



**THE TEACHING ACADEMY**  
UVM LARNER COLLEGE OF MEDICINE

# **2023 Snow Season Education Retreat**

**Thursday, January 12 &  
Friday, January 13, 2023**

**PROGRAM**

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## 2023 Snow Season Education Retreat PROGRAM

Thursday, January 12 and Friday, January 13, 2023

### Thursday, January 12, 2023

TIME	SESSION	LOCATION
1:00-1:10 PM	<b>Welcome</b> <i>Katie Huggett, PhD</i> Teaching Academy Director Assistant Dean for Medical Education	<a href="#">Zoom Link</a> Meeting ID: 921 7366 3725
1:10-2:00pm	<b>Plenary</b> <b>Coaching in Medical Education: Why and How</b> <i>Karen Hauer, MD, PhD</i> Associate Dean, Competency Assessment and Professional Standards Professor of Medicine, UCSF	<a href="#">Zoom Link</a> Meeting ID: 921 7366 3725
2:15-2:45PM	<b>Oral Platform Presentations</b> <b>Moderator: Bridget Marroquin, MD</b> <ul style="list-style-type: none"> <li>• <b>CT Imaging in the Anatomy Lab</b>                          Will Brown, MS4; Sam Afshari, MS3; Megan Zhou, MS2; Ryan Walsh, MD; Abigail Hielscher, PhD</li> <li>• <b>Surgeon perceptions regarding disclosure of surgical errors at a single institution</b>                          Berna Buyukozturk, MD; Caroline Jirka, MD; Cate Nicholas EdD, MS, PA, FSSH; Alia Aunchman, MD</li> </ul>	<a href="#">Zoom Link</a> Meeting ID: 921 7366 3725

### 3:00 PM-4:00 PM      1st Breakout session

A	<b>Creating Psychological Safety in Clinical Settings</b> <i>William Burton, PhD</i> ; Director of Assessment, Evaluation & Quality Improvement Office of Medical Education, Albert Einstein College of Medicine <i>Hugh Stoddard, MEd, PhD</i> ; Assistant Dean for Medical Education Research Professor of Medicine, Emory University School of Medicine	<a href="#">Zoom Link</a> Meeting ID: 961 9837 9081
B	<b>Medical Education in the Age of Millennials!</b> <i>Mark Kulaga, MD</i> ; Assistant Professor, Western Connecticut Health Network - Department of Medicine	<a href="#">Zoom Link</a> Meeting ID: 968 4265 6501

**Friday, January 13, 2023**

TIME	SESSION	LOCATION
8:00-9:00 AM	<b>Poster Session with continental breakfast</b>	Grand Maple Ballroom, 4th Floor, Dudley H. Davis Student Center
9:00-9:15 AM	<b>Welcome</b> <i>Katie Huggett, PhD</i> Teaching Academy Director Assistant Dean for Medical Education	Grand Maple Ballroom, 4th Floor, Dudley H. Davis Student Center

**9:15-10:30AM 2nd Breakout session**

A	<b>Anti-Oppression Facilitation Fundamentals for the Small Group Experience</b> <i>Stephen Berns, MD</i>	Chittenden Bank Room, 4th Floor, Dudley H. Davis Student Center
B	<b>Setting the Stage: Optimizing Your Pre-Work to Meet Your Active Learning Goals</b> <i>Abigail Hielscher, PhD</i>	Williams Family Room, 4th Floor, Dudley H. Davis Student Center
C	<b>The Pearls and Pitfalls of Publishing in Medical Education</b> <i>Andrew Hale, MD; Molly Rideout, MD; Halle Sobel, MD; Bei Zhang, MD, PhD</i>	Grand Maple Ballroom, 4th Floor, Dudley H. Davis Student Center

**10:30-10:45 AM Break**

**10:45 -12:00 PM 3rd Breakout session**

A	<b>Putting Words into Numbers: Assessing the Assessors Using the Narrative Evaluation Quality Instrument (NEQI)</b> <i>Dennis Beatty, MD; Rosy Hill, MD</i>	Chittenden Bank Room, 4th Floor, Dudley H. Davis Student Center
B	<b>Medical Students at the Research Bench: Strategies for Effective Teaching in the Lab</b> <i>Chris Berger, PhD</i>	Williams Family Room, 4th Floor, Dudley H. Davis Student Center
C	<b>A Morning at the Museum: An Interactive Workshop Using Art to Foster Clinical Skills</b> <i>Jeremiah Dickerson, MD; Alice Boone, PhD</i>	Meet in Grand Maple Ballroom, walk to Fleming Museum

**12:00 PM Conference concludes.** Please complete the online evaluation. If you wish to receive CME credit, scan the QR code, login to [MyCredits](#), and complete the required documentation within 30 days of the retreat.



# Session Learning Objectives

## Plenary

### **Coaching in Medical Education: Why and How**

*Karen Hauer, MD, PhD*

- Describe the coaching approach in medical education.
- Distinguish coaching as central to competency-based medical education.
- Characterize how coaching promotes lifelong learning skills, motivation and self-regulation.

### **Creating Psychological Safety in Clinical Settings**

*William Burton, PhD & Hugh Stoddard, MEd, PhD*

- Define the construct of “psychological safety” in healthcare education.
- Recognize and apply Timothy Clark’s 4-stage model of psychological safety.
- Brainstorm and discuss interventions that could improve psychological safety for learners in the clinical environment.

### **Medical Education in the Age of Millennials!**

*Mark Kulaga, MD*

- Discuss the concept of “generations” and how they come together in the medical workspace
- Describe how the environment our residents and students were raised in shapes who they are today
- Provide tools for teaching and mentoring our millennial learners to help “bridge the gaps” that sometimes exist in medical education

### **Anti-Oppression Facilitation Fundamentals for the Small Group Experience**

*Stephen Berns, MD*

- Recognize the importance of creating brave spaces in small group settings
- Appreciate ways to maximize engagement in small group session and remove barriers that hinder participation
- Describe the importance of principled disagreement in discussions and how to promote it in small group settings
- Practice 2 anti-oppression facilitation skills

### **Setting the Stage: Optimizing Your Pre-Work to Meet Your Active Learning Goals**

*Abigail Hielscher, PhD*

- Identify barriers that students may encounter when reviewing pre-work materials
- Determine what material is essential versus what is nice to know during pre-work preparation
- Develop goals for your active learning session to serve as a guide for your pre-work material
- Identify alternative ways to deliver your pre-work materials
- Discuss how these alternative approaches for pre-work delivery can improve student engagement and preparation for your active learning session

### **The Pearls and Pitfalls of Publishing in Medical Education**

*Andrew Hale, MD; Molly Rideout, MD; Halle Sobel, MD; Bei Zhang, MD, PhD*

- Appreciate the value of academic writing and publication
- Address common challenges with medical education publishing
- Discuss strategies, resources, and tips for academic writing and publication

### **Putting Words into Numbers: Assessing the Assessors Using the Narrative Evaluation Quality Instrument (NEQI)**

*Dennis Beatty, MD; Rosy Hill, MD*

- Describe the elements of an effective narrative evaluation
- Review and understand the Narrative Evaluation Quality Instrument (NEQI)
- Demonstrate use of the NEQI and discuss how to give feedback to assessors

### **Medical Students at the Research Bench: Strategies for Effective Teaching in the Lab**

*Chris Berger, PhD*

- Understand the different types of research projects (e.g., fundamental, translational, clinical).
- Identify different goals for short research projects (e.g., exposure to the research process, exposure to a particular type of research, exposure to a particular laboratory, exposure to a particular technique or set of techniques).
- Identify strengths and weaknesses of research trainees and develop appropriate background work to set trainees up for success.
- Develop a training plan for different aspects of the research experience.
- Set appropriate expectations and benchmarks for a successful research experience.

