

## AACP REPORT

### School Posters Presented at the 120<sup>th</sup> Annual Meeting of the American Association of Colleges of Pharmacy, Chicago, Illinois, July 13-17, 2019

**A College of Pharmacy's Comprehensive and Collaborative Assessment Initiative.** Rochelle M. Roberts, *The University of Texas at Austin*, Patrick J. Davis, *The University of Texas at Austin*, Renee Acosta, *The University of Texas at Austin*. The mission of The University of Texas at Austin College of Pharmacy (UTCOP) is "to provide exemplary education, training, research, and professional development for Pharm.D. students, graduate students, and postgraduates in the pharmaceutical sciences; to advance discovery, innovation, and patient care; and to provide service to the university, professional and scientific communities, and society." The mission guided our 2016-2017 ACPE self-study process addressing the 2016 ACPE standards, clarifying the role of the Pharmacy Assessment Council (PAC) and leading to a collaborative Overall Assessment Process (OAP). The PAC includes much of the UTCOP leadership and is primarily responsible for overseeing assessment activities across the UTCOP mission. OAP implementation relies on approximately 20 committees, and 40 programmatic assessment tools. The OAP follows the typical assessment process: programmatic data reviewed by appropriate committees on a regular basis, committee chairs documenting committee discussions and any next steps. For each assessment tool, one or more committees review data, their reports are summarized by the appropriate PAC member and shared with the PAC for monitoring purposes. Due to the sheer number of committees and assessment tools, we face logistical challenges. Current efforts focus on ensuring that the OAP steps are manageable and well-aligned with each group's work and timeline. This initiative will greatly assist with regular documentation of assessment activities to provide evidence for future ACPE self-study processes, but more importantly, continue to foster a culture of assessment and continuous quality improvement, and raise awareness among stakeholders about the state of the UTCOP.

**A Complete Course: The CEPHS Co-Curriculum Model.** Kim M. Jones, *Union University*, Emily Brandl, *Union University*. The Co-Curriculum at the Union University College of Pharmacy (UUCOP) prepares students for success in five key domains: Career Planning, Education, Personal and Professional Development, Healthcare Advocacy, and Service (CEPHS). These domains were

chosen in alignment with the mission and vision of the UUCOP and are mapped to the University's Core Values. The CEPHS Co-Curriculum Model is longitudinally integrated across four years. In the first, second, and third didactic years, students are required to participate in activities that map to each of the five CEPHS domains. Sample activities include completion of a yearly CEPHS Plan, attendance at the local pharmacy association's continuing education presentations, travel to the state capital for advocacy activities alongside the state's pharmacy association, professional service activities, and participation in milestone events such as the White Coat and Pinning Ceremonies. Students complete an online assessment following each activity to document completion and to assess activity quality. In the fourth year, co-curricular concepts mapping to the CEPHS domains are addressed in the experiential curriculum and are evaluated through student self-assessments and preceptor evaluations. The CEPHS Co-Curriculum fully supports the didactic and experiential curriculum in that activities are also mapped to the UUCOP's ten Educational Outcomes. All Key Elements in ACPE Standards 3 and 4 are addressed by the CEPHS Model.

**A Comprehensive Approach to Developing an Interprofessional Program.** Lisa Hong, *Loma Linda University*, Daniel L. Brown, *Loma Linda University*, Caroline Sierra, *Loma Linda University*, Kathryn T. Knecht, *Loma Linda University*, Alireza Hayatshahi, *Loma Linda University*, Farnoosh Zough, *Loma Linda University*, Stanley K Matsuda, *Loma Linda University*, Jessa Koch, *Loma Linda University*, Michael D. Hogue, *Loma Linda University*. Background: Loma Linda University School of Pharmacy has implemented several strategies designed to enhance interprofessional education (IPE) for pharmacy students. Methods: The School of Pharmacy has partnered with other campus programs, including the Schools of Medicine, Nursing, Dentistry, Physician Assistant, and Allied Health, to establish case-based IPE activities. These occur as required curricular sessions during the second and third years of the PharmD program. Pharmacy students are assigned to teams with dental, medical, and physician assistant students and teams collaborate to solve complex hypothetical patient cases. Fourth year students engage in disaster

scenarios in addition to the IPE in the experiential setting. Pharmacy students also voluntarily participate with other health professionals in a variety of co-curricular service activities, such as free health clinics and medical mission trips. Results: Assessment methods associated with these IPE sessions confirm that all 4 Interprofessional Education Collaborative (IPEC) competencies are being addressed. The focus has generally been on roles and responsibilities of various health professionals, interprofessional communication (TeamSTEPPS), and collaborative teamwork. We are currently exploring the feasibility of creating an interprofessional ethics course that would include pharmacy students and medical students. There are also plans to investigate the potential of conducting interprofessional activities during the initial orientation of health profession students during their first weeks on campus. Conclusion: Despite some evidence of success, several challenges remain in the identification and implementation of IPE opportunities and the assessment of outcomes. Survey data and student reflections are being analyzed to identify potentials for improving the IPE program.

**A Multi-Modal Approach to Enhance Well-being at Concordia University Wisconsin School of Pharmacy.** Elizabeth A. Buckley, *Concordia University Wisconsin*, Kristine M. Sprung, *Concordia University Wisconsin*, Terry-Elinor Reid, *Concordia University Wisconsin*, Uvidelio Castillo, *Concordia University Wisconsin*, Dean L. Arneson, *Concordia University Wisconsin*, Danielle Kraak, *Concordia University Wisconsin*. The demand and rigor of pharmacy school is stressful to our students, faculty, and staff. The resiliency to focus and succeed within the curriculum without burning out or suffering from anxiety or depression is individual, and changes with time depending on various factors that are out of our control. The growing issues of mental illness and suicide amongst college students, and faculty burnout rates in academia, compelled our school to begin addressing these issues. Self-care is the foundation to cultivating physical and mental well-being and resiliency, and there are many tools available to help students learn to be self-aware and able to “examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth” (ACPE Standard 4). Our curricular opportunities that enhance self-awareness and resiliency includes elective courses such as global experiences, which cannot accommodate all students. Hence, our school took a multi-modal approach to design and implement wellness initiatives for students, staff, and faculty focused on improving wellness behaviors. The various activities and interventions were designed to improve health and wellness and encourage reflection about per-

sonal and professional well-being. Our multi-modal approach in year 1 included course integration of mindfulness training tools for P1 students, faculty development in mindfulness, staff and faculty training in suicide prevention, student initiatives to promote well-being, development of a working group of staff and faculty focused on student wellness, and university at-large support of student mental health awareness.

**A New Initiative Aimed at Improving Student Success, Recruitment and Retention through Inclusive Excellence.** Amanda Galindo, *Texas A&M University*, Elaine L. Demps, *Texas A&M University*, Amanda Galvan, *Texas A&M University*, Simi Gunaseelan, *Texas A&M University*, Indra K. Reddy, *Texas A&M University*. Introduction: The Texas A&M Rangel College of Pharmacy’s mission is to prepare a diverse student body for the practice of pharmacy in various settings, especially in underserved regions and for underserved populations. To further embolden that mission, the College launched a new initiative, the Aggie Student Pharmacists Initiative for Recruitment/Retention and Education (AS-PIR2E), in June 2018. Design: ASPIR2E includes four tracks: Pre-Pharmacy Introductory Program (PPIP–Track 1), Pre-Pharmacy Advanced Program (PPAP–Track 2), Pre-Matriculation Program (PMP–Track 3), and Academic Coaching Program (ACP–Track 4). PPIP and PPAP address undergraduate recruitment of underrepresented minority (URM) students; PMP and ACP address retention and diversity/ inclusion efforts of those students. Results: To date, the College has completed Tracks 1 and 3 while Tracks 2 and 4 are in progress. All tracks have been successful. Through all 4 tracks, 87 potential future students, 61 of whom are URMs, have been engaged. Track 3’s preliminary PMP results indicate significant improvements in academic performance and retention of URM students plus a tremendous sense of belonging among the participants, with the faculty and staff, and with the college. All four tracks will be repeated in the upcoming academic year. Outcomes: The College is recruiting more (>40%) URM students, recording high success rates (e.g., licensure exam pass rates), and producing diverse pharmacists who can practice according to ethnic/racial concordance, resulting in improved patient outcomes. Implications: By recruiting and retaining even more diverse students, the College is making great strides towards producing exceptional pharmacists to serve all populations.

**A Structured Co-Curricular Experience to Facilitate Personal and Professional Growth Among Students.** Elizabeth M. Lafitte, *The University of Louisiana at Monroe*, Gina C. Craft, *The University of Louisiana at Monroe*, Karen P. Briski, *The University of Louisiana at Monroe*, Michael B. Cockerham, *The University of*

*Louisiana at Monroe*, Glenn Anderson, *The University of Louisiana at Monroe*. Background: The faculty and administration at the University of Louisiana Monroe College of Pharmacy developed a structured program for documentation and assessment of students in all key elements of ACPE Standards 3 and 4. The program has four components: participation in co-curricular activities, reflection on co-curricular activities, attendance at mandatory seminars, and participation in peer mentoring groups. All program components are evaluated in a six-semester Professional Growth and Development Series during the first three professional years. Program Description: Each semester, students complete one or more hours of co-curricular activities to address professional development in key elements of Standards 3 and 4. Students complete reflective writings and add them to an electronic portfolio; students are encouraged to write the reflection in the What? So what? Now what? format to provide not only narrative comments, but also to discuss how the activity contributed new knowledge or changed their attitudes or behaviors. Faculty and staff facilitators provide feedback to the students on reflective writings and monitor progress toward fulfillment of the program requirements. Students attend two mandatory co-curricular seminars per semester; the concepts introduced in the seminars are further discussed in small groups, which are composed of two students per professional year and facilitated by faculty and staff. To improve consistency, students and faculty are provided with discussion guides prior to seminars and group meetings. Future Directions: Continued success of the co-curricular program depends on thoughtful continuous quality improvement, as well as faculty and student engagement.

**A Telehealth Model for the Delivery of Interprofessional Education.** Deepti Vyas, *University of the Pacific*, Eric G. Boyce, *University of the Pacific*. The University of the Pacific has a robust interprofessional education (IPE) curriculum linking pharmacy students with other health professions within the university but recognized the need to expand to include student physicians and other prescribers. Traditionally, IPE delivery methods have included case-based learning, simulations, and problem-solving exercises. In 2017, longitudinal telehealth-based activities were added to the IPE curriculum to facilitate student understanding of telehealth principles and IPE. Partnerships were established with a nurse practitioner program and two osteopathic medicine programs at universities in other states. Telehealth IPE activities included the use of electronic health records, YouTube videos demonstrating history and physical exam, a videoconferencing tool, and electronic document development. Students received training on telehealth principles such as

maintaining patient privacy, noise reduction strategies, and how to set up key equipment. First-year coursework focused on a population-health problem where interprofessional student teams co-created a white paper and poster outlining strategies for improving the care of the disenfranchised population. Second-year coursework focused on the management of patients located in a remote location, where students collaborated to work-up a case and write a SOAP note outlining their care for the patient. Student accountability and continuous quality improvement was ascertained through peer-assessment. Over one thousand students have participated in the telehealth IPE. The majority of students have reported improvements in knowledge, skills, and attitudes in the use of telehealth and interprofessional teams.

**Advancing Pharmacy Practice in Nigeria.** Pamela M. Moye-Dickerson, *Mercer University*, Angela O. Shogbon, *Mercer University*, Uche Ndefo-Anadu, *Texas Southern University*, Teresa Pounds, *WellStar Atlanta Medical Center*. Mercer University College of Pharmacy's (MUCOP) mission and vision include global outreach to improve health. MUCOP is committed to advancing clinical pharmacy practice in Nigeria and empowering pharmacists to strengthen their role as a member of the interdisciplinary team. Since 2013, MUCOP faculty have assisted in the organization and facilitation of five preceptor development training workshops. In 2017, a Special Doctor of Pharmacy (PharmD) Conversion Program was initiated. This special fast-track PharmD program was done in collaboration with the Pharmacy Council of Nigeria and the Nigerian Association of Pharmacists and Pharmaceutical Scientists in the Americas (NAPPSA) and was hosted at the University of Benin in Benin City, Nigeria. Through NAPPSA, MUCOP sent faculty as trainers for this program in July 2018. The program trained pharmacists who are lecturers, preceptors, and faculty for universities across Nigeria on how to be more clinically focused in pharmacy practice while earning their Doctor of Pharmacy degree. Of the 130 participants surveyed at the end of the training, more than 98% strongly agreed/agreed that the facilitators were prepared and enthusiastic about the program. Approximately 99% strongly agreed/agreed that the knowledge acquired would increase their competency in pharmacy practice, improve pharmacist-patient relationships, and enhance the effective provision of services to patients. Half of the students strongly agreed/agreed that the logistics for the program were appropriate. Despite some limitations encountered during the training session, about 90% were very satisfied/satisfied with the overall program. The second installment of the program is anticipated for August 2019 in Enugu, Nigeria.

**Advancing Standards 3 and 4 Through Didactic Curriculum and IPE.** Laura Licari, *Roosevelt University*, Cara M. Brock, *Roosevelt University*. Achieving Standards 3 and 4 have challenged colleges of pharmacy to incorporate these 'soft skills' into their didactic curriculum. At Roosevelt University College of Pharmacy, multiple steps were taken to achieve advancement (achievement?) of these standards. First, a full-time assistant professor position was created to develop and execute a 2-year longitudinal course series entitled Professional Development and Leadership. This series consists of 7 courses that start Term 1 of Cohort year 1, and ends Term 8 of Cohort year 3, in an accelerated 3-year program. Standards 3.3, 3.5, 4.1, 4.2, 4.3 and 4.4 are specifically addressed in each course. End of course evaluations were reviewed for improvement in content. A second layer to this longitudinal course series is the incorporation of standard 3.4, interprofessional collaboration, into Terms 2-4. We achieved advancement of IPE through partnership with a local medical center's health sciences university. By including pharmacy students into their longitudinal IPE course series, with a university that currently does not offer a PharmD program. A mutually beneficial collaborative relationship has been achieved to meet required interprofessional education in multiple health discipline programs. Assessment of each workshop, along with individual reflection and College of Pharmacy specific focus group, IPE activities are evaluated and improved year over year.

**An Academic Partnership to Support Advanced Pharmacy Practice Education in South Africa.** Karen Kopacek, *University of Wisconsin-Madison*, Alexander Gidal, *University of Wisconsin-Madison*, Renier Coetzee, *University of the Western Cape*. Objective: To describe the experience of PharmD students assisting with development and implementation of pharmacotherapy curriculum in a new Masters in Clinical Pharmacy program through an Advanced Pharmacy Practice Experience (APPE) clerkship, offered in partnership between pharmacy schools at the University of Wisconsin-Madison (WI) and University of the Western Cape, South Africa (SA). Methods: PharmD students completing this academic APPE clerkship in 2018-2019 spent the first week of rotation with the WI faculty preceptor preparing for their teaching role. The remaining five weeks were completed in Cape Town where students collaborated with the SA faculty preceptor to create and teach new lectures and patient cases for multiple pharmacotherapy topics in the clinical Masters (MPharm) program. PharmD students also assisted with precepting senior Bachelor of Science pharmacy (BPharm) students on clinical rotations. Results: The SA academic clerkship provided a

rich learning experience for both WI and SA students. Faculty benefited from assistance of fourth-year PharmD students with developing and teaching a new pharmacotherapy curriculum. The rotation offered PharmD students multiple opportunities to enhance their teaching, cultural awareness, and pharmacy practice skills prior to residency where they will be expected to teach and precept students. Engagement with WI students allowed SA students to learn about advanced pharmacy practice in the U.S. (BPharm and MPharm) and receive peer mentorship (MPharm). Implications: Partnering with an international pharmacy school to develop an academic APPE clerkship supports advancement of pharmacy education, prepares students for future teaching roles, and provides faculty with additional teaching resources.

**An Innovative Transitions-of-Care Escape Room Activity to Train Pharmacy Students on Patient Safety.** Brittany N. Palasik, *University of North Texas Health Science Center*, Hae Jin Cho, *University of North Texas Health Science Center*, Wei C. Yuet, *University of North Texas Health Science Center*. Objective: To determine student perceptions of an escape room activity on application of diabetes management and transitions-of-care interventions Methods: This study was approved by the University of North Texas (UNT) Health Science Center IRB in December 2018. The escape room activity was implemented in the required Integrated Pharmacotherapy Recitation course at the UNT System College of Pharmacy in January 2019. Students were given 40 minutes to solve six puzzles related to diabetes management in hospital and clinic settings. A perceptions survey consisting of Likert-type scale was administered after students had completed the activity; students received course credit for survey completion. Descriptive statistics were used to characterize student perceptions of the activity. Results: Of the 90 students enrolled in the course, 88 students (98%) completed the perceptions survey following the escape room activity. The median value of students' perceptions on the 14 questions that were included in the survey was 4 (IQR = 3-5). When compared to the median value of the Likert-type scale (3 = neutral), the median value of students' perceptions was greater by 1. The two questions that obtained the highest median values were question items about the degree of encouragement for one to think differently about the topic (median = 5, IQR = 4-5) and the degree of enjoying games in general (median = 5, IQR = 4-5). Implications: Pharmacy students found the escape room activity to be an enjoyable opportunity to learn from peers, perform transitions-of-care interventions, and apply material taught in a didactic setting.

**An Interprofessional Global Practice Experience Within a College of Pharmacy and Health Sciences.**

Flora G. Estes, *Texas Southern University*, Andrea Shelton, *Texas Southern University*, Shirlette G. Milton, *Texas Southern University*. Study abroad programs are noted to be beneficial for a number of reasons. The health focus offers an opportunity for students to become better prepared for a diverse health workforce and patient populations. The experience also broadens career opportunities. Learning in an international environment fosters collaboration, personal development and training outside the traditional classroom. The Study Abroad program at Texas Southern University has been in existence for nearly 20 years with trips to Asia, Europe, Africa, South America and the Caribbean. The College of Pharmacy and Health Sciences has been directly involved for the past thirteen years. However, no internship credit has been awarded for any of our seven (7) pharmacy and allied health programs. The College looked to expand student involvement and considered offering internship credit for study abroad participation. A student interest survey was submitted to students in the pharmacy program with 91.4% of students responding they would be interested in doing an APPE/IPPE international rotation. When asked why, 81.7% had an interest in international health/tropical medicine issues and 78.1% had a desire for cross-cultural experience. Although cost was a factor for 65.2%, 70.0% of students would participate if receiving internship credit, and 24.7% responded they would be grateful for the experience and opportunity. We will expand internship credits for all programs in accordance with program accreditation requirements. Curricular approval has allowed our first International APPE Elective course with internship credit hours to St. Kitts/Nevis in the West Indies to be offered for this academic year.

**Application of the Pharmacist's Patient Care Process Throughout the PharmD Curriculum at the University of Georgia.** Gregory B. Seagraves, *The University of Georgia*, Kay L. Brooks, *The University of Georgia*, Keith N. Herist, *The University of Georgia*, Ashley N. Hannings, *The University of Georgia*, Trisha N. Branan, *The University of Georgia*, W. Anthony Hawkins, *The University of Georgia*, Merrill Norton, *The University of Georgia*, Andrew Darley, *The University of Georgia*, Beth Phillips, *The University of Georgia*, Michael J. Fulford, *The University of Georgia*. The College of Pharmacy integrated the Pharmacist's Patient Care Process Model endorsed by JCPP throughout its new curriculum that started in Fall 2015. First, the Essentials of Pharmacy Practice (EPP) Course Sequence & Applied Pharmacy Practice (APP) Sequence. Within the P1 Es-

entials course, students attend a lecture, skills lab, and a recitation that introduces them to the JCPP model, specifically how it relates to being patient-centered. Students are taught how to collect and assess information within the context of pharmacy practice. During the P2 Essentials course sequence and the P3 Applied Course Sequence, students integrate knowledge from their pharmacotherapy courses into the patient care process through labs and recitations. Second, students apply the JCPP model as they work with standardized and real patients during their IPPEs each year. In the standardized patient program, students use the template they learned in their Essentials course recitations to practice and implement the various components of the JCPP model. The IPPEs emphasize the methodical approach and patient involvement in the decision-making process. The students are assessed during and at the end of the experiences to determine their confidence in applying the model to actual situations. Last, the Integrated Patient Care course in the P3 year is a culminating course. The course engages students in multiple complex cases that consider socioeconomic issues, transition of care, and ethical dilemmas. Students identify and discuss how they would respond to a case using the JCPP model as the framework for their responses.

**Assessing Cultural Competence in Students Participating in an Exchange Experience Between Urban and Rural Healthcare.** Estela Lajthia, *Howard University*, Toyin S. Tofade, *Howard University*, LaMarcus T. Wingate, *Howard University*, Jessica Lyons, *Howard University*, Nkiruka Emezienna, *Howard University*, Zulikhat Segunmaru, *Howard University*, Hadiya Strong, *Howard University*. Objective: To assess cultural competence skills of eight pharmacy students from diverse backgrounds before and after participating in a unique health equity exchange experience. Methods: Select students from the University of Wyoming and Howard University participated in an exchange program showcasing health challenges and benefits in a rural and urban environment. Students visited Wyoming in January and will visit the District of Columbia in April 2019. The Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals – Revised (IAPCC – R) tool provided through Transcultural C.A.R.E Associates, will be utilized to assess cultural sensitivity before and after the exchange experience. Two post visit verbal debriefings are scheduled among students and facilitators. The students completed the pre-exchange survey and post visit debriefing in January and will complete a post exchange survey and debriefing. Descriptive statistics will be used to analyze demographic data, pre and post survey scores. Sample T-test analysis will be conducted to determine

whether this exchange experience improved students' cultural competence. Verbal and written feedback on the exchange will be summarized. Results: Out of the eight students that completed the pre-exchange IAPCC – R survey, six (75%) demonstrated cultural awareness, and two (25%) demonstrated cultural competence. The post exchange results are currently pending. Preliminary verbal student feedback on the first experience indicates it was life-changing. Implications: Cultural competence in the US has become crucial in providing effective and culturally responsive healthcare services. Through this experience we aim to increase the students' cultural awareness and implement innovative ideas into the curriculum.

