

Surgical Trainee Research Initiative and Evaluation (STRIVE) Annual Report

2019-2020

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Department of Surgery

Dartmouth-Hitchcock Medical Center

July 2019 – June 2020



Introduction

The Department of Surgery Surgical Trainee Research Initiative and Evaluation (STRIVE) Program provides support for general and vascular surgery residents during their academic development year, with the goal of ensuring residents make meaningful strides in professional development which are recognized by Department leaders. STRIVE measures progress in terms of academic deliverables produced by residents, educational certifications, as well as evidence of engagement with a broad network of collaborators. This report summarizes the results of the achievements of the general and vascular surgery residents engaged in full-time academic development during the 2020 Academic Year (AY 2020, July 2019- June 2020). This includes residents sponsored by the Department of Surgery (DoS), the VA Quality Scholars Program (VAQS), and individual research awards held by DoS faculty. Residents engaged in externally sponsored research training programs with supervision outside of DHMC are not included.

Major Projects and Accomplishments

During AY 2020, the STRIVE program supported four surgical residents: Jenaya Goldwag (general surgery), engaged in self-directed research; Phillip Grey (general surgery), engaged in self-directed research and quality improvement; Mark Eid (general surgery), a first year VAQS fellow; and Aaron Barnes (vascular surgery), pursuing a one-year research fellowship sponsored by an American Heart Association (AHA) Strategically Funded Vascular Disease Research Network (SFRN) grant.

Each of the residents were supported in their academic pursuits in a variety of ways. All had expert mentorship by at least one dedicated faculty member. Dr. S. Joga Ivatury, Section Chief in the Division of Colorectal Surgery at DHMC served as the primary mentor for Drs. Goldwag and Grey, while Dr. Goodney had primary oversight of Drs. Eid and Barnes through his role as Co-Training Director for both the VAQS program at the White River Junction VA Medical Center and the AHA SFRN. Each also worked with a variety of other faculty who served as mentors and Principal Investigators (see *Faculty Mentorship and Collaboration*). All STRIVE participants participated in research, weekly conferences, and took advantage of numerous opportunities to engage in supplemental training and educational courses (see *Educational Programs and Other Professional Development Activities*). In addition, Drs. Eid and Barnes, were each enrolled in The Dartmouth Institute for Health Policy and Clinical Practice, Masters of Science Program, and completed a full course load in addition to supplemental curricula required through the VA and AHA SFRN training programs.

Over the course of the year, each of the residents built a portfolio of projects that suited their individual interests. Dr. Goldwag continued to hone her skills as a qualitative researcher gained through completion of the SERF program in AY2019 and built on her experienced and time invested in the prior year to advance new and existing projects centered around her interests in surgical education, colorectal surgery, and geriatric trauma. Dr. Grey gained foundational experienced as a clinician researcher, with projects focused on patient reported outcomes research, colorectal surgery, and quality improvement. Dr. Barnes' had pre-defined projects which aligned with milestones set by the MS program at The Dartmouth Institute and the AHA SFRN project, which aligned with his interest in vascular surgery outcomes. Lastly, Dr. Eid leveraged the coursework from The Dartmouth Institute and VAQS program to build a solid foundation in research methods and analyses and built a portfolio of surgical health services research projects. Throughout the year, research residents interacted regularly with the STRIVE program manager and Dr. Goodney for check-ins, guidance and support. Table 1 below summarizes the key achievements resulting from the residents'

research activities over the course of the year. Each resident's specific interests and projects are detailed below, with their words in *italics*.

Table 1: Publications and Presentations from DHMC Surgical Research Residents: July 2019 – June 2020

Resident	Presentations (<i>accepted</i>)	Total publications (accepted)	First author publications (accepted)	Additional manuscripts under review/pending submission
Jenaya Goldwag	14	5	5	13
Phillip Grey	8	0	0	3
Mark Eid	9	3	1	6
Aaron Barnes	14	10	4	7
Mean	11.25	4.5	2.5	7.25



Dr. Jenaya Goldwag:

Jenaya Goldwag is a general surgery resident who began her academic development time in July 2018 as a Surgical Education Research Fellow. Following completion of the SERF program during AY 2019, Dr. Goldwag elected to extend her academic development time through a second year in order to complete additional projects.

Dr. Goldwag's goals during this time were to learn how to take a research project from inception to completion, as well as to explore different types of research methodology. During her first research year, she found a love for qualitative research, and as such has continued to pursue qualitative research projects. During her second year, Dr. Goldwag aimed to complete many of the projects she started in year one, as well as to start building a body of work in medical education, rectal cancer, and geriatric trauma.

In the field of medical education, Dr. Goldwag published a manuscript based on her SERF project, "Operating Room Preparation by General Surgery Residents: A qualitative analysis" in the

American Journal of Surgery. She also initiated a follow-on project to further explore resident utilization of educational resources and resource overload through a multi-institutional survey study. This study is in the data collection phase and is expected to be completed within the next several months. In rectal cancer, Dr. Goldwag published a manuscript on fascial defects after stoma reversal and took part in a qualitative study to identify information needs of patients diagnosed with rectal cancer in order to create educational tools to support them during their treatment. She also explored national outcomes of geriatric vs adult patients who underwent ski and snowmobile trauma and submitted manuscripts to *Injury* and the *Journal of Surgical Research*, which are currently under review.

Overall, she completed the year with 5 first author publications and 8 presentations. An additional 13 manuscripts are under review or planned for submission in the next 3 months.

Presentations

1. **Goldwag J**, Wilson L, Ivatury S, Tsapakos M, and Wilson M. Incidence of Fascial Defects at Prior Stoma Sites in Patients with Colorectal Cancer. Poster presentation at Annual NESS Conference; 2019 September 13-15th; Montreal, QC, Canada.
2. Porter E, Wong L, Wilcox A, **Goldwag J**, Trooboff S, Martin E, Briggs A, Angeles C, and Wolffing A. Routine Blood Count Monitoring is Unnecessary After Uncomplicated Appendectomy. Poster presentation at 2019 Annual NESS Conference; 2019 September 13-15th; Montreal, QC, Canada.
3. **Goldwag J**, Porter E, Wilcox A, Li Z, Crockett A, Wolffing A, Mancini D, Martin E, and Briggs A. Geriatric All Terrain Vehicle Trauma : An Unhelmeted and Severely Injured Population. Poster presentation at 1st Annual D-H Scientific Retreat; 2019 October 22nd, Hanover, NH.
4. **Goldwag J**, Panitz A, and Pinto-Powell R. Medical Student Involvement on Admission Committees. Poster selected for presentation at GSA-CiM-OSR Professional Development Conference; 2020 March 27-29th, Chicago, IL. (conference canceled due to COVID-19)
5. **Goldwag J**, Deal S, Relles D, Sorensen M, Jung S. Operating Room Preparation by General Surgery Trainees: A Survey of US Residents. Selected for poster presentation at Association for Surgical Education Annual Meeting at Surgical Education Week; 2020 April 28th; Seattle WA. (conference canceled due to COVID-19)
6. Ivatury S, **Goldwag J**, Wilson L, and Wilson M. Restorative Reconstruction after Total Mesorectal Excision for Rectal Cancer is Associated with Significant Bowel Dysfunction. Presented at American College of Surgeons Clinical Congress; 2019 October 27-31st, San Francisco, CA. (not presenter)
7. **Goldwag J**, Porter E, Wilcox A, Li Z, Crockett A, Wolffing A, Mancini D, Martin E, Briggs A. Geriatric Snowmobile Trauma: Longer Courses after Similar Injuries. Presented at 15th Annual Academic Surgical Congress; 2020 Feb 4-6th; Orlando, FL. (not presenter)
8. **Goldwag J**, Porter E, Wilcox A, Li Z, Crockett A, Wolffing A, Mancini D, Martin E, Briggs A. Geriatric All Terrain Vehicle Trauma: An Unhelmeted and Severely Injured Population. Presented at 15th Annual Academic Surgical Congress; 2020 Feb 4-6th; Orlando, FL. (not presenter)
9. Porter E, **Goldwag J**, Wilcox A, Li Z, Mancini DJ, Wolffing A, Martin E, Briggs A. Geriatric Skiers and Snowboarders: Active But Still At Risk. Presented at 15th Annual Academic Surgical Congress; 2020 Feb 4-6th; Orlando, FL. (not presenter)
10. Wilcox A, Porter E, **Goldwag J**, Li Z, Mancini DJ, Wolffing A, Crockett A, Martin E, Briggs A. Pediatric Snowmobile Injuries: Too Young and Unprotected. Presented at 15th Annual Academic Surgical Congress; 2020 Feb 4-6th; Orlando, FL. (not presenter)
11. Sorensen M, **Goldwag J**, Lee C, Rogers D, Davies L. An Exploration of Patient Perceptions of Resident Operative Participation: Implications for Surgical Educators. Selected for presentation at the Association for

