



# THE TEACHING ACADEMY

Robert Larner, M.D. College of Medicine at The University of Vermont

## Snow Season Education Retreat

January 5-6, 2017  
Sheraton Hotel and Conference Center  
South Burlington, VT



## Welcome to the Snow Season Education Retreat

### January 5, Thursday

5:30 - 6:30 PM

#### **Reception and Poster Session**

Emerald III Promenade; Emerald III

6:30 - 8:30 PM

#### **Dinner, Induction Ceremony, and Medical Education Updates**

Kathryn N. Huggett, Ph.D., Teaching Academy Director

Frederick C. Morin, III, M.D., Dean

William B. Jeffries, Ph.D., Senior Associate Dean for Medical Education

Emerald III

### January 6, Friday

7:30-8:00 AM

#### **Registration and Continental Breakfast**

Emerald III Promenade; Emerald III

8:00-8:05 AM

#### **Welcome**

Kathryn N. Huggett, Ph.D., Teaching Academy Director

Emerald III

8:05-9:05 AM

#### **Keynote Session**

#### **Inside Out: Clarifying the Values and Assumptions that Drive Us as Educators**

Elizabeth Gaufer, M.D., M.P.H.

Emerald III

9:15-9:45 AM

**Two Oral Platform Presentations**, Introduced by Erica Gibson, M.D.

#### **FOCUSING ON THE FORMATIVE: No magic is necessary to**

#### **increase resident and faculty participation**

Stephanie Mann, M.D.

#### **Healing the Divide: Surgery Resident Simulation of Stapled and Hand-sewn Bowel Anastomosis**

D. George Ormond, M.D.

Emerald III

9:45-10:30 AM

#### **Break/Poster session with poster authors present**

Emerald III Promenade

10:30-11:45 AM

#### **Breakout Sessions**

#### **Creating Digital Learning Objects for Active Learning**

Laurie Leclair, M.D., Rajan Chawla, Gary Atwood, M.A., M.S.LIS.,

Stephen Everse, Ph.D., Catherine Ryan, M.Ed.

Emerald I

#### **Resident Remediation: How to Develop and Implement a Structured Plan**

Melissa Davidson, M.D., Stephanie Mann, M.D., Mark Levine, M.D.

Emerald II

#### **Adapting Table Top Simulations**

Tess Aulet, M.D., D. George Ormond, M.D.,

Cate Nicholas, Ed.D., M.S., P.A.

Diamond I

#### **Longitudinal Integrated Clerkship Session**

The LIC Working Group

Diamond II

## Welcome to the Snow Season Education Retreat

- 11:45-12:45 PM      **Buffet Lunch**  
Interest group tables and open seating in the ballroom  
Emerald III
- 1:00-2:15 PM      **Breakout Sessions**  
**Having Difficult Conversations Across Cultural Divides**  
Michael Upton, M.D. and Tiffany Delaney, M.A.Ed.  
Emerald I  
**Designing and Leading Active Classroom Experiences Part I**  
Stephanie Mann, M.D., Patricia King, M.D., Rebecca Wilcox, M.D.,  
Melissa Davidson, M.D., Bridget Marroquin, M.D.,  
Kevan Sternberg, M.D., Emily Stebbins, M.D.  
Emerald II  
**Utilizing Institutional Expertise and Resources to Enhance Medical  
Education Research**  
Alexander Yin, Ph.D., M.S., B.S., Alison Howe, M.S.  
Diamond I
- 2:15-2:30 PM      **Break**
- 2:30-3:45 PM      **Breakout Sessions**  
**Creating Digital Learning Objects for Active Learning  
(Repeat of AM session)**  
Laurie Leclair, M.D., Rajan Chawla, Gary Atwood, M.A., M.S.LIS.,  
Stephen Everse, Ph.D., Catherine Ryan, M.Ed.  
Emerald I  
**Designing and Leading Active Classroom Experiences Part II**  
Stephanie Mann, M.D., Patricia King, M.D., Rebecca Wilcox, M.D.,  
Melissa Davidson, M.D., Bridget Marroquin, M.D.,  
Kevan Sternberg, M.D., Emily Stebbins, M.D.  
Emerald II  
**MedEd Portal: How to locate free resources AND publish your own  
work in this peer-reviewed repository of the Association of  
American Medical Colleges**  
Cate Nicholas, Ed.D., M.S., P.A.  
Diamond I  
**Transforming your CV to the new College of Medicine CV format**  
Charles Irvin, Ph.D. and Erin Montgomery  
Diamond II
- 3:45-4:00 PM      **Wrap up and Evaluations**  
Emerald III

*Please check your email for an online evaluation of the program. Thank you for your participation and important feedback.*

*CME credit is available and claimed online. Directions to claim credit through the MyCredits system are available at the registration table.*

## CME Information

### CME

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

The University of Vermont designates this live activity for a maximum of 5 *AMA PRA Category 1 Credits*<sup>™</sup>. 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 CME 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.

**Interest Disclosures:** As an organization accredited by the ACCME to sponsor continuing medical education activities, The Robert Larner College of Medicine at The University of Vermont Medicine is required to disclose any real or apparent conflicts of interest (COI) that any speakers may have related to the content of their presentations.

### **No Interests to Disclose:**

**None of the faculty or planners of this activity has any possible conflicts to disclose.**

*\*Note: UVM CME Staff who reviewed this activity had no interests to disclose.*

### **Commercial Support Received:**

NONE

The Robert Larner College of Medicine at The University of Vermont requires that each speaker participating in a program designated for *AMA PRA Category 1 credit*<sup>™</sup> 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 commercial 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 commercial 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.

## Descriptions and Learning Objectives

### ***Inside Out: Clarifying the Values and Assumptions that Drive Us as Educators***

Elizabeth Gaufberg, M.D., M.P.H.

Learning objectives:

1. Identify key values and assumptions one holds about teaching and learning.
2. Consider how values and assumptions drive our actions as educators.
3. Distinguish between 'format driven' and 'principle-driven' educational choices.
4. Use awareness of values, assumptions and principles to enhance curriculum development and teaching practices.

### ***Creating Digital Learning Objects for Active Learning***

Laurie Leclair, M.D., Rajan Chawla, Gary Atwood, M.A., M.S.LIS., Stephen Everse, Ph.D., Catherine Ryan, M.Ed.

This session will briefly review essential steps in creating a successful active learning session based on current best practice guidelines. Participants will also have a hands-on opportunity to create and edit original digital educational content to demonstrate the use of OneNote and Camtasia software in the active learning process.

Learning objectives:

1. Describe the steps involved in creating an effective digital learning tool based on current best-practice guidelines.
2. Create and edit a digital learning tool using PowerPoint and OneNote.
3. Identify areas where effective digital learning tools can improve current teaching strategies.

### ***Resident Remediation: How to Develop and Implement a Structured Plan***

Melissa Davidson, M.D., Stephanie Mann, M.D., Mark Levine, M.D.

Principles of learner remediation will be applied in an active learning session where small groups will develop structured plans for a real case scenario. Although cases focus on resident remediation, these principles can be applied to all learners including medical students, graduate students and allied health professions students.

Learning objectives:

1. Distinguish between "remediation" and "probation".
2. Using a real case scenario, identify learner issues that are in need of remediation.
3. Apply principles of learner remediation in developing a structured plan that includes behavioral expectations, timelines, and consequences.

### ***Adapting Table Top Simulations***

Tess Aulet, M.D., D. George Ormond, M.D., Cate Nicholas, Ed.D., M.S., P.A.

Tabletop simulation provides both participants and facilitators with a vehicle to observe and assess a multitude of team and individual skills. During our workshop, participants will receive a brief overview of simulation best-practices, instructional design, then experience a tabletop simulation and debrief how to adapt simulation for assessment.

Learning objectives:

1. Describe basic simulation best practices and implementation skills.
2. Apply an instructional design template.
3. Explain the challenges and benefits of using tabletop simulation.
4. Describe how to adapt tabletop simulation for assessment.

## Descriptions and Learning Objectives

### ***Having Difficult Conversations Across Cultural Divides***

Michael Upton, M.D. and Tiffany Delaney, M.A.Ed.

