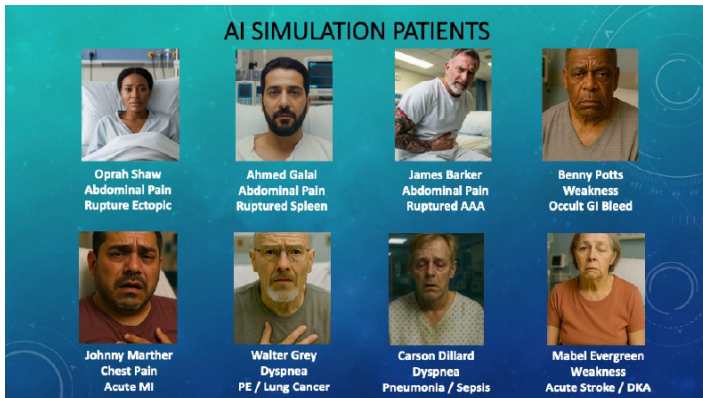


and communication skills. We also assessed comfort and perception of this novel simulation modality.

**Curricular Design:** Eight AI-simulated cases representing common emergency presentations (chest pain, dyspnea, abdominal pain, and weakness) were developed using avatars with diverse patient backgrounds, communication styles, and personalities (Image 1). Residents completed a pre-survey, simulation encounter, post-survey, and final assessment. The system automatically captured metrics for diagnostic sequencing, time to critical actions, and management decisions, followed by structured debriefing. This is an IRB-approved project.

**Impact And Effectiveness:** Eight PGY-1 residents completed all simulations. Across the first four cases mean Likert ratings ranged from 3.6–4.1/5, reflecting overall positive perceptions (Table 1). The largest pre–post gain was in comfort participating in simulation (+0.42), while other domains (perceived educational value, engagement, and clinical reasoning) remained stable. No statistically significant differences were observed, consistent with high baseline confidence and limited sample size.

This pilot demonstrates that AI-simulated patient encounters are a feasible, safe, and responsible modality for EM resident training.



Question	Mean Pre	Mean Post	Mean Δ (Post-Pre)	SD Δ	t-test p	Wilcoxon p
Q11	3.638	4.055	0.417	0.432	0.149	0.25
Q12	3.783	3.75	-0.033	0.461	0.896	1.0
Q13	3.824	3.71	-0.115	0.283	0.478	0.593
Q14	3.824	3.866	0.042	0.315	0.809	1.0
Q15	3.668	3.81	0.141	0.279	0.386	0.285

Question 11: Comfort participating in simulation-based training  
 Question 12: Perception of simulation as valuable for learning EM skills  
 Question 13: Confidence engaging in and contributing to simulation  
 Question 14: Comfort making mistakes in simulation  
 Question 15: Expectation that simulation improves clinical reasoning

## 19 Residency Training for Language-Concordant Care: How Effectively Can a Bilingual Emergency Medicine Residency Improve Outcomes for Patients and Hospitals?

Lincoln Sheets, Victor Cisneros

**Background:** Nearly 20% of the U.S. population

experiences limited English proficiency, placing them at heightened risk. In emergency medicine, timely and accurate communication is essential for patient safety. LEP patients experience longer ED stays, higher repeat visits, and increased adverse events. Elderly LEP patients are particularly vulnerable, compounding clinical risks. Despite federal mandates, existing interpretation services often fall short of patient needs. High costs and inconsistent quality plague current language access solutions.

**Curricular Design:** Residency Training for Language-Concordant Care proposes a proactive shift by training residents to provide language-concordant care. A structured, evidence-based bilingual curriculum is integrated into residency training. This curriculum spans three years, progressively building medical Spanish proficiency. It begins with foundational language skills and advances to complex clinical conversations. Digital tools, including an online learning platform and smart phrasebook, support the training. A professional development module ensures regulatory compliance in language access. A virtual compliance advisor provides real-time guidance on legal and ethical standards. Residents are prepared to achieve Qualified Bilingual Staff (QBS) status, with certification based on scenario-based assessments and rigorous testing. The curriculum supports both language acquisition and cultural competence. An interdisciplinary team with extensive clinical and educational expertise leads the project.

**Impact:** Our preliminary data show significant improvements in medical Spanish proficiency and pilot studies indicate high user acceptance of the smart phrasebook and digital modules. The project will evaluate language proficiency gains and assess regulatory compliance and resident self-efficacy. Key metrics include completion rates, time-to-certification, and patient satisfaction. Data collection spans multiple residency programs and clinical settings. The program’s scalability will allow broader adoption across healthcare institutions. Success will advance health equity and improve outcomes for LEP populations. This innovative approach aims to transform language access in emergency medicine nationwide.

