than surface level.

### Methods

Every 3 months, we send out surveys to see how the students and faculty like the topics of the previous months, if activities were helpful or not and ideas for how we can improve.

### **Outcome/Significance**

We hope the outcome of these surveys will tell us if a wellness calendar such as this is effective in reminding our students and faculty to take any kind of time in their day to check in on themselves and assess their own needs. We foresee that creating an open air of conversation will encourage other students to open up, offer a hand and reach out to others whom they see as struggling in their own battles.

### **Contribution to the session participants and ability to be utilized by other institutions**

We will have a breakdown of our own wellness calendar with activities done in a small handout for other schools to take back to their own institutions. We hope this will remind others that small changes can be just as effective as large ones over time.

### **References**

<https://www.thehotline.org/is-this-abuse/> <br><http://www.mentalhealthamerica.net/conditions/infographic-life-depression>  
<br><https://www.apa.org/topics/lgbt/transgender.pdf> <br><https://www.cdc.gov/lgbthealth/youth.htm>  
<br><https://meded.hms.harvard.edu/wellness> <br><https://www.amsa.org/time-management/>

## Submission ID#592085

Annual Mental Health Awareness Week: Resolutions and Resilience

Submission Type: Posters

Submitter: Rebecca Budish – Louisiana State University School of Medicine in Shreveport

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### Presenter(s)

Rebecca Budish

Role: Lead Presenter

Medical Student

Katie Moreaux

Role: Co-Presenter

Medical Student

Elyse Bradley, PhD

Role: Facilitator

### Topic

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### Background/Context and Relevance of the presentation/session

Mental health is a concerning topic among healthcare professionals. Despite surveys indicating medical students are some of the happiest and healthiest prior to medical school, the student suicide rate has skyrocketed. Depression, addiction, and anxiety are just some mental health issues introduced or exacerbated among all healthcare professionals. To care for others, healthcare providers must be mentally well. However, these individuals who struggle with their mental health are less likely to seek help compared to non-healthcare matched controls.

### Objectives and purpose of the innovation/practice/program/idea

We aim to spread awareness, promote wellness, and facilitate change at LSU-Ochsner Health during our second Mental Health Awareness Week in spring 2019. We will continue the conversation from 2018, with a specific focus on resolutions and resilience. Each day will be dedicated to one fundamental word: Purpose, Mindfulness, Advocacy, and Happiness. Plans include creative outlet workshops, panel discussions, fitness expos, and bringing Leon Logothetis as our keynote speaker. We will continue our pre-week and post-week surveys to objectively measure knowledge of mental health struggles and record self-reflections from the events.

### Methods

Pre-week surveys will be distributed to LSU-Ochsner Health students, residents, and faculty. This electronic survey was approved by the LSUHSC IRB, ID#: STUDY00000926. Data will be collected and organized via the RedCap Database program.

This anonymous survey addresses knowledge of mental health concerns, personal experiences, and comfort level approaching mental health issues. Following the events, a post-week survey will evaluate responses based on knowledge obtained and changes in comfort level. Results will be analyzed using RedCap and SPSS.

### **Outcome/Significance**

Data collected from last year's surveys showed that while students (compared to non-students) reported lower mental health scores, they also reported feeling more comfortable seeking help. Students also had a higher percent change in both personal mental health reporting and comfort seeking help, indicating increased receptiveness to the events.

In 2019 we will repeat these surveys, introducing new questions on finding solutions and developing resilience. We will assess pre-week and post-week changes, compare 2018 with 2019 data, and increase the power of the study with more participants.

Contribution to the session participants and ability to be utilized by other institutions

From initial data, we concluded that mental health concerns are significant and should be addressed early in one's career. Emphasizing mental health through a focused event impacts knowledge of resources, comfort level discussing mental health, and likelihood of asking for help. It is our goal to share this information in hopes that session participants will adopt similar programs to further decrease the stigma of mental health.

### **References**

1. Rotenstein LS, Ramos MA, Torre M, et al. Prevalence of Depression, Depressive Symptoms, and Suicidal Ideation Among Medical Students. *JAMA*. 2016;316(21):2214. doi:10.1001/jama.2016.17324.
2. Dana Cook Grossman. Reducing the Stigma: Faculty Speak Out About Suicide Rates Among Medical Students, Physicians. *AAMC News*. <https://news.aamc.org/medical-education/article/reducing-stigma-suicide-rates/>. Published 2016. Accessed January 23, 2018.
3. Dyrbye LN, West CP, Satele D, et al. Burnout Among U.S. Medical Students, Residents, and Early Career Physicians Relative to the General U.S. Population. *Acad Med*. 2014;89(3):443-451. doi:10.1097/ACM.000000000000134.
4. Schernhammer ES, Graham Colditz DA. Suicide Rates Among Physicians: A Quantitative and Gender Assessment (Meta-Analysis). *Am J Psychiatry*. 2004;161:12. <http://ajp.psychiatryonline.org>. Accessed January 11, 2018.
5. Gold KJ, Sen A, Schwenk TL. Details on suicide among US physicians: data from the National Violent Death Reporting System. *Gen Hosp Psychiatry*. 2013;35(1):45-49. doi:10.1016/j.genhosppsych.2012.08.005.
6. Eckleberry-Hunt J, Lick D. Physician Depression and Suicide: A Shared Responsibility. *Teach Learn Med*. 2015;27(3):341-345. doi:10.1080/10401334.2015.1044751.



## Submission ID#592125

The Ability of the Multiple Mini-Interview (MMI) to Predict Residency Placement after Medical School

Submission Type: Posters

Submitter: Abhay Dhaliwal – Michigan State University College of Human Medicine

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### Presenters

Abhay Dhaliwal

Role: Lead Presenter  
Medical Student

Adam Kadri

Role: Co-Presenter  
Medical Student

Ali Beydoun

Role: Co-Presenter  
Medical Student

Joel Maurer, M.D.

Role: Co-Presenter

### Topic

Recruitment and Admissions

- Admissions changes in admissions protocols and waitlist management
- Admissions policies/ practices the evolving political/legal context

### Background/Context and Relevance of the presentation/session

Strategies have been developed to identify parameters that might identify an individual's residency selection after medical school; statistically significant correlations haven't been found. However, these studies didn't investigate non-cognitive skills; the MMI offers insight into an applicants' non-cognitive skills and personality traits.

With the looming physician shortage, a personality profile determined by the MMI, could be used to increase the number of students with an inclination to pursue a specific medical field. This could lead to improved access to care and healthcare delivery.

### Objectives and purpose of the innovation/practice/program/idea

Is there a correlation between a medical school applicant's MMI score and their residency selection after medical school?

### Methods

A retrospective review of medical school applicant and residency match data from Michigan State University College of Human Medicine was done using students that participated in the 2013/2014 MMI before entering medical school, and the 2017/2018 National Resident Matching Program. The characteristics assessed through the MMI were: maturity, morals, ethics, compassion, sociability, calm disposition, cultural competence, self-awareness. Students were grouped based upon their residency field; MMI sub-scores and total score were analyzed.

### Outcome/Significance

277 student records were analyzed. In Primary Care vs Non-Primary Care, students who pursued a non-primary care specialty scored higher on maturity; Surgical vs Non-Surgical, students who pursued a surgical

specialty scored higher on morality, sociability, and total score; In-State vs Out-of-State, students who went out-of-state for residency scored higher on calm disposition.

Contribution to the session participants and ability to be utilized by other institutions

Our findings have potentially important admissions implications regarding applicant characteristics evaluated by the MMI and residency placement after medical school. In an admission process that values certain applicant characteristics, there may be an unintentional bias against applicants who might choose a primary care/non-surgical specialty. Placing less importance on these characteristics may better help a medical school, with a strong primary care mission, achieve its goals. This illustrates the need for additional multi-institutional studies.

## References

1. Association of American Medical Colleges. The complexities of physician supply and demand: Projections from 2013 to 2025. AAMC, 2015.
2. Phillips J, Weismantel D, Gold K, Schwenk T. How Do Medical Students View the Work Life of Primary Care and Specialty Physicians? *Family Medicine*. 2012. 44(1): 713.
3. Lawson SR, Hoban JD. Predicting Career Decisions in Primary Care Medicine: A Theoretical Analysis. *The Journal of Continuing Education in the Health Professions*. 2003. 23: 68-80.
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## Submission ID#592221

The Effects of Having a Learning Specialist on Student Wellbeing During USMLE Preparation

Submission Type: Posters

Submitter: Madeline L'Ecuyer – Saint Louis University School of Medicine

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### **Presenter**

Madeline L'Ecuyer

Role: Lead Presenter

Medical Student

### **Topic**

The Medical School Environment

- Creative academic support with limited resources
- Student/staff wellness
- resilience
- and burnout

### **Background/Context and Relevance of the presentation/session**

Studies in recent years have shown that medical students stress levels regarding the USMLE Step 1 exam have greatly increased, likely related to its growing importance in allowing for a successful residency match. In the past two years, SLU's learning specialist has created a system of preparation for this exam aimed to minimize stress and improve study techniques and performance.

### **Objectives and purpose of the innovation/practice/program/idea**

This project evaluated the students' perspective of having a learning specialist in the Student Affairs dedicated to helping them prepare for their dedicated studying.

### **Methods**

A survey was sent to the M3 and M4 classes to measure how individually meeting with the learning specialist influenced their study skills, time management, and stress regarding the exam. Other measures employed by the learning specialist such as group presentations on topics including "Study Techniques", "Step 1 Wellness", and "Planning Your Success" were also evaluated.

### **Outcome/Significance**

The majority of students reported that meeting with the learning specialist greatly reduced their stress in preparation for their boards exam. Students also reported a positive influence on their study skills after these meetings, as well as ability to manage time efficiently. In addition, the topic presentations were valued as informative and worthwhile.

### **Contribution to the session participants and ability to be utilized by other institutions**

This project demonstrates the benefits on medical students at Saint Louis University School of Medicine of having a learning specialist dedicated to helping them prepare for their boards exams (both Step 1 and 2), as

well as regular monitoring of academic progress throughout their education. With lower levels of anxiety about these exams, our hope is that they will be better prepared and score higher. In future years we hope to measure quantitative data outcomes of this approach and compare to past scores. This strategy can be adapted at other institutions to fit the needs of their students and improve wellness and preparedness for the boards exams.

## **References**

Radcliffe, Christina. Lester, Helen. Perceived stress during undergraduate medical training: a qualitative study. *Medical Education*. 2007 January;37(1):32-38.

Dunn, Laura B. Iglewicz, Alana. Moutier, Christine. A Conceptual Model of Medical Student Well-Being: Promoting Resilience and Preventing Burnout. *Academic Psychiatry*. 2008 January;32(1):44-53

## Submission ID#592226

Second Year Autopsy Experience at Saint Louis University School of Medicine

Submission Type: Posters

Submitter: Madeline L'Ecuyer – Saint Louis University School of Medicine

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### **Presenter**

Madeline L'Ecuyer

Role: Lead Presenter

Medical Student

### **Topic**

The Medical School Environment

- Professionalism navigating evolving challenges
- Creating flexibility in the curriculum and support for students who more time to reach competencies
- Student/staff wellness
- resilience
- and burnout

### **Background/Context and Relevance of the presentation/session**

Studies have shown that with increasing cynicism and burnout in medical training comes a decline of empathy. This course aims to foster student empathy before entering the clinical years, as well as prepare students to explain an autopsy procedure to families who may be considering one.

### **Objectives and purpose of the innovation/practice/program/idea**

The M2 Autopsy Experience was developed at Saint Louis University to provide medical students a firsthand understanding of how an autopsy is performed and the valuable information it can provide loved ones of the deceased. Understanding what happens in the pathologist's lab fosters empathy in future physicians, and the successful completion of a death certificate prepares medical students for this process when a patient dies in their care. Observing the autopsy is essential for students to understand the procedure, what questions can be answered in doing one, and how to explain what is involved to a family. Students will also be able to correlate the patient's clinical course with the pathology findings.

### **Methods**

After attending an informational session, second year medical students were notified of upcoming autopsy procedures and allowed to sign up to attend one whenever they chose. On attending the procedure, the students signed in with the attending pathologist and remained for the entire procedure. After the autopsy, students completed a death certificate or working cause of death form and submitted to course directors for credit. All second year students were required to complete the above assignments before the end of the second year.

### **Outcome/Significance**

After all second year students have completed the requirement (February 2019), a survey will be sent out for

student feedback. So far, students have reported attending an autopsy was a valuable and incredibly unique experience that allowed them to not only understand how clinical outcomes appear pathologically, but also what happens in an autopsy in order to explain to families who are considering the procedure for their deceased loved one.

### **Contribution to the session participants and ability to be utilized by other institutions**

This project will present the clear course goals, learning objectives, and outcomes in the form of student feedback for other programs that are interested in incorporating this type of experience into their curriculum. Course directors agree that it is a unique experience that the students might otherwise not receive before their clinical rotations.

### **References**

Hojat, Mohammadreza et al. An empirical study of decline in empathy in medical school. *Medical Education*. 2004 August 24;38(9):934-941.

## Submission ID#592243

Pre-Medical Scribe Experience and its Impact on Clinical Skills in Year 1 of Medical School

Submission Type: Posters

Submitter: James Pearson – LSU Health Sciences Center- Shreveport

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### Presenters

Grant Pearson

Role: Lead Presenter

Medical Student

Rebecca Budish

Role: Co-Presenter

Medical Student

### Topic

Student Personal and Professional Development

- Beyond Step scores and ward performance: redefining student success (resilience
- professionalism
- attainment of competencies)

### Background/Context and Relevance of the presentation/session

The medical school admissions process is arduous for the student as well as the schools admissions committee. Which criteria in a student's application translates to the best medical school candidate? There is a broad range of job and volunteer experiences that expose students to the field of medicine. Therefore, it is difficult to determine which clinical experiences translate to better performances in medical school. Working as a medical scribe has become a common clinical experience which students are including on their medical school applications. It has been shown that scribes increase physician satisfaction and charting efficiency without diminishing patient satisfaction. Larger numbers of hospitals across many specialties are employing scribes to help improve physician workload. The increase in hiring scribes is creating opportunities for prospective medical students to gain clinical experience. While the role of scribes at different facilities can vary, generally a scribe will document patient encounters under the supervision of a physician or midlevel provider and assist with charting and entering data into EMRs.

### Objectives and purpose of the innovation/practice/program/idea

It is the goal of this study to compare the clinical skills of 1st year medical students with and without medical scribe experience prior to medical school. As scribing is a common job for pre-med students before attending medical school, we would like to investigate if the students who worked as scribes are producing objectively higher scores with standardized patient exams compared to their classmates.

### Methods

A survey will be distributed in January 2019 to all medical students at LSUHSC-Shreveport. The survey assesses whether students worked as scribes and for how long prior to attending medical school. The responses will be paired with their first-year standardized patient exam scores, and the data will be analyzed shortly thereafter.

### Outcome/Significance

We hypothesize students with scribing experience prior to medical school score higher on clinical skills standardized patient exams during their first year of medical school. We aim to provide evidence for admissions offices as well as prospective medical students on whether scribe experience results in superior medical school clinical performance. This information can benefit pre-medical students when considering a variety of clinical opportunities.

### **Contribution to the session participants and ability to be utilized by other institutions**

This information will allow session participants to present new information to their admissions offices and advocate for these applicants. This information can help continue the movement away from simply GPA and MCAT as the primary determinants of the strength of an applicant. This will also benefit prospective students when preparing a strong application.

### **References**

1. White CB, Dey EL, Fantone JC. Analysis of factors that predict clinical performance in medical school. *Advances in Health Sciences Education*. 2007;14(4):455-464. doi:10.1007/s10459-007-9088-9.
2. Dewitt D, Harrison LE. The Potential Impact of Scribes on Medical School Applicants and Medical Students with the New Clinical Documentation Guidelines. *Journal of General Internal Medicine*. 2018. doi:10.1007/s11606-018-4582-8.
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## Submission ID#592427

The Role of a Student Advocate: Engaging, Empowering, and Caring for Students in a Safe Learning Environment

Submission Type: Posters

Submitter: Charli Allen – Wake Forest School of Medicine of Wake Forest Baptist Medical Center

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### **Presenter**

Charli N. Allen, MHS, CHES

Role: Lead Presenter

### **Topic**

The Medical School Environment

- Professionalism navigating evolving challenges

### **Background/Context and Relevance of the presentation/session**

Amid an LCME self-study, Wake Forest School of Medicine identified a need for a common process and point of contact for students to report professionalism concerns. As a result, the role of Student Advocate was created to support students reporting concerns of mistreatment and unprofessional behavior. The Student Advocate is a staff member in the Office of Student Affairs who works with students in a coaching fashion to analyze situations, consider all perspectives, and discuss, as well as facilitate, interventions and outcomes.

### **Objectives and purpose of the innovation/practice/program/idea**

The intent of the Student Advocate process is not punitive, but rather promotes a culture of encouragement, learning, and personal and professional growth. The Student Advocate educates students on the institutions policies and procedures for reporting and addressing student mistreatment and professionalism lapses. The Student Advocate is also a support resource when a concern results in a formal inquiry, facilitating the connection of key institutional resources to investigate, intervene, and close the loop with the student(s), ensuring concerns are addressed.

### **Methods**

Reports of professionalism concerns or student mistreatment are most commonly collected through end-of-course evaluations and direct reports to the Student Advocate. Techniques used to facilitate discussions include the SBAR, restorative dialogue, and a formalized inquiry process with various institutional partners.