### **A Morning at the Museum: An Interactive Workshop Using Art to Foster Clinical Skills**

*Jeremiah Dickerson, MD; Alice Boone, PhD*

- Describe the benefits of using the arts and humanities in medical education.
- Appreciate how art can invite reflection and collaborative meaning-making that can be used to cultivate critical thinking skills, tolerance of ambiguity, and perspective taking.

## CME Information

In support of improving patient care, The Robert Larner College of Medicine at The University of Vermont is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

The University of Vermont designates this live activity for a maximum of *5 AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Meeting Disclaimer:** Regarding written materials and information received, written or otherwise, during this Conference: The scientific views, statements, and recommendations expressed during this activity represent those of the authors and speakers and do not necessarily represent the views of The Robert Larner College of Medicine at The University of Vermont.

**Financial Interest Disclosures:** As a joint accredited organization for interprofessional education, The Robert Larner College of Medicine at The University of Vermont Medicine is required to disclose any real or apparent financial interests from ineligible companies from anyone who has control of the content (speakers, planners, moderators, reviewers).

- **None of the planners/speakers or CMIE reviewers have any relevant financial relationships with ineligible companies.**

**Support received from Ineligible Companies:**

- **We have not received any support for this activity.**

The Robert Larner College of Medicine at The University of Vermont requires that each speaker/planner/moderator participating in an accredited program to disclose any financial interest/arrangement or affiliation with a corporate organization that may impact on his/her presentation (i.e. grants, research support, honoraria, member of speakers' bureau, consultant, major stock shareholder, etc.). In addition, the faculty member must disclose when an unlabeled use of a ineligible product or an investigational use not yet approved for any purpose is discussed during the educational activity.

\*Having a financial interest or other relationship with a corporate organization, or discussing an unlabeled use of a ineligible product, may not prevent a speaker from making a presentation. However, the existence of the relationship must be made known to the planning committee prior to the conference, so that any possible conflict of interest may be resolved prior to the talk.

## Snow Season Education Retreat Workshop Presenters and Facilitators

Dennis Beatty, MD, Medicine\*

Chris Berger, PhD, Molecular Physiology and Biophysics

Stephen Berns, MD, Family Medicine\*

Alice Boone, PhD, Fleming Museum

William Brown, Medical Student

William Burton, PhD, Albert Einstein College of Medicine

Berna Buyukozturk, MD, Surgery

Jeremiah Dickerson, MD, Psychiatry\*

Andrew Hale, MD, Medicine\*

Karen Hauer, MD, PhD, University of California San Francisco

Abigail Hielscher, PhD, Neurological Sciences\*

Rosy Hill, MD, Medicine\*

Mark Kulaga, MD, Medicine

Bridget Marroquin, MD, Anesthesiology\*

Molly Rideout, MD, Pediatrics\*

Halle Sobel, MD, Medicine\*

Hugh Stoddard, MD, PhD, Emory University School of Medicine

Bei Zhang, MD, PhD, Pathology and Laboratory Medicine\*

### **Planning Committee**

Maura Barry, MD, Medicine\*

Dennis Beatty, MD, Medicine\*

Justin DeAngelis, MD, Obstetrics, Gynecology and Reproductive Sciences\*

Pamela Gibson, MD, Pathology and Laboratory Medicine\*

Kathryn Huggett, PhD, Medicine, The Teaching Academy\*

John Miller, MD, Medicine\*

\*Indicates Teaching Academy Member



## Teaching Academy New Members Inducted January 11, 2023

### **Master Teacher**

Robert Althoff, MD, PhD, Psychiatry  
Anjuli Bagley, MD, Radiology  
Maura Barry, MD, Medicine  
William Copeland, PhD, Psychiatry  
Matthew Geeslin, MD, Radiology  
Jennifer Hall, DO, Psychiatry  
Christina Wojewoda, MD, Pathology & Laboratory Medicine

### **Member**

Katherine Anderson, MD, Pediatrics  
Joanne Astill-Vaccaro, MD, Psychiatry  
Jennifer Covino, MD, Pediatrics  
Leigh Ann Holterman, PhD, Psychiatry  
Delia Horn, MD, Pediatrics  
Sara Pawlowski, MD, Psychiatry  
Gordon Powers, MD, Family Medicine  
Hibba tul Rehman, MD, Medicine  
Chantal Roy-Hewitson, MD, Neurological Sciences  
Katelyn Shea, MD, Medicine  
Devika Singh, MD, Medicine  
Maya Strange, MD, Psychiatry  
Jennifer Todd, MD, Pediatrics  
Aaron Wallman-Stokes, MD, Pediatrics  
James Wolf, MD, Anesthesiology

### **Protégé**

Caroline Jirka, MD, Surgery  
Aurasch Moaven, MD, Medicine  
Amy Schumer, MD, Obstetrics, Gynecology, and Reproductive Sciences

## Teaching Academy Members January 2023

### **Distinguished Educator**

Jan Carney, MD  
Melissa Davidson, MD  
Elise Everett, MD, MS  
Lewis First, MD  
Pamela Gibson, MD  
Ann Guillot, MD  
Mark Hamlin, MD  
Kathryn Huggett, PhD  
Charles Irvin, PhD  
Douglas Johnson, PhD  
Amanda Kennedy, PharmD  
John King, MD  
Judith Lewis, MD  
Karen Lounsbury, PhD  
Bridget Marroquin, MD  
Jesse Moore, MD  
Cate Nicholas, EdD, PA  
Mark Plante, MD  
Molly Rideout, MD  
Martha Seagrave, PA-C  
Halle Sobel, MD, FACP  
Douglas Taatjes, MD  
Rebecca Wilcox, MD

### **Master Teacher**

Kevin Abnet, MD  
Robert Althoff, MD, PhD  
Varun Agrawal, MD  
Dmitriy Akselrod, MD  
Naiim Ali, MD  
S. Elizabeth Ames, MD  
Scott Anderson, MD  
Anjuli Bagley, MD  
Maura Barry, MD  
Dennis Beatty, MD  
Patrick Bender, MD  
Stephen Berns, MD  
Anant Bhave, MD  
Richard Bounds, MD  
Deborah Cook, MD  
William Copeland, PhD  
Keith Curtis, MD