**Assessing the Accuracy of Faculty, Staff, and Student Perceptions of Stress.** Chris Noel, *St. John Fisher College*, Sean T Leonard, *St. John Fisher College*, Kathryn Connor, *St. John Fisher College*, Keith DelMonte, *St. John Fisher College*, Kelly Conn, *St. John Fisher College*, Elizabeth Sutton Burke, *St. John Fisher College*, Angela K. Nagel, *St. John Fisher College*, Nabila Ahmed-Sarwar, *St. John Fisher College*, Christine R. Birnie, *St. John Fisher College*. In the past academic year, AACP has offered two institutes promoting greater awareness of levels of stress, burnout, and overall well-being amongst faculty, staff, and students. Anecdotally, Wegmans School of Pharmacy (WSOP) has noted that there is considerable variability in perceptions of stress between these groups. Furthermore, there is a knowledge gap in the literature regarding the accuracy of each groups' perception of the stress of the other groups. As part of a commitment to promote a culture of well-being, WSOP assessed faculty, staff, and student levels of stress. In addition, faculty were asked to estimate the levels of stress among students, and the executive committee estimated the levels of stress among faculty. The Copenhagen Burnout Inventory (CBI) was used to assess burnout in faculty, staff, and students. Domains of burnout assessed include: personal, professional, and patient/client burnout. Students and faculty were also asked a series of questions about their typical routine, stress management techniques, and fulfillment in their daily lives. A psychometric review of the CBI demonstrates its potential utility in assessing stress among pharmacy students and faculty. Our preliminary findings identified several key factors related to burnout (e.g., poor sleep quality, lack of family time, etc.) and have allowed us to build a set of guidelines for helping students reduce their levels of stress and minimize the risk of burnout. It was also noted that faculty perceptions of student stress were somewhat accurate, yet sufficiently different to warrant assessing for stress using more objective assessments and techniques.

**Assessment of the Costs and Benefits of a New Online Pharmacy Manager Concentration.** David A. Gettman, *D'Youville College*, Karen A. Mlodozeniec, *D'Youville College*, Michael S. MacEvoy, *D'Youville College*. OBJECTIVE: To explore themes making up students' understanding of the costs/benefits associated with a new online pharmacy manager concentration (oPMC). METHODS: Thematic analysis is a common form of analysis in qualitative research that emphasizes pinpointing patterns (or "themes") within data. This study involved asking open-ended questions of ten students currently enrolled in either the new oPMC or the more traditional classroom PharmD/MBA (cPhM). RESULTS: Six (6) different cost/benefit themes emerged: (1) Costs: cost of oPMC is subsumed under the costs of PharmD program, whereas the total cost is about \$13,500 more for cPhM; (2) Time: no additional time commitment for oPMC, whereas cPhM requires 12 more courses from business program; (3) Relevance: each oPMC module focuses on dealing with 'real-world' problems of being a pharmacy manager, whereas in the cPhM problems involve broad variety of businesses; (4) Flexibility: both in the oPMC and cPhM students can consolidate business education into the weekends, but the oPMC obviates student need to attend in-class; (5) Classwork: the oPMC lets students take weekly quizzes, submit weekly assignments and research papers/business plans, and take part in asynchronous case study discussions all via Canvas; and, take midterm/final exams via Canvas/Proctorio, whereas all these activities take place in weekend classes for cPhM; (6) Mentorship: offered by pharmacy faculty and experiential pharmacy manager preceptors for oPMC, whereas for cPhM business mentors. IMPLICATIONS: oPMC is designed to provide practical knowledge and core business competencies for new pharmacy managers. Employers may want gold-standard cPhM, but may pay future MBA tuition.

**Awareness of the Cumulative Effects of Microaggression and Implicit Bias on Students, Faculty and Staff.** Clara Okorie-Awe, *University of Illinois at Chicago*, Stephanie Y. Crawford, *University of Illinois at Chicago*, Taha Taha, Birgit U. Jaki, *University of Illinois at Chicago*, Lisa Sharp, *University of Illinois at Chicago*, Rodrigo M. Burgos, *University of Illinois at Chicago*, Marlowe D. Kachlic, *University of Illinois at Chicago*, Bradley D. Bartels, *University of Illinois at Chicago*, Gregory S. Calip, *University of Illinois at Chicago*, Kevin O. Rynn, *University of Illinois at Chicago*, Jeremy Ebersole, *Blackhawk Technical College, Wisconsin*. Abstract Objectives: 1. Describe the concept of microaggression and implicit bias (M&IB) and the cumulative effects on students, faculty and staff over time; 2. Discuss and

demonstrate understanding through the use of interactive videos of microaggressive behaviors; and 3. Discuss methods of avoiding language and behaviors reasonably perceived as microaggressive. Design: The University of Illinois at Chicago (UIC) College of Pharmacy Diversity Strategic Thinking and Planning - Teaching and Learning (DSTP T&L) Subcommittee conducted a 3-hour workshop on M&IB during the college's July 2018 faculty and staff retreat. The workshop was designed based on empirical and experiential evidence and personal narratives in the professional literature. Assessment: 151 people participated in the retreat. A subset of participants completed pre- and post-test surveys, which included prior knowledge and familiarity with and experiences with M&IB. Participants were asked to match given scenarios to the categorical themes associated with M&IB. Both formative and summative assessments showed faculty and staff increased awareness and knowledge of M&IB. Conclusion: Via our design using DSTP T&L members and others as "actors" in the videos, faculty and staff reaction to the workshop was enthusiastic and overall very positive. The workshop has beneficial implications for other colleges of pharmacy, health profession colleges, graduate disciplines, and continuing professional development in terms of clinical patient interactions, curricular design, and interpersonal behaviors (e.g., student-faculty, student-student). Participants provided suggestions on how to expand programming in a follow-up future workshop, both via the surveys and ongoing personal communications with the dean and DSTP T&L members.

**Beyond the Script: A Commonwealth Experience.** Holly S. Divine, *University of Kentucky*, Patricia R. Freeman, *University of Kentucky*, Autumn Rice, *University of Kentucky*, Emily Chambers, *University of Kentucky*, Trenika R. Mitchell, *University of Kentucky*, Kristie Colon, *University of Kentucky*, Nicole F. Keenan, *University of Kentucky*, R. Kiplin Guy, *University of Kentucky*. The University of Kentucky College of Pharmacy aspires to be a diverse and inclusive environment for professional growth and learning. Specific, dedicated initiatives include the development of a Diversity and Inclusion Task Force; mandatory unconscious bias training; cultural competency preparation; and mapping of diversity and inclusion topics within the curriculum. The College's experiential program built upon a long-standing "rural rotation" requirement in Advanced Pharmacy Practice Experiences (APPEs) to create a Commonwealth Experience Rotation (CER) for 2019-20. The CER goal is to introduce student pharmacists to experiential opportunities throughout the Commonwealth that provide a learning environment in which they can apply the College's curricular learning outcomes for medically underserved

populations/communities, health disparities, culturally diverse populations, and rural health in patient care practice. Students will engage in one of seven APPEs in a designated CER area and complete a focused assignment designed to promote student reflection on diversity and disparities. An event tagged 'the Commonwealth Experience Day' was held in the Fall prior to student rotation selection to introduce student pharmacists to the CER and other experiential opportunities throughout Kentucky. The daylong event included a showcase entitled "Passport to Kentucky" where regional Area Health Education Coordinators (AHEC) partnered with pharmacists to display and present geographical and practice site information regarding the eight AHEC regions. Additionally, students attended a seminar provided by an invited speaker that focused on health disparities and opportunities for pharmacist engagement. Survey data and an analysis of the assignments will be used to assess the impact of the CER.

**Blender Assessment Workflow Process: An Innovative CQI Model for Collaborative Faculty Engagement.** MaRanda K. Herring, *Harding University*, Shawn Turner, *Harding University*, Forrest L. Smith, *Harding University*, Melissa Max, *Harding University*, George Kwame Yeboah, *Harding University*, Anissa Harris, *Harding University*, Sarah E. Griffin, *Harding University*, Rayanne A. Story, *Harding University*, Landry Kamdem, *Harding University*. The Assessment Committee (AC) at Harding University College of Pharmacy (HUCOP) developed a continuous quality improvement (CQI) model aimed at promoting collaborative faculty engagement in the assessment and improvement processes required for meeting ACPE Standards 24 and 25. CQI is a process of using evidence-based qualitative and quantitative data to implement positive organizational changes designed to improve defined outcomes. Assessment tools and processes are, therefore, key to gathering, analyzing, and interpreting data for recommended changes. While numerous CQI models and tools exist, none seemed appropriate to implement changes and simultaneously infuse collaborative practice at HUCOP. Using input from key stakeholders and elements of existing CQI models, the AC created the blender assessment workflow (BAW) process, comprised of three main faculty-led subcommittees: Define, Analyze, and Improve. Each met monthly to discuss specific committee charges or assessment items and reported to the AC. The BAW process facilitates collaborative engagement framed in best research practice focused on addressing program, department, or student level outcomes. In 2018-2019, HUCOP's application of the BAW process facilitated benchmarks for faculty research and scholarship; recommendations for the progression and remediation policies; and evaluation of the

co-curricular, experiential, and didactic components of the HUCOP curriculum. The BAW has resulted in improved engagement of faculty in the databased assessment processes of the college, program, and their own teaching and student learning. The BAW transformed and galvanized HUCOP's faculty-led culture of assessment by using data-driven decisions for improved research, scholarship, teaching, and learning at both the individual and program level.

**BMI Effects on Chief Complaints of Hispanic Workers in the Farm Worker Family Health Program.** Stephanie C Watson, *University of Georgia*, Daniel N Padron, *University of Georgia*, Kobina Amoah. Background: The Farm Worker Family Health Program is an opportunity presented to healthcare students from various disciplines to participate in interprofessional collaboration and provide free healthcare services to farm workers from Mexico working in Moultrie, Georgia. The objective of this study was to analyze the effect of BMI on CC of Hispanic farm workers in the FWFHP from 2012 to 2016 and 2018 including the effect of BMI on the CC of Musculoskeletal Pain and Dental Health and compare these results to those of a similar population in Mexico. Methods: Using a random number generator one hundred subjects from each year (N=600) were selected. The total study sample included 600 data points, but 36 data points were excluded due to missing data not reported in the FWFHP database. Missing data includes height and weight, so that BMI could not be calculated. Results: Our final sample size was 564, which was then analyzed. The BMI of the sample had the following characteristics; 44.5% were overweight, 15.8% were obese, 1.2% were underweight, and 38.5% had normal BMI. The percentage of individuals who presented a dental CC in each BMI category is as follows: 0% underweight, 5.41% normal, 14.38% excessive weight. Assessment of our analytical sample (N = 564) shows 45.7% (153) of individuals with excessive weight (classified as overweight and obese) experience musculoskeletal pain, 37.39% (83) of individuals with normal weight experience MS pain, and 28.57% (2) of individuals classified as underweight reported MS pain.

**Bridging the Gap Between Didactic and Experiential Learning.** Misty M. Stutz, *Sullivan University*, James D. Nash, *Sullivan University*, Vinh D. Nguyen, *Sullivan University*, Cindy D. Stowe, *Sullivan University*, Kimberly K. Daugherty, *Sullivan University*, Dale E. English, *Sullivan University*, Arthur G. Cox, *Sullivan University*. Standard 12 of the 2016 ACPE accreditation standards clearly outlines the need for students to be provided a rigorous didactic educational foundation, with an incorporation of experiential learning in the form of

IPPEs, to be prepared to enter APPEs. Starting with the Sullivan University College of Pharmacy and Health Sciences graduating class of 2016, we have incorporated knowledge, practice, and application into the curriculum with purpose to meet the core domains noted in Appendix A of the Guidance for ACPE Standards 2016. A longitudinal patient care lab series, beginning in the first quarter of PY1, is centered around hands-on learning and practicing skills being taught in the classroom. Beginning at week four, the student starts the longitudinal community IPPE, which then lasts through the fourth quarter of PY1. To verify application of each domain, students are given assignments and a checklist that are mapped to and closely align with both the didactic learning and the clinical skills laboratory curriculum. In the fourth quarter of the PY1, the student is immersed in the institutional IPPE (structured in block form), where assignments and checklists are given for those specific domains. By mapping these core domains to student activities in classroom, skills laboratory setting, and experiential, it can be determined that every student is not only taught but has practiced and applied these core domains.

**Broadening the Definition of Diversity in the Admissions Process.** Jason S. Haney, *Medical University of South Carolina*, Jenny Bagg, *Medical University of South Carolina*, Scott W. Bragg, *Medical University of South Carolina*, Roger L. White, *Medical University of South Carolina*, Shannon J. Drayton, *Medical University of South Carolina*. Diversity and inclusion have long been an integral part of the fabric of the Medical University of South Carolina (MUSC) and our admissions committee has considered these factors during a holistic application review. In 2015, our committee sought a more expansive approach to embrace the university's Imagine MUSC 2020 goals and to meet the recommendations of the Argus Commission. We expanded our rubric of diversity factors (i.e., from 14 to 18 factors) and now consider the presence of individual factors instead of a trichotomy. Three independent reviewers continue to score anonymized, voluntarily submitted diversity statements, while a fourth member reviews and guides the adjudication of incongruent scores. The University and College also sought to improve the degree and institutional recognition of our student body's diversity. We made a concerted effort to emphasize the broader definition of diversity. The admissions committee shifted from reporting under-represented minority (URM) students to highlighting those with at least two diversity factors. The diversity of admitted classes has grown by an average of 15% over the last 4 years with the URM student population increasing by 10.2%. Student perceptions of diversity have improved as the mean percentage of students that agree or

strongly agree that our college has a diverse student body has increased from 45% to 74% in the past two years. Our ultimate goal is to better identify diversity resulting in a more unified and inclusive student body, thus helping our graduates leverage their differences in ways that allow them to better serve patients.

**Caring for Our Future Caregivers: Wellness Initiatives at the LDFP.** Jamie L. Kellar, *University of Toronto*, Zubin H. Austin, *University of Toronto*, Aleksandra Bjelajac Mejia, *University of Toronto*, Andrea J. Cameron, *University of Toronto*, Kishor M. Wasan, *University of Saskatchewan*. Background: Student burnout and resilience are rapidly emerging topics in health professions education. 18-24-year olds currently suffer the largest percentage of major depressive disorders. Increasing levels of stress, anxiety and depression influence student mental health, and ultimately academic success. Initiatives aimed at creating cultures of wellness in pharmacy education are more important than ever. Initiatives: We have introduced many initiatives aimed at enhancing and supporting student wellness including: i) an embedded counsellor to increase access and decrease wait times for our students; ii) meditation sessions demonstrating use of mindfulness to reduce anxiety; iii) biannual mental health movie nights that use popular films to spotlight mental health issues. The movies are followed by discussions facilitated by our Clinical Faculty who specialize in psychiatry. The movie nights provide opportunity for open discussion around mental health issues, with the goal of reducing stigma and increasing dialogue; and iv) a number of other student social events, supported through a Faculty wide Shaping Student Life and Learning Fund (SSLL). The SSLL provides financial assistance for student events such as Pharmacy Arts night, Pharmacy Phollies, Pharmacy's Next Top Pharmacist, among many others. These events help to provide social activities to balance the rigorous academic demands and contribute to building a sense of community. Assessment: Preliminary evaluation and feedback indicate supports are valued. Our next steps are to formally assess the effectiveness of these health and wellness initiatives, with the goal of identifying aspects for improvement while expanding on successful initiatives.

**Closing the Loop on ACPE Standards 3 and 4 with the E\*Value e-Portfolio.** Aaron Burton, *University of Saint Joseph*, Jennifer Podoloff, *University of Saint Joseph*, Swetha Rudraiah, *University of Saint Joseph*, James G. Henkel, *University of Saint Joseph*. At the University of Saint Joseph, we have found that ACPE accreditation standards 3 and 4 are best met using a mix of curricular, co-curricular and extra-curricular components with multiple items supporting each key element. This

poster describes the development and initial implementation of a Student Professionalism Portfolio program using a Healthcare Education Management software system (E\*Value). A student-centered e-portfolio has remained an obvious solution to the challenge of meeting Standards 3 and 4, but the previous E\*Value e-portfolio was difficult to manage, since items placed there typically required manual upload. In late 2018, E\*Value released a redesigned electronic portfolio, which appeared to address this shortcoming. We quickly migrated to this new system and have found that it now permits faculty advisors to track and comment on each student's Standards 3 and 4 evidence and outcomes. All of our E\*Value-derived components now flow automatically to the Portfolio. These include student-generated reflections surrounding professionalism, community service and professional experiences (APPE and IPPE). We have also developed professional behavior observation forms completed by faculty that are imported into the portfolio along with standard evaluations of student IPPE, APPE, and IPE performance. Additionally, the Portfolio permits easy upload of external documents, including de-identified peer assessments of professionalism, student writing samples, and professional presentations that we will encourage students to use in the future. Faculty advisors now have access to all documents and meet regularly with advisees to guide their professional development and validate advisee reported progress.

**Competency Driven Global Outreach Experiences.** Gina M. Prescott, *University at Buffalo*, *The State University of New York*, Qing Ma, *University at Buffalo*, *The State University of New York*, Joshua Sawyer, *University at Buffalo*, *The State University of New York*, William A. Prescott, *University at Buffalo*, *The State University of New York*, Alfred T. Reiman, *University at Buffalo*, *The State University of New York*, Eugene D. Morse, *University at Buffalo*, *The State University of New York*. The University at Buffalo School of Pharmacy and Pharmaceutical Sciences (UB SPPS) has integrated global outreach into our strategic plan and has dedicated resources for students and faculty to engage in this activity. Our global outreach program, which has multiple facets, is designed to positively impact the global community and develop students into culturally aware pharmacists. In the core curriculum, students receive training on cultural awareness, health literacy, and infectious diseases. Two didactic electives are available: complex global health problem solving and emerging infectious diseases. Immersion occurs within our co-curricular and experiential programs through: (1) a refugee health literacy program, (2) short term experiences (<10 days) in global health, (3) elective introductory and advanced pharmacy

practice experiences focusing on global outreach. All didactic and immersion experiences are mapped to the ACPE and Consortium of Universities for Global Health (CUGH) competencies. The CUGH competencies focus on Level I: The Global Citizen Level. To date, 182 students have taken the schools' electives. Within our co-curriculars, 159 students have been trained to participate in our refugee health program, with 60 of students participating in a training session. Eighty-four students have participated in 100 short-term experiences with interprofessional teams including medicine, dentistry, nursing, and management. Through elective experiential learning we have engaged 5 and 25 students in IPPE and APPE, respectively since 2013. After pre-travel training, students on immersive experiences are evaluated through journaling, quizzes, and summative evaluations

**Creating an Intentional Focus on Well-Being Among Faculty, Staff, and Student Pharmacists.** Susan L. Mercer, *Lipscomb University*, Jeff Lee, *Lipscomb University*, Thomas M. Campbell, *Lipscomb University*. Well-being remains a consistent topic of discussion across the academy and at Lipscomb University College of Pharmacy for students, faculty, and staff. Unfortunately, many individuals struggle to define "well-being". During a two-day Pharmacy Faculty Summer 2018 Planning Meeting, the faculty were educated on well-being concepts centered around the Gallup-Healthways' definition: well-being is comprised of five elements (purpose, social, financial, community, and physical) and all five are interrelated and interdependent. Recognizing that the way faculty and staff feel at work and how students feel at school influences performance, we conducted a self-analysis of our College performance in the well-being arena to identify strengths and areas for improvement. The following questions were provided for faculty response. (1) What are we already doing to impact student well-being? (2) How can we model aspects of well-being to our students? (3) What should we do to engage students in well-being? (4) How do we reinforce well-being concepts? (5) How do we hold students accountable for their well-being? Faculty responses and program highlights will be presented. Recently, the College has formed a new well-being committee with faculty, staff, and student representation that is responsible for the design and implementation of initiatives that promote a culture of well-being among each of these groups. Elements of well-being for consideration by the committee include purpose, social, financial, community, physical and spiritual. This initiative will reinforce well-being concepts and will provide a framework for proactively addressing these elements throughout the College.

**Creighton University School of Pharmacy and Health Professions: A History of Purposeful Global Engagement.** Naser Z. Alsharif, *Creighton University*, Angela Patterson, Cathy Carrico, Amy F. Wilson, *Creighton University*. Creighton University School of Pharmacy and Health Professions and College of Nursing faculty members have developed and participated in global outreach since 1995. Innovative programming extends to more than 12 countries spanning 5 continents (Asia, Africa, North America, South America and Europe). Engagement activities include a visiting scholar program, a student and faculty exchange program, an international interprofessional health science summer program, formal degree programs, and clinical education. International programs focus on global health care education, interprofessional activities, and cultural immersion experiences. The poster will summarize international key efforts, lessons learned, and the impact on health science education nationally and internationally. Development and required supportive structures of successful collaborations will be explored as well as key behaviors of working interprofessionally. Creighton University health science education is dedicated to crossing professions and borders.

**Curricular Assessment Using Faculty-Developed Exam Based on the PCOA Blueprint.** Ligia Westrich, *Fairleigh Dickinson University*, Michael J. Avaltroni, *Fairleigh Dickinson University*, Anastasia M. Rivkin, *Fairleigh Dickinson University*. Objectives: To evaluate students' academic performance in various curricular areas using faculty-developed exam based on the Pharmacy Curriculum Outcomes Assessment (PCOA) blueprint. To determine the relationship between faculty-developed exam, GPA, and PCOA. Methods: Using the PCOA blueprint, faculty from all divisions of the School developed an exam to assess performance of students in their third professional year (P3) in four main curricular areas (23 subtopics) and their readiness for the PCOA exam. The exam questions were mapped to the PCOA blueprint in ExamSoft and administered to three student cohorts (n=230; Classes of 2018-2020) prior to them taking the PCOA exam. Bivariate Pearson correlation analyses were completed to determine the relationship between performance on the faculty-developed and PCOA exams, and between students' GPAs and scores on both exams, respectively. Results: Student performance was below the minimum threshold (40%) in three out of 23 subtopics. For all three student cohorts, there were strong correlations between faculty-developed and PCOA exams (rCo2018=0.82, rCo2019=0.72, rCo2020=0.77, p<0.0001). Moderate to strong correlations were found between the faculty-developed exam and students' GPAs (rP1/P2/P3 range = 0.54 - 0.70,

$p < 0.0001$ ). Additionally, moderate to strong correlations were found between the PCOA exam and students' GPAs (rP1/P2/P3 range = 0.60 - 0.69,  $p < 0.0001$ ). Implications: Analysis of student performance on the faculty-developed exam provides a detailed and specific understanding of areas that require curricular enrichment. Regression analysis will be performed to determine the contribution of various factors to student outcomes. Subtopic area performance will guide faculty to engage in assessment-driven course improvements.

**Curricular Programming Efforts to Address Well-Being, Resiliency, Burnout, and Productivity Among Pharmacy Students.** Jessica Louie, *West Coast University*, Sarah McBane, *West Coast University*, Kyle Sousa, *West Coast University*. Background: West Coast University's School of Pharmacy is committed to improving well-being, resiliency, and burnout among its students. Accordingly, curricular programming efforts were developed and implemented to evaluate the prevalence of stress and burnout in second and third-year pharmacy students and promote their well-being and productivity. Methods: To pilot these efforts, a one-unit elective course was developed for second- and third-year pharmacy students and a two-hour wellness presentation was added to the third-year Capstone course. A planner/journal was designed to supplement elective course content and weekly activities focused on understanding and developing techniques related to: goal setting, journaling, decluttering, time blocking, stress management, self-care, mindfulness, financial well-being, community, imposter syndrome, and productivity were discussed. Twenty-seven students enrolled in the elective course completed the Well-Being Index and Perceived Stress Scale surveys at the beginning of the course; post-assessment comparisons will be made at week 12. The two-hour wellness presentation in the Capstone Course included three active learning activities and emphasized a mental health comfort kit in advance of APPE rotations. Results: Baseline results from the elective course revealed Well-Being Index scores of  $\geq 4$  in 16 out of 27 students. Baseline Perceived Stress Scores revealed scores of  $\geq 20$  in 13 out of 27 students. Implications: Curricular efforts to reduce stress and burnout have positive implications for improving student pharmacist persistence, mental health, and satisfaction by creating learning environments and habits for students to thrive.

