## **Supplemental Online Content**

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eAppendix. Relevant items from 2019 ABSITE survey

eTable. Sources of mistreatment for individual behaviors

This supplementary material has been provided by the authors to give readers additional information about their work.

### eAppendix. Relevant items from 2019 ABSITE survey

(Paper format shown here, but the survey is delivered on an electronic platform)

### Survey Preamble

Please complete the following survey to share your thoughts about your residency experience. The information will be used to inform future research and policy decisions to improve the learning environment and culture of residency. It is estimated that it will take approximately 5 to 8 minutes to complete the questions. The survey responses are never associated with your personal identity. All data are de-identified for analyses and reporting. Your program will not have access to your individual responses.

# 1. Are you currently enrolled in a clinically active year of your residency? This is defined as the PGY1-5 years that count toward your board eligibility.

#### Yes

\_No, I am currently working on research (full time), obtaining an additional degree (full time), or otherwise taking a break from my clinical years of training.

2.	2. The following describes me: (most applicable)				
a.	Married				
b.	Not married but in a relationship				
C.	Not married and not in a relationship (single)				
d.	Divorced/Separated				
e.	Widowed				

3.	3. As of July 2018, how many children (under 18) do you have?			
a.	0			
b.	1			
C.	2			
d.	3			
e.	4			
f.	5+			

4. During this academic year (July 2018 to present), were you or your partner pregnant/adopting/expecting a child?		
Yes	No	

5.	I identify my race as: (select all that apply)	
a.	American Indian or Alaska Native	
b.	Asian	
C.	Black or African American	
d.	Native Hawaiian or Other Pacific Islander	
e.	White	
f.	Other	
g.	Prefer not to say	

6.	l identify my ethnicity as:	
а.	Hispanic or Latino	
b.	Not Hispanic or Latino	
C.	Prefer not to say	

7.	I identify my gender/sexual orientation as (select all that apply):	
a.	Straight	
b.	Gay or lesbian	
C.	Bisexual	
d.	Other orientation	
e.	Transgender	
f.	Other gender identity	
g.	Prefer not to answer	

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9.	Please indicate the extent to which you agree with the following statements:					
	Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a.	My work is appreciated by my co-residents.					
b.	My work is appreciated by my attendings.					
C.	The residents in my program cooperate with one another.					
d.	Favoritism determines how decisions are made during residency.					
e.	I have a mentor within the department of surgery who genuinely cares about me and my career.					
f.	I consider my co-residents to be among my closest friends.					

10. Thinking back on this academic year (July 2018 to present), how satisfied were you with the following?						
Item	Dissatisfied	Neutral	Satisfied	Very Satisfied		
a. Your decision to become a surgeon.						

11.	11. Using the scale below, indicate the frequency with which you've experienced the following in your general surgery residency during this academic year (July 2018 to present).							
	Item	Never	Now and then	Monthly	Weekly	Daily		
a.	Someone withholding information which affects your performance							
b.	Spreading of gossip and rumors about you							
C.	Being ignored or excluded							
d.	Having insulting or offensive remarks made about your person, attitudes, or your private life							
e.	Being shouted at or being the target of spontaneous anger							
f.	Repeated reminders of your errors or mistakes							
g.	Being ignored or facing a hostile reaction when you approach							
h.	Persistent criticism of your work and effort							
i.	Practical jokes carried about by people you don't get along with							
j.	Being cursed or sworn at							

12. (only populate rows with #11 answers > "Never" to "a-j") During this academic year (July 2018 to present), from whom did you experience these behaviors noted in the prior question (spreading gossip/rumors about you, being shouted at, repeated reminders of your errors or mistakes, being cursed or sworn at, etc.)? (Select all that apply)

Patient(s) (includes patient's family members)	Attending(s)	Administrator(s)	Colleagues (other resident(s) and fellow(s))	Nurse(s)/ Support staff (e.g., radiology technicians, IT personnel, etc.)

13. Please indicate the extent to which you agree with the following statement:					
Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I have considered leaving my residency program during the current academic year (July 2018 to present).					

