Oral Presentations

Oral Presentation 1: Skin as the Human Canvas: Pilot of a 3-Session Arts-based Course for Enhancing Core Competencies in Dermatology Residents

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Needs and Objectives: The AAMC's FRAHME initiative launched efforts to incorporate arts and humanities programs into undergraduate medical education. These programs were found to strengthen core competencies including observation, communication, ambiguity tolerance, and perspective-taking, with emphasis on visual observation through use of visual arts. In graduate medical education, however, structural barriers have limited their integration into resident curricula. Dermatology, with its unique ACGME competency of "visual recognition", stands primed to benefit from integrating structured arts-based approaches into residency training. We piloted a three-session course for dermatology residents to assess the benefits of a structured arts-based program in dermatologic residency education and identify methods by which these might be achieved.
Setting and Participants: Ten dermatology residents across three post-graduate years participated in 3 optional course sessions: a 3-hour session in the Baltimore Museum of Art and two 1.5-hour sessions within the Johns Hopkins Hospital.
Description: Visual Thinking Strategies (VTS) discussions formed the core curriculum, occurring during each session. Additional activities included a personal responses tour, drawing from multiple perspectives, and back-to-back drawing. We also created an activity aimed at characterizing textures through visual and tactile observation of fabrics, addressing the importance of textures in characterization of dermatologic lesions and differences via in-person and telemedicine mediums.
Evaluation: We evaluated the course's efficacy at strengthening core competencies through pre-course, post-course, and 3-month post-course surveys. These solicited trainees' perceptions on course impact and structure through Likert-style and free-response questions. Additionally, competencies were directly assessed through administration of established scales and statistical comparison of scores across surveys.
Lessons Learned: Following a Kirkpatrick model level 1 assessment of efficacy, trainees perceived slight to moderate improvement (1-2, measured on 0-3 scale) in all competencies and with all activities. The greatest perceived improvements were in perspective-taking and observation with average gradings across participants and activities at 2.47 and 2.42, respectively. VTS (n=5) and fabric exploration (n=2) were cited as most helpful activities for advancing competencies overall. While no significant changes were directly measured in competencies, all participants agreed with the importance of these activities for building fellowship, and 90% agreed with the statement that longitudinal incorporation of this content into their residency curriculum would facilitate additional competency development.

Oral Presentation 2: Validity Evidence for a Simulation-Based Assessment System to Determine Competence in Pediatric Procedural Sedation

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Needs and Objectives: Pediatric procedural sedation (PPS) is increasingly performed by non-anesthesiologist pediatricians, including intensivists, yet there is no standardized, validated assessment system to support high-stakes decisions regarding readiness for independent sedation practice. Recent international consensus guidelines define expected competencies for sedation providers, but current assessments focus on patient sedation state rather than clinician competence, judgment, and entrustment. This project aims to develop and evaluate a simulation-based assessment system capable of supporting entrustment decisions for independent PPS practice by gathering validity evidence across multiple domains.
Setting and Participants: This study is conducted within the implementation of a pediatric procedural sedation onboarding curriculum at a tertiary academic children's hospital. Participants include pediatric intensivists undergoing PPS training, with assessments performed by trained faculty sedation providers and simulation educators. Expert reviewers contribute to content validation.

Description: A competency-oriented assessment system was developed, incorporating high-fidelity simulation OSCEs with critical safety action checklists and global entrustment ratings. The study uses a mixed-methods validity framework informed by Messick. Content validity is assessed through expert review and Delphi consensus using content validity indices. Response process evidence is examined via rater training, calibration, and think-aloud protocols. Internal structure evidence includes interrater reliability (ICC) and exploratory factor analysis. Relationships to other variables are evaluated through correlations with learner experience and knowledge scores. Consequences evidence is collected using learner surveys and qualitative feedback regarding fairness, usefulness, and entrustment decisions.
Evaluation: Planned analyses will generate validity evidence across all five domains of Messick's unified validity framework. The assessment system is hypothesized to demonstrate strong content alignment, acceptable reliability, consistent rater interpretation, expected relationships with experience and knowledge, and fair and actionable consequences when used to guide entrustment decisions.
Lessons Learned: This work is grounded in contemporary validity theory (Messick and Kane) and entrustment-based competency assessment to develop a competency-based assessment capable of supporting high-stakes clinical decisions. Early implementation demonstrates feasibility and alignment with consensus sedation competencies. Ongoing evaluation will determine whether simulation-based performance scores can be interpreted as evidence of readiness for independent PPS practice.