**Developing, Mapping and Assessing Curricular and Co-curricular Interprofessional Education in an Accelerated PharmD Program.** Abir Kanaan, *MCPHS University–Worcester/Manchester*, Paul P. Belliveau, *MCPHS University–Worcester/Manchester*, Terrick A. Andey, *MCPHS University–Worcester/Manchester*,

Kaelen C. Dunican, *MCPHS University–Worcester/Manchester*, Gretchen Jehle, *MCPHS University–Worcester/Manchester*, Karyn M. Sullivan, *MCPHS University–Worcester/Manchester*, Anna K. Morin, *MCPHS University–Worcester/Manchester*. MCPHS University- School of Pharmacy Worcester/Manchester (SOP-W/M) charged an Interprofessional Education (IPE) Committee with developing and integrating IPE into the PharmD curriculum, as well as assessing and sustaining IPE activities. An IPE definition was adopted, and an activity checklist was developed. The checklist guides faculty on the criteria an activity must meet to satisfy IPE requirements. Specifically, an activity must involve learners from at least two health professions, link to Interprofessional Education Collaborative (IPEC) core competencies, have an interactive component, and include an assessment of student learning. Five IPE activities were purposefully designed and integrated into the didactic curriculum during the first and second professional years. In addition to pharmacy, five to nine health professions participate in four activities, and one activity includes physician learners only. While on experiential education rotations, students submit IPE encounters that describe their contributions and identify interactions with other healthcare professionals and learners. Qualtrics surveys are administered after each semester to assess IPE content and activities in required (didactic and experiential) and elective courses, and in co-curricular activities. For courses, faculty map applicable IPE content to SOP-W/M curricular outcomes and objectives (adopted from 2013 CAPE Educational Outcomes); indicate the method of delivery, assessment and student self-assessment; and categorize the level of learning and performance. For required IPE activities, faculty identify IPEC core competencies. IPE co-curricular activities are captured and mapped by faculty and students. Assessment of outcomes and resources is reviewed by the IPE Committee and a report is submitted to Assessment and Curriculum Committees.

**Development of a Longitudinal Personal & Professional Development Course Series.** Melanie W. Pound, *Campbell University*, Tina H. Thornhill, *Campbell University*. The 2013 Center for the Advancement of Pharmacy Education outcomes and 2016 Accreditation Council for Pharmacy Education standards identified the need to educate student pharmacists on personal and professional development through self-awareness, leadership, innovation, entrepreneurship and professionalism. In 2017, as part of a revised curriculum, the Campbell University College of Pharmacy & Health Sciences created a "Personal & Professional Development" (PPD) course series. In year one, the focus is on self-awareness and professionalism and utilizes lectures and

active-learning activities to establish self-directed learning, critical thinking skills and stress management. Student pharmacists also begin developing their personal portfolio. In the second year, innovation, entrepreneurship, and advocacy are taught through a year-long, team-based project that culminates in the development and presentation of a business proposal. Student pharmacists are exposed to different business aspects of pharmacy including writing and developing mission and vision statements, SWOT analyses, financial considerations, and marketing. The third, and final, year focuses on life-long learning and the development of pharmacists as leaders and educators. Student pharmacists learn about career readiness, post-graduate training, and how to integrate into the health-care team. Content in the individual PPD courses is reinforced throughout the series and through integration into other courses (e.g., pharmacy operations and pharmacy practice skills). Interprofessional education, community service, co-curricular activities and career development are incorporated into all three years of the course.

**Development of a Wellness Committee for Faculty and Students at a College of Pharmacy.** Milena McLaughlin, *Midwestern University/Downers Grove*, Susan R. Winkler, *Midwestern University/Downers Grove*, Annette Gilchrist, *Midwestern University/Downers Grove*, Melinda Verdone, *Midwestern University/Downers Grove*, Brooke Griffin, *Midwestern University/Downers Grove*, Sally Arif, *Midwestern University/Downers Grove*, Kathy Komperda, *Midwestern University/Downers Grove*, Jennifer Phillips, *Midwestern University/Downers Grove*. Student and faculty wellness is an important factor that underlies overall engagement in academic life and satisfaction with career goals. One approach the Midwestern University Chicago College of Pharmacy implemented to address the larger issue of wellness was to form a College Wellness Committee. This was in response to concerns of high stress and burnout among students and faculty and the overarching discussion within the pharmacy profession. The goals of this committee were to establish a baseline measurement of wellness, identify areas of concern, and develop actionable items and recommendations for implementation. After a review of the literature, faculty were surveyed to identify themes for potential wellness interventions. A student survey had already been planned by the Senior Education Specialist. Both the faculty and student surveys included the Perceived Stress Scale. The faculty survey also included the Copenhagen Burnout Inventory. The faculty survey had an 84% response rate (n=44) and identified that faculty with and without clinical sites scored differently on several items. In addition, the written response section iden-

tified several themes such as perceived workload imbalances that may be future targets for wellness interventions. The student survey had a 60% (n=80) response rate and also included the Basic Need Satisfaction Inventory. The student survey identified potential areas of unmet needs such as financial stress and prioritizing academic activities over self-care (e.g., sleep). Going forward, the College Wellness Committee will further analyze results from these studies and conduct focus groups to better target interventions for both faculty and students.

**Development of a Year-long Required Early Interprofessional Experience Among Pharmacy and Medicine Students.** Jill M. Boone, *University of Cincinnati*, Bradley E. Hein, *University of Cincinnati*, Michael B. Doherty, *University of Cincinnati*, Tiffany Diers. The University of Cincinnati Academic Health Center (AHC) has been engaged in interprofessional education (IPE) activities over the last decade, including IPE co-curricular activities and IPE electives. These interactions and relationships have led to the development of a year-long required curriculum with college of pharmacy (COP) and college of medicine (COM) students, with plans to extend to all AHC colleges. Starting in the spring semester of the 1st year, all students from the COP and COM are partnered in one of two synchronous courses to develop skills in interprofessional collaborative practice (IPCP) based upon the Interprofessional Education Collaborative competencies. Half of the students participate in a 1 credit hour "Principles of IPCP" course and the other half participate in "Applications in IPCP". The students then take the opposite course, respectively, in the fall semester of the 2nd professional year. Courses are designed to be complementary with neither being a prerequisite for the other. Principles in IPCP has six IP touch points with the medicine-pharmacy IP partners over the semester, including, active learning sessions in IP roles, TeamSteps® communication, chronic pain ECHO, SBIRT training, resiliency/burnout, and a primary care practice-based experience. Applications in IPCP has foundational learnings through a shared learning assignment with the IP partners based upon the IHI Open School coursework in quality and safety. The IP partners also attend two shadowing experiences together, one with nursing and the other an allied health practitioner. Successful development and implementation has required collaborative efforts at multiple layers from all participants.

**Development, Implementation, and Assessment of a Comprehensive, Integrated, and Multimodal Interprofessional Education (CIM-IPE) Program.** Ashim Malhotra, *California Northstate University*, Welly Mente, *California Northstate University*, Eugene Kreys,

California Northstate University, Joseph Rogers, California Northstate University, Claire Baranov, California Northstate University, Thura AlKhayat, California Northstate University, Jennifer West, California Northstate University, Rudolph Holguin, California Northstate University, Linda T Buckley, California Northstate University, Joseph Silva, California Northstate University, Hieu T. Tran, California Northstate University. Objective: 2016 ACPE Standard 11 mandates the inclusion of interprofessional education (IPE) in pharmacy programs. However, challenges exist in the standardized design, delivery, and assessment of an IPE curriculum. We developed and implemented a comprehensive, vertically and horizontally integrated, multimodal IPE curriculum (CIM-IPE) and assessed for student, program, and institutional outcomes. Methods: We established an IPE collaboration, created an institutional infrastructure, and operationalized the curriculum with pharmacy, nursing, and medical students using a five-pronged approach built around 1) a didactic component, 2) high fidelity simulation with robots with content-emphasis, 3) hospital simulation with robots with process emphasis, 4) interprofessional case conferences, and 5) a Hot-spotting IPE-elective. The four 2016 Interprofessional Education Collaborative (IPEC) competencies and ACPE Standard 11 were used to assess outcomes, classifying developmental stages as initial, developing, developed, and proficient. Results: In seven IPE events distributed across the P1 through P3 years of the CNU-COP Pharmacy curriculum, a high total number of pharmacy, nursing and medical school participants (N=1,799) were repeatedly engaged. Overall assessment data show a high success rate of the integrated CIM-IPE program with mean performance scores of 98 (SD=13, N=117) and 95 (SD=5, N=67) for the interprofessional case conferences, 100 (SD=2, N=117), 95 (SD=4, N=67), and 95 (SD=5, N=67) for the 3 simulation based IPE events. Conclusion. Our curricular and assessment strategies for CIM-IPE outline a stepwise development and implementation blueprint for an inclusive and comprehensive IPE program that is readily transferable to other colleges and schools of pharmacy and other health care professional programs.

**Disrupting the Curriculum – 100% Synchronous Active Learning Across Three Campuses.** Karen Whalen, *University of Florida*, Reginald F. Frye, *University of Florida*, William C. Mobley, *University of Florida*, Michelle Z. Farland, *University of Florida*, Shauna M. Buring, *University of Florida*. The University of Florida revolutionized its curriculum in 2015, creating a curriculum that is different in structure, course design, pedagogy, and assessment. Backward design was used to set the

goals that would guide new curricular design. These goals include key attributes to cultivate in our students, and optimization of curricular integration and of active learning. Among the attributes for our students were to become self-directed learners and change agents who exhibit the highest standards of professional behavior and soft skills. These attributes and others are cultivated in our Personal and Professional Development series, which includes documentation of continuous achievement through milestone assessments. The curricular structure changed from multiple, simultaneous semester-long courses to fewer simultaneous courses in block format. Electives are taught in 2-week blocks at the end of second- and third-year semesters enabling the potential for complete immersion. Integration was improved horizontally through the creative union of the foundational and clinical sciences within courses and vertically by spiraling transcending concepts throughout the curriculum. Using the flipped-classroom design, dedicated synchronous active learning sessions employing team-based learning activities are a central component of all courses. Integration and active learning are fortified with coordinated skills labs during the entire pre-APPE curriculum. Our curricular revolution is enabled by leading edge technology and a robust staff support structure that includes academic coordinators and instructional designers. In summary, we have intentionally disrupted a traditional curriculum to deliver one that integrates the pharmaceutical and clinical sciences with a focus on deep, collaborative learning and continuous professional development.

**Diverse Global Education Opportunities at the University of New England College of Pharmacy.** Gurkishan S. Chadha, *University of New England*, Devon A. Sherwood, *University of New England*, Emily K. Dornblaser, *University of New England*, Rachel Naida, *University of New England*, Hailey Choi, *University of New England*, James R. Krebs, *University of New England*. The University of New England strives to empower students to become global citizens. Overall our students study abroad approximately five times the national average. Our College of Pharmacy leads the way in global travel for graduate programs, with nearly one-third of last year's graduates completing an international APPE. UNE's College of Pharmacy provides students with diverse choices of experiential opportunities in Spain, Morocco, Ghana, Thailand, and Japan. Through our Spain APPE, students and faculty partner with the University of Granada to examine the Spanish healthcare system within European and American contexts. It includes a Spanish language course, nutrition course, visits to pharmacy distribution centers, nutritional companies and research institutions, and has students work directly with

Spanish pharmacists in hospital and community settings. Students experience living in the medieval city of Granada and fully experience Andalusian culture. During our Thailand APPE, students learn about contemporary health issues. Particular focus is on social and environmental healthcare in the tropics, traditional and alternative medicine. Students observe tropical diseases such as tuberculosis, avian flu, leprosy, dengue fever, malaria, and HIV/AIDS through travel to large urban hospitals, research laboratories, hospices, orphanages, rural clinics, government, and non-governmental organizations. The Ghana APPE features an intensive two-week interprofessional medical clinic where students provide pharmacy services in the context of a medical mission trip and have an opportunity to see local pharmacies, clinics, and hospitals. Students from different health care professions (including nursing, physical therapy, physician's assistants, social work, and pharmacy) work the clinic collaboratively with Ghanaian medical professionals

**Enhancing Innovation in Education: Leveraging a Dedicated Teaching and Learning Support Team.**

Maria C. Pruchnicki, *The Ohio State University*, Brianne L. Porter, *The Ohio State University*, Justin Habash, Katherine A. Kelley, *The Ohio State University*, Christina Archer, Catherine E O'Keefe, Tanya Bomsta. Innovation in the design/delivery of health sciences education, to harness the benefits of evidence-based instructional practices, is an emerging standard in contemporary pharmacy curricula. Disciplinary integration, critical thinking/problem solving, and mastery-based learning are outcomes explicit in learning standards, but often challenging to implement effectively. Faculty training and expertise is necessarily aligned with pharmacy content, but even those faculty members who might have extensive pedagogical training find it difficult to stay abreast of developments in both pharmacy practice and educational research simultaneously. Even schools with university-level resources (e.g. teaching centers) may not have personnel to engage with faculty through a full assessment cycle. Furthermore, they are not generally familiar with the particular demands of pharmacy education. The Ohio State University College of Pharmacy dedicated resources to building an internal office of faculty support specialists to meet this need. The Office of Educational Innovation and Scholarship provides educational expertise related to a wide range of teaching and learning needs including course design, instructional strategies, and classroom assessment. Additionally, they can assist in learning object creation, effective use of learning management tools, and the adoption of innovative educational technology. The mission and composition of the office have evolved over time, but specialists have been

embedded in course/module teams throughout the five-year curricular design process. Benefits include: responsive teaching development programming based on specific faculty needs, assistance creating new learning materials resulting in increased use of flipped learning techniques, enhanced use of technology and learning spaces, and increased connection with university teaching support resources.

**Enhancing Recruitment Strategies to Enrich the Applicant Pipeline: A Focus on High School Students.**

Ryan E. Owens, *Wingate University*, Kurt A. Wargo, *Wingate University*. Objective: To develop new initiatives that enrich the applicant pipeline among local high school students Methods: A task force was developed to determine recruitment strategy ideas for multiple cohorts of potential applicant pools, including high school and middle school students. Partnerships with local school board key personnel were also established to help determine feasibility and interest in ideas. Out of this task force plans for a one-day 9-hour summer institute, termed Future Leaders in Pharmacy (FLiP) Institute, were developed to expose students to various education and practice aspects of pharmacy with activities such as problem-based learning, medication counseling, and career pathways panel. Additionally, a 3-hour high school preview day was developed which included a pharmacy career path discussion and laboratory activities. Results: A total of 19 high school students attended the inaugural FLiP Institute, the majority being rising seniors (38%) or juniors (26%). Among the students in attendance, 83% noted they were somewhat or very interested in a pharmacy career at the conclusion of the Institute. Additionally, a total of 21 students attended the inaugural preview day with juniors (67%) and sophomores (24%) comprising the majority. Upon event conclusion, 76% percent noted they were somewhat or very interested in pursuing a career in pharmacy. Implications: Schools of pharmacy should consider expanding beyond the traditional undergraduate recruitment efforts in order to provide early exposure to the profession to local high school students. Developing relationships and stimulating interest early, amongst these students, can assist with the establishment of a solid future pipeline.

**Enhancing Student Success on NAPLEX with Diagnostic and Predictive Analytics.** Nina Pavuluri, *Lake Erie College of Osteopathic Medicine*, Julie J. Wilkinson, *Lake Erie College of Osteopathic Medicine*, Rachel R. Ogden, *Lake Erie College of Osteopathic Medicine*, Katherine M. Tromp, *Lake Erie College of Osteopathic Medicine*, Hershey S. Bell, *Lake Erie College of Osteopathic Medicine*, Inna Miroshnyk, *Lake Erie College of Osteopathic Medicine*, Kristen M Gawronski, *Lake Erie*

*College of Osteopathic Medicine.* Objective: To apply diagnostic and predictive analytics to enhance student success and NAPLEX preparation initiatives. Methods: A retrospective analysis of 2014-2016 LECOM SOP graduates' (n= 732) NAPLEX scores, demographics, pre-pharmacy academic performance factors, and pharmacy school academic performance factors was performed. Categorical, bivariate (ANOVA, independent samples t-test) and correlational analyses were conducted, as was step-wise linear regression to examine the significance of course grades and other factors related to NAPLEX score. Risk factors were identified and students from the Class of 2018 were stratified into those risk categories. Intervention programs were developed and implemented accordingly to help the students better prepare for the NAPLEX. Validation of the diagnostic regression model was performed with the NAPLEX scores of the Class of 2018. Results: Average Pharmacotherapeutics course series and Pharmaceutical Calculations course grade, and pre-APPE class rank stood out as the most significant predictors of success on NAPLEX. Initial validation analysis showed a significant and strong correlation between the number of identified risk factors and the total scaled NAPLEX score ( $AR^2=0.947$ ,  $p<0.01$ ). Furthermore, as a potential result of the diagnostic analysis and interventions, LECOM SOP observed an increased 2018 NAPLEX pass rate. Implications: All Schools/Colleges of Pharmacy can potentially improve NAPLEX performance by determining risk factors unique to their curriculum and informing faculty and students of the magnitude of risk of failure associated with each factor. Faculty advisors should then meet with students individually to implement specific learning strategies to overcome the risk of failure.

**Establishing a Collaborative Approach to Inter-professional Education (IPE) via a Multi-institution Consortium.** Bethany Sibbitt, *Cedarville University*, Emily Laswell, *Cedarville University*, David Peters, *Cedarville University*, Aleda M. Chen, *Cedarville University*. When the Accreditation Council for Pharmacy Education (ACPE) introduced IPE as a curricular requirement, Cedarville University (CUSOP) determined to be proactive in our implementation and collaboration. Acknowledging the limitations of not being a comprehensive healthcare professions campus, we established the Dayton-area IPE Consortium with nearby Wright State University's medical and nursing programs. This collaboration has grown to include nine healthcare professions from four institutions. The consortium meets on a quarterly basis, identifying mutually beneficial events. Planning subcommittees handle the logistics leading up to the events. CUSOP has also mapped specific IPE events to

each year of the curriculum to ensure that pharmacy is represented in consortium initiatives and IPE is integrated throughout the curriculum with thorough exposure to other healthcare disciplines. Initially, assessments were only tied to events and mapped to the IPEC Competencies, which identified gaps as well as areas where our students were progressing. Students are now assessed globally at the end of each academic year through self-assessment to compare progression longitudinally. As the consortium has grown, we have also established an IPE subcommittee housed within our Curriculum/Assessment Committee to streamline communication and coordination of events within our curriculum. As a result, inter-professional activities have been incorporated into some of the disease/therapeutic modules, allowing for summative assessment of outcomes pertaining to interprofessional development. This strategic implementation has allowed us to build our relationships and interdisciplinary scholarship with neighboring programs, expand our students' exposure to other disciplines, and assess the success of our IPE-focused strategic plan initiatives.

**Establishing Health Partnerships Across the Globe.** Carl A. Anderson, *Duquesne University*, Jordan R. Covvey, *Duquesne University*, Kevin J. Tidgewell, *Duquesne University*, Khalid M Kamal, *Duquesne University*, David E. Zimmerman, *Duquesne University*, Branden D. Nemecek, *Duquesne University*. Global health student and faculty experiences in the School of Pharmacy have focused on educational trips to developed healthcare systems. These efforts include global health experiences in need-based international environments and educational exchange opportunities with established schools of pharmacy. These experiences have been developed for Haiti, Costa Rica, Japan, Italy and Saudi Arabia. Relationships with individual foundations, universities and medical providers facilitate the opportunities for service learning, educational exchange and new programs at international sites.

**Expanding Recruitment Efforts at the University of Montana.** Sherrill J. Brown, *University of Montana*, Rachael Zins, *University of Montana*, Shane Sangrey, *University of Montana*. The increasing competition for applicants has required our pharmacy program to enhance recruitment efforts. The University of Montana Skaggs School of Pharmacy is expanding local recruitment efforts and reaching out to potential applicants in other states. A major focus for our program is recruitment of American Indian students. School personnel give presentations at tribal high schools and colleges in Montana and recruit at various American Indian conferences. The Pathway to PharmD Program (P2PD) is available to enhance the success of American Indian/Alaskan Native and

Underrepresented Minority students who have been admitted into a professional pharmacy program. Although open to students accepted at any pharmacy program in the country, P2PD is a wonderful example of support our program can offer American Indian students. To introduce Montana high school and elementary students to the pharmacy profession, UM faculty and staff lead pharmacy-related activities with HOSA members and Med-Start camp attendees. The University's We Are Montana In The Classroom and spectrUM programs promote STEM education and careers to students of all ages, and pharmacy faculty, staff, and students have been privileged to highlight pharmacy at Family Science Nights across the state and pow-wows in western Montana. Outside of Montana, our faculty and staff recruit across the western US, attending Pharmacy Days at UC-Irvine and Washington State University. Presentations to pre-pharmacy and health science majors and meetings with advisors at schools in California, Oregon, Alaska, Arizona, and Montana have helped increase awareness of our pharmacy program.

**Exploring Well-being, Grit, and Resilience Among Students, Faculty, and Staff.** Jungeun Lee, Haneul J Kwon, Debra A. Copeland, *Northeastern University*, Jenny A. Van Amburgh, *Northeastern University*. Objective: Well-being, grit and resilience are three important characteristics needed to succeed in pharmacy school and the workplace. We will summarize the baseline opinions of students, faculty, and staff overall well-being and awareness of grit and resilience. These data will be used to create wellness quality improvement initiatives (QI) in the School of Pharmacy at Northeastern University. Methods: All students, faculty and staff within the School were invited to complete a 5-question online survey through Qualtrics. Questions asked respondents to share their results from the World Health Organization Five Well-Being Index, Grit Score from the Angela Duckworth Grit Scale, Resiliency Test Results, and a yes or no personal assessment questionnaire asking about their perceptions of well-being for themselves, faculty/staff, and colleagues. Results: The survey was sent to 693 students, 116 students responded (16.7%), with 113 complete responses (16.3%). Eight percent (8.0%) were pre-professional year 1 students, 13.3% pre-professional year 2, 29.2% P1, 9.7% P2, 20.4% P3, and 19.5% P4. The survey was sent to 111 faculty and staff, 29 provided a complete response (26.1%). Further analysis will be shared through descriptive statistics. Implications: The results of this QI will provide the baseline for future initiatives to increase awareness on grit, resilience and well-being. Primary literature for interventions to increase students', faculties', and staffs' well-being will

be analyzed and applied to the Northeastern University School of Pharmacy.