This workshop will assist faculty who are experiencing difficult conversations in the classroom or other teaching environments with our medical students or help prepare faculty who have not yet had this experience prepare for it. Preparatory material will be sent out to participants in advance and in addition to a short presentation we will work in groups on cases based on events that have happened at the Larner College of Medicine at UVM. We know that the topics that make these conversations are often emotionally charged and one strategy to manage the associated anxiety is to avoid engaging the student in a way that can be helpful and promote a more effective learning environment and a more rewarding experience for faculty in their roles as mentors and teachers. We hope that attendees will not only feel more confident and comfortable in meeting these challenges, but that our workshop will be a fun and enjoyable way of learning new skills and perspectives in teaching this generation of students.

Learning objectives:

1. Recognize the importance of self-reflection when teaching students in classroom and clinical settings.
2. Define identity, unconscious bias, microaggression, and stereotype threat and their impact on cross-cultural communication.
3. Develop a personal course of action to manage expected anxiety in difficult conversations.
4. Describe at least three strategies to facilitate successful communication in challenging cross-cultural situations in teaching/learning environments.

### ***Designing and Leading Active Classroom Experiences Part I***

#### **Active Learning Session I: Meeting the Larner initiative 2020 deadline – active learning tools to use in your flipped classroom.**

Stephanie Mann, M.D., Patricia King, M.D., Rebecca Wilcox, M.D., Melissa Davidson, M.D., Bridget Marroquin, M.D.

During this session, attendees will be introduced to two popular active learning approaches: Problem Based Learning (PBL) and Debate. This structured session will allow attendees to participate and acquire skills to implement these two strategies to enhance active learning.

Learning Objectives:

1. Identify opportunities to incorporate these active learning tools into the classroom.
2. Compare and contrast different problem-based learning techniques.
3. Design and implement active learning style(s) into educational activities.

### ***Utilizing Institutional Expertise and Resources to Enhance Medical Education Research***

Alexander Yin, Ph.D., B.S., M.S., Alison Howe, M.S.

This workshop is designed to introduce LCOM faculty to the Office of Institutional Research at UVM, and what types of institutional data are collected at LCOM. Participants will learn about how institutional data and resources can be used to enhance medical education research projects, This workshop is best suited toward medical education researchers who are just starting out or who would like to learn more about institutional research and practical tips in using institutional data.

Learning objectives:

1. Workshop participants will become familiar with institutional research and how institutional data may supplement medical education research.
2. Participants will learn about UVM faculty expertise and other UVM and LCOM resources.
3. Participants will learn the process of requesting institutional data at UVM and LCOM.

## Descriptions and Learning Objectives

### ***Designing and Leading Active Classroom Experiences Part II***

#### ***Active Learning Session II: Activate your classroom – active learning techniques you can start using now!!!***

Stephanie Mann, M.D., Patricia King, M.D., Rebecca Wilcox, M.D., Melissa Davidson, M.D., Bridget Marroquin, M.D., Kevan Sternberg, M.D., Emily Stebbins, M.D.

During this session, participants are encouraged to bring educational topics to the experts and apply a variety of active learning techniques to engage learners. There will be four breakout groups: Team-based Learning; Problem-based Learning, Debate and Potpourri (Peer instruction, Just-in-time teaching, innovative games and audience response systems).

Learning Objectives:

1. Critique different curricular innovations to engage and activate your learners.
2. Experiment with different teaching styles for a specific educational endeavor.
3. Assemble resources for continued curriculum development, mentoring and collaboration.

### ***MedEd Portal: How to locate free resources AND publish your own work in this peer-reviewed repository of the Association of American Medical Colleges***

Cate Nicholas, Ed.D., M.S., P.A.

MedEdPORTAL publications is a peer reviewed publishing venue through which educators both receive recognition for their educational scholarship works and promote these works through worldwide dissemination. Accepted publications receive a formal citation and are considered pieces of educational scholarship that may be referenced in support faculty advancement decisions.

Learning Objectives:

1. Discuss examples of appropriate types of materials that can be published in MedEdPORTAL Publications.
2. Assess standards and criteria to meet MedEdPORTAL Publications guidelines.
3. Identify steps to submit an educational resource to MedEdPORTAL Publications.

### ***Transforming your CV to the new College of Medicine CV format***

Charles Irvin, Ph.D. and Erin Montgomery

This workshop session will provide you with background knowledge of the CV changes as well as give you the opportunity to ask specific questions regarding your CV.

Learning Objectives:

1. Recognize the importance of the CV.
2. Identify individual CV challenges.
3. Apply the new template to their CV.

## **Snow Season Education Retreat Workshop Presenters**

Gary Atwood, M.A., M.S.LIS, Dana Medical Library  
Tess Aulet, M.D., Surgery, Clinical Simulation Laboratory\*  
Rajan Chawla, Larner College of Medicine Technology Services  
Melissa Davidson, M.D., Anesthesiology\*  
Tiffany Delaney, M.A.Ed., Office of Diversity and Inclusion  
Elizabeth Gaufer, M.D., M.P.H., Harvard Medical School, Medicine  
Alison Howe, M.S., The Teaching Academy  
Charlie Irvin, Ph.D., Medicine\*  
Patricia King, M.D., Medicine\*  
Laurie Leclair, M.D., Medicine\*  
Mark Levine, M.D., Medicine\*  
Stephanie Mann, M.D., Obstetrics, Gynecology and Reproductive Sciences\*  
Bridget Marroquin, M.D., Anesthesiology\*  
Erin Montgomery, Office of the Dean  
Cate Nicholas, Ed.D., Family Medicine\*  
D. George Ormond, M.D., Surgery, Clinical Simulation Laboratory\*  
Catherine Ryan, M.Ed., Larner College of Medicine Technology Services  
Emily Stebbins, M.D., Anesthesiology\*  
Kevan Sternberg, M.D., Surgery\*  
Michael Upton, M.D., Psychiatry\*  
Alexander Yin, Ph.D., B.S., M.S., UVM Office of Institutional Research

## **Planning Committee**

Melissa Davidson, Anesthesiology\*  
Erica Gibson, Pediatrics\*  
Ann Guillot, Pediatrics\*  
Elise Hotaling, Radiology\*  
Kathryn Huggett, Medicine, The Teaching Academy\*  
Sherrie Khadanga, Medicine\*  
Stephanie Mann, Obstetrics, Gynecology and Reproductive Sciences\*  
Molly Moore, Pediatrics\*

\*Indicates Teaching Academy Member

**Teaching Academy  
New Members, January 2017**

**Master Teacher**

Lee Rosen, Ph.D., Assistant Professor, Psychiatry

**Member**

Sally Herschorn, M.D., Associate Professor, Radiology

Robert Hieronimus, M.D., Assistant Professor, Anesthesiology

Karen Leonard, M.D., Associate Professor, Pediatrics

Sarah McCarthy, Ph.D., Assistant Professor, Neurological Sciences

Stephen Merena, D.P.M., Assistant Professor, Orthopaedics and Rehabilitation

Julie Phillips, M.D., Assistant Professor, Obstetrics, Gynecology and Reproductive Sciences

Constance van Eeghen, Dr.P.H., Assistant Research Professor, Medicine

Richard Watts, M.D., Associate Professor, Radiology

**Protégé**

Tess Aulet, M.D., Resident, Surgery; Fellow, Clinical Simulation Laboratory

D. George Ormond, M.D., Resident, Surgery; Fellow, Clinical Simulation Laboratory

Lauren Pearson, D.O., Resident, Pathology and Laboratory Medicine

Mrinal Shukla, M.D., Fellow, Surgery

## UVM Larner College of Medicine Teaching Academy Members

### **Distinguished Educator**

Jan Carney, M.D.  
Melissa Davidson, M.D.  
Lewis First, M.D.  
Pamela Gibson, M.D.  
Ann Guillot, M.D.  
Kathryn Huggett, Ph.D.  
Charles Irvin, Ph.D.  
Ted James, M.D.  
William Jeffries, Ph.D.  
John King, M.D.  
Mark Levine, M.D.  
Judith Lewis, M.D.  
Robert Macauley, M.D.  
Cate Nicholas, Ed.D., PA  
Martha Seagrave, PA-C  
Douglas Taatjes, Ph.D.

