12th Annual Harvard Surgery Research Day

Hosted by Boston Children's Hospital

Saturday, March 25, 2023
7:30am to 3:00pm

Joseph B. Martin Conference Center
Harvard Medical School
77 Avenue Louis Pasteur
Boston, MA 02115

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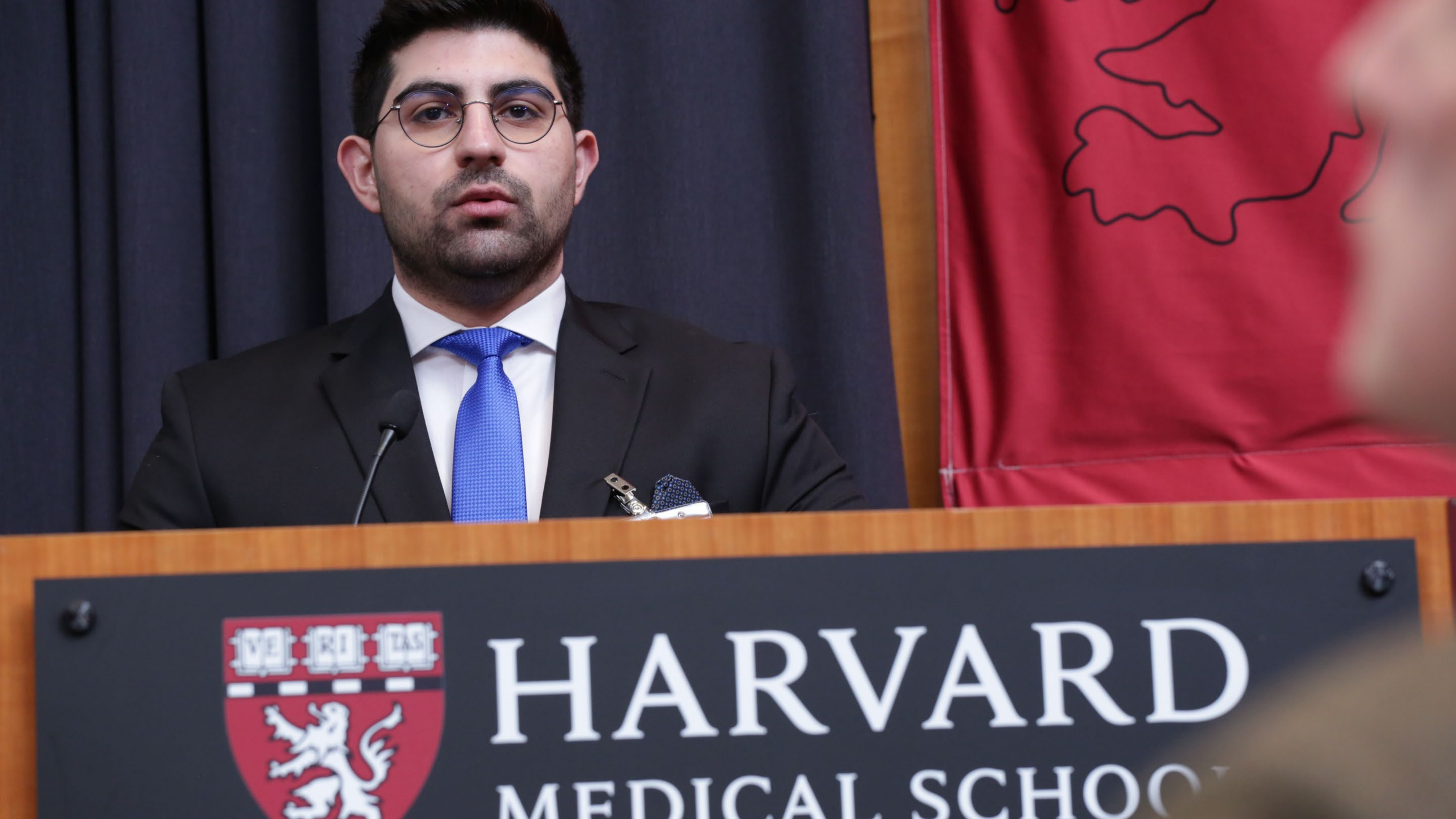
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12th Annual Harvard Surgery Research Day
Shawn Izadi, MD
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Benjamin Zendejas, MD


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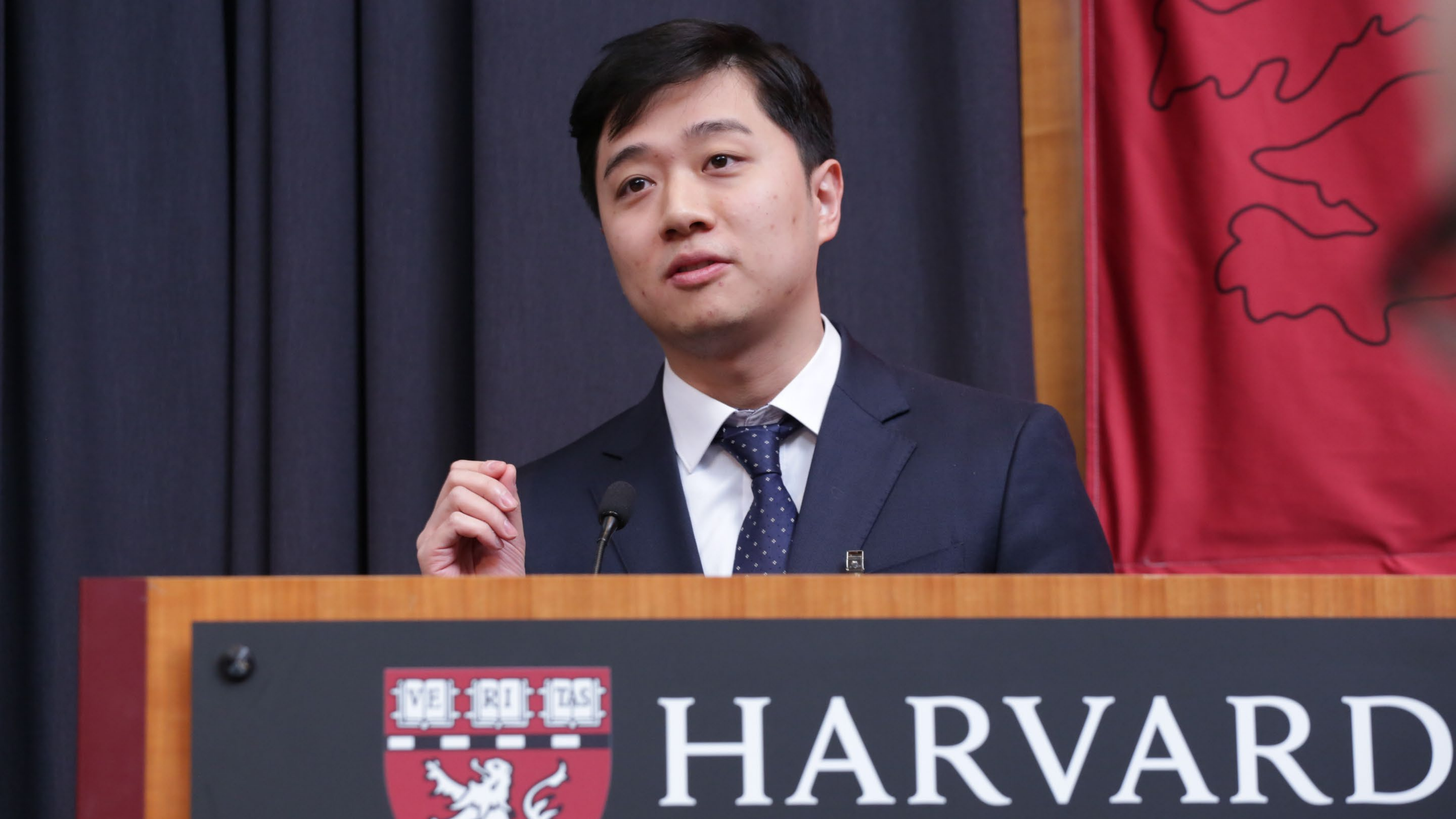
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12th Annual Harvard Surgery Research Day
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Poster Presentations


Examining the Mindsets of Surgery Residents and Faculty
Surgical Mindsets Research Team, Roy Phitayakorn, MD
MD, Deanna Palenzuela, MD Emil Pe
MATERIALS &
Quali-tative
Quanti-tative
Analysis
For our quantitative stage, we used a modified version of the Implicit Theories of Intelligence Scale (ITIS) to survey four general surgery programs. This was six item survey on a seven-point Likert scale.
We surveyed categorical general surgery residents (n=83) and surgical attendings (n=86). From these programs. ITIS data was gathered along with demographic data (e.g., residency year, gender, race). At the end of the survey, we asked participants to volunteer for a follow-up interview.
We completed a preliminary analysis (reported here) to inform the creation of an interview guide. This guide was then piloted and still being used to obtain qualitative data.
MINARY RESULTS*
Response rate was 169/602 (n=83 residents and 86 attendings; 38% and 23% respectively)
The survey had high internal consistency (α = 0.87)
Average resident and attending mindset scores were identical (5.7±0.9)
There was a statistically significant difference in average mindset scores of different programs (5.3 to 6.0, p<0.001)
Within individual programs, there was no statistically significant difference between mindset score of attendings and that of residents
Linear regression of mindset subgroups demonstrated a significant contribution to general mindset score from the mindset score for surgical skill (p<0.001), but patient care skill was not statistically significant (p=0.07)
Differences between sub-group mindsets scores were also statistically significant (5.2 to 6.2, p<0.001)
Multivariable linear regression demonstrated significantly more growth mindset in residents and attendings that self-identify as male versus female (5.6 vs 5.9, p=0.019)
There was no significant difference in mindset scores by race (p=0.662)
*- Survey and interview data are still being gathered, as more institutions have been enrolled since the preliminary analysis.
CONCLUSIONS
On average, surgical residents and attendings demonstrate similarly high growth mindset scores as opposed to a balance of fixed versus growth noted in other learners
Mindset tended to vary significantly by residency program, but not within program
There was a small, but statistically significant difference in mindset score by gender
We are continuing our investigation to shed light on the reasons behind these statistical findings
LITERATURE CITED
Dweck CS, Leggett EL. A Social-Cognitive Approach to Motivation and Personality. Psychological review 1988;95(2):256-273. DOI: 10.1037/0033-295X.95.2.256.
Yeager DS, Dweck CS. Mindsets That Promote Resilience: When Students Believe That Personal Characteristics Can Be Developed. Educational Psychologist 2012;47(4):302-314. DOI: 10.1080/00461520.2012.722805.
Dweck CS. Self-theories : their role in motivation, personality, and development. Philadel- Psychology Press, 1999
Research D
2. Department of Surgery,
3. Department of Surgery, Amsterdam, the
Medical Center, Amsterdam,
INTRODUCTION
Current guidelines advocate open repair for blunt thoracic aortic injury (BTAI) in the pediatric population, whereas the standard of treatment in adult patients is thoracic endovascular aortic repair (TEVAR) [1][2].
Studies regarding the utilization of TEVAR for BTAI have mainly been performed in the adult population and data regarding outcomes in the pediatric population remain scarce.
Recent studies have brought into question if TEVAR is possible in the pediatric population as well, but have not looked closely into in-hospital outcomes.
AIM
Examine the outcomes of the pediatric population undergoing TEVAR for BTAI compared with adult counterparts.
METHODS
Design and data source
We performed a retrospective cohort study using the American College of Surgeons Trauma Quality Improvement Program (ACS-TQIP) 2010 - 2019 database.
Patient population
We included patients with BTAI undergoing TEVAR.
Pediatric patients were divided into three groups:
1) children (0-11 years old)
2) adolescent patients (12-17 years old)
3) mature patients (18-21 years old).
Adult patients were defined as >21 years old.
Statistical analysis
Multivariable logistic regression was perfo
examine the in-hospital mortali
complications after T
adult popu
RESULTS
Patient population
We included a tota
(children [N=1], adole
Figure I. Inclusion flo
Identification
Exclusion criteria
Included
Pediat
(≤21
CONCLUSION
The results of this
adolescent and mat
compared to the adu
between these three
Future studie


INTRODUCTION
What are the current applications of artificial intelligence in cardiac surgery?
Current AI studies focused on examining performance, clinician outcomes, and patient outcomes
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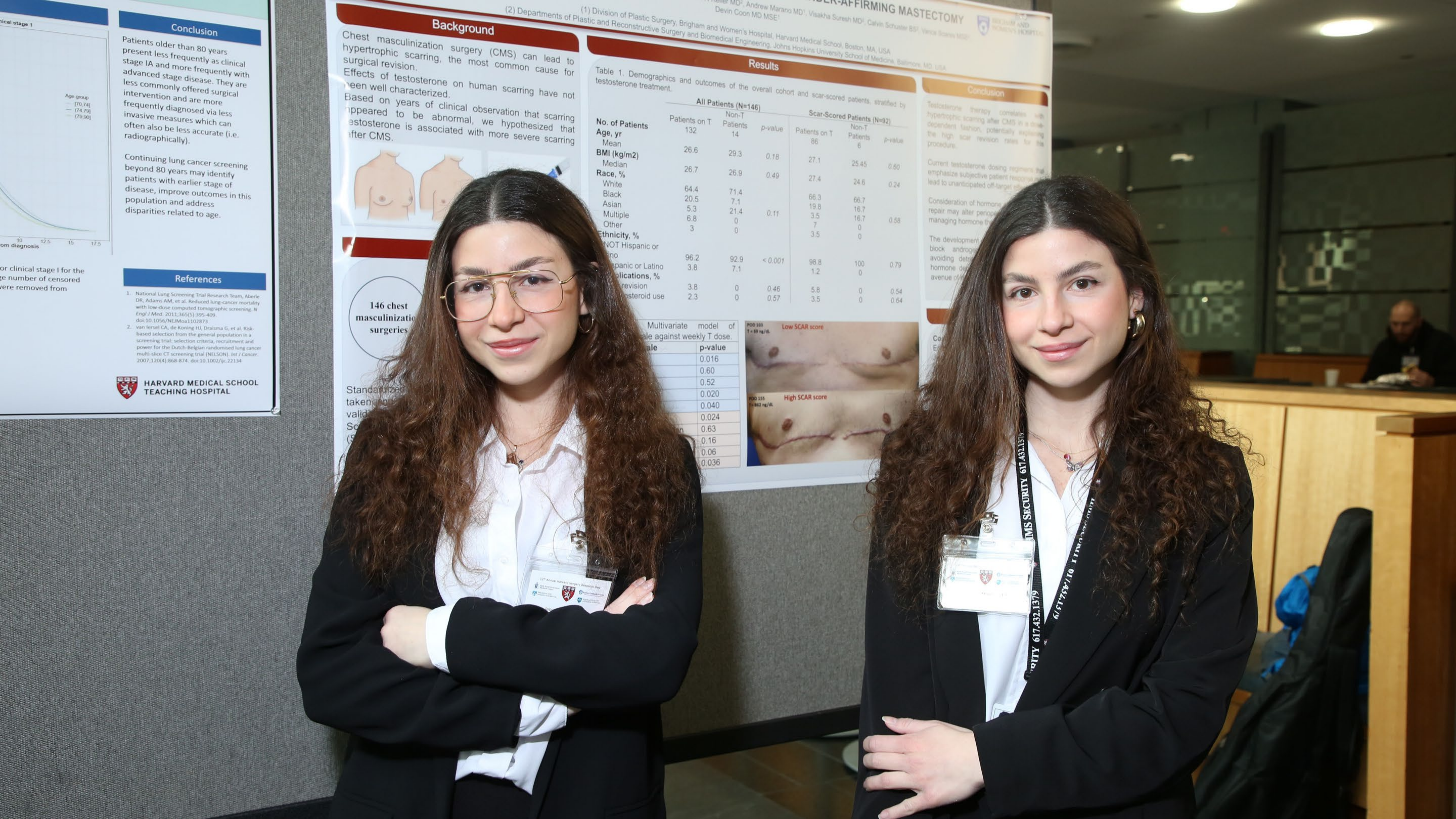
Conclusion
Patients older than 80 years present less frequently as clinical stage IA and more frequently with advanced stage disease. They are less commonly offered surgical intervention and are more frequently diagnosed via less invasive measures which can often also be less accurate (i.e. radiographically).
Continuing lung cancer screening beyond 80 years may identify patients with earlier stage of disease, improve outcomes in this population and address disparities related to age.
References
HARVARD MEDICAL SCHOOL TEACHING HOSPITAL
DER-AFFIRMING MASTECTOMY
Background
Chest masculinization surgery (CMS) can lead to hypertrophic scarring, the most common cause for surgical revision.
Effects of testosterone on human scarring have not been well characterized.
Based on years of clinical observation that scarring appeared to be abnormal, we hypothesized that testosterone is associated with more severe scarring after CMS.
Results
Table 1. Demographics and outcomes of the overall cohort and scar-scored patients, stratified by testosterone treatment.
All Patients (N=146)
Scar-Scored Patients (N=92)
Conclusion
146 chest masculinization surgeries
Low SCAR score
High SCAR score
p-value

Conclusion

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IA and more frequently with
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References

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Background

Chest masculinization surgery (CMS) can lead to hypertrophic scarring, the most common cause for surgical revision.

Effects of testosterone on human scarring have not been well characterized.

Based on years of clinical observation that scarring appeared to be abnormal, we hypothesized that testosterone is associated with more severe scarring after CMS.

Methods

146 chest masculinization surgeries

- Demographics
- Scarring comorbidities
- Procedure
- Exogeneous hormone regimen

Standardized scar photos (anteroposterior/lateral) were taken and assessed by four blinded clinicians using validated metrics Manchester Scar Scale (MSS) and Scar Cosmesis Assessment and Rating Scale (SCARS).

Multivariate mixed-effects linear regression models were used to assess the relationship between exogenous testosterone and scar outcomes.