Surgical Education Annual Meeting at Surgical Education Week; 2020 April 28-30th; Seattle WA. (Not presenter- conference canceled due to COVID-19)

12. Burney C, **Goldwag J**, Sorensen M, Crockett A. Hopes, Fears, and Rumors: Medical Students and the General Surgery Clerkship. Selected for presentation the Association for Surgical Education Annual Meeting at Surgical Education Week; 2020 April 28-30th; Seattle WA. (Not presenter- conference canceled due to COVID-19)
13. **Goldwag J**, Saunders C, Read J, Durand M-A, Elwyn G, Ivatury S. Would Patients Benefit from a Decision Aid for Surgical Decision Making for Rectal Cancer? A Qualitative Analysis. Accepted for American Society of Clinical Oncology for online publication, May 13, 2020.
14. **Goldwag J**, Lee C, Rogers D, Davies L, Sorensen M. Patient Perceptions of the Operative Experience: A Qualitative Analysis. Virtual quickshot presentation. The Eighth Annual STARS; 2020 May 15th; Lebanon, NH.

Publications

1. **Goldwag J**, Lyn R, Wilson L, Wilson M, and Ivatury S. Effect of Elective Sigmoidectomy for Diverticulitis on Bowel Function Patient-Reported Outcomes. J Surg Res. 2019 Apr 22; 241:135-140. Doi: 10.1016/j.jss.2019.03.041
2. **Goldwag J**, Marsicovetere P, Scalia P, Johnson H, Durand MA, Elwyn G, and Ivatury S. The impact of decision aids in patients with colorectal cancer: a systematic review. BMJ Open. 2019 Sep 12; 9:e028379. Doi: 10.1136/bmjopen-2018-028379
3. **Goldwag J**, and Jung S. Operating Room Preparation by General Surgery Residents: A qualitative analysis. Am J Surg. 2019 Dec 20; pii: S0002-9610(19)31572-7. doi: 10.1016/j.amjsurg.2019.12.020
4. **Goldwag J**, Wilson L, Ivatury S, Tsapakos M, and Wilson M. The Prevalence of Fascial Defects at Prior Stoma Sites in Patients with Colorectal Cancer. IJAWHS. 2020; Doi: 10.4103/ijawhs.ijawhs_56_19
5. **Goldwag J**, Panitz A, and Pinto-Powell R. Medical Student Involvement on Admission Committees. Med Sci educ. 2020 March 23. Doi:10.1007/s40670-020-00950-z

Publications pending review/submission:

1. Rezaee M, **Goldwag J**, Goddard B, Bihle W, Viazmenski A, Wilson M, and Seigne J. Parastomal Hernia Development after Cystectomy and Ileal Conduit for Bladder Cancer: Results from the Dartmouth Ileal Conduit Enhancement (DICE) Project. Under review
2. **Goldwag J**, Wilson L, Ivatury S, Pauli E, Tsapakos M, and Wilson M. Stoma Closure and Reinforcement (SCAR): A study protocol for a pilot trial. Under Review at Contemporary Clinical Trials Communications.
3. **Goldwag J**, Porter E, Wilcox A, Martin E, Wolffing A, Mancini D, Briggs A. Geriatric ATV and Snowmobile Trauma at a Rural Level 1 Trauma Center: A Blow to the Chest. Under Review at Injury.
4. Sacks O, **Goldwag J**, Gray P, Eid M, Wilson L, Wilson M, Ivatury S. IBD patients are younger and in worse health at initial presentation to a colorectal surgeon. Under Review.
5. Gray P, **Goldwag J**, Eid M, Sacks O, Wilson L, Wilson M, Ivatury S. Does Bowel Function Change After Colectomy for Colon Malignancy? Under Review.
6. Ivatury S, Kang R, **Goldwag J**, Wilson M. Restorative Reconstruction after TME for Rectal Cancer is Associated with Significant Bowel Dysfunction from Initial Presentation. Under Review
7. **Goldwag J**, Porter E, Wilcox A, Li Z, Crockett A, Wolffing A, Mancini D, Martin E, Scott J, Briggs A. Geriatric Snowmobile Trauma: Longer Courses after Similar Injuries. To be submitted to Journal of Surgical Research.

8. **Goldwag J**, Porter E, Wilcox A, Li Z, Crockett A, Wolffing A, Mancini D, Martin E, Scott J, Briggs A. Geriatric All Terrain Vehicle Trauma: An Unhelmeted and Severely Injured Population. To be submitted to Journal of Trauma.
9. **Goldwag J**, Panitz A, Foster-Johnson L, Pinto-Powell R. Virtual Medical School Interviews in the Age of Social Distancing. To be submitted to Academic Medicine as an Innovation report.
10. Saunders C, **Goldwag J**, Read J, Durand M-A, Elwyn G, Ivatury S. "Because everyone is so different" Interviews with Rectal Cancer Patients Reveal Major but Varied Impact and Information Needs at Diagnosis, Treatment, and Survivorship.
11. **Goldwag J**, Saunders C, Read J, Durand M-A, Elwyn G, Ivatury S. Would Patients Benefit from a Decision Aid for Surgical Decision Making for Rectal Cancer? A Qualitative Analysis. To be submitted to Diseases of the Colon and Rectum
12. **Goldwag J**, Lee C, Rogers D, Davies L, Sorensen M. Patient Perceptions of the Operative Experience: A Qualitative Analysis.
13. Burney C, **Goldwag J**, Sorensen M, Crockett A. Hopes, Fears, and Rumors: Medical Students and the General Surgery Clerkship.

Dr. Phillip Grey:

Phillip Grey is a general surgery resident who completed one year of academic development and research with sponsorship from the Department of Surgery. *As a novice in the research field, he hoped to gain foundational skills in research, from initial study design, including IRB submission, to data acquisition and analysis, and ultimately manuscript writing. He also aimed to present original research at national and regional conferences during his research year.*

Under the mentorship of Dr. Ivatury, Dr. Grey focused primarily on three projects related to patient-reported outcomes in colorectal surgery and rectal cancer. The first project examined functional outcomes after colon resections and resulted in two Quickshot oral presentations, at the American Surgical Congress (ASC) and Vermont ACS, as well as a poster at the Dartmouth-Hitchcock Scientific Retreat. The manuscript has been submitted to the Journal of Surgical Research and is currently under review. Following this work, Dr. Grey examined long-term outcomes in patients treated for diverticulitis through follow-up phone surveys. This work was disseminated at New England Society of Colon and Rectal Surgeons



(NESCO) Annual Meeting in June 2020, and will be presented at the annual meetings of the New England Surgical Society (NESS) and American College of Surgeons (ACS) Clinical Congress this Fall. As a highly rated abstract, the full manuscript was invited for early submission to the Journal of the ACS, and is currently under review. Dr. Grey completed a similar study examining long-term bowel function changes in colon cancer patients, and has been shared as a virtual poster presentation on the American Society for Colon and Rectal Surgery (ASCRS) Annual Meeting website.