**Faculty Workload Analysis: Improving the Process, Assessment, and Communication.** Laura M. Fox, *Presbyterian College*, Giuseppe Gumina, *Presbyterian College*, Kayce M. Shealy, *Presbyterian College*. To collect an accurate depiction of faculty workload and products generated during the previous academic year, Presbyterian College School of Pharmacy conducts an annual faculty productivity and workload analysis. Data collection processes, workload and productivity calculations, and communication of results were incrementally adjusted over the past three years to improve ease of use, accuracy, transparency, and usage. Adjustments included the development of a faculty annual activity report template to capture any information not required or documented for promotion/tenure purposes. Prior to data analysis, quality assurance measures were added to improve the accuracy of self-reported data. Workload and productivity calculations were conducted using formulas for converting products to hours; feedback from faculty over the past two years were used to adjust the formulas to ensure accurate representation of faculty effort into any given product. In 2016-17, individual reports were given to faculty comparing their allocation of effort and productivity to the department and school as a whole. In 2017-18, an infographic was generated summarizing the allocation of effort and productivity for the department and school. Instead of individual reports, the whole faculty were provided a spreadsheet with everyone's data for comparison and additional quality assurance. Future directions include (1) elucidating faculty perceptions of the workload analysis; (2) investigating the impact on employee engagement and satisfaction; and (3) examining congruency between perceived and actual workload and the relationship of this congruency with job satisfaction.

**Flexibility, Variety, and Mission Alignment in Pharmacy Curriculum: Leading Change in Education.** Daniel Berlau, *Regis University*, Bianca Calderon, *Regis University*, Robert C Haight, *Regis University*, Christine Feltman, *Regis University*, Miki Goldwire, *Regis University*. Developing and delivering a quality pharmacy curriculum is the primary goal of every pharmacy school. The faculty of Regis University School of Pharmacy have prioritized three major aspects of our curriculum, which we believe has contributed to successful outcomes. Curricular review ensures that our curriculum is flexible and adaptable, using input from faculty, students and preceptors to make adjustments on a regular basis. These curricular adjustments have led to better student outcomes and greater faculty effectiveness. Additionally, offering a variety of academic experiences to

our students has been our priority. These include innovative APPEs and IPPEs, interesting and relevant electives, and significant interprofessional educational experiences. Because of the large number of pathways within the profession of pharmacy, we reject the one size fits all mentality, and work to tailor the curriculum to each student's specific career goals. Although we have a core curriculum that all students must complete, we offer interesting and diverse electives in the P2 and P3 year as well as a wide variety of experiential education rotations in the P4 year. And finally, our curriculum and program learning outcomes are in alignment with Key Values in Jesuit Education and our University mission, which includes the Jesuit Value of "men and women in the service of others." Our students participate in extensive service-learning projects, pioneering diversity and inclusion programming, and challenging ethics discussions involving real world health care scenarios. Our goal is to not only make our students better pharmacists, but also better people in the world.

**Global Health Elective: Application of International Strategic Objectives.** Sally L. Haack, *Drake University*. Drake University CPHS developed international strategic objectives that includes the development of educational offerings. An application of that objective is the offering of an interdisciplinary elective course to explore global health concepts in countries across the world. The new course was built on the institutional partnership between Drake University and Tecnológico de Monterrey (Tec) in Guadalajara, Mexico. Drake pharmacy students and Tec nutrition students were assigned to teams and participated in co-learning activities throughout the semester. Through regular interaction in video-conferencing and teamwork across both campuses, students collaborated on a food insecurity community engagement project. Students were engaged with each other and also with their local community partners, DMARC food pantry (Des Moines, Iowa) and the Valle de la Primavera Comedor Comunitario (Guadalajara, Mexico). These partners were selected based on their commitment to providing food resources in their respective communities and their collaborative work to meet the needs of vulnerable populations. The course focused on three primary learning outcomes: personal growth, civic learning and academic learning. Critical reflection and civic learning were incorporated in the community engagement project and developing active citizenship was emphasized as a way to make a local – global connection in global health. This pedagogical approach is a high impact teaching strategy and supports the development of the relationship between the university and the community. Students from Drake and Tec worked virtually, so the course allowed sharing

global perspectives without the financial barriers that can limit student participation in travel seminars.

**Global Outreach at the St. Louis College of Pharmacy.** Stephanie Lukas, *St. Louis College of Pharmacy*, Roma R. Ryan, *St. Louis College of Pharmacy*, Golden L. Peters, *St. Louis College of Pharmacy*, Amy M. Tiemeier, *St. Louis College of Pharmacy*, Ken Schafermeyer, *St. Louis College of Pharmacy*. Background: Since the inception of an Office of International Programs (OIP) in 2013, the St. Louis College of Pharmacy (STLCOP) has developed a robust program and diverse set of service learning, international exchange and global health initiatives. The OIP works in alignment with the College's vision to be globally prominent in pharmacy education and to graduate culturally competent students thorough international education and service work. Programs Global outreach is addressed through the following programs: • International Service Learning (ISL) courses that allow students to do international service work addressing health issues related to poverty housing and provide service to international communities in need. • International Advanced Pharmacy Practice Experience (APPE) rotations that allow students to teach, participate in research or provide patient care at sites around the world. • International partnerships and exchanges that result in collaborative work between institutions and the exchange of faculty members and students. • International events on campus, such as International Week and seminars from international pharmacy leaders, that allow students to learn about and participate in multicultural and global health activities locally. Results: Through July 1, 2019, the College has sent 346 students on international service and learning experiences to 23 countries. STLCOP has partnerships with other colleges and health institutions in China, India, Ireland, Mexico, Saudi Arabia, and South Africa. In addition, the College has hosted 32 international visitors from 10 countries. Evaluations by participants indicate that global engagement activities positively impact admissions and recommendations given to prospective students.

**Global Outreach in Pharmacy Education - Preparing Pharmacists for 21st Century Patient Care Practice.** Jodie V. Malhotra, *University of Colorado*, Shaun E. Gleason, *University of Colorado*, Kari L. Franson, *University of Colorado*, Ralph J. Altieri, *University of Colorado*. Introduction: There is an increasing desire for worldwide pharmacy education to prepare pharmacists to meet societal needs through patient-centered pharmacy care. Recognizing this, the University of Colorado Skaggs School of Pharmacy (CU) engages in global outreach to have an impact in clinical education and training. Overview: CU takes a four-fold approach to global outreach in

pharmacy education. 1) Degrees: CU offers clinical pharmacy master's and PharmD degrees for international pharmacists. We collaborate with Children's Cancer Hospital Egypt to offer a PharmD degree for regional pharmacists; 2) Practitioner Training: CU provides training programs worldwide to enhance the clinical expertise of pharmacists. Programs include globally-offered certificate courses (live and online), and supporting scholars at CU and elsewhere for onsite training; 3) Student/Trainee Development: CU has established collaborations to offer clinical training opportunities for students that include international student exchange programs and interprofessional partnerships providing education and clinical services in Guatemala and Peru; 4) Leadership: CU faculty members serve in leadership positions in national (ACCP, ACCP) and international (FIP, IPSF) organizations focused on the global advancement of pharmacy education and practice. CU created the Pharmacy Strategies for New Opportunities Worldwide (SNOW) symposium, bringing pharmacy practitioners and educators together to share best practices for novel pharmacy approaches to address global health disparities. Conclusion: The global pharmacy community's desire to advance pharmacy practice through enhanced clinical education and training is a valuable and achievable goal. Each of our global outreach strategies are helping CU and our international partners make progress towards meeting this goal.

**Global Outreach Interprofessional Experiences: The Impact to Students and Communities.** Trish Devine, *Butler University*, Kimberly M. Beck, *Butler University*, Jane M. Gervasio, *Butler University*. Butler University is committed to global outreach and encourages students to engage in international interprofessional experiences throughout the program. The poster will provide an overview of the benefits of global outreach to the students and the communities they serve. First year pre-health students through professional pharmacy, physician assistant, nursing, and software engineering students, along with the faculty adviser from a student organization, have served the communities surrounding Santiago, Dominican Republic for the past six years in a medical mission clinic. Students developed and presented health and wellness education to underserved patients, local medical students, and healthcare providers. Student research demonstrated patient learning through infographics, student learning through collaboration to develop and implement a prototype electronic health record program and increased cross-cultural awareness. Additionally, as an advanced pharmacy practice experience, students have the opportunity to select underserved clinic rotations in Ecuador and Belize. Students utilize their clinical skills and knowledge by working in different

stations each day: registration, triage, medical scribing, pharmacy, fluoride treatment, and patient education. Clinic experiences provide students interaction with a variety of healthcare providers and expose students to different cultures. Students have the opportunity in the curriculum to enhance global initiatives through a global health elective course and Spanish speaking skills through our Medical Spanish Track curriculum and Spanish immersion trip. Global outreach programs provide opportunities for student research, enhance cultural awareness, and provide the opportunity to learn with, from and about other healthcare disciplines. Global outreach provides under-resourced communities with medical clinics, patient education, and hope.

**Harrison School of Pharmacy Fosters a Culture of Wellness Among the Auburn University Family.**

Kimberly Braxton Lloyd, *Auburn University*, Greg C. Peden, *Auburn University*, K. Paige Patterson, *Auburn University*, Richard A. Hansen, *Auburn University*, Leigh Ann Ballard, *Auburn University*, April G. Staton, *Auburn University*, T. Lynn Stevenson, *Auburn University*, Karla S. McCormick, *Auburn University*, Ann S. Shore, *Auburn University*. Auburn University (AU) Harrison School of Pharmacy (HSOP) has a strong wellness outreach mission. As a result, faculty, staff, and students actively engage in providing health, wellness, and preventative care services for the AU family. In 2010, HSOP partnered with AU Human Resources (AUHR) to develop and implement AU's "Healthy Tigers (HT)" program. Through this partnership, HSOP provides biometric screenings for AU employees and dependents who are insured by AU's health insurance to provide early detection of uncontrolled or undiagnosed conditions. In 2018, HSOP faculty/staff/students provided 4,209 biometric screenings for HT participants, identifying 878 (21%) BP readings, 1625 (39%) cholesterol values, and 635 (15%) glucose results above normal limits, requiring follow-up care. The HT providers also administered 2,528 vaccines (70%-influenza, 4%-shingles, 1%-pneumonia, 5%-tetanus, 0.2%-hepatitis, 10%-rabies) and applied/read 126 PPD skin tests. HSOP faculty and students also provided wellness consultations on weight management; cardiovascular risk reduction; tobacco cessation; and performed osteoporosis screenings using peripheral ultrasound. HSOP published monthly wellness newsletters; coordinated interdisciplinary lunch-and-learns; presented health topics through AUHR's employee development program; and sponsored walk-at-lunch events. This year HSOP introduced the "Dean's Fit Family Health and Wellness Challenge" to promote health, wellness, and active lifestyles within the HSOP family. Ninety teams (n=180) enrolled, and participants

cumulatively logged 4,000 hours of exercise, lost 352 pounds, and lost 64% body fat over 2 months. HSOP and AUHR have received the “AU Spirit of Sustainability Award” and the “AU President’s Outstanding Collaborative Units Award” in recognition of this commitment to employee wellness.

**Health Professions in the Neighborhood: Setting Aside a Day for Interprofessional Education.** Beth E. Welch, *Western New England University*, Melissa Mattison, *Western New England University*, Courtney Doyle-Campbell, *Western New England University*. It is particularly challenging for pharmacy programs to include interprofessional education (IPE) when there are few other health professions programs on campus. In an effort to overcome this obstacle, Western New England University College of Pharmacy and Health Sciences established a relationship with a regional government funded agency that connects health professions academic institutions with healthcare institutions. From this affiliation, the Pioneer Valley Interprofessional Education Collaborative (PV-IPEC) was founded. PV-IPEC is a regional partnership established to lead, develop and facilitate IPE education and collaborative practice amongst academic institutions and service providers. Most recently, member institutions of PV-IPEC set aside a full day in the spring of 2019 to hold a regional IPE day. Simulated IPE activities were hosted by seven different academic and healthcare institutions, to include over 300 students from ten institutions and representing 8 different health professions. Examples of activities include: ambulatory care standardized patient scenario, cardiac arrest high-fidelity simulation, opioid overdose simulation with naloxone reversal training, poverty simulation, and emergency bleed training. All activities were focused on the IPEC Core competencies as well as important shared professional competencies. Participation was a requirement for third professional year pharmacy students as a part of the capstone course, Patient Care Management. Other professions included the activities within course requirements, clinical hours or voluntary participation. Faculty and staff from all institutions contributed to the success of the day. Student evaluations and accomplishment of outcomes are currently being analyzed. This poster will share the outcomes and describe examples of the various activities.

**Holistic Student Success: Promoting a Culture of Wellness and Self-Care.** Victoria A. Keel, *Virginia Commonwealth University*, Kelechi C. Ogbonna, *Virginia Commonwealth University*, Joseph T. DiPiro, *Virginia Commonwealth University*. Health professional students are struggling with stress management, coping skills, and work-life balance. 1 Pharmacy students are un-

der tremendous pressure related to academic success and extracurricular involvement as they vie for residencies, fellowships, and job placements. The pressure and angst often have a detrimental effect on academic progression and overall well-being. AACP’s recent policy statements on Commitment to Clinician Well-Being and Resilience reaffirms the need for schools of pharmacy to “proactively promote overall wellness and stress management techniques.” The Office of Admissions and Student Services (OASS) at Virginia Commonwealth University School of Pharmacy has prioritized student well-being as a key component of holistic student success. Wellness is a crucial component of the School of Pharmacy’s Tenets of Professionalism. Students are encouraged to contribute to a school-wide culture of care and compassion by seeking support for themselves and providing support for others. The OASS has developed and supported programs and initiatives that demonstrate commitment to holistic student success. Tails for Self-Care is a reoccurring program where certified therapy dogs visit the school to encourage stress relief prior to mid-terms and final exams. Campus Connect Training serves as a platform for students to learn how to help a friend or family member struggling with mental health concerns. Finally, we have collaborated with pre-existing programming at the University to offer interactive information sessions related to financial literacy, stress management, sleep hygiene, healthy relationships, sexual health, and the importance of physical exercise. These programs provide a portfolio of options for struggling students.

**Identifying Need and Developing a Position to Assist in Wellness and Inclusion Efforts.** Kierstan M. Etheridge, *Manchester University*, Thomas R. Smith, *Manchester University*, Jessica Montalvo, *Manchester University*, Ahmed Abdelmageed, *Manchester University*. Manchester University College of Pharmacy, Natural & Health Sciences (MUCPNHS) is dedicated to student wellness and continually explores ways to help students. In Fall 2017 MUCPNHS experienced the loss of two student pharmacists in separate traffic accidents. The staff, faculty, and administration reacted in multiple ways to help the students cope with this difficult experience. Upon returning to Spring 2018 semester, faculty noticed many students were still having difficulty navigating their grief. To assess components of student wellness, two surveys were sent to students. The first was regarding grief and the second was part of a student research project that assessed student anxiety, stress, and depressive symptoms. Results from both surveys indicated that additional efforts were needed to support student wellness. Specifically, 48% of student responses indicated they were unsure of the effectiveness of their grief coping skills and

23% of student responses to the depression and anxiety survey indicated at least moderate depression. Through realignment of roles and responsibilities of select faculty members, MUCPNHS developed a Wellness and Inclusion Coordinator position to lead these endeavors. The coordinator has 20% of their time allocated to wellness and inclusion efforts and reports to the Assistant Dean of Student, Alumni and Community Engagement. One of the first tasks for the position was to develop an early identification system for students experiencing barriers to wellness. The poster will highlight key results from the surveys and outline wellness initiatives from the inaugural year of the Wellness and Inclusion coordinator position.

**Implementation and Assessment the Colonel's ConnectRx Community Outreach Event.** Nicole Pezino, *Wilkes University*, Thomas S. Franko, *Wilkes University*. Wilkes University's Nesbitt School of Pharmacy was an early adopter of the incorporation and assessment of the PPCP and the key elements of ACPE Standard 4 in the curriculum. Colonels ConnectRx is one of our co-curricular, community outreach events where over one-hundred twenty student pharmacists, of various professional years, and twenty licensed, practicing pharmacists attend seventeen senior centers across Luzerne County to conduct medication reviews, blood pressure screenings and adherence counseling in a layered-learning model. Student pharmacists begin Colonels ConnectRx in the spring semester of their first professional year and continue to the spring of their third professional year with strategically integrated patient care activities. After each experience, students are asked to submit de-identified medication records, medication-related action plans, and physician letters. The students also complete an evaluation of the experience and submit a reflection. Over three semesters, students have conducted 382 medication reviews, 1,051 blood pressure screenings, and counseled over 400 individuals on adherence. Some of the most frequently used words in reflections included: welcoming, real-life patients, blood pressure skills, talking to patients, lead, communication skills, patient interaction and build confidence. 91.3% of students agreed that Colonel's ConnectRx was a beneficial event to their professional development, and 90% recommend Colonel's ConnectRx continue in the curriculum.

**Implementation of a Longitudinal Interprofessional Education Plan within a Three-Year Accelerated Curriculum.** Donna M. Adkins, *William Carey University*, Jessica L Johnson, *William Carey University*, Samantha Odem, *William Carey University*, Charles R. Breese, *William Carey University*, David J. Weldon, *William Carey University*. A longitudinal interprofes-

sional education (IPE) plan, spanning the entire three years of an accelerated pharmacy program, was developed to ensure student pharmacists learn with, from, and about their own and other healthcare providers' roles as members of the healthcare team. The School's IPE plan is designed to expose students to the pharmacist's role as a member of the healthcare team. During the first term of the curriculum, in the Introduction to Interprofessional Education course, speakers representing pharmacy and other healthcare fields were invited to speak on their specific roles. During the first year of their curriculum, students also participated in various activities with student physicians, including a poverty simulation. Additional virtual and live activities are planned to occur in each subsequent term. As students gain new knowledge and skills, the School's IPE plan provides opportunities to practice these skills in an interprofessional environment and to gain confidence in performing these skills as part of a team. The School is establishing a required IPE-based APPE rotation where student pharmacists will interact with student physicians and nurses in an intercollaborative environment. These interactions will be documented during the capstone course with an interprofessional team poster detailing their interactions. With more emphasis being placed on team-based patient centered care, this innovative, comprehensive plan fosters student comfort and team readiness when interacting with healthcare providers from other disciplines. This longitudinal IPE plan serves as a framework throughout the curriculum for both professional and personal growth.

**Implementation of a Self-reflective Digital Space to Meet ACPE Standards 3 & 4.** Melanie Foeppel, *Pacific University Oregon*, Andrew Longhofer, *Pacific University Oregon*, Rita Barton, *Pacific University Oregon*, Anita J. Clevon, *Pacific University Oregon*, Ian C. Doyle, *Pacific University Oregon*, Sarah Jane E. Faro, *Pacific University Oregon*, Reza Karimi, *Pacific University Oregon*, Sigrid C. Roberts, *Pacific University Oregon*, Beth Ross, Pauline A Low, *Pacific University Oregon*. In September 2018, Pacific University School of Pharmacy implemented a comprehensive plan for formative assessment in ACPE Standards 3 & 4 via reflective practice, integrative learning, and increased intentionality around personal and classroom activities. Students documented social and affective skills development in curricular and co-curricular experiences in a longitudinal portfolio. A developmental rubric was generated anchored to ACPE accreditation language for the ten elements of Standard 3 & 4. Each semester, students self-assessed on this rubric and responded to several reflective prompts. They produced written narratives describing demonstrations of their level of competency in each element to various audiences. They then identified

specific activities through which they could develop further competency. They finally attached video-recorded responses to interview questions mapped to one or more standard. Two trained faculty members assigned assessor scores for reflections and interview recordings using the same rubric. Individual feedback was provided, including concrete recommendations for action to develop further competency. By graduation, students are expected to reach the rubric level corresponding to language from ACPE standards. Students not on track to reach that level will receive ongoing opportunities for intensive individual support. Differences between self-assessment and assessor scores were analyzed. Implementation of the plan resulted in achievement of full ACPE compliance for Standards 3 & 4. Future plans include the use of these results in assessing delivery of Standards 3 & 4 throughout the curriculum and co-curriculum and in evaluating the plan's impact on students' personal and professional development.

**Implementing an Interprofessional Education Curriculum on a Non-Academic Medical Center Campus.** Zachary A. Weber, *Purdue University*, Patricia L. Darbishire, *Purdue University*. Current ACPE accreditation standards emphasize the importance of interprofessional education (IPE), which can be challenging for pharmacy programs not located on, or near, an academic medical center campus. In order to meet the requirements of ACPE Standard 11 on Interprofessional Education, and to provide students with a contemporary and quality educational experience, the Purdue College of Pharmacy formed a unique partnership with the Indiana University Interprofessional Practice and Education Center in the Fall 2016. This partnership ensures that all Purdue Doctor of Pharmacy students are provided with opportunities to learn with, from, and about other healthcare providers. Students are now required to complete the Team Education Advancing Collaboration in Healthcare (TEACH) Curriculum through a series of six Interprofessional Learning Anchors (IPLAs). This includes two IPLAs during the first and second professional years, and one during each of the third and fourth professional years. The TEACH curriculum ensures all students are exposed to the same minimum level of IPE throughout their professional degree program and transitions students from exposure, to immersion, and finally entry-to-practice. TEACH curriculum assessment includes pre- and post-knowledge assessments, questionnaires on attitudes towards teamwork, peer- and self-evaluations, and structured reflections on interprofessional education or practice during Advanced Pharmacy Practice Experiences. Outside the TEACH curriculum, students complete IPE reflections during an annual performance evaluation with

faculty, participate in an interprofessional geriatric medication game, and complete a personal cultural continua assessment and intercultural patient case activity.

**Implementing Pharm.D. Student Research and Quality Improvement Projects at the University of Utah.** Craig P. Henchey, *The University of Utah*, Kristen A. Keefe, *The University of Utah*, Mark A. Munger, *The University of Utah*, Daniel M. Witt, *The University of Utah*. Since the Accreditation Council for Pharmacy Education's standards do not specifically require research or quality improvement projects, many Pharm.D. curricula do not incorporate them. However, it is recognized that pharmacists should have the ability to generate new knowledge to advance the profession and improve medication safety and effectiveness, as seen in the American College of Clinical Pharmacy's 2016 call for more research training. Increased curricular focus on research and quality improvement can also develop required competencies, including evaluating literature, problem solving, leadership, communication, and innovation. The University of Utah College of Pharmacy recently revised its curriculum to require every student to complete a research or quality improvement project. The College recruits project proposals from faculty and local colleagues, and P2 students are matched with projects based on their interest. After developing a written research proposal in P3 year, students complete the project with mentor oversight in the P3 and P4 years, culminating in a final poster session and manuscript late in the P4 year. Four semesters of courses provide structure, deadlines, and feedback to check progress and provide a support network. The College is monitoring the program through course evaluations, surveys of the mentors and students, and students' publications and presentations. Professional students have reported increased confidence in their ability to understand research, with many students developing and presenting abstracts/posters at conferences. Student projects appear to be impressing interviewers for jobs and residencies. The University of Utah's program may provide a model for implementing effective and sustainable Pharm.D. student projects.