Results

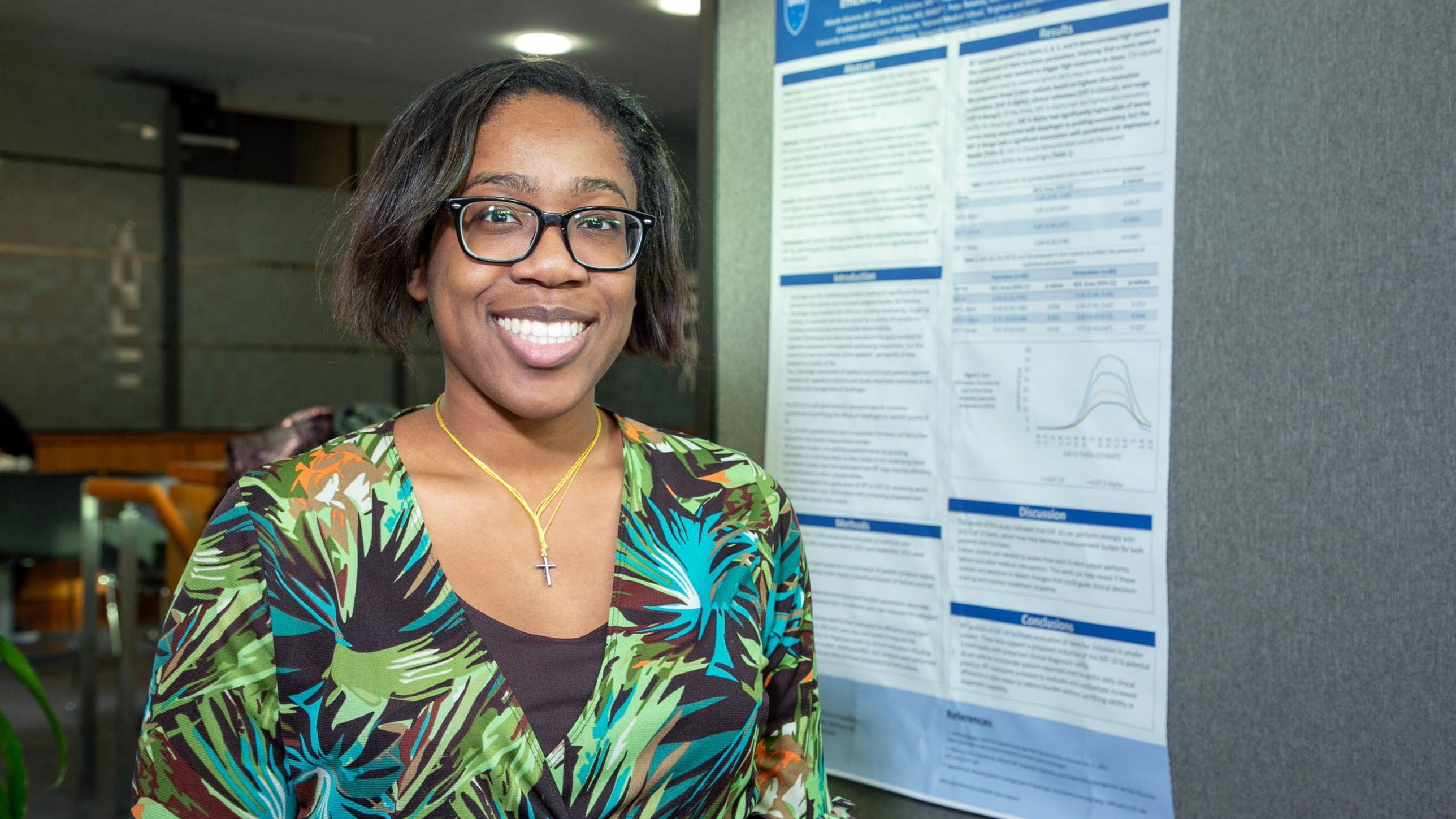
Table 1. Demographics and outcomes of the overall cohort and scar-scored patients, stratified by testosterone treatment.

	All Patients (N=146)			Scar-Scored Patients (N=62)		
No. of Patients	Patients on T 132	Non-T Patients 14	p-value	Patients on T 56	Non-T Patients 6	p-value
Age, yr						
Mean	26.6	25.3	0.19	27.1	25.45	0.60
Median	26.7	26.9	0.49	27.4	24.8	0.24
Race, %						
White	64.4	71.4		66.3	66.7	
Black	20.5	7.1		16.8	16.7	
Asian	5.3	21.4	0.11	3.5	16.7	0.59
Multiple	6.8	0		7	0	
Other	3	0		3.5	0	
Ethnicity, %						
NOT Hispanic or Latino	96.2	92.9	< 0.001	98.8	100	0.79
Hispanic or Latino	3.8	7.1		1.2	0	
Complications, %						
Scar revision	3.8	0	0.46	5.8	0	0.54
Corticosteroid use	2.3	0	0.57	3.5	0	0.64

Table 2. Multivariate model of scale/subscale against weekly T dose.

Scale/subscale	p-value
MSS color	0.016
MSS finish	0.60
MSS contour	0.52
MSS distortion	0.020
MSS total	0.040
SCAR erythema	0.024
SCAR dyspigmentation	0.63
SCAR palpability	0.16
SCAR overall impression	0.06
SCAR total	0.036

Conclusion


Abstract
Introduction
Methods
Results
Discussion
Conclusions
References

CANCER CENTER

Positive nipple margins in nipple sparing mastectomy: Management of cancer and atypia at the margin

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Background

- Nipple sparing mastectomy (NSM) is an oncologically safe approach for breast cancer treatment and prevention
- Nipple-areola complex (NAC) preservation provides improved cosmesis and patient satisfaction compared to other mastectomy techniques
- Lack of long-term data on management and outcomes when nipple margins contain tumor or atypia may limit uptake of NSM

Methods

- NSM patients with tumor or atypia in the nipple margin were identified from a prospectively maintained database of consecutive NSM at a single institution
- Patient and tumor characteristics, nipple margin pathology, treatments received, recurrence, and survival were assessed

Figure 1: Procedure for obtaining nipple margin

(A) Sharp dissection under NAC

(B) Nipple margin specimen

(C) Underside of NAC, with fat, parenchyma, and duct tissue removed

Adapted from Tang R, et al. 2016

Results

Table 1. Patient and tumor characteristics

	Nipple margin contained tumor (113 women, 113 breasts)	Nipple margin contained atypia (106 women, 106 breasts)
Age (years), median (range)	48 (31-80)	51 (26-74)
Overall breast histology, n (%) (per breast)		
Invasive ductal carcinoma ± DCIS	54 (47.8%)	37 (34.9%)
Invasive lobular carcinoma ± DCIS	23 (20.4%)	14 (13.2%)
Invasive carcinoma with ductal and lobular features ± DCIS	8 (7.1%)	8 (7.5%)
DCIS with microinvasion	5 (4.4%)	2 (1.9%)
DCIS only	24 (21.2%)	21 (19.8%)
No evidence of malignancy	-	42 (37.7%)
Nipple margin histology, n (%)		
Invasive ductal carcinoma ± DCIS	7 (6.2%)	-
Invasive lobular carcinoma ± DCIS	24 (21.2%)	-
Other invasive carcinoma	2 (1.8%)	-
DCIS only	77 (68.1%)	-
Lymphatic vessel invasion only	1 (0.7%)	-
Atypia only*	-	104 (100.0%)
Invasive tumor size (cm), mean (range)	2.7 (0.2-14.0)	1.9 (0.15-6.0)
Tumor grade, n (%)		
1	6 (5.3%)	0 (0.0%)
2	59 (52.7%)	27 (75.0%)
3	47 (42.0%)	9 (25.0%)
Not reported or no cancer	1	85
Positive lymph nodes, n (%)	18 (20.0%)	0 (0.0%)
Invasive cancer receptors, n (%)		
ER+ / HER2-	92 (75.9%)	30 (93.8%)
ER+ / HER2+	12 (10.0%)	1 (3.1%)
ER- / HER2+	6 (5.0%)	1 (3.1%)
ER- / HER2-	11 (9.1%)	0 (0.0%)
Not reported	1	3
DCIS receptors, n (%)	23 (50.0%)	17 (68.0%)
ER+	2 (4.3%)	2 (12.0%)
ER-	1	1
Not reported	20 (75.0%)	16 (76.0%)
Any systemic therapy, n (%)	40 (35.4%)	17 (16.0%)
Post-mastectomy radiation therapy, n (%)		

*Atypia types: atypical ductal hyperplasia, lobular carcinoma in situ, atypical ductal hyperplasia, flat epithelial atypia, or type not specified

Abbreviations: DCIS = ductal carcinoma in situ; ER = estrogen receptor; HER2 = human epidermal growth factor receptor 2

- [illegible] meeting eligibility criteria were performed from 6/2007 to 12/2019
- Tumor was found in nipple margins of 109 (9.9%) NSM performed for cancer and 41 (6.25%) prophylactic NSM
- 36 (27%) positive nipple margins were treated with repeat surgery, 21 (19%) contained invasive carcinoma
- At 47 months median follow-up, 11 (4%) patients had tumor recurrence. For women in whom atypia was the nipple margin finding, 0 (0%) had recurrence

Table 2. Recurrence and survival

	Nipple margin contained tumor (113 women, 113 breasts)	Nipple margin contained atypia (106 women, 106 breasts)
Overall survival, n (%)	106 (93.8%)	101 (97.1%)
Breast cancer-specific survival, n (%)	106 (93.8%)	101 (96.7%)
Any recurrence, n (%)	10 (11.4%)*	1 (1.0%)
NAC/peri-areolar region	2 (1.8%)	0 (0.0%)
Locoregional (outside NAC/peri-areolar region)	3 (2.6%)	1 (1.0%)
Distant	5 (4.4%)	0 (0.0%)

*Three patients with nipple margin containing tumor had both locoregional and distant recurrence

- 104 (9.9%) nipple margins contained atypia without tumor. 33 (79%) breasts with tumor and 8 (21%) prophylactic mastectomies contained atypia
- 106 (95%) of these nipples were retained
- At 42 months median follow-up, there were no recurrences in the breast with atypia in the nipple margin

Conclusion

- Atypia excision is effective management for tumor
- No intervention is required for nipple margin atypia
- These results support breast-sparing surgical assessment

The Significance of N1 Lymph Node Involvement By Direct Extension for Non-Small Cell Lung Cancer

Grigory A Manyak, BA[1,2], Lida P Hariri, MD PhD[2], Hugh G Auchincloss, MD MPhil[2]
[1]Case Western Reserve University School of Medicine, Cleveland, OH
[2]Massachusetts General Hospital, Boston, MA

Introduction

- **N1 Spread:** Nodal involvement by lymphatic metastatic spread in the lung
- **N1 Direct:** Nodal involvement by direct, infiltrative tumor extension from the primary mass

Figure 1: Various Nodal Involvement in NSCLC Staging

- Adjuvant chemotherapy is predicated on the tumor's metastatic potential, and typically recommended for patients with N1 disease [1].
- Current staging and treatment practices for NSCLC do not discriminate between N1 Direct and N1 Spread tumors [1].
- Chemotherapy may subject patients with N1 Direct NSCLC to severe, adverse side effects without the benefit of improved survival [2,3].
- **Purpose:** To examine differences in long-term survival and response to adjuvant chemotherapy of patients characterized with N1 Direct versus N1 Spread NSCLC.

Study Cohort and Methods

- **Study Cohort:** 321 patients with N1 nodal NSCLC who underwent curative surgical resection for NSCLC between 2010 and 2020 at Massachusetts General Hospital, Newton-Wellesley Hospital, and North Shore Medical Center.
- Survival analysis was performed using Kaplan-Meier survival curves with log-rank test, and cox regressions.
- Significance of clinical and oncologic characteristics was assessed using Student's t test for parametric variables, Wilcoxon rank-sum test for nonparametric variables, and Pearson's χ^2 test for categorical variables.
- Statistical analysis was performed using STATA/IC 15 (StataCorp, College Station, TX).

Figure 2: Flowchart of Inclusion and Exclusion Criteria

Results

- Cohort had an average age of 74.3 ± 9.7 years (mean ± SD), was 49.2% male, and predominantly white (89.7%).
- N1 Direct vs N1 Spread nodal involvement: 47 patients (14.6%) vs 274 patients (85.4%).
- N1 Direct and N1 Spread cohorts were similar, except for prevalence of adenocarcinoma (44.7% vs 65.7%), and squamous cell carcinoma (32.9% vs 27.4%) (p=0.005).

Table 1: Clinical Characteristics of Lung Cancer Patients Undergoing Surgical Resection Stratified by Adjuvant Chemotherapy Status

Parameters	No Chemotherapy (N= 256)	Chemotherapy (N= 279)	P-value
Demographic / Social Characteristics			
Age, median (IQR)	76 (71-81)	71 (64-76)	<0.001
Sex = Male, n (%)	76 (29.7)	90 (48.2)	0.29
N1 Nodal Pathology, n (%)	35 (13.6)	21 (11.2)	0.49
Lung Cancer Pathology, n (%)			0.028
Adenocarcinoma	94 (36.7)	123 (65.8)	
Squamous Cell	64 (25)	37 (19.8)	
Other	98 (38.3)	27 (14.4)	
Survival			
Survival (30 days), n (%)	234 (91.4)	186 (99.5)	0.012
Survival (1 year), n (%)	194 (75.8)	178 (95.2)	<0.001
Survival (3 years), n (%)	97 (37.9)	139 (74.3)	<0.001
Survival (5 years), n (%)	61 (23.8)	121 (64.7)	<0.001
Survival (10 years), n (%)	31 (12.1)	74 (39.6)	<0.001

Kaplan-Meier

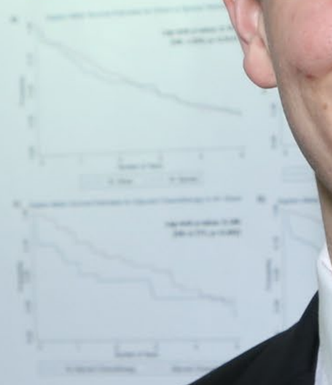


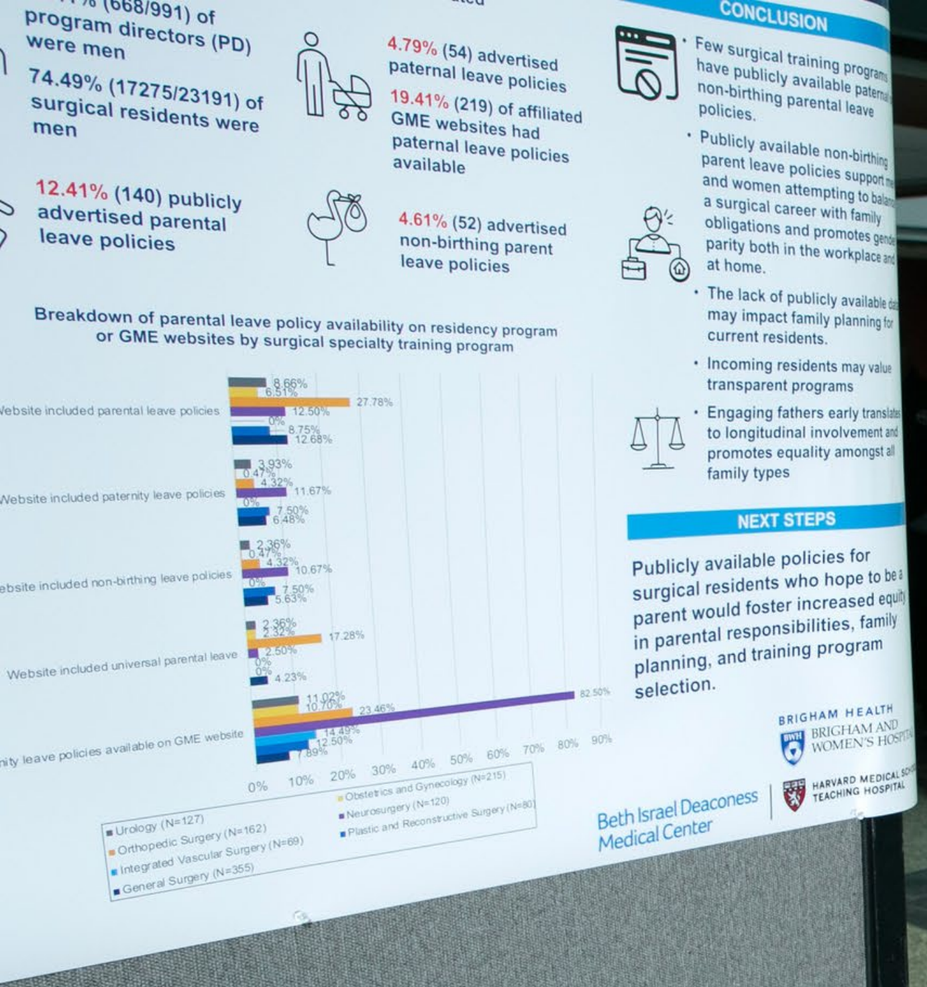
Figure 3: Kaplan-Meier Survival Curves for Cohort


Utilization of Endoscopic and Exoscopic Assistance during
Temporomandibular Joint Pathologies with Skull Base Extension:
Review of Six Cases from Massachusetts General Hospital
Briana June Burris, DDS; Daniel Choi DDS, MD; Joseph McCain DMD, FACS
INTRODUCTION
RESULTS
Mean age was 52. Most patients were males (n=4). All cases had unilateral pathology and right TMJ was more frequently involved (n=4). Intra-op, none of the cases had dural tear nor CSF leaks. Skull base defect repair was completed with alloplastic materials. The histopathologic diagnoses included: Calcified chondroid mesenchymal neoplasm (n=1), Synovial Chondromatosis (n=2), Tenosynovial Giant Cell Tumor (n=2), Osteoarthritis otherwise unspecified (n=1). Residual lesions have been seen in four cases. No recurrence has been diagnosed to date.
Figure 2. View of a left glenoid fossa defect under 26x Magnification using the Olympus OrbEYE Exoscope
Figure 3. Exoscopic view of right TMJ Pseudogout lesion (white arrow)
Figure 4. Exoscopic view of a right TMJ Tenosynovial Giant Cell Tumor under 26x magnification
Figures 5 & 6 View of endoscopic-assisted TMJ surgery (left photo) and endoscopic-view of skull base defect (white arrow)
DISCUSSION
In all six cases, histopathology was benign, however, rates of residual lesions were high. Thus, efforts should be made to embrace, learn, adapt, and optimize emerging technologies towards the surgical approach to TMJ pathology with skull base involvement. Preliminary experiences demonstrate that endoscopic and exoscopic assistance is beneficial in providing enhanced visualization, access to surgical blind-spots, improved depth perception, and wider color variations to help distinguish lesion form unaffected tissue. Exoscopic challenges include insuff luminescence and inadequate camera foc working-distances.


rison of patient characteristics and measures of disease severity in empiric
tic duration groups before and after propensity score matching.
Pre-Matching
Post-Matching
Short Duration ≤5 Days
Long Duration 6-14 Days
P-Value
N=356
N=924
N=311
Conclusions
Wide variation exists in the empiric postoperative antibiotic duration used in children with complicated appendicitis
Empiric treatment exceeding 5 postoperative days was not associated with lower rates of organ space infection or resource utilization
Postoperative antibiotic use beyond 5 days may not be necessary to optimize outcomes in children with complicated appendicitis
Favors 6-14 days
djusted OR
BACKGROUND
Obesity exerts negative effects on lung function
Functions and Patie
Vasundhara Mathur MD[1], Mehran Karvar MD[1]
[1] Laboratory of Surgical and Me
Ali Tavakkoli MD[2], Eric Sheu MD PhD[1]
and Women's Hospital
Jessica Mroueh, MD
Brigham and Women's Hospital
Vanessa Mroueh, MD
Brigham and Women's Hospital

is Associated with Longitudinal Improvements in Lung
Functions and Patient-Reported Respiratory Outcomes
Vasundhara Mathur MD1, Mehran Karvar MD1, Tammy Lo MD1,
BACKGROUND
Obesity exerts negative effects on lung function
Multiple studies suggest that bariatric surgery improves lung function
Pre-Matching
Post-Matching
Conclusions
Wide variation exists in the empiric postoperative antibiotic duration used in children with complicated appendicitis
Empiric treatment exceeding 5 postoperative days was not associated with lower rates of organ space infection or resource utilization
Postoperative antibiotic use beyond 5 days may not be necessary to optimize outcomes in children with complicated appendicitis


FINANCIAL HARDSHIP HAS A DOSE DEPENDENT RELATIONSHIP WITH CLINICAL PREDICTORS
Public Hospital System
Private Hospital System
Catastrophic Expenditure
Financial Hardship
Representation of public, private and variable pricing healthcare centers.
Multivariate logistic regression model with CE or FH as outcomes.