### **Outcome/Significance**

This addresses LCME standards 3.5 & 3.6 (Learning Environment/Professionalism & Student Mistreatment). This has resulted in demonstrable improvement in student awareness and understanding of institutional policies and procedures around professionalism and mistreatment, as well as demonstrable improvement in student satisfaction with the handling of student concerns.

### **Contribution to the session participants and ability to be utilized by other institutions**

Learning objectives will focus on understanding how to use the SBAR technique, determining when to engage in restorative dialogue, recognizing how these techniques can be used to address student concerns, and discovering how a formalized, institutional process can be developed to address student reports of professionalism lapses and mistreatment.

### **References**

Association of American Medical Colleges. Medical School Graduation Questionnaire: 2018 Individual School Report. Published July 2018.

Wake Forest School of Medicine Office of Education Institutional Effectiveness. 2018 AAMC Graduation Questionnaire Individual School Report Graphical Analyses. Presented to Wake Forest School of Medicine leadership in 2018.

## Submission ID#592433

Restorative practices as an approach to team-building in the flipped classroom

Submission Type: Posters

Submitter: Jay Behel – Rush Medical College

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### Presenters

Jay M. Behel, PhD

Role: Co-Presenter

Jacob H. Schulman

Role: Lead Presenter

Medical Student

Daniel Webster, BS

Role: Co-Presenter

Medical Student

Kathryne Adams

Role: Co-Presenter

Medical Student

### Topic

The Medical School Environment

- Creating flexibility in the curriculum and support for students who more time to reach competencies
- Student/staff wellness
- resilience
- and burnout

### Background/Context and Relevance of the presentation/session

Small group learning places students into teams without teaching conflict resolution, leaving them unprepared to handle inevitable discord. Restorative justice (RJ) provides a unique solution. Using principles from indigenous communities, RJ processes identify and remedy sources of harm in conflict rather than assign blame. Circles, a structured restorative practice, promote open and equitable communication, allowing for the acknowledgement and ownership of harms in communities. This process leads to equitable resolution within the group. With the implementation of a flipped-classroom curriculum at Rush Medical College, students brought RJ into the classroom by developing Team-Building Circles (TBCs).

### Objectives and purpose of the innovation/practice/program/idea

TBCs were implemented to foster proactive communication among medical students to prevent and resolve conflict. Through participation in TBCs, students are equipped to actively listen to and thoughtfully communicate with their peers. Faculty participate alongside students, providing a uniquely equal voice within a traditionally hierarchical medical culture.

### Methods

TBCs are generally held at the beginning of a designated session in the first week of each pre-clinical course. TBCs include key elements of traditional circles including the use of a talking piece and a circular seating arrangement. Every student has an opportunity to contribute but may also elect to not speak. TBCs are limited to 30 minutes and are guided by predetermined questions posed by circle keepers to focus on students concerns, needs and commitments vis-à-vis small group learning. Small groups work throughout the course to solidify the commitments they made during their initial TBC. Each consecutive TBC gives the opportunity for revision of their commitments, in addition to resolving new conflicts which arise throughout the year.

### **Outcome/Significance**

TBCs provided a framework for student-directed dialogue that has been integral in creating spaces for proactive conflict resolution among peers and faculty. Anecdotal results have shown immediate implementation of conflict resolution in the classroom. The major anticipated outcome of implementing RJ into medical curricula is to create student empowerment within small group settings. This will in turn lead to more efficacious small-group work, peer teaching, and, with faculty participation, encourage students to be comfortable speaking with all levels of medical education: administration, faculty, residents, and other students. This modality for student-centered conversation can be incorporated to any medical education program with a small-group learning system.

### **Contribution to the session participants and ability to be utilized by other institutions**

After viewing the poster, each attendee will be able to: describe the RMC circle process, appraise whether the circle process is appropriate for their institution, and replicate a TBC in their small-group learning environment.

## Submission ID#592501

Predicting Success for Underrepresented Students in a Post-baccalaureate Premedical Program Using a Simple Math and Vocabulary Pretest

Submission Type: Posters

Submitter: Anneke Metz – SIU School Of Medicine

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### **Presenter**

Anneke M. Metz, Ph.D.

Role: Lead Presenter

### **Topic**

Recruitment and Admissions

- Pipeline programs

### **Background/Context and Relevance of the presentation/session**

A diverse workforce is important for the health of the medical profession (1) and pipeline programs represent one avenue to address underrepresentation in medicine (2). To bring students to medical school who would not otherwise qualify, pipeline programs must identify students with the talent to become medical professionals, but who, with their current profile, would be passed over by medical schools. It is thus necessary to be able to gauge potential participants ability to succeed in medical school after a pipeline program intervention when the traditional metrics of academic ability, such as MCAT score and undergraduate GPA, will by definition be low.

### **Objectives and purpose of the innovation/practice/program/idea**

To determine if a short math and vocabulary test can predict a student's readiness for an intensive post-baccalaureate pipeline experience, by comparing pre-program test scores to post-intervention MCAT scores.

### **Methods**

Prior to program entry, students completed an 80-item vocabulary, and 31-item basic mathematics test. Students completed the MCAT exam after one year of intensive academic intervention at the post-baccalaureate level. Statistical analyses on matched scores were performed using SPSS v. 20. 707 students taking the 1991-2014 MCAT, as well as 120 students taking the new (2015+) MCAT were tracked.

### **Outcome/Significance**

Scores below 40% on the mathematics exam, and below 70% on the vocabulary exam, were associated with student failing to achieve an MCAT reference score of 24 on the 1991-2014 MCAT. Furthermore, students scoring less than 50% on the mathematics- and also less than 80% on the vocabulary exams, were 10x less likely to achieve the reference MCAT score. Data for students completing the 2015+ MCAT are similar, and this testing scheme appears to be a robust method to gauge student future MCAT success.

### **Contribution to the session participants and ability to be utilized by other institutions**

An easy to administer exam can help predict a applicants eventual success in a post-baccalaureate premedical pipeline program.

## References

- 1) Marrast LM, Zallman L, Woolhandler S, Bor DH, McCormick D. Minority physicians role in the care of underserved patients: diversifying the physician workforce may be key in addressing health disparities. *JAMA Int Med.* 2014;174(2):289-290.
- 2) Grumbach K. Adopting postbaccalaureate premedical programs to enhance physician diversity. *Acad. Med.* 2011;86:154-157.

## Submission ID#592507

Diversity & Inclusion at All Levels: Overcoming Silos to Strategically Develop Pipeline Programming for the Health Care Workforce

Submission Type: Posters

Submitter: Charli Allen – Wake Forest School of Medicine of Wake Forest Baptist Medical Center

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### Presenter(s)

Charli N. Allen, MHS, CHES

Role: Lead Presenter

Brenda Latham-Sadler, MD

Role: Co-Presenter

Stefanie R. Rachis, EdD

Role: Co-Presenter

Nate Warden, BS

Role: Co-Presenter

Sobia S. Hussaini, MHA

Role: Co-Presenter

### Topic

Recruitment and Admissions

- Pipeline programs

### Background/Context and Relevance of the presentation/session

Based on feedback from the LCME, Wake Forest School of Medicine organized a team of delegates from each educational program and key departments to develop a collaborative strategic plan for diversity and inclusion. During the strategic planning process, the delegate team realized that each educational program was hosting similar pipeline programs, with similar target audiences. The collaborative strategic planning process allowed for alignment across educational programs and strategic enhancement of currently offered pipeline efforts, as well as development of several new pipeline opportunities.

### Objectives and purpose of the innovation/practice/program/idea

The purpose of the delegate group's formation was to align on pipeline programming to ensure consistency, as well as to align on the priority populations recruited to participate in pipeline activities. By offering programming developed and administered by an interprofessional group, students participating in the programs are offered a more holistic view of the healthcare education opportunities available to them and are exposed to how the healthcare professions work together to provide patient care.

### Methods

The interprofessional team used the Lean Six Sigma DMAIC methodology to analyze the current state of all educational programs, determine strategic priorities for new initiatives, develop integrated plans, and begin to implement activities to improve diversity and inclusion across the learning healthcare system. Focus groups about additional programming needs were also held with students from each educational program.

### Outcome/Significance

This demonstrates a learning healthcare system breaking down silos related to diversity and inclusion by working collaboratively to offer pipeline programming. Pipeline program participation in new and enhanced

initiatives resulted in outcomes indicating participant awareness of health disparities and the need for a diverse health care workforce to address disparities.

**Contribution to the session participants and ability to be utilized by other institutions**

The poster will offer ideas for pipeline programming that can be reproduced at other institutions. Participants will also understand the DMAIC methodology and will recognize areas for institutional partnership.

**References**

Association of American Medical Colleges. Medical School Graduation Questionnaire: 2018 Individual School Report. Published July 2018.

Wake Forest School of Medicine Office of Education Institutional Effectiveness. 2018 AAMC Graduation Questionnaire Individual School Report Graphical Analyses. Presented to Wake Forest School of Medicine leadership in 2018.

Silo Busters & Bridge Builders: Utilizing Strategic Alignment and Process Improvement Tools to Improve Diversity and Inclusion Across Health Professions Education and the Workforce. Panel presentation at the 14th Annual AAMC Health Workforce Research Conference in May 2018.

## Submission ID#592743

Real talk: Peer advocates support medical student wellness

Submission Type: Posters

Submitter: Karri Grob – University of Michigan Medical School

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### Presenter(s)

Karri L. Grob, Eds, MA

Role: Co-Presenter

Claire Collins, BA

Role: Lead Presenter

Medical Student

Amy Tschirhart, MA

Role: Co-Presenter

### Topic

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### Background/Context and Relevance of the presentation/session

All medical students should feel welcomed and supported. Medical student diversity is demonstrated not only through cultural, racial, and socioeconomic differences, but also mental and physical abilities. Various learning styles, personalities, and other unique qualities often contribute to diversity of educational experiences and outcomes.

### Objectives and purpose of the innovation/practice/program/idea

Knowing that struggles/challenges during medical school should not feel isolating, but rather could provide a greater opportunity for connection and growth, reinforces the culture of inclusivity and promotes diversity and equity. Medical student peer relationship provides the necessary social supports that foster successful adjustment to new situations.<sup>1</sup> Formal training of peer advocates was noted as important to ameliorate risks, establish boundaries, and inform processes.

### Methods

In the 2018-19 academic year, a second-year medical student, concerned at the disproportionate rate of depression and suicidal ideation in medical students<sup>2,3</sup>, established a new peer support group focused on wellness advocacy. The initiative received funding from the institutions Diversity, Equity, and Inclusion mini-grant program with the express purpose of creating a supportive and empowering environment for all students. Funds were used to create a formalized training program with the input of the University's Assistant Director of peer mentor groups, Medical School counselor, and the Director of Student Services. Advocates were recruited by email and participated in an initial 4-hour training session, or a second 2-hour training



session. Training centered on appropriate referral resources, coaching skills, and tools to maintain healthy peer relationships. Peer advocates have biographies on the medical school website and rotate on-call coverage by pager. Peer advocates provide support and referrals to available resources.

### **Outcome/Significance**

Referral resources are essential wellness tools that all advocates should use regularly. As the peer support group and advocacy program grows, student will receive additional training. The program strives to become an integral part of the overall wellness initiative to tackle the high rates of medical student burnout, depression, and anxiety.<sup>3</sup> Advocacy support will be available to all students. Students will work with administration to ensure support and longevity of the program. After its one-year pilot, the program will move to an existing unit where dedicated staff will oversee continued efforts.

### **Contribution to the session participants and ability to be utilized by other institutions**

The peer advocacy program is easily replicated by other institutions, even those without an existing well-being initiative. Infrastructure and costs are minimal and focus primarily on supporting the paging system, meeting space for training, and identifying students and staff to provide support. Program administrators are willing to share resources and training materials.

### **References**

1. Maunder RE, Cunliffe M, Galvin J, Mjali S, Rogers J. Listening to student voices: student researchers exploring undergraduate experiences of university transition. *Higher Ed.* 2013;66(2):139-152.
2. Schwenk TL, Davis L, Wimsatt LA. Depression, Stigma, and Suicidal Ideation in Medical Students. *JAMA.* 2010;304(11):1181-1190. doi:10.1001/jama.2010.1300
3. Dyrbye LN, Thomas MR, Shanafelt TD. Systematic review of depression, anxiety, and other indicators of psychological distress among U.S. and Canadian medical students. *Acad Med.* 2006;81(4):354-73.

## Submission ID#592965

Maximizing Student Engagement in Wellness: Eight dimensions and Eleven Groups

Submission Type: Posters

Submitter: Kristen Heath – Indiana University School of Medicine

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### Presenter(s)

Kristen Heath, MS

Role: Lead Presenter

Emily C. Walvoord, MD

Role: Co-Presenter

### Topic

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### Background/Context and Relevance of the presentation/session

Intentional programming that fosters wellness and promotes resiliency is imperative during medical training. Each institution must work to create programming that meets the needs of their students to assist them in developing lifelong skills to combat burnout. This poster presentation showcases how IUSM utilized existing student organizations to create, plan and implement programming to help students address their wellness needs in order to thrive in medical school and beyond.

### Objectives and purpose of the innovation/practice/program/idea

At IUSM our wellness curriculum is based on 8 dimensions of wellness (emotional, environmental, financial, intellectual, occupational, physical, social, spiritual). Previously independent student organizations were brought together as one coalition to plan events and activities aimed at educating and engaging students on those 8 dimensions with the goal of promoting resiliency, gratitude, community and well-being. Organizations were recruited based on their missions; those who worked toward wellness initiatives were asked to come together to serve the student population in this capacity. Each dimension of wellness is addressed during the year, either through a coalition developed activity, or by linking to previously established events. Examples include: Picnic & Painting, Mental Health in Med School: Let's talk about it, and Board Game Study Break. The coalition now works as a team, with oversight from medical student affairs staff, to meet students where they are in terms of their wellness needs during specific time points in the academic year.

### Methods

The wellness coalition meets 1-2 times a month. At a minimum they plan 2 events a month: You Day Tuesday and Wellness Wednesday, choosing 1-2 dimensions of wellness to address for each activity. Some events utilize the entire group, while other events bring together 2 or 3 organizations that team up to host the event.

**Outcome/Significance**

The wellness coalition at IUSM has successfully engaged a large group of students (11 organizations) into the process of developing wellness programs to better meet student needs within an established framework. Satisfaction surveys reveal that students greatly value the experiences and efforts of their peers in creating opportunities to focus on their well-being in accessible contexts.

**Contribution to the session participants and ability to be utilized by other institutions**

Participants will gain ideas on engaging students in the process of embedding wellness programming into their school culture. They will see examples of wellness activities, based on the 8 dimensions of wellness, that promote resiliency, gratitude, community and well-being. They will learn strategies to increase student attendance, maximize use of resources, and gain an increased level of buy-in from student constituents.

**References**

Substance Abuse and Mental Health Services Administration, U.S. Department of Health & Human Services. (2017). The Eight Dimensions of Wellness. Retrieved from: <https://www.samhsa.gov/wellness-initiative/eight-dimensions-wellness>

## Submission ID#593010

From Patients to Test Questions: Do Clinical Clerkships Really Improve Student Performance on United States Medical Licensing Examination Step 1?

Submission Type: Posters

Submitter: Donald Chan – University of Texas Southwestern Medical School

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### Presenters

Donald Chan, EdM

Role: Lead Presenter  
Medical Student

Dustin Le, MD

Role: Co-Presenter

Brendan Swain, BS

Role: Co-Presenter  
Medical Student

Dorothy M. Sendelbach, MD

Role: Co-Presenter

Blake R. Barker, MD

Role: Co-Presenter

### Topic

Student Personal and Professional Development

- Beyond Step scores and ward performance: redefining student success (resilience
- professionalism
- attainment of competencies)

### Background/Context and Relevance of the presentation/session

Many schools have delayed when students take Step 1. While some have reported higher Step 1 scores if taken after clerkships, these findings may be confounded by differences between cohorts, including changes pre-clinical curricula, addition of basic science curricula to clerkships and secular trends of Step 1 performance.

### Objectives and purpose of the innovation/practice/program/idea

We had hoped to address these limitations in a quasi-experimental study of Step 1 performance in a single cohort.

### Methods

In 2015, our school implemented a new curriculum, including an 18-month pre-clinical phase and requirement to take Step 1 within the first 6 months of the clerkship phase. Students may take zero, one, two or three clerkships prior to a dedicated 6-week Step 1 study period. Timing of clerkships and Step 1 was primarily based on student-submitted preferences. Some were assigned a schedule by administrators due to risk for Step 1 failure based on pre-clinical performance. We aimed to analyze the effect of clerkship exposure on

Step 1 performance in a single cohort of 2017 test-takers after controlling for pre-clinical grades, admissions qualifications, and demographics.

### **Outcome/Significance**

Each week of graded clerkships before Step 1 appeared to be associated with a 0.35-point increase in Step 1 scores, suggesting a dose-response. There was no significant difference in the average Step 1 score compared to prior cohorts. More students requested extensions for their exam date than in prior years. The strongest association amongst all factors was between Step 1 scores and pre-clinical grades. Each point increase in the average of all pre-clinical grades was associated with a 2.66-point increase on Step 1. Further analysis highlighted that clerkship phase schedule is predicted by pre-clerkship performance. While clerkship exposure appeared to be positively associated with Step 1 scores, it was not possible to fully control for the effect of pre-clerkship performance on scheduling. The effect of clerkship exposure may only be reflective only of pre-clerkship performance.

### **Contribution to the session participants and ability to be utilized by other institutions**

We wish share our analysis of Step 1 performance as an important cautionary tale inherent in medical education research. Limitations such as ours are substantial and can lead to flawed conclusions about curricular redesign, particularly for high stakes assessments such as Step 1. In addition, current studies are generally isolated to specific portions of the curriculum and do not consider modest gains in Step 1 scores in the context of possible unintended consequences such as increased stress related to delay in Step 1 and potentially negative impact on clerkship education and performance.

