

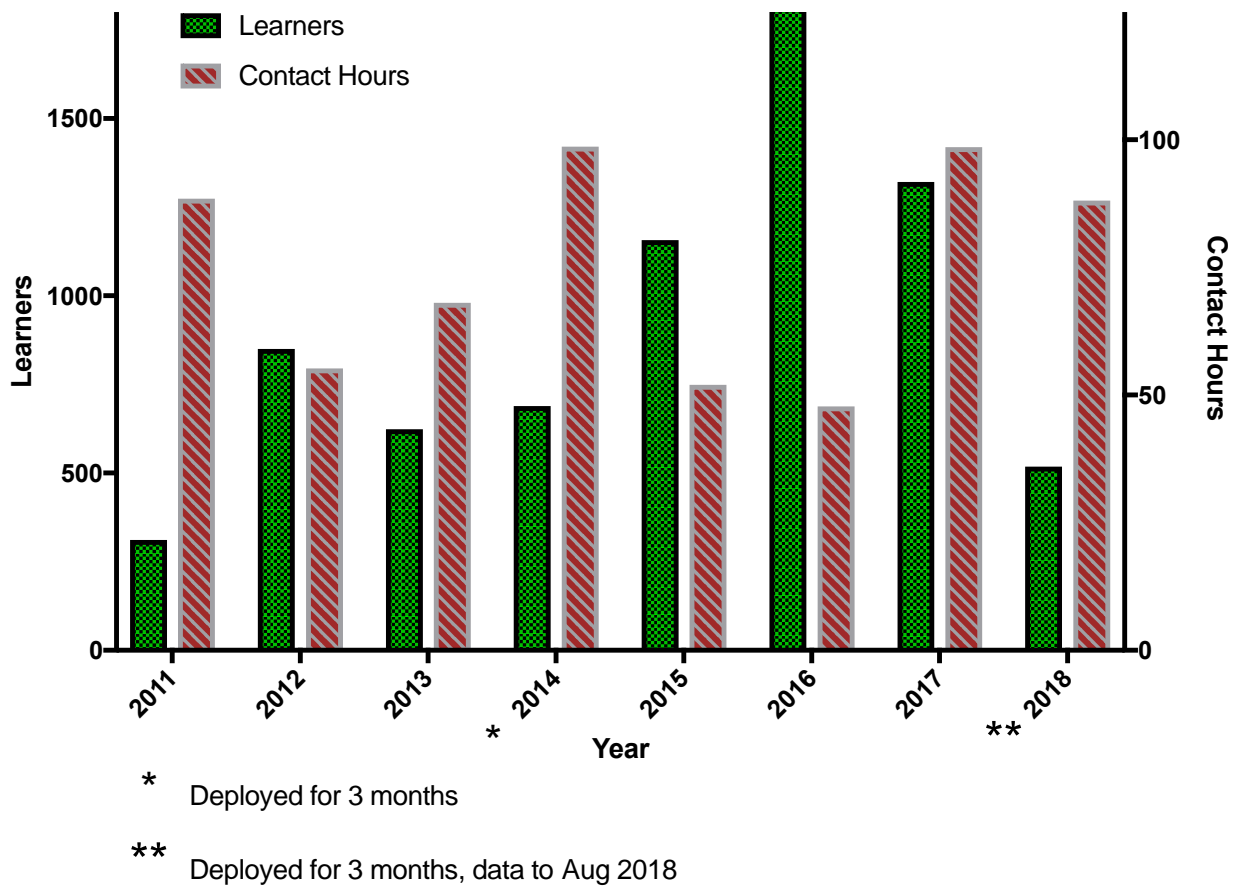
## Teaching Portfolio 2011-2019

### Samuel M. Galvagno Jr., D.O., Ph.D., M.S., F.C.C.M.

#### Direct Teaching

Since my arrival at the University of Maryland School of Medicine in July, 2011, I have taught 10,438 learners for a total of 652.9 contact teaching hours. These data include formal teaching and do not include major conferences, online teaching activities, or daily teaching on rounds or in the operating room. I have developed over sixty lectures, 25 infographics, and numerous other educational content including podcasts and webinars (see CV).

