TEACHING AND MENTORING ACADEMY

MEDICAL & BIOSCIENCE EDUCATION SEMINAR
2018 – 2019 ACADEMIC YEAR PROGRAMS

http://med.stanford.edu/academy.html

- Medical & Bioscience Education Seminar Series

- Mentoring Skills Workshop Series

- New Faculty Mentoring Skills Workshop
  Registration announced at New Faculty Orientation sessions

- Innovation Grants

- Peer Coaching

- Junior Faculty Teaching Workshop

- Medical & Bioscience Education Day
  http://med.stanford.edu/academy/programs/education-day.html
  Save the date: May 4, 2019

Join our mailing list!
The Teaching and Mentoring Academy
presents the
Medical & Bioscience Education Seminar Series
FALL QUARTER 2018

Jecca Steinberg & Paloma Marin-Nevarez
MD Students

Service through Surgery:
Surgeons with an Impact
Service through Surgery is a 10-week course that exposes Stanford medical students to a diverse group of surgical leaders who are passionate about improving health equity through surgery. The seminar capitalizes on the diversity and leadership among Stanford and Bay Area surgeons and connects them to future physicians through weekly lectures and reflection sessions. It was offered for the first time in Winter 2018 and will be offered again in Winter 2019. Steinberg and Marin-Nevarez will describe their course and what they learned about exposing students to diverse role models in Surgery.
Service Through Surgery: Surgeons with an Impact

Jecca R Steinberg, Paloma Marin-Nevarez
Does Service = Primary Care?
Background
Why increase diversity among healthcare providers?
Educational Benefits

GREATER DIVERSITY = RICHER LEARNING
S SAHA, 2014
Some patients prefer physicians of their demographic background.

**Increased**

- Compliance
- Satisfaction
- Participation in clinical Trials
The Representative Workforce

A DIVERSE WORKFORCE WELCOMES DIVERSE COMMUNITIES

Access

Trust
Social Justice

Discriminatory and exclusionary policies should be removed from medical education and achievement.
Increasing diversity in surgery improves healthcare access and outcomes for disenfranchised communities.

AAMC Data 2014
31% of the US population is Black, African American and/or Latinx

This percentage will increase in the coming decades.
Diversity among Physicians

2015 Medical School Graduates

- Black or African American: 6%
- Hispanic or Latino: 5%
Diversity in Medical Education

39% of full-time faculty are female

Only 4% of full-time faculty are Black or African American, Hispanic or Latino, Native American or Alaska Native, and Native Hawaiian or Pacific Islander females
Diversity in Surgery

Abelson et al., 2018

Fig. 2. Proportion of General Surgery Trainees by Race/Ethnicity, 2005–2014.
Why focus on surgery?
Low-income, underrepresented communities receive inadequate surgical services
Surgery continues to trail other specialties in workforce diversity.

2013 Practice Specialty and Race/Ethnicity (%)

Surgical Specialty
- Asian: 10
- Black or African American: 3
- Hispanic or Latino: 4
- White: 56
- Unknown: 5

Primary Care
- Asian: 13
- Black or African American: 5
- Hispanic or Latino: 5
- White: 48
- Unknown: 4

All Specialties
- Asian: 13
- Black or African American: 4
- Hispanic or Latino: 5
- White: 49
- Unknown: 29
Diversity through Mentorship
Benefits of Mentorship from a Role Model

My mentor is #goals
Service through Surgery

- Study Design
- Class Design
- Preliminary Findings
- Future Work
Study Design
Intervention: Lunch Seminar Course

Primary Outcomes:

○ Attitudes Towards the Medically Underserved
○ Exposure to Mentorship
○ Class Reviews
Survey Metrics

- Demographic Survey
- Medical Students Attitudes towards the Underserved
- Exposure to Mentorship in Surgery
- Class Evaluation

Qualitative Focus Groups

- Semi-structured in-depth focus groups on class 3 and 11
MSATU
MEDICAL STUDENTS' ATTITUDES TOWARDS PROVIDING CARE FOR THE UNDERSERVED

Crandall Et Al, 1993
1. Access to care and responsibility for providing care.