14. During the past <u>12 months</u> :					
	No	Yes			
Have you had thoughts of taking your own life?					

### 14a. (only if answered "Yes" to "14")

Suicidal ideation should be taken seriously, and we urge you to seek medical attention. You can start by reaching out to your program director for help or calling the toll-free National Suicide Prevention Lifeline (1-800-273-8255), available 24 hours a day, 7 days a week. The service is available to anyone. All calls are confidential. http://www.suicidepreventionlifeline.org

16	16. Using the scale below, indicate the frequency with which you've experienced the following in your general surgery residency during this academic year (July 2018 to present).											
	Item	Never	A few times a year	Once a month or less	A few times a month	Once a week	A few times a week	Every Day				
a.	Crude/sexually demeaning or explicit remarks, stories, or jokes											
b.	Unwanted sexual imagery or materials sent or shown to you											
C.	Unwanted verbal sexual attention (e.g., comments, flirtations, sexual advances)											
d.	Offensive body language (e.g., leering, standing too close)											
e.	Unwanted physical sexual attention (e.g., inappropriate or uncomfortable touching; attempts to touch, fondle or kiss)											
f.	Sexual coercion (e.g., bribed or threatened to engage in sexual behavior; suggestion of better treatment if sexually cooperative)											

	17. Using the scale below, indicate from whom you've experienced the following in your general surgery residency during this academic year (July 2018 to present). (Select all that apply)											
		Never Experienced It	Patient(s) (includes patient's family members)	Attending(s)	Administrator(s)	Colleagues (other resident(s) and fellow(s))	Nurse(s)/ Support staff (e.g., radiology technicians, IT personnel, etc.)					
a.	Crude/sexually demeaning or explicit remarks											
b.	Unwanted sexual imagery sent or shown to you											
C.	Unwanted verbal sexual attention (e.g., flirtations, sexual advances)											
d.	Offensive body language (e.g., leering, standing too close)											
	Unwanted physical sexual attention (e.g., inappropriate touching											
f.	Sexual coercion (e.g., bribed or threatened to engage in sexual behavior; suggestion of better treatment if sexually cooperative)											

18. Using the scale below, indicate the frequency with which you've experienced the following based on your <u>GENDER/GENDER IDENTITY/SEXUAL ORIENTATION</u> in your general surgery residency during this academic year (July 2018 to present). These questions are NOT related to race/ethnicity/religion.

	Item	Never	A few times a year	Once a month or less	A few times a month	Once a week	A few times a week	Every Day
a.	Different standards of evaluation (e.g., lowered expectations, need to work harder to achieve the same success as others, unfair punishment, less respect for my opinion)							
b.	Denied opportunities (e.g., OR cases, attendance at conferences, career options, opportunities for advancements, mentorship)							
C.	Mistaken for a non-physician based on your gender/gender identity/sexual orientation							
d.	Slurs and/or hurtful/ humiliating/negative/uncomfortable comments even when purported as jokes							
e.	Socially isolated (e.g., excluded from social events, malicious gossip)							
f.	Was advised against having children during residency							
g.	Felt like my/my partner's pregnancy or our childcare needs led to negative reactions from my coworkers/program							

19.	19. Using the scale below, indicate from whom you've experienced the following based on your <u>GENDER/GENDER IDENTITY/SEXUAL ORIENTATION</u> in your general surgery residency during this academic year (July 2018 to present). These questions are NOT related to race/ethnicity/religion. (Select all that apply)										
	Item	Never Experience d It	Patient(s) (includes patient's family members)	Attending (s)	Administrator (s)	Colleagues (other resident(s) and fellow(s))	Nurse(s)/ Support staff (e.g., radiology technician s, IT personnel, etc.)				
а.	Different standards of evaluation (e.g., lowered expectations, need to work harder to achieve the same success as others, unfair punishment, less respect for my opinion)										
b.	Denied opportunities (e.g., OR cases, attendance at conferences, career options, opportunities for advancements, mentorship)										
C.	Mistaken for a non- physician based on your <u>gender/gender</u> <u>identity/sexual</u> orientation										
d.	Slurs and/or hurtful/ humiliating/negative/u ncomfortable comments even when purported as jokes										
e.	Socially isolated (e.g., excluded from social events, malicious gossip)										
f.	Was advised against having children during residency										
g.	Felt like my pregnancy/childcare needs led to negative reactions from my coworkers										