## Submission ID#593762

Near-Peer Mentorship Program: Evaluation of shifting to mentorship groups

Submission Type: Posters

Submitter: Jenna Rogers – University of Louisville School of Medicine

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### Presenters

Jenna Rogers, Medical Student

Role: Lead Presenter  
Medical Student

Tony Simms, MPH

Role: Co-Presenter

Martin Huecker, MD

Role: Co-Presenter

Jessica M. Bier

Role: Co-Presenter  
Medical Student

Brooke E. Barrow, Student

Role: Co-Presenter  
Medical Student

### Topic

Other: Student Personal and Professional Development  
Near-Peer Mentorship

### Background/Context and Relevance of the presentation/session

At the 2018 AAMC National Conference the University of Louisville School of Medicine (ULSOM) presented the structural change to ULSOMs near-peer mentorship program. For the class of 2022, ULSOM switched from a one-to-one peer mentorship program in which one second year medical student (MS2) was paired with one first year medical student (MS1) to a near-peer group mentorship program. In the current near-peer group mentorship program, MS2 apply and are selected to mentor a group of four to five MS1s. Mentors provide important support in the transition into medical school as well as transitions during school.

### Objectives and purpose of the innovation/practice/program/idea

To ensure ULSOM students benefit from the near-peer group mentorship program, we will evaluate the program and compare it to the previous one-to-one near-peer mentorship program.

### Methods

IRB approved surveys will be administered to the classes of 2020, 2021, and 2022. Mentor and mentee surveys will be the evaluation tools used. The mentor survey will be administered to the class of 2020 for the one-to-one near-peer mentorship program mentors perspective. The mentors of the class of 2021 will receive the mentor evaluation survey as the near-peer mentorship group perspective. Mentor responses will be used to compare how mentors perceive their roles and the structure of their respective mentorship program. The mentee survey will be administered to the classes of 2021 and 2022. The class of 2021 will represent the one-

to-one near-peer mentorship program mentees perspective. The class of 2022 responses will represent the near-peer mentorship group program mentees perspective. The mentee responses will be used to measure how mentees perceive the support provided by and structure of their respective programs.

### **Outcome/Significance**

Surveys will be administered electronically for voluntary completion. These surveys will include demographic information, multiple choice questions, and open-ended questions evaluating the overall perception of the two near-peer mentorship program models as well as questions to investigate areas of improvement. Results will be evaluated for statistical significance to compare the two program models. The quantitative and qualitative data gathered from the surveys will be presented at the 2019 AAMC Central and Southern Regional Meeting.

### **Contribution to the session participants and ability to be utilized by other institutions**

Through the evaluation of this novel approach to near-peer mentorship, we hope to present important and significant data contrasting the different near-peer mentorship programs.

### **References**

- Akinla O, Hagan P, Atiomo W. A systematic review of the literature describing the outcomes of near-peer mentoring programs for first year medical students. *BMC Med Educ*. 2018;18(1). doi:10.1186/s12909-018-1195-1
- Buddeberg-Fischer, B., & Herta, K. D. (2006). Formal mentoring programmes for medical students and doctors--a review of the Medline literature. *Med Teach*, 28(3), 248-257. doi:10.1080/01421590500313043
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- Meinel, F. G., Dimitriadis, K., von der Borch, P., Stormann, S., Niedermaier, S., & Fischer, M. R. (2011). More mentoring needed? A cross-sectional study of mentoring programs for medical students in Germany. *BMC Med Educ*, 11, 68. doi:10.1186/1472-6920-11-68
- Sambunjak, D., Straus, S. E., & Marusic, A. (2006). Mentoring in academic medicine: a systematic review. *JAMA*, 296(9), 1103-1115. doi:10.1001/jama.296.9.1103
- Taylor, J. S., Faghri, S., Aggarwal, N., Zeller, K., Dollase, R., & Reis, S. P. (2013). Developing a peer-mentor program for medical students. *Teach Learn Med*, 25(1), 97-102. doi:10.1080/10401334.2012.741544

## Submission ID#593828

High Satisfaction and Improved Academic Self-Confidence Among Students Participating in the Academic Society Peer Tutoring Program

Submission Type: Posters

Submitter: Natalie Williams – University of Miami Leonard M. Miller School of Medicine

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### **Presenter**

Natalie M. Williams, BS

Role: Lead Presenter

Medical Student

### **Topic**

The Medical School Environment

- Creative academic support with limited resources

### **Background/Context and Relevance of the presentation/session**

The Academic Societies program at the University of Miami Miller School of Medicine is a collaborative effort between students, faculty, and administration to encourage peer teaching of clinical skills, enhance teamwork, and provide students with leadership, tutoring, and community service opportunities. One component of the AS program is the Peer Tutoring Program, which allows student volunteers to serve as peer-to-peer tutors.

### **Objectives and purpose of the innovation/practice/program/idea**

We sought to evaluate tutor and tutee satisfaction with the Peer Tutoring program from 2016-2018.

### **Methods**

Tutees request online tutoring through Google forms managed by student leaders, and are connected to approved tutors in the discipline of their choice. All volunteers are academically cleared by the administration and then undergo a tutor training led by our academic enhancement specialist. Satisfaction with the program was evaluated through surveys, completed after each tutoring session. Both tutors and tutees were asked about the ease with which the session was scheduled, and if they felt the session was valuable/helpful to them. Answers were recorded on a Likert scale from strongly disagree to strongly agree. Free-text feedback was also available for further comments regarding experiences with their tutor/tutee and the program in general.

### **Outcome/Significance**

For the past 2 years, approximately 246 requests for tutoring were fulfilled. From 2016-2018 we had 238 tutor feedback forms submitted, and 44 tutee feedback forms submitted. Overall, tutors and tutees were highly satisfied with the tutoring sessions. Tutees reported great satisfaction with their tutors, however, a few cited concern over scheduling problems with their tutors as well as differing communication preferences (in person vs. telephone, etc.). Based on feedback, we broadened preparation for tutoring with dedicated training in the science of learning, and we are developing a best practices document for both tutors and tutees. We are also considering expanding an option for board preparation. Feedback from the tutors was generally positive with some also reporting increased self-confidence and knowledge after their teaching session.

### **Contribution to the session participants and ability to be utilized by other institutions**



The high satisfaction among tutors and tutees demonstrates that the AS Peer Tutoring program is a valuable resource for students seeking to improve academically, and serves as a medium to foster leadership and improve self-confidence and understanding of content for both types of participants. This program provides an opportunity for students to both serve their peers and enhance teaching skills, and can easily be utilized by other institutions.

## Submission ID#593865

A Questionnaire-based Study on Future Physicians Knowledge of Modern Slavery

Submission Type: Posters

Submitter: Miriam Lobrano – Louisiana State University School of Medicine in Shreveport

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### **Presenter(s)**

Miriam Mae Lobrano

Role: Lead Presenter

Medical Student

### **Topic**

Other:

### **Background/Context and Relevance of the presentation/session**

According to the Global Slavery Index, on any given day in 2016 there were 403,000 people living in conditions of modern slavery in the US. The Department of Children and Family Services reports 681 cases of human trafficking in Louisiana in 2017. Of those cases, 65% were reported by health care providers. Over the last decade, medical schools nationwide have implemented increased awareness and training in the education of physicians on human trafficking. At LSUHSC-Shreveport, this has been limited to occasional training sessions through the pediatric rotations and in certain residency programs. However, there has been no formal education during the first years of medical training. How can we insure that medical students will be in a position to identify and treat a victim of human trafficking year if they do not understand the foundations of this complex issue? In 2019, a lecture will be implemented outlining a fundamental analysis of human trafficking in Louisiana and detailing the complexities of victim identification in healthcare. The curriculum will focus on closing the major gaps in knowledge of this particular field while also incorporating interaction among patient population.

### **Objectives and purpose of the innovation/practice/program/idea**

This study aims to evaluate the medical education of second year students in the topic of human trafficking at LSUHSC-Shreveport. We would like to compare the baseline knowledge of prior to the lecture to the knowledge thee students acquired after, with hopes the addition to the curriculum is effective at my institution in training future physicians.

### **Methods**

We will administer a questionnaire to 125 second year students before and after the lecture to assess the knowledge of the students and their ability to identify victims. The data will be analyzed prior to poster presentation.

### **Outcome/Significance**

We hypothesize that the students will have a better understanding of human trafficking and be better prepared to identify a victim in the future. It is vital that future physicians are educated in modern forms of slavery that can affect their patient population.

### **Contribution to the session participants and ability to be utilized by other institutions**

Out of 106 survivors interviewed, 87.8% reported interacting with a health care professional while being a

victim of human trafficking (Lederer and Wetzel). Medical students across the country need to be aware of this issue since the health care setting is first line in reporting cases of human trafficking. Through this conference, I aspire to inform other institutions of the importance of implementing this training into the curriculum in the first two years of medical school.

## **References**

United States. The Global Slavery Index, 2018, [www.globalslaveryindex.org/2018/findings/country-studies/united-states/](http://www.globalslaveryindex.org/2018/findings/country-studies/united-states/).

Human Trafficking, Trafficking of Children for Sexual Purposes and Commercial Sexual Exploitation. 2018, Department of Children and Family Services annual report.

Lederer, Laura J, and Christopher A Wetzel. *Annals of Health Law. The Health Consequences of Sex Trafficking and Their Implications for Identifying Victims in Healthcare Facilities* , vol. 23.

## Submission ID#593869

Expanding Student Affairs with the Office of Academic Excellence

Submission Type: Posters

Submitter: KELLY EVANS – University of North Carolina at Chapel Hill School of Medicine

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### Presenter(s)

Kelly L. Evans, MD

Role: Co-Presenter

Kimberley Nichols, MD

Role: Lead Presenter

Elizabeth Steadman, PhD

Role: Co-Presenter

### Topic

Other: Student Affairs Operations

### Background/Context and Relevance of the presentation/session

The University of North Carolina at Chapel Hill created the Office of Academic Excellence (OAE) as a subsidiary to Student Affairs in January 2018 to reach as many struggling students as possible by providing early interventions for academic success.

### Objectives and purpose of the innovation/practice/program/idea

As above

### Methods

Defined roles within this new office are mostly held by physicians and include a Director of Academic Assistance, who provides one-on-one academic support around test-taking; a Director of Learning Innovation (DLI), who works mainly with first and second-year medical students and is currently focusing on deliberate practice strategies to increase performance on licensing exams; a Foundation Phase Academic Coach (F-PAC) works with first and second-year medical students to help with organization of academic content and strategies around challenges in standardized test-taking. Additionally, there are several tutors who support the mission of both the F-PAC and DLI. Clinical Academic Resource Directors (CARDs) are two physicians who work primarily with third and fourth-year medical students on history-taking, physical exam skills, and professionalism. The CARDs also actively work with the Clinical Skills center to prepare students for the Step 2 CS licensing exam. The OAE receives guidance from the Office of Medical Education Director of Student Affairs, Assistant Dean for Student Affairs, and Associate Dean for Student Affairs. The CARD role previously existed prior to the inception of the Office of Academic Excellence, but the previous individuals in these roles had less protected time to perform their duties. With the creation of the OAE, new physicians were appointed, and more protected time was granted for the CARDs. Moreover, the roles of the DLI and F-PAC were created to expand the mission of the OAE.

### Outcome/Significance

With each groups specified focus, UNC SOM has been able to streamline communication with course

directors and advisors, and struggling students now have a team of people who can provide them with resources. Forty-two students have accessed the services of the OAE since January 2018, and in a short time period UNC SOM has seen improved licensing exam passage rates. For example, our Step 1 passage rate increased from 92% in 2017 to 99% in 2018 with a national average of 96%. Moreover, the Step 2 CS passage rate was 98% which is above the national rate of 95%. As the services offered by the OAE develop and expand, we will continue to follow these and other metrics in the coming years.

**Contribution to the session participants and ability to be utilized by other institutions**

Value of expanded support team

## Submission ID#594061

Approaches to Unconscious Bias Training for Faculty/Staff and Students: Two Models

Submission Type: Posters

Submitter: Adrian De Gifis – Michigan State University College of Human Medicine

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### Presenter(s)

Adrian J. De Gifis, Ph.D.

Role: Lead Presenter

Judy Brady, M.D.

Role: Co-Presenter

Wanda Lipscomb, Ph.D.

Role: Co-Presenter

Julie P. Phillips, MD, MPH

Role: Co-Presenter

Cheryl Celestin, Ed.D.

Role: Co-Presenter

### Topic

Diversity, Inclusion, and Social Justice

- Educating with compassion and empathy
- particularly around important contemporary topics like #Metoo and WhiteCoats4BlackLives

### Background/Context and Relevance of the presentation/session

We are committed to providing the best possible educational experience including preparing students to care for individuals and families of diverse backgrounds is central mission of the college. Unconscious Bias has been demonstrated to influence interactions and decisions in the contexts of both medical education and health care delivery.

### Objectives and purpose of the innovation/practice/program/idea

We offer two approaches to mitigating the negative impacts of UB: a student facilitated curricular offering and a faculty/staff-oriented workshop. Students may choose to enroll in an UB elective in their 1st or 2nd year. The elective seeks to foster discussions of and reflection on UB. During the 2018-2019 academic year each Academic Affairs faculty and staff will be asked to participate in a workshop focused on UB. The purpose of this workshop is to explore those biases that everyone carries in an effort to raise consciousness about how reaction may occur without thinking.

### Methods

The UB elective utilizes multiple resources to foment meaningful discussion and reflection. Students completing the elective may choose to be next year's facilitators of the elective. The faculty/staff workshop follows the model developed by the AAMC and Cook Ross, Inc. They are led by two CHM facilitators who have been certified by Cook Ross. Participants complete a pre- and post-survey.

**Outcome/Significance**

The peer-to-peer model has proven highly effective in delivering curriculum. The opportunity to elevate from student to student-facilitator enables longitudinal development of skills and attitudes. We are considering how to incentivize more students to enroll, as we assert that voluntary enrollment increases the propensity for students to derive value. Faculty and staff are assigned a workshop training date, however participation has been voluntary. The workshop is a single session. Feedback indicates a desire for continued conversation; as with the student elective, it is apparent that effective UB training requires frequent discussion, reflection and learning.

**Contribution to the session participants and ability to be utilized by other institutions**

The commitment of the College to D&I and Social Justice has compelled us to seek new and innovative approaches that can be customized and scaled to appeal to different stakeholders. Our two-pronged approach to increasing awareness of UB in medical education and health care and to providing skills necessary to mitigate the impact of those biases is one reflection of that commitment. As all AAMC member schools share a commitment to these values, we allege that our approach is of broad interest to our peers. We are also keen to stimulate discussion and gather input to help us further refine our approach.

## Submission ID#594082

Continuing Change: Mental Health and Wellness at Tulane University School of Medicine

Submission Type: Posters

Submitter: Erika Chow – Tulane University School of Medicine

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### Presenter(s)

Erika T. Chow, MS

Role: Lead Presenter  
Medical Student

James R. McAllister

Role: Co-Presenter  
Medical Student

Justine Ker

Role: Co-Presenter  
Medical Student

Charlotte S. McLean

Role: Co-Presenter  
Medical Student

Myo Thwin Myint, MD

Role: Co-Presenter

### Topic

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### Background/Context and Relevance of the presentation/session

Physician and medical student burnout and depression is of increasing concern. In response, the Tulane Mental Health and Wellness Coalition (MHCWC) was created at Tulane University School of Medicine (TUSOM) to coordinate efforts on student wellness, to track mental health and resource utilization, and to implement changes based on feedback. In 2016 an informal survey was administered leading to several interventions, such as increased counseling resources, an integrated wellness calendar, and mental health check-ins during third year clerkships.

### Objectives and purpose of the innovation/practice/program/idea

The purpose of this study is to gauge wellness of TUSOM medical students, assess changes in satisfaction with mental health and wellness resources, and identify areas for further improvement. We anticipate that this study will improve mental health and increase satisfaction with wellness interventions.

### Methods

The TUSOM student body was surveyed via REDCap in fall 2018. The survey incorporated the PHQ-9, GAD-



7, and questions about burnout, coping mechanisms, social support, history of mental illness, and awareness and utilization of Tulane wellness resources.

### **Outcome/Significance**

289 students (38.6% of the student body) took the survey, with equal representation from all four classes. 12 students (4.2%) reported moderately severe to severe depression on the PHQ-9 scale, and 49 students (17.0%) reported moderate to severe anxiety. 103 students (35.6%) self-reported feelings of burnout. 43 students (14.9%) used student counseling services, while 36 students (12.5%) reported needs for mental healthcare at Tulane that were inaccessible. The main barriers for these students was an inability to take time off from clinical duties and a lack of after hour services. Since the last MHWC survey, 37 students (30.6%) felt that Tulane resources improved, 3 (2.5%) felt they worsened, and 81 (66.9%) felt they stayed the same. When asked about resources, students suggested more yoga/meditation sessions, school-sponsored wellness events, and workshops on work-life balance and coping with medical school milestones. The MHWC will be working with the administration to target the deficits that students identified.

### **Contribution to the session participants and ability to be utilized by other institutions**

The yearly survey provides data to determine trends in wellness, resource deficits, and efficacy of the interventions. The coordination between faculty and student leaders creates a concerted effort to obtain needed resources. Additionally, we are working in parallel with a similar survey being conducted at University of Texas Southwestern. This will be beneficial to medical schools nationwide by providing a model for students to have a proactive and collaborative voice in their own wellness.