(668/991) of program directors (PD) were men
74.49% (17275/23191) of surgical residents were men
12.41% (140) publicly advertised parental leave policies
4.79% (54) advertised paternal leave policies
19.41% (219) of affiliated GME websites had paternal leave policies available
4.61% (52) advertised non-birthing parent leave policies
Breakdown of parental leave policy availability on residency program or GME websites by surgical specialty training program
Website included parental leave policies
Website included paternity leave policies
ebsite included non-birthing leave policies
Website included universal parental leave
nity leave policies available on GME website
8.66%
6.51%
27.78%
12.50%
0%
8.75%
12.68%
3.93%
0.47%
4.32%
11.67%
0%
7.50%
6.48%
2.36%
0.47%
4.32%
10.67%
0%
7.50%
5.63%
2.36%
2.32%
17.28%
2.50%
0%
4.23%
11.02%
10.70%
23.46%
82.50%
14.49%
12.50%
7.89%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
Urology (N=127)
Orthopedic Surgery (N=162)
Integrated Vascular Surgery (N=69)
General Surgery (N=355)
Obstetrics and Gynecology (N=215)
Neurosurgery (N=120)
Plastic and Reconstructive Surgery (N=80)
CONCLUSION
Few surgical training programs have publicly available paternal non-birthing parental leave policies.
Publicly available non-birthing parent leave policies support men and women attempting to balance a surgical career with family obligations and promotes gender parity both in the workplace and at home.
The lack of publicly available data may impact family planning for current residents.
Incoming residents may value transparent programs
Engaging fathers early translates to longitudinal involvement and promotes equality amongst all family types
NEXT STEPS
Publicly available policies for surgical residents who hope to be a parent would foster increased equity in parental responsibilities, family planning, and training program selection.
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BASAL RESPIRATION
SPARE CAPACITY
DEPOLARIZED MITOCHONDRIAL FRACTION
MITOTRACKER GREEN MEANS (Mitochondrial content)
CONCLUSIONS & FUTURE PERSPECTIVES
ACKNOWLEDGEMENTS

SRD5A2 Expression is a Predictor of Resp

Ra'ad Al-Faouri, Christina Sharkey, Zongwei
Division of Urologic Surgery, Department of
Beth Israel Deaconess Medical Cente

Beth Israel Lahey Health
Beth Israel Deaconess Medical Center

Introduction

- The Medical Therapy Of Prostatic Symptoms (MTOPS) study was a multi-center, RCT (1995-2001) aiming to evaluate the effect of **finasteride**, doxazosin, or a combination of both drugs on the progression of urinary symptoms in men with benign prostatic hyperplasia (**BPH**)
- Despite the introduction of steroid 5α-reductase inhibitors (**5ARI**) for BPH, the progression of lower urinary tract symptoms (**LUTS**) is only slowed by 34% with 5ARI-response. Little is known why patients with BPH do not uniformly respond to 5ARI therapy.
- We have demonstrated that 30% of adult prostates do not express SRD5A2 through epigenetic regulation, enabling us to postulate that expression of SRD5A2 may be related to response to finasteride.
- It is postulated that the lack of expression of SRD5A2 is responsible for 5ARI resistance, although that has never been tested.

Methods

- Prostate biopsies and clinical data from 82 MTOPS trial participants were obtained to test the correlation between baseline expression of SRD5A2 and the response to medical treatment with finasteride.
- We classified men based on changing their AUA symptom score (AUASS) into **good responders** (**change of AUASS ≤ -12**) and **poor responders (change of AUASS ≥ -2)**
- Using immunoreactive score system (**IRS score**), we quantified the expression of SRD5A2 in the biopsies. We compared baseline age, demographics, AUASS, BMI, serum dihydrotestosterone (DHT) between men in the two groups.

Results

- Men in the 5ARI good response group had higher expression of SRD5A2 compared to men in the 5ARI poor response group (*p-value <0.007*).
- SRD5A2 expression correlated with the 5-year change in AUASS (*r: -0.518, p-value: 0.004*).
- In a multiple linear regression model that adjusted for baseline AUASS, baseline total prostate volume, baseline serum DHT level, age, and BMI, men with higher expression of SRD5A2 still had better response to finasteride with better improvement of LUTS on AUASS.

Conclusion

- Higher expression of SRD5A2 in the prostate was associated with a better response to finasteride as measured by improvement in AUASS.
- This may contribute to precision medicine by predicting men that are most likely to benefit from tailored therapy by 5ARI.

Funding

NIH: R01DK124502; X01DK131477

High expression

Low expression

Figure 1: IHC

ΔUrinary Bothersome score

20
10
0
-10
-20
-30
0

Figure 3: Hi
Finasteride

Figure 2: (a) experimental groups, (b) dorsal wound creation, (c) MTS Criterion™ Model 43 tensile testing force-displacement apparatus

Wounds were harvested on post-op day 42 for histology (H&E and Masson's Trichrome), mass spectrometry, RNAseq, and tensile strength testing.

Results

Histology: At post-op day 42, samples from XX-T swine showed decreased mean fibrosis area and thickness (0.157 cm^2 and 2455.82 µm respectively; p = 0.007) compared to XX+T and XY+T (0.290 cm^2 and 3893.20 µm; 0.268 and 4232.07 µm respectively; p (0.01) (Figure 3). Chronic post-op wounds showed decreased tissue area in the XX-T compared to the XY+T group cm^2 and 0.878 cm^2, ; p = 0.039).

Figure 3: Masson's Trichrome staining for (a) XX-T, (b) XX+T, and (c) XY+T

ctrometry: Scar tissue analyzed with mass spectrometry mples from -T swine had lower testosterone levels compared e (p < 0.001).

Tensile Strength Testing: Scars in XX+T and XY+T pigs had greater tensile burst strength than XX-T pigs (p < 0.01) (Figure 4)

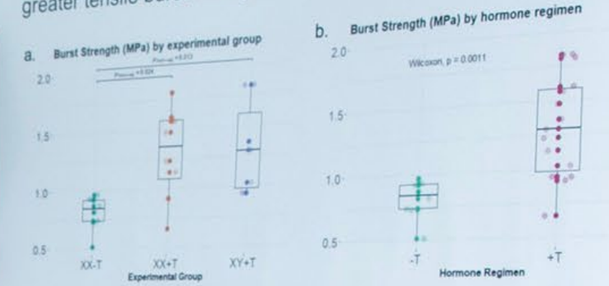

Figure 4: Tensile burst strength plotted by (a) experimental group and (b) hormone regimen.

Conclusions

We developed a novel preclinical model to study the effects of sex hormones on scarring. Testosterone induces early proliferation of excessive granulation tissue which eventually leads to increased scar tissue. T appears to increase the physical strength of scars via supraphysiologic deposition of collagen and other extracellular matrix factors. Local, anti-androgen topical therapies are a promising future area of wound healing research for not only the transgender population but also the general public.

Acknowledgements

Coon lab members:
Devin Coon, MD, MSE, Erik Reiche, MD, Vanessa Mroueh, MD, Vance Soares, MS, Calvin R Schuster, BA, Patrick R Keller, MD, Yu Tan, PhD

References

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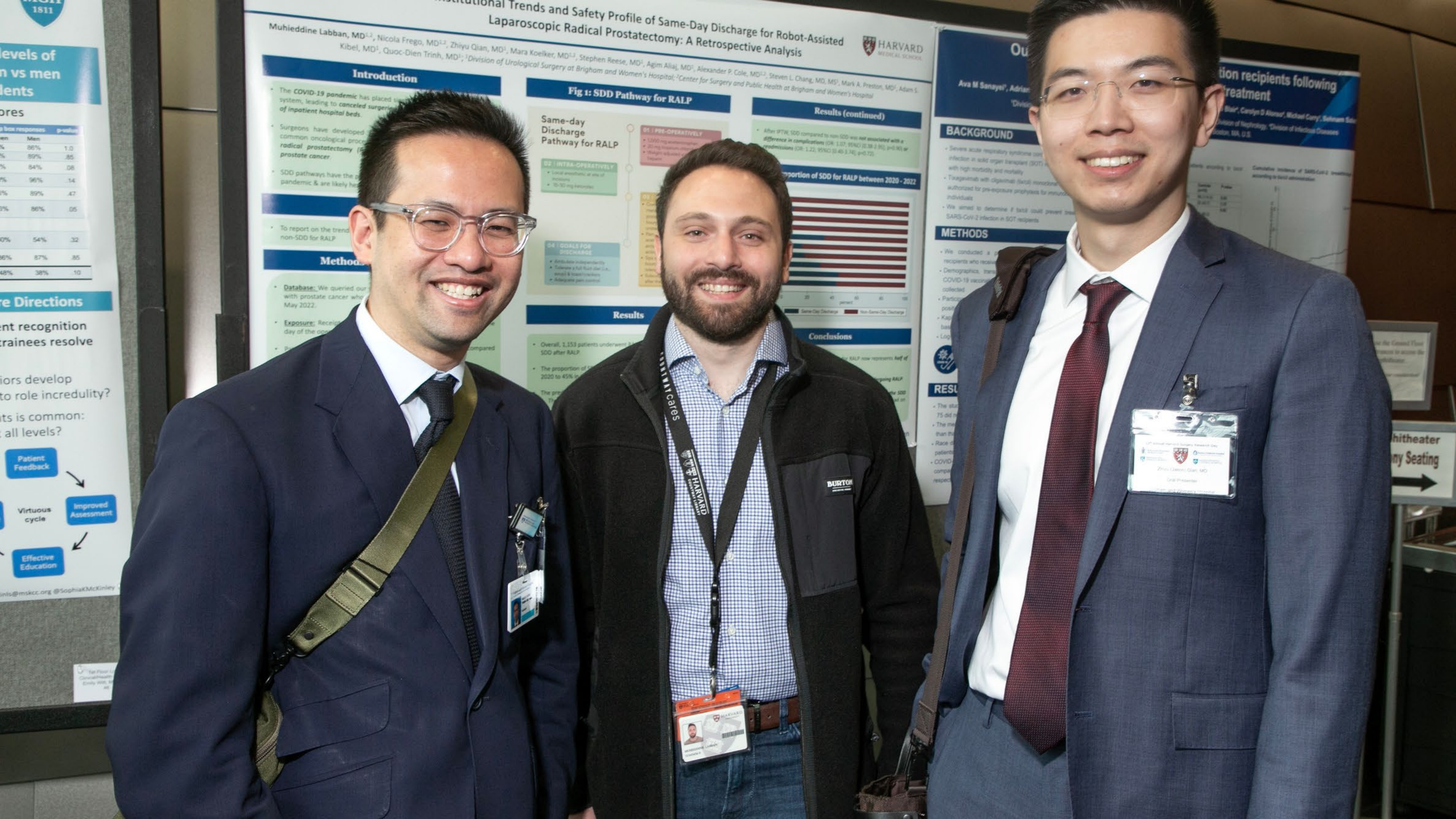
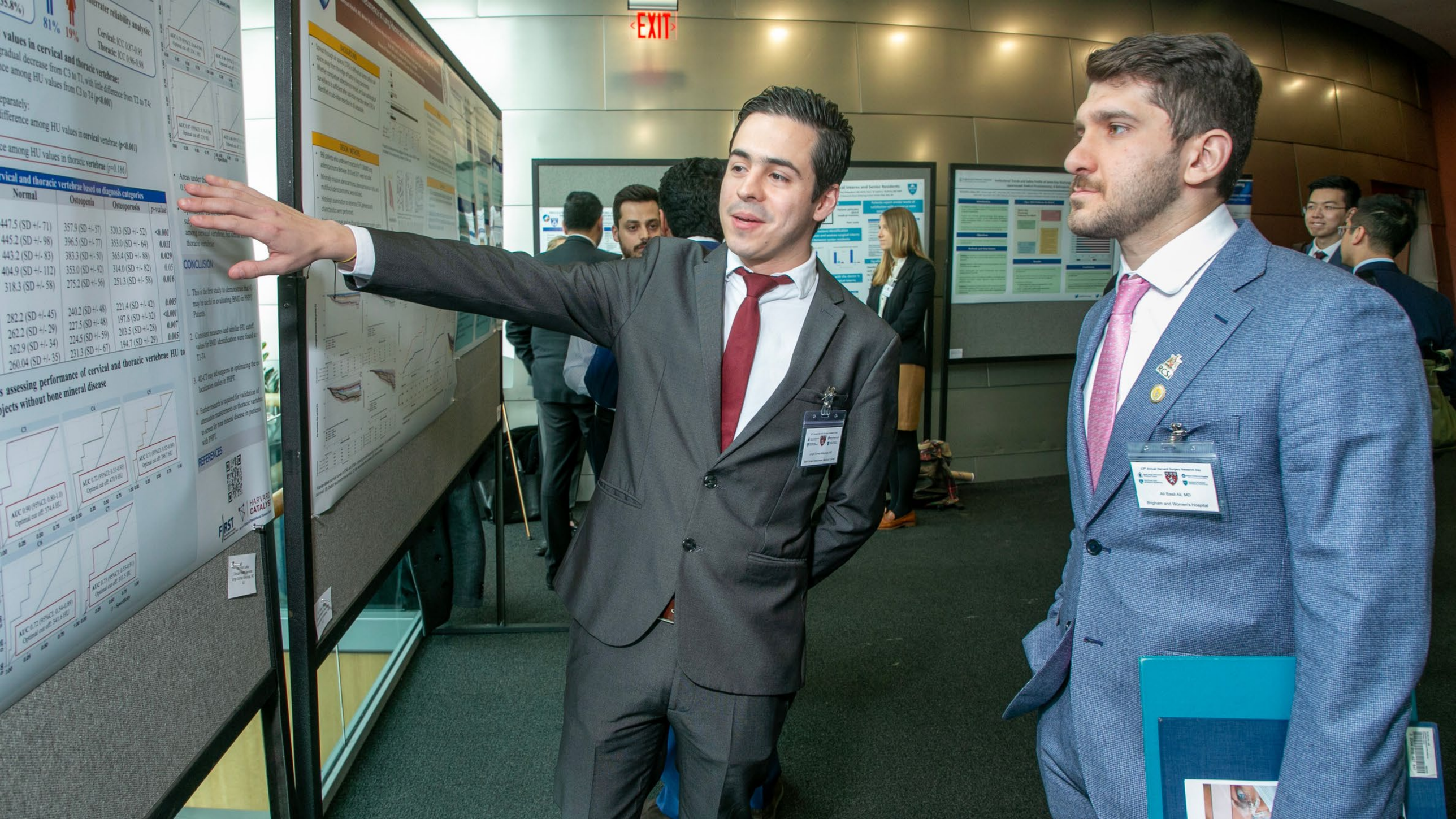
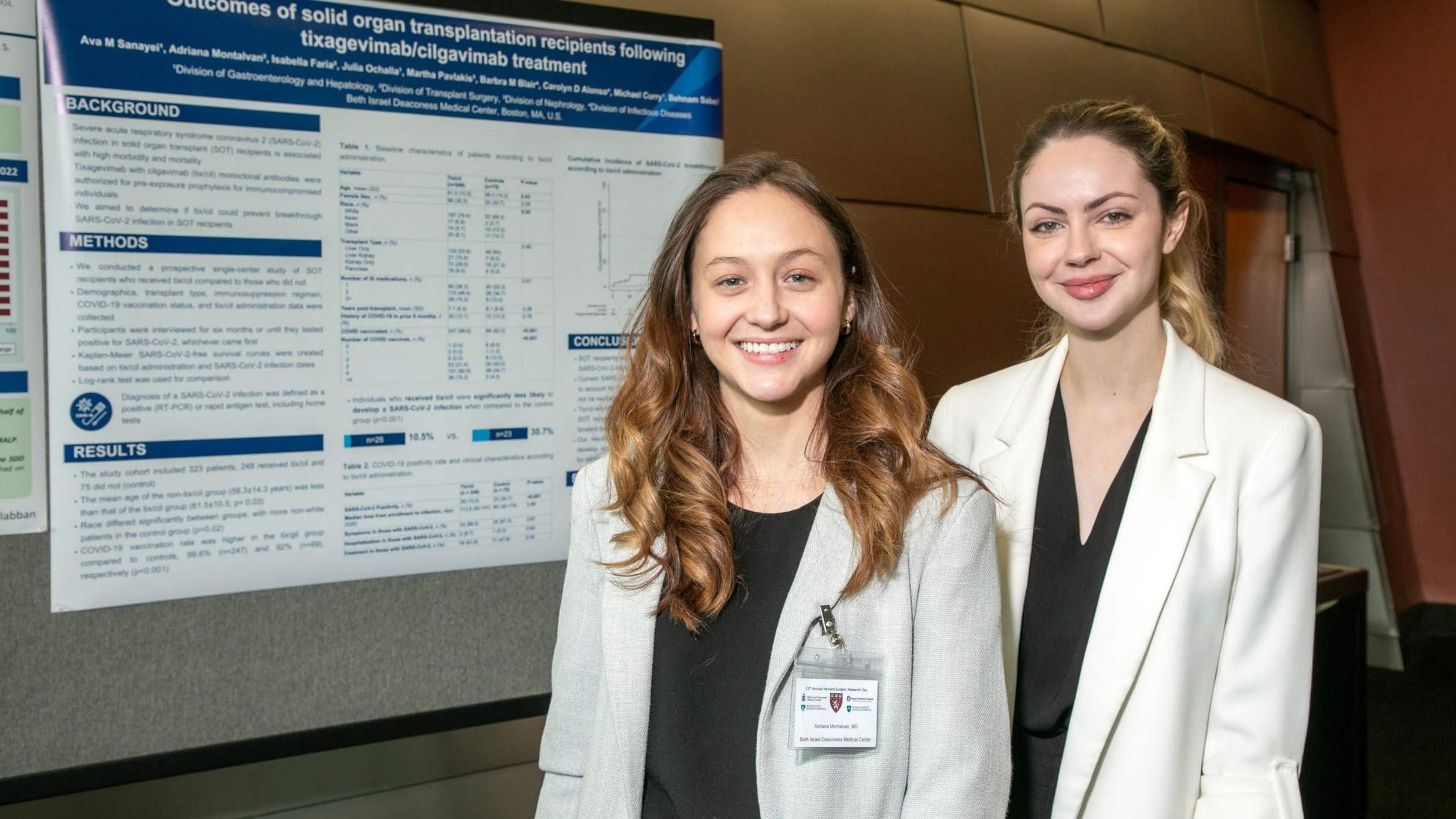
2. Joseph Canner et al., "Temporal Trends in Gender-Affirming Surgery mong Transgender Patients in the United States" 153, no. 7 (July 2018): 609–16, https://doi.org/10.1001/jamasurg.2017.6231.
3. Kyle S. Gabrick et al., "A Comparison of Perioperative Safety for Breast Augmentation in Cis- vs . Trans Patients," *Annals of Translational Medicine* 9, no. 7 (April 2021): 601–601, https://doi.org/10.21037/atm-20-3355.