Robert D'Agostino, MD  
Thomas Delaney, PhD  
Kristen DeStigter, MD, FACR  
Katherine Dolbec, MD  
Stephen Everse, PhD  
Nathalie Feldman, MD  
Candace Fraser, MD  
Mark Fung, MD, PhD  
Matthew Geeslin, MD  
Erica Gibson, MD  
Karin Gray, MD  
Andrea Green, MD  
Laura Greene, MD  
Andrew Hale, MD  
Jennifer Hall, DO  
Pete Holoch, MD  
Friederike Keating, MD  
Clara Keegan, MD  
Jay Kikut, MD  
Patricia King, MD, PhD  
John Klick, MD  
Thomas Lahiri, MD  
Michael LaMantia, MD  
Christopher Morris, MD  
Janet Murray, PhD  
Macaulay Onuigbo, MD  
Deirdre O'Reilly, MD, MPH  
Mark Pasanen, MD  
Richard Pinckney, MD  
Lee Rosen, PhD  
Jay Silveira, PhD  
Jaspinder Sra, MD  
Emily Stebbins, MD  
Anne Stowman, MD  
Mitchell Tsai, MD  
Emmett Whitaker, MD  
Christina Wojewoda, MD  
Christa Zehle, MD  
Bei Zhang, MD, PhD

### **Member**

Wasef Abu-Jaish, MD  
Daniel Ackil, DO  
Abigail Adler, MD

Erik Anderson, MD  
Katherine Anderson, MD  
Joanne Astill-Vaccaro, MD  
Whittney Barkhuff, MD, PhD  
Jason Bartsch, MD  
Michael Bazylewicz, MD  
Mark Bisanzo, MD  
Carolyn Boscia, MD  
Bronwyn Bryant, MD  
LeeAnna Burgess, MD  
Kelly Butnor, MD  
Whitney Calkins, MD  
Michelle Cangiano, MD  
Eileen Cichoskikelly, PhD  
Leigh-Anne Cioffredi, MD  
Benjamin Clements, MD  
Joanna Conant, MD  
Jennifer Covino, MD  
Kelly Cowan, MD  
Justin DeAngelis, MD  
Jeremiah Dickerson, MD  
Anne Dougherty, MD  
Danielle Ehret, MD, MPH  
Navid Esfandiari, PhD  
Rebecca Evans, MD  
Borzoo Farhang, DO  
Jonathan Flyer, MD  
Tabitha Ford, MD  
Havaleh Gagne, MD  
Eric Ganguly, MD  
Garth Garrison, MD  
Matthew Gilbert, DO, MPH  
Kelsey Gleason, Sc.D.  
Emily Greenberger, MD  
Lydia Grondin, MD  
Deepak Gupta, MD  
Rebecca Guy, PhD  
Heather Herrington, MD  
Sally Herschorn, MD, FACR  
Abigail Hielscher, PhD  
Rosy Hill, MD  
Naomi Hodde, MD  
Breena Holmes, MD  
Leigh Ann Holterman, PhD

Delia Horn, MD  
Elizabeth Hunt, MD  
Alicia Jacobs, MD  
Jennifer Kelly, MD  
Sherrie Khadanga, MD  
Benjamin King, MD  
F. Louis Kirk III, MD  
George Kurien, MD  
Mark Lach, MD  
Julie Lahiri, MD  
Shea Lambirth, MD  
Skyler Lentz, MD  
Karen Leonard, MD  
Jana Lichtenfeld, MD, MPH  
Robert Low, PhD  
Lauren MacAfee, MD  
Katherine Mariani, MD, MPH  
Rachel McEntee, MD  
Isaura Menzies, MD  
Stephen Merena, DPM  
John Miller, MD  
Erin Morris, MD  
Katelin Morrissette, MD  
Sharon Mount, MD  
Roberta O'Brien, MD  
Carolyn Orgain, MD  
Sara Pawlowski, MD  
Julie Phillips, MD  
Gordon Powers, MD

Marios Prikis, MD  
Christian Pulcini, MD, MPH  
Delphine Quénet, PhD  
Lindsay Reardon, MD  
Hibba tul Rehman, MD  
Tamara Rimash, MD  
Elly Riser, MD  
Valerie Riss, MD  
Andrew Rosenfeld, MD  
Chantal Roy-Hewitson, MD  
Matthew Saia, MD  
Mirabelle Sajisevi, MD  
Marie Sandoval, MD  
Sarah Schlein, MD  
Joel Schnure, MD  
Geoffrey Sriver, MD  
Ramanathan Seshadri, MD  
Katelyn Shea, MD  
Arti Shukla, PhD  
Devika Singh, MD  
Matthew Siket, MD  
Paul Slavik, MD  
Fateme Sobhani, MD  
Kevan Sternberg, MD  
Maya Strange, MD  
Emily Hadley Strout, MD  
Jillian Sullivan, MD  
John Steele Taylor, MD  
Alissa Thomas, MD

Tina Thornton, PhD  
Jennifer Todd, MD  
Sarah Twichell, MD  
Michael Upton, MD  
Eline van den Broek-  
Altenburg, PhD  
Constance van Eeghen, DrPH  
Aaron Wallman-Stokes, MD  
Stanley Weinberger, III, MD  
Katie Wells, MD  
James Wolf, MD  
Leslie Young, MD

**Protégé**

Vishwanath Anekonda, MD  
Caroline Jirka, MD  
Alison Brandeis Johnson, MD  
Sarah Kelso, MD  
Aurasch Moaven, MD  
Autumn Sacklow, MD  
Amy Schumer, MD  
Sean Till, MD  
Kramer Wahlberg, MD  
Patrick Zimmerman, DO

**Awards for Teaching and Educational Excellence**  
Conferred at the Teaching Academy Induction and Award Ceremony  
on January 11, 2023

**Teaching Academy Awards**

**Innovation in Curriculum Development or Pedagogy**

L.E. Faricy, MD, Pediatrics

**Learner Assessment**

Bronwyn Bryant, MD, Pathology and Laboratory Medicine

**Educational Scholarship**

Molly Rideout, MD, Pediatrics

**Outstanding Contribution**

Anthony Williams, MD, Family Medicine

**Frederick C. Morin III, MD Educational Leadership Award**

Cynthia Forehand, PhD, Neurological Sciences

**Medical Group Education Awards**

**UVMHN Medical Group Education Grant**

PI: Anisha Rimal, MD, Pediatrics

Co-PI: Miller Celestin, RN, MSN, CEN, CMSRN, Department of Nursing

**Graduate Medical Education Educator of the Year**

Clara Keegan, MD, FAAFP, Family Medicine

**Continuing Medical Education Educator of the Year**

Jennifer Kelly, DO, Medicine

## DANA MEDICAL LIBRARY

# Library Information Sheet

*The only thing that you absolutely have to know, is the location of the library*  
~ Albert Einstein

## Welcome to the library!

Dana Medical Library has so much more to offer than ever before! Here is just a sampling of what is available to you. Visit our website to learn more: [dana.uvm.edu](http://dana.uvm.edu).

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One stop list for our most popular services.

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Connect to UVM Libraries' online books, journals and databases from anywhere. Information for on and off-campus access.

### Poster Support

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[dana.uvm.edu/research/consulting](http://dana.uvm.edu/research/consulting)

Dana offers services that assist with GIS (Geographical Information System) project design and Statistical Consulting.