Dr. Grey also played an important role as a collaborator on a variety of other projects led by Dr. Ivatury, Dr. Sorensen and Dr. Rosenkranz. These projects included the development of a new education tool for rectal cancer patients, a

survey of physician perspectives on ostomy patients, and two retrospective chart review studies. Lastly, he completed the Yellow Belt training course and applied his new knowledge to two quality improvement projects. These secondary projects enriched his professional development and gave him experience with a variety of study designs and research teams. *Overall, he grew as a scientist, developing skills in study design, IRB submission, data acquisition, data analysis, and writing, all of which will benefit him professionally long into the future.*

Dr. Grey's research work led to 3 first author manuscripts, all of which are currently under review, and 8 presentations at regional and national professional society meetings.

Presentations

1. **Gray P**, Goldwag J, Eid M, Sacks O, Wilson L, Wilson M, Ivatury S. Does Bowel Function Change After Colectomy for Colon Malignancy? Poster presentation. 1st Annual D-H Scientific Retreat; 2019 October 22nd, Hanover, NH.
2. **Gray P**, Goldwag J, Eid M, Sacks O, Wilson L, Wilson M, Ivatury S. Does Bowel Function Change After Colectomy for Colon Malignancy? Quickshot presentation. Annual Academic Surgical Congress; 2019 Feb 5-7th; Houston TX.
3. **Gray P**, Goldwag J, Eid M, Sacks O, Wilson L, Wilson M, Ivatury S. Does Bowel Function Change After Colectomy for Colon Malignancy? Quickshot Presentation. Vermont Academic Surgical Congress Annual Meeting. February 7th 2020.
4. **Gray P**, Goldwag J, Eid M, Trooboff ST, Wilson LR, Wilson MZ, Ivatury S. What are the Long-Term Changes to Bowel Function Patient-Reported Outcomes After Elective Sigmoidectomy for Diverticular Disease? Quickshot Presentation. Dartmouth-Hitchcock Medical Center Eighth Annual Surgical Trainees Advancing Research Symposium. Lebanon, NH. May 2020.
5. **Gray P**, Goldwag J, Eid M, Trooboff ST, Wilson LR, Wilson MZ, Ivatury S. What are the Long-Term Changes to Bowel Function Patient-Reported Outcomes After Elective Sigmoidectomy for Diverticular Disease? Virtual oral presentation. New England Society for Colon and Rectal Cancer Annual Meeting. June 28, 2020.
6. **Gray P**, Goldwag J, Eid M, Trooboff ST, Wilson LR, Wilson MZ, Ivatury S. What are the Long-Term Changes to Bowel Function Patient-Reported Outcomes After Elective Sigmoidectomy for Diverticular Disease? Quickshot presentation. New England Surgical Society Annual Meeting, Oct 2020.
7. **Gray P**, Goldwag J, Eid M, Trooboff ST, Wilson LR, Wilson MZ, Ivatury S. What are the Long-Term Changes to Bowel Function Patient-Reported Outcomes After Elective Sigmoidectomy for Diverticular Disease? Oral presentation. American College of Surgeons Clinical Congress 2020; Oct 4-7, 2020. (highly rated abstract)
8. **Gray PJ**, Bastien AJ, Eid MA, Goldwag JL, Wilson LR, Wilson MZ, Ivatury S. Ivatury Does Long-Term Bowel Function Change After Colectomy for Colon Malignancy? Video poster presentation. American Society for Colon and Rectal Surgery, June 2020.

Publications Pending Review/Submission

1. **Gray P**, Goldwag J, Eid M, Sacks O, Wilson L, Wilson M, Ivatury S. Does Bowel Function Change After Colectomy for Colon Malignancy? Under Review at J of Surg Research.
2. **Gray P**, Goldwag J, Eid M, Trooboff ST, Wilson LR, Wilson MZ, Ivatury S. What are the Long-Term Changes to Bowel Function Patient-Reported Outcomes After Elective Sigmoidectomy for Diverticular Disease? Under review at JACS.

3. **Gray PJ**, Bastien AJ, Eid MA, Goldwag JL, Wilson LR, Wilson MZ, Ivatury S. Ivatury Does Long-Term Bowel Function Change After Colectomy for Colon Malignancy? To be submitted to Diseases of the Colon and Rectum.
4. Sacks O, **Goldwag J**, Gray P, Eid M, Wilson L, Wilson M, Ivatury S. IBD patients are younger and in worse health at initial presentation to a colorectal surgeon. Under Review.
5. MA. Eid, J. Goldwag, **P. Gray**, SJ Ivatury “ Physicians Perceive that Ostomates Have Decreased Quality of Life but Not Overall Health: An International Survey of Physicians Caring for Ostomates.” Planning Submission to BMJ, Summer 2020
6. MA. Eid, J. Goldwag, **P. Gray**, SJ Ivatury “Decreasing Ileostomy Readmission in a Rural Healthcare Setting: A Quality Improvement Initiative.” Diseases of the Colon and Rectum. Submitting July 2020.

External Programs in Research: VA Quality Scholars Program & AHA SFRN Fellowship

In the 2019-2019 year, Dr. Mark Eid completed the first year of a two year fellowship through the VA Quality Scholars Program (VAQS), while Dr. Aaron Barnes served as the AHA SFRN research fellow for the Brigham-Dartmouth Center. These external fellowships allowed each resident to complete the MS degree program at The Dartmouth Institute for Health Policy and Clinical Practice as part of their research training. Led by Dr. Louise Davies, Brant Oliver, Brenda Sirovich, and Philip Goodney, the VAQS program at the White River Junction VA Medical Center has a longstanding history of success in mentorship and career development. It focuses on methods in outcomes research, quality improvement, and medical communication. A full report can be obtained at <http://www.vaoutcomes.org>. The AHA SHRN fellowship is funded through a four-year grant awarded to Dr. Goodney in April 2018 to study the use and effect of integrated management strategies for patients with peripheral arterial disease. The fellowship component included monthly professional development seminars offered by AHA, quarterly SFRN center meetings with the Brigham-Dartmouth team, and an annual network meeting with SFRN teams from across the country, all of which emphasized professional networking and collaboration.

Dr. Mark Eid:



Mark Eid is a general surgery resident currently serving a two-year term as a VA Quality Scholar. During his first year, Dr. Eid elected to take a full course load at the Dartmouth Institute for Health Policy and Clinical Practice, in order to gain a solid foundation in research methods and analytics. He will receive a MS from the Dartmouth Institute next Spring following the completion of a capstone project.

Dr. Eid's main goals for the first year of his academic development time were to obtain experience and skills in conducting health services research through collaboration with mentors and the VA Outcomes Group, and to begin individual

research projects. As a VA Quality Scholar, Dr. Eid also aimed to carry out a quality improvement project to implement the knowledge gained through the VAQS curriculum.

Dr. Eid started off his research year completing an ecologic cross-sectional analysis of surgical quality and patient satisfaction among VA Hospitals and neighboring non-VA Hospitals under the mentorship of Dr. Sandra Wong. He presented their work as a podium presentation at the Academic Surgical Congress and authored a publication in the *Journal of Surgical Research*. Through this project, Dr. Eid and the team found that across a national sample of VA Medical Center, VAs match or outperform neighboring non-VA both in terms of surgical quality and patient satisfaction. Their results have significant implications for Veterans as they face the decision of seeking care within or outside the VA, as well as for National VA Administration, as they decide on how to allocate resources to best serve Veterans.

Dr. Eid also worked under the mentorship of Dr. Phil Goodney on an American Heart Association study analyzing racial and regional differences in amputation rates among patients with peripheral artery disease and diabetes, as well as analyzing how different preventative measures augment risk for amputation. In a collaborative effort, Dr. Eid as well as colleague Aaron Barnes presented their work at multiple national and regional conferences and are preparing manuscripts for submission to high impact journals.