### **Master Teacher**

Elizabeth Ames, M.D.  
Scott Anderson, M.D.  
Dennis Beatty, M.D.  
Patrick Bender, M.D.  
Marie Berg, M.D.  
Stephen Contompassis, M.D.  
Stephen Everse, Ph.D.  
Candace Fraser, M.D.  
Tim Fries, M.D.  
Mark Fung, M.D., Ph.D.  
Erica Gibson, M.D.  
Karin Gray, M.D.  
Laura Greene, M.D.  
Felix Hernandez, M.D.  
Patricia King, M.D., Ph.D.  
Jerry Larrabee, M.D.  
Laurie Leclair, M.D.  
Karen Lounsbury, Ph.D.  
Stephanie Mann, M.D.  
Bridget Marroquin, M.D.  
Christopher Morris, M.D.  
Richard Pinckney, M.D.  
Molly Rideout, M.D.  
Lee Rosen, Ph.D.  
Jay Silveira, Ph.D.  
Rebecca Wilcox, M.D.  
Christa Zehle, M.D.

### **Member**

Julie Adams, M.D.  
Erik Anderson, M.D.  
Maura Barry, M.D.  
Jason Bartsch, M.D.

Lynn Blevins, Ph.D.  
Kelly Butnor, M.D.  
Whitney Calkins, M.D.  
Deborah Cook, M.D.  
Kelly Cowan, M.D.  
Thomas Delaney, Ph.D.  
Jeremiah Dickerson, M.D.  
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Elise Everett, M.D., M.S.  
Lydia Grondin, M.D.  
Sally Herschorn, M.D.  
Robert Hieronimus, M.D.  
Elise Hotaling, M.D.  
Clara Keegan, M.D.  
Alison Krywanczyk, M.D.  
Karen Leonard, M.D.  
Michael Lewis, M.D.  
Robert Low, Ph.D.  
John Lunde, M.D.  
Sarah McCarthy, Ph.D.  
Isaura Menzies, M.D.  
Stephen Merena, D.P.M  
Jesse Moore, M.D.  
Molly Moore, M.D.  
Sharon Mount, M.D.  
Julie Phillips, M.D.  
Pamela Puthoor, M.D.  
Alan Rubin, M.D.  
Arti Shukla, Ph.D.  
Halle Sobel, M.D.  
Emily Stebbins, M.D.  
Kevan Sternberg, M.D.  
Jillian Sullivan, M.D.  
Mitchel Tsai, M.D.  
Suzanne Tucker, M.D.  
Michael Upton, M.D.  
Constance van Eeghen, Dr.P.H.  
Richard Watts, M.D.

### **Protégé**

Tess Aulet, M.D.  
Jacquelyn Grev, M.D.  
Patrick Hohl, M.D.  
Sherrie Khadanga, M.D.  
Rachel McEntee, M.D.  
Jill Miller, M.D.  
D. George Ormond, M.D.  
Charmaine Patel, M.D.  
Lauren Pearson, D.O.  
Thomas Rogers, M.D.  
Mrinal Shukla, M.D.

**Abstract:** Assessing Teamwork Competency in Orthopaedic Resident Candidates: Adding a Hands-on Station to the Interview Process

**Authors:** Ames, S. Elizabeth; Haimes, Mark; Ormond, D. George; Aulet, Tess; Feldman, Nathalie; Nicholas, Cate

**Introduction:** Excellence in interactions with other people is emphasized in orthopaedic resident education. Evaluating these skills could improve the residency application process. The UVMHC department of Ob/GYN implemented table-top simulation with success. We explored a formal trial with these hypotheses:

1. An interactive team-based activity will add value and interest to our applicants.
2. Scores generated will add information to our rank order process.
3. The table-top model can translate across specialties.

**Materials & Methods:** 50 applicants participated over two dates. Application scores (AS) were generated separately. Applicants met one-on-one with 7 committee members. 3 members interviewed without paperwork, and one (EA) had access to the AS. 7 individual scores created the total interview score (TIS). The provisional match list was generated from TIS and AS within 24 hours of the last interview. This is our standard process. Applicants completed the “Mr. Potato Head” exercise with experienced evaluators. One orthopaedic faculty member and one resident independent of the interview team observed the process. Applicants completed an anonymous survey.

A unique identifier was assigned to each applicant and all identifying information removed except AS and TIS (“Interview Day Score Sheet”). Simulation center staff used the same identifier to add the “Teamwork Score”. Applicants that the committee chose not to rank were left on that list. One author (NF) had access to the unique identifier list to allow comparison with official rank status.

**Results:** \*\*% met expectations, \*\*% exceed expectations, and \*\*% failed to meet expectations based on the criteria applied.

Previous data from OB/GYN were 56/102, 20/102 and 22/102.

\*\*% reported positive feedback. Previous data from OB/GYN was 71-94% positive.

Orthopaedic observers reported {high/mod/low satisfaction} with the process.

Applicants with the top 10 TIS: \*\*% met expectations, \*\*% exceed expectations, and \*\*% failed to meet expectations

Applicants who were not ranked: \*\*% met expectations, \*\*% exceed expectations, and \*\*% failed to meet expectations

Provisional match list {was unchanged/changed slightly/changed significantly} when TIS + AS + TS total was calculated.

**Conclusions:** The addition of this applicant assessment {was/was not} well accepted. The addition of the TS {would/would not} have changed our rank-order list. This {is/is not} consistent with the experience in OB/GYN and we {plan/do not plan} to continue to explore this effort.

**Abstract:** How to Prevent Your Flip from Flopping: Five Key Mistakes to Avoid When Switching to the Flipped Classroom Model

**Author:** Atwood, Gary

Contrary to popular perception, successfully adopting the flipped (or inverted) classroom model requires more than just recording videos of lectures for students to watch outside of class. This poster will highlight five key mistakes that teachers sometimes make when adopting the flipped classroom model, and outlines effective strategies to avoid them.

The following sources were analyzed for common factors identified as contributing to either the success or failure of a flipped classroom initiative:

- Flip Your Classroom: Reach Every Student in Every Class Every Day by Jonathan Bergmann and Aaron Sams, the two teachers credited with launching the flipped classroom movement
- The research studies and reviews listed in a bibliography on the Flipped Learning Network's Research, Reports, and Studies webpage
- Three recently published research articles from the medical literature that describe efforts to convert a course to the flipped classroom model.

These common factors were grouped into categories and the five most frequently repeating problems were identified. They are:

1. Failure to convince students to embrace the flipped classroom model
2. Failure to anticipate the time and costs associated with the flipped classroom model
3. Failure to incorporate effective assessment methods into the course
4. Failure to adopt appropriate technology for the information being taught
5. Failure to adjust the course structure to fit the new model

Recommended practices to address these problems were synthesized from the literature and will be presented in the poster.

This poster was accepted and presented at the 2016 Medical Library Association Annual Conference in May 2016.

**Abstract:** Development of an Assessment Rubric for EPA 5: Documenting clinical encounters during a Surgery Clerkship Clinical Skills Exam

**Authors:** Aulet, Tess; Moore, Jesse; Nicholas, Cate; Hulme, Michael

**Background:** The AAMC recently published Entrustable Professional Activities (EPAs) for undergraduate medical education. How the EPAs will be assessed and integrated into the curriculum remains to be determined. Effective documentation is an essential form of communication that promotes quality patient care and coordination of multidisciplinary teams. EPA 5 is “Document a clinical encounter in the patient record.” Currently, UVM students complete two post encounter notes during their surgery clerkship clinical skills exam, which are not being utilized for assessment. Our goal was to develop an assessment rubric for EPA 5 to be used during this exam.

**Methods:** Using the AAMC EPA Curriculum Developers guide, specific EPA 5 functions and behaviors that could be assessed, were identified and mapped to note objectives. These served as the blueprint for the rubric. Rater training curriculum materials were developed. Note writing curriculum materials were reviewed and standardized across the clerkship. Medical education, clinical experts, and students were involved in rubric review and development. Three raters who retrospectively reviewed student notes piloted the rubric. The rubric was presented to UVM Clerkship Director’s Committee and at the Surgical Education Research Fellowship fall meeting for review.

**Results:** We developed a rubric that assesses student’s documentation of history, physical exam, differential diagnosis, diagnostic justification, workup and EPA specific functions. The rubric generates a score that categorizes the note as entrustable, pre-entrustable, or below expectations. The rubric also assigns a global note score. See attached rubric.