### Systematic Review Service [researchguides.uvm.edu/reviews](http://researchguides.uvm.edu/reviews)

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### Get Full Text Articles

[illiad.uvm.edu/illiad/AtlasAuthPortal](http://illiad.uvm.edu/illiad/AtlasAuthPortal)

### Access from UVMCC

[researchguides.uvm.edu/clerkship/uvmccaccess](http://researchguides.uvm.edu/clerkship/uvmccaccess)

Connect to Dana's resources from the UVM Medical Center portal.

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## Poster Session Abstracts

### 1. Feasibility and perception of virtual reality for anatomy education in the high school classroom

Authors: Estelle Spear Bishop, PhD; Joel Sadler, PhD; Matthew Hasel; Erin Ruden; Miguel Angeles, MD, MPH; Beth Habelow, PT, DPT; Sakti Srivastava, MBBS, MS

Category: Innovations

#### Background

Virtual reality (VR) allows individuals to interact from afar with benefits over standard videoconferencing. The ENGAGE software permits development of virtual classrooms including a replica of the Stanford Clinical Anatomy Lab, with 3D anatomical models that can be manipulated and annotated in real-time. The utility of VR in a classroom setting is still being established, and this project investigated the feasibility and perceptions of attending a VR anatomy lab by high school students.

#### Methods

Two science teachers from Crespi Carmelite (all-male) High School in Los Angeles, California were loaned Oculus Quest 2 VR headsets for use in their Anatomy and Physiology (A&P) classes. Sixteen (n=16) students (age 17-18) were enrolled by informed consent/assent. Students completed a questionnaire before and after participating in two lectures involving the gastrointestinal and urinary tracts. Students self-selected into one of three groups; 1) participated in ENGAGE VR anatomy lab while wearing an Oculus VR headset; 2) participated in ENGAGE VR anatomy lab on their laptop or cellphone; 3) hybrid of 1 & 2.

#### Results

Students ranked VR models as more useful than plastic models ( $p<0.01$ ), textbook images ( $p<0.05$ ), and zoom lectures ( $p<0.001$ ). Students more strongly felt that “VR was better for in-class interaction with peers than using Zoom” after participating in VR ( $p<0.01$ ) and were more excited to learn about A&P ( $p<0.05$ ), were more interested in using VR in their future A&P courses ( $p<0.01$ ) and were more likely to recommend VR to other students for A&P education ( $p<0.01$ ). After the VR experience students felt more confident to describe the anatomy of the urinary system ( $p<0.05$ ).

## Poster Session Abstracts

### Discussion

This project established that VR is a feasible and well-received alternative for standard videoconferencing technology as a distance learning platform for high school science education. Future studies will expand upon the impact of VR on learning outcomes specific to anatomy education.

IRB Determination (if obtained) Stanford IRB eProtocol 56592

Please list any previous dissemination None

Disclosures None

Funding Pilot grant from the Stanford Graduate School of Education and internal funds from Stanford Division of Clinical Anatomy

## Poster Session Abstracts

### 2. CT Imaging in the Anatomy Lab

Authors: Will Brown, MS4; Sam Afshari, MS3; Megan Zhou, MS2; Ryan Walsh, MD; Abigail Hielscher, PhD

Category: Education

#### Background

Competency in radiology is an essential skill for graduating physicians. In Foundations of Clinical Sciences, imaging instruction is delivered via asynchronous modules. To improve students' competency in imaging, we incorporated post-mortem and normal CT scans into the anatomy lab. While others have used post-mortem CT imaging in anatomy, none to our knowledge have compared it with scans from living individuals or made DICOM viewers available at each student table.

#### Innovation

1. CT scans were uploaded on Pacsbin, a web-based DICOM viewer, accessible to each student table through use of an iPad in lab or personal devices at home.
2. Radiology residents assisted students with the use of Pacsbin and identification of structures in lab.
3. E-modules instructed students how to utilize common DICOM features, identify, and label structures.
4. Exam questions on CT images were administered via an iPad, allowing students to view the labeled structures in the sagittal, coronal or axial planes.

#### Method

Four cadavers were scanned using a Philips iCt 128 CT scanner. Students were placed into 3 CT groups: (1) cadaver being dissected, (2) cadaver not being dissected and (3) normal scan. Students viewed images of the chest and abdomen and will be assessed on:

1. Performance on anatomy practicals.
2. Ability to correctly identify structures on cross-sectional images.
3. Ability to correctly identify anatomical spatial relationships.
4. Perceptions of anatomical, pathological, and imaging knowledge.

Results will be weighed based on pre-matriculation student anatomical and imaging experience.

#### Results

Average student performance for imaging-based questions on the thorax practical was 85% while the performance was ~69% for imaging questions on the thorax written exam.



## Poster Session Abstracts

### **Discussion/Conclusions**

The intervention needs optimization. A lecture or workshop before lab and required assignments would likely improve participation and performance.

IRB: Study00002139.

Previous dissemination: Submitted to the NEGEA 2023 meeting.

Disclosures: N/A

## Poster Session Abstracts

### 3. Surgeon perceptions regarding disclosure of surgical errors at a single institution

Authors: Berna Buyukozturk, MD; Caroline Jirka, MD; Cate Nicholas EdD, MS, PA, FSSH; Alia Aunchman, MD

Category: Quality Improvement

#### Introduction

Surgeons assume risk of errors during every procedure performed. Unsurprisingly, rates of surgeon burnout correlate with higher rates of medical errors. Despite this interplay between errors and surgeon wellness, there is no error disclosure training specific to surgical trainees at most institutions. We hypothesize that specific training would not only alleviate anxiety surrounding error disclosure, but also improve performance.

#### Methods

A REDcap survey was conducted to examine general surgery attending and resident perceptions about disclosing surgical errors at a single institution. This will be followed by a performance assessment in which residents will be asked to disclose a surgical error to a standardized patient. The results of both survey and performance assessment will be used to inform the development of a simulation-based education workshop.

#### Results

Preliminary results from the 41 respondents to the survey include both attendings (27, 65.9%) and residents (14, 34.1%). Only 34.1% of respondents have had previous training in error disclosure. For nearly two-thirds of respondents (23, 63.9%), their most recent error occurred within the past year. The majority of respondents are comfortable with accepting responsibility for the error, explaining the medical facts of the error, and communicating a plan to prevent re-occurrence. Respondents were in most agreement that fear of losing patient trust, fear of personal failure, and fear that peers will question the respondent's competence are barriers to disclosure.

#### Conclusion

Our results are consistent with the current literature suggesting that most surgeons are comfortable with taking responsibility for an error and feeling the duty to disclose. However, in the next phase of our study, we plan to assess actual performance of error disclosure in a simulated scenario and analyze whether a provider's perception of comfort is associated with ability to perform a full disclosure in a clinical setting.

The authors have no disclosures to report.

## Poster Session Abstracts

### 4. Deciphering Value Based Care: A Qualitative Survey of Academic Physicians

Authors: Michelle Cangiano, Alicia Jacobs

Category: Research

#### Background

Value-based care (VBC) with high quality, integrated care teams and innovative practices is best practice in moving to the quadruple aim. Value-based care is seen as the solution to our health care problems. It has already shown to bend the cost curve and, fully realized, will likely support provider wellness. We engaged in a qualitative study exploring the desire and knowledge of the provider workforce, outlining key drivers in how providers find meaning in and energy for engagement in the transformation to value-based care.