Dr. Eid was also pivotable in the data management an analysis of the PROVE-AAA cluster-randomized clinical trial which studied the effect of a decision aid and how well it aids in aligning Veteran's preferences for abdominal aortic aneurysm surgery. This work is ongoing, but preliminary results have been submitted for presentation and are being considered for Distinction in Research Awards through the American College of Surgeons Clinical Congress. During his second year, Mark plans to take this work forward and is currently involved in three manuscripts relaty as well as obtain a Center for Medicaid and Medicare Data Use Agreement to develop a predictive model of factors associated with amputation among patients with peripheral arterials disease and amputation.

To advance his work in quality improvement research, Dr. Eid has led a project to decrease rates of readmission after ileostomy creation under the mentorship of Dr. Joga Ivatury in the section of colorectal surgery at DHMC. He will continuing working with Dr. Ivatury on this effort over the course of his second year. In addition, Dr. Eid is planning a quality improvement within the section of vascular surgery to standardize opioid prescribing for patients undergoing lower extremity bypass. To help to take this project forward, he has been awarded a grant through the Vascular Surgery Group of New England, which will cover the cost of supplies, materials, and effort for data collection.

Overall, Dr. Eid completed the year with 1 first author publication and 8 presentations. An additional 6 manuscripts are under review or planned for submission in the next 3 months.

Presentations

1. **M.A. Eid**, B. Oliver. "When to Conduct a Root Cause Analysis: A Process for Improvement?" VA Quality Scholars Summer Institute. July 2019.
2. **M.A. Eid**, P.P Goodney, "A Minimally Invasive Approach to Incidental Arterial Injury." Vascular Interventional Advances Annual Conference. Oral Presentation. November 19, 2019.
3. **M.A. Eid**, J.A. Barnes, Z.J. Wanken, S Arya, RJ, Powell, D.H. Stone, B.D. Suckow, B. Gladders, M.A. Creager, P.P. Goodney. "Regional Variation in Amputation Rates Among Patients with Concomitant Diabetes and Peripheral Aertery Disease." Southern Association of Vascular Surgery Annual Meeting. January 7th, 2020.
4. **M.A. Eid**, J.A. Barnes, S. Trooboff, P.P. Goodney, S.L. Wong. "Differences in Surgical Quality and Patient Satisfaction between VA Hospitals and Hospitals Near VA Hospitals." Academic Surgical Congress, Oral Presentation. February 7th 2020.

5. **M.A. Eid**, J.A. Barnes, Z.J. Wanken, S Arya, RJ, Powell, D.H. Stone, B.D. Suckow, B. Gladders, M.A. Creager, P.P. Goodney. "Racial Disparities in the Prevalence of Peripheral Arterial Disease and Diabetes and Amputation rates Among Medicare Patients" Poster Presentation. American Heart Association EPI Meeting, March 5th, 2020.
6. **M.A. Eid**, P. Gray, J. Goldwag, B. Oliver, S.J. Ivatury. Decreasing Ileostomy Readmissions in a Rural Healthcare Setting: A Quality Improvement Initiative. Vermont American College of Surgeons Meeting, March 2020.
7. **M.A. Eid**, J.A. Barnes, Z.J. Wanken, S Arya, RJ, Powell, D.H. Stone, B.D. Suckow, P.P. Goodney. "Longitudinal Qualitative Outcome Assessment in a Surgical Randomized Controlled Trial." Quick Shot Presentation. Association of VA Surgeons Annual Meeting. April 19th, 2020.
8. **M.A. Eid**, J.A. Barnes, S. Trooboff, P.P. Goodney, S.L. Wong. "Differences in Surgical Quality and Patient Satisfaction between VA Hospitals and Hospitals Near VA Hospitals." STARS, Oral Presentation. May 15th 2020.
9. **M.A. Eid**, J.A. Barnes, Z.J. Wanken, S Arya, RJ, Powell, D.H. Stone, B.D. Suckow, B. Gladders, M.A. Creager, P.P. Goodney. "Racial and Regional Disparities in the Prevalence of Peripheral Artery Disease and Diabetes and Amputation Rates Among Medicare Patients" Vascular Annual Meeting, Plenary Presentation. July 2nd 2020.

Publications

1. Z.J. Wanken, J.A. Barnes, **M.A. Eid**, P.P. Goodney. Online Ratings for Vascular Interventional Proceduralists Vary by Physician Specialty" Annals Of Vascular Surgery, Accepted April 7th, 2020.
2. **M.A. Eid**, J.A. Barnes, P.P. Goodney, S.L. Wong. "Differences in Surgical Quality and Patient Satisfaction between VA Hospitals and Hospitals Near VA Hospitals." Journal of Surgical Research. Accepted May 13th 2020.
3. J.A. Barnes, **M.A. Eid**, M.A. Creager, P.P. Goodney, "Epidemiology and Risk of Amputation in Patients With Diabetes Mellitus and Peripheral Artery Disease." Arterioscler Thromb Vasc Biol. Published June 25, 2020.

Publications Pending Review/Submission

1. **MA. Eid**, J. Goldwag, P. Gray, SJ Ivatury " Physicians Perceive that Ostomates Have Decreased Quality of Life but Not Overall Health: An International Survey of Physicians Caring for Ostomates." Planning Submission to BMJ, Summer 2020
2. **MA. Eid**, J. Goldwag, P. Gray, SJ Ivatury "Decreasing Ileostomy Readmission in a Rural Healthcare Setting: A Quality Improvement Initiative." Diseases of the Colon and Rectum. Submitting July 2020.
3. **M.A. Eid**, J.A. Barnes, Z.J. Wanken, S Arya, RJ, Powell, D.H. Stone, B.D. Suckow, B. Gladders, M.A. Creager, P.P. Goodney. "Factors Associated with Preference of Choice of Aortic Aneurysm Repair." Journal of the American College of Surgeons. Submitted July 2020.
4. P Gray, J Goldwag, **MA Eid**, SJ Ivatury. "What are the Long-term Changes to Bowel Function Patient Reported Outcomes After Elective Sigmoidectomy for Diverticular Disease?" Diseases of Colon and Rectum. Submitted June 2020.
5. A. Lambour, **MA Eid**, M Sorensen, SL Wong. " Work after Work; The Impact of the HER on Burnout in Surgeons." Planning submission Summer 2020
6. J.A. Barnes, **M.A. Eid**, M.A. Creager, P.P. Goodney. "Population-Based Analysis of the Epidemiology of Concomitant Diabetes and Peripheral Artery Disease". Planning submission Summer 2020

Dr. Aaron Barnes:



At the onset of Dr. Barne's professional development year, his goals were to: 1) partake in the formal educational program at The Dartmouth Institute to develop and hone his research capabilities; 2) to participate in a diverse set of research projects pertaining to vascular surgery, surgical health services, and patient education; and 3) explore future career opportunities. Dr. Barnes completed his Master of Science degree The Dartmouth Institute for Health Policy and Clinical Practice. This degree program equipped him with the knowledge and skillset to evaluate, construct, and execute research studies. Further, Dr. Barnes was able to apply this knowledge and these skills to all the research work he participated in throughout the year.