**Discussion:** Assessment rubrics for EPAs are needed to address existing gaps. The development of this rubric demonstrates initial evidence to support content validity. We plan to prospectively apply the rubric to the surgery clerkship clinical skills exam post-encounter notes in order to collect additional validity and reliability evidence. Once validated, we hope to utilize it for feedback and assessment of EPA 5.

**Abstract:** Improving neonatal fellow evaluations through Use of entrustable professional activities.

**Authors:** Berg, Marie; Junjulas, Nicole

**Background:** The Accreditation Council for Graduate Medical Education (ACGME) and the American Board of Pediatrics (ABP) have been developing specialty-specific frameworks for assessing competence known as Entrustable Professional Activities (EPAs) to meaningfully evaluate trainees.

**Description:** We instituted EPAs as tools to guide feedback and evaluation of fellows, aiming to increase the percent of evaluations completed to >90% without any loss in the number of evaluations completed or assigned and to improve the timeliness and perceived usefulness of the evaluations.

**Methods:** We prepared assessments using 5 EPAs created by the ABP, including specific outcomes. Fellows were asked to assign these evaluations weekly to faculty members, who then completed these and provided verbal feedback to fellows within the week. We collected data on the numbers of evaluations completed and assigned and the time to completion.

**Results:** We assessed evaluation assignment and completion for the two academic years prior to instituting EPA-based assessments and then in 2 cycles thereafter. Before the change, an average of 59% of evaluations were completed within an average of 37 days. Following institution of EPA-based assessments, during cycle 1 the completion rate increased to an average of 81%, but the number assigned decreased. For cycle 2 we instituted in-person reminders to fellows, but this did not result in a significant change. Additionally, the percent (71%) of evaluations completed declined, though the timeliness improved to an average of 17 days. Subjective feedback was that this system provided more useful information to guide practice and facilitated face-to-face feedback, and that workflow issues were the key barrier.

**Conclusions:** We were able to improve timeliness of completion but did not meet our goal of increasing the completion rate to >90%. The perceived usefulness of the evaluations did improve. We will continue to track progress and identify and troubleshoot issues impacting this process.

**Abstract:** Creating Effective Team Members: Introducing Medical teams to Third Year Medical Students.

**Authors:** Bludevich, Bryce; Moore, Jesse

**Background:** During the surgery clerkship medical students work on many teams, often without prior instruction on how to be a successful team member. This study was conducted to identify areas for medical student education around team membership on the surgical clerkship.

**Methods:** General surgery residents at the University of Vermont Medical Center were surveyed along with third and fourth year medical students who had completed their surgery clerkship. The surveys measured characteristics of effective team members and leaders, along with basic skills MS3s are expected to acquire during their surgical clerkship.

**Results:** 64% of students (57/89) and 86% of residents (19/22) completed surveys. Residents identified willingness to help whenever possible (84%) as the most important quality for MS3s. Students selected being eager to help whenever possible (91%) as the trait that made them an effective team member. Treating all members of the medical team with respect (91%) and asking and being available for feedback (86%) were also identified by medical students as being positive characteristics. 31% of residents did not review expectations with medical students; while most medical students (95%) felt asking what tasks they could complete was helpful in making them an asset. Medical students identified specific skills and knowledge that would have helped them: proper scrub technique (50%), location of OR supplies (77%), and navigating patient charts (79%). Residents identified their expectations of MS3s: how to use the paging system (100%), operating hospital beds (89%), and sterile technique (79%).

**Conclusions:** Medical students and residents identify similar traits of successful team membership for medical students. However, residents' expectations are not always conveyed to medical students. Our survey identified several areas for pre-clerkship education of medical students to enable successful integration into the surgical team. We identified steps residents can take to facilitate medical student incorporation into the medical team.

**Abstract:** Coping with a Code: Providing an Academic Framework for Third Year Medical Students to Discuss Reactions to Adverse Outcomes

**Authors:** Brown, Alexandra; Ma, Melanie; Leclair, Laurie

**Background:** Advanced Cardiac Life Support training is provided to fourth year medical students with a focus on methodology. Third year students are, however, exposed to codes and not provided a framework with which to help them cope with the unfamiliar and often troubling outcomes. Current studies have only examined the efficacy of ACLS training as it pertains to clinical knowledge. We created a course in which students witnessed a simulated ACLS code, patient demise, but were then provided a structured academic framework with which to engage in a dialogue about their emotional and psychological reactions. We theorized that students would benefit both academically and emotionally from not only witnessing a simulated code prior to entering clinical training, but also having the opportunity to discuss their reactions.

**Methods:** Students were introduced to a “patient” who underwent a simulated code and death. Students wrote a 1-word response to summarize their initial reaction and then initiated a group discussion with a panel of faculty experts that focused on their perceptions of the experience. Students completed pre and post-session evaluations to gauge academic knowledge and personal perceptions of their emotional preparedness to witnessing a code.

**Results:** Preliminary data analysis shows all students who, prior to the session, did not know the role/actions of a code could identify these correctly after the session. Additionally, >90% of students felt the code simulation was “very helpful” in preparing them to witness a code and “strongly agreed” that the simulation was a valuable addition to their curriculum. Further analysis pending.

**Discussion/Conclusions/Lessons Learned (including implications and/or next steps):** The course has been incorporated into the University of Vermont College of Medicine’s third year curriculum. Data analysis will culminate this month. We hope to improve the course for the Class of 2018 and to make recommendations for other medical schools to implement a similar course for their third year students.

**Abstract:** Finding Our Common Ground: A Framework for Cultural Competency in Medical Education

**Authors:** Delaney, Tiffany; Hurwitz, Aaron; Jaworski, Diane; Upton, Michael; Tandoh, Margaret

Ongoing cultural competency development is imperative for physicians. As populations grow more diverse, physicians must continuously develop the knowledge, skills, and attitudes to provide effective care to a wide range of patients, with the ultimate goal of reducing health disparities. The Association for American Medical Colleges (AAMC) created the *Tool for Assessing Cultural Competency Training* (TACCT), which identifies 52 components to longitudinally integrate throughout a medical curriculum.

LCOM's *Finding Our Common Ground* (FOCG) pre-matriculation and orientation curriculum focused on fifteen TACCT components. The curriculum began on interview days and not only introduced prospective students to the unique features of the FOCG curriculum, but also described institutional commitment to cultural competency development as a driver of academic excellence. Prior to matriculation, students completed both a set of seven e-modules and the Intercultural Development Inventory® (IDI®), a cross-culturally validated assessment of intercultural competence. Finally, at orientation, students engaged in multiple reflective activities that focused on identifying characteristics of their own personal and social identities and those of their peers.

Participants evaluated each component of the FOCG curriculum via questionnaires. The interview day presentation received positive responses (93% rated excellent/good). Encouragingly, the IDI® was voluntarily completed by 93% of the class. Upon completion of orientation, 94% of students believed that completing the e-modules enhanced their cultural awareness, and overall 93% of students agreed they achieved FOCG's objectives. Based on the post-intervention questionnaire, students viewed their classmates as more diverse after the activities than they did beforehand. These results demonstrate that the tripartite curricular approach effectively enhanced student's knowledge of cultural competence terminology, the relevance of cultural sensitivity in patient care, and their ability to recognize dimensions of diversity in themselves and others. Based on feedback, revisions to the orientation curriculum are planned, including additional post-activity reflection and more in-depth data collection and analysis.

**Abstract:** Psychiatrists' Perspectives on Medical Student Competencies for Child and Youth Suicide Prevention

**Authors:** Delaney, Thomas; Howe, Alison

**Background:** Primary Care Providers (PCPs) are well positioned to play a role in screening, assessment, safety planning and obtaining additional care for people who are risk for suicide, many of whom receive medical care but are not actively receiving mental health services. The 2012 National Strategy for Suicide Prevention identifies several areas where PCPs can play an important role in suicide prevention, and makes the case that all healthcare professionals need to be educated specifically about suicide prevention. To date, an educational competency approach for suicide prevention in children, youth and young adults at risk for harming themselves has not been described in the literature.

**Description:** The current study aims to identify a set of suicide prevention educational competencies for caring for young people, and which can be integrated in the undergraduate medical curriculum.