#### Methods

Our study question was how well do Family Medicine physicians understand value-based care and its impact on their work? We interviewed family physician faculty and then analyzed the data qualitatively. We used grounded theory, with inductive coding methods and thematic analysis.

#### Results

Our results indicated that academic family medicine physicians understand value-based care and are looking forward to further evolving their care teams. Younger faculty learned value-based care and have only practiced in this model. However, family physicians do not really understand an accountable care organization, and how this can help support efforts associated with value-based care.

This study was IRB exempt.

The concept and data were presented at the 2022 Society of Teachers of Family Medicine Conference on Practice and Quality Improvement.

We have no disclosures.

## Poster Session Abstracts

### 5. Impact of a Mindfulness Program on a Physician Assistant Surgical Residency

Author: Richard Cassa, PA-C, MPAS, MBA

Category: Research

#### Background

Despite the growing focus on the phenomenon of trainee burnout, effective wellness programs combined into a trainee's curriculum are lacking. The purpose of this study was to explore the effects of a mindfulness program on a group of Physician Assistant Surgical Residents. The author's hypothesis is that participation in a structured mindfulness program will allow PA residents to understand their individual responses to stress and this may lead to lower burnout rates and improved employee satisfaction.

#### Methods

Twelve surgical Physician Assistant (PA) Residents participated in a structured mindfulness program initiated by their Program Director. The program consisted of four, fifty-minute in-person sessions, in the Spring of 2022. Each session consisted of a brief introduction, discussion of the science behind the meditation techniques, and time to practice the techniques. Participants completed two pre-course surveys prior to the first mindfulness session; the Maslach Burnout Inventory (MBI abbreviated) and the Response to Stressful Experiences Scale. Both surveys were administered as posttests two weeks following the final session.

#### Results

The pretest results provided a baseline measure of over 33% experiencing high burnout rates in the personal accomplishment domain. Over 41% of PA resident pretest responses reflected a high emotional exhaustion. Fortunately, over 83% of respondents responded with low depolarization rates. The baseline Response to Stressful Experiences Scale demonstrated high scores representing greater resiliency. Two post-course surveys showed an improvement in personal accomplishment and emotional exhaustion. Depolarization was slightly increased. The Response to Stressful Experiences Survey was unchanged.

#### Discussion

A mindfulness course is underway and survey responses will be collected at various points throughout the academic year. Further research is needed to explore the impact of a mindfulness program on rates of exhaustion, resiliency, and happiness.

IRB approval was not necessary for this study.

This study was presented in May 2022, as an abstract and poster.

No disclosures

## Poster Session Abstracts

### 6. A rare anatomical variation of the ulnar artery arising from the axillary artery: a cadaveric study

Authors: Molly Greenblat, Elle Cunningham, Shruthi Santhanakrishnan, Abigail Hielscher  
Category: Education

#### Background

A Superficial Ulnar Artery (SUA) is an anatomical variation in which the ulnar artery branches proximally to its typical branch site within the cubital region. Variations in branching of SUAs exist with possible embryological origins to the exact branching point. Current literature suggests SUA is a rare anatomical finding which is underreported but warrants additional investigation due to important clinical significance.

#### Innovation

This report presents a case of bilateral SUA found in a human cadaveric donor, along with the clinical and educational significance this finding.

#### Methods

During anatomical dissection of the upper limb, a case of bilateral SUA was discovered in an 87-year-old white male cadaver-donor. The donor's history is significant for coronary artery disease and peripheral vascular disease.

#### Results

The right SUA originated from the brachial artery superior to the cubital fossa, in the proximal half of the arm. The left SUA originated from the 2nd part of the axillary artery and continued down the medial aspect of the arm and forearm, independent from the brachial artery. The right SUA was much smaller than is typically encountered during cadaveric dissection.

#### Discussion/Conclusions

SUA variations must be taken into consideration during radiological or angiographic imaging of the forearm and especially during surgery. The SUA risks injury during reconstructive surgery involving forearm skin flaps and intra-arterial cannulation. The SUA also has important implications for artery harvesting during coronary bypass grafts. Often, the radial artery is used for coronary bypass and in the present case, the SUA would have likely been an insufficient source of blood to the forearm. Finally, injury to the SUA can lead to ischemia in the lower portion of the forearm.

IRB Determination: N/A

Previous dissemination: N/A

Disclosures: No conflicts of interest. Permission to report these findings was received from the donor's next of kin.

## Poster Session Abstracts

### 7. What's in the Secret Sauce? Investigating and Designing Interprofessional Education Best Practices for Serious Illness Communication Trainings

Authors: Naomi Hodde MD FACP; Kacey Boyle RN MSPC; Jennifer Hauptman MSW; Juvena Hitt MPH; Stephen Berns MD FAAHPM

Category: Innovation

#### **Objective**

This project seeks to investigate best practices in interprofessional education in serious illness communication trainings and identify facilitation behaviors and course curricular elements to increase inclusive and equitable learning environments for all disciplines.

#### **Background**

Training clinicians in serious illness communication skills has been shown to increase the likelihood of goal concordant, high-quality care. There is ample evidence to support the impact of communication skills training, but there remains a gap on how to create an inclusive and collaborative learning environment with small groups composed of professionals from varied disciplines.

#### **Innovation design**

A mixed methods study aimed at understanding the perspective of learners from diverse backgrounds and clinical expertise when participating in the TalkVermont serious illness communication training. We used survey and focus groups to gather data from course graduates.

#### **Methods**

Our project included a survey eliciting experience and comfort with interprofessional competencies. We conducted five focus groups. Our interview guide centered on opinions and insights into learner experiences.

Participants included: nurses, physicians, nurse practitioners, physician assistants, social workers, case managers, child life specialists, and chaplains. Following resultant curriculum changes, we will resurvey future course participants.

#### **Outcomes**

Our study involved TalkVermont graduates of eight disciplines. Initial review of survey data reveals that updating case introductions for role play will improve the inclusivity of our course. Qualitative analysis of focus group transcripts is currently ongoing and will be available within the next two months.

#### **Innovation strengths and limitation**

Strengths include the diversity of professions and varied clinical experience of participants. Limitations include that participants were self-selected. Additionally, the course structure of TalkVermont has varied over time (virtual vs in person, facilitator training, etc.). Learning experiences were not uniform.

#### **Next Steps**

We aim to create and disseminate a facilitation guide for serious illness communication training to assist educators in reducing barriers to inclusion and safety in the interprofessional learning environment at academic institutions nationwide.

## Poster Session Abstracts

### **8. A Needs Assessment for the Development of a Surgical Critical Care Curriculum for Residents**

Authors: Caroline Jirka, MD; Berna Buyukozturk, MD; Susan Steinemann, MD; Larson Erb, MD; John Klick, MD; Cate Nicholas, EdD, MS, PA

Category: Quality Improvement

#### **Background**

Management of critically ill patients is a requirement for general surgery and anesthesia resident during training, however; there is no critical care rotation requirement in medical school. Therefore, residents may enter residency with limited critical care experience. No structured surgical critical care curriculum exists at our institution. The aim of this project is to perform a needs assessment to assess the gap between resident perceived level of competence and expected clinical responsibilities in the surgical intensive care unit (SICU) at UVM Medical Center.