### **References**

- 1) Ishak W, Nikraves R, et al. Burnout in medical students: a systematic review. Clin Teach. 2013 Aug;10(4):242-5.
- 2) Shanafelt TD, Dyrbye LN, West CP. Addressing Physician Burnout: The Way Forward. JAMA. 2017 Mar 7;317(9):901-902.

## Submission ID#594372

SOS: An Inclusive Student Affairs Approach to Supporting Healthcare Education Students

Submission Type: Posters

Submitter: Julie Johnson – Wake Forest School of Medicine

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### **Presenter(s)**

Julie Johnson

Role: Lead Presenter

Charli N. Allen, MHS, CHES

Role: Co-Presenter

Betty Smith

Role: Co-Presenter

### **Topic**

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### **Background/Context and Relevance of the presentation/session**

The Office of Student Affairs at Wake Forest School of Medicine (WFSM) provides inclusive support for all healthcare education students, including MD, PA, CRNA, DNP, and Graduate School students. Each educational program has provided various levels of support in the past for student-led activities, but in a siloed fashion. This year, WFSM initiated a Student Organization Support (SOS) process that allows students to submit grant requests on a monthly basis to fund student group activities or student wellbeing programming that will benefit a large cross section of students.

### **Objectives and purpose of the innovation/practice/program/idea**

Students are encouraged to be creative with their requests and to propose activities that will benefit students in a positive way, not only through educational experiences, but also through activities that promote the health and wellbeing of the whole student.

### **Methods**

Grant requests are reviewed monthly by an interdisciplinary committee made up of at least one faculty or staff representative from each educational program, as well as faculty or staff representatives from key institutional departments such as Diversity & Inclusion and Counseling & Wellbeing.

### **Outcome/Significance**

A summary of each funded activity is required at the end of the event, which allows the committee to identify the student effort put forth, the perceived value by the students, and to track the committees return on investment for each funded activity. This centralized process allows students across programs to come together in the promotion of student wellbeing, community service, and diversity and inclusion initiatives. The process promotes collegiality and interprofessional programming. Students are given the opportunity to create

and select activities that are the most meaningful to them. Promoting student engagement across programs and in extracurricular activities leads to decreases in burnout and increases in student resilience.

### **Contribution to the session participants and ability to be utilized by other institutions**

By implementing an inclusive Student Organization process, there is the ability to discover student-centered activities to implement at your school. Participants will identify ways to encourage communication between educational programs for students, faculty, and staff, as well as recognize ways students can be more involved within the school and the community.

### **References**

Shochet RB, Colbert-Getz JM, Wright SM. The Johns Hopkins Learning Environment Scale: Measuring Medical Students Perceptions of the Processes Supporting Professional Formation. *Academic Medicine*. 2015;90:810-818. Shochet RB, Colbert-Getz JM, Wright SM. The Johns Hopkins Learning Environment Scale: Measuring Medical Students Perceptions of the Processes Supporting Professional Formation. *Academic Medicine*. 2015;90:810-818.

## Submission ID#594491

Understanding the Predictive Value of Medical School Applicants Rural Characteristics on Intent to Practice in a Rural Community

Submission Type: Posters

Submitter: Julie Phillips – Michigan State University College of Human Medicine

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### Presenter(s)

Julie P. Phillips, MD, MPH

Role: Lead Presenter

Andrea Wendling, MD, FAAFP

Role: Co-Presenter

Karen Jones

Role: Co-Presenter

Scott Shipman, MD, MPH

Role: Co-Presenter

Iris Kovar-Gough, MA, MLIS

Role: Co-Presenter

### Topic

Recruitment and Admissions

- Admissions policies/ practices the evolving political/legal context

### Background/Context and Relevance of the presentation/session

There is a substantial shortage of physicians in rural communities. Students from rural backgrounds are much more likely to eventually practice rurally, yet underrepresented in medical schools. However, there has been no consensus as to how to best define students of rural origin.

### Objectives and purpose of the innovation/practice/program/idea

Study purpose was to understand the predictive value of rural student characteristics, as documented in medical school applications, on students intentions to practice in rural communities.

### Methods

Study was a secondary analysis of a national dataset. We obtained information on medical students matriculating for between 2012 and 2017 from AMCAS applications and AAMC Matriculating Student (MSQ, 2012-2017) and Graduation Questionnaires (GQ, 2016-2018). Using AMCAS applications, we identified and geographically coded multiple variables associated with rural identity, including birth county, self-declared childhood county, and high school county; as well as self-declared geographic origin. Using logistic regression analyses, we measured the likelihood of intent to practice rurally for all students, selecting each rural identity variable, as well as for combination variable cohorts. Separate regression models were built for each variable or combination, controlling for other known demographic variables. Separate analyses were performed for likelihood of expressing rural interest on the MSQ (2012-2017 matriculants) and on the 2016-2018 GQ (2012-2014 matriculants).

## **Outcome/Significance**

115,027 medical students (94%) matriculated between 2012 and 2017 and met inclusion criteria. For the 56,126 study students who matriculated between 2012 and 2014, 20,861 (37.2%) identified a preferred practice location on both MSQ and GQ.

More students self-declared rural origin (18,662; 16.4%) than were identified using any of the geographically-coded variables (6,097-8,784; 6.1%-8.1%). Geographically-coded rural admissions characteristics were all strongly and similarly associated with rural intent to practice, with rural high school county being the most predictive on both MSQ (OR 6.51, CI 6.1-7.0) and GQ (OR 5.4, CI 4.9-6.0). Self-declared geographical origin was associated with a similar intention to practice rurally on both MSQ (OR 6.93, CI 6.5-7.3) and GQ (OR 5.69, CI 5.2-6.2).

## **Contribution to the session participants and ability to be utilized by other institutions**

Considering students who identify as being from rural communities in medical school admissions has the potential to identify a larger group of rural applicants than more objective geographic variables, without negatively impacting students interest in eventual rural practice. Based on these findings, we recommend that admissions committees and other medical educators strongly consider self-identification of rural origin when selecting students for admission to medical school and to rural educational programs.

## **References**

Singh GK, Siahpush M. Widening rural-urban disparities in life expectancy, U.S., 1969-2009. *Am J Prev Med.* 2014;46(2):e19-29.

Whitcomb ME. The challenge of providing doctors for rural America. *Acad Med.* 2005;80(8):715-716.

Rabinowitz HK, Diamond JJ, Markham FW, Paynter NP. Critical factors for designing programs to increase the supply and retention of rural primary care physicians. *Jama.* 2001;286(9):1041-1048.

## Submission ID#594639

The Wellness Advisory Council: Lessons Learned and the Growth of a Student-Led Wellness Initiative

Submission Type: Posters

Submitter: Andrew Stine-Rowe – University of Miami Leonard M. Miller School of Medicine

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### Presenter(s)

Andrew Stine-Rowe, n/a

Role: Lead Presenter  
Medical Student

Madeline A. Cohen, MPH

Role: Co-Presenter  
Medical Student

Hilit Mechaber, M.D.

Role: Facilitator

### Topic

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### Background/Context and Relevance of the presentation/session

In 2017, OSR at the University of Miami Miller School of Medicine launched a new initiative to improve the health and well-being of the student body. The new Wellness Advisory Council (WAC) sought to bring together leaders in student government, academic societies, and the school administration to holistically examine student well-being and identify changes within the school that might improve student wellness.

The WAC engaged in independent initiatives in its first year, including the launch of a school-wide Wellness Week featuring student groups that promoted wellness, and a research project aimed at how to improve social events at the school.

### Objectives and purpose of the innovation/practice/program/idea

In 2018, its second year, the WACs main priority was to expand their engagement within the schools existing student and faculty leadership. To build on its early successes and meet its role as a convening and organizing body, the WAC sought ways to bring more stakeholders to the table to focus on student health.

### Methods

The WAC leadership led off this year with maximizing connections individually to a broad range of stakeholders in student health, inviting student leaders and administration to a large fall kickoff meeting. The WAC updated the team on new wellness-related initiatives underway and identified areas in student health that the group could focus on in the upcoming academic year.

**Outcome/Significance**

Identifying and improving stakeholder engagement has brought new voices to the conversation and has been the driving force in the WACs projects this year. Based on student feedback, the WAC launched a new project to explore peer mentoring programs. Additionally, student feedback spurred a project addressing the unique health concerns faced by our regional campus students, as they are geographically separated from main campus resources.

The WAC is also now collaborating with colleagues in graduate medical education and adding resident representation to the group. Resident involvement will expand our understanding of student health needs.

**Contribution to the session participants and ability to be utilized by other institutions**

The WAC demonstrates the reality that substantive, sustainable change takes longitudinal iteration and evolution. In its year-end review, WAC leadership determined the importance of improving stakeholder engagement, which has now become a strength this year. Regular reflection is integral to improvement. This program can be implemented at other institutions seeking to improve the culture of medical student well-being through student involvement. Administrators can empower student leaders with support and guidance. Even with limited resources, valuing student contributions and leadership can be a powerful impetus for meaningful and long-term change.

## Submission ID#594657

Wellness Week: An Annual Project Promoting the Long-term Well-being of Future Healthcare Providers

Submission Type: Posters

Submitter: Rikera Taylor – University of Miami Miller School of Medicine

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### **Presenter(s)**

Rikera L. Taylor, B.A.

Role: Lead Presenter

Medical Student

Elisa K. Karhu, MS

Role: Co-Presenter

Medical Student

Alexandria Poitier, MPH

Role: Co-Presenter

Medical Student

Andrew Stine-Rowe

Role: Co-Presenter

Medical Student

Hilit Mechaber, M.D.

Role: Facilitator

### **Topic**

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### **Background/Context and Relevance of the presentation/session**

The Wellness Advisory Council (WAC) is a student led organization founded in 2016 with the mission of promoting overall wellness among medical students. The WAC aims to improve wellness for members of the student body within various domains (Mind, Body, Interpersonal, Community and Service, and Academic and Professional Development). WAC domain chairs work with student leaders, student government representatives, and medical education administration to bring awareness to the importance of medical students' well-being.

### **Objectives and purpose of the innovation/practice/program/idea**

In Spring 2017, two domain chairs from the WAC led the inaugural "Wellness Week," a school-wide, week-long series of activities centered around student wellness. Wellness Week was created to encourage students to immerse themselves in activities aimed at fostering self-care and personal well-being.



## **Methods**

Wellness Week was comprised of events including panel discussions, hands-on workshops, group exercise lessons, and therapeutic activities. In the inaugural year, leaders encountered barriers such as scheduling conflicts, inconsistent event attendance, and limited participation during faculty-led discussions. Building on experience, a different approach was taken while planning for the current year's event. An additional co-chair was recruited to assist with early planning, to facilitate increased collaboration between student groups, and to enable inclusion of more events than the prior year. The co-chairs also worked together to ensure the timely completion of event scheduling and logistical tasks, and advanced preparation provided time to incorporate lessons learned from the inaugural Wellness Week. Co-chairs also modified scheduling plans this year to account for class and test schedules. Additionally, faculty guest discussants sought out students' opinions on appropriate wellness topics for their presentations. Student groups were also encouraged to collaborate with each other, if they had similar ideas and goals, to plan events that promoted student wellness. As a result, several group leaders planned wellness activities that brought together diverse groups from the student body who may not have otherwise co-programmed.

## **Outcome/Significance**

During this year's Wellness Week, students learned about an array of topics including mental well-being and burnout, physical health, and stress-relief techniques. Incorporating previous student feedback and increasing student autonomy led to significant improvement in attendance and participation.

## **Contribution to the session participants and ability to be utilized by other institutions**

Institutions can use "Wellness Week" as a guide to implement school-wide initiatives that promote the importance of wellness in the medical community. Students will find that prioritizing their overall well-being during their medical education can have a positive long-term impact throughout their careers.

## Submission ID#594671

Impact of a Peer-to-Peer Tutoring Model on Student Test Taking Confidence and Performance

Submission Type: Posters

Submitter: Michael Trainer – Mercer University School of Medicine

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### **Presenter**

Michael S. Trainer

Role: Lead Presenter

Medical Student

### **Topic**

Other: Academic Support

### **Background/Context and Relevance of the presentation/session**

Formal systems of peer teaching are common in many advanced-degree programs and provide academic benefit to both the teacher and learner.

### **Objectives and purpose of the innovation/practice/program/idea**

This study examines the impact MS3 students can have in supplemental instruction of medical knowledge and exam-taking strategy for MS2 students during the pre-clinical curriculum.

### **Methods**

Tutors were identified and recruited based on performance (above 50th percentile) on USMLE Step1 and interest in teaching. During each module of the preclinical curriculum, 6-8 MS3 tutors look through the MS2 study guide at the beginning of a module and create a set of 10-15 USMLE-style practice questions reflective of key topics. Pairs of tutors lead small groups of students through dissection strategies and review of key information. MS2 students are surveyed after the exam to see how the tutoring session affected their confidence in answering test questions and performance. Feedback is related to the question selection, performance of each tutor, and continued interest in sessions to help revise the plan for the following module.

### **Outcome/Significance**

Preliminary data. After two modules (Pulmonology, Nephrology), the sessions are attended by an average of 21 students (34.4%). There is an average survey response rate of 50%. Students felt that the session offered them greater confidence when taking exams (average Likert score of 4.17/5, n=41) and helped them score more points on the faculty exam (3.83, n= 41).

### **Contribution to the session participants and ability to be utilized by other institutions**

Continued data collection for the remaining MS2 modules and expansion to MS1 modules. There will be review session for USMLE Step1 and a study of the impact of this program on students preparedness for the exam. Academic counselors are working on deidentifying student data to track the trending impact of small-group tutoring on actual performance, not just the students perceived performance. This model may be used for at-risk students or to improve global student performance on licensing exams.

### **References**

Jeffrey G. Wong, Thomas D. Waldrep & Thomas G. Smith (2007) Formal Peer-Teaching in Medical School Improves Academic Performance: The MUSC Supplemental Instructor Program. *Teaching and Learning in Medicine*, 19:3, 216-220

## Submission ID#594698

OU Community Health Alliance: A Curriculum Designed to Cultivate the Next Generation of Community Leaders

Submission Type: Posters

Submitter: Stephanie Lee – University of Oklahoma College of Medicine

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### Presenter(s)

Stephanie M. Lee, n/a

Role: Lead Presenter  
Medical Student

Justin M. Robbins

Role: Co-Presenter  
Medical Student

### Topic

Student Personal and Professional Development

- Humanism in Medicine
- Beyond Step scores and ward performance: redefining student success (resilience
- professionalism
- attainment of competencies)

### Background/Context and Relevance of the presentation/session

The majority of medical school curriculum is geared towards teaching medical knowledge and the practical skill sets of a physician, but an important part of the hidden curriculum is training Americas future physicians to interact with their community, seek out resources that are available to the population they serve, and becoming leaders in improving the landscape of our nation's health.

### Objectives and purpose of the innovation/practice/program/idea

The University of Oklahoma's Community Health Alliance (OUCHA) serves as both a student organization and an optional elective course for students in their fourth year that they can begin to earn hours towards completion during their first three years of education. Students seeking to enroll in the course are required to complete 8 community service hours, 12 hours educating the general public about disease prevention topics such as smoking prevention and the importance of a healthy diet and exercise, and 60-80 clinical hours. At the end, students are required to write a reflection paper about their experience. All hours are earned through participating or creating various student led initiatives at local free clinics, public schools, and other community settings.

### Methods

(Note: hours represented in our outcome are based on the past 4 months and will reflect through March in final poster)

### Outcome/Significance

OUCHA began in 2005, but in just this past semester (4 months) students have completed 2700+ man-hours in 58 events throughout the Oklahoma City metro area. Since the creation of our organization, we have established a partnership with 17 local charity clinics and the Oklahoma City Public School System, hosted our 12th annual state-wide conference focused on bridging the gap to healthcare access to uninsured patients and 10th annual marathon fundraiser, began a collaboration with the Trauma department to deliver Stop the Bleed trainings to the community, and started a poverty simulation workshop on our campus. OUCHA has created a platform for students to propose new ideas on how to better serve patients and the time and resources to enact these novel ideas. This program has allowed our medical students to be more well-rounded, broaden their understanding of different cultural and socioeconomic backgrounds found throughout our community, and has allowed them to refine their understanding of various disease processes and treatments.

**Contribution to the session participants and ability to be utilized by other institutions**

This highly successful model of engaging students in leadership roles in their community can be easily replicated throughout all medical training institutions to teach a curriculum that is not readily available in a classroom or ward-based setting.

## Submission ID#594725

Enhancing Step 1 Preparation through Peer-Led Reviews

Submission Type: Posters

Submitter: Sarah Russel – University of Illinois College of Medicine

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### Presenter(s)

Sarah M. Russel

Role: Lead Presenter  
Medical Student

Joseph R. Geraghty

Role: Co-Presenter  
Medical Student

Tarek Behery

Role: Co-Presenter  
Medical Student

Cutler Lewandowski

Role: Co-Presenter  
Medical Student

Timeah T. Rogers

Role: Co-Presenter

### Topic

The Medical School Environment

- Creative academic support with limited resources

### Background/Context and Relevance of the presentation/session

The University of Illinois College of Medicine (UICOM) consistently admits a diverse student body representing a wide range of socioeconomic backgrounds. As students have varying financial support, UICOM works to support students with study resources to limit out-of-pocket expenditures towards educational materials. One such resource is the Peer Education Program (PEP) composed of three tiers: large lecture-style reviews open to all students, small group tutoring, and one-on-one tutoring for those in need of extra support. Peer educators, who have demonstrated academic excellence, have been used to review large volumes of material at the end of courses and clerkships, but they had not been utilized for USMLE Step 1 preparation outside of the one-on-one setting.