BACKGROUND
•Infants with congenital diaphragmatic hernia (CDH) may require cardiopulmonary bypass (ECMO) and systemic anticoagulation. Survival while on ECMO depends on expeditious lung growth
•Heparin impairs lung growth in a murine model of compensatory lung growth (CLG), while the direct thrombin inhibitors (DTIs) bivalirudin and argatroban preserved growth
•While DTIs are increasingly used for anticoagulation clinically, CDH patients may still receive subtherapeutic heparin
•We investigate the pulmonary and molecular effects of subtherapeutic heparin with or without DTIs in the CLG model
METHODS
•Outcomes evaluated in vivo on post-operative day 8:
• Anticoagulation assessment
• Lung growth and function
• Lung histology & morphometrics
• Treadmill exercise tolerance testing (TETT)
ChAT-tdT
Proximal
(ganglionic)
distal colon
DASANI


Institutional Trends and Safety Profile of Same-Day Discharge for Robot-Assisted Laparoscopic Radical Prostatectomy: A Retrospective Analysis
Muhieddine Labban, MD[1,2], Nicola Frego, MD[1,2], Zhiyu Qian, MD[1], Mara Koelker, MD[1,2], Stephen Reese, MD[1], Agim Aliaj, MD[1], Alexander P. Cole, MD[1,2], Steven L. Chang, MD, MS[1], Mark A. Preston, MD[1], Adam S. Kibel, MD[1], Quoc-Dien Trinh, MD[1]; [1]Division of Urological Surgery at Brigham and Women's Hospital; [2]Center for Surgery and Public Health at Brigham and Women's Hospital
HARVARD MEDICAL SCHOOL
Introduction
Fig 1: SDD Pathway for RALP
Same-day Discharge Pathway for RALP
Results
Results (continued)
Conclusions
BACKGROUND
METHODS
Levels of
n vs men
dents
ores
re Directions
nt recognition
trainees resolve
iors develop
to role incredulity?
ts is common:
all levels?
Patient Feedback
Improved Assessment
Virtuous cycle
Effective Education
tion recipients following
treatment
Whitheater
ny Seating


EXIT
values in cervical and thoracic vertebrae:
gradual decrease from C3 to T1, with little difference from T2 to T4:
ce among HU values from C3 to T4 (p<0.001)
eparately:
difference among HU values in cervical vertebrae (p<0.001)
ce among HU values in thoracic vertebrae (p=0.186)
rvical and thoracic vertebrae based on diagnosis categories
Normal
Osteopenia
Osteoporosis
p-value
447.5 (SD +/- 71)
357.9 (SD +/- 57)
320.3 (SD +/- 52)
<0.001
445.2 (SD +/- 98)
396.5 (SD +/- 77)
353.0 (SD +/- 64)
0.011
443.2 (SD +/- 83)
383.3 (SD +/- 50)
365.4 (SD +/- 88)
0.029
404.9 (SD +/- 112)
353.0 (SD +/- 92)
314.0 (SD +/- 82)
0.05
318.3 (SD +/- 58)
275.2 (SD +/- 56)
251.3 (SD +/- 58)
0.016
282.2 (SD +/- 45)
240.2 (SD +/- 48)
221.4 (SD +/- 42)
0.005
262.2 (SD +/- 29)
227.5 (SD +/- 48)
197.8 (SD +/- 32)
<0.001
262.9 (SD +/- 34)
224.5 (SD +/- 59)
203.5 (SD +/- 28)
0.007
260.04 (SD +/- 35)
231.3 (SD +/- 67)
194.7 (SD +/- 29)
0.005
s assessing performance of cervical and thoracic vertebrae HU to
jects without bone mineral disease
BACKGROUND
DEXA SCANS
CONCLUSION
1. This is the first study to demonstrate that c
may be useful in evaluating BMD in PSPP
Patients.
2. Consistent measures and similar HU cutoff
values for BMD identification were found to
T1-T4
3. 4Q-CT may aid surgeons in optimizing the to
localization studies in PSPT.
4. Further research is required for validation of
alternative measurements on thoracic vertebr
to screen for bone mineral disease in patients
with PSPT.
REFERENCES
HARVARD CATALYST
FIRST
Ali Rasli Ali, MD
Brigham and Women's Hospital


Outcomes of solid organ transplantation recipients following tixagevimab/cilgavimab treatment
Ava M Sanayei[1], Adriana Montalvan[2], Isabella Faria[2], Julia Ochalla[1], Martha Pavlakis[3], Barbra M Blair[4], Carolyn D Alonso[4], Michael Curry[1], Behnam Sabati
[1]Division of Gastroenterology and Hepatology, [2]Division of Transplant Surgery, [3]Division of Nephrology, [4]Division of Infectious Diseases
Beth Israel Deaconess Medical Center, Boston, MA, U.S.
BACKGROUND
METHODS
RESULTS
CONCLUSI
12th Annual Harvard Surgery Research Day
Adriana Montalvan, MD
Beth Israel Deaconess Medical Center

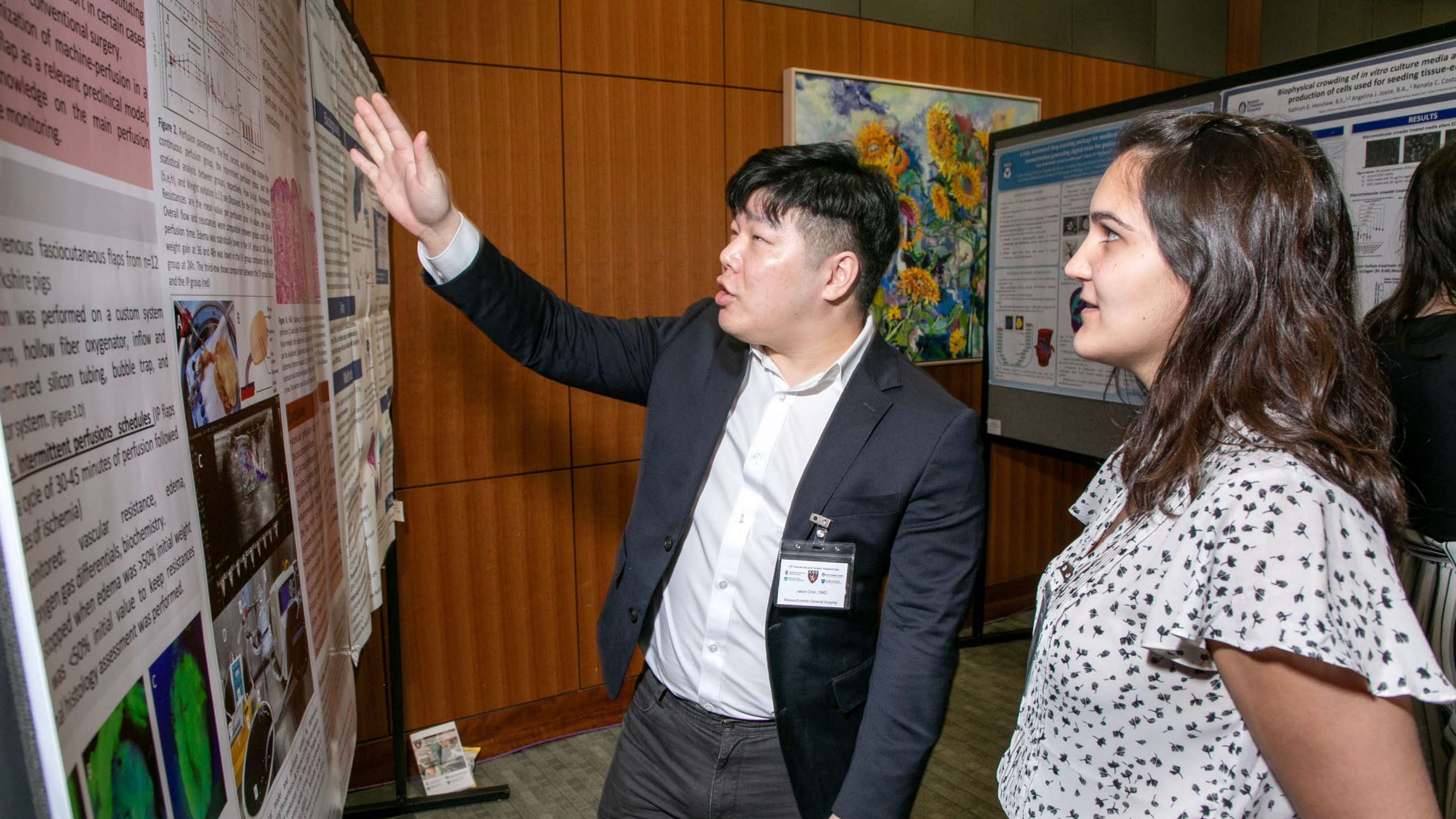

SOCIAL VULNERABILITY AND TIME TO SURGEON
Reagan A. Collins, BA, Jordan M. Broekhuis, MD, MPH, Maria P. Cole, MD, Mayorga MD, Natalia Chaves MD, MPH, Benjamin C. James, MD, MS,
Department of Surgery, Beth Israel Deaconess Medical Center, Boston, MA
Beth Israel Deaconess Medical Center
BACKGROUND
METHODS
RESULTS I
Figure 1. Kaplan-Meier Curve of Time to Surgeon Evaluation
Time (months)
Quartile 1 (Low vulnerability)
Quartile 2
Quartile 3
Quartile 4 (High vulnerability)
RESULTS II
Figure 2. Geospatial representation of SVI subthemes in MA by zip code areas *Darker colors correspond to higher levels of vulnerability
Socioeconomic Status
Household Characteristics
Racial & Ethnic Minority Status
Housing Type & Transportation
Table 1. Odds of Surgeon Evaluation by SVI subtheme (Q1 as Ref)
Characteristic | SVI quartile | aHR | CI | P-value
Socioeconomic status | Q2 | 1.20 | 0.86-1.66 | 0.281
Q3 | 0.93 | 0.66-1.31 | 0.67
Q4 | 0.65 | 0.45-0.94 | 0.024
Household Characteristics | Q2 | 1.25 | 0.91-1.72 | 0.164
Q3 | 0.84 | 0.60-1.19 | 0.332
Q4 | 0.77 | 0.53-1.12 | 0.176
Racial/Ethnic Minority Status | Q2 | 1.09 | 0.76-1.56 | 0.65
Q3 | 0.78 | 0.54-1.12 | 0.174
Q4 | 0.64 | 0.43-0.96 | 0.031
Housing Type/ Transportation | Q2 | 0.65 | 0.46-0.93 | 0.019
Q3 | 0.63 | 0.44-0.89 | 0.01
Q4 | 0.66 | 0.57-0.93 | 0.017
CONCLUSION
Highly vulnerable PHPT patient populations are at greater risk for under-evaluation by a surgeon
Targeted interventions should focus on the barriers to access care for PHPT patients
REFERENCES
Presented at Harvard Surgery Research Day – March 2023


CONCLUSIONS
LITERATURE CITED


ARTIFICIAL INTELLIGENCE IN CARDIAC SURGERY: A SYSTEMATIC REVIEW
Ralf Martz Sulague MD, Sharina Macapagal MD, Francis Joshua Beloy MD MBA, Jillian Reeze Medina MD, Thea Danielle Cartojano MD, Edward Daniel Mortalla MD, Jacques Kpodonu MD
Beth Israel Lahey Health
Beth Israel Deaconess Medical Center
INTRODUCTION
What are the current applications of artificial intelligence in cardiac surgery?
Current AI studies focused on examining performance, clinician outcomes, and patient outcomes
Artificial intelligence was used to predict mortality, postoperative length of stay, and complications following cardiac surgeries.
It can also improve clinician's medical decision by providing better preoperative risk assessment, stratification, and prognostication.
Of the 42 studies, only 13 studies were conducted in Lower- and Middle-Income Countries.
RESULTS
Harvard Surgery Research Day
Jillian Reeze Medina, MD
Beth Israel Deaconess Medical Center