Oral Presentation 3: Defining Educational Priorities for Oncologic Critical Care Education for Pulmonary and Critical Care Medicine Fellows: A Modified Delphi Study

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Background: Advances in cancer diagnosis and treatment have prolonged survival, expanded therapeutic options, and introduced novel treatment-related toxicities. Patients with cancer now account for more than 20% of ICU admissions, exposing intensivists to increasingly complex clinical scenarios. Despite this evolving landscape, oncologic critical care education within PCCM fellowship training remains unstructured, with limited consensus on educational priorities or expectations for trainee practice.
Aim: To define consensus-based educational priorities in oncologic critical care for PCCM fellowship training and clarify expectations regarding trainee management responsibility.
Methods: We conducted a modified Delphi study between October and December 2025. Expert panelists were purposively recruited based on clinical or educational expertise in PCCM, hematology oncology, and fellowship education. Using a REDCap-based survey, panelists rated 47 proposed topics across 11 oncologic critical care domains for importance to graduating PCCM fellows without additional sub-specialty training. Topics were rated using a four-point scale, with consensus defined *a priori* as ≥70% *Must Know* ratings. Open-ended feedback informed addition of a secondary rating scale in Round 2 assessing expected management responsibility (independent management vs. co-management with hematology/oncology). Responses were analyzed descriptively and in aggregate.
Results: Of 58 invited experts, 41 (70%) completed Round 1. All Round 1 respondents were invited to participate in Round 2, of whom 32 (78%) completed the survey. Panelists represented diverse disciplines, geographic regions, and levels of experience. Of the 47 topics presented in Round 1, 33 met consensus criteria. Three non-consensus topics were carried forward based on panelist feedback. Five new topics were introduced in Round 2, three of which achieved consensus. In total, 39 topics were retained across both Delphi rounds. Consensus items emphasized core principles of oncologic critical care including ICU triage, procedural safety, management of infectious, metabolic, neurologic and oncologic emergencies, respiratory failure and therapy-related complications. Managementresponsibility ratings differentiated topics appropriate for independent PCCM management from those requiring co-management with hematology/oncology.
Conclusion: This study defines consensus-based educational priorities in oncologic critical care and clarifies expectations for trainee management and interdisciplinary collaboration, providing a practical framework to align PCCM fellowship training with contemporary ICU practice.

Oral Presentation 4: Improving Advance Care Planning Skills Among Medical Students Through Respecting Choices® Certification

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Background: Despite widely cited benefits of advance care planning (ACP), fewer than 40% of adults in the United States have an advance directive.1-4 One barrier to ACP is a lack of formal provider training. Though 90% of physicians believe ACP is important, only 29% have formal training in ACP facilitation.5 Various curricula have been proposed and implemented in the medical school setting to address this gap in training, but these interventions have met with varying degrees of success. To our knowledge no studies have evaluated an intensive, nationally recognized ACP training program among medical students.
Aim: To certify medical students in Respecting Choices® First Steps and Advanced Steps, and then measure the eYect of this training on student preparedness to facilitate ACP discussions.
Methods: Second-year students at the Loyola Stritch School of Medicine completed three inperson, half-day, simulation-based training sessions following the Respecting Choices® curriculum. Students who underwent the training completed both pre-and post-training surveys to assess student preparedness for ACP discussions in self-reported knowledge and comfort domains. They will also participate in a nine month follow up survey during their third year of medical school and an eighteen-month follow-up survey during their fourth year.
Results: Fourteen of fifteen enrollees completed certification in First Steps and Advanced Steps ACP facilitation. Initial survey results suggest improvement in self-reported ACP-related knowledge and increased comfort facilitating discussions. For example, prior to training no students agreed with the statement "I feel prepared to initiate ACP with patients and their families." Following training, all 14 students agreed or strongly agreed with this statement.
Conclusion: Despite the challenges of lengthy programs, formal ACP training should be considered for inclusion in medical school curricula.
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Oral Presentation 5: Characterizing Trends in Neurology Core Clerkship Evaluations

Authors: Mehta, S, Paul, A, Leung, D

Background: Students in the neurology core clerkship (NCC) often describe trepidation with learning the relevant content and skills. Pre- and post-NCC evaluations are crucial for understanding how to support students' learning goals and academic success.
Hypotheses/Aim: We characterized trends in medical student evaluations of the NCC, focusing on goal setting and confidence in clinical skills.
Methods: We analyzed de-identified data collected between 2022 and 2025 from pre- and post-clerkship evaluations. We analyzed the frequencies of rankings for confidence in neurologic examination,

history-taking, and oral presentations, top three clerkship goals, and post-clerkship satisfaction in achieving them, and confidence in the tools provided by the clerkship. Students answered questions on a Likert scale from 0 to 5, with 5 being the highest ranking.
Results: 276 students completed pre- and post-NCC evaluations. Students with fewer than three goals listed were excluded. The three most popular goals included "improving my neuro exam" (69%, 190/276), "generating a better neuro differential diagnosis" (39%, 109/276), and "recognizing/identifying neuro emergencies" (37%, 101/276). Most students ranked their satisfaction in achieving their goals at a 4/5 (51%, 142/276) or 5/5 (42%, 117/276) confidence (1/5=0, 2/5=0, 3/5=5%, 14/276). 41% reported a two-point increase in confidence in their exam skills (change in confidence: -1=1, 0=24, 1=91, 2=115, 3=42, 4=3). 42% reported a two-point increase in confidence in their history skills (change in confidence: -1=4, 0=29, 1=101, 2=116, 3=24, 4=2). 38% reported a two-point increase in confidence in their oral presentation skills (change in confidence: -2=1, -1=3, 0=24, 1=97, 2=106, 3=39, 4=6). 36% of students ranked their neurophobia at 3/5 (99), (1=29%, 79/276, 2=28%, 78/276, 4=7%, 20/276). 38% of students ranked the clerkship as providing appropriate tools for learning at 4/5 (105) or 5/5 (37%, 102) (0=0%, 1=0%, 2=1%, 4/276, 3=3%, 8/276).
Conclusion: The NCC led to measurable increases in student confidence in exam, history, and oral presentation skills. Most students rated high satisfaction with achieving their learning goals, which is linked to higher test scores and tendencies toward self-directed learning.