### Objectives and purpose of the innovation/practice/program/idea

Develop a series of peer-led USMLE Step 1 reviews that cover high-yield subjects at no cost to students and low cost to UICOM.

### Methods

Through collaboration between students and PEP staff, a list of high-yield subjects was developed that closely aligned with resources currently being used by students. Peer educators signed up to develop audio-video recordings of lectures on these subjects. Lecture media was uploaded to a shared drive for students to

access, and a question portal was provided so that students could submit follow-up questions to the peer educators for ongoing discussion. These lectures were released on a rolling basis leading up to the dedicated study time prior to students USMLE Step 1 exam.

### **Outcome/Significance**

The PEP Step 1 Review Series was highly utilized by second-year UICOM students. Students felt that the reviews offered a supplemental resource to their studies by expanding on material and providing critical context. Students also appreciated the efforts of upperclassmen to serve as near-peer educators, improving the sense of cohesion amongst the student body. While originally we had developed in-person office hours during the dedicated study period, low attendance encouraged us to switch to an online portal, which was utilized more frequently. Future plans include development of a Step 2 CK review series, as well as a parallel advice & strategies series to accompany content review.

### **Contribution to the session participants and ability to be utilized by other institutions**

The success of the Step 1 Review Series presented here can easily be translated to other institutions and will serve as a valuable resource for medical students preparing to take the USMLE Step 1 exam.

## Submission ID#594875

Autonomy and Accountability: Expanding Student Leadership in Medical School Organizations

Submission Type: Posters

Submitter: Sarah Goodman – Charles E. Schmidt College of Medicine at Florida Atlantic University

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### Presenter(s)

Sarah Goodman

Role: Lead Presenter

Medical Student

William Gibbs

Role: Co-Presenter

Medical Student

Stuart Markowitz, MD

Role: Facilitator

Joanna Duran

Role: Facilitator

Jennifer Caceres, MD

Role: Facilitator

### Topic

The Medical School Environment

- Creative academic support with limited resources

### Background/Context and Relevance of the presentation/session

Based on the NRMP Program Directors Survey, 61% of residency programs rank student leadership experiences as an important factor for selecting an applicant for an interview. It is, therefore, important to encourage and support student organizations with opportunities that foster student leadership.

While some schools have substantial funding to support all aspects of student organizations, others might have more limited resources, being left with less financial support. This may result in restriction of events that could foster students leadership skills and experiences in specialties that would prepare them for residency.

### Objectives and purpose of the innovation/practice/program/idea

Students at FAU College of Medicine developed a proposal for a student-led Medical Student Association (MSA). With oversight by the Office of Student Affairs, the MSA was initiated to give students more autonomy over their organizations by giving students an annual allotment of funds. They would then determine allocation of these funds to meet the needs of the organizations. Students would be expected to work collaboratively and be held accountable for the allocation outcomes.

### Methods

The student government leadership developed a proposal delineating the roles/responsibilities of the MSA and presented it to the central university for approval.

### Outcome/Significance

The central university student government approved the MSA charter. Medical student leaders will now have complete control of the allocation of funds, helping existing organizations grow and creating new organizations



based on student body interests. Although the program is in its infancy, students are already developing new programs that will result in enhanced professional development, nurturing leadership and accountability.

### **Contribution to the session participants and ability to be utilized by other institutions**

This project represents a student-led initiative to improve the effectiveness of funding allocation to student organizations in a medical school environment with limited resources. The MSA is an example of how students can play a leadership role in determining how funds should be allocated to support student activities.

### **References**

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National Resident Matching Program. Data Release and Research Committee. (2018). Results of the 2018 NRMP Program Director Survey. National Resident Matching Program, Data Release and Research Committee.

Stoller, J. K. (2008). Developing physician-leaders: key competencies and available programs. *Journal of Health Administration Education*, 25(4), 307-328.

Swensen, S., Pugh, M., McMullan, C., & Kabcenell, A. (2013). High-impact leadership: improve care, improve the health of populations, and reduce costs. IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement.

## Submission ID#595022

eQuality: Overview and Clinical Resources from LGBTQ Medical Curricula Developed at ULSOM

Submission Type: Posters

Submitter: Emily Noonan – University of Louisville

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### Presenter(s)

Hallie Decker, MSW Candidate

Role: Lead Presenter

Laura A. Weingartner, PhD, MS

Role: Co-Presenter

Emily J. Noonan, PhD, MA

Role: Co-Presenter

Amy Holthouser, MD

Role: Co-Presenter

Susan Sawning, MSSW

Role: Co-Presenter

### Topic

Diversity, Inclusion, and Social Justice

- Empowering students and creating the climate and context for success
- Educating with compassion and empathy
- particularly around important contemporary topics like #Metoo and WhiteCoats4BlackLives

### Background/Context and Relevance of the presentation/session

Individuals who are lesbian, gay, bisexual, or transgender (LGBTQ) face significant health disparities and barriers in accessing quality health care due to systemic biases and inadequate provider knowledge [1].

Despite calls for specific training to provide evidence-based clinical care to LGBTQ patients, a gap in medical training exists [2-3].

### Objectives and purpose of the innovation/practice/program/idea

The objective of this project is to create, implement, assess, and disseminate an educational model that seeks to address health disparities by incorporating recommended LGBTQ healthcare competencies from the Association of American Medical Colleges (AAMC) into medical school curriculum. This presentation provides an overview of the project and resulting resources.

### Methods

In 2015, the University of Louisville School of Medicine (ULSOM) developed eQuality as the nation's pilot site for implementing integrated medical education to deliver equitable, quality care for all people, inclusive of identity, development, or expression of gender/sex/sexuality [4]. With local LGBTQ community input, this integrated educational model incorporates LGBTQ health competencies throughout medical school by developing curriculum interventions and training resources to increase knowledge and improve clinical skills.

## **Outcome/Significance**

eQuality incorporated 50.5 hours of new or modified content into required curriculum. To date, over 800 medical students have received eQuality content from over 25 teaching faculty, including multiple direct LGBT patient-student interactions. The eQuality project has so far resulted in 28 peer-reviewed presentations, 5 peer-reviewed publications, and 6 awards received from local and national organizations. In 2016, the eQuality project was awarded a grant to develop The eQuality Toolkit, a brief, practical LGBTQ clinical skills manual that will be available to other programs in the coming year [5]. These outcomes have allowed eQuality content to be disseminated to other medical schools throughout the United States in hopes that they will adopt LGBTQ curricula.

## **Contribution to the session participants and ability to be utilized by other institutions**

Incorporating comprehensive, equitable, and affirming LGBTQ-specific content into undergraduate medical education has great promise in yielding increased health workforce competency in caring for LGBTQ patient populations. The eQuality program intervention can effectively serve as a model for healthcare equity training for other institutions interested in developing and adopting similar curriculum successfully. The eQuality Toolkit can be used by students and practicing clinicians to improve the care they provide to LGBTQ patients.

## **References**

1. AAMC Advisory Committee on Sexual Orientation, Gender Identity, and Sex Development (2014). Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who are LGBT, Gender Nonconforming, or Born with DSD. A. D. Hollenbach, K. L. Eckstrand and A. Dreger. Washington, DC, Association of American Medical Colleges.
2. Obedin-Maliver J, Goldsmith ES, Stewart L, White W, Tran E, Brenman S, et al. Lesbian, Gay, Bisexual, and Transgender-related Content in Undergraduate Medical Education. *Journal of the American Medical Association*. 2011;306(9):971-7.
3. Sanchez NF, Rabatin J, Sanchez J, Hubbard S, Kalet A. Medical Students' Ability to Care for Lesbian, Gay, Bisexual, and Transgendered Patients. *Medical Student Education*. 2006;38(1):21-7.
4. Holthouser, A., S. Sawning, K. F. Leslie, V. Faye Jones, S. Steinbock, E. J. Noonan, L. J. Martin, L. A. Weingartner, J. Potter, J. Davis, K. L. Eckstrand and M. Ann Shaw. eQuality: a Process Model to Develop an Integrated, Comprehensive Medical Education Curriculum for LGBT, Gender Nonconforming, and DSD Health. *Medical Science Educator*. 2017:1-13.
5. Weingartner, L., E. Noonan, A. Holthouser, J. Potter, S. Steinbock, S. Kingery, S. Sawning. The eQuality Toolkit: Practical Skills for LGBTQ and DSD-Affected Patient Care. University Press of Kentucky, In-Press.

## Submission ID#595031

Engaging people with intellectual/developmental disabilities to improve medical student competency

Submission Type: Posters

Submitter: Emily Noonan – University of Louisville

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### Presenter(s)

Emily J. Noonan, PhD, MA

Role: Lead Presenter

Priya Chandan, MD, MPH

Role: Co-Presenter

### Topic

Diversity, Inclusion, and Social Justice

- Empowering students and creating the climate and context for success
- Educating with compassion and empathy
- particularly around important contemporary topics like #Metoo and WhiteCoats4BlackLives

### Background/Context and Relevance of the presentation/session

People with intellectual and developmental disabilities (PWIDD) are at increased risk for poor health outcomes and are a high priority population for reducing health disparities [1-3]. Lack of healthcare provider training is a key, modifiable determinant of cumulative health disparities [4] experienced by PWIDD [1-3,5,6], prompting calls to improve provider competency [1-3,7]. Further, it is imperative to include PWIDD in the development of curriculum and training of future clinicians [7].

The National Curriculum Initiative in Developmental Medicine (NCIDM) is a multi-year partnership between the American Academy of Developmental Medicine and Dentistry and Special Olympics (SO) International with funding from the Centers for Disease Control. Under the NCIDM model of including PWIDD in health training, medical schools partner with local organizations of PWIDD. The University of Louisville School of Medicine (ULSOM) was selected as a Medical School Partner to train students about care of PWIDD.

### Objectives and purpose of the innovation/practice/program/idea

This presentation describes the importance of including PWIDD in curriculum development, details ULSOMs implementation of NCIDM curriculum, and shares evaluation results.

### Methods

As a NCIDM Partner, ULSOM developed: 1) a required session for M2s (n=163), and 2) an elective rotation for M4s (n~20) at an interdisciplinary clinic for PWIDD.

PWIDD, graduates of SO Kentucky's Athlete Leadership Program (n=7), participated in a Photovoice [8] project and were interviewed about perceptions of health and healthcare. With researcher support, athletes shared themes with small student groups (~12/group) during the required session for M2s.

NCIDM surveys were administered pre/post to evaluate attitude and knowledge change in M2s and M4s. Session and course evaluations were used to understand student perceptions.

### **Outcome/Significance**

Both pre- and post-tests were completed by 53% (n=87) of M2s and showed significant improvements in attitudes, such as comfort talking with PWIDD ( $t=-4.2$ ,  $p < 0.001$ ) and perception that PWIDD can provide consent for care ( $t=5.2$ ,  $p < 0.001$ ). Session evaluations were completed by 62% (n=101) and were positive; 95% agreed the session helped them understand health issues of PWIDD.

Data collection among M4s is ongoing; students who have completed the elective (n=7) report positive outcomes, including hands on work and exposure to clinical interprofessional collaboration as key strengths of the intervention.

### **Contribution to the session participants and ability to be utilized by other institutions**

ULSOMs NCIDM interventions combine preclinical education, clinical education, and community engagement to improve medical student knowledge and attitudes about PWIDD. As a nationwide project, NCIDM contributes to medical education by facilitating medical student learning with PWIDD.

### **References**

1. Office of the Surgeon General (US), National Institute of Child Health and Human Development (US), Centers for Disease Control and Prevention (US). Closing the Gap: A National blueprint to improve the health of persons with mental retardation: Report of the Surgeon Generals Conference on Health Disparities and Mental Retardation. Washington (DC): US Department of Health and Human Services; 2002. <http://www.ncbi.nlm.nih.gov/books/NBK44346/>. Accessed December 1, 2017.
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6. Robey KL, Minihan PM, Long-Bellil LM, Hahn JE, Reiss JG, Eddy GE. Teaching health care students about disability within a cultural competency context. *Disabil Health J*. 2013;6(4):271-279.
7. Iezzoni LI, Long-Bellil LM. Training physicians about caring for persons with disabilities: Nothing about us without us! [https://ac.els-cdn.com/S1936657412000441/1-s2.0-S1936657412000441-main.pdf?\\_tid=b05044d6-d6b0-11e7-926d-00000aacb362&acdnat=1512144182\\_a3589eebe01d0b4fcc4c4ca43574616c](https://ac.els-cdn.com/S1936657412000441/1-s2.0-S1936657412000441-main.pdf?_tid=b05044d6-d6b0-11e7-926d-00000aacb362&acdnat=1512144182_a3589eebe01d0b4fcc4c4ca43574616c). Accessed December 1, 2017.
8. Catalani C, Minkler M. Photovoice: A review of the literature in health and public health. *Health Educ Behav*. 2010;37(3):424-451.

## Submission ID#595238

Language discordance in Undergraduate Medical Education: A Review of the Literature

Submission Type: Posters

Submitter: Amanda Beering – University of Louisville School of Medicine

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### **Presenter(s)**

Amanda R. Beering

Role: Lead Presenter

Medical Student

### **Topic**

Student Personal and Professional Development

- Humanism in Medicine
- Beyond Step scores and ward performance: redefining student success (resilience
- professionalism
- attainment of competencies)

### **Background/Context and Relevance of the presentation/session**

The Liaison Committee on Medical Education's Standards for Accreditation include Cultural Competence and Health Care Disparities, Communication Skills, and Interprofessional Collaborative Skills as requirements in medical school curricula; however, topics specific to language discordance are not required. Overlooked elements include working with patients that do not have a language in common with their provider and practical considerations when working with language discordance, such as working with medical interpreters. Few institutions have implemented training for medical students; with the majority instead offering Medical Spanish as an elective class. Furthermore, a comprehensive review of the outcomes of the few existing courses focusing on issues pertaining to language discordance has not been performed.

### **Objectives and purpose of the innovation/practice/program/idea**

To review the existing evidence on educational outcomes of language discordance curricula for medical students.

### **Methods**

A literature review was performed in September 2018 using PubMed, Embase, and Cochrane. Search terms included: limited English proficiency, curriculum, and medical student. No limitations on publication year were used. Articles met inclusion criteria if the article described a curriculum designed for medical students that discussed topics in language discordance between patient and provider. Programs focusing solely on improving Spanish competency were excluded. The Kirkpatrick model was used to evaluate educational outcomes.

### **Outcome/Significance**

The literature search described above resulted in 5 PubMed, 0 Embase, and 0 Cochrane articles. Three curricula involved in-person content only, one curriculum took place through online training, and the remaining was delivered through both online and in-person means. Two articles met Kirkpatrick's first level of evaluation by gauging student reaction. Two evaluated student performance, thereby meeting the second level of the

Kirkpatrick model. The literature demonstrates a lack of education provided to medical students regarding working with language discordant patients. No articles met the criteria for the third or fourth levels of the Kirkpatrick model. Future research is needed to develop effective curricula as well as determine how education on working with language discordant patients changes student behaviors and patient outcomes. Analysis of these outcomes could help create a standard curriculum implementable across medical schools.

### **Contribution to the session participants and ability to be utilized by other institutions**

This project highlights the lack of innovative solutions for working with language discordant patients. Through suggesting alternatives to teaching medical students a second language, this project will enable other institutions to evaluate their existing curricula and identify updates that can potentially help alleviate difficulties for language discordant patients across languages.

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## Submission ID#595241

Accelerated Medical Pathways to the MD Degree at MUSC

Submission Type: Posters

Submitter: Stephanie Gehle – MUSC

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### Presenter(s)

Stephanie C. Gehle

Role: Co-Presenter  
Medical Student

Angela Dempsey, MD, MPH

Role: Lead Presenter

Megan Grinnell

Role: Co-Presenter

Mollianna Walker

Role: Co-Presenter  
Medical Student

Jackson Pearce

Role: Co-Presenter  
Medical Student

### Topic

Other: Accelerated MD Degree

### Background/Context and Relevance of the presentation/session

There is a rising call to train medical students in the face of a projected national physician shortage that could grow to 120,000 physicians by 2030 (1). Further, many educators have called upon the academic medicine community to explore innovative ways to move from time-based education models to competency-based education models.

### Objectives and purpose of the innovation/practice/program/idea

Concurrent with implementation of a new pre-clerkship (FLEX) curriculum in 2018, the Medical University of South Carolina (MUSC) College of Medicine will expand the innovative Accelerated Medical Pathways (AMP) program which provides a track in which qualified students may complete their graduation requirements and enter a conditional residency position at our institution after 3 years. A select number of students with outstanding academic and professional performance may apply for an accelerated track in one of 13 participating residency programs at MUSC. With faculty support, we would like to present the advantages of this model from a student perspective and explore the potential challenges associated with implementation.

### Methods

As a member of the Consortium of Accelerated Medical Pathway Programs (CAMPP), MUSC is joining the national effort to create models of continuous learning within existing undergraduate and graduate programs (2). Our poster will describe the accelerated medical pathway track at our institution, outline the application process and eligibility criteria, delineate the unique advising needs to support students in accelerated medical pathways, and present the safeguards built in to mitigate risk to students.

### Outcome/Significance



Accelerated training offers students a reduction in total tuition debt and training time while maintaining the integrity of quality medical education in a robust academic training institution. Residency programs benefit from the ability to retain outstanding students at their home institution, and data shows that physicians are more likely to practice in South Carolina after trainees complete UME and GME in state (3).

**Contribution to the session participants and ability to be utilized by other institutions**

We will share our approach to ensuring competency for the UME to GME transition. This program supports MUSCs goal for students to attain an MD degree in a flexible time period and begin residency with equal preparedness as traditional candidates. We hope to share our experience with expanding our pilot program with colleagues as we embrace a new opportunity for growth.