Over the course of the year, Dr. Barnes participated in an array of research projects of varying types. Most notably, he assisted with the coordination of a multi-center retrospective test case project funded by The National Evaluation System for health Technology Coordinating Center (NESTcc) to assess the feasibility of using real world data source to identify novel uses of the Gore Excluder iliac branch endoprosthesis with the Gore Viabahn balloon expandable

endoprosthesis. This experience provided Dr. Barnes with the opportunity to assist in leading a multi-center endeavor and gain direct experience in managing an externally funded research project. Dr. Barnes also participated in the claims-based population health project funded by the American Heart Association Strategically Focused Research Network and led by Dr. Philip Goodney. This project provided Dr. Barnes with the opportunity to utilize a large administrative claims dataset in the evaluation of the epidemiologic trends in concomitant diabetes and peripheral artery disease and subsequent amputations over a 13-year period. In addition, Dr. Barnes participated in several single-center retrospective chart review research projects evaluating topics such as duplex ultrasound velocity thresholds indicative of mesenteric in-stent restenosis, the proportion of ruptured abdominal aortic aneurysms presenting with a prior endovascular aneurysm repair, and the outcomes of Zone 0 and Zone 1 endovascular aortic repairs and associated procedural costs.

Dr. Barnes also had the opportunity to conduct several research projects of his own design. He was awarded a grant from the Vascular Study Group of New England for a quality improvement project in vascular surgery. With this support, Dr. Barnes created a standardized template to document anticoagulation and antiplatelet therapy treatment plans for use in all vascular surgery progress notes and discharge summaries. He also has continued to work with local Epic coders to create a tool to seamlessly document and convey this important information. Additionally, Dr. Barnes designed and conducted an assessment of the reading grade level and quality of freely available internet-based information regarding peripheral artery disease which might be used by patients to glean information regarding the disease process.

Finally, Dr. Barnes was able to explore future career prospects within his home state of Alaska. As a state without an established academic medical center, Dr. Barnes wanted to explore the opportunities to both conduct research and participate in medical education. This year afforded Dr. Barnes the chance to meet with vascular surgeons practicing in Alaska. Through these conversations, he was able to gain information and insight into the types of opportunities associated with a career in this unique practice environment.

Overall, Dr. Barnes completed the year with 4 first author publications, 5 first author manuscripts to be submitted this summer, and 14 first author abstracts accepted for poster or podium presentations.

Presentations

1. **Barnes, JA**, Eid, MA, Wanken, ZJ, Gladders, B, Austin, AM, Powell, RJ, Stone, DH, Feinberg, MW, Bonaca, MP, Creager, MA, Goodney, PP. Long-term Survival After Amputation Among Medicare Patients with Concomitant Diabetes and Peripheral Artery Disease. Presentation at the 8th Annual Dartmouth-Hitchcock Medical Center Surgical Trainees Advancing Research Symposium, Virtual Meeting, May 2020.
2. **Barnes, JA**, Eid, MA, Wanken, ZJ, Gladders, B, Austin, AM, Powell, RJ, Stone, DH, Feinberg, MW, Bonaca, MP, Creager, MA, Goodney, PP. Long-term Survival After Amputation Among Medicare Patients with Concomitant Diabetes and Peripheral Artery Disease. Poster presentation at The American Heart Association Vascular Discovery: From Genes to Medicine and Vascular Research Initiative Conference (VRIC), Virtual Meeting, May 2020.
3. **Barnes, JA**, Eid, MA, Wanken, ZJ, Powell, RJ, Stone, DH, Suckow, BD, Gladders, B, Creager, MA, Goodney, PP. Variation in Timing of Guideline-Driven Preventative Measures in Patients with Diabetes and Peripheral Artery Disease. Poster presentation at the 48th Annual Society for Clinical Vascular Surgery Symposium. Huntington Beach, CA, March 2020. Cancelled due to COVID-19.
4. **Barnes, JA**, Eid, MA, Wanken, ZJ, Powell, RJ, Stone, DH, Suckow, BD, Gladders, B, Creager, MA, Goodney, PP. Regional and Racial Variation in the Prevalence of Concomitant Diabetes and Peripheral Arterial Disease. Poster presentation at The American Heart Association EPI | LIFESTYLE 2020 Scientific Sessions, Phoenix, AZ, March 2020.
5. **Barnes, JA**. Aorto-Esophagogastric Conduit Fistula. Case presentation at Clinically Relevant Vascular & Endovascular Surgery, Vail, CO. February 2020.
6. **Barnes, JA**, Eid, MA, Wanken, ZJ, Gladders, B, Austin, AM, Powell, RJ, Stone, DH, Feinberg, MW, Bonaca, MP, Creager, MA, Goodney, PP. Long-term Survival After Amputation Among Medicare Patients with Concomitant Diabetes and Peripheral Artery Disease. Poster presentation at The American Heart Association Vascular Disease Strategically Funded Research Network Annual Meeting, Nashville, TN, February 2020.
7. **Barnes, JA**. Anticoagulation and Antiplatelet Treatment Plan Communication and Documentation Improvement Project. Presentation at Vascular Study Group of New England Fall Meeting 2019, Portland, ME. November 2019.
8. **Barnes, JA**. A Novel Approach to SFA Occlusive Disease: The 'Endovascular Fem-Pop'. Case presentation at Vascular Interventional Advances (VIVA), Las Vegas, NV. November 2019.
9. **Barnes, JA**, Eid, MA, Wanken, ZJ, Powell, RJ, Stone, DH, Suckow, BD, Gladders, B, Creager, MA, Goodney, PP. Regional Variation in Amputation Rates Among Patients with Concomitant Diabetes and Peripheral Arterial Disease. Poster presentation at the 1st Annual Dartmouth-Hitchcock Medical Center Scientific Retreat, Hanover, NH. October 2019.
10. **Barnes, JA**, Kang, J, Suckow, BD, Goodney, PP, Columbo, JA, Zwolak, RM, Powell, RJ, Stone, DH. The Evolution of the Financial Delivery of EVR in Contemporary Practice. Poster presentation at the 1st Annual Dartmouth-Hitchcock Medical Center Scientific Retreat, Hanover, NH. October 2019.
11. **Barnes, JA**, Eid, MA, Wanken, ZJ, Powell, RJ, Stone, DH, Suckow, BD, Gladders, B, Creager, MA, Goodney, PP. Regional and Racial Variation in the Prevalence of Concomitant Diabetes and Peripheral Arterial Disease. Poster presentation at The American Heart Association Strategically Funded Research Network Annual Meeting, Baltimore, MD, September 2019.

12. **Barnes, JA**, Kang, J, Suckow, BD, Goodney, PP, Columbo, JA, Zwolak, RM, Powell, RJ, Stone, DH. The Evolution of the Financial Delivery of EVR in Contemporary Practice. Presentation at the New England Society for Vascular Surgery Annual Meeting 2019, Providence, RI. September 2019.
13. **Barnes, JA**, Columbo, JA, Ponukumati, AS, Zwolak, RM, Olive, FT, Goodney, PP, Powell, RJ, Zacharias, N. Long-term Outcomes of Visceral Stenting and Analysis of In-Stent Restenosis Duplex Velocity Criteria. Presentation at the New England Society for Vascular Surgery Annual Meeting 2019, Providence, RI. September 2019.
14. **Barnes, JA**. Anticoagulation and Antiplatelet Treatment Plan Communication and Documentation Improvement Project. Presentation at Vascular Study Group of New England Spring Meeting 2019, Lebanon, NH. June 2019.