**Methods:** We developed a semi-structured interview tool that us being used in a series of interviews with psychiatric providers. Data are being analyzed using a thematic content analysis approach.

**Results:** Preliminary results support that there are a set of discrete, observable behaviors essential to providing effective care for young people at risk for suicide. These include suicide screening approaches, risk assessment, lethal means safety and linking to additional resources. Suggested methods for teaching suicide related competencies include video-based learning modules and using simulated patients.

**Discussion:** The current study offers guidance for developing a set of medical education competencies related to effective suicide prevention care for young people. Following additional data collection and completion of data analysis, we expect the focus of the study to shift towards validating the competencies and testing different models for teaching them.

**Previous Dissemination:** None.

**Abstract:** Summer Medical School Prep Program: Giving undergraduate students a taste of medical school

**Authors:** Haynes, Laura; Tracy, Paula

Matriculation into medical school presents students with a number of changes from their undergraduate education to which they must adapt, including an emphasis on team-based learning and integration of coursework with clinical scenarios. Fifteen undergraduate and post-baccalaureate students were enrolled in an intensive four-week course that exposed them to demands of medical school. Students enrolled in the course were required to have satisfactorily completed general physics, organic chemistry, and a cell biology/biochemistry course. “Didactic sessions” were held in the morning and utilized team-based learning, team-based problem solving, and concept mapping to integrate students’ knowledge in a manner consistent with that tested on the revised MCAT and required for success in medical school. Topics covered included the biochemical regulation of intermediary metabolism, bioenergetics, genomics/genetics, immunology, the cardiovascular system, and the foundations of behavior—all of which integrated concepts from the prerequisite course work. Afternoon sessions were devoted to shadowing experiences at the University of Vermont Medical Center, performing virtual medical procedures in the Larner College of Medicine Simulation Center, working with standardized patients, and self-reflection sessions in which students were able to assess their personal motivations for pursuing a career in medicine. Students enrolled in the course were mentored by members of the Larner College of Medicine’s class of 2019 who shared their insight into the medical school application process and guided them through mock multiple mini interviews (MMIs). Finally, this non-credit course was not graded, but students received a personalized letter that they could potentially use as part of their application package. Anecdotally, several of the students enrolled in the course became self-aware of their weaknesses, which prompted them to postpone their scheduled MCAT testing dates. Overall, the first year of the program was very well-received by the students and deemed a success.

**Abstract:** Medication Management in the Elderly

**Authors:** Hill, Elizabeth Rosy; Menzies, Isaura

**Background:** Medication Management is a core competency for geriatric training in internal medicine (IM) residency training. Our session was designed to introduce internal medicine residents to the concepts of medication management and reducing polypharmacy.

**Description of project/program/innovation:** The “Beers Run” workshop is an interactive activity using a flipped classroom model. It was presented to five separate groups of IM residents during their primary care week rotation. The objectives included: ability to describe common problems in medication use among older adults (competencies 1 and 2) and ability to evaluate a medication list and recognize potential harmful medications and understand safe prescribing (competencies 2 and 3).

**Methods:** Residents work in teams of 2-3 (groups include at least one intern and one senior resident). They are presented with a case scenario and asked to modify an older patient’s medication list so that it is medically appropriate, practical and safe. To complete the task, participants obtained additional information from various sources. They must answer questions about safe prescribing in the elderly to receive each data source. The session concludes with a moderated discussion regarding the rationale for the final medication list.

**Results:** The session was very well-received. 29 residents completed an evaluation: 19 of them gave the highest rating of 5 (awesome), 9 gave a rating of 4 (very good). 21 residents indicated that the session was critically important to their training. The residents learned the principles of medication management in older adults and indicated that this session would positively affect their practice.

**Discussion/Conclusions/Lessons Learned:** The use of a flipped classroom and interactive application resulted in an engaged groups of learners. All members of the group had an opportunity to participate in the process. The competition element worked well with this group of learners as it kept teams “on track” and made the activity more fun.

**Previous Dissemination:** A modified version of this workshop was given at the AHEC Geriatrics Conference in Spring 2016. Participants included physicians, nurses, social workers, pharmacists and physical therapists. Again, the feedback was positive and participants indicated that this session would affect their practice in the care of older adults.

**Abstract:** Exploring Intent to Communicate in an Interprofessional Critical Care Simulation Setting

**Authors:** Howe, Alison; Leclair, Laurie

**Background:** Decisions to speak up can have crucial implications for critically ill patients. For best care, interprofessional teams need to function as a cohesive unit with clear leadership and open communication, often a challenge in academic institutions where interprofessional critical care teams are subject to high resident physician and medical student turn over. Communication skills in such teams are of even greater importance.

In an interprofessional critical care simulation project at the Lerner College of Medicine, researchers explored what led to the decision to either withhold information from the team or to speak up. The theory of planned behavior was used as a theoretical framework to facilitate understanding of choice to communicate.

**Methods:** A phenomenological qualitative research study was performed to explore how participants in an interprofessional critical care simulation made sense of their decision to communicate or to not communicate. Ten participants were recruited to and provided their thoughts and experiences in a semi-structured interview immediately following a simulation event and team debrief. Transcripts were coded using HyperResearch 3.5.1 and evaluated for themes.

**Results:** Interprofessional participants were separated into Physicians in Training (medical students and residents) and Professionals (nurses and respiratory therapists.) Positive attitude, clearly defined norms and positive perceptions of control were associated with positive communication intention. Professionals, particularly nurses, identified patient care and safety as a major driver of behavior. Physicians in Training expressed concern about professional hierarchy and norms associated with current role which often prevented a decision to communicate.

**Discussion:** While further research is warranted, both within the simulation environment and in the critical care setting, the current study suggests that decision to communicate varies by professional discipline and was influenced by attitude, defined norms and perceptions of control. Academic interprofessional critical care team training should likely take into account these communication barriers.

**Abstract:** FOCUSING ON THE FORMATIVE: No magic is necessary to increase resident and faculty participation

**Authors:** Mann, Stephanie; Burns, Timothy

### **ORAL PLATFORM PRESENTATION**

**Background:** A challenge faced by the CCC is ensuring that there is enough objective data to determine resident progress across all 28 milestones. One of the rate limiting factors has been accruing immediate faculty feedback of resident performance. Our goal is to develop a user friendly formative evaluation system that will ensure residents receive timely formative feedback and analyze the patterns of resident requests and faculty completion.

**Methods:** Retrospective study analyzing evaluation data from 2014-2016. In the 2015-16 academic year, a targeted approach (desk top icon, email links, PA reminders, faculty development session) was undertaken to improve resident and faculty understanding and completion of formative evaluations. The number of total evaluations requested during each academic year was calculated. The association between completed evaluations and milestone was determined (Chi square, Marascuilo post hoc multiple proportion comparison test).

**Results:** 2014-15: 103 formative evaluations were requested by our 12 residents. 2015-16: 1,420 evaluations were requested by our residents with a 68% faculty completion rate. The greatest number of evaluations requested by residents (table) was C/S (n=284, 20%) followed by Endoscopy (n=259, 18%), and NSVD (n= 193, 14%). 50% of all evaluations requested were related to patient care milestones (see figure). There was a significant association between the number of evaluations completed by faculty and milestone group (df =3, P=0.02). Post hoc analysis revealed that formative evaluations for medical knowledge were less likely to be completed by faculty (P=0.03) in comparison to those for patient care.

**Discussion:** Critical components for a successful formative evaluation system include active involvement by the program administrator as well as appropriate faculty and resident training to encourage buy in and participation.

**Abstract:** Can Interdisciplinary/ Interprofessional Simulation Based Team Training Improve Team Dynamics on Labor and Delivery?

**Authors:** Marroquin, Bridget; Feldman, Nathalie; Miller, Vincent; McClean, Kelley; MasiKars, Sarah; Jones, Bradley

The Labor and Delivery (L&D) unit at UVM Medical Center has long been considered a clinical and learning environment “hot spot” for tension and conflict among team members. L&D is an acute care setting in which the potential for unpredictable emergencies is pervasive. This can lead to a high stress environment and communication breakdown, which can negatively impact patient care.