**Incorporating a Student Wellness Track into a Pharmacy Professional Development Course Series.** Jennifer L. Schoelles-Williams, *The University of Tennessee*, Chasity M. Shelton, *The University of Tennessee*, Dawn E. Havrda, *The University of Tennessee*. Background: The University of Tennessee Health Science Center College of Pharmacy (UTHSC COP) developed a wellness track for all student pharmacists across its three campuses. Methods: The UTHSC COP Office for Student Affairs, along with the UTHSC Student Academic Support Services and Inclusion (SASSI) Office, developed

programming embedded throughout the Pharmacy Professional Development (PPD) eight-course series to better support all students in the Doctor of Pharmacy program. PPD begins during New Student Orientation Week with sessions on organization and time management. Eight weeks later, students refine these skills in follow up sessions. Students meet individually with a COP student affairs coordinator and also with a SASSI counselor. The following semester, first-year students participate in interactive sessions focused on practicing a growth mindset, and balance and self-awareness. Second-year students focus on personal relationships, sleep hygiene and finding work-life balance, and participate in a stress personality assessment and guided visualization. Programming for third-year students focuses on financial stressors related to Advanced Pharmacy Practice Experiences (APPEs) and self-motivation. APPE students are guided to online wellness resources and encouraged to schedule virtual appointments with SASSI counselors. Stress management is an area of focus throughout the entire wellness track. Through the PPD series, students are reminded of available resources on each campus and resources available virtually. Results: The UTHSC COP Office of Student Affairs and the SASSI Counselors have documented an increase in students utilizing resources from both offices and feel that the program has reduced student stigma associated with seeking assistance from SASSI counselors.

**Integrating Global Outreach and Student/Faculty Exchange into a Pharm.D. Program.** Helen Berlie, *Wayne State University*, Francine D. Salinitri, *Wayne State University*, Linda A. Jaber, *Wayne State University*, Insaf Mohammad, *Wayne State University*, Paul E. Kilgore, *Wayne State University*, Lamis R. Karaoui, *Lebanese American University*, Imad F. Btaiche, *Lebanese American University*, Brian L. Crabtree, *Mercer University*, Lynette R. Moser, *Wayne State University*, Richard L. Lucarotti, *Wayne State University*. Objectives: Wayne State University (WSU) shares AACP's vision of a "world of healthy people" through teaching, service, and research. Our Pharm.D. program has integrated global initiatives to prepare graduates for success across diverse environments. Methods Concerted efforts have incorporated global health education, training and outreach into our 4-year Pharm.D. curriculum. Required and elective courses as well as opportunities afforded through the co-curriculum emphasize the impact of global health initiatives to students. A formal relationship with an international college of pharmacy also serves to provide student experiential and faculty scholarship opportunities. Results The didactic curriculum incorporates global health education through a required population

health course and 3 elective global health courses, one of which includes international medical relief experiences. Our co-curricular activity requirements include providing patient care to underserved populations (6 visits/year). A total of 28 students have elected to participate in global medical relief trips in order to fulfill this co-curricular requirement. Fourth year pharmacy students have the opportunity to participate in an Advanced Pharmacy Practice Experience rotation exchange between WSU and the Lebanese American University (LAU); one WSU and two LAU students participated this past year. Our relationship with LAU also includes a faculty research exchange that has resulted in a global research partnership. Implications Our program has successfully integrated global outreach into our curriculum. Future directions include evaluating student experiences, expanding current international experiences, and fostering the growth of successful research programs.

**Integrating Interprofessional Education and Co-curricular Activities through a Professionalism Curriculum.** Jocelyn D. Spates, *Florida A&M University*, Patty Ghazvini, *Florida A&M University*, Tonya S. Martin, *Florida A&M University*. The comprehensive Florida A&M University College of Pharmacy and Pharmaceutical Sciences, Institute of Public Health PharmD degree learning experience is comprised of four distinct, interlinking curricula. They are 1) the didactic curriculum, 2) the experiential curriculum, 3) the research curriculum, and 4) the professionalism curriculum. This poster will describe our professionalism curriculum and highlight the incorporation and achievement of co-curricular and interprofessional education competencies. The goal of this professionalism curriculum is provision of the expectations and educational activities that foster professional growth of student pharmacists. Delivery of the professionalism curriculum is primarily facilitated through a series of six non-credit courses called Pharmacy Forum and Colloquium. Faculty members, alumni and other pharmacists volunteer to serve as Career Coaches for one or more students, interacting with them throughout the academic years of the professional program. The professionalism curriculum mandates all student pharmacists' participation in described professional activities in every year of the degree program. Assessment and follow-up regarding student achievement of established interprofessional and co-curricular competencies are accomplished through PharmAcademic®.

**Integrating Simulation into the Redesign and Implementation of a Skills-Based Pharmacy Curriculum.** Liza Barbarello Andrews, *Rutgers, The State University of New Jersey*, Carol Goldin, *Rutgers, The State University of New Jersey*, Leslie Barta, *Rutgers, The State*

University of New Jersey, Lauren Aleksunes, Rutgers, The State University of New Jersey, Joseph A. Barone, Rutgers, The State University of New Jersey. The evolving role of pharmacists requires new instructional approaches. At Rutgers, we constructed a building addition, thereby enhancing our ability to ensure state-of-the-art instruction, including a simulated community pharmacy (CP), ambulatory care clinic (ACC), parenteral sterile product (PSP) lab and a high-fidelity acute care simulation (ACS) suite. New space supported the launch of a skills-based curriculum that has embraced the adoption of new educational tools and technology across the clinical and basic sciences. The simulation integration strategy included targeted evaluations of each new area, assessing technological capabilities and establishing standard operational procedures and core educational design elements. This approach supported the development of templates for ongoing curricular expansion. The CP and ACC launched and assessed the skills-based integrated Pharmacotherapy Assessment Skills Series (iPASS). The PSP course was an elective before becoming a required course. The critical care clinical elective converted from a didactic to an ACS-based design, serving as a template for clinical elective development. Ultimately, tiered semester integration has assured progressive exposure to and integration of affective domain development across the first to third professional years. Additionally, simulation provides earlier exposure to team-based practice, allowing students to explore and develop their roles as effective healthcare team members, an opportunity previously limited to the experiential portion of the curriculum. Parallel interprofessional activities have further solidified the learning experience within team environments. Ongoing assessment of the impact and opportunities will optimize the seamless weaving of simulation and skills-based learning in a tiered fashion throughout the curriculum.

**Integrating the PPCP Across Clinical, Basic, and Social Sciences using the “IESA” MTP Assessment Framework.** Keri D. Hager, *University of Minnesota*, Grant W. Anderson, *University of Minnesota*, Jennifer Chen, *University of Minnesota*, Caitlin K. Frail, *University of Minnesota*, Kristin K. Janke, *University of Minnesota*, Anne M. Schullo-Feulner, *University of Minnesota*, Sarah M. Westberg, *University of Minnesota*, Beshay Zordoky, *University of Minnesota*. Adopting the Pharmacists’ Patient Care Process (PPCP) as the uniform approach to care delivery across the profession is critical to demonstrating the value of pharmacists’ contributions to care. To prepare graduates for practice, the PPCP should be consistently and thoroughly integrated into Pharm.D. curricula. However, teaching the PPCP’s basic

five-step framework is not enough, as the steps are not distinctly unique to pharmacists; they describe the general process of care for all health professionals. What makes the pharmacists’ patient care process unique and complementary to the team is the assessment of each medication for appropriate indication, effectiveness, safety, and adherence (IESA) allowing pharmacists to identify, prevent, and resolve medication therapy problems. Therefore, “IESA” is an essential framework for PPCP integration across clinical, basic, and administrative/social science courses. We will present where and how the “IESA” framework is used in both the didactic and experiential curriculum at the University of Minnesota College of Pharmacy. Specific examples will be provided that can be used on a small (session level) or large (course and/or curricular level) scale for incorporation of the PPCP into the curriculum at other institutions. These examples will include the introduction of PPCP in a pharmacology lecture in a course taken by first-year students using a simple clinical scenario to demonstrate the connection to pharmacology, and incorporation of PPCP into assessments. Together they illustrate how PPCP can be threaded throughout all aspects of the curriculum from basic biomedical sciences to clinical applications.

**Integration of a Required Study Away Program Within the PharmD Curriculum.** Denise Pinal, *The University of Texas at El Paso*, Jacquelyn P Navarrete, *The University of Texas at El Paso*, Jeri J. Sias, *The University of Texas at El Paso*, Amanda M. Loya, *The University of Texas at El Paso*, Emily J. Christenberry, *The University of Texas at El Paso*, Sweta Andrews, Lilitiana Lunares, *The University of Texas at El Paso*, Ian A. Mendez, *The University of Texas at El Paso*. Purpose: To describe the development and rationale for a required study away program and provide a replicable framework for integration of similar programs into PharmD curricula. Through the implementation of this program, students were engaged in global learning in domestic and international settings. Methods: School and university administrative support was obtained prior to program implementation. The study away program aligned with university-wide quality enhancement focused on creating the “next generation of student engagement and professional preparation.” Program structure included pre- and post-immersion coursework delivered in courses that book-ended the study away program. The program was designed to address pharmacy educational outcomes including cultural sensitivity, problem solving, and self-awareness while exposing students to social determinants of health. An initial faculty survey was conducted in order to gauge interest in leading a study away program. Study away faculty leads attended development workshops that

reviewed the program content and ensured consistency and safety. Students learned about each experience during an orientation and subsequently ranked the sites in order of preference. Results: All students in the first cohort (n=41) participated in one of the six faculty-led study away programs in 2018. Students completed a three-step process (pre-immersion course, study away program, and post-immersion course) to ensure a meaningful experience with opportunity for reflection and applied learning. Conclusions: The required study away program has the ability to influence pharmacy education through global learning in a variety of communities and settings. A solid infrastructure has been created to replicate and scale up the program.

**Interprofessional Education Through a Prescriber-Led APPE.** Will Ofstad, *California Health Sciences University*, Jeremy Hughes, *California Health Sciences University*, David G. Fuentes, *California Health Sciences University*, Charles Douglas, *California Health Sciences University*, Miriam Ansong, *California Health Sciences University*, Ahmd Azab, *California Health Sciences University*, Delwar Hussain, *California Health Sciences University*, Wendy Duncan, *California Health Sciences University*. **BACKGROUND:** A clarion call across all healthcare professions demands we develop the collaborative, practice-ready graduates and practitioners needed to improve healthcare quality, satisfaction and cost-effectiveness. Accreditors across healthcare education now look for greater evidence of graduates meeting the Interprofessional Education Collaborative (IPEC) competencies. The purpose of this poster is to share a model and outcomes following the implementation of an interprofessional prescriber-led APPE, mapped and aligned to the Kirkpatrick topology, ACPE Standard 11, CAPE social and affective learning domains, and the 2019 HPAC recommendations. **METHODS:** Fourth-year students (P4) in their advanced pharmacy practice experiences (APPE) are placed with a prescriber during one required 6-week rotation. The prescriber serves as the student's primary preceptor, provides rubric driven assessments of performance, and provides learners with a unique lens on how to manage a collaborative medical practice. **RESULTS:** 100% our first class of graduating students were assigned to a prescriber-led rotation and all completed the rotation successfully. All knowledge-based and affective competencies were met by the end of the rotation. Students and prescribers shared insights about the experience through APPE reflections and performance assessments. **IMPLICATIONS:** From the first cohort, one student was immediately hired after graduation by their preceptor, building on the APPE experience and forging a new practice model for pharmacy

within an oncology medical service. Other students engaging in this experience have identified additional potential career opportunities. Prescribers in our region are also now exposed to the benefits of an embedded pharmacist in the medical office setting.

**Interprofessional Partnerships in Leading Curricular and Co-curricular Change.** Reshmi L. Singh, *University of Wyoming*, Alvin B. Oung, *University of Wyoming*, Leena D. Myran, *University of Wyoming*, Thanh-Nga Nguyen, *University of Wyoming*, Becky Linn, *University of Wyoming*, Janelle L. Krueger, *University of Wyoming*, Tonja M. Woods, *University of Wyoming*, Baskaran Thyagarajan, *University of Wyoming*. The University of Wyoming, School of Pharmacy (UWSOP), continues to implement initiatives to improve and advance changes within pharmacy education. In alignment with the ACPE Standards 2016, we developed a co-curricular initiative focusing on professional development, clinical skills, research or advocacy, medical/nonmedical community engagement and leadership. For this initiative, students are expected to complete and reflect upon their growth through involvement in two activities each year for the first 3 years of the pharmacy curriculum. Interprofessional education (IPE) is another area of emphasis and our students participate in formal IPE opportunities throughout the curriculum. These IPE activities allow for collaboration and shared student learning across a wide variety of disciplines, including medical, nursing, speech-language pathology, special education, dietetics, social work, and law programs. The UWSOP is committed to foster a diverse and inclusive work environment and professionally competent and culturally skilled faculty and students to advance pharmacy education and healthcare. One such partnership is with Howard University obtained through grant funding from the National Association of Chain Drug Stores. This is an innovative Health Equity Leadership exchange program that offers a student cohort opportunities to work longitudinally on issues relating to urban and rural healthcare access and equity. Another exciting initiative is the implementation of a longitudinal Pharmacy Skills course, providing application opportunities that are aligned with didactic coursework and ensuring that our students are prepared for not only their experiential rotations but also equipped for diverse healthcare roles in the future.

**Kennedy Pharmacy Innovation Center: Leading Curricular Change through Innovation and Entrepreneurship.** Patricia H. Fabel, *University of South Carolina*, Pamela Hite, Brianne L. Dunn, *University of South Carolina*, Claiborne E Reeder, *University of South Carolina*, Stephen J. Cutler, *University of South Carolina*. The Kennedy Pharmacy Innovation Center (KPIC) at

the University of South Carolina College of Pharmacy (UofSC) was formed in 2010 to create an influential cadre of students, faculty and practitioners equipped with an entrepreneurial spirit in order to tackle evolving challenges within healthcare. In that time, KPIC has brought a variety of business and entrepreneurial training experiences to UofSC students. This includes the development of a student-focused ownership bootcamp, a business and entrepreneurship track, a business plan competition, and an entrepreneurship elective. KPIC began using the General Measure of Enterprising Tendency v2 test to assess student pharmacists' enterprising tendencies. The GET2 Test is administered during orientation of the first professional year. The majority (>75%) of students in the past 2 years received a medium overall GET2 score indicating a medium level of enterprising tendencies. Only 10% of students received a high score in either creativity or calculated risk taking. These are two essential knowledge, skills, and abilities (KSAs) for a pharmacist entrepreneur. This indicated a need to restructure KPIC initiatives and focus on activities that support the mastery of these KSAs. KPIC will be creating an Innovation and Entrepreneurship Playbook to increase student achievement of a core set of KSAs for pharmacist entrepreneurs. The playbook will include a set of learning experiences (didactic, experiential, and co-curricular) in each of four defined student involvement levels (awareness, interest, engagement, and commitment). As students progress along the involvement continuum, the activities will provide opportunities for the student to master the pharmacist entrepreneur KSAs.

**Leading Change for Pharmacy Students Through Structured Remediation and Early Intervention Methods.** C. Leiana Oswald, *Roseman University of Health Sciences*, Larry D. Fannin, *Roseman University of Health Sciences*, Erik Jorvig, *Roseman University of Health Sciences*, Helen C. Park, *Roseman University of Health Sciences*, Catherine J. Cone, *Roseman University of Health Sciences*. ACPE standards 17.1 and 17.2 require colleges and schools of pharmacy to have policies related to remediation and early intervention. This poster describes one program's unique and intentionally structured remediation process as well as three early intervention methods to aid in student success. Roseman University of Health Sciences College of Pharmacy includes designated time within the didactic curriculum to allow students multiple opportunities to succeed at mastering content within the program's 90% pass/no-pass grading structure. Built-in early intervention methods including daily formative assessment, assigned faculty mentors, and peer tutoring supplement the remediation process. All students (approximately 220 per cohort) across two

campuses are provided three attempts within the same year to demonstrate competency on assessments and graded assignments such as OSCEs, SOAP notes, and SBAR presentations. Each year, approximately forty-five days of time are set aside for students to remediate. By creating a culture of remediation that allows students and faculty to detect misunderstandings early and provides dedicated time and early intervention methods for student success, this process seeks to prepare competent, caring, and ethical pharmacists.

**Leading Change Through Changing Health.** Michael Rush, *Ohio Northern University*, Amy M. Fanous, *Ohio Northern University*, Steven J. Martin, *Ohio Northern University*. Since 2010, the Raabe College of Pharmacy has directed ONU Healthwise, a multidisciplinary clinical practice of Ohio Northern University. The cornerstone of the practice is the University's wellness and prevention program, a partnership between academic health programs at ONU led by the College of Pharmacy. It provides participants access to knowledge about their health, which empowers them to make better choices to maintain wellness and prevent disease. All ONU beneficiaries and students are eligible for the wellness program. The program includes one-on-one health coaching with health care professionals, education about health and wellness, and disease state and medication management. Preventative services include individualized health risk assessment and preventative medicine strategies, annual laboratory screening and analysis, and routine screenings for hypertension, diabetes, obesity, cholesterol problems, osteoporosis, skin cancer, and a host of other chronic and/or preventable medical conditions. Other preventive health services include a monthly newsletter, bimonthly wellness presentations (Lunch & Learn) to the campus, group fitness classes, individualized personal fitness training, and friendly competitive wellness challenges. In 2015 ONU HealthWise led a successful effort to make ONU a smoke-free and tobacco-free campus. In 2018 76% of campus employees participated in the wellness program. Outcomes highlights include metabolic syndrome prevalence of 21.1% (43% below national average), HTN 15% (39% below national average), total cholesterol  $\geq$  200 mg/dL 32.7% (29% below national average) and undiagnosed diabetes 0.5% (90% below national average). Over 9 years the wellness program has positively changed the health of the campus community.

**Leading Change through Global Engagement to Develop Students into Global Leaders.** David R. Steeb, *University of North Carolina at Chapel Hill*, Sarah A. Dascanio, *University of North Carolina at Chapel Hill*, Amanda H. Corbett, *University of North Carolina at Chapel Hill*, Stephen F. Eckel, *University of North*

*Carolina at Chapel Hill*, Dhiren R. Thakker, *University of North Carolina at Chapel Hill*. The UNC Eshelman School of Pharmacy prioritizes global engagement through a variety of global initiatives. The Global Pharmacy Scholars (GPS) program exposes students to different health care systems and cultures through an international Advanced Pharmacy Practice Experience rotation. The GPS program sends over 50 students annually to nine country locations with the goal of at least 50% of the graduating class having an international experience. Learning outcomes include enhanced cultural sensitivity, problem solving, and communication and differ across developing and developed countries. Pre-post growth for all Consortium of Universities for Global Health competency statements was significant. Logistic regression analysis showed that international rotation participation was the only significant predictor of global health competency growth. A didactic elective opportunity is the international clinical classroom in which UNC students virtually learn alongside those from Japan and Zambia. PharmAlliance, a partnership between pharmacy schools at UNC, Monash University (Australia), and University College London (United Kingdom), is another global initiative striving to improve healthcare globally through collaboration. A global leadership development module was created and offered to 72 students across the three schools in Spring 2019. International teams addressed global challenges with local implications related to non-communicable diseases, universal health coverage, and primary care. The Global Engagement Organization (GEO) is a student led global initiative with activities ranging from conducting medication safety projects to hosting international visitors. Graduate students are also engaged teaching students from China about innovations in pharmaceutical sciences. These opportunities empower students to lead global change that can impact health worldwide.

**Leading Change through New Excellence in Teaching Initiatives.** Rory O’Callaghan Kim, *University of Southern California*, Maryann Wu, *University of Southern California*, Glen L. Stimmel, *University of Southern California*. Background: Student evaluations of teaching have been shown to be biased and are not correlated with teaching effectiveness. In 2017, the Provost of the University of Southern California set in motion a new peer evaluation of teaching initiative as the primary mode of evaluating teaching effectiveness to reduce bias and promote teaching excellence. The USC School of Pharmacy’s Excellence in Teaching Committee (ETC) had already initiated a pilot test of a peer review process within one department. Given the new initiative, the committee expanded this effort to create a schoolwide process

for implementation. Methods: For faculty development, a formal needs assessment was conducted, a faculty retreat and multiple faculty workshops were held, and two senior faculty were chosen to serve in the University’s Faculty Fellow Leadership Institute. For evaluation, the School adapted the University’s Classroom Observation Checklist and created a Pre-Observation Checklist. Faculty were asked to use the checklist to complete a self-evaluation and teaching reflection in Fall 2018. The School built the Automated Approach to Reviewing and Developing Valuable Assessment Resources for your Curriculum (AARDVARC) to evaluate its syllabi. Results: 26 and 21 faculty completed the Pre-observation Checklist and Classroom Observation Checklist respectively. 80% or more of faculty who completed the self-evaluation reported satisfaction with the ease of use, length, and the time to complete. AARDVARC was found to improve the efficiency of reviewing syllabi. Implications: The ETC continues to develop the process for the University’s initiative while maintaining a focus on faculty development and improvement of teaching.

**Leading Change Through Self-Leadership.** Nicholas E. Hagemeyer, *East Tennessee State University*, Steve C. Ellis, *East Tennessee State University*, Sarah Gentry, *East Tennessee State University*, David S. Roane, *East Tennessee State University*, Michele Williams, *East Tennessee State University*. A key initiative in the East Tennessee State University Gatton College of Pharmacy’s 2017-2022 strategic plan is fostering a healthy environment to work, grow, and live. To that end, the college is fostering a culture of wellbeing-related self-leadership among students, staff, and faculty. Organizationally, the college has hired a clinical psychologist (2017) and Academic Success Specialist (2018) to promote student mental health and academic success, respectively. Likewise, the college established a Director of Student Professional Development position (2018) through which both personal and professional development efforts are championed. In 2019, the college’s newly renovated student mentoring program – of which wellbeing is an essential tenet – was launched with the Class of 2022. A “Phitness Phriday” student, faculty, staff run/walk group was also established. In the Fall of 2019, a required, newly developed personal and professional development co-curriculum will be implemented and assessed. Using Gallup’s 5 conceptualization of wellbeing, the personal development curriculum will provide monthly opportunities for students, staff, faculty, and administrators to engage together in wellbeing discussions and activities. Importantly, student, staff, and faculty wellbeing champions have been identified. Overall, the college is leading change by developing students, staff,

and faculty who are equipped with the self-leadership tools necessary to maximize their wellbeing and the wellbeing of those they serve.