Publications

1. **Barnes JA**, Eid MA, Creager MA, Goodney PP. Brief Review: Epidemiology and Risk of Amputation in Patients with Diabetes and Peripheral Artery Disease. *Arteriosclerosis, Thrombosis, and Vascular Biology*. Accepted for publication.
2. **Barnes JA**, Goodney PP. Invited Commentary: Coming into Focus - Evidence Supporting the Use of Inferior Vena Cava Filters in Cancer Patients. *JAMA Network Open*. Accepted for publication.
3. **Barnes JA**, Columbo JA, Kuwayama DP. Novel Use of the ENROUTE® Transcarotid Arterial Sheath for Antegrade Cerebral Perfusion During Retrograde Innominate Stenting. *Journal of Vascular Surgery Cases and Innovative Techniques*. Accepted for publication.
4. Eid MA, **Barnes JA**, Trooboff SW, Goodney PP, Wong, SL. A Comparison of Surgical Quality and Patient Satisfaction Indicators between VA Hospitals and Hospitals Near VA Hospitals. *Journal of Surgical Research*. Accepted for publication.
5. Wanken ZJ, Rode JB, Bessen SY, Anderson PB, **Barnes JA**, Eid MA and Goodney PP. Online Ratings for Vascular Interventional Proceduralists Vary by Physician Specialty. *Ann Vasc Surg*. 2020.
6. **Barnes JA**, Columbo JA, Ponukumati AS, Zwolak RM, Olive FT, Goodney PP, Powell RJ, Zacharias N. Long-Term Outcomes of Mesenteric Stenting and Analysis of In-Stent Restenosis Duplex Velocity Criteria. *Ann Vasc Surg*. 2020.
7. Columbo JA, **Barnes JA**, Jones DW, Suckow BD, Walsh DB, Powell RJ, Goodney PP and Stone DH. Adverse cardiac events after vascular surgery are prevalent despite negative results of preoperative stress testing. *J Vasc Surg*. 2020.
8. Wanken ZJ, **Barnes JA**, Trooboff SW, et al. A Systematic Review and Meta-Analysis of Long-Term Reintervention After Endovascular Abdominal Aortic Aneurysm Repair. *J Vasc Surg*. 2020.
9. Trooboff SW, Wanken ZJ, Gladders B, **Barnes, JA**, et al. Characterizing Reimbursements for Medicare Patients Receiving Endovascular Abdominal Aortic Aneurysm Repair at Vascular Quality Initiative Centers. *Annals of Vascular Surgery*. 2020;62:148-158.
10. Wanken ZJ, **Barnes JA**, Eppolito AJ, Zwolak RM, Suckow BD. Coil Embolization of an Aberrant Posterior Tibial Artery Pseudoaneurysm After Total Knee Arthroplasty. *Journal of Vascular Surgery Cases and Innovative Techniques*. 2019;5(4):497-500.

Manuscripts Under Review/Pending

1. **Barnes JA** et al. Assessing the Quality and Readability of Online Health Information for Patients with Peripheral Artery Disease. To be submitted this summer.
2. **Barnes JA** et al. Population-Based Analysis of the Epidemiology of Concomitant Diabetes and Peripheral Artery Disease and Lower Extremity Amputation: 2003- 2016. To be submitted this summer.

3. **Barnes JA** et al. Use of real-world data and clinical registries to identify new uses of existing vascular endografts: Combined use of Gore Excluder iliac branch endoprosthesis and Gore Viabahn VBX balloon expandable endoprosthesis. To be submitted this summer.
4. Flores and **Barnes** et al. Ulcer code methods manuscript for AHA SFRN. To be submitted this summer.
5. **Barnes** et al. DHMC Rupture AAA with prior EVR manuscript. To be submitted this summer.
6. **Barnes** et al. DHMC Zone 0 and Zone 1 TEVAR outcomes and cost manuscript. To be submitted this summer.
7. Eid and Barnes et al. PROVE-AAA manuscript for JACS. To be submitted this summer.

Faculty Mentorship and Collaboration

Barnes, Aaron

Faculty Mentors

Philip Goodney, MD, MD
Mark Creager, MD
David Stone, MD

DHMC, Vascular Surgery
DHMC, Vascular Surgery
DHMC, Vascular Surgery

Faculty Collaborators

Marc Bonaca, MD, MPH

Brigham and Women's Hospital, Vascular Surgery

Nikolaos Zacharias, MD
Bjoern Suckow, MD MS
Jeanwan Kang, MD
David Kuwayama, MD MPA
Richard Powell, MD
Jon Lurie, MD MS

DHMC, Vascular Surgery
DHMC, Vascular Surgery
DHMC, Vascular Surgery
DHMC, Vascular Surgery
DHMC, Vascular Surgery
DHMC, Hospital Medicine; The Dartmouth Institute

Others

JoAnna Leyenaar MD MPH PhD
Lauren Gilstrap, MD MPH
Barbara Gladders, MS
Mark Eid, MD

The Dartmouth Institute
DHMC, Cardiovascular Medicine
DHMC, Heart and Vascular Center
DHMC, General Surgery Resident; WRJ
VAMC, VA Outcomes Group
DHMC, General Surgery Resident

Medical Students

Eid, Mark

Zachary Wanken, MD, MS
Jesse Columbo, MD, MS
Spencer Trooboff, MD, MS
Aravind Ponukumati

Geisel School of Medicine at Dartmouth

Sandra Wong, MD, MS
Philip Goodney, MD, MD
S. Joga Ivatury, MD
Brant Oliver, PhD, MS, MPH,
FNP-BC, PMHNP-BC

DHMC, Chair, Department of Surgery
DHMC, Vascular Surgery
DHMC, General Surgery
WRJ VAMC, VA Outcomes Group

Grey, Phillip

Faculty Mentors

Faculty Collaborators

S. Joga Ivatury, MD
Meredith Sorensen, MD
George Blike, MD
Richard Barth, MD
Kari Rosenkranz, MD
Matthew Wilson, MD
Lauren Wilson, MD

DHMC, General Surgery
DHMC, General Surgery
DHMC, General Surgery
DHMC, General Surgery
DHMC, General Surgery
DHMC, General Surgery
DHMC, General Surgery

Other Collaborators	Mark Eid, MD	DHMC, General Surgery Resident; WRJ VAMC, VA Outcomes Group
	Jenaya Goldwag, MD	DHMC, General Surgery Resident
	Robert Allen, MD	DHMC, General Surgery Resident
	Spencer Trooboff, MD, MS	DHMC, General Surgery Resident
Medical Students	Amanda Bastien	Geisel School of Medicine at Dartmouth
<u>Goldwag, Jenaya</u>		
Faculty Mentors	Meredith Sorensen, MD	DHMC, General Surgery
	S. Joga Ivatury, MD	DHMC, General Surgery
	Alexandra Briggs, MD, MS	DHMC, General Surgery
	Matthew Wilson, MD	DHMC, General Surgery
	Andrew Crockett, MS	DHMC, General Surgery
	Sarah Jung, PhD	University of Wisconsin-Madison, Department of Surgery
Other Collaborators	Phillip Grey, MD	DHMC, General Surgery Resident
	Mark Eid, MD	DHMC, General Surgery Resident; WRJ VAMC, VA Outcomes Group
	Catherine Saunders, PhD	DHMC, General Surgery
	Allison Wilcox, MD	DHMC, General Surgery
	Eleah Porter, MD	DHMC, General Surgery
	Charles Burney, MD	DHMC, General Surgery
Medical Students	Jackson Read	Geisel School of Medicine at Dartmouth
	Olivia Sacks	Geisel School of Medicine at Dartmouth
	Chloe Lee	Geisel School of Medicine at Dartmouth

Educational Programs and Other Professional Development Activities

Goldwag, Jenaya

Advanced Trauma Life Support (ATLS) Instructor: Trained as instructor on ATLS 10th edition 2020

Organization of Resident Representatives (ORR) Member 2019 – present

Geisel Medical School Admissions Committee 2020 – present

Grey, Phillip

Yellowbelt QI Certification Dec 2019

Eid, Mark

The Dartmouth Institute for Health Policy and Clinical Practice, MS degree program Jul 2019 - present

VA Outcomes Group, White River Junction VA Medical Center July 2019 – present

VA Quality Scholars Program, White River Junctions VA Medical Center, 2-year fellowship July 2019 – present

Barnes, J. Aaron

The Dartmouth Institute for Health Policy and Clinical Practice, MS degree program Jul 2019-May 2020

Yellowbelt QI Certification Dec 2019

Research Meetings and Events

Each Wednesday, 5-6pm is reserved for a Resident Research-in-Progress meeting as part of the Chair's Academic and Non-technical Development Opportunities Conference (CAN-DO). The research discussions provide residents and faculty with a venue for sharing research in progress, receiving feedback, and refining ideas. Presentations range from informal discussions of project ideas, to pilot-testing surveys, and practicing for upcoming talks at national meetings. Once a month, the CAN-DO meeting is dedicated to topics related to surgical education research. "The Education And Collaborative researchH and Engaging Residents (TEACHER) Conference" serves as a forum to share project ideas and foster collaboration on surgical education research at DHMC.