Oral Presentation 6: Equity in Evaluation: Assessing Gender Differences Amongst ACGME Milestones 1.0 Ratings (2014-2022)

Authors: Griffin, B, Osei, B, Agandi, L, Lifchez, S, Cooney, DS, Cooney, C

Background: Gender representation within plastic surgery residency programs has become more balanced in recent years. While these improvements are notable, previous studies on various surgical specialties, including plastic, general, vascular, and thoracic surgeries, have shown a difference in how men and women residents are evaluated and scored. These findings show gender-based disparities appear early in training and disappear by the end but may be influenced by implicit bias and could result in significant long-term negative effects on residents' overall training progress. We conducted our current study using the Accreditation Council for Graduate Medical Education (ACGME) Plastic Surgery Milestones 1.0 data to identify genderbased rating differences amongst plastic surgery residents from 2014-2022.

Aim: Evaluate whether gender differences exist in ACGME Milestones 1.0 evaluations for integrated plastic surgery residents.
Methods: After IRB approval, we analyzed de-identified ACGME Milestones 1.0 data from Plastic Surgery Integrated programs collected between 2014 and 2022. We excluded independent tracks, incomplete evaluations, and residents without self-reported gender data (15%). Variables included resident self-reported gender, postgraduate year (PGY 1–6), evaluation period (mid-year or end-year), and milestone domains. Milestone domains were categorized as Medical Knowledge, Patient Care, or Non–Medical Knowledge/Patient Care. We compared mean domain ratings by gender and year, as well as growth slopes across PGY 1–6 to assess competency progression over time. Comparisons were made using t-tests and linear regression.
Results: Of 1,886 integrated residents, a total of 410,690 milestone assessments were analyzed. Among these, 1,600 residents (706 female, 894 male) had self-reported gender data, representing 402,552 Milestones 1.0 assessments. We found no significant differences between Milestones scores for men and women across all Milestones and PGYS. The average slope differences for men and women demonstrated almost identical growth trajectories, and mean differences at the completion of training were also not statistically significant.
Conclusion: Our analysis of national ACGME Milestones 1.0 data for all integrated plastic surgery training programs demonstrates equitable scoring of men and women across all Milestones and PGYs.

Oral Presentation 7: Improving Resident Education in Ambulatory Oncology: A Novel Flipped-Classroom Curriculum for Internal Medicine Residents

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Background: There is a paucity of oncology curricula for internal medicine (IM) residents, particularly related to ambulatory practice. Adequate knowledge of oncology is crucial for internists as guideline-driven cancer screening and prompt diagnosis of new malignancy can improve patient outcomes. A targeted needs assessment of IM residents at Johns Hopkins Bayview (JHBMC) demonstrated that the majority of residents felt dissatisfied with current oncology curricula and did not feel confident in their knowledge of topics in ambulatory oncology.
Aims: To present and evaluate an innovative educational curriculum in ambulatory oncology for IM residents using a flipped-classroom format.
Methods: Using the results of a previously reported targeted needs assessment, a flipped-classroom approach was administered to PGY-1 IM residents at JHBMC, consisting of 2 asynchronous videos followed by a synchronous session applying concepts in case-based scenarios. Videos were created to focus on high-yield oncology topics for internists using results of the needs assessment, ABIM Blueprint and ACP MKSAP. Topics included lung, breast and colon cancer screening, diagnostic work-up of suspected malignancy, and performance status evaluation. Knowledge assessment surveys consisting of validated questions from ACP MKSAP were administered pre- and post-curriculum. Residents were asked to rate their satisfaction with the curriculum and confidence in curricular areas after the session.
Results: The curriculum was delivered to 22 IM residents. 68% (15/22) completed the pre- and post-curricular surveys. Knowledge improved from 61% to 73% (p = 0.012) after delivery of the curriculum. Areas demonstrating the weakest baseline knowledge were lung cancer screening and diagnostic evaluation of lung and colon cancer in the primary care setting. 95% of residents felt "extremely satisfied" with topics covered and 90% felt "extremely satisfied" with the format. 71% felt "significantly more confident" in initiating a diagnostic work up of cancer in the ambulatory setting.
Conclusions: Our flipped classroom curriculum supports the use of asynchronous videos followed by a case-based discussion to teach ambulatory oncology topics to IM residents. This offers a novel opportunity to address the knowledge gap among IM residency curricula regarding the management of patients with solid tumor malignancies and improve confidence in the care of these patients.