#### **Methods**

An electronic survey was designed using the SCORE critical care modules and ACGME case requirements as a basis for clinical conditions resident should be comfortable managing in the SICU. Surveys were administered to surgical and anesthesia residents who rotate through the SICU and to surgical and anesthesia critical care attendings. Residents were asked to rank the level of supervision they felt they required to manage clinical conditions. Attendings were asked to rank the level of supervision they expected residents to require and if residents met their expectations. This project met criteria for operational improvement activities and was exempt from IRB review.

#### **Results**

Preliminary results show a survey response rate of 72% of critical care attendings and 62.5% of residents surveyed. 60% of residents had completed a critical care rotation in medical school. Residents felt least comfortable managing cerebral vasospasm, endocrine dysfunction, and hepatic failure. PGY-1 residents were not meeting attending expectations in management of electrolyte derangement/acid base disorders and renal failure. PGY 2-3 residents were not meeting attending expectations in management of cardiogenic shock/cardiac failure. PGY1-3 residents were not meeting attending expectations for ventilator management.

#### **Discussion**

We are developing a formalized curriculum that includes in person lectures and clinical simulation for residents in the SICU.

## Poster Session Abstracts

### 9. Perceptions on a Global Health Curriculum Among Pediatric Residents

Authors: Tiffany Lao; Andrea Green MD; Anisha Rimal MD

Category: Innovations

#### Background

Global health (GH) has rapidly grown as a field of interest within pediatrics. However, much remains unknown regarding residents' perspectives on GH as a discipline and how they value its presence in general pediatric training. This study assessed the degree to which an introduction to the definition and relevance of GH changes or enhances residents' opinions of having a formal GH curriculum within their residency training.

#### Methods

Pediatric residents were surveyed regarding their opinions on the inclusion of a formal global health curriculum in their residency training. This was followed by a presentation addressing the formal definition of GH, its relevance in pediatric practice, and the trajectory of the field. Residents then completed a post-survey that re-assessed their previously stated opinions. Descriptive statistical analysis compared pre- and post- survey data to detect any significant changes in responses.

#### Results

13 out of 20 residents responded to the initial survey while 10 responded to the post-survey (50% response rate). Following the presentation on GH, a majority of respondents strongly agreed to the addition of a formal GH curriculum (60%), and that it would benefit the quality of their patient care at their current institution (70%) and regardless of their future practice location (50%). Most notable was an increase in respondents who strongly agreed that a formal GH curriculum should be available to all pediatricians (38.5% pre- vs. 60% post-).

#### Conclusions

The results of this study suggest that an introduction to the definition and relevance of GH favorably affects how pediatric residents view its value in their training and future careers. Survey data may additionally offer insight into how to best target learning objectives toward the interests and knowledge gaps of residents to ensure maximum engagement and benefit from the curriculum.



## Poster Session Abstracts

### 10. Optimizing Nursing Student Well-Being: A Longitudinal Study

Authors: Jane Nathan, PhD; Lili Martin, DNP, RN, PCCN

Category: Research

#### Background

Mental health issues among nursing students are on the rise with stress, anxiety and depression contributing to burn out, drop-out rates and suicide. COVID-19 has added complexity, with studies showing a particularly negative impact on younger nurses. Stress management trainings have been shown to positively impact healthcare practitioners by decreasing stress and anxiety and improving well-being. College seems an opportune time to teach resiliency strategies before nurses enter the workforce. This study evaluated the effectiveness of a stress training delivered to senior nursing students compared to a group of controls.

#### Methods

The Benson Henry Institute Stress Management and Resiliency Training (SMART) course was offered to all senior nursing students with 14 opting to participate and 18 choosing to be controls. The course was delivered virtually over 8 weeks in 1.5-hour sessions by a certified practitioner. Perceived stress, mindful awareness, anxiety, depression, resiliency, mindful practice and satisfaction were measured around the training and again one year later as the nurses entered the workforce.

#### Results

SMART participants began the study with greater previewed stress than controls. They experienced decreased stress, anxiety, and depression symptoms after the training which remained stable one year later. Conversely, control participants exhibited increased stress and decreased mindful awareness around the 8-week training, with significantly increased depression symptoms one year later. SMART was very well received by those who took it while in retrospect, the majority of controls regretted not taking it when they had the opportunity.

#### Conclusions

Inclusion of explicit stress management training during nursing school appears to promote the well-being of students with benefits holding a year later as they enter the workforce. Given the diverse challenges nurses currently face, teaching them such strategies during school seems crucial, not only to support their personal well-being but to support the field of nursing in general.

This study was supported by a Frymoyer grant and was deemed “not research” by the IRB.

The results of this study have been presented at various stages several times over the past two years, the most recent at the 13<sup>th</sup> Annual Nursing Research Evidence-Based Practice Symposium on Nursing Scholarship: Strengthening Resilience, Passion & Empowerment, on October 27-28, South Burlington VT. The poster won First Place by the committee at that symposium.

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### **Worthy of note**

The results of this study directly led to the creation of a 2-credit course at CNHS called Compassionate Care for Nurses, currently being taken as an elective by nursing students and is soon to be offered to graduate students. It is also being considered as a possible required course for all nursing students.

## Poster Session Abstracts

### 11. A Pilot Study of Residency Program Director Expectations in a Growing Pass/Fail Environment

Authors: Leland Nguyen; Elise Everett, MD; Nathalie Feldman, MD

Category: Education

#### Background

Command of medical knowledge, as measured by grades and performance on the USMLE Step 1, have been important objective criteria used by graduate medical programs to assess medical student readiness for residency. As more holistic methods of evaluating competency emerge and USMLE and clinical clerkship assessments become Pass/Fail, residency and medical school programs across the country are seeking to develop new assessment tools better aligned with residency program goals. The goal of this study is to gain a greater understanding of the desired competencies University of Vermont residency programs seek in their applicants and using this data to develop new assessment tools that more accurately align with the desired characteristics.

#### Methods

Residency program directors at the UVM Larner College of Medicine were invited to participate in interview/focus groups in which they were queried on the expected and desired traits and qualities of strong applicants to their respective programs. The questions were identical for all programs. Once a list of desired characteristics was obtained, participants were asked to rank them in order of most to least important.

#### Results

Results revealed that program directors most value the following 3 attributes:

1. critical thinking
2. teamwork
3. reliability and dependability

Many program directors expressed difficulty in assessing these characteristics using traditional methods, i.e., letters of recommendation and the MSPE (Dean's letter). They expressed interest in exploring the development of new methods of assessment.

#### Discussion

This preliminary data serves as a starting point to help inform medical schools and students on the most desirable attributes; they should be developing to improve success in the residency application match rates at the University of Vermont. Future research would be to extend the inquiry to program directors across the country to guide in the development of enhanced measures of the identified desirable traits and attributes.