### eTable. Sources of mistreatment for individual behaviors

on-LGBTQ+ R	lesidents												
Non-LGBTQ+							LGBTQ+						
1		n (%	6)			n (%)							
Not Identified	Patients/ Families	Attendings	Admin*	Colleagues	Nurses/ Support Staff	Not Identified	Patients/ Families	Attendings	Admin*	Colleagues	Nurses/ Support Staff		
											Withheld		
	· · · /							· · · /			Withheld		
											22 (16.9)		
241 (38.6)	110 (17.6)	112 (17.9)	Withheld		41 (6.6)		9 (11.7)	19 (24.7)			7 (9.1)		
118 (28.7)	5 (1.2)	57 (13.9)	6 (1.5)	213 (51.8)	12 (2.9)	10 (32.3)	Withheld	Withheld	Withheld	15 (48.4)	Withheld		
121 (16.3)	17 (2.3)	357 (48.0)	27 (3.6)	190 (25.5)	32 (4.3)	Withheld	Withheld	21 (53.8)	Withheld	9 (23.1)	Withheld		
24 (11.0)	Withheld	69 (31.5)	11 (5.0)	111 (50.7)	Withheld	Withheld	Withheld	Withheld	Withheld	Withheld	Withheld		
1													
252 (18.3)	285 (20.7)	294 (21.3)	Withheld	402 (29.2)	142 (10.3)	13 (11.1)	25 (21.4)	41 (35.0)	Withheld	25 (21.4)	12 (10.3)		
88 (39 8)	18 (8 1)	20 (9 0)	Withheld	73 (33 0)	21 (9 5)	9 (37 5)	Withheld	5 (20.8)	Withheld	7 (29 2)	Withheld		
	\ /										8 (17.4)		
			· · · /								Withheld		
											Withheld		
											Withheld		
	. (												
400 (23.0)	210 (12.1)	444 (25.5)	55 (3.2)	351 (20.2)	281 (16.1)	18 (18.0)	10 (10.0)	30 (30.0)	Withheld	24 (24.0)	14 (14.0)		
484 (27.1)	15 (0.8)	236 (13.2)	19 (1.1)	819 (45.8)	216 (12.1)	22 (21.0)	Withheld	9 (8.6)	Withheld	57 (54.3)	14 (13.3)		
483 (28.3)	32 (1.9)	445 (26.0)	36 (2.1)	610 (35.7)	103 (6.0)	17 (18.1)	Withheld	30 (31.9)	Withheld	40 (42.6)	5 (5.3)		
· · · /	71 (5.6)		7 (0.5)		95 (7.4)	13 (18.8)	Withheld	22 (31.9)	Withheld		7 (10.1)		
	231 (10.7)	1127 (52.2)	12 (0.6)	270 (12.5)	72 (3.3)	22 (16.7)	11 (8.3)	78 (59.1)	Withheld	17 (12.9)	Withheld		
659 (28.3)	25 (1.1)	1076 (46.3)	28 (1.2)	500 (21.5)	38 (1.6)	28 (20.6)	Withheld	75 (55.1)	Withheld	31 (22.8)	Withheld		
390 (29.5)	46 (3.5)	505 (38.2)	22 (1.7)	248 (18.8)	111 (8.4)	20 (24.4)	Withheld	35 (42.7)	Withheld	15 (18.3)	12 (14.6)		
493 (29.8)	22 (1.3)	758 (45.8)	26 (1.6)	319 (19.3)	37 (2.2)	23 (21.5)	Withheld	56 (52.3)	Withheld	24 (22.4)	Withheld		
228 (46.8)	5 (1.0)	39 (8.0)	Withheld	167 (34.3)	45 (9.2)	6 (22.2)	Withheld	6 (22.2)	Withheld	11 (40.7)	Withheld		
266 (21.2)	148 (11.8)	656 (52.3)	6 (0.5)	159 (12 7)	20 (1.6)	9 (13.4)	9 (13 4)	43 (64 2)	Withheld	5 (7 5)	Withheld		
	Not Identified 196 (16.3) 148 (23.5) 127 (7.3) 241 (38.6) 118 (28.7) 121 (16.3) 24 (11.0) 24 (11.0) 252 (18.3) 24 (11.0) 252 (18.3) 388 (39.8) 123 (18.4) 146 (27.2) 72 (33.2) 39 (66.1) 440 (23.0) 484 (27.1) 483 (28.3) 365 (28.6) 447 (20.7) 659 (28.3) 390 (29.5) 493 (29.8) 228 (46.8)	Identified Families   196 (16.3) 84 (7.0)   148 (23.5) 10 (1.6)   127 (7.3) 1391 (79.4)   241 (38.6) 110 (17.6)   118 (28.7) 5 (1.2)   121 (16.3) 17 (2.3)   24 (11.0) Withheld   252 (18.3) 285 (20.7)   88 (39.8) 18 (8.1)   123 (18.4) 280 (41.9)   146 (27.2) 124 (23.1)   72 (33.2) 37 (17.1)   39 (66.1) 7 (11.9)   400 (23.0) 210 (12.1)   483 (28.3) 32 (1.9)   365 (28.6) 71 (5.6)   447 (20.7) 231 (10.7)   659 (28.3) 25 (1.1)   390 (29.5) 46 (3.5)   493 (29.8) 22 (1.3)   228 (46.8) 5 (1.0)	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{  c                                  $		