**Figure: Summary of overall direct teaching activity, July 2011 to August 2018.**

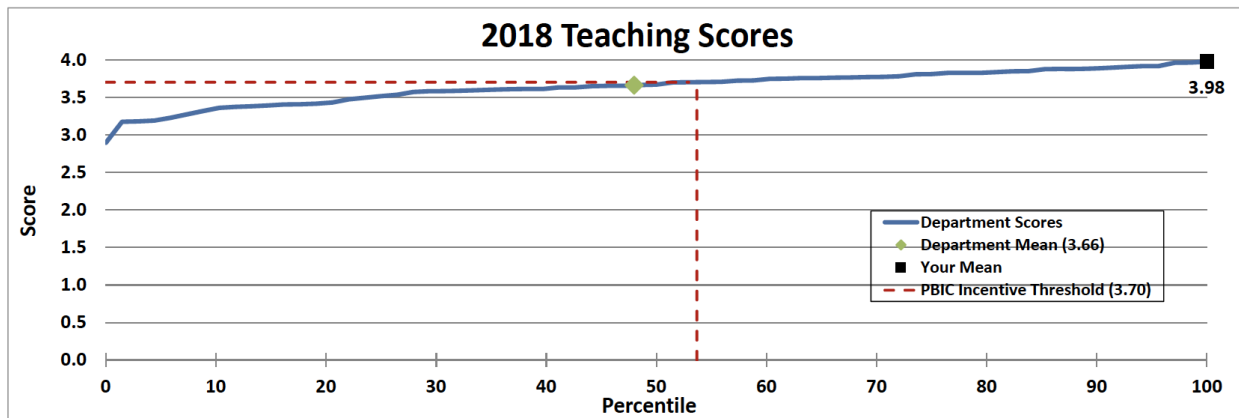


Since 2011, I have provided clinical instruction in the operating room, trauma resuscitation unit, surgical intensive care unit, and neurosciences intensive care unit. Instruction has been provided daily for:

- Trauma anesthesiology fellows (2-3 per year)
- Anesthesiology residents (20-24 per year)
- Surgery residents (8-10 per year)
- Emergency medicine residents (24-28 per year)

- Pulmonary critical care fellows (4-6 per year)
- Medical students (12-16 per year)
- Neurology residents (3-6 per year)
- Neurosurgery residents (1-2 per year)

In the Department of Anesthesiology, I have consistently been rated as either the top educator in the Department or performing in the highest percentile. My median score (scale: 1-4) has been 4.00 since my arrival (mean range, 3.79-3.98); my Departmental percentile, based on formal evaluations by residents, has ranged from 94-100%. In 2018, I was the top rated educator in the Department.



[Scale:1=Inadequate,2=Adequate,3=Good,4=Outstanding]	AcademicYear2018	
	YourMean	DeptMean
Q1 -Availability	4.00	3.70
Q2 -CaseRelatedTeachingAbility	4.00	3.64
Q3 -DidacticTeaching	4.00	3.65
Q4 -ProfessionalismandPatientCare	4.00	3.70
Q5 -Systems-BasedPractice	4.00	3.68
Q6 -OverallContributiontoDevelopmentofResidentasAnesthesiologist	3.86	3.62
<b>OverallScore</b>	<b>3.98</b>	<b>3.66</b>

I have provided education for a wide variety of learners. Objective measures of my teaching, as rated by residents and medical students, include:

- A mean score of 4.9 (scale: 1-5, 5 best) for didactic teaching including annual core lectures on respiratory disease, renal systems, biostatistics, pharmacology for residents in the **Department of Anesthesiology**. Each of these lectures include 1-3 medical students completing the **ANES 541** and **ANES 581** electives.
- As rated by residents from the **Department of Emergency Medicine** (airway rotation in trauma), my average teaching score was 4.78 (scale: 1-5, 5 best).
- As rated by **Department of Surgery** residents, I received a mean teaching score of 4.00 (scale, 1-4, 4 best) for annual invited cross disciplinary lectures on trauma resuscitation.