**Leading Change to Instill Lifelong Learning.** Erin E. Pauling, *Binghamton University, The State University of New York*, Sarah Lynch, *Binghamton University, The State University of New York*, Utkarsh J. Dang, *Binghamton University, The State University of New York*, Meagan J. Mielczarek, *Binghamton University, The State University of New York*, Gloria E. Meredith, *Binghamton University, The State University of New York*, Gail B. Rattinger, *Binghamton University, The State University of New York*. Objective: Lifelong learning is the process of continuously expanding therapeutic knowledge and professional development. These attitudes and behaviors, exemplified by CAPE Domains 3 and 4, take longer to develop. Our objective is to graduate well-rounded lifelong learners. Methods: We introduce recurring concepts of self-directed learning early in P1 year with activities increasing in rigor across the PharmD curriculum. Active learning and assessments are embedded in didactic courses, interprofessional education, co-curriculum, and a longitudinal lifelong learning course. Examples include integrated patient cases, poverty and emergency management simulations, opioid crisis ethics cases, patient care recommendations based on critical literature evaluation and selection of co-curricular activities and seminars. Results: Based on two years of preliminary results, we have found that students are able to better show their skills across CAPE Domains 3 and 4 when given an opportunity to demonstrate competency through active learning and assessment activities. Students have improved in these assessments by an average of 9-10% points when compared to objective exam items mapped to the same competencies. Implications: Based upon students' early exposure to foundational and self-directed learning, we found that students do better when presented with opportunities to demonstrate their skills in active learning situations. However, additional growth is needed in students' ability to self-identify learning needs. Activities in the P3 and P4 years will focus on building these skills. Early and longitudinal incorporation of activities to develop and grow lifelong learning attitudes and behaviors is anticipated to produce graduates with the skills necessary to be lifelong learners.

**Leading from Within: A Longitudinal and Integrative Approach for Preparing Graduates for Leadership.** Anandi V. Law, *Western University of Health Sciences*, Eunice P. Chung, *Western University of Health Sciences*, Mark Iannuzzo, *Western University of Health Sciences*, Benjamin J. Malcolm, *Western University of Health Sciences*, Janice Hoffman, *Western Uni-*

*versity of Health Sciences*. Leadership is both a profession-wide intent and necessity; and is well represented in the academic accreditation standards. Leadership is also an integral component of Western University of Health Sciences College of Pharmacy's (WesternU) vision statement: "Develop leaders in pharmaceutical care and research who will advance global health outcomes through innovative pharmacy practice, interprofessional collaboration, scholarship and service." WesternU is utilizing a longitudinal and integrative approach to developing leadership in our student pharmacists. Using an underlying framework of 'leading from within,' the 'Exploring Leadership and Self-Awareness' (ELSA) co-curriculum steps students through a process of self-awareness and principles of leadership; interspersed with goal-setting. ELSA begins orientation week of P1 year with lunchtime meetings of student teams occurring twice a semester until graduation; facilitated alternately by faculty advisors and students. Each ELSA session focuses on one topic with prompts for team discussion; followed by individual reflections graded for effort and content. Topics include: strengths, self-awareness, emotionally intelligent leadership (EIL), personal career exploration, well-being, and grit, in P1 year. The P2 year exposes students to writing a personal mission statement, tools/strategies for addressing EIL, personal and professional goals. Improving well-being, personal brand of leadership, personal goals for experiential program and career planning are featured in P3 year; while P4s focus on experiential reflections. Leadership is also embedded within the didactic curriculum, a leadership elective, and through student organizational activities. Faculty serve as leadership role-models and mentors. Formative and summative student response has been overwhelmingly positive and has been featured in recruitment events.

**Leading Pharmacy Education Through Advancements in Curriculum.** Russell T. Attridge, *University of the Incarnate Word*, Bradi L. Frei, *University of the Incarnate Word*, Christina M Long, *University of the Incarnate Word*, Hansita B Patel, *University of the Incarnate Word*, Raghunandan Yendapally, *University of the Incarnate Word*, David F. Maize, *University of the Incarnate Word*. The Feik School of Pharmacy is leading change in pharmacy education through recent advancements in our curriculum. Over the past three years, we have responded to formal and informal feedback from students, alumni, faculty, and stakeholders with the implementation of several curricular modifications. Since our first class matriculated in 2006, we have had a pharmacotherapeutics series that integrates medicinal chemistry, pharmacology, and therapeutics of various disease states. In 2016-2017, we restructured our

practice lab series to align with therapeutics content, reinforce clinical skills across labs, incorporate OSCEs each semester, and assess basic drug knowledge and calculation abilities through weekly lab quizzes in order to enhance APPE readiness. In 2017-2018, we implemented a summative progression exam to verify competency in basic drug knowledge and calculations. To enhance practice-readiness, we continue to increase professional certifications offered, including immunizations, MTM, and POCT. To prepare students for interdisciplinary care, we require IPE activities throughout the curriculum. To improve our students' cultural competency and communication, we have offered annual study abroad electives since 2012, and will require four credit hours of Spanish education starting in 2019. We have also encouraged life-long learning, well-being, and service to the community through formalizing our co-curricular program in 2017-2018, offering a wellness elective as of spring 2019, and providing service opportunities through electives. The curriculum advancements we have made demonstrate our ability to both assess and implement change through collaborative efforts of faculty, staff, and students and our leadership's willingness to consider feedback and new approaches.

**Learning Through Immersive Global Healthcare Experiences.** Michael Thomas, *Samford University*, John J. Arnold, *Samford University*, Michael A. Crouch, *Samford University*, Peter J. Hughes, *Samford University*, Michael G. Kendrach, *Samford University*, Roger D. Lander, *Samford University*, Pilar Z. Murphy, *Samford University*. Global outreach is an important tenet of the Samford University McWhorter School of Pharmacy mission. The school has provided unique global opportunities for students for more than three decades. The school has 15 affiliation agreements with universities, hospitals, and a community pharmacy chain in 12 countries on five continents. International experiences provide a rich framework to partially address Approaches to Practice and Care (Standard 3) and Personal and Professional Development (Standard 4). Students travel abroad through three possible mechanisms: study abroad didactic electives, advanced pharmacy practice experiences (APPEs), and mission service trips. Study abroad didactic electives happen the summer after completing the second professional year and occur in the United Kingdom, Spain, and Tanzania. These electives expose students to pharmacy practice and healthcare in the host country for about two weeks. The Office of Experiential Education works closely with students who indicate their desire to travel abroad for a five-week elective APPE during their fourth-year. Mission trips occur during spring or summer breaks and are coordinated with outside organizations oftentimes in-

volving an interprofessional healthcare team. International student travel is financially supported through an endowment and all sites have been carefully selected to ensure a safe and meaningful educational experience in Asia, Africa, Europe, and North, Central, and South America. More than 200 students have traveled abroad during the last three calendar years including study abroad electives (n=98), APPEs (n=47), and mission service trips (n=58). Learning objectives that encompass the unique setting have been created for these experiences.

**Making Diversity, Equity and Inclusion Strides in a Non-Affirmative Action State.** Regina S. McClinton, *University of Michigan*. In 2006 the State of Michigan abolished affirmative action at the state and lower levels. This meant that academic institutions, such as The University of Michigan could no longer offer scholarships nor preferred admissions based upon race or gender. But the University recognized that its dedication to academic excellence is inseparable from its commitment to diversity, equity and inclusion. In 2016 the University unveiled its university-wide strategic plan for diversity, equity and inclusion, which in part required all units to create their own strategic plan. The College of Pharmacy created its plan in 2016, and in a short time have made major strides and had successes that have us on a trajectory to support our goal of being an inclusive environment for all College constituents.

**Making Mental Health a Priority.** Sandra B. Earle, *University of Findlay*, Akesha Edwards, *University of Findlay*, Debra L. Parker, *University of Findlay*. Stressful events are highly associated with suicide attempts and mental health issues in college students. (Liu, 2018) Pharmacy students are under great stress with a demanding curriculum and increasing expectations in and out of the classroom. Liu found that 20% of students surveyed had thought about suicide, twenty percent of students surveyed reported self-injury and nine percent reported attempting suicide. We became concerned about our student welfare as students reported increases in anxiety and feelings of being overwhelmed. It became our goal to decrease the stigma associated with mental health disease, ensure that our students know how to get help, and to recognize the signs of a person in crisis and know how to help them. This fall the dean met with each class to ensure all students were aware of the resources available and emphasized getting help without stigma. With the help of the trained counselors on campus, we established mental health questions to be asked of each student each semester. These are discussed with faculty advisors, so students can be connected with campus resources. Finally, our counseling staff trained all students,

faculty, and staff in the college in QPR (Question, Persuade, Refer), which is a method for identifying someone at risk for suicide. We have begun to implement relaxation exercises prior to exams and to intentionally teach students stress management techniques. The students, faculty, and staff of the college will be surveyed to determine if there has been progress in achieving the goals listed.

**Measurement of Professional Behavior with an Additional Experiential Year in the Pharmacy Curriculum.** Vanishree Rajagopalan, *Touro University California*, Tara L. Jenkins, *Touro University California*, Susan Heimer, *Touro University California*. Objective: To determine if professionalism scores for students completing a second year of experiential training was closer to preceptors than students having completed one-year Methods: Preceptors and students completing either their first or second experiential year in an innovative 2+2 PharmD program were e-mailed an online survey comprised of a validated instrument, the Assessment of Professionalism in Pharmacy, A Novel Instrument (APIPHANI). APIPHANI contains 37 items measured on a 10-point Likert scale and grouped into five domains: Knowledge/Skills/Self-learning, Proactivity, Accountability/Involvement/Care/Dedication, Altruism/Responsibility/Moral Courage, and Self-Control/Integrity/Discernment. The data was statistically analyzed at the domain level using a Mann-Whitney U and an a priori alpha of 0.05. Results: Usable data was received from 90 preceptors, 55 P4s, and 38 P3s (response rates 20%, 57%, and 43% respectively). There was a statistically significant difference in 4 out of the 5 domains when comparing fourth year students to preceptors with only the Self-Control domain being similar. When comparing third year students with preceptors, there was a statistically significant difference in 3 out of the 5 domains. There was no difference in the Self-Control or Accountability domains. Implications: Professionalism scores for students completing a second year of experiential training were not more similar to preceptors than students finishing their first year of rotations.

**Multimodal Optimization of a Pharmacy Curriculum: Simultaneous Solutions for Student Success, Integration, IPE & Professional Development.** Paul DiFrancesco, *MCPHS University-Boston*. The challenges in higher education continue to increase yearly. Pharmacy education is faced with a decreasing applicant pool, changing scope of practice, regulatory pressures and changing societal perceptions of the profession. It is increasingly difficult to imagine that a single solution approach will continue to work into the future. As a result, the School has embarked on a concerted effort to simul-

taneously implement multiple local solutions for various issues. In addition to national trends, analysis of student performance (GPA, SAT, NAPLEX, PCOA) as well as AACP curriculum quality survey data have identified room for improvement in the pre-professional phase as well as the professional phase of the curriculum. Utilizing a common mode for implementation involving a faculty task force for each aspect that includes a member of the executive team, the School is simultaneously developing and implementing strategies to support student success and wellness, deliver interprofessional education, assess student professional development while also revising the professional curriculum to increase integration between disciplines and align co-curricular activities. This multimodal strategy for global improvement of a curriculum serving a large cohort represents a new direction for the School. Implementation timelines have been staggered over a 6-year period that began in the Fall of 2017 and will result in a complete implementation by the Spring of 2023. The timeline also allows for iterative improvements during the process. The poster will provide details of the various interconnected initiatives with design philosophies, implementation status and effectiveness data at the time of presentation.

**Nuclear Pharmacy Education Available to Every Student Pharmacist.** Nicki L. Hilliard, *University of Arkansas for Medical Sciences*. Currently only five colleges of pharmacy offer an elective curriculum that provides student pharmacists the opportunity to complete the education and training requirements to become a nuclear pharmacist. There are nuclear pharmacies in every state, but with the tight job market employers are increasingly unwilling to pay for the additional training required to practice in this specialized field. The Nuclear Education Online (NEO) program is a joint educational consortium that began in 2001 between the UAMS College of Pharmacy and the University of New Mexico College of Pharmacy that offers an online curriculum for pharmacists, student pharmacists, and physicians to obtain their Authorized User of Radioactive Materials training with local hands-on laboratory training. Student pharmacists from all colleges are eligible to enroll in the program with a significant student discount. Better yet, students can complete the 200-hour program for a \$500 deposit and they are only required to pay the tuition balance if and when they obtain employment and the documentation of training is needed. This allows student pharmacists to be competitive for employment opportunities at home and across the country. While the NEO certificate program does not offer college credit, many colleges have accepted these courses to satisfy elective credits. The NEO certificate training program allows colleges to expand their

curricular offerings and career opportunities for their students. [www.nuclearonline.org](http://www.nuclearonline.org).

**Optimizing the Co-curriculum Through Implementation of a Web-based Platform.** Amy D. Robertson, *The University of Kansas*, Cheryl A. Holcomb, *The University of Kansas*, Karen E. Moeller, *The University of Kansas*, Janelle F. Ruisinger, *The University of Kansas*, Brittany L. Melton, *The University of Kansas*. The 2016 ACPE Standards call for co-curricular activities that “complement and advance” the didactic and experiential curriculum. During the 2015-2016 school year, the University of Kansas School of Pharmacy created and implemented a co-curricular program assessing the CAPE Outcome domains through guided reflection questions. Several barriers were identified with initial implementation including insufficient student and faculty engagement, inconsistent faculty and student training, poor quality student reflections, and lack of a well-supported portfolio system. Changes to the program were made including utilization of the University Writing Center to educate students on composing appropriate reflections, implementation of a co-curriculum committee comprised of students and faculty, and creation of a web-based platform for the 2018-2019 school year. The goal for the online platform was to increase accessibility, communication, and understanding for faculty and students. The new co-curriculum website features links to each advisees’ portfolio, an activity map with qualifying activities, frequently asked questions, and a link to an “Advisor Meeting” form. This form includes suggested discussion questions regarding co-curricular outcomes and overall student wellness. The form also allows advisors to flag students who need immediate assistance from School administration. Once the advisor has met with the advisee, the form is submitted certifying all co-curricular requirements are complete. Feedback on the new website will be collected from both faculty and students to further optimize the platform and discussion topics.

**Overview of Global Outreach by St. John’s University, College of Pharmacy and Health Sciences.** John M. Conry, *St. John’s University*, Tina Kanmaz, *St. John’s University*, Russell J. DiGate, *St. John’s University*, Joseph M. Brocovich, *St. John’s University*, Vijaya Korlipara, *St. John’s University*, Wenchen Wu, *St. John’s University*. As identified within its University Mission Statement, St. John’s University is Catholic, Vincentian, Metropolitan and Global. As a global University, St. John’s is one of the nation’s most diverse institutions of higher education, enriched by a mixture of cultures which complements an internationalized curriculum. Through collaboration with other institutions around the world, study abroad opportunities, and online courses and de-

grees, the University’s outreach spans the globe. Consistent with this University mission, the College of Pharmacy and Health Sciences (COPHS) has developed a variety of global initiatives and programming. The COPHS global outreach initiatives have spanned the three academic priority areas of teaching, scholarship and service. The purpose of this COPHS poster will be to provide an overview of the COPHS global outreach over the past three years. Areas to be highlighted include: medical mission and experiential learning experiences in Guatemala, Jamaica and Taiwan; student participation in the University’s Discover the World: Europe Program where students complete coursework while fully immersed into the local cultures within Italy, France and Ireland over the course of a semester; faculty collaboration for didactic teaching of student pharmacists in Egypt; the Deans’ International Opportunities Programs; the COPHS’ collaborative research program for visiting professors and students from China and Egypt; and faculty research collaborations in multiple countries, including Italy, Philippines, China, Egypt, Africa and Turkey. This College poster will serve to summarize the current global outreach of the COPHS and demonstrate its commitment to creating a community of global citizens.

**Perception of Student Knowledge about JUUL Electronic Cigarette Use and Vaping.** See-Won Seo, *Albany College of Pharmacy and Health Sciences*, Asha Kurian. The use of JUUL e-cigarettes has become a common trend among youth and adults in the past few years.<sup>1</sup> The perception may be that e-cigarettes and vaping are healthier alternatives to smoking traditional cigarettes for those considering quitting. However, the use of e-cigarettes may also contribute to nicotine addiction, especially in young adults.<sup>1,2</sup> This study highlights the perceptions and use among pharmacy students specifically at Albany College of Pharmacy and Health Sciences (ACPHS) and will guide the need for additional educational opportunities specific to e-cigarettes. An electronic survey was administered to P1-P4 PharmD students enrolled at ACPHS. The survey was made available for one week. No funding was distributed during the creation and administration of the survey. Study participation was anonymous and voluntary. The study was granted IRB exemption. Of 174 respondents, 14% currently used JUUL e-cigarettes or other e-cigarettes. 95% perceived e-cigarettes can be addictive and 98% believed that e-cigarettes contain nicotine. 48% agreed that the use of e-cigarettes assist in trying to quit the use of traditional cigarettes, while 31% disagreed with that statement. 36% agreed that vaping is a safer option for adolescents compared to the use of other tobacco products while 47% disagreed. 75% agreed that e-cigarette products may

contain cancer causing ingredients while 5% disagreed. Although a minority currently use electronic cigarettes, the study demonstrate that many students believe that electronic cigarettes can assist with quitting traditional cigarettes. This study highlights the need for curricular content to address perceptions of electronic cigarettes.

**Performance-Based Assessment: Five-Year Experience and Future Directions.** Jing Fan, *Southern Illinois University Edwardsville*, Katie E. Ronald, *Southern Illinois University Edwardsville*, Stephanie J Hunziker, *Southern Illinois University Edwardsville*, Janice R. Frueh, *Southern Illinois University Edwardsville*. Background: In 2011, the Southern Illinois University Edwardsville School of Pharmacy implemented an OSCE assessment to assess third professional year (P3) students' APPE-readiness. In 2015, this assessment was expanded to assess all Pre-APPE Performance Domains and Abilities as a zero-credit course. Description: The P3 Performance Based Assessment (PBA) course occurs in the spring semester over a 2-week time period, with seven assessments conducted over three days. All assessments are evaluated in week one; followed by remediation in week two. Assessments include literature evaluation, prescription drug coverage, patient interview and documentation, patient counseling, hospital OSCE stations, community OSCE stations, and a public health activity. Each assessment is mapped to one or more Pre-APPE Domains. Students who receive a NO PASS must remediate the specific assessment in order to pass the course. The P3 PBA course is a group effort, with approximately 80% of pharmacy practice faculty involved in various ways. Growth and Development: Evolution and improvement of the P3 PBA can be attributed to feedback from students and faculty, student performance, curriculum enhancement, and implementation of new technology. A homegrown collection of validated cases, a volunteer-based standardized patient/healthcare provider program, and simulation technology that allows off-site evaluation by faculty, residents, alumni, and preceptors aided in decreasing faculty workload for the course over time. Future Directions: As we embark on a new curriculum that includes a longitudinal skills lab in the six didactic semesters, PBAs will be incorporated every semester with the intent to enhance student mastery of pre-APPE skills.

**Pharmacy Practice Without Borders: Development of International Pharmacy Practice Experiences for Future Global Pharmacists.** Suzanna Gim, *Long Island University*, Rebecca Cope, *Long Island University*. Most international pharmacy practice experiences are limited in focus (e.g. mission, hospital, research). Although any international experience is arguably inval-

able, development of international experiences with more open-minded mutual benefit as goals- have limitless possibilities. The objective of this poster is to share a model of international relationship building for mutual benefit and growth of interprofessional as well as international pharmacy education. Over ten years, a faculty led initiative to provide international experiences for pharmacy students, started with non-credit mission trips and quickly developed into for-credit advanced pharmacy practice experiences (APPE). Collaborations with local training programs are forged whenever possible. Interactions are not limited to pharmacy but expand beyond to any discipline aiming to improve global health. A survey was developed to assess student understanding of various health worker roles after the experience. 45 pharmacy students have traveled with two faculty over 20 trips in 6 countries. Pre-post surveys revealed an improved understanding of various roles including pharmacy through the trip. The APPE offerings have expanded to 14 countries (in Central/ South America, Asia and Africa) and span beyond service learning to all facets of pharmacy (including industry, research, hospital, community, public and private) and global health (such as health promotion/ prevention). International experiences do not have to be limited and should not focus on pharmacy only. Development of richer international experiences that maximize opportunities for mutually beneficial relationships may be established for the benefit of the entire University with strategic planning.

**Pharmapreneurship – Leading Change in Pharmacy Education.** Lisa Lebovitz, *University of Maryland*, Magaly Rodriguez de Bittner, *University of Maryland*, Kenneth Boyden, *University of Maryland*, Peter Swaan, *University of Maryland*. Objective: To describe a multifaceted approach to developing students and faculty into Pharmapreneurs, to address our nation's health care, research, policy, and societal needs. Method: We identified strategies and skills that pharmapreneurs across the fields of pharmacy practice, pharmaceutical health services research, and pharmaceutical sciences might utilize, including collaboration, leadership, exploration, and innovation. We embarked on several educational initiatives to enhance these and other characteristics and sought out funding support for research initiatives and expertise for guidance. Results: We partnered with the UM Robert H. Smith School of Business Dingman Center for Entrepreneurship for a joint PharmD/MBA degree and Pharmapreneurism certificate and designed a Pharmapreneurship elective pathway for motivated PharmD students. We secured funding for the Pharmapreneur's Farm innovation space, Pharmapreneur Fellowships, and an endowed PharmD scholarship in Pharmapreneurship. We appointed a

Pharmapreneur-in-residence and formed the Center for Women in Pharmapreneurism (CWP). Other outcomes include establishment of revenue-generating companies SilcsBio, LLC (computer aided drug design) and UPM Pharmaceuticals, Inc. (contract formulation development, cGMP manufacturing); creation of fee-for-service Centers of Pharmaceutical Research Computing and Mass Spectrometry; and gained membership in the National Institute for Innovation in Manufacturing Biopharmaceuticals (NIMBL) to accelerate biopharmaceutical manufacturing innovation and capabilities, and train a world-leading biopharmaceutical manufacturing workforce. Implications: With cutting-edge research initiatives and innovative clinical services, the University of Maryland School of Pharmacy fosters an unparalleled environment that both values and nurtures pharmapreneurship among faculty, staff, and students and ignites creativity, confidence, and fearlessness to empower them to be critical thinkers and problem solvers.

**PharmD Forward Curriculum: A Curricular Change for Future Pharmacy Leaders and Innovators.** Jeannie K. Lee, *The University of Arizona*, Janet H. Cooley, *The University of Arizona*, Elizabeth A. Hall-Lipsy, *The University of Arizona*. With an increasingly competitive job market, there is an urgent need to address the complexity of the pharmacy profession to better prepare the students for future leadership and practice innovation. At the University of Arizona (UA), we have transformed the Doctor of Pharmacy (PharmD) program into one that creates practice innovators and leaders in pharmacy. The curricular change started in 2015 with a “Deep Dive” review by an 18-member committee including students. Through a focused look at the curriculum (what students were learning, when, where and how), we identified gaps in knowledge and skills, and the need for innovative opportunities. Equipped with the “Deep Dive” recommendations and our new dean’s vision to provide more options to our students, the curriculum committee, in collaboration with all faculty, developed and implemented the PharmD Forward Curriculum. Launched in fall 2018, the changes included course integration to eliminate duplicate contents and lessen student burden. New courses, Clinical Pathophysiology and Medical Microbiology, were added to fill the identified gaps. Increased elective hours from 4 to 8 units allow students to explore their interests within and beyond pharmacy, with newly-built dual-degrees and certificate options. The PharmD Forward dual-degrees are in PhD, public health, law, and business. Graduate pharmacy degrees are available in pharmacology/toxicology, health and pharmaceutical outcomes, drug discovery, and pharmaceuticals/pharmacokinetics. Certificate programs include regulatory science, health law,

health administration, clinical and translational research, public health, and global health. With the PharmD Forward Curriculum, the UA students may be better equipped for leadership and innovative practice.