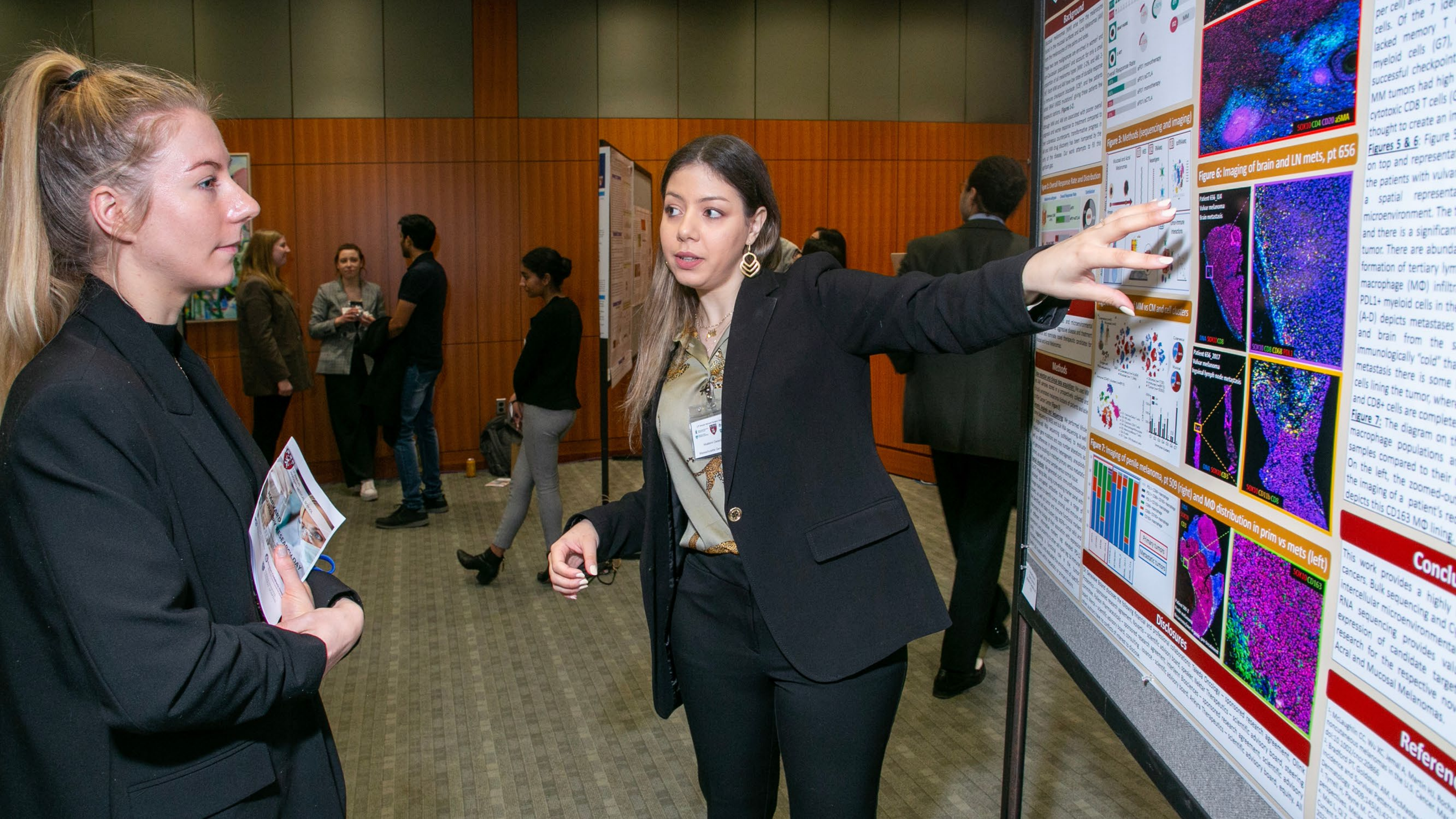

adder cancer from 1990 until 2018
were analyzed: overall survival (OS),
ic resection vs. no hepatic resection,
ed. There were 115 (78%) incidental
(67%) patients were female.
ass
c cases
2 non-incidental cases
16 with jaundice at first presentation
derwent c resection
12 did not undergo hepatic resection
4 received neoadjuvant therapy
Five-year OS was 69% and 5-year DFS was 55%.
There was no difference in 5-year OS or DFS among patients who underwent hepatic resection compared with patients who did not (OS 76% vs. 58%, p=0.42 and DFS 51% vs. 70%, p=0.23).
Peritoneal tumors had a 5-year OS of 83% vs. 40% for hepatic tumors (p<0.001) and 5-year DFS of 76% vs. 30% (p<0.001).
Incidental Gallbladder Cancer OS
OS | Median (mo) | 5-year % | p-value (compared to T1)
T1 | 196 | 87.4 | -
T2 | NR | 77 | -
T3 | 45.3 | 34 | 0.52
T4 | NR | 0 | 0.015
1.00
Incidental Gallbladder Cancer DFS
DFS | Median (mo) | 5-year % | p-value (compared to T1)
T1 | NR | 100 | -
T2 | NR | 68 | -
T3 | 16.8 | 12 | <0.001
T4 | 13.2 | 0 | <0.001
<0.001
Non-incidental Cases:
Five-year OS was 50% and 5-year DFS was 29%.
There was no difference in 5-year OS among patients who underwent hepatic resection (56% vs. 39%, p=0.53). Five-year DFS was higher among patients who underwent hepatic resection (32% vs. 15%, p=0.02).
There was no difference in 5-year OS (52% vs. 45%, p=0.65) or in 5-year DFS (27% vs. 30%, p=0.65) in patients with peritoneal facing tumors compared with hepatic facing tumors.
Non-incidental Gallbladder Cancer OS
OS | Median (mo) | 5-year % | p-value (compared to T1)
T1 | NR | 100 | -
T2 | 18 | 21 | <0.001
T3 | 19.2 | 17 | <0.001
T4 | NR | 0 | 1.0
Non-incidental Gallbladder Cancer DFS
DFS | Median (mo) | 5-year % | p-value (compared to T1)
T1 | NR | 100 | -
T2 | 11.2 | 40 | <0.001
T3 | 6.96 | 20 | <0.001
T4 | 1.2 | 0 | -
Conclusions
Incidental GB cancer was associated with higher OS and DFS rates when compared to non-incidental GB cancer.
For both incidental and non-incidental cases, greater T stages were associated with lower DFS and OS.
Hepatectomy was not significantly associated with improved OS for incidental and non-incidental disease. Among non-incidental cases, hepatectomy was associated with improved DFS.
Tumor sidedness was only pertinent in incidental disease: peritoneal located tumors were associated with improved OS and DFS when compared to hepatic-located tumors.
VISITOR
DISASTER PASS


RESULTS (continued)
Frequency of Observed Checklist Items
Frequency % (N)
Procedure confirmed 98.4 (7015)
Patient ID confirmed 97.0 (6915)
Antibiotic prophylaxis verbalized 95.1 (6775)
Other 86.9 (6192)
Allergies 83.1 (5923)
DVT prophylaxis 63.7 (4538)
Fire risk assessment 61.5 (4385)
Expected blood loss 47.9 (3413)
Administration of beta blocker 45.6 (3252)
Consents verified 44.3 (3156)
Site confirmed 40.0 (2848)
Patient positioning confirmed 38.8 (2765)
Essential relevant imaging discussed 35.1 (2499)
Team introduction performed 34.5 (2456)
Required blood products 34.1 (2428)
Expected duration 32.4 (2306)
Patient disposition 28.5 (2033)
Site marked 28.4 (2027)
Patient warming acknowledged 27.9 (1988)
Potential risks (Any team member) 24.8 (1769)
Antibiotic redosing plan 18.8 (1337)
Patient specific concerns (Anes.) 18.1 (1289)
Prep dry confirmed 16.6 (1182)
Indication confirmed 12.6 (896)
Case specific needs 12.1 (861)
Nursing equipment check 11.3 (805)
10.0 (714)
Figure 1. Aggregate Pause Point Performance Over Time
Figure 2. Aggregate Engagement Score Over Time
CONCLUSIONS
ARIADNE LABS
The Significance of N1 Lymph Node Involvement By Direct Extension for Non-Small Cell Lung Cancer

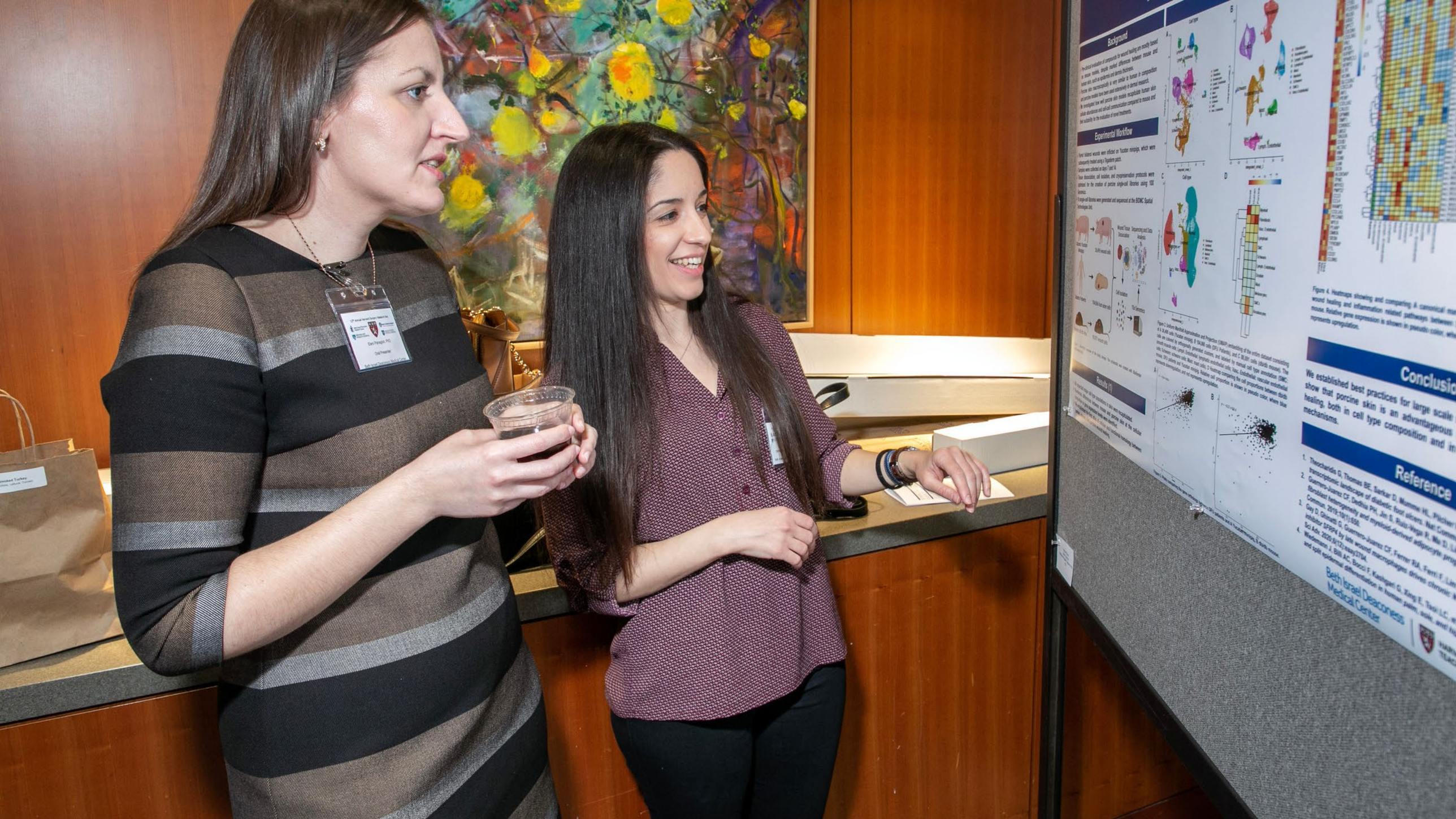

Jason Chen, DMD
Massachusetts General Hospital
RESULTS


The Influence of Abdominal Effort
for the Assessment of Airway Collapse: A
Video link


es Following Breast Cancer Surgery
METHODS
Methods
Video link
Figure 2. Distribution of airway levels by luminal collapse severity and normalized exhalation force.


Background
Figure 3: Methods (sequencing and imaging)
Figure 6: Imaging of brain and LN mets, pt 656
Figure 7: Imaging of penile melanoma, pt 509 (right) and MΦ distribution in prim vs mets (left)
Methods
Disclosures

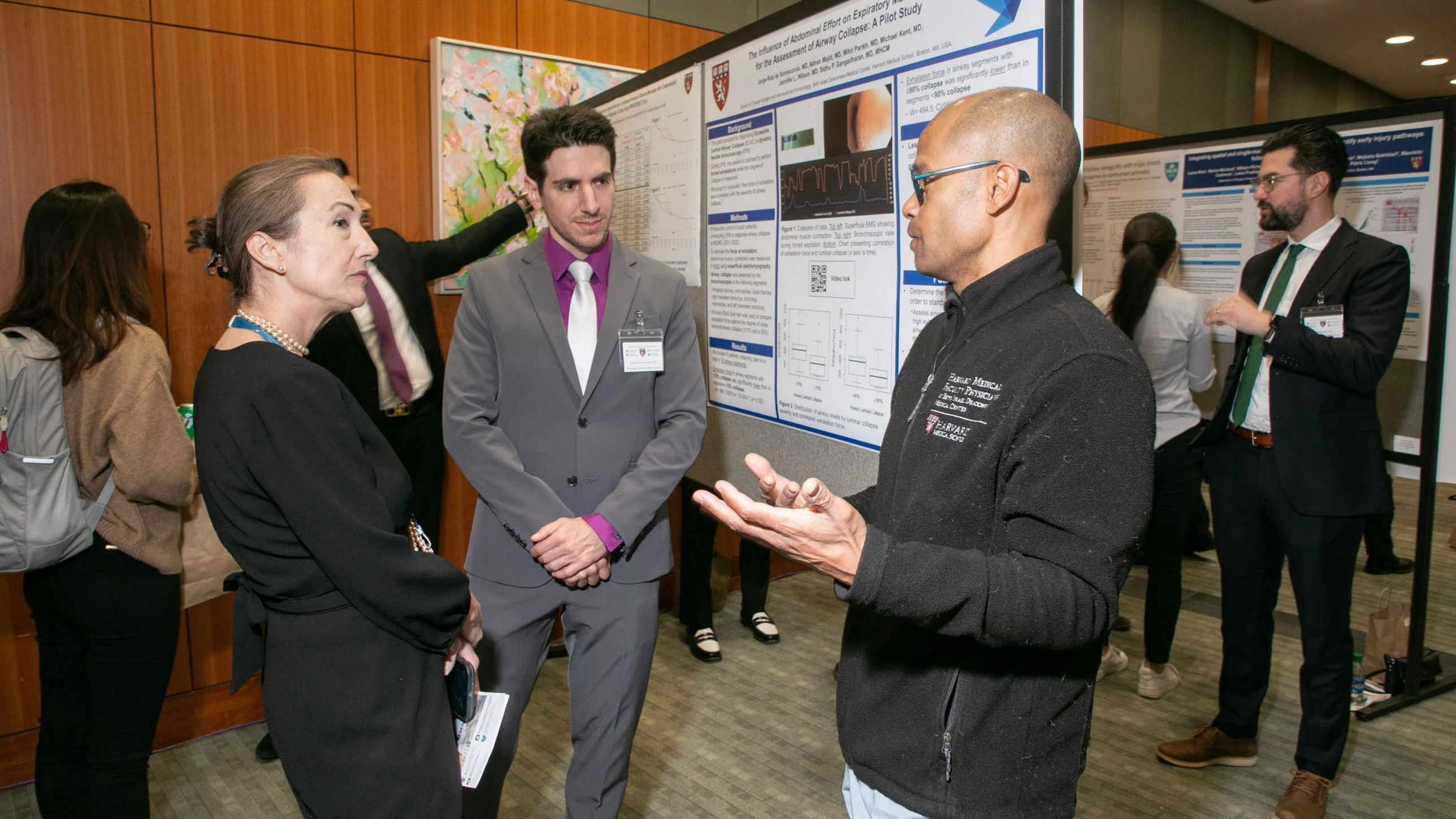

Preservation Solution
ESOLS
AST
CPDA
SAGM
Metabolic Activity and Hemolysis in RBC Storage
ESOLS as the best performing solution. Metabolic activity is suppressed as temperature decreases.
Lactate (mmol/L)
Percent Hemolysis
Storage Time (weeks)
4 °C
-5 °C
-9 °C
Oxidative and Osmotic Stress
Melondialdehyde (μM)
Total Antioxidant (mM)
Osmotic Fragility (g/L)
Day-42
Day-70
Percent Hemolysis
No Antioxidant
Resveratrol (10 μM)
Melatonin (10 μM)
Trolox (10 μM)
Discussion
RBCs are stored for 126 days with less than 1.5% hemolysis.
Alkaline and hypotonic solutions cause lower hemolysis.
Metabolic activities of RBCs are suppressed as temperature decreases.
Osmotic fragility and lipid peroxidation are lowest, and total antioxidant capacity is highest at -5 °C supercooled storage.
Future Directions
Antioxidants to alleviate storage injuries.
Omics analysis to better understand and target injuries.
Restore innate antioxidant mechanism.
Store 50 to 100 ml RBC samples.
Ethical, Societal, Broader Impacts
RBC transfusion is one of the most valuable and widespread treatments in modern medicine.
Blood banks experience shortages in the supply of RBC units.
Longer stored RBCs (>42 days) at high volumes (> 100 ml) will address such shortages.
RBCs undergoing minimum storage lesions will ensure transfusion efficacy/safety for all patients.
Acknowledgements
National Institutes of Health under Grant No.
National Science Foundation under Grant No.
References
Huang et al., Nature Comm, 9, 3201, 2018
Isikcacan et al., PNAS
Isikcacan et al., Frontiers in Physiology


Background
Experimental Workflow
Results (1)
Conclusio
We established best practices for large scale
show that porcine skin is an advantageous
healing, both in cell type composition and
mechanisms.
Reference
Beth Israel Deaconess
Medical Center

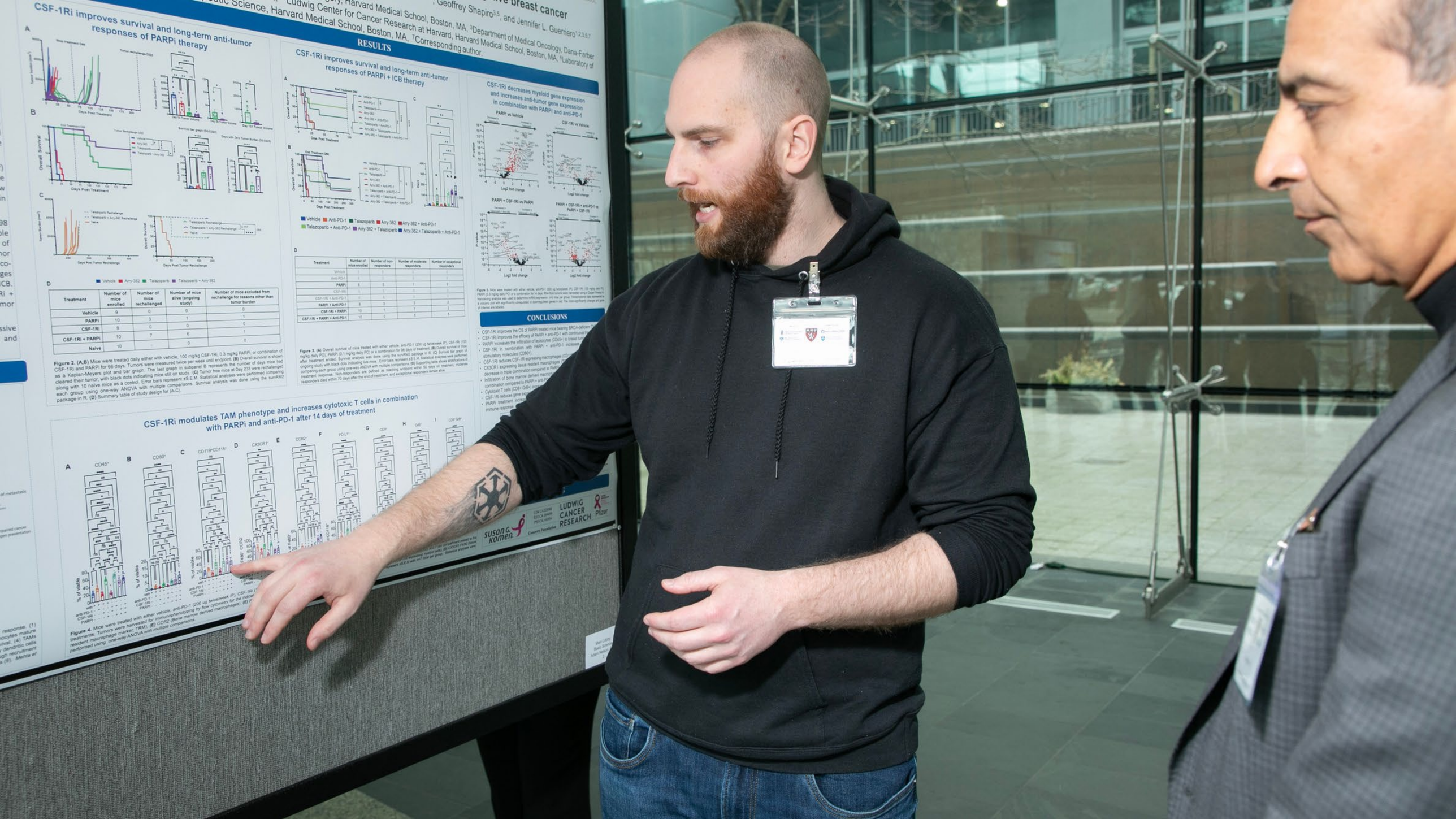
Exhalation Force (lbs)
Luminal Collapse (%)
1. Collection of data. Top left: Superficial EMG showing inal muscle contraction. Top right: Bronchoscopic view forced expiration. Bottom: Chart presenting correlation halation force and luminal collapse (x axis is time).
Video link
Exhalation Force
Airway Luminal Collapse
<70%
≥70%
Figure 2. Distribution of airway levels by luminal collapse severity and correlated exhalation force.
Conclusions
Future research
References