- As rated by **School of Pharmacy** students, residents, and faculty, my average rating has consistently been “Outstanding” (rating average: 2.86 / 3.0) for invited cross-disciplinary talks that I have given bi-annually.
- For the **University of Maryland Surgical Critical Care Fellowship**, my rating average has been 2.82 / 3.0 for bedside and informal teaching, interest in teaching, status as a role model, and commitment to education among other outcome measures; my median rating for overall quality of teaching in this program has been 3.0 / 3.0.

In both 2012 -2015, I taught sections of **MSPR 522 PATHOPHYSIOLOGY THERAPEUTICS II**. In 2012, I lectured for 2 hours on “general anesthesia.” In 2013 and 2014, I provided a 2-hour lecture on “multimodal analgesia” (I did not receive evaluation data for these talks from the School of Medicine).

I was the attending physician and preceptor for students completing the **ANES 518** surgical critical care unit sub-internship. I teach 3-5 senior students per year, 8-12 hours per day. This sub-internship involves an intense immersion for senior students, with hands-on experience with advanced procedures and daily presentations of critically ill patients. I provide a lecture one-on-one to the medical students 5 days a week each week when assigned to the intensive care unit. For evidence of teaching effectiveness, please see data below regarding advising and mentoring. Also of note, as a result of this activity, I have been nominated twice for the Arthur P Gold Foundation Humanism in Medicine Award.

In 2012, a lecture series was initiated for medical students performing an anesthesiology elective (**ANES 541**). This series is known as the “Miller” series. I was highly involved in the organization and planning for this lecture series, and independently authored two of the twelve lectures (I did not receive formal evaluation data for this activity).

Throughout my career, I have received numerous teaching awards for direct teaching activity (see CV).

## **Advising and Mentoring**

### **Anesthesiology Resident Advising**

1. 2011-2014. Jing Tao, MD. I became Jing’s secondary advisor and wrote her a letter of recommendation for her critical care fellowship. Through my connections in the Society of Critical Care Anesthesiologists (SOCCA), I was able to help Jing secure interviews at Harvard and Columbia. Jing was accepted to the Brigham and Woman’s / Harvard Medical School Fellowship in Critical Care Medicine and is presently on staff at Yale University as an anesthesiologist-intensivist having graduated from this fellowship program. We published an editorial and a piece for a national trade newsletter together (<https://socca.org/newsletter/issue/winter-2012/>).

2. 2011-12. Aaron Lange, MD. I began advising Aaron at the beginning of his CA-3 year. I wrote a letter of recommendation which led to his acceptance as the first regional fellow in the University of Maryland fellowship in regional anesthesia. Aaron was offered a position in our Department and is currently an Anesthesiology attending in the Division of Regional Anesthesia at the University of Maryland.
3. 2013-Present. Justin Richards, MD. Justin is currently on faculty at the University of Maryland as an Assistant Professor. Justin completed his fellowship in critical care at our institution after I recruited him. I also recruited him to stay at Maryland as an anesthesiologist-intensivist, and he joined our staff as an Assistant Professor following fellowship. Justin has published several papers in high impact anesthesiology journals and was recently named Director of Education for the Division of Trauma Anesthesiology at the R Adams Cowley Shock Trauma Center. We have published several papers and abstracts together (PMIDs: 29542136, 29283920).
4. 2012-Present. Michael Mazzeffi. Mike joined our staff having completed fellowships in critical care and anesthesiology. He was recently named Division Chief for our Department of Anesthesiology (taking my place in this position). Dr. Mazzeffi has authored over 70 peer reviewed papers and has secured funding from a variety of sources. I was one of his advisors during his promotion process to Associate Professor at our institution. We have published several papers and abstracts together (PMIDs: 29542136, 30612931, 30300172, 29688923, 29283920, 28504993, 27474334, 27379496).
5. 2014-Present. Kevin Blaine, MD. Kevin was the first joint NIH-University of Maryland Critical Care fellow that were able to recruit in over a decade. After finishing his fellowship, he was recruited widely and accepted a position at the University of Southern California where he is thriving as a researcher, anesthesiologist, and intensivist. We continue to collaborate and share research ideas. I have pre-reviewed several of his grants.
6. 2013-Present. Jonathan Chow, MD. Jon was closely mentored by me during his time as a resident and chief resident in our residency program. He completed a critical care fellowship and was immediately recruited to return to Maryland. He won the critical care resident of the year award during his final year as a resident (second time this award was ever given in our Department). He is one of our handpicked anesthesiologists for liver transplants, works as an intensivist, and was recently appointed Director of our Critical Care Fellowship program. We published one paper together (PMID: 29688923).
7. 2014-Present. Zachary Chauncer, MD. Zach was a resident at Maryland and was recruited for our critical care fellowship which he completed in 2018. Following