2. Basic, essential services to complex, expensive procedures.

3. Demographic populations and differential access to care.

Crandall Et Al, 1993
Exposure to mentorship

During your time as a Stanford Medical Student, have you met or encountered a surgeon...

...whose career you would want to emulate?

...of your race, ethnicity and gender?
Quasi Experimental Control Trial

**Intervention Arm**
- 32 Participants

**Pre Survey**
- Demographic information, mentorship exposure information and The Medical Students’ Attitudes Toward Providing Care for the Underserved Questionnaire (MSATU).

**Intervention**
- 11 classes led by expert surgeons and students on service through surgery and making an impact as a surgeon.

**In-Depth Focus Groups at Class 4 and 8**

**Post Survey**
- Identical post-survey and a class evaluation.

**6 Month Follow Up Survey**
- Identical post-survey and a class evaluation.

**Comparison Arm**
- 61 Participants

**Pre Survey**
- Demographic information, mentorship exposure information and The Medical Students’ Attitudes Toward Providing Care for the Underserved Questionnaire (MSATU).

**No Intervention**

**Participants Lost to Follow Up or Who Discontinue Participation**

**Post Survey**
- Identical post-survey and a class evaluation.

**6 Month Follow Up Survey**
- Identical post-survey and a class evaluation.

Analysis
Recruitment

LUNCH SEMINAR

SERVICE THROUGH SURGERY

Surgeons with an impact.

Learn from Surgeon Leaders who are changing the world.

Service Through Surgery
Surgeons with an impact

Learn from Surgeon Leaders who are changing the world.
Class Design
Class Design: Lunch Seminar

— 11 Classes

— 82%: 9 Lectures

— Speakers had choice of lecture or conversation format.

— 18%: 2 Small-group reflection sessions

— Attendance required
Lecturer Preparation

— Semi-structured in depth interviews with all class lecturers

— Passion for building diversity and diminishing surgical inequities
Course Objectives

1) Articulate the role of surgeons in addressing health inequities, social justice and poverty

2) Understand how a diverse set of accomplished surgeons balance service with their other professional responsibilities

3) Articulate how diversity enhances patient care and the surgical community

4) Interact with surgery leaders as role models and potential mentors

5) Reflect on their career goals by examining their current perceptions of surgery and how it aligns with addressing health inequities
The Speakers

We chose our speakers by emphasizing:

1) **Accomplished** surgeon leaders from a variety of surgical specialties

2) Demonstrated interest in serving the underserved

3) **Diverse** backgrounds

Featuring:

- January 12: Dr. James Lau
  Director of the Surgery Clerkship
- January 19: Dr. Waldo Concepcion
  Chief of Clinical Transplantation
- January 26: Dr. Sherry Wren
  Director of Global Surgery at the Stanford Center for Innovation and Global Health
- February 9: Sayantan Deb
  Medical Student and Expert Inequities in Neurosurgery
- February 16: Dr. Micaela Esquivel
  General Surgery Resident and Expert in Global Surgery
- February 23: Dr. Mary Hawn
  Chair of the Stanford Department of Surgery
- February 27: Dr. Leah Backhus
  Co-Director, Thoracic Surgery, Health Services Research
- March 9: Dr. Matias Bruzoni
  Program Director, Pediatric Surgery Fellowship
"[Surgeons] see when the rest of the health system has failed."

"I never wanted to ask a patient if they could afford me."

"[It's time] to get rid of the ghost. Surgery is for everyone."

"All people deserve the best care possible in their community. [It is critical as a surgeon to have] your finger on the pulse of the community."
"Implicit bias is something we have to be aware of in ourselves."

"Seeing a representation of myself in the [neurosurgery] department helped me see that it could be a path for me."

"Connecting well with the families you treat will result in better delivery of healthcare. Braking the language barrier is key to this."