EXIT
Harvard Medical Faculty Physicians
Harvard Medical School

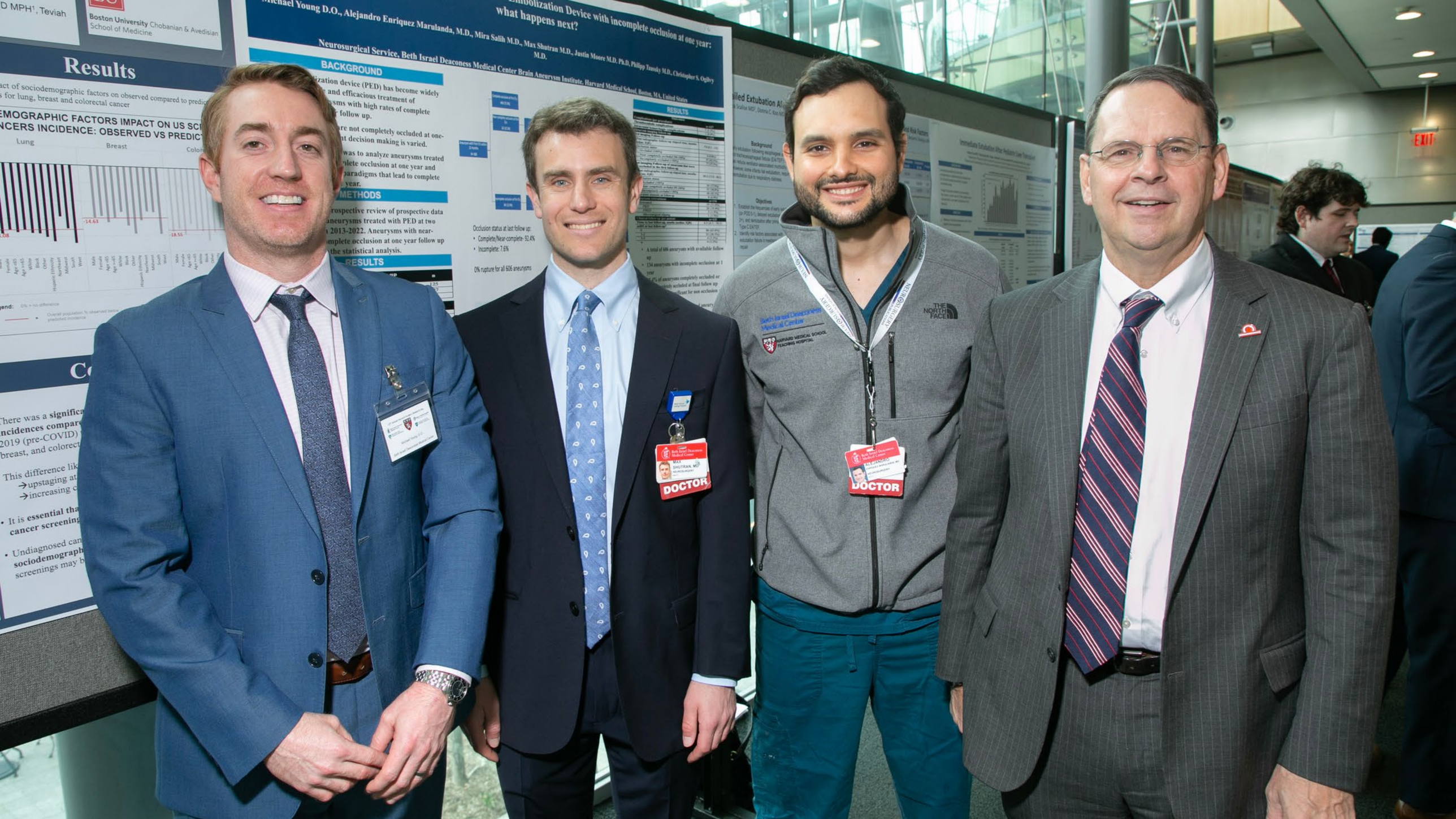

ds
biopsies and clinical data from 82 MTOPS trial participants were obtained to test the correlation
baseline expression of SRD5A2 and the response to medical treatment with finasteride.
assified men based on changing their AUA symptom score (AUASS) into good responders
ge of AUASS ≤-12) and poor responders (change of AUASS ≥-2)
immunoreactive score system (IRS score), we quantified the expression of SRD5A2 in the
es. We compared baseline age, demographics, AUASS, BMI, serum dihydrotestosterone (DHT)
een men in the two groups.
lts
in the 5ARI good response group had higher expression of SRD5A2 compared to men in the 5ARI
response group (p-value <0.007).
D5A2 expression correlated with the 5-year change in AUASS (r: -0.518, p-value: 0.004).
multiple linear regression model that adjusted for baseline AUASS, baseline total prostate volume,
eline serum DHT level, age, and BMI, men with higher expression of SRD5A2 still had better
ponse to finasteride with better improvement of LUTS on AUASS.
clusion
pression of SRD5A2 in the prostate was associated with a better response to finasteride as
provement in AUASS.
ecision medicine by predicting men that are most likely to benefit from tailored
Figure 1: IHC staining for SRD5A2 in the prostate gland.
High expression
Low expression
SRD5A2 Expression
Adjusted Bothersome score
SRD5A2 Expression IRS
20
10
0
-10
-20
-30
0
5
10


The Influence of Abdominal Effort on Expiratory
for the Assessment of Airway Collapse: A Pilot Study
Jorge Ruiz de Somocurcio, MD, Adnan Majid, MD, Mihir Parikh, MD, Michael Kent, MD,
Jennifer L. Wilson, MD, Sidhu P. Gangadharan, MD, MHCM
Background
Methods
Results
Video link
Figure 1. Collection of data. Top left: Superficial EMG showing abdominal muscle contraction. Top right: Bronchoscopic view during forced expiration. Bottom: Chart presenting correlation of exhalation force and luminal collapse (x axis is time).
Figure 2. Distribution of airway levels by luminal collapse severity and correlated exhalation force.
Exhalation force in airway segments with ≥90% collapse was significantly lower than in segments <90% collapse.
FACULTY PHYSICIAN
HARVARD MEDICAL SCHOOL

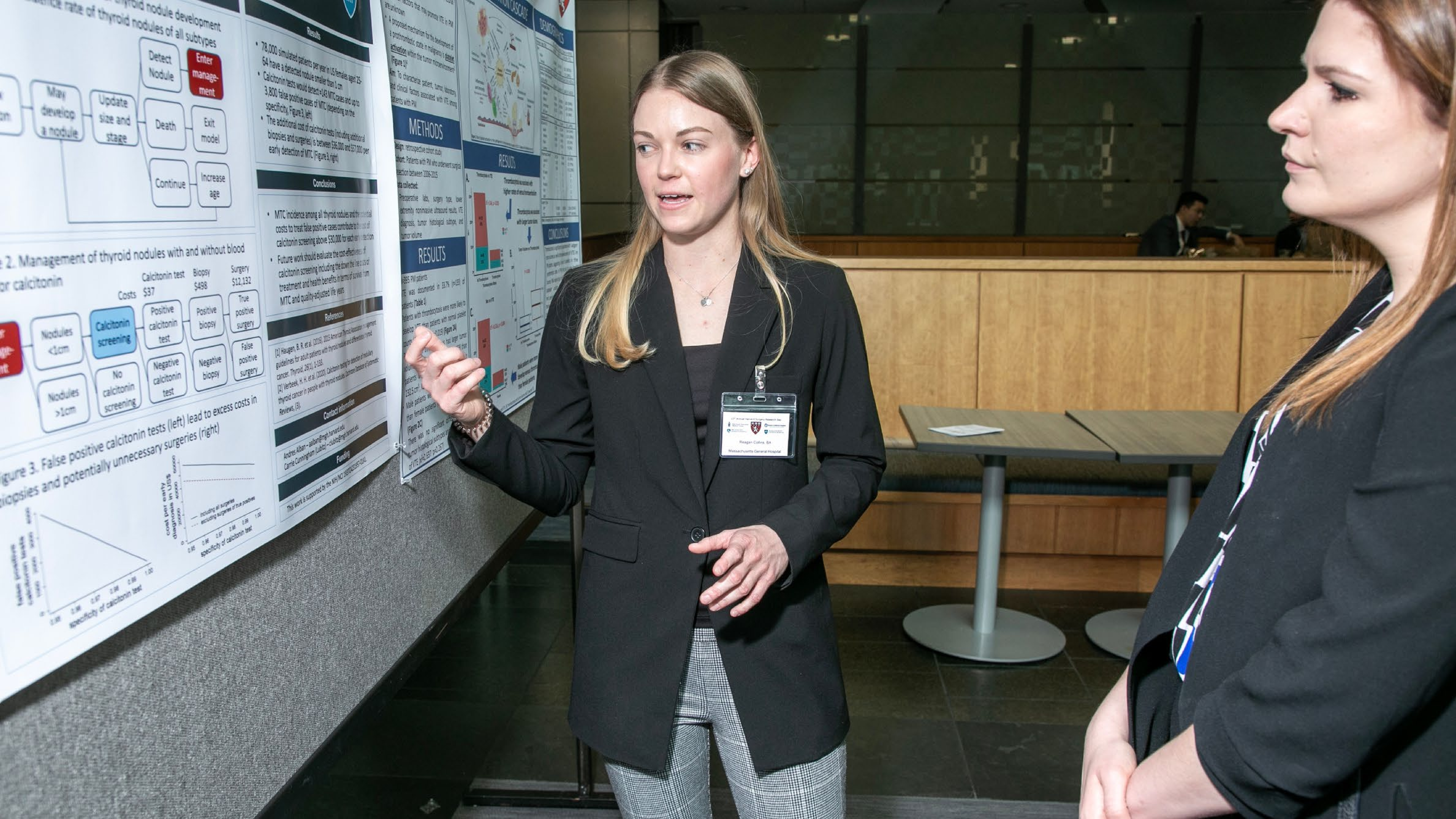

Engineered Heart Tube Tissue Model
Heart Tube Compaction And Function
Compaction
Directed Morphogenesis Of Engineered T
Heart Tube Shapes During Looping
1. Straight Tube
2. C-Shape Tube
3. S-Shape Tube
4. Fully Looped
Caudal Side
Cranial Side


RESULTS
CSF-1Ri improves survival and long-term anti-tumor responses of PARPi therapy
CSF-1Ri improves survival and long-term anti-tumor responses of PARPi + ICB therapy
CSF-1Ri decreases myeloid gene expression and increases anti-tumor gene expression in combination with PARPi and anti-PD-1
CONCLUSIONS
CSF-1Ri modulates TAM phenotype and increases cytotoxic T cells in combination with PARPi and anti-PD-1 after 14 days of treatment
susan G. komen
LUDWIG CANCER RESEARCH
Pfizer


HARVARD
MEDICAL SCHOOL
Conclusions
Acknowledgements and References


Boston University Chobanian & Avedisian School of Medicine
Results
Lung
Breast
Michael Young D.O., Alejandro Enriquez Marulanda, M.D., Mira Salih M.D., Max Shutran M.D., Justin Moore M.D. Ph.D, Philipp Taussky M.D., Christopher S. Ogilvy M.D.
Neurosurgical Service, Beth Israel Deaconess Medical Center Brain Aneurysm Institute, Harvard Medical School, Boston, MA, United States
what happens next?
BACKGROUND
METHODS
RESULTS
Occlusion status at last follow up:
• Complete/Near-complete- 92.4%
• Incomplete: 7.6%
0% rupture for all 606 aneurysms
DOCTOR
DOCTOR
Beth Israel Deaconess Medical Center
HARVARD MEDICAL SCHOOL TEACHING HOSPITAL
THE NORTH FACE


Demographics
Scarring comorbidities
Procedure
Exogenous hormone regimen
Table 2. Multivariate model of scale/subscale against week 7 dose.
Scale/subscale
p-value
MSS color
0.016
MSS finish
0.80
MSS contour
0.52
MSS distortion
0.020
MSS total
0.049
SCAR erythema
0.074
SCAR dyspigmentation
0.63
SCAR palpability
0.16
SCAR overall impression
0.06
SCAR total
0.036


Detect Nodule
Enter management
May develop a nodule
Update size and stage
Death
Exit model
Continue
Increase age
Management of thyroid nodules with and without blood
Costs
Calcitonin test $37
Biopsy $498
Surgery $12,132
Nodules <1cm
Calcitonin screening
Positive calcitonin test
Positive biopsy
True positive surgery
False positive surgery
Negative biopsy
Negative calcitonin test
No calcitonin screening
Nodules >1cm
False positive calcitonin tests (left) lead to excess costs in
biopsies and potentially unnecessary surgeries (right)
Results
Conclusions
References
Contact Information
Funding
METHODS
RESULTS
CONCLUSIONS
Reagan Collins, BA
Massachusetts General Hospital


Results
Conclusions
DOCTOR


Introduction
Aim
Methodology
Elderly patients with CD had significantly higher rates of major morbidity, minor complications and readmission rates.
In patient with CD, age, frailty, preoperative anemia, and open surgery were associated with increased major morbidity
In contrast, elderly patient's with UC had similar rates of major morbidity although they did have significantly higher rates of minor complications and total length of stay.
In patients with UC, frailty and case urgency were associated with increased major morbidity but age was not
Conclusi
References

ing of 2.5-dimensional
ffness. Single-cell RNA
s of the ISCs and their
om murine colitis models
in vivo.

Apical

Basal

Figure 3. Stiffness regulates the fate of ISCs in **colitis mouse model**.

vivo gut epithelium.

ntly reduced the population
ls expressing the stem cell
ents and pervaded the villus-
o preferentially differentiate
from murine colitis models
nt of those observed *in vitro*.

Figure 4. Stiffness regulates the fate of ISCs in **colitis human patient's samples**

Conclusions:

