

**Award: Promising Medical Student Surgery Education Research : Entry # 15581****Basic Information****Your name:**

Matthew Lin

**Your title:**

Surgery Clerkship Director

**Your institution**

University of California, San Francisco

**Your email address:**[Matthew.Lin@ucsf.edu](mailto:Matthew.Lin@ucsf.edu)**Nominee Information****Name of nominee:**

Anya Greenberg

**Nominee's institution**

University of California, San Francisco

**Nominee's title**

Medical Student (4th year)- Class of 2023

**Nominee's email address:**[Anya.Greenberg@ucsf.edu](mailto:Anya.Greenberg@ucsf.edu)**Eligibility****Has the nominee completed at least two years of medical school?**

Yes

**Has the nominee been an author on a peer-reviewed manuscript or curricular project in surgical education?**

Yes

**Has the nominee held a leadership role in a course or group related to surgery or surgical education?**

Yes

**Is the nominee planning to do surgical residency (any specialty)?**

Yes

**Short Essays**

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### **Why do you think the nominee deserves this award?**

The following is from the student's PI: Anya joined my research lab in April 2020 and has worked with me on several Surgical Education-related projects since. Between her 3rd and 4th years of medical school, she spent a dedicated year as a supported full-time Research Fellow through a highly competitive UCSF program and secured a Platinum Grant from the Association for Surgical Education. As a Research Fellow, she served as the student lead of a multi-center mixed-methods study exploring individual, system, and cultural-level factors influencing trainee well-being. She managed 16 participating program sites including IRB administration, survey execution, the conduct of qualitative research, the interpretation of findings, and the creation of manuscripts. She was in all ways organized, professional, and reliable. She demonstrated deep investment of time and effort, and genuine passion for the topic of surgery resident well-being and distress. Although she entered this role new to academic research, her natural talent and voracious learning resulted in remarkable growth in her scholarship skills. Outside of her own projects, she went above and beyond in helping me and other lab members in any way she could. She was quick to offer assistance and readily willing to mentor, coach and teach other students. Lastly, Anya's enthusiasm for research and genuine interest in surgical education are contagious. Her passion for discovery and for improving the status quo combined to support my lab's atmosphere of collaboration, support and productivity which was a pleasure for us all. For these reasons, I wholeheartedly recommend Anya for this award as an exemplary model of who we want our future surgical educators to be.

### **How has the nominee demonstrated passion and enthusiasm for surgery and surgical education research?**

Anya has demonstrated that she is exceedingly passionate about both surgery and surgical education research. She has taken ample opportunities to prepare herself for the field. In addition to her primary area of research in surgical education, she has participated in research with faculty within the UCSF Department of Surgery across numerous surgical specialties (colorectal surgery, surgical oncology, trauma surgery) and domains (surgical disparities, enhanced recovery after surgery, long-term outcomes, and palliative care). She is heavily involved with the UCSF Department of Surgery Muriel Steele society, which allows her to participate in the community of women surgeons and organize events for other medical students. For instance she volunteered to work in our surgical skills laboratory with the UCSF surgical interns, simultaneously learning and being of service to those above her. In all her pursuits she has built relationships with practicing surgeons, surgical residents, and other aspiring surgeons and is a well-known and highly-regarded member of the community. Regarding her passion for surgical education research, she has led projects pertaining to General Surgery Resident well-being, robotic surgery training for medical students, basic surgical skills training for interns, and advanced open skills for residents and junior fellows through her work in my lab and the UCSF Surgical Skills Center. In addition, she has taken opportunities to lead surgical skills workshops and given in-services to various groups of students and surgical teams. Through these areas of involvement, Anya has clearly demonstrated a passion for and a commitment to both surgery and surgical education. Further, her passion and enthusiasm are evident in her numerous publications in this area as well as local, regional and national presentation of her work.