## 20 Development of a Prehospital and Austere Medicine Elective

Bryanne Macdonald, Matthew Shapiro, Leah Manchester, Adrienne Wurzl, Matthew Senno, Julianne Earle, Brendan McFall, Meghann Zapcic-Desrochers, Seth Kelly, Liza Smith

**Introduction:** Subspecialty EM rotations provide students with exposure beyond a standard clerkship experience and broaden access for away rotations. They also allow programs to highlight unique strengths and engage with applicants. Existing resource-limited environment electives typically address wilderness medicine or EMS in isolation. To fill this gap, we created a fourth-year elective integrating wilderness

and prehospital care, providing comprehensive training across diverse austere and field settings.

**Educational Objectives:** The curriculum's 11 objectives targeted three domains: familiarizing students with resources and capabilities across prehospital and austere environments; preparing learners for both common and unique scenarios encountered in these settings; and demonstrating how these interests can be woven into a sustainable EM career.

**Curricular Design:** Following Kern's framework, a needs assessment revealed an opportunity for blended subspecialty training. A collaborative EMS, wilderness and education workgroup developed objectives, content, and assessment methods. The resulting four-week elective combined didactics, ride-alongs, simulation, wilderness field days, and ED shifts. Assessment included clinical evaluations, ride-along documentation, and participation in hands-on EMS and wilderness activities.

**Impact/Effectiveness:** Four fourth-year students completed the pilot rotation. Learners reported effectiveness in informing and solidifying career aspirations and satisfaction with educational strategies, particularly hands-on and clinical activities. Faculty stakeholders highlighted improved interdivisional collaboration and increased feasibility by pooling resources across subspecialties. Future enhancements include expanding content to include event and disaster medicine experiences and increasing the number of in-situ wilderness training opportunities.

## 21 Creation and Evaluation of a Departmental Junior Faculty Development Program

*Adam Janicki, Alexis Kearney*

**Introduction/Background:** Prior studies have demonstrated that the need for faculty development within Emergency Medicine (EM) is universally high, particularly in the domains of scholarship, leadership, and education. Early career EM physicians perceive a lack of educational resources in several faculty development areas. This project addresses these needs by creating a novel program focusing on academic and career advancement.

**Educational Objectives:** We created a junior faculty development program to provide a structured, collaborative, and social platform designed to engage junior physicians in career advancement activities that complement existing departmental efforts and iteratively adapted the program based on qualitative feedback.

**Curricular Design:** The program includes in-person meetings and self-directed learning. In-person meetings occur quarterly and offer structured time to address high yield topics including 1) networking, 2) work-life balance, 3) finding your academic niche and promotion, 4) research and medical education opportunities, 5) mentor/mentee relationships, and

6) financial literacy. The series includes an orientation for new faculty to Brown EM and provides organizational support for developing careers to complement clinical practice.

**Impact/Effectiveness:** The program was initiated in March 2025 and 4 sessions have occurred. Thus far, 29 of 54 invited members have attended in-person sessions. Feedback has been overall positive with most attendees reporting high overall satisfaction and a positive impact on department culture. Communication and attendance have been the biggest hurdles. Since the program's inception, we have created a departmental junior faculty listserv for easy and rapid communication. Additionally, we have advertised events during department and division meetings, as well via email to increase engagement in future events. Such a program could be adapted for junior faculty career development at other institutions.

## 22 Ultrasound Bootcamp Gamification

*Giannina Alvarez Calderon, Christiaan Myburgh, Tyler Moriarty*

**Introduction:** Point-of-care ultrasound (POCUS) is a core EM skill for diagnosis and procedures. ACEP recommends structured U/S training for all new EM interns to ensure foundational knowledge in image acquisition, interpretation, and application. Given variable prior exposure, it's essential to establish a common foundation in image acquisition, interpretation and clinical application.

**Educational Objective:** This innovation sought to introduce core EM U/S modalities, enhance technical skills, improve recognition of pathology, and boost resident confidence in POCUS.

**Curricular Design:** Interns begin with a 4-week bootcamp to build core EM knowledge before clinical shifts. A 2-day U/S bootcamp serves as the foundation of POCUS training, combining targeted lectures, hands-on scanning of standardized patients and pathology-based case reviews. Gamification encourages engagement in case competition (review of U/S clip with points given for correct anatomy and pathology identification), team challenges (interactive rounds combining scanning, image interpretation and procedural skills—Scan-Based Trivia, Prove-It Challenge, Physics/Knobology, Blindfolded FAST Challenge) and POCUS scavenger hunt (hands-on event requiring teams to obtain real-life patient scans from the department). Faculty oversaw activities, provided immediate feedback and reinforced U/S concepts during structured debriefs.

**Impact:** The gamified POCUS bootcamp had a strong positive impact on learners across all measured dimensions. Residents agreed with increased motivation (96%) and engagement (100%), compared to traditional educational methods. Residents also agreed that it provided a productive level