Gut Stiffening

in vivo

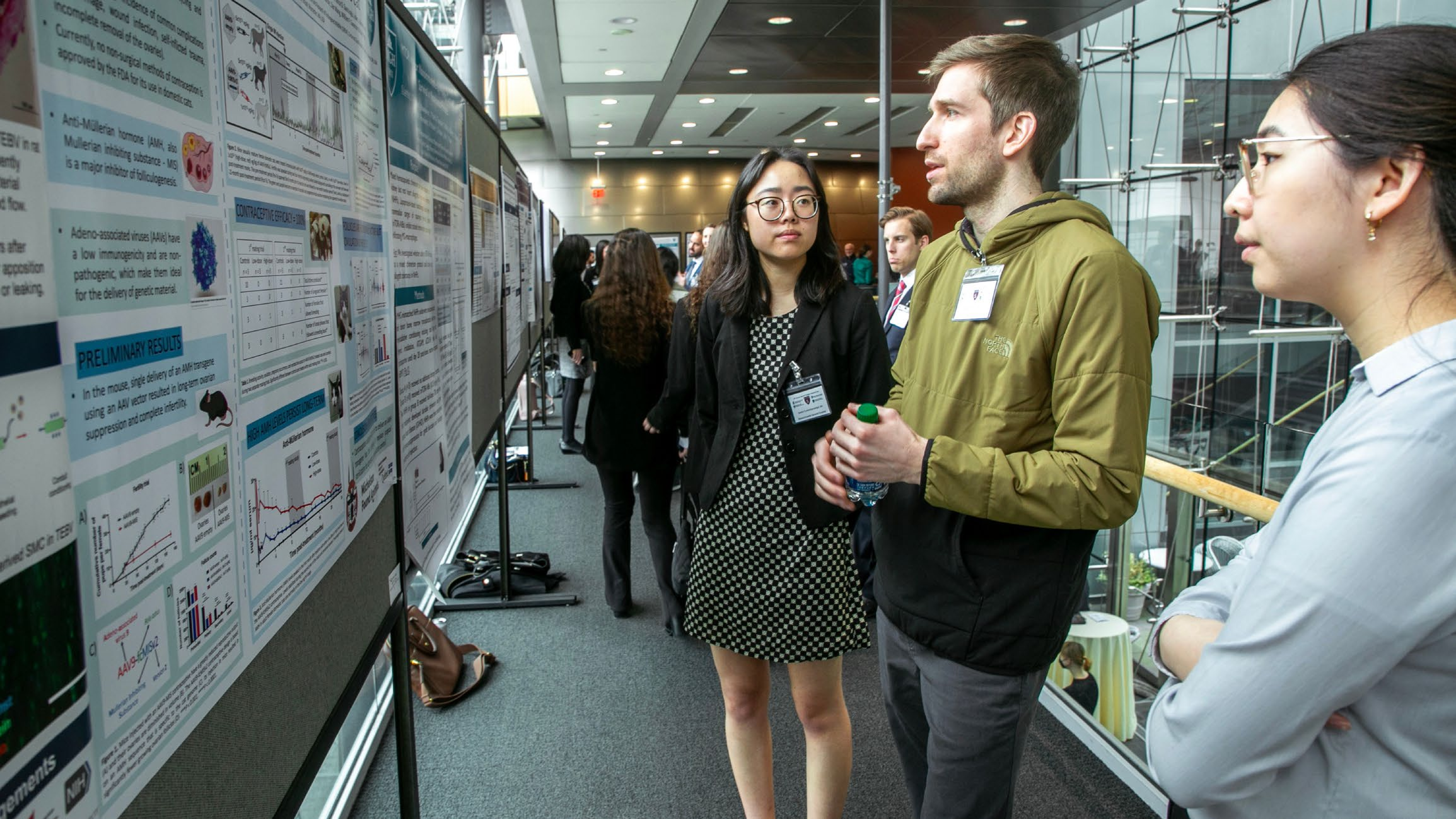
in vitro

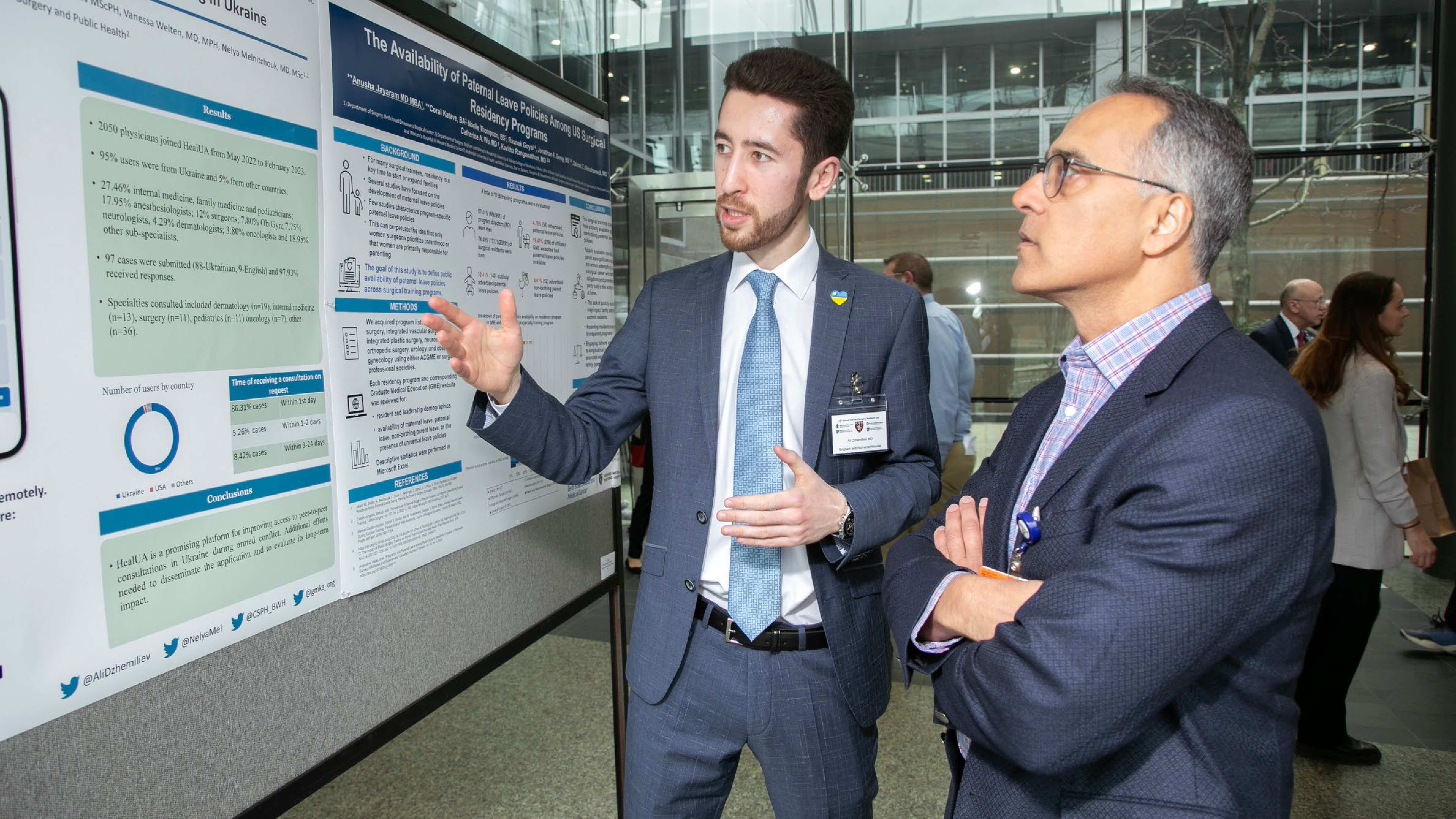
Reference: S. He#, P. Lei#, N. Saeidi# et al. Stiffness restricts the stemness of the intestinal stem cells and skews their differentiation towards goblet cells. *Gastroenterology*; In press

Purpose

Methods

Results


Currently, no non-surgical methods of contraception is
approved by the FDA for its use in domestic cats.
Anti-Müllerian hormone (AMH, also Mullerian inhibiting substance - MIS) is a major inhibitor of folliculogenesis.
Adeno-associated viruses (AAVs) have a low immunogenicity and are non-pathogenic, which make them ideal for the delivery of genetic material.
PRELIMINARY RESULTS
In the mouse, single delivery of an AMH transgene using an AAV vector resulted in long-term ovarian suppression and complete infertility.
CONTRACEPTIVE EFFICACY = 100%
HIGH AMH LEVELS PERSIST LONG-TERM
Anti-Müllerian hormone
Fertility trial
AAV9-rEMISv2
NIH
THE NORTH FACE


Surgery and Public Health[2]
MScPH, Vanessa Welten, MD, MPH, Nelya Melnitchouk, MD, MSc[1,2]
Results
2050 physicians joined HealUA from May 2022 to February 2023.
95% users were from Ukraine and 5% from other countries.
27.46% internal medicine, family medicine and pediatricians; 17.95% anesthesiologists; 12% surgeons; 7.80% Ob/Gyn; 7.75% neurologists, 4.29% dermatologists; 3.80% oncologists and 18.95% other sub-specialists.
97 cases were submitted (88-Ukrainian, 9-English) and 97.93% received responses.
Specialties consulted included dermatology (n=19), internal medicine (n=13), surgery (n=11), pediatrics (n=11) oncology (n=7), other (n=36).
Number of users by country
Ukraine
USA
Others
Time of receiving a consultation on request
86.31% cases
Within 1st day
5.26% cases
Within 1-2 days
8.42% cases
Within 3-24 days
Conclusions
HealUA is a promising platform for improving access to peer-to-peer consultations in Ukraine during armed conflict. Additional efforts needed to disseminate the application and to evaluate its long-term impact.
@AliDzhemiliev
@NelyaMel
@CSPH_BWH
@gmka_org
emotely.
re:
The Availability of Paternal Leave Policies Among US Surgical Residency Programs
BACKGROUND
For many surgical trainees, residency is a key time to start or expand families
Several studies have focused on the development of maternal leave policies
Few studies characterize program-specific paternal leave policies
This can perpetuate the idea that only women surgeons prioritize parenthood or that women are primarily responsible for parenting
The goal of this study is to define public availability of paternal leave policies across surgical training programs.
METHODS
Each residency program and corresponding Graduate Medical Education (GME) website was reviewed for:
resident and leadership demographics
availability of maternal leave, paternal leave, non-birthing parent leave, or the presence of universal leave policies
Descriptive statistics were performed in Microsoft Excel.
RESULTS
REFERENCES
CONCLUSION
Ali Dzhemiliev, MD
Brigham and Women's Hospital

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Visiting Professor Lecture:

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Intestinal TLR4


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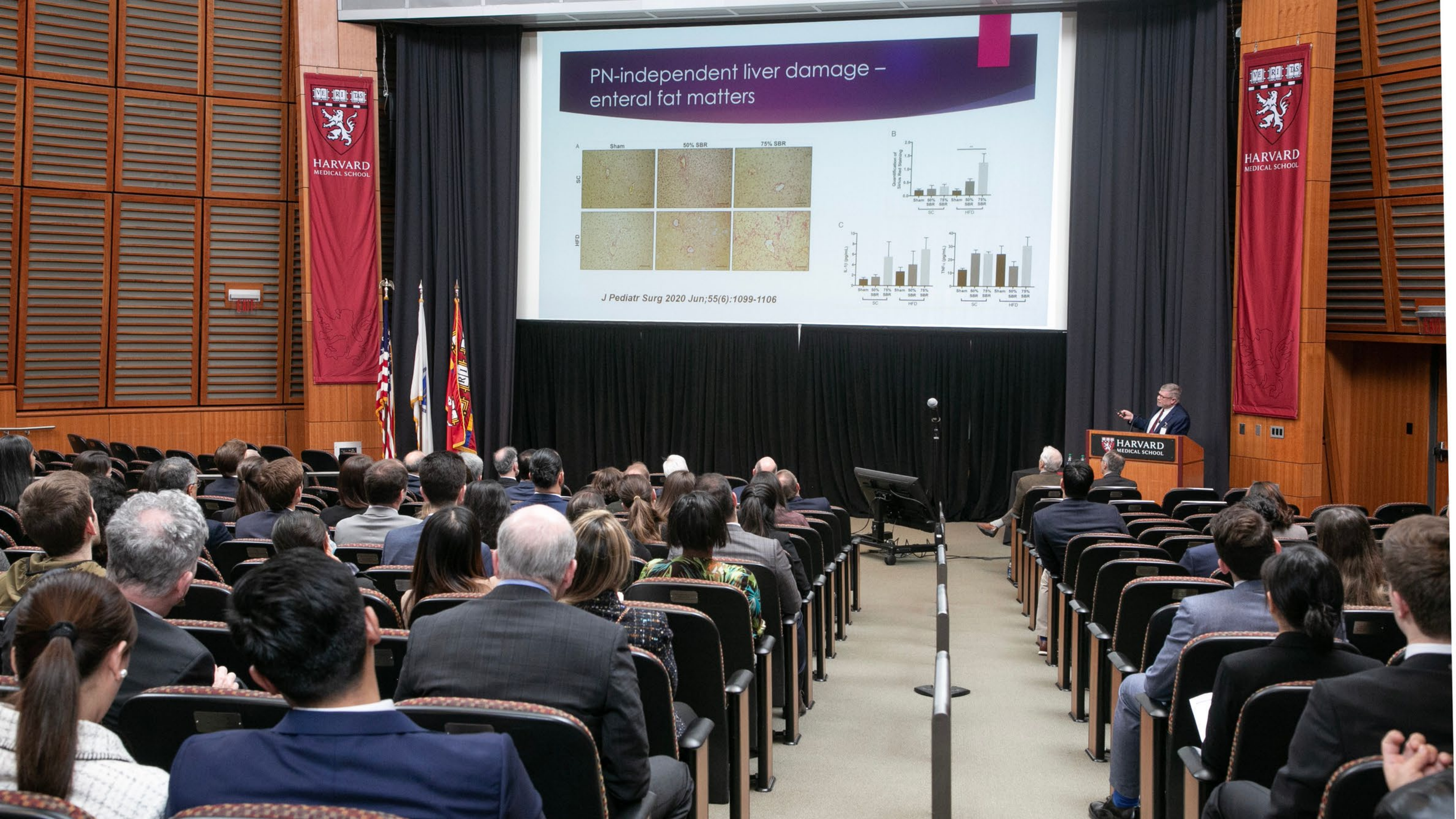
PN-independent liver damage –
enteral fat matters
A
Sham
50% SBR
75% SBR
SC
HFD
B
C
J Pediatr Surg 2020 Jun;55(6):1099-1106
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March 23, 2023
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Visiting Professor & Guest Lecturer


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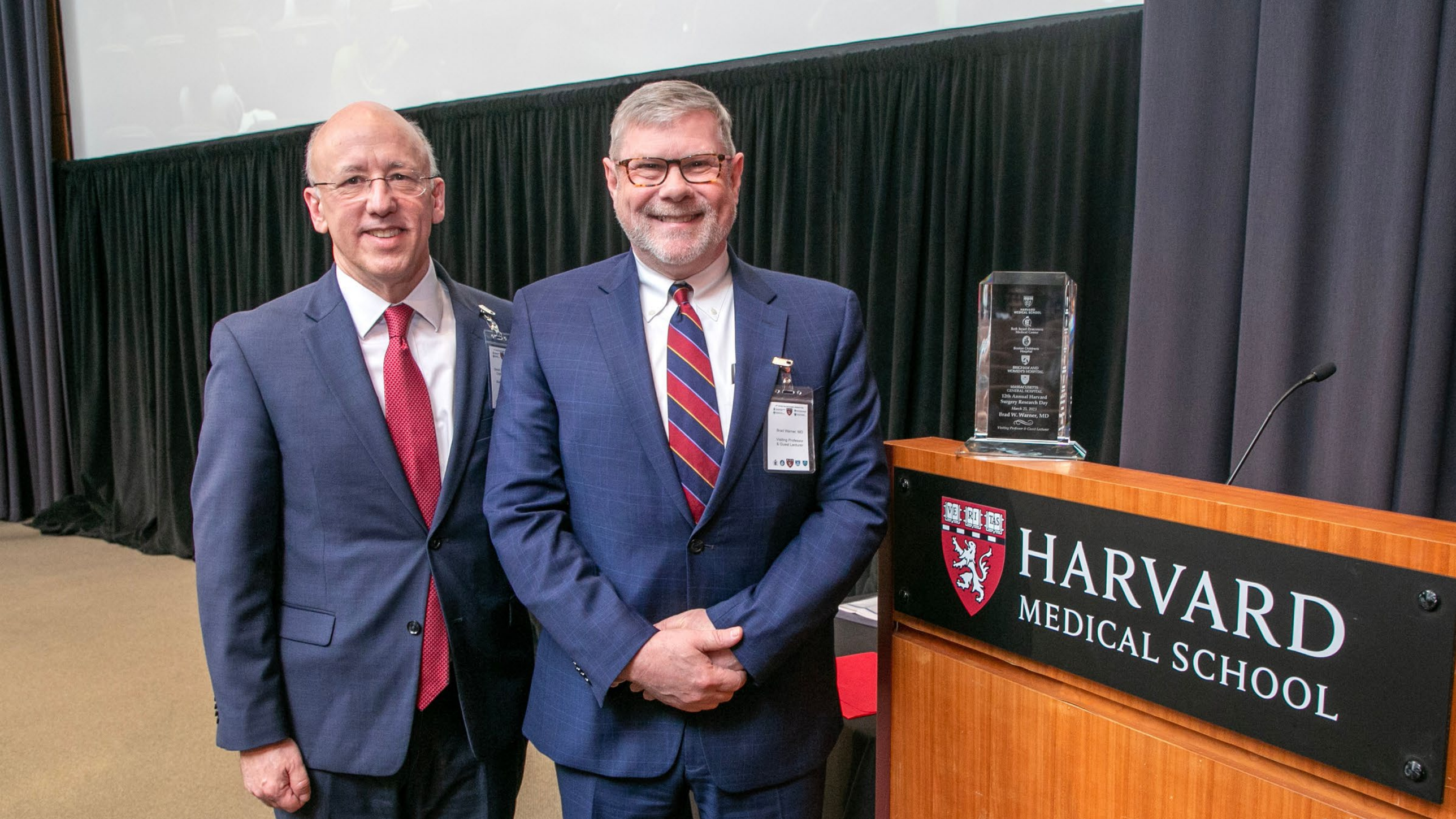
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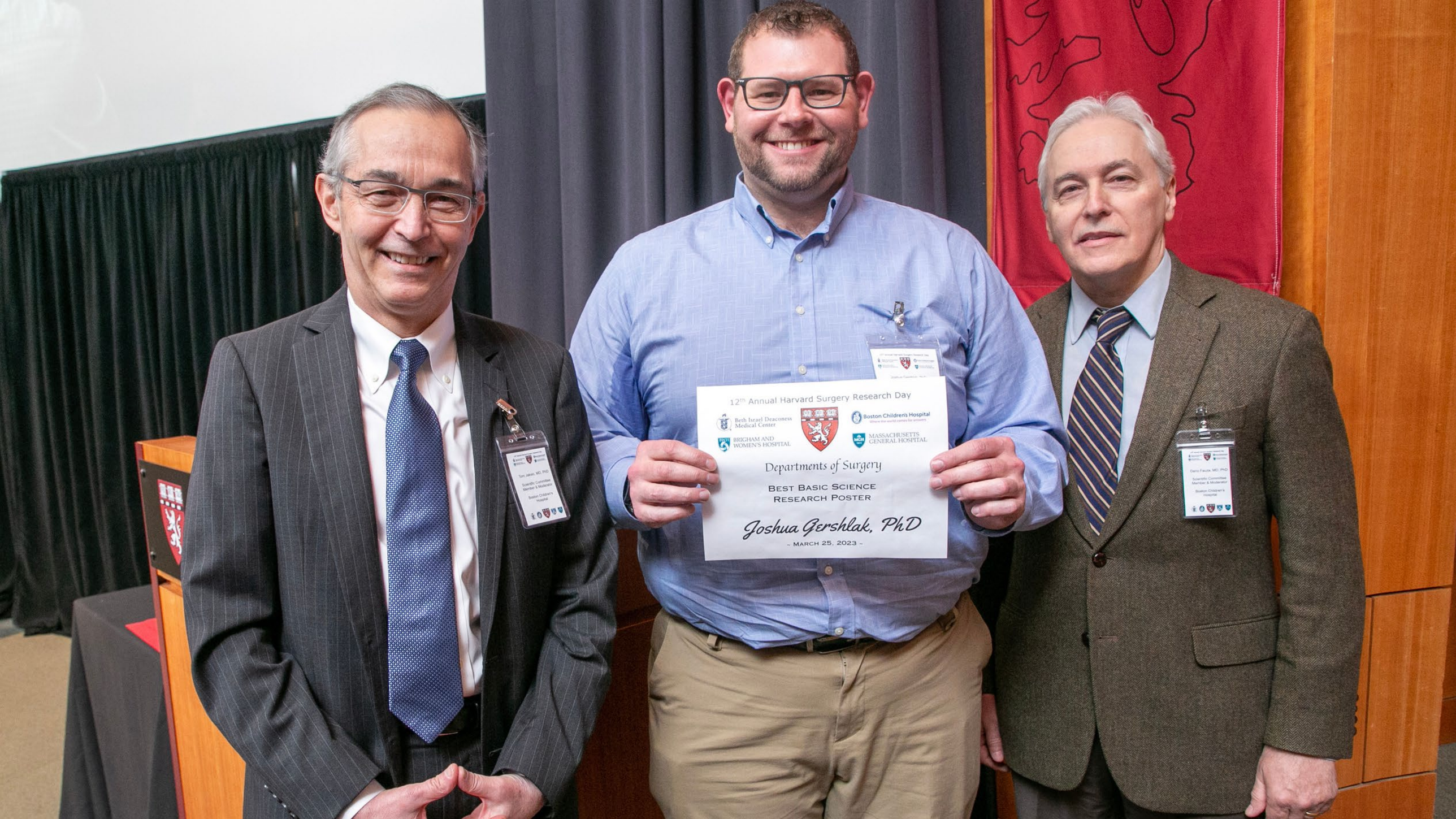
Awards Ceremony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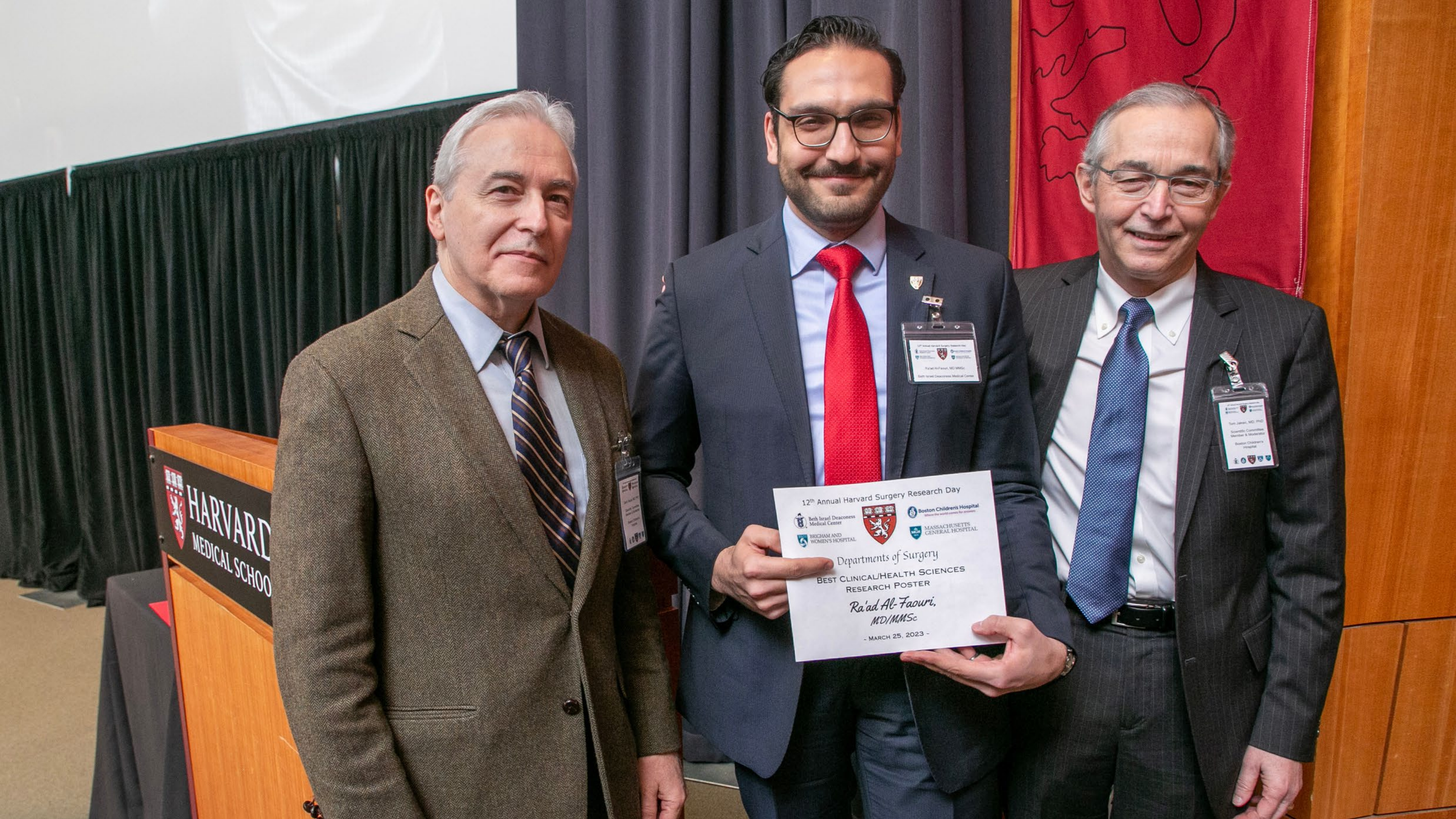
MASSACHUSETTS GENERAL HOSPITAL
Departments of Surgery
BEST BASIC SCIENCE RESEARCH POSTER
Joshua Gershlak, PhD
- MARCH 25, 2023 -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Departments of Surgery
Best Clinical/Health Sciences Research Poster
Ra'ad Al-Faouri, MD/MMSc
- March 25, 2023 -