The authors sought to determine if inter-professional/interdisciplinary activity involving simulation based team training (SBTT) improves communication, empathy, and confidence among L&D team providers. We recruited obstetric and anesthesiology residents and L&D nurses to participate in a four-hour SBTT. The simulation included two scenarios: (1) post-partum hemorrhage and (2) cardiac arrest in a parturient. All participants took part in each clinical scenario twice with team debriefing after every simulation exercise.

A post-simulation survey was administered at one week. A five-point Likert scale was utilized to compare crisis management skillset confidence pre- and post-SBTT. 77% of participants reported to be “more confident” or “much more confident” in their own skillset after the SBTT. When asked to evaluate team specific skills, 77% of all participants reported being “more confident” or “much more confident” with the OB team and 73% reported being “more confident” or “much more confident” with the Anesthesiology team. Similarly, 86% of all participants reported to be “more confident” with the nursing team.

More than 90% of participants reported an increased familiarity and trust of other team members after the SBTT. The majority of participants reported the experience provided team members with an opportunity for clarification of roles and responsibilities and improved collaboration.

SBTT improved confidence level, familiarity, and trust of team members. However, questions remain: does the impact of SBTT continue over time, can SBTT be extrapolated to real-life L&D team-based care and does SBTT improve patient outcomes on L&D?

**Abstract:** Drama Free Promotion and Tenure: An Innovative Approach to Faculty Education for the Reappointment, Promotion and Tenure Process

**Authors:** McCarthy, Sarah; Merrill, Liana; Irvin, Charles

The reappointment, promotion, and tenure (RPT) process is a daunting activity that most junior faculty do not think about early enough. Indicators of success in the RPT process are not openly discussed, but a recent study suggested that a formal mentoring program reduced the time to promotion. The Teaching Academy at the Robert Larner, MD College of Medicine at the University of Vermont implemented an RPT mentoring group to assist faculty with this process. The goal of this group was to provide junior faculty with necessary tools and knowledge to achieve promotion with as few complications as possible utilizing an active curricular approach. This 6-session, monthly mentoring program, comprised of senior and junior clinical and basic science faculty members, utilized collaborative mentoring and self-directed improvement to assist junior faculty in learning about the RPT process, including panel and group discussions, and hands-on workshops. The learning objectives were: 1) To provide faculty with necessary tools and knowledge to put together a successful promotion package; 2) To understand gaps in their Curriculum Vitae (CV) and learn how to fill those gaps; and 3) To develop a handbook to guide faculty with promotion and tenure. Most sessions were open to all College of Medicine faculty and recorded for asynchronous viewing. The program as a whole and each individual session were evaluated. The active multiple teaching modality approach to our curriculum was well received by the mentoring group. Overwhelmingly, the CV evaluation sessions were reportedly the most valuable sessions. The average mean score of helpfulness of each session was a 3.6 on a 4-point scale (1= poor, 4= excellent). We conclude that this RPT mentoring group empowered attendees to learn about the RPT process early in their careers and thus should lead to an increased likelihood of a successful promotion.

**Abstract:** Multidisciplinary Tumor Board: A Ready Made Tool for Competencies, Professionalism and Capturing Medical Student Interest in Pathology

**Authors:** Miller, Jill; Wilcox, Rebecca

**Background:** Medical educators are expected to build action plans to address new core competencies, including core entrustable professional activities (EPAs) and interprofessional education. Implementation of EPAs poses a challenge to medical educators who already have a full medical school curriculum.

**Description of project/program/innovation:** We hypothesized that medical student exposure and participation in pathology run multidisciplinary tumor boards (MDTB) will provide a practical means of addressing interprofessional education and EPAs without adding to the current curriculum.

**Methods:** Medical students will attend and participate in MDTBs depending on their level of education. First year medical students in an 8-week integrated course will be provided the opportunity to attend one of four MDTB sessions. Medical students who take a Pathology elective will attend and present at least 2 patient cases at MDTBs. The pathologist will provide verbal and written feedback to the medical students. The medical students will provide feedback by completing an anonymous survey.

**Results:** All MDTB sessions offered to first year medical students filled to capacity. MDTBs received the highest rating (4.8/5.0) in "Teaching Effectiveness" of all evaluated methods in the course. Based on survey results, the majority of first year medical students reported that MDTBs provided role modeling of EPAs and interprofessional/multidisciplinary teamwork. They also reported enhancement of their medical education. All fourth year medical students on Pathology electives successfully presented at MDTBs and have been provided documentation of their involvement in interprofessional education and participation in EPAs.

**Discussion/Conclusions/Lessons Learned:** MDTB is an effective means of both introducing early medical students to EPAs as well as role modeling these EPAs. We will continue to gather data from 4th year medical students presenting at MDTBs to see whether MDTBs provides a further role of allowing MS4 students to demonstrate their own ability to perform EPAs while actively participating in interprofessional patient care.

**Please list any previous dissemination:** UMEDS Plenary I Session at the APC Annual meeting 2016

**Abstract:** Determinants of hospital length of stay for tPA treated ischemic stroke patients transferred to University of Vermont Medical Center from community hospitals

**Authors:** Ohanyan, Sargis; Eastman, Lauren; Kenney, Sharon; Bingham, Peter

**Background:** Several models of acute ischemic stroke care have been designed with the aim of supporting decision making regarding tPA administration in community hospitals<sup>1-3</sup>. Using such a model, University of Vermont LCOM (UVMMC) has been expanding its collaborative care with community hospitals throughout rural Vermont and upstate New York. In an effort to improve stroke care, various patient-based and clinician-oriented stroke educational materials have been disseminated in local community hospital.

**Objective:** The aim of this study was to examine factors influencing length of stay of tPA treated transfer patients from community hospitals to UVMMC.

**Method:** We conducted chart reviews of acute ischemic stroke transfer patients from community hospitals to UVMMC from March of 2014 to April of 2015 and from October of 2015 to June of 2016. Patients who received tPA therapy were placed into 3 groups based on hospital length of stay and analyzed.

**Results:** Statistically significant differences were observed in initial NIHSS at UVMMC and distance of referring hospital from UVMMC between groups with maximal vs extreme length of stay; 95% CI of NIHSS 3 – 9 and 13 – 21 respectively, and 95% CI of distance from UVMMC 46.4 – 67.9 (mi) and 70.5 – 97.5 (mi) respectively. Differences in age, gender, and acute stroke symptoms to tPA therapy between the groups were not statistically significant.

**Discussion:** Our results suggest future educational efforts should be aimed particularly towards remote community hospitals. Future plans of stroke QI project includes tele-sessions with ER providers in collaborating community hospitals. Future research in this area will address the alternative explanations in observed differences in distance and NIHSS between groups with minimal and extreme hospital length of stay.

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**Abstract:** Healing the Divide: Surgery Resident Simulation of Stapled and Hand-sewn Bowel Anastomosis

**Authors:** Ormond, D. George; Aulet, Tess; Nicholas, Cate; Forgiione, Patrick

**ORAL PLATFORM PRESENTATION**

**Introduction:** Various changes within the hospital environment have necessitated an increase in surgical education through simulation for high-level surgical resident training. The American College of Surgeons (ACS) and Association of Program Directors in Surgery (APDS) Surgical Skills Curriculum has been found to be utilized at curiously low levels despite being comprehensive, detailed, and well organized. With many of the barriers identified in the literature, we present the effective implementation of resident simulation sessions of a Stapled Bowel Anastomosis and a Hand-Sewn Bowel Anastomosis.

**Methods:** Scheduled within our resident education curriculum are specific simulation sessions. The ACS/APDS Surgical Skills Curriculum contains modules describing learning objectives, teaching materials, set up and execution instructions, and Objective Structured Assessment of Technical Skills (OSATS) tests. These modules require surgical equipment, much of which is already purchased or commonly found in simulation centers, but innovative solutions have been crafted to acquire those resources that could help reduce cost and functionality barriers. Participants and faculty feedback was collected using a structured online feedback tool and written evaluation.



**Results:** We have currently completed one simulation. Survey results indicate that residents strongly enjoyed the session, found it educational, and improved their skills, regardless of level of training but especially for junior residents. With the implementation of the modules, we have found a number of strategies to overcome various barriers encountered and effectively execute the ACS/APDS curriculum. At the time of the Snow Season Educational Retreat, we will have completed and have evaluation data for the two anastomosis sessions.