**References**

1. Tim Dall, Terry West, Ritashree Chakrabarti, Ryan Reynolds, Will Iacobucci. The Complexities of Physician Supply and Demand: Projections from 2016 to 2030 (2018 Update). Association of American Medical Colleges. 2018. IHS Markit Ltd.
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3. South Carolina Office for Healthcare Workforce. Residency Training Choices of SC Medical School Seniors: 2016 and 2017.

## Submission ID#595293

HealthFirst: A Curriculum with a Dual Agenda

Submission Type: Posters

Submitter: Michelle Lizotte-Waniewski – Florida Atlantic University Charles E. Schmidt College of Medicine

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### **Presenter(s)**

Michelle Lizotte-Waniewski, PhD

Role: Lead Presenter

Stuart Markowitz, MD

Role: Co-Presenter

Jennifer Caceres, MD

Role: Co-Presenter

Joanna Duran

Role: Co-Presenter

Sarah Wood, MD

Role: Co-Presenter

### **Topic**

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### **Background/Context and Relevance of the presentation/session**

Over the past several years, medical school communities have found many varied ways to support student well-being and redefine success in a holistic context. Programming can include elements such as culinary medicine electives, reflective writing, mindfulness/meditation-based stress reduction, student-directed social activities, events that promote exercise and many others. Typically, these programs are extracurricular and participation by students is voluntary. It therefore remains unclear if students who would benefit most from learning about health and wellness are the ones engaging in the activities provided.

### **Objectives and purpose of the innovation/practice/program/idea**

The HealthFirst Health and Wellness Initiative at the Charles E. Schmidt College of Medicine has taken a unique approach to address the issue of instructing students in self-care practices and healthy lifestyle choices. The Initiative not only includes optional activities and events that support the well-being of students, staff and faculty, but also integrates active, hands-on learning experiences into the curriculum, making them required as part of mandatory course work for students.

### **Methods**

The HealthFirst curriculum was designed to integrate self-care and wellness activities using an evidence-

based approach and logical integration throughout the first 2 years. During the Neuroscience and Behavior course students are taught the practice of Cognitive Behavioral Therapy. Within the GI and Nutrition course students participate in a group diet project. In the Cardio-Pulmonary course, students participate in a meditation workshop and monitor the effects of breath meditation on heart rate. In the Endocrine course, students participate in making a plant-based Mason-jar salad. All of these curricular elements allow the students to learn and be exposed to healthy lifestyle practices, while framing them in an evidence-based manner that enables them to educate future patients from a place of personal experience.

### **Outcome/Significance**

Qualitative data from students indicates that the HealthFirst Initiative is perceived to support their well-being and provides learning opportunities that they may not have participated in if they were not integrated into the curriculum. The students also express that they will feel more comfortable recommending certain practices to their patients having experienced them personally.

### **Contribution to the session participants and ability to be utilized by other institutions**

This curricular innovation can easily be utilized by other institutions and is flexible enough to be adapted to existing programming.

### **References**

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## (91) Submission ID#595343

Empowering Students to Build Community: A Grassroots Approach to Fostering Community and Wellness in Medical School

Submission Type: Posters

Submitter: Trent Goodin – University of Kentucky College of Medicine

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### **Presenter(s)**

Trent L. Goodin

Role: Lead Presenter  
Medical Student

Carter Baughman

Role: Co-Presenter  
Medical Student

### **Topic**

The Medical School Environment

- Creative academic support with limited resources
- Student/staff wellness
- resilience
- and burnout

### **Background/Context and Relevance of the presentation/session**

According to the Independent Student Analysis conducted in 2016-2017 at the University of Kentucky College of Medicine, 68% of first-year students interact with members of other classes. Additionally, just 60% of second-year students agree with the statement, I have adequate time to care for myself emotionally, while 92% of fourth-year students agree with the same statement. These results raise interesting questions: why is 1/3 of the first year class (nearly 44 students) not interacting with and learning from members of other classes? Why is there such a large disconnect between the emotional wellness of fourth-year students and second-year students? Can students be more intentional about creating community and emphasizing wellness from day one of medical school?

### **Objectives and purpose of the innovation/practice/program/idea**

We believe that empowered students with a deliberate purpose and plan can build an inclusive community between students of all levels while emphasizing and promoting student wellness. Thus, we devised a three-phase, three-year strategic plan to construct such a culture.

### **Methods**

The first phase targeted first-year orientation. To destigmatize discussions about emotional well-being, promote student wellness, and prioritize relationship building, we revitalized first year orientation to include intentional spaces for meaningful small group discussions led by upper level medical students. These

sessions require students to reflect on previous challenges, develop crisis plans, identify their motivations for pursuing medicine, and ultimately form relationships with their peers in a more meaningful manner. The second phase (and our current phase) involves the establishment of student-created and student-focused learning communities. 20 second-year students have been empowered to create and lead their respective Houses and engage first year students in service events, social events, and philanthropy while providing academic and peer mentorship. The final phase is integration into the school framework and curriculum. The goal of this phase is to provide an intentional scaffold to assimilate faculty, staff, and resident mentorship while implementing a wellness curriculum that can begin during first-year orientation and continue longitudinally until graduation.

### **Outcome/Significance**

Already, students at UKCOM appear to be more engaged in their community: 22 students applied to lead orientation groups in 2017 while 48 students applied in 2018. Engagement in service and fundraising campaigns has increased as well following the introduction of learning communities.

### **Contribution to the session participants and ability to be utilized by other institutions**

As modeled by students at the University of Kentucky College of Medicine, these steps in intentional community building via student empowerment are appropriate for other schools seeking a grassroots solution to building student investment and promoting student wellness.

# Submission ID#595357

Affirming Racial Diversity: An Analysis of Diversification Strategies in Medical School Admissions

Submission Type: Posters

Submitter: Heather Wright – Carle Illinois College of Medicine

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## Presenter

Heather D. Wright, MS

Role: Lead Presenter

## Topic

Recruitment and Admissions

- Admissions policies/ practices the evolving political/legal context

## Background/Context and Relevance of the presentation/session

2019 will likely see the Supreme Court revisit the role of Affirmative Action in higher education admissions due to a suit against Harvard University. As applications to medical school reach record levels, the percentage of underrepresented minorities in medicine remains stagnant at 1-9%. Medical school admissions officers must then face a difficult question: How do we identify diverse, well-qualified applicants for medical school particularly at a time when Affirmative Action is highly scrutinized?

## Objectives and purpose of the innovation/practice/program/idea

Medical schools are looking for a variety of tools to support the recruitment and matriculation of diverse medical students. As such, this research tests the following hypotheses:

H1: As admissions committees increase the weight of noncognitive measures of an applicant's profile (i.e. attributes other than standardized test scores and grade point averages), the relative percentage of well-qualified, racially diverse applicants who qualify for admission will increase.

H2: If an admissions committee replaces the consideration of one's race with the consideration of one's socioeconomic status, the racial diversity of the applicant pool will decrease.

## Methods

This paper utilizes applicant data (n=788) from the 2019 admission cycle to examine if socioeconomic status can serve as an effective proxy for race at a public-private medical school in the Midwest. Additionally, an analysis was run to examine the impact that relative weights of cognitive (i.e. MCAT and GPA) and noncognitive (i.e. leadership, identity, etc.) scores had on the racial diversity of a medical student body.

## Outcome/Significance

This study found that SES does not serve as an effective proxy for race. However, increased noncognitive weights in the admissions algorithm resulted in increased offers to qualified URM applicants.

## Contribution to the session participants and ability to be utilized by other institutions

Other medical schools can benefit from this research by seeing how variations of the admissions algorithm can impact racially diverse student enrollment. Additionally, programs can feel confident that SES is not an effective replace of race.

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## Submission ID#595423

Peer Advocates: A Novel Approach to Improve Medical Student Wellness

Submission Type: Posters

Submitter: Alvin Chang – Virginia Commonwealth University School of Medicine

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### Presenter(s)

Isabel Hefner, BA

Role: Lead Presenter  
Medical Student

Alper Dincer, BS

Role: Co-Presenter  
Medical Student

Komal Safdar, BS

Role: Co-Presenter  
Medical Student

Sarah Andrew, BA

Role: Co-Presenter  
Medical Student

Danny Lee, BA, BS

Role: Co-Presenter  
Medical Student

Kalissa Zhang, BS

Role: Co-Presenter  
Medical Student

Wei-li Suen, BA, MM

Role: Co-Presenter  
Medical Student

Alvin Chang, N/A, BA

Role: Co-Presenter  
Medical Student

Christopher Woleben MD

### Topic

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### Background/Context and Relevance of the presentation/session

Medical school burnout is a well-known phenomenon, but the literature is still emerging on what interventions successfully decrease burnout. A national survey from 2011 and 2012 showed that medical students had higher rates of burnout and depression than the general population, and that studies on interventions were still



needed<sup>1</sup>. As a response to perceived burnout, the role of peer advocates was remodeled to offer class-specific solutions to improve student wellness.

### **Objectives and purpose of the innovation/practice/program/idea**

To describe the initiatives started by our peer advocates.

### **Methods**

Two peer advocates were elected by each medical school class and received training for peer-to-peer counseling. Their primary role was to create different events to improve student well-being. Some events were done on an individual level and consisted of confidential and anonymous messaging through the Wickr application, one-on-one meetings, and casual conversation. Other events were done in a group setting and consisted of social events structured for peer-to-peer interaction and resiliency panels, where students shared their experiences with their peers. The efficacy of these events was determined by attendance rate and anecdotal student responses.

### **Outcome/Significance**

The Wickr application was used by six peer advocates with mixed results, with an average of three conversations over the period of a year with use occurring in clusters due to an inciting event. The conversations were about both personal and academic concerns. Only two one-on-one meetings were scheduled. Peer support groups also had minimal attendance.

However, events with greater success included the resiliency panel, Stitch and \*\*\*\*\*, and open mic night. The resiliency panel had an attendance of 120 students, a quarter of all preclinical students at VCU. The attendance for Stitch and \*\*\*\*\* and the open mic night ranged from 20-30 people. These events were unique because their purpose was multifactorial--the events themselves not only served as an outlet, but it was noted that these events also allowed for opportunities for students to express their concerns to their peers in a more comfortable and casual setting, which helped foster community. We hypothesize that these casual events, which do not have the word wellness advertised in them, had greater attendance because they naturally minimize the stigma surrounding mental issues and decrease the fear of exposing oneself. Overall, the feedback the Peer Advocates have received has been positive and we hope to continue to learn from previous events to plan future ones.

### **Contribution to the session participants and ability to be utilized by other institutions**

On our poster, we plan on sharing details on each of our successful interventions.

### **References**

1. Dyrbye LN, et al. Burnout among U.S. medical students, residents, and early career physicians relative to the general U.S. population. *Acad Med.* 2014 Mar;89(3):443-51. doi:10.1097/ACM.000000000000134.
2. Dyrbye LN, et al. Systematic review of depression, anxiety, and other indicators of psychological distress among U.S. and Canadian medical students. *Acad Med.* 2006 Apr;81(4):354-73.
3. Moffat KJ, et al. First year medical student stress and coping in a problem-based learning medical curriculum. *Med Educ.* 2004 May;38(5):482-91.

## Submission ID#595456

Virtual Patients for Empathy Training and Eliciting the Social Determinants of Health in Interprofessional Education.

Submission Type: Posters

Submitter: Christina Rios – FIU HWCOC

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### **Presenter(s)**

Christina Rios

Role: Lead Presenter

Medical Student

### **Topic**

Student Personal and Professional Development

- Beyond Step scores and ward performance: redefining student success (resilience
- professionalism
- attainment of competencies)

### **Background/Context and Relevance of the presentation/session**

Empathy is an important skill to engage with emotionally distressed patients, particularly those facing health inequity. Participants improved their clinical/empathetic skills by engaging with a virtual human. Virtual human interactions (VHIs) are multimedia, screen-based interactive scenarios (1). We present the results on an early version of a VHI representing Maria Suarez, an infant brought by her mother for failure to thrive.

### **Objectives and purpose of the innovation/practice/program/idea**

This research aims to engage study participants into VHI's to yield feasible educational modalities, which may improve participants ability to address the social determinants of health (SDOH) that impact health outcomes (2, 3). In this study, participants engage in VHIs with highly-sensitive clinical situations, which they may lack in their pre-clinical years.

### **Methods**

Students in healthcare disciplines anonymously interacted with Maria Suarez, a virtual patient. Participants were prompted to engage in the VHI by typing questions in order to elicit clinical history and the SDOH. The study participants suggestions were used by script editors to create further VHI dialogue, enriching this tool. Student response were graded on empathetic level of response based on the Empathetic Communication Coding System (ECCS). An anonymous survey administered via Qualtrics software, measured participants satisfaction with the VHI.

### **Outcome/Significance**

In the absence of SP's and patient interaction in pre-clinical years, VHI may augment training in empathetic interactions and eliciting SDOH's with patients, particularly for complex/high-risk clinical cases and victims of health disparities. Students responded empathetically to VHI's by explicitly the central issue in the empathic opportunity. We will conduct further research to enhance the quality of the tool presented and determine

whether there is a significant difference in empathetic response level in VHI's versus SP encounters.

### **Contribution to the session participants and ability to be utilized by other institutions**

Standardized patients are often highly limited and very expensive. VHI's may supplement traditional clinical teaching methods in any medical institution.

### **References**

1. Berman, N. B., Durning, S. J., Fischer, M. R., Huwendiek, S., & Triola, M. M. (2016). The role for virtual patients in the future of medical education. *Academic medicine*, 91(9), 1217-1222.
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3. Foster, A., Chaudhary, N., Kim, T., Waller, J. L., Wong, J., Borish, M., ... & Buckley, P. F. (2016). Using virtual patients to teach empathy: a randomized controlled study to enhance medical students empathic communication. *Simulation in Healthcare*, 11(3), 181-189

# Submission ID#595501

The Effect of Learning Communities on First Year Medical Student Experience

Submission Type: Posters

Submitter: Carter Baughman – University of Kentucky College of Medicine

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## Presenter(s)

Carter Baughman

Role: Lead Presenter  
Medical Student

Trent L. Goodin

Role: Co-Presenter  
Medical Student

## Topic

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

## Background/Context and Relevance of the presentation/session

Learning communities are becoming a prominent part of medical education due to their positive impacts on school community(1), medical student wellness(2), and professional development(3).

Objectives and purpose of the innovation/practice/program/idea

The University of Kentucky College of Medicine (UKCOM) implemented a student-led learning community system at the beginning of the 2018-2019 academic year. The purpose of this study is to evaluate the medical student experience during the first year of belonging to a learning community. The main categories being evaluated are the students sense of belonging and feelings of connectedness to their school community.

## Methods

Prior to the implementation of learning communities, a survey was completed by the UKCOM Class of 2021 at the end of their MS1 year. This same end-of-year survey will be completed by the Class of 2022 MS1 students after they have been incorporated into their learning communities for a full academic year. The surveys between these two classes will be directly compared to evaluate the effect of this learning community system on the medical student experience.

## Outcome/Significance

Members of the Class of 2021 rated that, on average, they felt a sense of belonging at UKCOM between October-November of their first year. On a scale of 1-10, students rated the following feelings of connectedness to: other MS1 students (7.97), MS2 students (5.58), M3-M4 students (3.69), and faculty (5.42). The main goal will be to assess if learning communities create an earlier sense of belonging and increased connectedness to upper level students and faculty.

## Contribution to the session participants and ability to be utilized by other institutions

Learning communities are a growing trend among medical schools with many schools still in the process of developing this system. The results of this study will provide useful information to medical schools that are implementing learning communities as well as to those who have already adopted this system.

## References

(1) Smith, S. D., Dunham, L. N., Dekhtyar, M. F., Dinh, A. L., Lanken, P. E., Moynahan, K., . . . Skochelak, S. (2016). Medical

Student Perceptions of the Learning Environment: Learning Communities Are Associated With a More Positive Learning Environment in a Multi-Institutional Medical School Study. *Academic Medicine*, 91(9), 1263-1269.

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## Submission ID#595540

Women Leading Healthy Change: Taking action to decrease barriers to health

Submission Type: Posters

Submitter: Mara Nickel – University of Cincinnati College of Medicine

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### Presenter(s)

Mara C. Nickel, BS

Role: Lead Presenter

Medical Student

Eshita Singh

Role: Co-Presenter

Medical Student

Aurora Bennett, MD

Role: Facilitator

### Topic

Student Personal and Professional Development

- Humanism in Medicine

### Background/Context and Relevance of the presentation/session

Women Leading Healthy Change (WLHC) is a student-led curriculum at the University of Cincinnati College of Medicine focused on promoting healthcare self-advocacy through knowledge of women's health and mental health issues. The student-created sessions are taught for 11 weeks, two times per year, at two community centers, Off the Streets and First Step Home, facilities dedicated to serving women with histories of substance abuse and/or victimization through sex trafficking or exploitation. Of the 11 weeks, five focus on women's health education, five spotlight mental health education, and one week is an open-table discussion for feedback and suggestions.

### Objectives and purpose of the innovation/practice/program/idea

Since its beginning in 2011, the program has set three goals: 1. Demonstrate program efficacy through short- and long-term retention of relevant health knowledge by participants; 2. Enhance the sense of participant self-advocacy in navigating the healthcare system; 3. Develop medical students comprehension and empathy for this vulnerable patient population.