fellowship, Zach was also recruited to remain on staff. He is presently an anesthesiologist and intensivist in our Department.

8. 2016-Present. Benjamin Fedeles, MD. Ben was recruited personally by me for our residency program. We have written one book chapter, have another research project in progress, and published one review paper together. He has decided to apply for a fellowship in critical care medicine and I recently completed a letter of recommendation for him. Ben is a second lieutenant in the US Air Force and will be entering active duty following completion of his training. We published 2 book chapters together: a chapter on monitoring published in *Anesthesia Outside the Operating Room*, Urman RD, et al. (Eds), 2018 and a chapter on helicopter emergency medical services in *Current Surgery* (due to be published in 2019).

### **Medical Student Mentoring**

1. 2012. Erin Knepp, MD. Erin first worked with me during her anesthesiology elective. I began advising Erin formally thereafter, and wrote her a letter of recommendation. She obtained several interviews including programs at Harvard and Johns Hopkins. She successfully matched for an anesthesiology residency position at the Johns Hopkins School of Medicine.
2. 2013-present. Kiran Belani. I began advising Kiran in early 2013. Kiran, a designated FAER scholar, performed a subinternship in critical care with me where she earned the grade of "Honors." I wrote a letter of recommendation for Kiran and reviewed her personal statement. She went on to graduate (as Chief Resident) from Harvard/Beth Israel, and subsequently completed a fellowship in cardiothoracic anesthesia at Duke University.
3. 2012. Krupa Patel, MD. I met Krupa through the Trauma Interest Group. I reviewed and edited her personal statement and provided one-on-one advice and mentoring for residency planning. Krupa successfully matched into an anesthesiology residency upon graduation from the University of Maryland School of Medicine in 2012.
4. 2012-present. Remigo "Remy" Roque. Remy sought my advice regarding research in the field of anesthesiology. I continue to meet with him regularly regarding several IRB-approved projects that I have invited him to participate in. I have also provided him with advice regarding his application to anesthesiology programs.
5. 2012-present. Jonathan Danquah. Jonathan approached me via the Trauma Interest Group. He shadowed me in both the intensive care unit and trauma operating rooms

numerous times. I continue to provide Jonathan with advice regarding residency and academic advice and wrote a letter of recommendation that helped him gain a residency position at the New York University Department of Anesthesiology.

6. 2012-present. Aaron Hess, PhD. Aaron and I became acquainted when he approached me regarding a residency in anesthesiology. Aaron and I also continue to work on several research projects ranging from the effects of high-dose opioids on microcirculation in shock to the epidemiology of massive blood transfusions. I wrote a letter of recommendation for Aaron for his application to residency programs in anesthesiology, and he is about to successfully complete his residency at the University of Wisconsin.

### **Anesthesiology Fellow Advising**

1. 2011-2012. Karla Greco, MD. Karla was a trauma anesthesiology fellow from 2011-2012. I wrote her a letter of recommendation which helped her secure a position as an attending anesthesiologist in the Division of Trauma Anesthesiology, University of Maryland School of Medicine, Department of Anesthesiology. I also wrote a letter of recommendation supporting Karla's promotion to Assistant Professor, which she subsequently attained.
2. 2011-2012. Christopher Franklin, MD. I wrote a letter of recommendation supporting the hiring of Chris as an intensivist in our Division of Critical Care Medicine, University of Maryland School of Medicine, Department of Anesthesiology. I also write a letter of recommendation for Chris' promotion to Assistant Professor, which he subsequently attained.
3. 2010-2013. Joshua Sappenfield, MD. Before I was faculty at the University of Maryland, I met Josh and encouraged him to apply for the trauma anesthesiology fellowship. Josh was a CA-2 in the Department of Anesthesiology at the time. I wrote one of his letters of recommendation for that position. During his fellowship, I helped Josh author two peer-reviewed articles (see CV), one as a senior author. Josh is presently poised to be promoted to an Associate Professor this year in the Department of Anesthesiology at the University of Florida.