**Conclusions:** Bowel anastomosis is a complicated surgical task and simulation learning facilitates the transition of knowledge to the operating room. The ACS/APDS Anastomosis modules have various barriers including monetary cost, faculty time commitments, and physical resource limitations. With economical and innovative solutions, we have managed to adapt and create a rewarding learning experience for our residents.

**Abstract:** “ Uncomfortable, yet incredibly important” : creating conversations about race and bias among first year medical students

**Authors:** Rosen, Lee; Manigrasso, Jayne; Hurwitz, Aaron; Streck, Joanna

**Background:** Race-related bias – unconscious and otherwise – is a critically important issue in medicine. This study examined a curricular method, carried out early in the first year of medical school, designed to help students increase awareness of their biases and reflect on them in facilitated small groups. This approach – using students’ Implicit Association Test results as a launching point in small-group discussion – has not appeared in the literature to date. Prior research is also limited in the evaluation of similar curricula.

**Description:** 120 first-year medical students at the University of Vermont are enrolled in a year-long, small-group course designed to create reflective discussion about professionalism and emotionally-complex topics in medicine. To prepare for discussion, students were instructed to take the Implicit Association Test (IAT) and read several pertinent articles. Students then engaged in a semi-structured discussion facilitated by their faculty preceptor.

**Methods:** Following the session, all students completed an anonymous evaluation, which included Likert-type survey questions about session objectives and a prompt for spontaneous, open-ended comments. Comments underwent thematic analysis, and a coding scheme was developed to capture themes.

**Results:** 86% of the students indicated that this session encouraged them to think about their own unconscious bias, and 80% indicated that it prompted them to have discussions they would not have otherwise had with their classmates. 64% reported that the IAT played a crucial role in their discussion. Thematic analysis of open-ended comments is pending and will elaborate on questionnaire responses.

**Conclusion:** Use of the IAT, combined with facilitated small-group discussion, encouraged students to contemplate and discuss race and bias with their peers. This method for promoting exploration of racial bias early in students’ medical education appears useful and perhaps lays the groundwork for continued dialogue in addition to promoting a just and patient-centered approach in the clinical sphere.

**Abstract:** Grand Friends Student-Senior Companion Program

**Authors:** Strout, Emily; Jacobs, Alicia; Hutchins, Jeanne

**Background:** Vermont is ranked as the “2nd oldest” state in the nation<sup>1</sup> and persons 65 years and older make up 12.7% of the Chittenden County population and 16.4% of the population in the state of Vermont.<sup>2</sup> Despite these figures the supply of geriatricians falls short. Social engagement is an important component of successful aging and social activity is associated with reduced risk of developing disability.<sup>3</sup> Vermont’s growing older adult population calls for increased programs and services that address social isolation and support healthy aging.

**Aim:** The study aimed to evaluate how implementation of a student-senior companion program affects participants, with the hope of increasing medical student interest working with a geriatric population and connect generations to also help build a sense of community and address social isolation in older adults.

**Methods:** Medical students and older adults were recruited from Chittenden County to participate in a student-senior companion program and then asked to complete a survey that assessed student interest in geriatrics, older adult social connectedness, and the program. 39 surveys were completed and analyzed and SPSS was used for statistical analysis.

**Results:** 45% of students felt like the program should be integrated in the medical curriculum and 80% reported the program was a valuable learning experience and helped them gain more respect and understanding of older adults. 77.8% of residents reported the program allowed them to connect to younger adults in the community and 68.5% felt less lonely. Participation did not increase interest in specializing in geriatrics, however participation increased interest in working with a geriatric population overall.

**Discussion:** A student senior-companion program can help foster interest, respect and understanding among future physicians for the aging population, address social isolation in older adults, and connect generations within a community.

Previous Poster presentation: “Grand Friends Student-Senior Companion Program” Poster

**Abstract:** Does a capstone course in pediatrics prepare graduating medical students for pediatric residency?

**Authors:** Suppan, Catherine; Rideout, Molly

**Background:** Capstone courses for graduating medical students (“boot camps”) are becoming increasingly common at medical schools across the country. The courses are well received, and implementation is feasible, though the efficacy of specialty-specific capstone courses in preparing students for residency has not been well studied.

**Description:** This project aims to compare the level of self-rated competency and confidence among pediatric interns who completed a capstone course in pediatrics as fourth-year medical students to those who did not.

**Methods:** Pediatric interns who graduated from the University of Vermont College of Medicine in 2015 completed an anonymous survey after the first month of residency rating their level of competency and confidence across three domains: 1) clinical management, 2) procedural skills, and 3) communication skills. Authors examined the difference between those who participated in a three-day capstone course in pediatrics and those who did not.

**Results:** A total of 10/13 (77%) interns responded to the questionnaire: five participated in the capstone course and five did not. Individuals in both groups completed similar fourth year rotations. Those who completed the capstone course reported higher levels of competency and confidence across all domains, with a greater difference demonstrated in clinical management and procedural skills than in communication skills (Table 1). Both groups rated fourth year rotations as the most important aspect of preparation for intern year (80% of each group), and every student who completed the capstone course rated it as either the first (20%) or second (80%) most important aspect.

**Discussion:** Specialty-specific capstone courses offered to graduating medical students can be an effective way to increase interns' level of competency and confidence during early residency. Procedural skills and clinical management scenarios may be better suited for a capstone course curriculum than communication skills. Further study is needed to examine objective measures of capstone course efficacy.

**Abstract:** Feasibility of a Web-Based Operating Room Management Curriculum in Surgical Training Programs

**Authors:** Tsai, Mitchell H.; Davidson, Melissa L.; Leahy, Danielle T.; Ames, S. Elizabeth; Adams, Julie E.; Plante, Mark K., Millay, Donna J., Durham, Susan R.

**Background:** Anesthesiologists have primarily sought and completed fellowships in perioperative management, resulting in an imbalance in faculty expertise in operating room management in the professional fields.

**Description of project/program/innovation:** We studied the implementation of an educational web module for surgical residents in orthopedics, urology, neurosurgery, general surgery, and otolaryngology.

**Methods:** Each resident completed a validated pre- and post-module test consisting of multiple-choice, open-ended, and definition questions. The residents then registered and completed a one-hour web module, "OR Management Basics: Right Case, Right Time, Right Cost," which is a component on the continuing education section of the website for the American Society of Anesthesiologists. We used the number of correct answers to calculate the following statistic using SPSS (IBM, Armonk, NY) software: the pre- and post-module exam scores between each group (examined with dependent t-testing).

**Results:** Seven orthopedic and surgical residents completed the pre-test and subsequent post-test after the completion of the one-hour web module. The mean (SD) pre-module test score for the group was 6.14 ( $\pm$  1.07) and mean post-module test score was 9.36 ( $\pm$  0.75). A comparison using a paired t-test showed a statistically significant difference between the pre-module and post-module test scores ( $P = 0.001$ ) as seen in Table 1.

**Discussion/Conclusions/Lessons Learned (including implications and/or next steps):** With the introduction of the Perioperative Surgical Home, future perioperative physicians need to understand health care delivery at a system-based level and recognize that the largest driver of the cost of surgical care is the operating room. Program Directors should recognize that there will be organizational, financial, and operational barriers to the implementation of a perioperative management curriculum. For instance, residents may not be available for clinical responsibilities and there may be little room in the current residency curriculum. Finally, we believe that the web-based module can serve as an educational platform for program directors and faculty members interested in teaching perioperative management.