Disclosures: None

## Poster Session Abstracts

### 12. Advancing Addiction Medicine in Undergraduate Medical Education: Piloting an Addiction Medicine Elective

Authors: Elly Riser, MD, MPH; Halle Sobel, MD; Charlie MacLean, MD

Category: Innovations

#### Background

Overdose deaths in the United States are rising, with over 107,000 lives lost in 2021. Stigma toward those with substance use disorders (SUDs) is widespread and leads to poor health outcomes. There are no requirements to teach addiction medicine topics in undergraduate medical education, however it is imperative that medical students understand treatments that improve morbidity and mortality.

#### Description

We developed a two-week addiction medicine elective at the Lerner College of Medicine (LCOM) to prepare students, regardless of specialty interest, to provide compassionate, evidence-based addiction care. It supplemented existing content in preclinical and clinical years. The elective was 70% didactics, films, and reading materials, and 30% community and clinical experiences. It was offered to fourth year students twice during the academic year and was part of the Area Health Education Centers Scholars' Program which supports education highlighting the social determinants of health, caring for vulnerable populations, and SUDs.

#### Methods

Prior to development of the elective, an anonymous needs assessment survey was obtained from students to determine interest in an addiction medicine elective. After the elective, participating students evaluated the course using a 7-question survey and an open-ended feedback session.

#### Results

Most students surveyed expressed interest in participating in an addiction medicine elective. Ten 4<sup>th</sup> year LCOM students participated in the elective between November 2021 and April 2022. All participants agreed or strongly agreed that learning goals were achieved, the material was relevant to their future careers, and their attitudes toward people with SUDs had changed because of the elective.

#### Discussion

This elective provided an in-depth, multifaceted study of addiction medicine topics. Students valued the small, interactive sessions with faculty, the community engagement, and direct patient care. Although the students were a self-selected group, they felt all medical students would benefit from exposure to the topics presented in this course.

## Poster Session Abstracts

### 13. Integrating Trauma-Informed Care and Doula Skills into the Ob-Gyn Clerkship

Authors: Alexa Rosenthal; Erin Morris, MD; Lisa Rubin; Marti Churchill

Category: Innovations

#### **Background**

Training in trauma-informed care is not yet standard in undergraduate medical education yet is critical to providing equitable care across populations. The Ob/Gyn clerkship provides clinical opportunities for medical students to apply a trauma-informed approach, particularly during prenatal care and on L&D. Birth doula and midwifery practices similarly prioritize birthing people's psychological and emotional well-being, recognizing that one's life experiences may affect interactions with healthcare providers. Through the Ob/Gyn department, we developed an interprofessional curriculum using tenets of midwifery and doula care to teach trauma-informed care and labor support practices for all medical students beginning their Ob/Gyn clerkship.

#### **Methods**

We are in the process of collecting outcome data from third year participants to assess how this session helped prepare them for their Ob/Gyn experience on labor and delivery, and if they have found the trauma-informed care approach to be helpful on subsequent clerkships.

#### **Results**

Anecdotally, we have heard that students feel more confident getting involved in the birthing process after attending this session.

This project will be presented in workshop format at the 2023 Association of Professors of Gynecology and Obstetrics (APGO) Faculty Development Seminar in Scottsdale, Arizona.

No disclosures to be made for this project.

## Poster Session Abstracts

### 14. Fostering the Qualities of Excellent Clinical Teachers in Medicine: A Pilot Observed Structured Teaching Encounter

Authors: Jamie Rowell, MD; Jessica VanNostrand, MD; Emily Greenberger, MD; Karen Dearborn, RN; Deirdre O'Reilly, MD

Category: Innovations

#### Background

The Accreditation Council for Graduate Medical Education (ACGME) includes teaching skills in its Core Competencies and Milestones. The Larner College of Medicine (LCOM) at the University of Vermont (UVM) offers a Residents, Students, and Fellows as Teacher (RAST) course twice annually to all fourth-year medical students, residents, and fellows. The effectiveness of the course has not yet undergone formal evaluation.

#### Methods

The RAST curriculum was evaluated for effectiveness utilizing the well-documented clinical teaching strategy of the Objective Structured Teaching Exercise (OSTE) [1-3]. The pilot OSTE session was held at the conclusion of the week-long elective to assess learners' ability to implement effective teaching strategies. Learners were instructed to prepare a simulated teaching session from choice of clinical scenarios. Performance was measured with feedback provided using the OSTE assessment form [3]. Following the exercise, participant perception of the activity was assessed via survey using a standard Likert scale (1=strongly disagree, 5=strongly agree).

#### Results

Pilot survey data show that all participants (n=8) strongly agreed that the OSTE experience was valuable and that feedback was useful for their teaching, both with a mean( $\pm$ SD) agreement of 5( $\pm$ 0). The teaching cases were felt to be an accurate representation of real-life teaching scenarios with a mean( $\pm$ SD) agreement of 4.88 ( $\pm$ 0.35). Learners agreed that the environment was conducive to practicing teaching skills with a mean( $\pm$ SD) rating of 4.88 ( $\pm$ 0.35).

#### Conclusion

Our data show that learners valued the OSTE experience in the development of teaching skills. In addition to this ongoing needs assessment, we plan to implement pre- and post-elective OSTE sessions in the RAST course to assess for interval change following participation. In the future, the elective will include a longitudinal workplace-based assessment to ensure long-term behavioral change for learners.

Previous disseminations: abstract submitted for 2023 NEGEA annual conference

Disclosures: none

#### References:

1. Zackoff, M., et al., *An Observed Structured Teaching Evaluation Demonstrates the Impact of a Resident-as-Teacher Curriculum on Teaching Competency*. *Hosp Pediatr*, 2015. 5(6): p. 342-7.
2. Zackoff, M.W., et al., *Objective Assessment of Resident Teaching Competency Through a Longitudinal, Clinically Integrated, Resident-as-Teacher Curriculum*. *Acad Pediatr*, 2019. 19(6): p. 698-702.
3. Oh, S., T. Servoss, and D. Wilkins, *Using the Objective Structured Teaching Encounter to Assess Resident Teaching Skills*. *Fam Med*, 2021. 53(6): p. 453-456.

## Poster Session Abstracts

### 15. Fostering Belongingness to Achieve a Successful Clinical Education Experience for a Student who is Deaf

Authors: Paula Smith; Justine Dee; Rachael Zeno; Michaela Cornbrooks

Category: Innovation

#### Background

Clinical education experiences (CEE) are crucial components of doctor of physical therapy (DPT) education. "Belongingness," or acceptance and value within the clinic, has been shown to have a significant impact on CEE outcomes. Belongingness supports engagement and fosters clinical competence. The significance of belongingness during CEE is further compounded for students with differing abilities and backgrounds. Healthcare affirms the need for providers to promote diversity, equity, and inclusion in education and practice. This requires DPT programs and clinicians to embrace the challenge of educating and preparing students of all capabilities to become successful clinicians.

#### Description of project/program/innovation

We describe an ethnographic approach illustrating a sense of belongingness fostered CEE success for a student who is deaf.