### Methods

To ensure our goals are met, the program utilizes quantitative and qualitative measures, allowing for feedback and quality improvement. Medical students complete a survey to assess their attitudes and perspectives on this patient population before and after their teaching duties. At the beginning of the curriculum, participants complete a pre-survey, gaining demographic information and assessing their views on their interactions with healthcare professionals, knowledge of certain health issues, and how confident they feel advocating for their health. This survey is repeated at the end of each session. In addition, at each session, participants take a pre-test and a post-test to ascertain retention of the information presented. To gauge long-term retention, cumulative questions are added each week.

**Outcome/Significance**

For the 2017-2018 WLHC sessions, result analysis showed an increased test score for each session, with statistical significance for a majority of these sessions ( $p < 0.05$ ). Participants (N=113) also showed progress in confidence, comfort, and self-advocacy in navigating the healthcare system. Medical students (N=12) showed statistically significant growth in perspective and satisfaction when working with this patient population ( $p < 0.05$ ).

**Contribution to the session participants and ability to be utilized by other institutions**

WLHC promotes relationships and understanding between future physicians and a patient population that is often stigmatized. Due to the significant results seen in the last seven years of the program, for the 2018-2019 school year we have added an additional location (Bethany House Services), allowing for the impact of this program to grow. In addition, the curriculum used is easily transferrable, and discussions are taking place to begin spreading this program to other interested medical institutions.

## Submission ID#595545

Implementing a Pre-Clerkship Curriculum that Replaces Didactic Lectures with Integrated Case-Based Sessions

Submission Type: Posters

Submitter: Andrew Williams – Texas Tech University Health Sciences Center Paul L. Foster School of Medicine

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### Presenter(s)

Andrew Williams

Role: Lead Presenter  
Medical Student

Pompeyo Quesada

Role: Co-Presenter  
Medical Student

Brittany Harper

Role: Co-Presenter  
Medical Student

### Topic

Other: Curriculum change – Case-Based Sessions

### Background/Context and Relevance of the presentation/session

The results of the 2017 Year Two Questionnaire (Y2Q) administered by the Association of American Medical Colleges (AAMC) reported that less than half of medical students are attending in person lectures either Most of the time or Often (1). These numbers highlight the continuing debate about whether traditional in-class lectures are actually synonymous with quality and effective medical education.

### Objectives and purpose of the innovation/practice/program/idea

As a result, an increasing number of medical schools have elected to implement new innovative approaches that are supported by current research such as flipped classrooms, team-based learning, and interactive online modules. At Texas Tech University Health Science Center Paul L. Foster School of Medicine (TTUHSC-PLFSOM) we implemented an interactive self-directed course format which was recently piloted as a 6-week endocrine course.

### Methods

Design and implementation of the new unit format began with complete overhaul of previous content presentation. Each lecture from the prior format was converted into an online format including both written and audio content delivery with topic specific quizzes. At the conclusion of each week, students were required to attend an integrated case-based session which began with an Initial Readiness Assurance Test (IRAT). Subsequently, a variety of relevant clinical cases were covered utilizing an interactive group format. At the conclusion of the unit, each students individual IRAT average counted toward 12% of their final unit grade.

### Outcome/Significance

The primary goal of this format change was to improve student performance through innovative and integrated



content delivery while also better utilizing educational resources. Initial results show a statistically significant improvement in student performance, with the largest improvement occurring in the lowest quartile of the class. Additionally, the failure rate decreased to 1% as opposed to the previous years' failure rate of 10.6%.

### **Contribution to the session participants and ability to be utilized by other institutions**

This presentation would serve as a guide for implementation of similar programs at institutions considering replacement of traditional didactic lectures.

### **References**

(1) Medical School Year Two Questionnaire, 2017 All Schools Summary Report (Rep.). Association of American Medical Colleges. (2018, March). Retrieved <https://www.aamc.org/download/488336/data/y2q2017report.pdf>

## Submission ID#595594

A Retrospective Analysis of the MATCH Outcomes of Previous Ronald B. George Scholars Participants

Submission Type: Posters

Submitter: Destiny Price – Louisiana State University School of Medicine in Shreveport

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### Presenter(s)

Destiny J. Price

Role: Lead Presenter

Medical Student

Kirsten A. Fontenot

Role: Co-Presenter

Medical Student

### Topic

Student Personal and Professional Development

- Career Advising/Match/ NRMP Update
- Beyond Step scores and ward performance: redefining student success (resilience
- professionalism
- attainment of competencies)

### Background/Context and Relevance of the presentation/session

The Ronald B. George (RBG) Scholars Program is a month-long summer internship offered by Louisiana State University Health Sciences Center - Shreveport that allows students to observe physicians and patients in various fields of internal medicine. Each year, ten first-year medical students are selected to participate and have the opportunity to rotate through internal medicine subspecialties.

### Objectives and purpose of the innovation/practice/program/idea

The stated goal of the Ronald B. George Scholars program is to prepare first-year students for their upcoming clinical education. The applicants for the Ronald B. George Scholars program are not required to have a specific interest or intent to enter Internal Medicine. Although the primary goal of the Ronald B. George Scholars program is not to entice participants into pursuing Internal Medicine as a career, fostering interest in the field is one of the implicit intentions of the program. By looking at the results of National Residency Matching Program (NRMP)® MATCH data of previous Ronald B. George Scholars participants, we hope to determine the long-term effects of the program at generating interest in Internal Medicine.

### Methods

Ronald B. George Scholars participants from 2010-2014 (MATCH years 2013-2017) were identified. A search of public MATCH data to see which specialty each RBG scholar selected to enter was performed. Unavailable MATCH data for three scholars was supplemented with an independent search for their physician record. MATCH specialty data for the RBG scholars were categorized and compared to MATCH specialty data to the general student body MATCH classes of 2013-2017.

Chi-square test was used to test assumptions and significance was set at 0.05.

**Outcome/Significance**

Of the 52 former Ronald B. George Scholars between 2010-2014 (MATCH years 2013-2017), 18 (35%) matched into Internal Medicine and related residencies (including joint internal medicine/emergency medicine and internal medicine/pediatrics residencies). Of the 551 matched LSUHSC-Shreveport medical students over the same timeframe, 103 (19%) matched into Internal Medicine and related residencies. Thus, Ronald B. George Scholars entered into Internal Medicine at a rate 16% higher than the general student body ( $p=.006$ ).

**Contribution to the session participants and ability to be utilized by other institutions**

Pipeline programs at the undergraduate level and below have long been used to steer students towards careers in medicine. Results from this study suggest that early exposure can also encourage current medical students to enter specific medical specialties. The model of the Ronald B. George Scholars program can be replicated to drive students into medical specialties with a higher need (e.g., primary care).

**References**

National Resident Matching Program, Charting Outcomes in the Match for U.S. Allopathic Seniors, 2016. National Resident Matching Program, Washington, DC 2016.

## Submission ID#595604

Analyzing A New Curriculum: The Effect of Dedicated Step 1 Studying Time on Subsequent Shelf Exam Scores

Submission Type: Posters

Submitter: Brendan Swain – University of Texas Southwestern Medical School

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### Presenter(s)

Brendan Swain, BS

Role: Lead Presenter  
Medical Student

Donald Chan, EdM

Role: Co-Presenter  
Medical Student

Blake R. Barker, MD

Role: Co-Presenter

### Topic

Recruitment and Admissions

### Background/Context and Relevance of the presentation/session

An increasing number of students are taking Step 1 after one or more clerkship rotations. While preparing for Step 1, students review important concepts from the pre-clinical curriculum. Clerkship NBME subject exams, or shelf exams, are also important assessments covering overlapping concepts. Although other schools have published increases in Step 1 scores if taken after clerkships, none have investigated the impact of Step 1 preparation on clerkship shelf exam performance. Our medical school recently implemented a new curriculum which features an 18-month pre-clinical phase. Students are required to take Step 1 within 6 months of completing pre-clinical curricula, and many take one or more clerkship exams before Step 1 preparation.

### Objectives and purpose of the innovation/practice/program/idea

The goal of our study was to investigate whether students received higher clerkship shelf exam scores following the dedicated Step 1 study period compared to exams taken before Step 1 preparation.

### Methods

We analyzed Step 1 and clerkship exam shelf scores of a single cohort in 2017. Within this cohort, 92 students took a clerkship shelf exam before Step 1. For each clerkship, students were divided into those who took the respective clerkship shelf exam immediately preceding the Step 1 study period (group 1) or immediately after (group 2). The average shelf score for each clerkship was determined, and the ratio of students that were above the average was calculated in each group. For each clerkship, group 1 and group 2 were compared utilizing a chi-squared test. Family medicine and pediatric clerkships were excluded due to low sample size.

### Outcome/Significance

The obstetrics-gynecology shelf score was 9.56 points higher (group 1, n=19, group 2, n=12) in the group that

took the shelf after step 1 ( $p=0.011$ ). A similar increase of 7.73 (group 1,  $n=21$ , group 2,  $n=13$ ) was observed in the neurology clerkship shelf exam ( $p=0.0015$ ). Increases in internal medicine, surgery and psychiatry shelf exam scores were found to not be significant ( $p=0.096$ ,  $p=0.13$  and  $p=0.27$  respectively).

The dedicated study period before step 1 seems to lead to significant improvements in the obstetrics-gynecology and neurology shelf exams, but no improvement for other clerkships. Limitations of study include a single cohort and a single institution. Additional study in a larger sample size may be necessary to further investigate the impact of Step 1 preparation on clerkship shelf exam performance.

### **Contribution to the session participants and ability to be utilized by other institutions**

This study presents relevant information for medical students and faculty at all institutions when switching to curricula with shorter preclinical periods.

### **References**

1. Hoffman KI. The USMLE, the NBME subject examinations, and assessment of individual academic achievement. *Academic medicine : journal of the Association of American Medical Colleges*. 1993;68(10):7407.
2. Casey, Petra & Palmer, Brian & B. Thompson, Geoffrey & A. Laack, Torrey & R. Thomas, Matthew & F. Hartz, Martha & R. Jensen, Jani & J. Sandefur, Benjamin & E. Hammack, Julie & W. Swanson, Jerry & Sheeler, Robert & Grande, Joseph. (2016). Predictors of medical school clerkship performance: A multispecialty longitudinal analysis of standardized examination scores and clinical assessments. *BMC Medical Education*. 16. 10.1186/s12909-016-0652-y.
3. M Zahn, Christopher & Saguil, Aaron & Artino, Anthony & Dong, Ting & Ming, Gerald & Servey, Jessica & Balog, Erin & Goldenberg, Matthew & Durning, Steven. (2012). Correlation of National Board of Medical Examiners Scores with United States Medical Licensing Examination Step 1 and Step 2 Scores. *Academic medicine : journal of the Association of American Medical Colleges*. 87. 1348-1354. 10.1097/ACM.0b013e31826a13bd.
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5. Morrison, Carol & Ross, Linette & Sample, Laurel & Butler, Aggie. (2014). Relationship between performance on the NBME® Comprehensive Clinical Science Self-Assessment and USMLE® Step 2 Clinical Knowledge for USMGs and IMGs. *Teaching and learning in medicine*. 26. 373-378. 10.1080/10401334.2014.945033.

## Submission ID#595752

Bridges to Access Conference: Bringing Together a Community to Solve Healthcare Gaps

Submission Type: Posters

Submitter: Stephanie Lee – University of Oklahoma College of Medicine

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### Presenters

Stephanie M. Lee

Role: Lead Presenter

Medical Student

Christopher D. Anderson

Role: Co-Presenter

Medical Student

### Topic

The Medical School Environment

- Professionalism navigating evolving challenges

### Background/Context and Relevance of the presentation/session

Professionalism, interdisciplinary teamwork, cultural competency, and the ability to begin helping patients from various socioeconomic backgrounds navigate available resources are skills that are not easy to teach in the classroom. The students at the University of Oklahoma Health Sciences campus have found a way to deliver these lessons and encourage student-driven solutions by teaming up with community leaders and experts within and outside the field of medicine.

### Objectives and purpose of the innovation/practice/program/idea

Bridges to Access (B2A) is an annual, one-day, state-wide conference organized entirely by health science students that aims to educate on and address various barriers to the delivery of high-quality health care in a setting that is engaging to attendees.

### Methods

Each year, students from the various disciplines including medicine, dentistry, pharmacy, nursing, social work, and others come together and volunteer their time to develop this free conference for the purpose of fostering personal and professional development in an extracurricular setting. In addition, locally-owned businesses; experts from governmental agencies; leaders in the community in religion, public health, and law; researchers in nutrition and psychiatric care; and those who have made it their life's mission caring for the uninsured come together to make this conference a reality.

In 2018, the 11th Annual B2A Conference sought to address challenges that occur at the front line of patient care: how difficulties in appreciating the experiences of those of a different race, religion, culture, socioeconomic status, and gender identity obstructs the delivery of high-quality health care at the level of the interface between provider and patient.

### Outcome/Significance

The B2A conference was successful in broadening attendees (students from every major educational institution within Oklahoma) perspectives on gaps present in how healthcare is delivered in the state of Oklahoma and upcoming solutions. It has even inspired new movements and connections on campus, including a Unity in Medicine conference and a new campus LGBTQ+ ally student organization.

**Contribution to the session participants and ability to be utilized by other institutions**

The Annual Bridges to Access Conference represents a highly successful and reproducible model for encouraging motivated students to work with each other across disciplines to "give back" to their colleagues and community. In doing so, organizers practice essential leadership skills and learn to further appreciate the perspectives of other disciplines. Likewise, conference attendees have the opportunity to grow beyond their standard curricula and acquire a deeper understanding of the challenges facing modern health care.

## Submission ID#595810

Motivational Interviewing in the Setting of Substance Use A Clinical Simulation for Multidisciplinary Learning

Submission Type: Posters

Submitter: Tazheh Kavooosi – University of Cincinnati College of Medicine

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### Presenter(s)

Tazheh Kavooosi, BS

Role: Lead Presenter

Medical Student

Meredith G. Moore, BS

Role: Co-Presenter

Medical Student

### Topic

Student Personal and Professional Development

- Beyond Step scores and ward performance: redefining student success (resilience
- professionalism
- attainment of competencies)

### Background/Context and Relevance of the presentation/session

In 2009, the AAMC partnered with five institutions to establish the Interprofessional Education Collaborative. Since its creation, AAMC has advocated for the implementation of programs that allow medical students to gain experience working with other professions. The University of Cincinnati College of Medicine (UCCOM) has collaborated with the social work program at UC to create a novel interprofessional experience (IPE) wherein students work together in a simulated clinical scenario to provide the highest level of holistic care to a patient with a substance use disorder.

### Objectives and purpose of the innovation/practice/program/idea

We will demonstrate how a simple intervention within the clinical skills curriculum can serve as the foundation for how medical students interact with other health professionals and as a testing ground for cooperative, multidisciplinary techniques.

### Methods

An IPE was introduced into the existing simulated patient care curriculum. Four medical students and a social work student participated in a 40-minute session during which they collaboratively assessed and treated a standardized patient's condition. Medical students completed a history, physical, and evaluation of laboratory results. Students surveyed the patients smoking habits and recognized a pattern consistent with substance use disorder. Both disciplines then utilized motivational interviewing techniques to 1) help the patient link their illness with their tobacco use and 2) help the patient move towards a state of contemplating change. Finally, social work students discussed smoking cessation resources, while considering factors such as effects smoking has had on the patients relationships and access to resources (i.e. transportation, work schedule). Following the interaction, students received immediate feedback from preceptors and peers. All students were given a survey with open-ended questions eliciting reflection on the encounter and student performance. Responses available on 12/3/2018.



**Outcome/Significance**

The experience structure allowed students to build relationships and let their respective roles develop organically. Although this was not a true clinical experience, standardized patients are trained to create a realistic atmosphere and respond in a manner consistent with their clinical persona. The benefit of a standardized experience is that students are given equal opportunity to utilize important skills and obtain personalized feedback. We hope this will help students recognize the value of and be more comfortable working with other disciplines in future clinical scenarios. Future enhancements include perfecting the scenario for real-world applicability and incorporating other professions (nursing and/or pharmacy).

**Contribution to the session participants and ability to be utilized by other institutions**

Participants will be able to return to their home institutions with insights on how to begin organizing and implementing meaningful IPEs into their existing curriculum.

## Submission ID#595857

The Effectiveness of Poverty Simulation on Improving Medical Students Understanding of Poverty

Submission Type: Posters

Submitter: Noor Khan – Wayne State University School of Medicine

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### Presenter(s)

Noor Khan, WSUSOM AAMC OSR

Role: Lead Presenter

Medical Student

Ebony White, MPH, WSUSOM AAMC OSR

Role: Co-Presenter

Medical Student

Rima Sakr, WSUSOM AAMC OSR

Role: Co-Presenter

Medical Student

Theresa Kaminski, WSUSOM AAMC OSR

Role: Co-Presenter

Medical Student

Nakia Williams, MD, FAAP

Role: Facilitator

### Topic

Diversity, Inclusion, and Social Justice

- Educating with compassion and empathy
- particularly around important contemporary topics like #Metoo and WhiteCoats4BlackLives

### Background/Context and Relevance of the presentation/session

According to the U.S. Census Bureau, 12.3 percent of the American population is living in poverty, but in Detroit that number is 34.5 percent. Poverty is defined by income cutoffs adjusted for size of family, number of children under 18, and residence. When someone is impoverished, their ability to gain access to secure shelter, food, and medical care is impacted (Conger et al. 1994). In order to provide effective care to patients who are economically disadvantaged, physicians need to have a comprehensive understanding of what it means to live in poverty and the struggles associated with it.

### Objectives and purpose of the innovation/practice/program/idea

This year at the Wayne State University School of Medicine, 290 first-year medical students took part in the Poverty Simulation Program, which is owned by the Missouri Community Action Partnership and is an educational program designed to help participants understand what it can be like to be part of a low-income family.