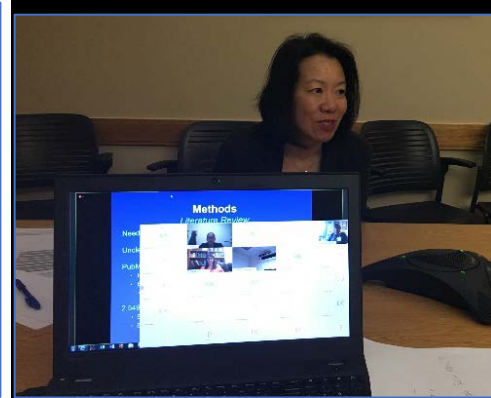
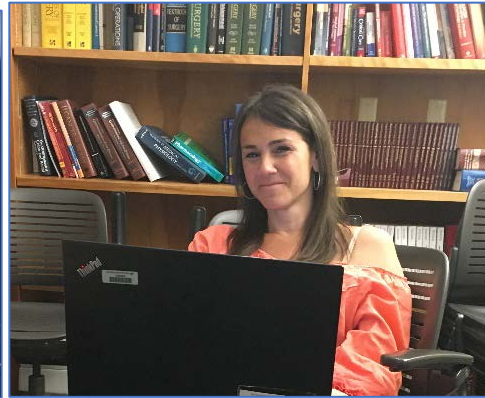
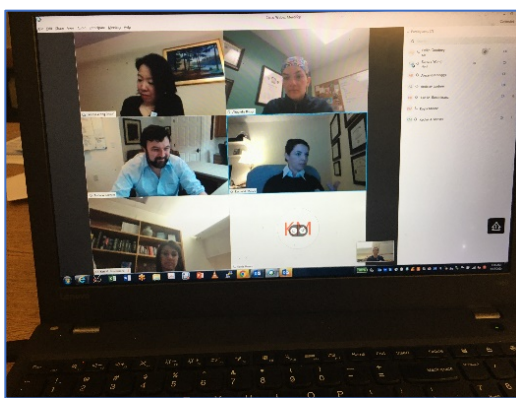
Chair's Academic and Non-technical Development Opportunities Conference – Schedule of Research Presentations

DATE	PRESENTER	TOPIC
7/10/2019	Meredith Sorensen	Surgical Education Research
7/17/2019	Jenaya Goldwag	Research in Progress
7/31/2019	Mark Eid	Research in Progress
8/14/2019	Aaron Barnes	Research in Progress
8/21/2019	Group Discussion	TEACHER
8/28/2019	Jenaya Goldwag	Research in Progress
9/4/2019	Ravinder Kang	NESS practice talk
9/11/2019	Phillip Gray	Research in Progress
9/18/2019	Group Discussion	TEACHER
9/25/2019	Mark Eid	Research in Progress
10/2/2019	Phil Goodney	How to write an abstract
10/9/2019	Aaron Barnes	Research in Progress
10/16/2019	David Stone	Applying for Fellowships - What a Program Director Looks for?
10/23/2019	Phillip Gray	Research in Progress
10/30/2019	Casey Lamb	Practice Talk for American Society of Metabolic and Bariatric Surgeons
11/6/2019	Phillip Gray	Research in Progress
11/13/2019	Group Discussion	TEACHER
11/20/2019	Jenaya Goldwag	Research in Progress
12/4/2019	Phillip Gray	Research in Progress
12/11/2019	Bob Shaw and Case Lamb	TEACHER: SERF Project Ideas
12/18/2019	Jenaya Goldwag	Research in Progress
1/8/2020	Philip Goodney	How to make slides and give a talk
1/15/2020	Phil Gray, Fay Leech	ASC Practice Talks

1/22/2020	Mark Eid, Eleah Porter, M Jiang	ASC and STS Practice talks
1/29/2020	Allison Wilcox, Eleah Porter, Olivia Sacks	ACS Practice Talks
2/12/2020	Group Discussion	TEACHER
3/4/2020	Aaron Barnes	Research in Progress
3/11/2020	Aaron Barnes	Research in Progress
3/18/2020	Mark Eid	Research in Progress
3/25/2020	Phil Goodney	Research in Progress
4/1/2020	Phillip Gray	Research in Progress
4/8/2020	Group Discussion	TEACHER
4/22/2020	Jenaya Goldwag	Research in Progress
4/29/2020	Aaron Barnes	Research in Progress
5/6/2020	Group Discussion	TEACHER
5/13/2020	Eleah Porter	Research in Progress
5/20/2020	Group Discussion	STRIVE Transition Meeting
6/3/2020	Group Discussion	TEACHER
6/10/2020	Jenaya Goldwag	Research in Progress
6/24/2020	Marc Eid	Research in Progress

Surgical Trainees Advancing Research Symposium (STARS-8)

The Eighth Annual Surgical Trainees Advancing Research Symposium (STARS) took the form of a virtual conference this year due to precautions and restrictions in place related to the COVID-19 pandemic. The meeting was held via WebEx on Friday, May 15, 2020. Twenty-three abstracts featuring original research conducted by DHMC surgical residents were submitted and reviewed by the judges panel, consisting of surgical faculty from various specialties: Drs. Alexandra Briggs, Philip Goodney, Rian M. Hasson, Jennifer Hong, Andrew Loehrer, Rachel Moses, Kari Rosenkranz, Sandra Wong. Sixteen of these abstracts were selected for presentation. Prizes were awarded for first and second place, and honorable mentions given to six presenters.



Judges convene via WebEx to determine winners for STARS.

THE EIGHTH ANNUAL STARS



(SURGICAL TRAINEES ADVANCING RESEARCH SYMPOSIUM)

Ord.	Time	Presenting Author	Title
1	7:00	Michael E. Rezaee, MD, MPH	The Impact of Partial versus Complete BCG Intravesical Therapy on Bladder Cancer Outcomes in High-risk Non-muscle Invasive Bladder Cancer (NMIBC): Implications for Global BCG Shortages
2	7:07	Daniel R. Calnan, MD	Detecting Ischemic and Hemorrhagic Lesions using a novel Bioimpedance Monitoring System
3	7:14	Jenaya L. Goldwag, MD	Patient Perceptions of the Operative Experience: A Qualitative Analysis
4	7:21	Eleah D. Porter, MD	Guideline-Directed Prescribing and Proper Disposal of Excess Opioids After Inpatient Surgery: A Prospective Clinical Trial
5	7:28	Phillip Gray, MD	What are the Long-Term Changes to Bowel Function Patient-Reported Outcomes After Elective Sigmoidectomy for Diverticular Disease?
6	7:35	Mark A Eid, MD	Differences in Surgical Quality and Patient Satisfaction between VA Hospitals and Hospitals Near VA Hospitals
7	7:42	Prashanthi Divakar, MD	Factors Affecting Neck Dissection Lymph Node Yield in Head and Neck Squamous Cell Carcinoma
8	7:49	Rob Allen, MD	Deep Sleep and Beeps: Inpatient Sleep Assessment in Elective Surgical Patients
9	7:56	Andrew Lambour, MD	Work After Work: The Impact of the EHR on Burnout in Surgeons
10	8:04	J Aaron Barnes, MD	Long-term Survival After Amputation Among Medicare Patients With Concomitant Diabetes And Peripheral Artery Disease
11	8:11	Kevin Krughoff, MD	Botulinum Toxin Attenuates Ureteral PGE Synthase in a Rabbit Model
12	8:18	Eleah D. Porter, MD	Reducing Unnecessary Chest X-Rays After Thoracic Surgery: A Quality Improvement Initiative
13	8:25	Eric Eisen, MD	Age of Cochlear Implantation Predicts Sound Quality Perception
14	8:32	Eileen R. Brandes, MD	Peri-Partum Acute Changes in 24-Hour Lithogenic Urine Measures
15	8:39	Michael Davis, MD	Quantitative Analysis of Frozen Section Histology in Mohs Micrographic Surgery
16	8:46	Libby Copeland-Halperin, MD	The Effects of Cannabis Use on Wound Healing: A Review of the Literature