"Diversity is a service to everything [in surgery]. [Diversity means] creativity and innovation. [You have to] foster it, live it and show it."
MENTORSHIP

"You have always been the best and that is why you're here. Don't let anything change your mind about that now."

"I felt like a fish swimming upstream wanting to work for the community."

"I spent my entire life being counseled on what I couldn't do."
Preliminary Findings

Intervention: 32
Comparison: 61
Total: 93
Demographic Data

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<th></th>
<th>Intervention N=32</th>
<th>Comparison N=61</th>
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<tr>
<td></td>
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<tr>
<td>Year</td>
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<td>White, Non-Latinx</td>
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<td>Underrepresented in Surgery</td>
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<tr>
<td>Disadvantaged Background</td>
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<tr>
<td>Yes</td>
<td>34</td>
<td>21</td>
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<tr>
<td>Regular Volunteerism as Medical Student</td>
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<td>56</td>
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Chi Squared Test for Variance P-Value > 0.05 for all demographic characteristics.
INTEREST IN A SURGICAL SPECIALTY

66% 34%
P = 0.01
Pre-Survey Results

Exposure to Mentorship (% Yes)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Intervention</th>
<th>Comparison</th>
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<tr>
<td>Emulate</td>
<td>54%</td>
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<tr>
<td>Volunteer</td>
<td>57%</td>
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</table>

% of all Participants
% of Intervention or Control

Intervention: 32
Comparison: 61
Medical Students newly meeting a surgeon of their race.

**INTERVENTION: 100%**

**COMPARISON: 16%**

\[ P = 0.004 \]
Degree to which students expressed feeling personally responsible for providing surgical care to the needy.

PRE-POST INCREASE

INTERVENTION P = 0.039
COMPARISON P = 0.80

PAIRED T-TEST
Increase among intervention students newly meeting a surgeon whose career they would like to emulate.

**Intervention:** 58%

**Comparison:** 36%

P = 0.224
92.3% of students would recommend the class.
Representative Quotes - Takeaways

-The Service Through Surgery seminar has helped me **better appreciate the importance of serving the community** and spurred me to understand that **surgeons will be able to balance both their demanding lifestyles with surgery.**

-I realized that, **while difficult, there is always some way** to give back to the community as a surgeon.

-There are **many ways for a surgeon to impact a community** and that goes beyond what is typically thought of a service. **Research on health disparities** is something that I had not thought of as a form of service but is something that is extremely valuable in order to effect change.
Representative Quotes - Takeaways

-I [learned that] service [is] not something you go abroad to do once a year but **something that you incorporate into your work every day** working at the VA, etc.

-Previous to this course, I could not have named specific ways in which surgeons could be involved in the community. Now I not only have specific examples, but understand that **service and surgery are not mutually exclusive**.

-[The] talk about culture and language appropriate care tells me that **my upbringing can be an advantage** in my future surgical care.
...surgery is not just about power, fame and money; there are other aspects that most people do not think of when they hear surgery like service and the speakers in this class really highlighted it
Representative Quotes - Suggestions for Improvement

— Make a clear distinction between local and global service

— More speakers, fewer reflection sessions

— Provide students with reflection session questions in advance

— Larger classroom (Room felt crowded at times!)

— Incorporate surgeons from the community that work with underserved patients on a daily basis
- Exposing medical students to diverse, service-minded surgeons through seminars like “Service Through Surgery” may make them more inclined to pursue such careers themselves.

- The class represents a low-labor, replicable model for increasing mentorship and service-minded surgical candidates.
Next Steps

— Second Iteration of class and data collection: Winter 2019
— New Lecturers: Dr. Shaw and Dr. Campbell
— New Leaders: Anna Carroll and Tyler Bryant
A special thank you to

— Dr. Jim Lau
— Our lecturers
— Dr. Sylvia Bereknyei-Merrell
— Dr. Sonia Crandall
— Goodman Surgical Education Center Staff
— TMA Innovation Grant
— CTSS and Fellows
— The Stanford Surgery Department