### Methods

The class was divided into groups of 72 students, each of whom played a role in one of 26 different low-income families. The task of the families is to provide for basic necessities and shelter for one month, consisting of four 15-minute weeks. The simulation was staffed by volunteers who portrayed community resources: grocery stores, police, employment office, Social Services office, pawnshop, and others to create a local economy for participants. The families had to meet specific goals for four 15-minute weeks. Students

were asked to fill out an E-value survey before and after participating in the simulation to assess how their beliefs towards people living in poverty may have changed after the simulation.

### **Outcome/Significance**

During the Spring 2019 AAMC conference, the poster will include data analyzed from the simulation. In addition to outcomes, the presentation will include discussions concerning the setbacks of the simulation as well as the benefits with alternative strategies proposed to address these findings.

### **Contribution to the session participants and ability to be utilized by other institutions**

Medical students tend to come from more affluent backgrounds, with the average parental income being \$125,000 (AAMC MSQ). Although not all students experience the same financial situations, and the data supports the notion that the average medical student has not lived in poverty and that some may struggle to understand what that means.

### **References**

Fontenot, K., Semega, J., & Kollar, M. (2018, September 12). Income and Poverty in the United States: 2017. Retrieved from United States Census Bureau

Etty Vandsburger , Rana Duncan-Daston , Emily Akerson & Tom Dillon (2010) The Effects of Poverty Simulation, an Experiential Learning Modality, on Students' Understanding of Life in Poverty, *Journal of Teaching in Social Work*, 30:3, 300-316, DOI: 10.1080/08841233.2010.497129

AAMC Matriculating Student Questionnaire

## Submission ID#595866

What A Successful Clinical Skills Course Looks Like at U.S. Medical Schools

Submission Type: Posters

Submitter: Noor Khan – Wayne State University School of Medicine

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### Presenter(s)

Noor Khan, WSUSOM AAMC OSR

Role: Lead Presenter

Medical Student

Ebony White, MPH, WSUSOM AAMC OSR

Role: Co-Presenter

Medical Student

Rima Sakr, WSUSOM AAMC OSR

Role: Co-Presenter

Medical Student

Theresa Kaminski, WSUSOM AAMC OSR

Role: Co-Presenter

Medical Student

Nakia Williams, MD, FAAP

Role: Facilitator

### Topic

Other: Clinical Skills Course

### Background/Context and Relevance of the presentation/session

Medical schools have courses that teach students about the doctor-patient relationship and the humanistic side of medicine in their pre-clinical years.

### Objectives and purpose of the innovation/practice/program/idea

The data acquired from the national OSR survey will be presented with the primary goals of providing students as well as faculty an authentic, student driven perspective on the effectiveness of clinical skills courses.

Additionally, we will describe similarities and differences across medical schools with the aim of encouraging discussions around how the modern student can learn clinical skills during preclerkship years. Lastly, we hope to provide best practices per student feedback so that OSR delegates can have tangible ideas to discuss with their respective deans.

### Methods

During the National Learn Serve Lead Meeting in November 2018, the Organization of Student Representatives (OSR) team at Wayne State University School of Medicine conducted a Qualtrics survey to garner feedback on the organization and success of clinical skills courses at medical schools across the country. The questions asked about: grading systems, methods used to teach information, integration of the clinical skills course into the overall curriculum, perceptions about how well the course achieved its purpose,

and strengths and weaknesses of the course. 48 AAMC student representatives from 36 medical schools participated in this survey.

### **Outcome/Significance**

Results showed that 64% of students believe that their clinical skills course is effective in teaching them useful clinical skills. Many schools use standardized patients, physician-led small groups, clinic simulation, CBLs, and lectures in these courses, although students do want more active involvement and realistic representations of patient interactions. Students also want a better organized course that has clear expectations for the level of clinical acumen they are supposed to achieve. Another issue is of competing priorities within the medical school curriculum 73% of students would prioritize studying for a basic science exam over a clinical skills exam.

### **Contribution to the session participants and ability to be utilized by other institutions**

This information will be useful in helping administrators provide services and programs that meet the needs and wishes of students.

## Submission ID#595896

Mental Health Peer Patient Panel: Normalizing Mental Illness in Medical Students

Submission Type: Posters

Submitter: Carolina Ortiz Villabona – Ohio State University College of Medicine

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### Presenter(s)

Carolina Ortiz Villabona, BS

Role: Lead Presenter  
Medical Student

Mike Yang, BS

Role: Co-Presenter  
Medical Student

### Topic

The Medical School Environment

- Student/staff wellness
- resilience
- and burnout

### Background/Context and Relevance of the presentation/session

The Ohio State University endured six suicides during the 2017-2018 school year (1). In response to these numbers and the increasing referrals to University counseling services, The Ohio State University set out to create a culture of care throughout its colleges (2). Even more startling is that rates of physician suicide were reported to be 1.41 times greater in males and 2.27 times greater in females compared to the general population (3). The Ohio State University College of Medicine (OSUCOM) has not taken this issue lightly. Through the directives of medical students, OSUCOM students and administrators have been collaborating to destigmatize mental health so that our medical school environment encourages medical students to utilize resources that help them build resilience early in their careers.

### Objectives and purpose of the innovation/practice/program/idea

With this mission in mind, we are developing initiatives that would help normalize mental illness within the student community. In addition, we sought to educate students on the resources available to them as OSU students and in the community at large. Finally, we hoped to empower medical students to recognize, accept, and address their own mental health needs.

### Methods

One such initiative to achieve these objectives was a mental health peer panel that was open to all OSUCOM students and staff. Panelists were current medical students with a variety of mental illness diagnoses who volunteered from an interest survey and an existing Mental Wellness Peer Support group. Logistics included obtaining funding, scheduling a time and date that was convenient for most medical students, and crowdsourcing questions for discussion during the panel.

### Outcome/Significance

At the time of proposal submission, this panel is scheduled to occur in two weeks. At this time, we have had

an overwhelmingly positive response from both medical students and administration, and hope to host this panel annually. Once we receive feedback from panel attendees, we plan to expand these panels to better suit the needs of the medical students and potentially involve other graduate schools at OSU, in addition to other medical schools.

### **Contribution to the session participants and ability to be utilized by other institutions**

We believe that in speaking openly about managing mental illnesses we can begin to create a culture that normalizes mental illness and provides proper support for medical students. By attending this conference, we hope other institutions can learn from our process to adopt similar initiatives and provoke productive conversation to reduce the stigma around mental health and therefore promote wellness in healthcare providers nationwide.

### **References**

- (1) Carter, T. (2018, April 11). OSU promotes suicide prevention programs after incidents at Ohio Union garage. NBC4 WCMH Columbus. Retrieved from <https://www.nbc4i.com/news/local-news/osu-promotes-suicide-prevention-programs-after-incident-at-ohio-union-garage/1116143200>.
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- (3) Schernhammer, E. S., & Colditz, G. A. (2004). Suicide Rates Among Physicians: A Quantitative and Gender Assessment (Meta-Analysis). *American Journal of Psychiatry*, 161(12), 2295-2302. doi:10.1176/appi.ajp.161.12.2295.

# Submission ID#596011

Student-Led Initiatives for Improving Collegewide Community Across Campuses

Submission Type: Posters

Submitter: Ushasi Naha – University of Illinois College of Medicine

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## Presenter(s)

Ushasi Naha

Role: Lead Presenter  
Medical Student

Robert George

Role: Co-Presenter  
Medical Student

Joseph R. Geraghty

Role: Co-Presenter  
Medical Student

Ryan Dahlberg

Role: Co-Presenter  
Medical Student

## Topic

Student Personal and Professional Development

- Beyond Step scores and ward performance: redefining student success (resilience
- professionalism
- attainment of competencies)

## Background/Context and Relevance of the presentation/session

The University of Illinois College of Medicine (UICOM) recently completed its most comprehensive curriculum transformation in over four decades, debuting the Illinois Medicine curriculum in August 2017. Previously, UICOM had four campuses Chicago, Peoria, Rockford and Urbana each with its own distinct demographics, geography, and community. The new Illinois Medicine curriculum is part of a larger mission to integrate and standardize the campuses as a single college, representing a unique opportunity and challenge given inherent differences in campus culture.

## Objectives and purpose of the innovation/practice/program/idea

In conjunction, students have spearheaded initiatives and events striving to foster a stronger community among students throughout all of the campuses. Here, we trace the history of UICOM from its early beginnings to recent developments, including the expansion of the Rockford and Peoria campuses along with the sunsetting of the Urbana campus. We also describe student efforts to unite the student body.

## Methods

These efforts include an organized student government that represent all four campuses, the University Medical Student Council (UMSC), as well as smaller government branches that represent each campus specifically. Furthermore, students have established several collegewide events as an opportunity for students



to share experiences regardless of campus assignment.

**Outcome/Significance**

USMC has proven a strong outlet for student voices that has allowed for collaboration across campuses and created student-unifying initiatives, such as leadership retreats and all-campus field days. As further collegewide events are planned, efforts must be made to find ways to engage more of the student body.

**Contribution to the session participants and ability to be utilized by other institutions**

We anticipate the description of these steps will benefit the medical education community at large, especially institutions with multiple campuses that are considering large-scale curriculum transformation.

## Submission ID#596508

Investigating causes of neurophobia to inform the development of an eLearning intervention in a first-year medical student population

Submission Type: Posters

Submitter: Jessica Bergden – University of Louisville School of Medicine

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### Presenter(s)

Jessica Bergden, MS

Role: Lead Presenter

Emily Noonan, PhD, MA

Role: Facilitator

G. Benton Maglinger, MS

Role: Facilitator

Medical Student

Susan Sawning, MSSW

Role: Facilitator

Jennifer Brueckner-Collins, PhD

Role: Facilitator

### Topic

Other: Neurophobia Intervention

### Background/Context and Relevance of the presentation/session

Neurophobia is a fear of neuroscience hindering one's ability to learn and apply neuroanatomy in a clinical setting. Neurophobia has been described in the literature affecting medical students worldwide and is a growing trend among physicians. A comprehensive investigation of student perceptions of neuroanatomy will provide valuable information on developing tools that can be strategically implemented to address neurophobia. This qualitative study is a vital step on filling the existing literature gap on identifying causes of this neurophobia phenomenon to develop an eLearning intervention designed specifically to address it.

### Objectives and purpose of the innovation/practice/program/idea

The objective of this project is to identify aspects of neuroanatomy that first-year medical students find difficult and to characterize neurophobia. Patterns and themes of student attitudes towards neuroanatomy will be identified and categorized. Researchers will gain insight on which areas of neuroanatomy need attention to create innovative tools designed to reduce neurophobia in medical education.

### Methods

The objectives were achieved by conducting a focus group (n=60) of student attitudes and challenges in learning neuroanatomy. Student responses were recorded, transcribed, categorized, and patterns within the data were documented using thematic coding. Triangulation was utilized to validate observations: researcher, second observer observations, and member checking. IRB approval was obtained.

## Outcome/Significance

Four categories of perceived difficulties in neuroanatomy emerged from the data: content, instruction, communication and organization. Clinical cases, 3D relationships, and lexicon are content barriers. Students suggested a step-by-step approach, clinical context, and structure-function correlations to improve instruction. Communication difficulties included overestimation of student knowledge, unclear expectations, and faculty inconsistencies. Lecture organization throughout the course was described as the main difficulty. Together, these resulted in negative emotional responses (n=16) including feeling overwhelmed, frustrated, and unsupported. A step-by-step instructional approach, clinical correlations appropriate for preclinical students and 3D relationships amongst neuroanatomical structures will be utilized to design an eLearning intervention in ArticulateStoryline® to address neurophobia.

## Contribution to the session participants and ability to be utilized by other institutions

Identifying causes of neurophobia is the first step towards the development and assessment of an eLearning intervention's effect on neurophobia at the University of Louisville. An intervention designed to address neurophobia may inform curriculum changes at other institutions.

## References

1. AAN. (2013). The doctor won't see you now? Study: US facing a neurologist shortage. ScienceDaily. Retrieved from: [www.sciencedaily.com/releases/2013/04/130417164444.htm](http://www.sciencedaily.com/releases/2013/04/130417164444.htm)
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## Submission ID#596750

Compassion Rounds: Using patient stories to foster medical student empathy and resilience

Submission Type: Posters

Submitter: Tali Pomerantz – University of Louisville School of Medicine

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### Presenter(s)

Tali Pomerantz, MS4

Role: Lead Presenter  
Medical Student

Corey Ketchem, B.S.

Role: Co-Presenter  
Medical Student

Pradip Patel, MD

Role: Co-Presenter

### Topic

Student Personal and Professional Development

- Humanism in Medicine

### Background/Context and Relevance of the presentation/session

The Gold Humanism Honor Society (GHHS) is a national organization that aims to cultivate compassionate, collaborative and scientifically excellent care amongst medical students. Numerous studies have shown demonstrated the importance of humanistic qualities positive impact on medicine. The University of Louisville chapter of GHHS is committed to integrate humanism early in the medical curriculum, with the belief that by regularly engaging students to feel, emote, and empathize, we will help ourselves and our colleagues maintain qualities of humanism.

### Objectives and purpose of the innovation/practice/program/idea

In order to continually inform the student body on cultivating and maintaining compassionate care, we have developed a discussion series known as Compassion Rounds. At monthly noon sessions, we plan to present a theme to center our GHHS activities around, presented by specialists in the field of interest. The format consists of a 15-20 minute briefing by an expert followed by either a panel discussion or small group discussion to engage the audience.

### Methods

The GHHS members generate topics that prioritize the need to spread empathy and compassion to the student body. The GHHS members then join choose a topic they are passionate about. Each group brainstorms ideas that would fall under each theme and coordinates a session based on that topic. Examples of themes include: (1) Burnout/Wellness/Personal & Professional Development, (2) Getting to Know our Patients as People, (3) Death/Dying/Palliative, (4) Community Outreach, and (5) Gratitude/Recognition. Our entire GHHS chapter works together to plan and execute the Compassion Rounds.

### Outcome/Significance

Our most recent Compassion Rounds focused on caring for patients with disabilities. It consisted of a presentation by a pediatric faculty member, followed by a panel of patients with disabilities and their families. This topic was chosen due to the belief that caring for disabled patients should be a crucial part of our medical education, yet did not have a place in our formal curriculum. Students wanted to learn how to properly engage those with disabilities and how to prioritize their most crucial healthcare needs in the setting of patients with multiple medical issues. Future sessions will focus on functional medicine, death & dying, and addiction.

### **Contribution to the session participants and ability to be utilized by other institutions**

We believe this program could easily be replicated at other institutions. Session topics can be tailored to reflect the unique needs and interests of students at various medical schools. Students at our institution regularly provide feedback that the Compassion Rounds sessions are moving, reinvigorating, and refresh their commitment to providing empathetic and compassionate patient care.

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## Submission ID#596937

Differences in Study Strategies Between Students Who Improve Most and Those who Improve Least from NBME CBSE to Step 1.

Submission Type: Posters

Submitter: Leslee Martin – University of Louisville School of Medicine

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### Presenters

Leslee J. Martin, MA

Role: Lead Presenter

Jacob R. Shreffler, MS

Role: Co-Presenter

Amy L. Holthouser, MD

Role: Co-Presenter

Angela J. Pyle, PhD

Role: Co-Presenter

Monica A. Shaw, MD, MA

Role: Co-Presenter

### Topic

The Medical School Environment

### Background/Context and Relevance of the presentation/session

Despite concerns about over-reliance on a single test, residency programs place much emphasis on students USMLE Step 1 scores when students apply for residency. Because of its importance, the University of Louisville School of Medicine (ULSOM) began a program in 2016 that requires all students to take the NBME Comprehensive Basic Science Examination (CBSE) and additional practice exams before sitting for Step 1. Examining early study strategy differences in groups who improve substantially from the CBSE to Step 1 could yield useful information on how to better prepare lower-performing students.

### Objectives and purpose of the innovation/practice/program/idea

To understand study strategies used by students who make the largest gains from pretest to Step 1 compared to students who make the smallest gains. Study outcomes will be used to design better study programs for students.

### Methods

Students in the ULSOM classes of 2019 and 2020 were administered surveys a few weeks after they took the Step 1 exam. The survey used was adapted with permission from Burk-Rafel, Santen, and Purkiss. Among other topics, the survey asked students to provide the approximate number of hours they studied each week during their 7-week study period, whether or not they rescheduled their Step 1 exam, whether they experienced study burnout, and how frequently they were distracted by social media and texting.

### Outcome/Significance

Student responses revealed the following differences between students who showed the least amount of

improvement between taking the CBSE and Step 1 and those students who showed the most improvement:

1. Those in the bottom 20% in growth studied less than those in the top 20% in weeks 1 - 6 of the study period by an average of .55 hours ( $r=.24$  to  $.27$ ;  $p < .05$ ). The week 7 difference was not statistically significant.
2. Students in the bottom 20% were more likely to reschedule their original test date ( $r=-.37$ ,  $p < .001$ ).
3. Those in the bottom 20% experienced higher levels of study burnout ( $r=-.29$ ,  $p < .05$ )
4. Those in the bottom 20% were more likely to be distracted by social media and texting ( $r=.21$ ,  $p < .05$ ).

### **Contribution to the session participants and ability to be utilized by other institutions**

Students who showed the least improvement from baseline to Step 1 exam score studied somewhat less each week, experienced more burnout, were more likely to reschedule their Step 1 exam, and were more prone to be distracted by social media and texting. Results from this study can be used to help inform Student Affairs advising and provide students with evidence-based strategies for Step 1 study.

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