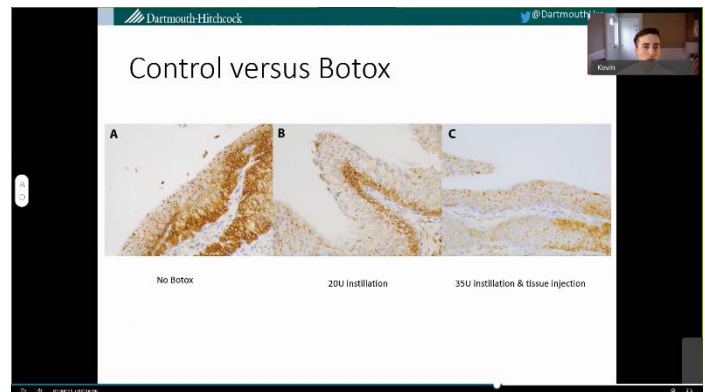
Co-Directors: Philip P. Goodney, MD, MS and Kari M. Rosenkranz, MD. Judges: Alexandra Briggs, MD; Philip P. Goodney, MD, MS; Rian M. Hasson, MD; Jennifer Hong, MD; Andrew P. Loehrer, MD, MPH; Rachel A. Moses, MD, MPH; Kari M. Rosenkranz, MD; Sandra L. Wong, MD, MS

STARS Prizes and Honorable Mentions

First Place

Botulinum Toxin Attenuates Ureteral PGE Synthase in a Rabbit Model

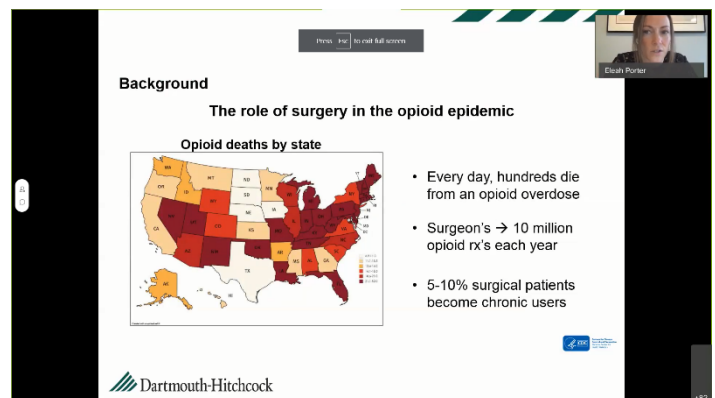
Kevin Krughoff, Scott Palisoul, Steven Tau, Faith L. Anderson, Alison L Young, Jason Pettus, Karen Moodie, Rachel Moses, Matthew C. Havrda, David Chavez



Second Place

Guideline-Directed Prescribing and Proper Disposal of Excess Opioids After Inpatient Surgery: A Prospective Clinical Trial

Eleah D. Porter, Sarah Y. Bessen, Ilda B Molloy, Julia L. Kelly, Olivia C. Weale, Jessica R. Henkin, Anne K. McGowan, Jonathan D. Dupuis, Alexandra Fannin, Lisa L. Cotnoir, , Lindsay E. Bergmann, Loyd A. West, Srinivas J. Ivatury, Ivy Wilkinson-Ryan, John D. Seigne, Kerrington D. Smith, Lauren R. Wilson, Evelyn L. Fleming, Matthew Z. Wilson, Joseph D. Phillips, Andrew P. Loehrer, David J. Finley, Rian M. Hasson, Einar F. Sverrisson, Timothy M. Millington, Ilana Cass, Lawrence M. Dagrosa, Florian R. Schroeck, Christina V. Angeles, Sarah E. Billmeier, Sandra L. Wong, Richard J. Barth Jr.



Honorable Mention

Reducing Unnecessary Chest X-Rays After Thoracic Surgery: A Quality Improvement Initiative

Eleah D. Porter, Julia L. Kelly, Kayla A. Fay, Rian M. Hasson, Timothy M. Millington, David J. Finley, Joseph D. Phillips

Honorable Mention

Peri-Partum Acute Changes in 24-Hour Lithogenic Urine Measures

Eileen R. Brandes, MD, Zita F. Ficko, MD, Elizabeth B. Johnson, MD, Vernon M. Pais, MD

Honorable Mention

The Impact of Partial versus Complete BCG Intravesical Therapy on Bladder Cancer Outcomes in High-risk Non-muscle Invasive Bladder Cancer (NMIBC): Implications for Global BCG Shortages

Michael E. Rezaee, MD, MPH, A. Aziz Ould Ismail, Chiamaka L. Okori, BS, John D. Seigne, MB, BCh, Kristine E. Lynch, PhD, & Florian R. Schroeck, MD, MS

Honorable Mention

Patient Perceptions of the Operative Experience: A Qualitative Analysis

Jenaya L. Goldwag, MD; Chloe N. Lee, BA, MPH; David A. Rogers, MD, MHPE; Louise Davies, MD, MS; Meredith J. Sorensen, MD, MS

Honorable Mention

What are the Long-Term Changes to Bowel Function Patient-Reported Outcomes After Elective Sigmoidectomy for Diverticular Disease?

P Gray, J Goldwag, M Eid, S Ivatury

Honorable Mention

Deep Sleep and Beeps: Inpatient Sleep Assessment in Elective Surgical Patients

Rob Allen, MD, S. Joga Ivatury, MD, MHA

Resident Travel Funds For Research Support

The Department of Surgery provides funding for travel expenses for residents to present original scientific work at regional and national professional society meetings. Trips are pre-approved by the Vice Chair for Research and expenses are monitored by the STRIVE Program Manager. In the latter half of the 2020 AY, travel was significantly curtailed due to the COVID-19 pandemic, with all travel for DHMC employees prohibited after March 15, 2020. In total, the DoS sponsored 21 trips (11 National, and 10 Regional) totaling \$18,104 in expenditures between July 2019 and February 2020. A total of 15 residents encompassing the sections of general surgery, urology, plastic surgery, and otolaryngology made use of the fund for research presentations. At least 15 trips were cancelled due to the COVID-19 pandemic, although a number of presentations moved to a virtual format in May and June.



Looking Ahead

In the coming year, the STRIVE program will continue to support surgical residents during their academic development time and provide access to resources and opportunities to develop foundational skills as clinician-researchers. In addition, the STRIVE Sharepoint site, which contains a compendium of resources and answers to frequently asked questions, will continue to be updated and expanded with input from residents. It is hoped that residents will access this site frequently and contribute additional resources throughout the year, thus building on the collective knowledge accumulated from past years.

Three new incoming research residents, Drs. Casey Lamb, Robert Shaw, Kunal Mehta will join Mark Eid for the 2021 Academic Year. Each participated in the STRIVE Transition meeting held in May 2020 to hear insights from outgoing research residents, share their individual goals, and understand the expectations and resources offered to research residents through the Department of Surgery. Ms. Moore has met with each of them to identify their overall goals and project ideas and will continue to meet with them individually throughout the year to support and encourage their progress. In the fifth year of the STRIVE program, the leadership team will aim to meet quarterly to review progress and challenges, and identify ways to further strengthen the program and ensure that each resident navigates their research year successfully and returns to their clinical residency equipped with new skills which will serve them both in clinical and academic pursuits.