#### Methods

The clinical instructor (CI) and student minimized barriers while integrating accommodations. Weekly meetings were held to share feedback and brainstorm changes for the future. Team members were equally vital in promoting a successful clinical experience

#### Results

Themes were analyzed and interpretations identified. Challenges included the busy clinic environment, space, mask use during the pandemic, reduced lip reading, sign-language interpreter scheduling, and accuracy of interpreter translation within a medical context. Continued guidance and progress in overcoming barriers allowed the CI to support the student in reaching clinical competencies. The partnership between the student and CI created an environment for discussion and problem-solving, leaving space for independent challenge navigation. Exposure to novel experiences allowed the CI and DPT program to gain valuable strategies and insight into fostering belongingness, autonomy, and competency with a student who is deaf.

#### Discussion

Belongingness can impact clinical learning. A successful CEE for a DPT student who is deaf was accomplished through collaborative planning with stakeholders to address barriers and embrace learning opportunities. This reaffirms the importance of belongingness, especially as we work to create a more diverse and inclusive workforce.

IRB Determination: NA

Please list any previous dissemination (e.g., poster, abstract, demonstration, article), if applicable  
Educational Leadership Conference, Poster, October 2022

Disclosures: NA

## Poster Session Abstracts

### 16. Resident physicians' perceptions of telemedicine in a primary care setting

Authors: David Steinmetz, MD; Kamryn Jones; Amanda Kennedy, PharmD, BCPS; Halle G. Sobel, MD

Category: Research

#### Background

The healthcare system abruptly adapted to telemedicine during the coronavirus pandemic. Resident physicians lacked formal training in telemedicine. It is critical that this technology is effectively implemented and taught during residency training to ensure quality of care and education. The purpose of this study was to evaluate trainees' perception of telemedicine in a residency primary care clinic.

#### Methods

The study used convenience sampling of second- and third-year internal medicine residents at the University of Vermont Burlington Adult Primary Care Clinic. Three focus groups were conducted between April and May of 2021. An interview guide was created to study residents' experiences with logistics, educational value, impact on patient care, and impact on rapport-building. We used a line-by-line thematic analysis to develop and apply codes, resulting in themes, which were then divided into positive, negative, or neutral perceptions.

#### Results

Logistics, technology, and access were notable themes related to preparing for a visit. Physical exam, home environment, and communication were themes present during the actual visit. Quality of care and educational value were identified themes that were predominant after visits. Residents identified multiple positive and negative aspects across different themes. Technology was used optimally when telemedicine was as similar to an in-person visit as possible. Residents noticed inconsistent and inappropriate scheduling of patients for telemedicine. They perceived improved access to care using telemedicine. Communication and physical exam were significantly affected by the video interface, and at times felt unnatural. Residents reported that quality of care was contingent on appropriate use of telemedicine. They appreciated practicing telemedicine as trainees, recognizing it will likely be a permanent fixture of healthcare.

#### Conclusions

Our work supports prior literature recommending training in telemedicine communication and physical exam skills. While telemedicine improves access to care, it also creates new challenges that should be addressed intentionally on a systems level as part of graduate medical education.

IRB Determination: Not applicable

Previous Dissemination: Poster presentation at SGIM Regional Meeting, September 2022

Disclosures: None



## Poster Session Abstracts

### 17. Multimodal Rural Emergency Medicine Curriculum: Preparing Residents for Rural Practice

Authors: Ashley Weisman; Richard Bounds; Skyler Lentz; Martha Stevens

Category: Innovation

#### Background

Rural regions face emergency medicine (EM) physician shortages. Most training programs are located in cities and lack rural clinical experiences, didactics, and mentorship to excite and prepare residents for rural EM practice. There is limited data on optimal training methods for preparing residents for rural practice.

#### Description/Methods

We created a multimodal rural EM curriculum to prepare trainees to independently work in rural EDs at graduation. Our rural EM faculty working group, with extensive experience in rural practice, developed this curriculum based on two years of weekly case review from two rural critical access hospitals (CAHs). This 3-year program features clinical rotations, lectures, and simulation training. Rotations take place at rural CAHs in the northeast and remote indigenous hospitals in Alaska and New Mexico. Lectures and simulation focus on skills required in resource-limited solo practice, such as ventilator management without respiratory therapy, critical medication mixing with no pharmacist, obstetric emergencies, patient transfer logistics and priorities, leveraging telemedicine, and providing prolonged critical care when transport is unavailable. During each resident's elective quantitative data on patient volume, acuity, and procedures performed is collected; each rotation concludes with a qualitative evaluation of new skills, unique experiences, and limitations.

#### Results

Our rural EM curriculum has proven successful over the first two years. Quantitatively, residents see patient acuity and procedures similar to their academic center rotations but gain unique skills from the challenges of a rural environment. Qualitatively, 7/7 residents gained new skills and confidence, and found these experiences invaluable and career-defining with 86% choosing a rural practice.

#### Discussion/Next Steps

We plan to expand our program, sharing lecture and simulation content with other residencies, and opening additional rural clinical experiences to trainees nationwide, with the goal of bridging the gap between urban tertiary care training programs and rural emergency care needs.

IRB Determination: exempt

Previous dissemination: none

Disclosures: No disclosures

## Poster Session Abstracts

### **18. Interprofessional Case-Based Learning with DPT and DNP Learners: Perspectives and collaboration in the development of clinical reasoning skills**

Authors: Holly Whitcomb DNP, APRN, FNP-BC; Elizabeth Sargent PT, ScD, OCS; Paula Smith PT, MAS, DPT, GCS

Category: Innovation

#### **Background**

IPEC competencies are accreditation requirements for health science graduate programs to promote interprofessional team collaboration and improve health outcomes. This project aimed to compare and contrast elements of a clinical exam for musculoskeletal conditions seen in primary care by DPT and the DNP provider. Students collaborated on differential diagnoses and gained decision-making skills for treatment and referral.

#### **Description**

This project evolved from a request for DPT faculty to instruct DNP students in tests for musculoskeletal conditions. Faculty quickly identified a need for a co-curricular design for interprofessional clinical learning rather than skills instruction. By working in small interprofessional groups through cases presenting with musculoskeletal pain, the learners from each discipline could demonstrate their clinical expertise and teach important decision-making skills to the other discipline.

#### **Methods**

Students worked in groups of second-year DPT and third-year DNP students on patient cases. The IPEC Self-Assessment Tool was utilized to measure student self-efficacy on core IPEC competencies. The tool was administered pre- and post-educational sessions.

#### **Results**

The results were analyzed and evaluated to determine the impact of interprofessional education programs and collaborative practice on Triple Aim Outcomes.

#### **Discussion**

This is the third collaboration with an evolution of operationalizing IPEC competencies and developing the professional identity of DNP and DPT students. Students reported increased self-efficacy in

## Poster Session Abstracts

understanding their roles and benefits of collaborative practice. Results are utilized to enhance and update the curriculum to maximize competency achievement. Other areas of interprofessional curricular overlap identified include health policy, psychosocial aspects of care, and reimbursement, which will be further explored.

IRB Determination (if obtained) NA

Please list any previous dissemination (e.g., poster, abstract, demonstration, article), if applicable NA

Disclosures NA

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