## Registrant List as of 12/29/16

First	Last	Department
Abigail	Adler	Pediatrics
Elizabeth	Ames	Orthopaedics
Scott	Anderson	Pathology
Gary	Atwood	Dana Medical Library
Tess	Aulet	Surgery
Frank	Bailey	EMMC Medical Education
Dennis	Beatty	Primary Care Internal Medicine
Marie	Berg	Pediatrics
Ellen	Black	Neurological Sciences
Lynn	Blevins	Medicine (Public Health)
Bryce	Bludevich	Department of Surgery
Leah	Burke	Pediatrics
Kelly	Butnor	Pathology
Raj	Chawla	COMTS
Deborah	Cook	Pathology and Laboratory Medicine
Kelly	Cowan	Pediatrics
Melissa	Davidson	Anesthesiology
Tiffany	Delaney	Office of Diversity & Inclusion
Tom	Delaney	Pediatrics
Claude	Deschamps	UVMMG
Jeremiah	Dickerson	Psychiatry
Stephen	Everse	Biochemistry
Nathalie	Feldman	OBGYN
Nicholas	Ferrentino	Medicine/GI
Lewis	First	Pediatrics
Cynthia	Forehand	Neurological Sciences
Garth	Garrison	Medicine
Laurie	Gelles	Technology Services
Pamela	Gibson	Pathology
Erica	Gibson	Pediatrics
Ann	Guillot	Pediatrics
Emily	Hadley Strout	internal medicine
Laura	Haynes	Biochemistry
Felix	Hernandez	EMMC Medical Education
Robert	Hieronimus	Anesthesiology
Rosy	Hill	Internal Medicine/Geriatrics
Mia	Hockett	Internal Medicine
Alison	Howe	Teaching Academy
Katie	Huggett	Medicine, The Teaching Academy
Aaron	Hurwitz	OMSE
Charlie	Irvin	Medicine
Alicia	Jacobs	Family Medicine
Diane	Jaworski	Neurological Sciences
Bill	Jeffries	Medical Student Education
Jill	Jemison	COM Technology Services
David	Kaminsky	Medicine-Pulmonary

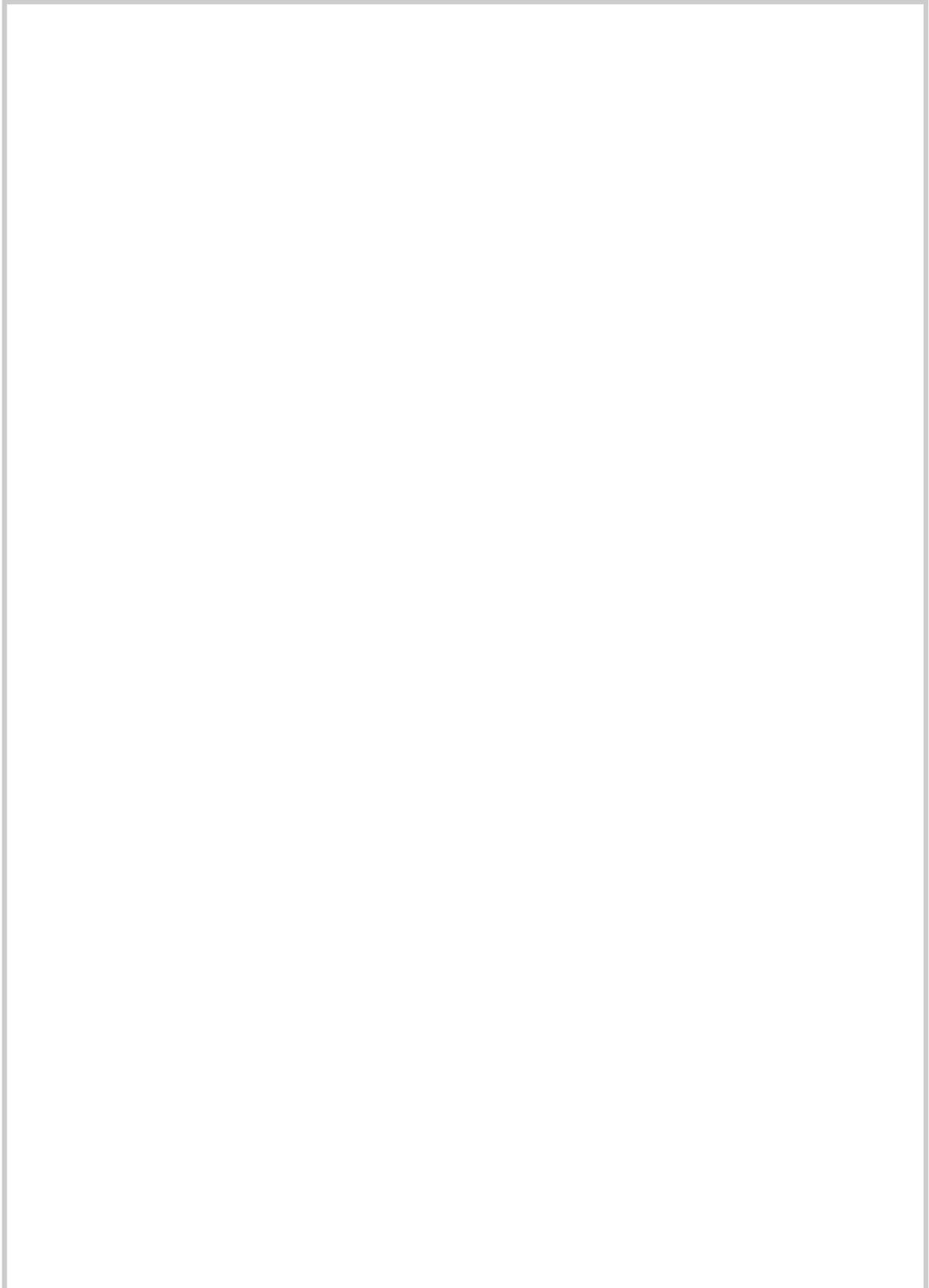
## Registrant List as of 12/29/16

First	Last	Department
Clara	Keegan	Family Medicine
John	King	Family Medicine
Patricia	King	medicine
Lyndelle	LeBruin	Pathology & Laboratory Medicine
Laurie	Leclair	Medicine
Mark	Levine	Medicine
Judith	Lewis	Psychiatry
Karen	Lounsbury	Pharmacology
Jayne	Manigrasso	UVM COM
Stephanie	Mann	OBGYN
Bridget	Marroquin	Anesthesiology
Sarah	McCarthy	Neurological Sciences
Cathy	Mclsaac	Nutrition
Tristan	McNamara	Graduate Medical Education (UVMCMC)
Mariah	McNamara	Surgery
Isaura	Menzies	GIM and Geriatrics
Stephen	Merena	Orthopedics and Rehabilitation
Liana	Merrill	Neurological Sciences
Jill	Miller	Pathology
Vincent	Miller	Anesthesiology
Erin	Montgomery	Dean's Office
Jesse	Moore	Surgery
Sharon	Mount	Pathology
Keith	Nagle	Neurological Sciences
Cate	Nicholas	Clinical Simulation
Janet	Nunziata	Center on Aging
Sargis	Ohanyan	College of Medicine
George	Ormond	Surgery
Rodney	Parsons	Neurological Sciences
Mark	Pasanen	Medicine
Lauren	Pearson	Pathology & Laboratory Medicine
Christina	Pedro	Anesthesiology
Julie	Phillips	OB/GYN
Richard	Pinckney	Internal Medicine
Pamela	Puthoor	Pediatrics
Colleen	Quinn	Family Medicine
William	Raszka	Pediatrics
charlotte	Reback	Family Medicine
Molly	Rideout	pediatrics
Valerie	Riss	Pediatrics
Lee	Rosen	Psychiatry
Catherine	Ryan	Larner College of Medicine Technology Services
Martha	Seagrave	Family Medicine
Mrinal	Shukla	Vascular Surgery

## Registrant List as of 12/29/16

<b>First</b>	<b>Last</b>	<b>Department</b>
Jay	Silveira	Biochemistry
Emily	Stebbins	Anesthesiology
Kevan	Sternberg	Surgery
Catherine	Suppan	Pediatrics
Ben	Suratt	Medicine
Paula	Tracy	Biochemistry/OMSE
Mitchell	Tsai	Anesthesiology
Michael	Upton	Office of Diversity and Inclusion
Constance	van Eeghen	General Internal Medicine-Research
Katie	Warther	College of Medicine Student
Richard	Watts	Radiology
George	Wellman	Pharmacology
Robert	Wheeler	Grossman School of Business
Rebecca	Wilcox	Pathology
Alexander	Yin	Office of Institutional Research

# Snow Season Education Retreat Notes

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For more information about The Teaching Academy, please contact  
Teaching Academy Coordinator, Randi-Lynn Crowther  
Randi-Lynn.Crowther@med.uvm.edu

Or visit:  
[www.med.uvm.edu/teachingacademy](http://www.med.uvm.edu/teachingacademy)