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Departments of Surgery
SECOND PRIZE
BEST BASIC SCIENCE RESEARCH
ORAL PRESENTATION
Cullen Roberts, MD
- MARCH 25, 2023 -


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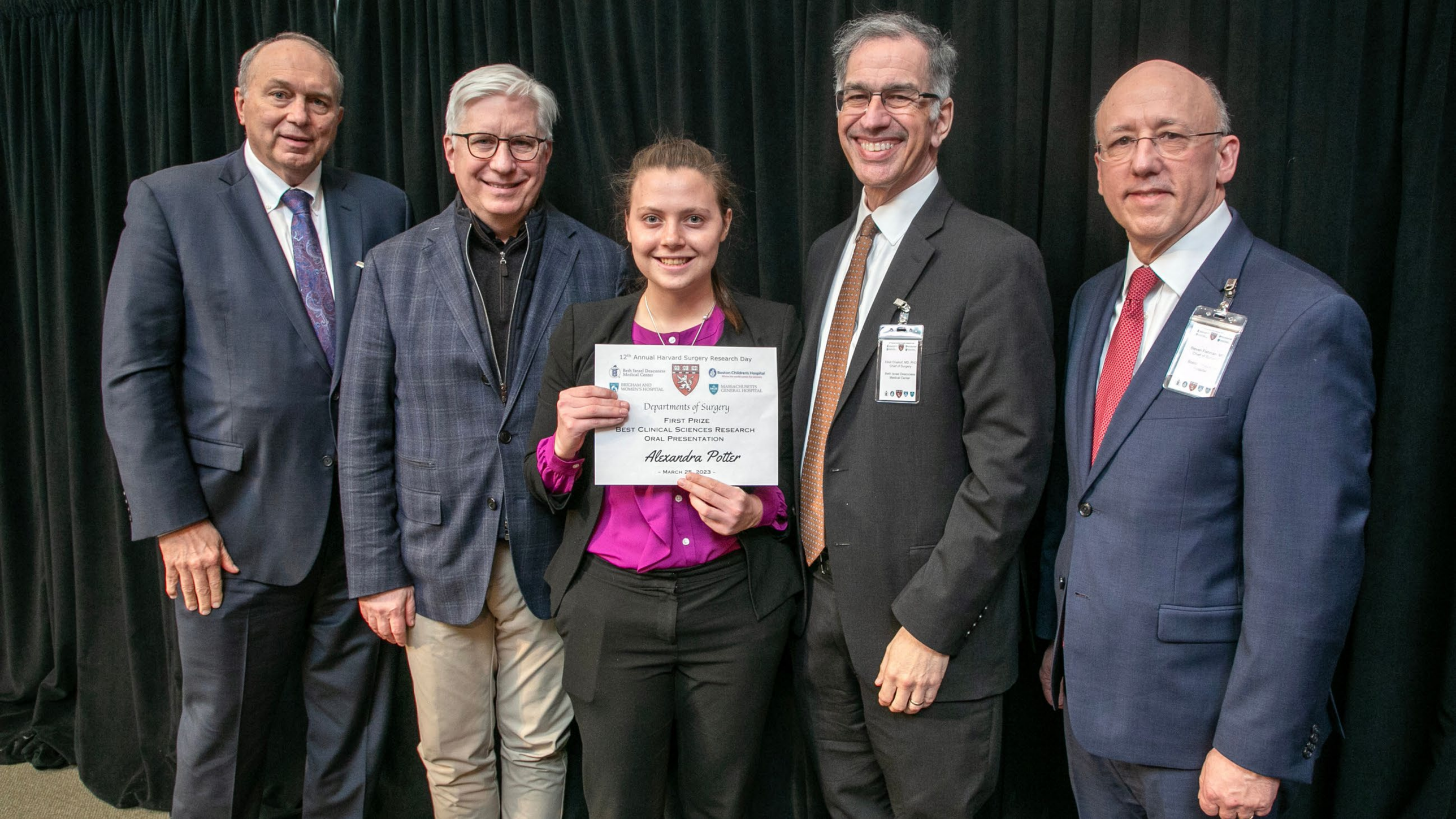
SECOND PRIZE
BEST CLINICAL SCIENCES RESEARCH
ORAL PRESENTATION
Shawn Izadi, MD
- MARCH 25, 2023 -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First Prize
Best Clinical Sciences Research
Oral Presentation
Alexandra Potter
- March 25, 2023 -


12th Annual Harvard Surgery Research Day
Departments of Surgery
Second Prize
Best Basic Science Research
Oral Presentation
Cullen Roberts, MD
March 25, 2023
12th Annual Harvard Surgery Research Day
Departments of Surgery
First Prize
Best Clinical Sciences Research
Oral Presentation
Alexandra Potter
March 25, 2023
12th Annual Harvard Surgery Research Day
Departments of Surgery
Best Basic Science
Research Poster
March 25, 2023
12th Annual Harvard Surgery Research Day
Departments of Surgery
Second Prize
Best Clinical Sciences Research
Oral Presentation
Shawn Izadi, MD
March 25, 2023
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Departments of Surgery
Best Clinical/Health Sciences
Research Poster

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Conversations & Groups


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Immediate Extubation After Pediatric Liver Transplant
CONCLUSIONS
TEG-PM can accurately detec
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increased R-time.


MGH
1811
The role of cancer-associated mesothelial cells in the tumor microenvironment: elucidating the AMH/AMHR2 axis
RESULTS
AJANI


Posters 1-16
Posters 17-30
Posters 31-48
Posters 49-72


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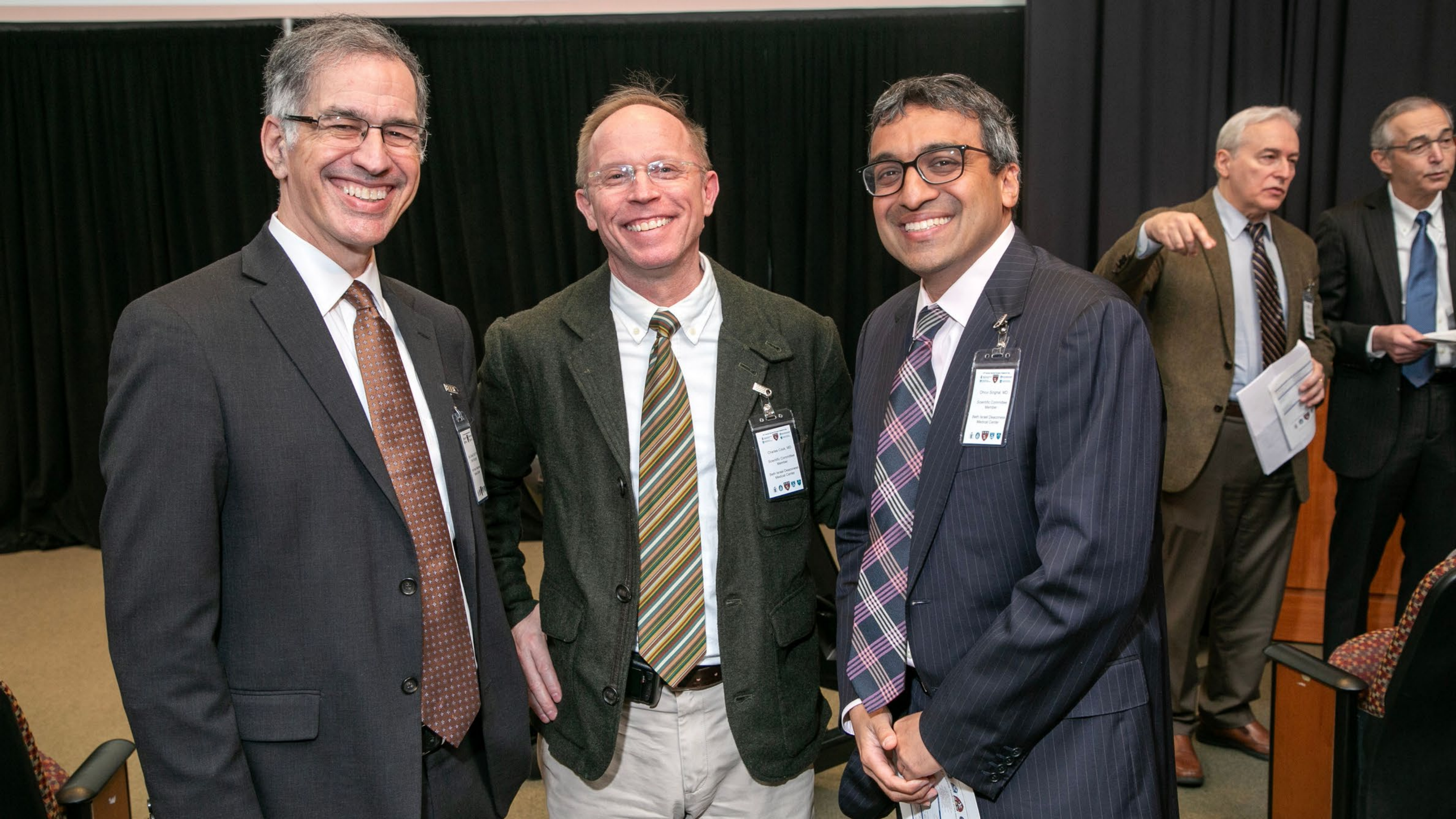


The CRISPR Journal
MGH
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Hueng Bae Kim, MD
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EXIT


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Response to Finasteride in the MTOPS Trial
HARVARD MEDICAL SCHOOL TEACHING HOSPITAL
SRD5A2 Expression
P=0.007
Poor Responders
Good Responders
R: -0.5180
P-value: 0.004
Comparing Financial Hardship to Catastrophic Expenditure as Measures of Financial Toxicity after Surgery
Introduction
Financial toxicity is the detrimental health expenditure.
Catastrophic Expenditure (CE) is 10% of annual household income.
Financial Hardship (FH) is inability to afford basic needs of life.
Methods
Study Type
Study Setting
Statistical Analysis
Results
Conclusions
Contact
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Zhuqing (Lemmy) Li, PhD
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Welcome
Posters 1-16
Ground Floor Lobby
Posters 17-50
1st Floor, Skywalk
Posters 51-98
1st Floor, Eleventh Cafe
Posters 99-136
1st Floor, Pocket Room


Welcome
Posters 1-16
Ground Floor Lobby


Keith D. Lillemoe, MD


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Scientific Committee
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Boston Children's
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Chief of Surgery BWH
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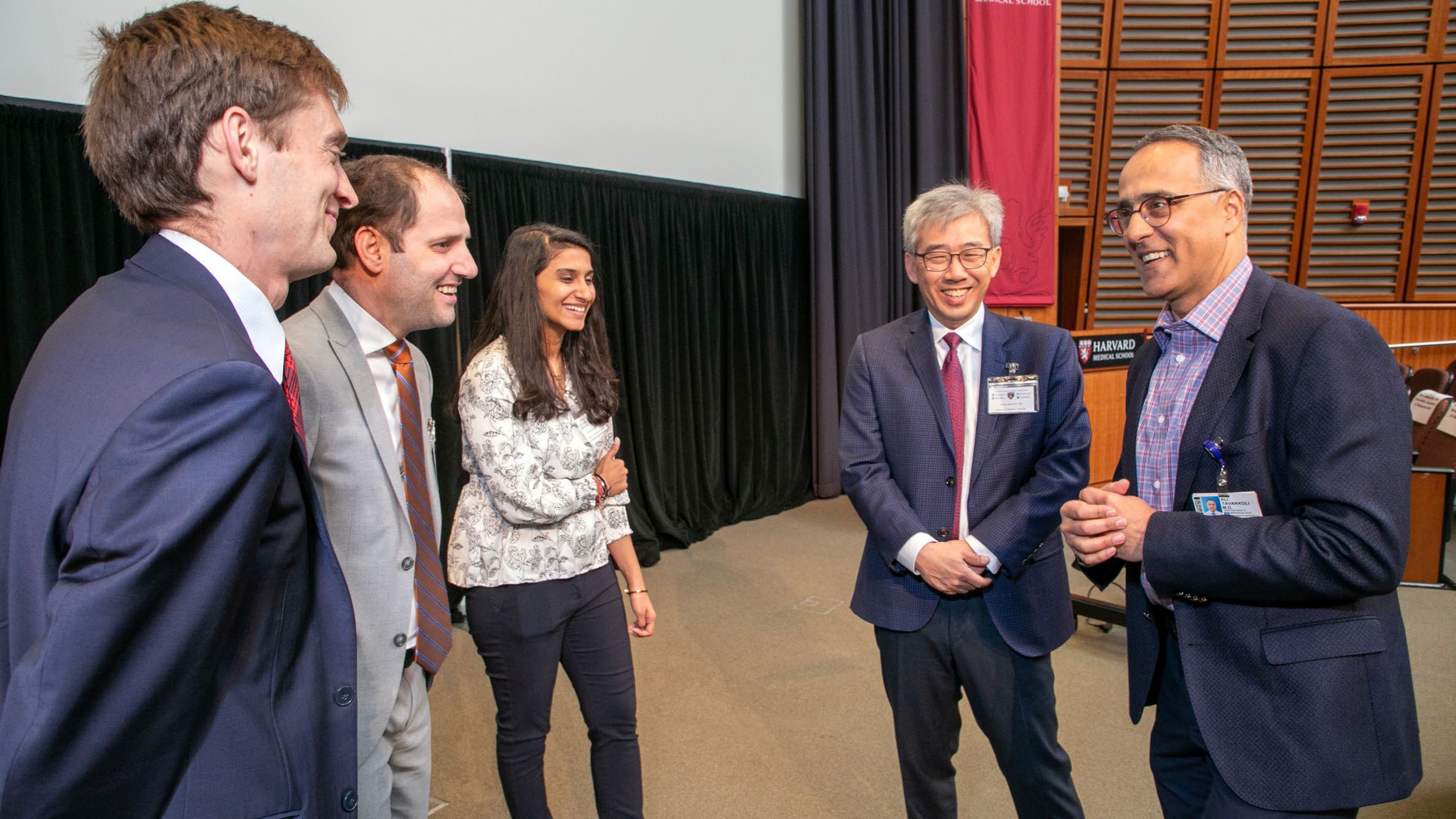
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