**Planting the Seeds Early: Valuable IPE Activities for First Year Pharmacy & Medical Students.** Kristen B. Preston, *Appalachian College of Pharmacy*, Joe Kingery, *Kentucky College of Osteopathic Medicine*. An Introductory Interprofessional Education program has been established at Appalachian College of Pharmacy (in conjunction with Kentucky College of Medicine) whereby students of pharmacy and medicine partner together for two years. In their first year Fall Semester, the framework for interprofessional socialization is placed when student partners are tasked with interviewing each other, using a specified set of questions. Interviews are conducted in “real time” (in-person, via telephone, social media or web-based collaborative tools [ex. Skype]). Students write reflective essays based on the experience, often noting that they found more in common with each other than originally assumed, especially in the context of their learning backgrounds and career goals. A clinical learning activity assigned in the spring semester requires pharmacy students to contact medical students to discuss an assigned drug-related problem and create a patient care plan. Again, students write reflective essays, summarizing their interaction and teamwork and the importance of communication among healthcare providers. In their second didactic year, students continue to build professional relationships as they are again teamed together to work through cases and simulations with other healthcare professional students, during their bi-annual IPE experiences. Data collected from pre- and post-surveys as well as information gleaned from reflective essays has been overwhelmingly positive. Students report increased respect for each other’s professions, increased confidence in skills in their own professions and better understanding of the need for communication and collaboration in order to achieve their shared goals of improving quality of healthcare delivery and patient safety.

**Predictors of Standardized Test Outcomes in Pharmacy Students.** Karen L. Hardinger-Braun, *University of Missouri-Kansas City*, Maqual R. Graham, *University of Missouri-Kansas City*, Russell B. Melchert, *University of Missouri-Kansas City*. Objective: To determine how pre-pharmacy characteristics and pharmacy school performance predict scores on standardized examinations [Pharmacy College Admission Test (PCAT), Pharmacy Curriculum Outcomes Assessment (PCOA), Pre-North American Pharmacist Licensure Examination (Pre-NAPLEX) and NAPLEX]. Methods: Data for the graduating class of 2016, 2017 and 2018 were reviewed.

The local score was computed using the pre-pharmacy math and science grade point average (GPA) and PCAT composite percentile,  $[\text{Math and science GPA} / 4.0 \times 100] + \text{highest PCAT composite percentile}$ . PCOA scores were only available for the graduating class of 2017 and 2018. Pearson's correlation was used to determine the relationship between predictors and test performance (raw score). Results: Pre-pharmacy characteristics including math and science GPA, cumulative GPA, and PCAT composite score had a low to moderate correlation with PCOA, Pre-NAPLEX, NAPLEX (range 0.255-0.496,  $n=374$ ). The local score was the strongest pre-pharmacy predictor of PCOA ( $r=0.565$ ), Pre-NAPLEX ( $r=0.456$ ), and NAPLEX ( $r=0.374$ ). Semester 1 through 8 pharmacy school GPA had a moderate to high correlation with NAPLEX (range 0.377-0.583). Seventh and eighth semester GPA (experiential learning) had the highest correlation with NAPLEX ( $r=0.576$  and  $r=0.583$ , respectively). PCOA and Pre-NAPLEX had a high correlation with NAPLEX ( $r=0.615$  and  $r=0.541$ , respectively). Implications: Experiential learning GPA, PCOA and Pre-NAPLEX score were the strongest predictors of the NAPLEX score. GPA and PCAT composite score should be used in the admission decision making processes. However, PCOA and Pre-NAPLEX scores should be closely reviewed to identify students at risk for scoring low on the NAPLEX.

**Preparing Team-Ready Graduates in a Private University Setting.** Julie A. Testman, *University of Charleston*. As a private institution not directly associated with a medical teaching center, the University of Charleston School of Pharmacy (UCSOP) embraced the challenges inherent to this type of setting by developing and implementing interprofessional education (IPE) initiatives that enhance learning and prepare team-ready graduates. One notable partnership is with the UC Physician Assistant (PA) program. Students and faculty from both disciplines work collaboratively throughout a longitudinal experience providing team-based care to a standardized patient. The success of this collaboration led to the development of a separate interprofessional grand rounds series involving UC pharmacy, PA, and an external dental hygiene program. An e-Portfolio course requires P1-P3 students to earn an "Interprofessional Badge" and encourages collaboration with nursing, athletic training, PA, or other external healthcare programs in the provision of community service and engagement in other interprofessional events or activities. Introductory and advanced pharmacy practice experiences require students to complete longitudinal IPE documentation, assess the quantity and quality of interprofessional experiences, and be assessed in this area by their preceptors. A full-day in-

terprofessional simulation event with medical, nursing, nurse practitioner, and PA programs from throughout the state occurs biannually at an osteopathic medical school located approximately two hours from the UC campus. Finally, an on-line ethics course involving UC pharmacy, PA, and nursing provides students the opportunity to interact with and learn from the experiences and perspectives of each discipline. These initiatives have demonstrated value and established the foundation for future collaborations, particularly with medical students and providers in the didactic curriculum.

**Promediation: A Proactive Tool for Student Success.** John A. Dougherty, *Palm Beach Atlantic University*, Harm Maarsingh, *Palm Beach Atlantic University*, Dana A. Brown, *Palm Beach Atlantic University*, Jonathan Jackson, *Palm Beach Atlantic University*. Pharmacy education is academically challenging and processes to facilitate student performance are instrumental for student success. The Gregory School of Pharmacy has developed proactive policies and tools to enhance student success. The dismissal and probation policy was updated to clarify performance expectations. In addition, eligibility for remediation changed from course-centered to student-centered, where students who were close to passing are offered the opportunity to demonstrate proficiency through self-directed learning. Remediation offers students the opportunity to graduate without delay after failing a single course, while the intent of promediation is to facilitate student success before they fail a course. Recently, the promediation process was revised to provide a proactive approach. Previously, students entered promediation when their course average was  $<76\%$  at midpoint. Disadvantages included 1) the intervention was too late for students failing multiple exams and 2) there was no consequence for not completing promediation. Promediation is now initiated the first-time students fail an exam in each course. As part of the promediation process, students are required to complete the student section of the promediation action form, attend exam reviews, and in consultation with the course coordinator determine a strategy for success. Failure to participate in promediation renders them ineligible for remediation. Students play a crucial role in their success and need to be willing to make changes in their study habits and behavior in order to be successful. The updated promediation policy facilitates student's success through early intervention, focusing the student priorities, and by offering course and student-specific advice.

**Realignment of Objective Structured Clinical Examinations (OSCEs) to Better Assess Curricular Outcomes.** Chelsea Gresham-Dolby, *Marshall University*, Christopher J. Booth, *Marshall University*, Tiffany Davis,

*Marshall University*, Casey Fitzpatrick, *Marshall University*, Lisa A. Nord, *Marshall University*, Jessica E Saunders, Robert B. Stanton, *Marshall University*, Eric Blough, *Marshall University*, Kimberly A. Broedel-Zaugg, *Marshall University*. Objective: Improve the OSCE assessment process, provide recommendations for changes, and demonstrate progressive achievement of the Entrustable Professional Activities (EPAs) through OSCE performance. Methods: OSCEs are an integral part of demonstrating competency in skills students need to be practice-ready pharmacists. A task force was created to improve OSCE structure to better assess curricular learning outcomes. The task force recommended assessing more skills-based competencies, communicating the process to students through Objective Structured Learning Experiences (OSLEs), and scheduling the OSCE dates to align with current coursework. The task force recommended that each OSCE station be peer reviewed and have objective criteria for pass/fail, thus eliminating the need for leveling events. Results: Previously assessed OSCE content was incorporated into a decreased total number of OSCEs. During this process, the OSCE sequence was realigned to allow for closer assessment to the time students learned the skills in the curriculum. Faculty and staff ensured that OSCEs were mapped to EPAs and in-house terminal learning outcomes. Mandatory OSLEs allowed students to practice skills and to understand the structure of the OSCE in order to decrease anxiety during the assessment. All OSCE stations were peer reviewed prior to delivery, and any borderline student performance was peer reviewed to determine pass or failure of a station. Students only retake failed stations, allowing students to focus on deficiencies. Implications: Not only is the delivery of OSCEs more efficient than in the past, but the addition of mapping allows for more effective creation and tracking of assessment data.

**Refugee Health at Jefferson College of Pharmacy: Students Make a Difference in Improving Patient Outcomes.** Kimberly L. Carter, *Thomas Jefferson University*. Nearly 800 refugees arrive in Philadelphia each year; having lived in refugee camps for most of their lives, modern medicine is a foreign concept to them and adherence to medications is a challenge. Refugees often require multiple new medications for both acute and chronic conditions upon arrival. Due to language and cultural barriers, refugees are prone to medication misuse. More than 110 students at the Jefferson College of Pharmacy (JCP) have provided care to this vulnerable population during their ambulatory care experiential rotations at the UPenn Refugee Clinic. Kimberly Carter PharmD, BCACP, Assistant Professor at JCP, involves students in a pharmacist-run latent tuberculosis infection (LTBI) clinic

where they assist in providing counseling and routine follow-up to ensure treatment is completed successfully. Through the creation of this clinic and the assistance of students, the practice has been able to increase LTBI treatment completion rates from 14% (pre-pharmacist involvement) to 94% (post-involvement). Students have also improved patient outcomes by conducting medication reconciliations and providing counseling using interpreters over the telephone. To minimize confusion and improve adherence, students create visual aids for patients using pictograms. Students fluent in overlapping languages, such as Arabic and Nepali, have volunteered to assist in this clinic forming strong bonds with patients. Those involved in APhA-ASP have served on interdisciplinary care teams with Jefferson Refugee Health Partners where they assist refugees in the community with medication-related issues. Positive feedback on evaluations confirms that students truly enjoy interacting with refugees as they describe their experiences as humbling and rewarding.

**Reimagining the Master Learner: A Framework for Developing an Adaptive Self-directed Life-long Learner/Educator in PharmD Students.** Harish S. Parihar, *Philadelphia College of Osteopathic Medicine*, Vicky Mody, *Philadelphia College of Osteopathic Medicine*, Vishakha Bhawe, *Philadelphia College of Osteopathic Medicine*, Naushad K. Ghilzai, *Philadelphia College of Osteopathic Medicine*, Avadhesh C. Sharma, *Philadelphia College of Osteopathic Medicine*, Michael J. Lee, *Philadelphia College of Osteopathic Medicine*, Julie Wickman, *Philadelphia College of Osteopathic Medicine*, Shawn D. Spencer, *Philadelphia College of Osteopathic Medicine*. Historically, many educational systems have followed various teaching and learning cycles, which generally rely on four key stages: Plan, Teach, Assess, Revise. Medical programs are innovating this concept with a revised model of teaching students to become Master Adaptive Learners, which imparts skills to adjust to challenges in a clinical practice environment. Here we combine elements from both models with application to pharmacy learners as educators and describe an innovative three-phase six-point model based on the philosophy that “teaching is learning and learning is teaching.” The initial “decision phase” is an Identification and Planning phase where the learner focuses on identifying knowledge gaps and determine the learning resources that can be used to fill the gap. This phase depicts a continuum of questioning and seeking, and a decision to pursue additional learning. The second “immersion phase” is an Engagement and Adaptation phase, where the learner engages multiple resources and practices adapting to gaps in expertise. This is a period where a learner cross-references, reflects, and integrates knowledge with one’s previous

frame of reference. The final “mastery phase” is a Self-Assessment and Teaching phase where the student has adapted to new knowledge and is ready for creative self-assessment. The learner begins to form an opinion about their level of effectiveness and readiness for teaching to all audiences. The process is complete once the learner practices teaching what they have learned from multiple resources. This framework is expected to foster self-efficacy, metacognition and adaptive learner/educator expertise in Doctor of Pharmacy students.

**Re-inventing the Wheel: Content Development Across Disciplines Within an Integrated Pharmacotherapy Course.** David R. Bright, *Ferris State University*, Jennifer Lamberts, *Ferris State University*, Kali VanLangen, *Ferris State University*, Gregory S. Wellman, *Ferris State University*, Lisa M. Meny, *Ferris State University*, Felix Amisshah, *Ferris State University*. Introduction: Ferris State University College of Pharmacy (FSUCOP) is currently implementing a newly-rebuilt curriculum for the Doctor of Pharmacy program. In the curriculum rebuild, an intentional decision by faculty was made to integrate discipline-specific content (e.g. pathophysiology, medicinal chemistry, pharmacology, therapeutics, and patient care skills) into a four-semester, systems-based course series called Integrated Pharmacotherapy (IP). Process: The creation of content for the IP course sequence began with the formation of content development teams based on teaching assignments. Teams were comprised of both pharmaceutical science and clinical faculty. Teams and team “captains” set timelines for building the course content with stipulated deadlines for completion, providing future teams the ability to build upon content from earlier teams work to enhance subsequent content development. Teams started with the development of learning objectives and brief content outlines, then added assessment items, and finally completed teaching materials. Importantly, teams provided peer review throughout each step to ensure harmony of message, relevance to diverse areas of practice, and intentionality of content delivery. Final teaching materials were populated into an internal file sharing system for faculty and into a learning management system for students. Reviewed and finalized assessments were uploaded into Examsoft to allow for faculty viewing as additional assessments were being built. Conclusion: The integrated content creation process has allowed for appropriately sequenced content development, effective peer review, and cross-disciplinary sharing of teaching content among faculty teaching in related areas.

**Restructuring a PharmD Curriculum to Support Student Success.** Norma J. Owens, *The University of Rhode Island*, Kristina E. Ward, *The University of Rhode*

*Island*, Katherine K. Orr, *The University of Rhode Island*. Background: While many outcome measures speak to success of graduating PharmD students, our P1 year is an especially challenging transition. Over two semesters, students must succeed in 13 courses, 2 seminars, 2 laboratories, and IPPEs. Student focus groups and self-reflection activities over the past 2 years highlighted an increased level of stress during this year, which led faculty to recommend change. Curriculum Guiding Principles: After creation of guiding principles focusing on producing practice-ready generalists and intentional consideration of student wellness, the curriculum committee created a template of change to 1) reduce the number of required courses in P1 year, 2) use a layered approach across the curriculum to allow coverage of more challenging material in later years, 3) add P1 coursework that aligned with needed skills for IPPEs, and 4) build cohesion and repetition into the social and administrative science courses. New Curricular Results: Beginning this Fall, the pharmaceutical sciences will be taught in two, 3-credit courses over two semesters vs. three, 2-credits courses. A 3-credit self-care course is added into the first semester. Three of the five social and administrative science courses previously taught in P1 year, will be reduced to two integrated courses with the remainder of material dispersed across the remaining four didactic semesters. Embarking on substantial change is never easy. Hesitance from faculty was present, not all viewed change positively. After thoughtful discussion, faculty came to agreement that student success in the P1 year and throughout the curriculum was paramount; change was initiated.

**RxWellness: Promoting Resiliency, Wellbeing, and Reducing Burnout in Student Pharmacists.** Kelsea Gallegos, Gretchen M. Ray, *The University of New Mexico*, Joe R. Anderson, *The University of New Mexico*, Krystal Ward, *The University of New Mexico*. The University of New Mexico College of Pharmacy launched RxWellness as a professional elective in Spring 2019 as a mechanism for encouraging student wellness. Offered as a half semester elective, the course meets 2 hours per week for 8 weeks (1 credit hour). As a first time offering, the course was limited to 24 students to create an environment that encourages more personal wellness engagement. Topics for the course include resiliency, burnout, self-awareness, strengths, mindfulness, emotional intelligence, dysfunctions of a team, and grit. Students will use a variety of tools each week to learn more about themselves as well as how to better their wellness through self-management of various situations. The course has six main objectives: 1. Differentiate between stress and burnout and compare strategies to mitigate each. 2. Identify personal strengths and limitations unique to you and

how to successfully leverage them in a team-based environment 3. Create and begin to implement a plan for enhancing personal strengths and overcoming personal limitations 4. Examine your own and others' intrinsic and extrinsic motivations as health care providers, teammates, and leaders 5. Identify and self-evaluate the effectiveness of your current coping mechanisms and stress management strategies. 6. Develop a self-care plan that can be utilized throughout your personal and professional life. Tools from the course are planned to be utilized more widely throughout the college. Continued offerings of the course will provide the opportunity for students to revisit these themes and continue to engage in the process of wellness.

**School of Pharmacy Leading the Charge for Interprofessional Education at Temple University.**

Melissa E. Rotz, *Temple University*, Ina Lee S Calligaro, *Temple University*. Temple University School of Pharmacy's IPE curriculum prepares graduates for interprofessional collaboration in a developmentally appropriate manner; specifically, through exposure, immersion, practice, and demonstration of competency that aligns with the IPEC core competencies. An IPE Teaching Certificate was offered to train faculty for the IPE curriculum. During the first four semesters of the IPE curriculum, students participate in IPE Workshops. In the first workshop, perceptions, stereotypes, and professional hierarchies of health professionals are addressed with the goal of dispelling misconceptions; and similarities and differences in roles and responsibilities are discussed. In the second workshop, students are introduced to the topic of patient safety and TeamSTEPPs highlighting communication strategies that improve patient safety and team-based care. In the third and fourth workshops, students are immersed in interprofessional team education that is clinically-oriented. Teams discuss each profession's role and create an interprofessional team care plan in the context of a diabetes and an opioid misuse case. Additionally, the experiential component of the IPE Curriculum builds upon the content from the IPE Workshops. All third-year students practice team-based care via interprofessional practice experiences (IP-IPPE). The IP-IPPEs that are offered involve pharmacy students conducting medication histories with either medical or dental students. Finally, all fourth-year students demonstrate competency in interprofessional collaboration during their clinical advanced pharmacy practice experiences. Assessment data for the IPE curriculum includes validated surveys to assess changes in perception, team care plans to evaluate acquisition of knowledge and skills, and formative and summative evaluations to evaluate performance in practice.

**StEPP-ing with the Times: Outcomes of the PCP Co-curricular Program.**

Jesse P Swartz, Laura A. Mandos, *University of the Sciences*, Suzanne Carbonaro, *University of the Sciences*. The Philadelphia College of Pharmacy developed the Student Excellence in Professional Preparation (StEPP) co-curricular program to ensure all students develop the personal and professional skills necessary to become leaders and innovators upon graduation. Utilizing the affective domain elements of the ACPE standards 2016, student development theory, faculty mentors, and a new assessment platform, the co-curricular program was built to ensure Doctor of Pharmacy students develop the behaviors, self-awareness, and relationships that are consistent with success as students and as health care professionals. This iteration of our co-curricular was launched in the fall 2017 semester. Students enrolled in the professional phase of the PharmD program focus on creating and achieving individualized, personal development goals for each of the program's four pillars, leadership, professionalism, civic engagement & community service, and career development. To complement the didactic curriculum and promote escalating outcomes, themes were developed for each of the professional years. These themes ensure students' activities engage specific populations that will ultimately allow students to identify as advocates for themselves, the profession, and the community. Faculty mentors are utilized to promote self-reflection and communication skills, and to ensure goals and activities adhere to the program's pillars and themes. The StEPP program is assessed and measured via the AEFIS assessment management system. At every step of the program, student progress is measured by a combination of in-house and AAC&U VALUE rubrics. All assessed criteria are then mapped back to programmatic outcomes, competencies, and measurable abilities.

**Student Wellness: Campus Collaborations for Greater Impact.**

Kelley Kiningham, *Belmont University*, J. Michael McGuire, *Belmont University*, Tracy Frame, *Belmont University*, David F. Gregory, *Belmont University*, Erin M. Behnen, *Belmont University*. Background: Like other institutions, Belmont University College of Pharmacy (BUCOP) has experienced an increase in the number of students with greater support needs: from more mental health resources to study skills and self-awareness. BUCOP has worked to utilize more resources on campus and improve relationships with other departments to help students. Objective: Partnerships and shared resources on campus to improve pharmacy student support are described. Methods: When a new Dean of Students was hired for the university, meetings with the BUCOP student affairs office were held to discuss needs.

The following resulted: different needs of graduate students were recognized; more support groups for pharmacy students were added; wait times for counseling services were decreased; a student concerns notification system was created and a collaborative support system for BUCOP student affairs was formed. Additionally, programs were added to all student orientation days on topics such as resiliency, mindfulness, and study skills; a new wellbeing elective is scheduled; and convocation hour was opened in course schedules to allow students to participate in University-wide programming. Results: Student wait time to receive counseling services decreased from 3 weeks to same day for acute crises. The response was so significant, that faculty decided to award Counseling Services the 'Being Belmont' award at the White Coat Ceremony. A total of 6 student concerns were submitted through the anonymous online portal in 2018-2019. All were immediately addressed, and acute concerns were resolved. Implications: Monitoring will continue; however, students have realized stronger support through multiple mechanisms across campus.

**Sustainable Education and Training Model under Pharmacist-Provider Reimbursement (SETMuPP): Year One.** Michael Biddle, *Idaho State University*, Thomas G. Wadsworth, *Idaho State University*, Renee Robinson, Elaine Nguyen, *Idaho State University*, Andrew Hibbard, *Idaho State University*. Background: Despite the growing number of pharmacist-provided healthcare services, pharmacists are not reimbursed through the same mechanisms (i.e., medical benefit) or at the same rate as other providers. Reimbursement and compensation discrimination threaten the sustainability of pharmacists filling critical healthcare access gaps. Idaho State University developed the Sustainable Education and Training Model under Pharmacist-Provider Reimbursement (SETMuPP), a transformation demonstration project, which addresses reimbursement in three ways: advocacy, curricular change, and billing support. Objective: Provide an overview of how SETMuPP is training and supporting future and current pharmacists to provide sustainable, non-dispensing healthcare services. Methods: Focus groups and semi-structured interviews with patients, pharmacists, legislators and other stakeholders were used to inform SETMuPP initiatives. Advocacy: Statutes and regulations were reviewed, and stakeholders engaged to identify and address legislative needs. Curricular change: After curricular review, didactic and laboratory materials were developed to address gaps in reimbursement education. Materials focused on billing requirements encountered by other providers (e.g., credentialing, documentation, coding, and claim submission). Billing support: A toolkit for pharmacist reimbursement, based on curricular changes, was developed to help phar-

macists navigate credentialing and seek reimbursement through the medical benefit. Results: We engaged with 15 state legislators. A pharmacist reimbursement lecture and lab for students to practice coding and submitting claims for reimbursement was implemented. The toolkit is scheduled to be tested and refined with a partner practice site. Conclusion: Strategies to address barriers to reimbursement are underway with funding secured to: propose statute changes, further curricular integration, and add an independent community pharmacy pilot.