### **Additional Information**

#### **Please list the nominee's peer-reviewed manuscripts related to surgical education.**

##### **PUBLISHED:**

1. Greenberg AL, Karimzada MM, Brian R, Yap A, Luu HY, Ahmed S, Huang C-Y, Waits SA, Hirose R, Alseidi A, Rapp JH, O'Sullivan PS, Chern H, Syed SM. Assessment of Surgeon Performance of Advanced Open Surgical Skills Using a Microskills-based Novel Curriculum. *JAMA Netw Open*. 2022;5(9):e2229787. doi:10.1001/jamanetworkopen.2022.29787
2. Greenberg AL, Cevallos J, Ojute F, Davis D, Greene W, Lebares CC; for the General Surgery Collaborative on Resident Wellbeing. The General Surgery Residency Experience: A Multicenter Study of Differences in Wellbeing by Race/Ethnicity. *Annals of Surgery Open*. 2022;3(3):e187. Doi:10.1097/AS9.000000000000187
3. Greenberg AL, Tenzing N, Ghadimi TR, Tilahun MN, Berler MH, Lebares CC; for the General Surgery Collaborative on Resident Wellbeing. Well-Being Intervention in General Surgery: Multicenter Study of Program Director and Resident Perspectives. *Journal of the American College of Surgeons*. 2022;235(2):217-224. doi:10.1097/XCS.000000000000250

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4. Greenberg AL, Boscardin C, Lebares CC, and the General Surgery Collaborative on Resident Wellbeing. Flourishing as a Guide to Intervention: A National Multicenter Study of General Surgery Residents. *Global Surg Educ.* 2022;1(1):12. doi:10.1007/s44186-022-00014-3
5. Greenberg AL, Sullins VF, Donahue TR, Sundaram VM, Saldinger PF, Divino CM, Anton NE, Stefanidis D, Reilly LM, Egan RJ, Beals KJ, Riall TS, Duh QY, Mukhtar RA, Hirose K, Lebares CC. Emotional Regulation in Surgery: Fostering Well Being, Performance, and Leadership. *Journal of Surgical Research.* 2022;277:A25-A35. doi:10.1016/j.jss.2022.02.032
6. Lebares CC, Greenberg AL, Gonzales PA, Boscardin CK, and the General Surgery Collaborative on Resident Wellbeing. Validity evidence for flourishing as a measure of global wellbeing: a national multicenter study of academic general surgery residents. *Global Surg Educ.* 2022;1(1):1. doi: 10.1007/s44186-022-00008-1
7. Lebares CC, Greenberg AL, Shui A, Boscardin C, van der Schaaf M. Flourishing as a Measure of Global Well-Being in First Year Residents: A Pilot Longitudinal Cohort Study. *Journal of Medical Education and Curricular Development.* 2021;8:23821205211020760. doi:10.1177/23821205211020758
8. Lebares CC, Greenberg AL, Ascher NL, Delucchi KL, Reilly LM, van der Schaaf M, Baathe F, O'sullivan P, Isaksson Ro K. Exploration of Individual and System-Level Well-being Initiatives at an Academic Surgical Residency Program: A Mixed-Methods Study. *JAMA Netw Open.* 2021;4(1):e2032676. doi:10.1001/jamanetworkopen.2020.32676

### ACCEPTED/IN PRESS:

1. Greenberg AL, Doherty D, Cevallos J, Tahir P, Lebares C. Making the Financial Case for Surgical Resident Wellbeing: A Scoping Review. (Accepted by *Annals of Surgery*)

### IN REVISION:

1. Greenberg AL, Syed S, Alseidi A, O'Sullivan P, Chern H. Communicating from a Distance: Medical Student Perspectives from a Robotic Bedside Assist Simulation. (Reviewed by *Global Surgical Education*; In Revision)