### **Additional Mentoring and Advising (University of Maryland Baltimore)**

- I have served as a secondary mentor for 6 surgical residents including two preliminary residents seeking a permanent resident position (I helped secure positions for both)
- I have served as a secondary mentor for 7 additional SOM medical students, writing letters of recommendation and advising these students regarding a career in anesthesiology. Of note, five of these students secured first-choice residency

positions at Johns Hopkins, another matched to George Washington, and another matched at Maryland (first choices for both of these residents as well).

- I have mentored over forty critical care nurses at the University of Maryland School of Nursing (both Nurse Practitioner and Certified Registered Nurse Anesthetist programs).

### **Educational Leadership and Scholarship**

**Advanced Cardiac Life Support (ACLS).** Since 2001, I have been teaching ACLS. I am one of only a few instructors for this course in the Department of Anesthesiology, and the only certified instructor in the Division of Critical Care Medicine.

**Pediatric Advanced Life Support (PALS).** Since 2001, I have been teaching PALS. I am the only certified instructor in the both the Division of Trauma Anesthesiology and the Division of Critical Care Medicine.

**Advanced Trauma Life Support (ATLS).** I became a certified ATLS instructor in 2011, before my arrival as a faculty at the University of Maryland School of Medicine. I have instructed numerous courses, and I am one of only five anesthesiology faculty certified as an instructor. I am presently an instructor-trainer for this course and I have given lectures nationally on ATLS for anesthesiology colleagues and recently authored a review paper (as a recognized content expert) on this topic for *Anesthesiology Clinics* (to be published in 2019).

**Fundamentals of Critical Care Support Course (FCCS).** I have been teaching FCCS since 2010. This course is sponsored by the Society of Critical Care Medicine. This includes courses at both the University of Maryland and Johns Hopkins Bayview. In 2012, I was appointed as a Course Director by the Society of Critical Care Medicine after progressing through a rigorous evaluation process, including multiple tests and teaching evaluations by veteran course directors. I am one of two Course Directors at the University of Maryland. Course evaluations for these course are maintained by Claire Leidy; evaluations have been universally excellent and the course is sold out each time when offered.

**Director, Surgical Critical Care Fellowship Research Program.** In early 2012, I was approached by the Director of the Surgical Critical Care Fellowship Program, Dr. William Chiu, regarding a need for improved research education for the critical care fellowship program. I designed and implemented a fifteen-lecture series on biostatistics and epidemiology and organized monthly research meetings to track fellow progress. In 2013, I created a database to better track fellow participation, progress, and impediments to

successful completion of projects. Through my leadership, the number of abstracts and publications increased by over 40% during the first year of the program, and current research productivity has remained sustained. I mentored one of the surgical fellows this past year (2018), Jason Radovsky (a Major in the US Army), who won the *best research project of the year award from the Society of Surgical Critical Care Fellowship Directors*.

**Prehospital Ultrasound Course.** I created a one-day, 8 hour course to teach basic ultrasound techniques to paramedics. I established course content, objectives, and an agreement for paramedics to receive continuing education credit from the Maryland Institute for Emergency Medical Services Systems (MIEMSS). This is the first formal program of its kind in the state. Content from this course has since been adapted for use with anesthesiology residents while developing a comprehensive ultrasound training program.

**Shock Trauma / University of Maryland ECMO Course.** I served as an instructor for the first two ECMO courses taught at Shock Trauma in July, 2018. I worked with a small group of dedicated ECMO providers to create core content, training objectives, and assessment tools. This is the first ECMO course established in the region, and the first taught at the University of Maryland. For both of these courses, I received overall teaching ratings of “outstanding” (highest rating) from learners.