**Teaching Impact of a Structured Fellowship in Academic Pharmacy at a College Undergoing Curricular Change.** Matthew A. Wanat, *University of Houston*, Julianna M. Fernandez, *University of Houston*, Divya A. Varkey, *University of Houston*, Elizabeth A. Coyle, *University of Houston*. Objective: Curricular change and the continuous development of novel, active learning teaching strategies can place a strain on faculty resources. This need coupled with the University of Houston College of Pharmacy's (UHCOP) vision to prepare postgraduates for careers in academia were the motivation for the creation of a Fellowship in Academic Pharmacy. Methods: A blueprint for creation of an academic fellowship program was designed and vetted by faculty and administration. The academic fellowship is a 12-month, structured program geared to prepare pharmacists for a career in pharmacy education through training in teaching, curriculum development, service, clinical practice, and scholarship. The fellows participate in monthly academic (70%) or direct patient care rotations (30%) and have longitudinal responsibilities precepting clinics and health fairs. The academic fellows document teaching, research and service activities on a monthly basis via a significant activity report. Results: Three academic fellows started at the University of Houston College of Pharmacy in August 2018. From September to February, the fellows participated in 1385 hours of teaching related activities, including creating skills lab activities (234 hours), teaching in skills labs (247 hours), providing didactic lectures (21 hours), participating in student assessments and interviews (186 hours), and precepting advanced pharmacy practice rotations (480 hours). Implications: The academic fellows have a large teaching workload and can help bridge the gap to meet teaching needs, especially at institutions undergoing curricular revision. Additionally, the fellowship provides an excellent opportunity to mentor and teach trainees interested in a career in academia.

**The "Clinical Correlations" Course Series: An integrative Model to Bridge the Classroom and the Clinic.** Rebecca Sleeper, *Texas Tech University Health Sciences Center*, Molly Minze, Ashley Higbea, *Texas Tech University Health Sciences Center*. Identifying

optimal methods to incorporate active learning techniques in the classroom garners a great deal of interest, but this can be challenging. One dilemma instructors face involves instructional time. Hands on activities during short class periods may be perceived as inefficient if they displace content delivery. To address this, flipped models have become popular, shifting delivery of foundational knowledge to pre-class preparation by students, though this can create its own time-management dilemma for learners as the cumulative volume of pre-class work escalates across multiple courses. As a result, programs may limit flipped techniques to certain courses, or cap the amount of pre-class content allowed. As part of curricular renewal efforts at Texas Tech University Health Sciences Center School of Pharmacy, a new course series was developed called "Clinical Correlations" providing a hybrid approach. Faculty delivered foundational content is preserved in traditional class periods, which serve as the pre-activity foundation for small group active learning sessions later in the day. Running every semester, these sessions serve as a "lab" for lectures where, using a variety of pedagogical methods, students translate and apply classroom learning to professional or clinical scenarios. This further allows both horizontal and vertical integration, as activities are designed to incorporate content from more than one course running during the semester, as well as from previous coursework. This poster describes the rationale for the course series design and provides examples of instructional techniques and activities used. Initial outcomes following the first year of implementation are also reported.

**The Impact of Naloxone Training and Education in the Community.** Krista G. Brooks, *Southwestern Oklahoma State University*, Tom W. Davis, *Southwestern Oklahoma State University*. Introduction: The issue of opioid overdose has become a national crisis and is receiving a lot of attention in the media. In the state of Oklahoma, 388 people died from opioid overdose in 2017. Nationally, there were over 47,600 opioid-related drug overdose deaths in 2017. The objective of this study is to determine the impact that education and training have on attitudes and confidence of people in the community to have the ability to recognize and respond to an opioid overdose using naloxone. Methods: Student pharmacists and preceptors will present information about opioid overdose awareness, people who are at risk, how to recognize an opioid overdose, and how to respond to a situation where someone has overdosed. This education also provides training on using intranasal naloxone. Surveys will be conducted both prior to and after the presentation to determine the impact that the education has on knowledge and confidence in using intranasal nalox-

one in an opioid overdose situation. Surveys from various groups are being collected, and data from the pre- and post-survey will be compared. Data from the different groups will also be compared to identify how participant background affects survey data.

**The Importance of Change Leadership: The University of Washington Curricular Innovation Experience.** Jennifer Danielson, *University of Washington*, Shelly L Gray, *University of Washington*, Curtis G. Jefferson, *University of Washington*, Steve Pickette, *University of Washington*, Peggy S. Odegard, *University of Washington*. Improving a successful curriculum relies on common vision, stakeholder engagement, dialogue, collaboration, and change management. True curricular innovation requires transformative change. In 2016, the University of Washington School of Pharmacy embarked on a journey to reshape our curriculum to better prepare graduates as pharmacist providers with stronger ability to critically think, communicate, make clinical decisions, and provide leadership. The urgency for this curricular shift paralleled a pivotal change in state law recognizing and empowering pharmacist medical providers. The challenge we faced was that our current curriculum was successful, as evidenced by outstanding job placement and some of the highest NAPLEX and PCOA scores in the country-outcomes we aimed to maintain. Mindful of what worked well in our curriculum and eager to explore new possibilities, we used strategic change management to guide our work, following Kotter's 8-Step Process for Leading Change. First, the Curricular Innovation Guidance Team and Executive Committee received change management training. Next, coalition was built using retreats with faculty, students, pharmacists, employers, and professional leaders engaged in creating strategic vision, establishing guiding principles, and designing the new curriculum. The Curricular Innovation process has continued with change management by engaging "an army of volunteers;" identifying and removing barriers with strategic use of resources; and generating short-term wins. We sustained progress and attended to the culture by transferring ownership of the change to faculty and empowering the curriculum committee. In Fall 2019, the inaugural class of students will enter the Husky Pharmacist provider curriculum.

**The Primerx Program: A Co-curricular Career Development Resource.** Caylee R Sams, *University of Pittsburgh*, Daniel P Schrum, *University of Pittsburgh*, Patricia D. Kroboth, *University of Pittsburgh*, Thomas D. Nolin, *University of Pittsburgh*. ACPE Standards 2016 endorse co-curricular activities, which complement and advance the learning that occurs within the classroom and experiential curriculum. Extensive school- and

university-wide co-curricular activities exist to enhance students' awareness and professional development. In addition, student organizations host speakers and events that enhance awareness of the vast array of post-graduate training and career opportunities available to PharmD students. However, access to these events is limited or perceived to be limited to members of the sponsoring organizations. The University of Pittsburgh School of Pharmacy created the Primerx Program, a co-curricular based career development program conceived and implemented by student leaders. The program is available to all PharmD students, though it is designed particularly for students in the early years of their PharmD education. By spotlighting an event as Primerx, the Program leverages a wide range of existing co-curricular activities, including workshops and educational events outside of the standard academic curriculum, to provide students with essential information. Primerx marks specific events as open to all interested students, increasing access to non-members and therefore, enhances student pharmacist awareness of and readiness for post-PharmD training opportunities and direct-to-workforce placement. Qualtrics Software surveys have been used to assess student experiences. Additionally, assessment of student organization participation and collaboration have been included as measures of success. In accordance with the ACPE Standards 2016 for personal and professional development, the Primerx Program cultivates professionalism, promotes leadership, and raises awareness of and readiness for post-PharmD training opportunities and direct-to-workforce placement.

**The Push/Pull of Academic and Professionalism Policy Changes in an Accelerated Doctor of Pharmacy Program.** Diane W. Morel, *South College*, Connie F. Rust, *South College*. Change is never easy, but is especially difficult in the fast-paced environment of an accelerated, quarter-based Doctor of Pharmacy program. Change requires risk assumption without any assurance that the return on the investment of time, creativity and added labor will be of value. In our accelerated program, we have utilized iterative, incremental change, driven by direct and indirect assessment data, to foster student-centric culture change in how academic and professionalism issues are handled and resolved. In terms of academic policy changes, we have addressed academic dismissals by implementing an intrusive, but structured 'at risk' mandate for students in academic difficulty and by implementing the following: peer tutoring that encompasses both training and remuneration of tutors; added opportunities to remediate course failure by comprehensive re-examination and/or delayed program completion; learning enrichment workshops throughout the P1 year;

benchmarked extrinsic (out of class) P1/P2 'competency assessment' checks of practice readiness, with remediation as needed; and an array of required and elective IPE and co-curricular activities to support team- and career-readiness. In order to clarify expectations and hold students accountable for exhibiting professional attitudes and behaviors, we have updated our professionalism tracking ('iCARE card') system wherein repeated infractions are linked to escalating loss of student pharmacist privileges, documented longitudinally and shared with faculty mentors to close the communication loop. By holding student pharmacists accountable for both academics and professionalism right from day 1/P1, we look to create a positive, bidirectional learning environment that sustains lifelong learning, innovation and leadership in our graduates.

**The Use of Coaching Within a Pharmacy Leadership Degree Option Program.** Michael J. Smith, *The University of Oklahoma*, Jane E. Wilson, *The University of Oklahoma*, Melissa S. Medina, *The University of Oklahoma*, JoLaine R. Draugalis, *The University of Oklahoma*. Coaching is used in personal and professional development in which a coach serves as equal partner to guide and support a client through behavior change. The University of Oklahoma College of Pharmacy Leadership Degree Option (LDO) program is an example of how coaching can be incorporated into a curriculum. The LDO consists of 10 hours of elective coursework and two APPE rotations in leadership that students elect to complete over three years. We implemented coaching in the LDO six years ago in which faculty coordinators serve as a coach to students. Coaching facilitates two major topics in the LDO: 1) second-year students create an individual development plan (IDP); and 2) third-year students actively engage in a behavior change process. Second-year pharmacy students in the LDO refer to results from their individual assessments (values, strengths, emotional intelligence, personality traits, and conflict management) during a one-on-one faculty mentor-led coaching session. Students then finalize their IDP using a modified version of the American Association for the Advancement of Science IDP. For leading behavior change, third-year pharmacy students in the LDO use the Immunity to Change process by Kegan and Lahey to work on an improvement goal. Student pairs meet weekly and serve as peer coaches in support of each other's behavior change goal. Additionally, a faculty mentor leads monthly small student group discussions to share successes and barriers encountered in the change process. Feedback and written reflections revealed that students benefited from coaching and agreed coaching should be included in the LDO.

**Unlocking the Power of Reflections to Implement a Longitudinal Co-curriculum in an Accelerated Pharmacy Program.** Abir T. El-Alfy, *Medical College of Wisconsin*, Erin B. Walcheske, *Medical College of Wisconsin*, Joel P. Spiess, *Medical College of Wisconsin*, Karen J. MacKinnon, *Medical College of Wisconsin*, Michael E. DeBisschop, *Medical College of Wisconsin*, Ehab A. Abourashed, *Medical College of Wisconsin*, Nathan H. Lamberton, *Medical College of Wisconsin*, Mathew A. Letizia, *Medical College of Wisconsin*, Steven Broadway, *Medical College of Wisconsin*, Susan M. Korek, *Medical College of Wisconsin*, George E. MacKinnon, *Medical College of Wisconsin*. The Accreditation Council for Pharmacy Education (ACPE) Standards 2016 state that pharmacy programs prepare graduates to be “practice-” and “team-ready.” To achieve these goals, the ACPE requires programs to provide their students with co-curricular experiences that align with Standard 3 (Approach to Practice and Care) and Standard 4 (Personal and Professional Development). At the Medical College of Wisconsin School of Pharmacy, a required, zero-credit, longitudinal, co-curriculum course was developed entitled “Personal and Professional Development” (PPD). Throughout the course, students engage in both required and self-identified activities in each of three categories: professional development, health care services, and community engagement and outreach. This course fosters individualized student experiences, emphasizes the role of faculty mentors, and tracks learning outcomes through a learning management system. Course implementation began on August 1, 2018. Orientation sessions were held for students and faculty to introduce the course and its requirements. Data collected thus far show 100% student participation in required activities. Students have participated in a total of 51 unique elective activities that map to ACPE Standards 3 and 4 and fulfill course requirements for the three categories. At present, student activity reflections are used to assess achievement of the PPD course outcomes. Faculty mentors provide written feedback on completed student reflections and meet with each student at least twice a year to discuss professional development. Of student elective activity reflections submitted to date, 100% of students agree that participating in the activity contributed to their personal and professional development.

**Use of Adaptive Learning Technology: Past Experiences, Present Encounters, and Future Endeavors.** Kristopher Harrell, *The University of Mississippi*, Alicia S. Bouldin, *The University of Mississippi*, Sarah Campbell, *The University of Mississippi*, Erin R. Holmes, *The University of Mississippi*, Patricia O’Sullivan, *The University of Mississippi*, Kristen Pate, *The Uni-*

*versity of Mississippi*, Meagen M. Rosenthal, *The University of Mississippi*, David D. Allen, *The University of Mississippi*. Objective To outline the scope and current practice of adaptive learning technology (ALT) as a personalized learning strategy at the University of Mississippi School of Pharmacy (UMSOP) and to project future application opportunities Past Adaptive learning technology is an innovative personalized learning strategy with potential utility in self-remediation and in-semester success. The UMSOP’s initial ALT implementation occurred in a pre-pharmacy ethics course in 2016. Data (multiyear, longitudinal) suggest a correlation between high rates of attendance and personalized learning practices, including adaptive courseware that is blended with flipped classroom and team-based learning. Present Building on initial success, two courses in the first professional year of the LandshaRx curriculum were identified to pilot ALT in fall 2018. ALT was introduced in “Becoming a Pharmacist,” a one-week pass/fail course aimed at orienting students to the profession and curriculum. ALT was also implemented to personalize learning in a new Pharmacists’ Patient Care Process (PPCP) course series. In the fall PPCP I was implemented in a traditional class format, and in the spring ALT was employed in PPCP II. Comparisons of student performance and perceptions between the semesters are being made to determine learning effectiveness and learner satisfaction. Future The potential for positive outcomes encourages consideration of expansion of ALT and personalized learning beyond the pilot courses. ALT could be particularly valuable as an early intervention strategy because it facilitates immediate feedback and targeted self-remediation, as well as real-time faculty identification of learner needs. Connections to previous learning can foster deeper understanding and retention.

**Use of an Evidence-based Approach to Transform a Holistic Admissions Process.** Seth P. Brownlee, *Northeast Ohio Medical University*, Altaf S. Darvesh, *Northeast Ohio Medical University*, Lukas J. Everly, *Northeast Ohio Medical University*, James Barrett, Madison Ivan. *Northeast Ohio Medical University* (NEOMED) has utilized a consistent admissions interview and evaluation process for prospective students since the college enrolled its inaugural class in 2007. A major goal of the admissions process is to predictably enroll a P1 class commensurate with college enrollment goals that we can fully support to thrive academically and professionally. Over the past several years, the college has experienced significant changes in the quality and quantity of the applicant pool. In response, the faculty and staff have worked to systematically evaluate aspects of the admissions process to ensure it is continuing to meet its

goal(s). Selected evaluations have included: (1) interviewer rater reliability, (2) utility of PCAT and pre-matriculation characteristics to predict academic success, and (3) alignment of pre-requisites. This assessment data was reviewed during the AACP Institute on Holistic Admissions in 2017 and led to a series of new quality improvement initiatives. The first project was to evolve a single comprehensive admissions interview into a multiple focused interview format. Using historical data and feedback from faculty, two new rubrics and criteria were created. Ongoing work seeks to monitor emergent student profile issues to adapt a dynamic admissions model and proactively align academic and co-curricular supports to address students' cognitive and non-cognitive support needs. Collectively, this work further supports the goal to find a balance between the application of experiential judgment of pharmacy faculty with objective data determining a candidate's fit for the rigors of the program in a holistic admission process.

**Use of Multisource Assessments to Identify At-Risk Students.** Khaled A. Elsaid, *Chapman University*, Rocke DeMark, *Chapman University*, Siu-Fun Wong, *Chapman University*. Introduction: Early academic intervention has a positive effect on improving academic performance. Assessment programs can identify academically struggling students. We herein present our approach to identifying at-risk students using multisource assessments. Methods: Our accelerated, 3-year Pharm.D. program utilizes a centrally coordinated composite electronic exam in six trimesters (T1-T6) with 5 composite exams per trimester. We require a midpoint PCOA administered following the completion of T3. We hypothesized that a combination of cumulative composite exam performance (T1 through T3) and midpoint PCOA percentile rank can identify at-risk students and provide an opportunity for academic intervention. We set cumulative composite exam grade  $\leq 1 \times$  standard deviation and PCOA percentile rank  $\leq 1 \times$  standard deviation below cohort mean values to identify at-risk students. The program implements early intervention procedures following the second exam in each trimester where students are provided support with the assistance of their faculty Student Success Advisors. Results: Among Class 2020 student pharmacists, 10 students (11% of class size) were identified. In T4, 8 students had exam grade that remained lower than  $1 \times$  standard deviation below cohort average and all students scored below cohort average. These students accounted for 25% of those who received early intervention in T1, 36% in T2, 29% in T3 and 26% in T4. Conclusion: Using a multisource assessment approach, we identified at-risk students who significantly utilized our early intervention

program. Early identification of at-risk students may present a valuable opportunity to improve academic performance, retention and overall student wellness.

**Use of Professional Certification Programs to Achieve Practice Ready Graduates.** Karen R. Sando, *Nova Southeastern University*, Robert McGory, *Nova Southeastern University*, Graciela M. Armayor, *Nova Southeastern University*, Michelle A. Clark, *Nova Southeastern University*. ACPE Standards 2016 emphasize that graduates should be practice-ready. With rising competition for employment and residency programs, applicants with advanced skills in medication use systems and patient-centered care may be favored over the "generalist" graduate. Training sites increasingly incorporate students into professional duties, including immunization, medication reconciliation, discharge counseling and Medication Therapy Management. A new curriculum was initiated in Fall 2018 that emphasizes team-based learning, career guidance and skills development through laboratory exercises and experiential training. Block scheduling of topics created specialized two-week periods at the beginning and end of the semester to devote to advanced topics and electives. Embedded within these periods are ACPE approved, nationally recognized professional certification programs offered by the American Pharmacists Association, National Association of Chain Drug Stores and American Society of Health-System Pharmacists. Faculty who are credentialed as trainers for these organizations offer certifications in Immunization (IM), Medication Therapy Management (MTM), Point-of-Care Testing, Cardiac Risk Factors, Diabetic Management and Pharmacogenomics. Future electives will incorporate Sterile Preparation, Informatics, Pain Management and Medication Safety. Faculty workload is reduced through utilization of on-line study material prepared by the provider. Classroom space is minimized as students complete materials at home and attend a single 4 to 8-hour class. To date, 750 1st year students have received IM certification and 90 3rd and 4th year students have completed MTM certification.

**Using Virtual Reality to Recruit the Next Generation of Pharmacists.** Katelyn Sanders, *Shenandoah University*, Katerina Petrov, *Shenandoah University*, Nataliya Scheinberg, *Shenandoah University*, Jeremy R. Fox, *Shenandoah University*, Regina F. Peacock, *Shenandoah University*. Pharmacy applications nationwide have decreased over the last several years and the number of schools of pharmacy has almost doubled since 1987. In light of this difficult climate for pharmacy admissions, it is a challenge to find innovative ways to not only fill seats but increase the pipeline of quality students interested in a career in pharmacy. As Generation Z, born between 1995

and 2012, becomes our target recruiting audience, it is important to understand that these individuals are digital natives who are highly influenced by technology. They are also very creative, career and experience driven, and communicate via images. In order to be effective in recruiting this generation of students, a cutting edge, immersive, and technology-based approach must be utilized. In collaboration with the Shenandoah University Center for Immersive Learning, we are using virtual reality as an educational tool to capture the attention of Generation Z and connect them to the pharmacy profession. This immersive pharmacy experience will be delivered using virtual reality glasses, which are portable and may be easily employed in a variety of settings. This tool will enhance our recruiting efforts at large scale career exploration events, targeted high school and middle school classroom visits, as well as university and community college open houses. We believe this tool will not only help us increase our pipeline of applicants, but that it will also assist in educating members of Generation Z on the role of pharmacists as a vital component of the health-care team.

**Utilizing Endowed Positions to Drive Transformative Change in Teaching, Research and Practice.** Omathanu P. Perumal, *South Dakota State University*, James R. Clem, *South Dakota State University*, Xiangming Guan, *South Dakota State University*, Kristy Ullom, *South Dakota State University*, Jane R. Mort, *South Dakota State University*. Endowed positions have been traditionally utilized to recognize and retain leading/outstanding faculty. In the College of Pharmacy and Allied Health Professions at South Dakota State University, we strategically utilized the endowed positions to recruit leading researchers/scholars to drive transformative change in teaching, research and pharmacy practice. The utilization of open faculty lines as base funding for three endowed positions (cancer, genomics, and innovative practice) helped maximize the donor's investment and provide a competitive start-up package. Furthermore, the endowment was leveraged to secure state funding to enhance the research infrastructure in the College. More importantly, the endowed position in innovative community practice helped to advance the development of new pharmacy practice models in the state. Since hiring the first endowed faculty in 2014, the College's grant funding has doubled from less than \$500,000 to close to \$1 million per year. The endowed

positions also enhanced the recruitment and research opportunities for professional pharmacy and graduate students. The added expertise allowed the College to offer new courses in biomedical sciences and pharmacogenomics in the Pharm.D. and Ph.D. (Pharm.Sci.) curriculum. In addition, the positions led to new collaborative opportunities and enhanced visibility for the College. Given the increasing budget constraints in higher education, this strategic approach serves as a model to maximize the return on investment for endowed positions to drive transformative change in Colleges of Pharmacy.

**Veterinary Pharmaceutics and Compounding/An Opportunity for Interprofessional Education.** Julie A. Adrian, *University of Hawaii at Hilo*, Tamara Kondratyuk, *University of Hawaii at Hilo*, Carolyn Ma, *University of Hawaii at Hilo*. The majority of veterinarians do not have an ongoing relationship with a pharmacist when it comes to animal care. There is an opportunity for interprofessional collaboration. Pharmacists need education in veterinary medicine to improve the area of animal pharmaceutics. The inter-dependence between the health of humans and that of animals has led to the development of the concept of One Health. This international initiative aims to improve health that incorporates humans, animals, and their shared environment [1 Bidaisee et al, 2014]. In the Guidance for Industry, the US Food and Drug Administration estimated that 75,000 pharmacies fill 6,350,000 compounded prescriptions for animals in the United States each year [2 Compounding Animal Drugs From Bulk Drug Substances; Draft Guidance for Industry; Availability; Withdrawal of Compliance Policy Guide; Section 608.400 Compounding of Drugs for Use in Animals]. Compounded medications can provide therapy for animals when there are no available FDA-approved drug formulations. The College has a two semester Pharmaceutics course that teaches students about the basic principles of how physico-chemical properties at the molecular and macroscopic assembly level are manifested in dosage form properties and performance. The course consists of didactic lectures and compounding laboratory sessions which includes a Veterinary Compounding Lab. Students and Pharmacists who receive education in this growing field of veterinary compounding pharmacy can play a valuable role in caring for animal patients. Increased interprofessional education in veterinary pharmacy for both pharmacists and veterinarians can serve the best interests of both professions.