### SUBMITTED:

1. Greenberg, AL, Barnes, KE, Karimzada, MM, Huang, CY, Alseidi, A, Rapp, JH, O'Sullivan, PS, Chern, H, Syed, SM. Difficult or high risk? Objective task assessment vs. faculty perceptions of surgical skills.
2. \*Greenberg AL, \*Barnes K, Syed S, Rapp J, Alseidi A, O'Sullivan P, Chern H. Faculty Entrustment of Residents in the Operating Room: The Role for Surgical Simulation. (\*co-first authors)
3. Greenberg AL, Syed S, Alseidi A, O'Sullivan P, Chern H. Robotic Training for Medical Students: Feasibility of a Pilot Simulation Curriculum.
4. Nguyen, ET, Berler, MH, Gonzales, PA, Greenberg, AL, Lebares, CC. Prioritization of Workplace Elements and Flourishing in Mixed-Level General Surgery Residents: A National Multicenter Study.

**Please list any education or teaching awards the nominee has received.**

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- 1) 2021 UCSF Department of Surgery Research Symposium, Best Presentation (Defining and Validating Flourishing: Differences by Race and Gender in a Multicenter Study)
- 2) 2021 Platinum Research Grant, Association for Surgical Education (ASE) Foundation
- 3) 2021-2022 UCSF Department of Surgery Tom K. Hunt Memorial Yearlong Research in General Surgery Fellowship (Mixed-Methods Exploration of Modifiable Targets and Financial Considerations Regarding Wellbeing Interventions in Academic Surgical Residency)

### **Please list the nominee's education-related activities (e.g., lectures, programs, presentations, curricula, innovations for teaching or assessment, education-related research).**

#### EDUCATION-RELATED RESEARCH:

- 1) Through Lebares Resilience Lab (March 2020 – Present):

##### General Surgery Resident Wellbeing

- Multi-center mixed-methods study with 16 US General Surgery residency programs to establish validity evidence for metric of global wellbeing; elucidate resident perspectives of influencers of wellbeing; and identify potential targets for intervention.

- 2) Through UCSF Surgical Skills Center Research Lab (May 2021 – Present):

##### Robotic Bedside Assist Curriculum Development for Medical Students

- Feasibility study of adapting an existing Intuitive Surgical robotic training for medical students.
- Qualitative study of medical student perspectives on communication with a console surgeon during a bedside assist simulation.

##### Basic Surgical Skill Simulation

- Cross-sectional study of surgical intern performance on basic open surgical skills and faculty perceptions of skill difficulty and risk of patient harm to establish evidence for relative task difficulty and identify potential missed learning opportunities due to discordance between actual performance and faculty perception of difficulty.
- Exploratory sequential mixed-methods study to examine surgical faculty perceptions of resident entrustability after a formal simulation session and mechanisms by which simulation informs faculty perspectives on entrustment in the OR.

##### Advanced Open Surgical Skill Curriculum

- Prospective cohort study collecting validity evidence for novel advanced open surgical skills curriculum by assessing performance of practicing surgeons and second-year General Surgery residents.

##### Cognitive Load Inventory for Surgical Skills

- Prospective cohort study collecting validity evidence for tool to assess cognitive load in surgical trainees and compare cognitive load during simulated activities vs. in the OR environment.

#### EDUCATION RESEARCH PRESENTATIONS (ORAL):

##### National/International:

- 1) Association for Surgical Education Annual Meeting (May 2022): Faculty Entrustment of Residents in the Operating Room: The Role for Surgical Simulation
- 2) American College of Surgeons Surgical Simulation Summit (March 2022): Robotic Training for Medical Students: Feasibility of

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a Pilot Simulation Curriculum

3) Learn Serve Lead 2021: The AAMC Annual Meeting (November 2021): Surgical Trainee Wellbeing: A Synergy of Individual and System-level Interventions

4) American College of Surgeons Clinical Congress 2021 (October 2021):

1. Defining and Validating Flourishing: Differences by Race and Gender in a Multicenter Study
2. Enhancers and Inhibitors of Wellbeing: A Multicenter Study of Surgical Resident Perspectives

5) 2020 Consortium of Longitudinal Integrated Clerkships International Conference (May 2020): Engaging LIC Students in Virtual Clinical Care: COVID 19 and Beyond

Regional:

6) Pacific Coast Surgical Association Annual Meeting (February 2022): Breaking it Down to Build it Up: Using Microcompetencies to Refine Instruction of Advanced Open Surgical Skills

Local:

7) 2022 UCSF Department of Surgery Research Symposium (April 2022): Faculty Entrustment of Residents in the Operating Room: The Role for Surgical Simulation

8) 2021 UCSF Simulation Symposium (September 2021): The need for simulation in robotic surgery: A novice & beginner trainee experience

9) 2021 UCSF Education Showcase Week (May 2021): Flourishing as a Measure of Global Wellbeing in First Year Residents: A Pilot Longitudinal Cohort Study

10) 2021 UCSF Department of Surgery Research Symposium (April 2021):

1. Defining and Validating Flourishing: Differences by Race and Gender in a Multicenter Study
2. Enhancers and Inhibitors of Wellbeing: A Multicenter Study of Surgical Resident Perspectives

11) 2020 UCSF Department of Surgery Research Symposium (October 2020): Differences Matter: A Mixed Methods Exploration of the Who, What, and Why of Well-Being in Surgery

EDUCATION RESEARCH PRESENTATIONS (POSTER):

National/International:

1) Association for Surgical Education Annual Meeting (May 2022):

1. Communicating from a Distance: Medical Student Perspectives from a Robotic Bedside Assist Simulation
2. Difficult or high risk? Objective task assessment vs. faculty perceptions of surgical skills

2) 2021 International Conference on Mindfulness (July 2021): Flourishing and Mindfulness in Surgery: Differences by Gender and Race in a Multicenter Study

3) 2021 Association for Surgical Education Annual Meeting (May 2021): Augmenting Medical Student Surgical Education by

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Meeting an Institutional Clinical Need

4) 2020 American Medical Association Research Symposium (December 2020): Student Impact in the Era of COVID-19: An Opportunity for Medical Education

**Please list the nominee's leadership roles in courses or groups related to surgery and surgical education.****TEACHING/KNOWLEDGE SHARING:**

- 1) UCSF Department of Surgery Muriel Steele Society - Planned and led workshop on basic suturing and knot tying for 1st year medical students (March 2022)
- 2) Brain Camp @ UCSF -- Planned and led workshop on suturing and physical exam skills to Bay Area High School Students (July 2021)
- 3) UCSF Colorectal Surgery Service -- Delivered in-service on new protocol to colorectal surgery clinical team at weekly case conference (January 2021)
- 4) UCSF/WHO Collaborating Center for Emergency and Trauma Care -- Coordinated workshops on basic emergency care to clinicians at 7 hospitals in Tanzania (June-August 2019)

**INNOVATIONS FOR TEACHING AND ASSESSMENT:**

- 1) Supported Dr. Hueylan Chern (Director, UCSF Surgical Skills Center) on design and execution of two new introductory medical student courses on robotic surgery and robotic bedside assisting (June 2021, December 2021)
- 2) Supporting Dr. Shareef Syed (Associate Director, UCSF Surgical Skills Center) on development of new Advanced Open Surgical Skills Curriculum for residents and junior fellows (July 2021 – present)

A list of the nominee's leadership roles in courses or groups related to surgery and surgical education.

- 1) UCSF Department of Surgery Muriel Steele Society, Medical Student Committee, Administrative Lead (April 2021 – April 2022)
- 2) American College of Surgeons (ACS) Committee on Medical Student Education, UCSF Medical Student Representative (May 2020 – Present)

**File Uploads**

Please upload the nominee's CV.

- [Anya-Greenberg\\_CV\\_091622.pdf](#)

**Personal Statement**

- [Anya-Greenebrg\\_Personal-Statement\\_091622.docx](#)

**Notes**



**Admin Notification (ID: 5ba969832d2f1)**

added October 4, 2022 at 10:03 am

WordPress successfully passed the notification email to the sending server.