A Mixed-Methods Analysis Of A Novel Mistreatment Program
For The Surgery Core Clerkship

BY

JAMES N. LAU
B.S., University of California San Diego, 1990
M.D., Loyola University Chicago, 1995

THESIS
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Defense Committee:
Ilene Harris, Chair and Advisor
Laura Hirshfield
Kelley Skeff, Stanford University
This thesis is dedicated to my wife, Patricia, without whom this, and all my other professional and personal accomplishments, would not have been possible.
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Laura Mazer and Sylvia Bereknyei Merrell were essential collaborating with me on the study design, the qualitative analysis piece, and in creating some parts of and editing the entire manuscript. Cara Liebert and Dana Lin were also involved in the coding for the qualitative analysis. All the above were involved in the initial planning, monthly deployment, and constant program evaluation of the mistreatment program detailed herein. The quantitative data from the School of Medicine at Stanford required the support and assistance of Drs. Rebecca Smith-Coggins and Kerri Wakefield and Roxana Farias. The initial brainstorming of the mistreatment program was with Dr. Shalini Reddy.
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SUMMARY

A little less than half of all medical students report mistreatment during clerkship rotations and this is particularly prevalent on surgical ones. We report the impact of a program targeted at medical students for improving the clinical learning environment on the surgery clerkship at one academic institution.

We implemented a dual-modality, video- and discussion-based mistreatment program in the surgery core clerkship to empower students to address potential mistreatment. We compared counts and mistreatment types reports from one year prior to the start of the program and for two years during the program’s incorporation. Students also completed end-of-clerkship questionnaires and written reflections that we inductively analyzed to identify themes.

One hundred and sixty-four (164) students, enrolled in the general surgery clerkship between March 2014 and December 2015 and completed the mistreatment program, 141 completed surveys and 47 provided written reflections. On our clerkship surveys, 77% of students rated the program ‘excellent’ or ‘outstanding’. In the qualitative analysis, respondents valued the program in: establishing expectations; allowing for shared experiences; raising awareness of resources to address mistreatment; and providing emotional support. Students felt that the learning environment and rotation culture was improved and that interest in surgery as a career would increase. There were 14 mistreatment reports on the surgery clerkship the year preceding the program, 9 reports in the program’s first year, and 4 the second year.

A rotation-specific mistreatment program, focused on creating shared understanding about mistreatment, decreased mistreatment reports and was universally well received among core clerkship students in surgery.
I. INTRODUCTION

A. Background

In 1982, in a commentary in the Journal of the American Medical Association, Dr. Henry Silver drew comparisons between medical students and foster children, reflecting that the changes seen in students during medical school were reminiscent of ‘battered child syndrome.’ In surveys of senior medical students in the 1990s, more than 80% reported being abused or mistreated at some point during medical school, ranging from public humiliation, to gender or ethnic discrimination, to threats of physical harm. Moreover, this is an international phenomenon, with similarly high rates of abuse reported in studies from Japan, Finland, Pakistan, and the United Kingdom.

B. Statement of the Problem

Medical student mistreatment is associated with a range of deleterious effects, including burnout, symptoms of post-traumatic stress, and decreased confidence in clinical abilities. Although the number of students reporting mistreatment has decreased since the 1980s, medical student mistreatment continues to be a common phenomenon. In the 2014 Association of American Medical Colleges Graduation Questionnaire, excluding reports of public embarrassment, 39.9% of graduating medical students report experiencing some form of mistreatment during medical school. On the same questionnaire, 93% of students indicated that they were aware of mistreatment policies at their institution, and this percentage has increased every year since 2005.

Over the same time period, a number of policies and programs have been published that are directed at decreasing incidences of mistreatment at medical schools and affiliated hospitals. Yet despite high awareness of policies and an increasing frequency of mistreatment programs, the problem persists. Moreover, the problem is particularly severe in surgical departments and can negatively impact a student’s specialty choice. One published study reported that 37% of student mistreatment occurs on surgery clerkships. Despite this high prevalence, to date, only one medical
student mistreatment intervention at the departmental level in surgery has been reported in the literature.\textsuperscript{18}

C. **Purpose of the Study**

To address this problem, we initiated a program to decrease mistreatment for third year medical students during the required surgical core clerkship. This program was targeted to teach medical students, with the aims of setting expectations prior to the clerkship, developing a shared and personal understanding of the term ‘mistreatment’, establishing a relationship of student trust with the Clerkship Director and surgery clerkship staff, and informing students of avenues for reporting mistreatment. The purpose of this study is to review medical student reports, ratings, and qualitative responses to this program, and evaluate the short-term impact on students.
II. MATERIALS AND METHODS

A. Participants

At the study institution, all third year medical students complete an eight-week core clerkship in surgery, consisting of a four-week rotation on a general surgery service and two 2-week rotations on sub-specialty services. All students, regardless of clerkship site, come to the parent institution for a teaching session one afternoon per week. All medical students on the surgery clerkship, starting in January 2014, have participated in the mistreatment program.

B. Mistreatment Program Description

The surgery core clerkship formal curriculum is divided into eight one-week modules. During one afternoon per week, students attend scheduled educational activities using a blended learning format. The formal mistreatment program is embedded into this curriculum, and is portrayed visually in Figure 1. The program’s purpose is to introduce third year medical students to the culture of a surgical clinical learning environment and to empower them to succeed in this environment. Specifically, the program includes a facilitated discussion of student concerns and expectations for the surgical learning environment, helps students create both a consensus and a personal definition of ‘mistreatment’ as it applies to the clinical learning environment, and promotes advocacy and empowerment for students to address mistreatment if, and as, it occurs.

Like most core clerkships at Stanford, on the first day of the core surgery clerkship, medical students are told the policies and procedures for mistreatment at the School of Medicine. In the surgery clerkship, students are also specifically encouraged to communicate with the Clerkship Director and trained Surgical Education Fellows about any concerns, and given direct contact information. During the second day of the clerkship, after spending a day on their clinical service, students attend a dedicated mistreatment session, led by the Clerkship Director and the Surgical Education Fellows. Students first complete a written exercise, generating personal definition(s) of
‘mistreatment’. This exercise is followed by a group discussion facilitated by the Clerkship Director regarding what constitutes ‘mistreatment’, in the process sharing personal or related experiences of mistreatment on the wards in a confidential setting.

To facilitate this discussion, students view short videos created for the mistreatment program, portraying various degrees of suboptimal clinical learning environments. These videos include examples of ‘pimping’, where a medical student or resident on a surgical service faces a barrage of questions. In some instances, the attending is polite and encouraging; in others he is abrasive or personally insulting. Students reflect about the different scenarios, and how they would anticipate responding personally to each situation. Other ward videos feature morning rounds where medical students are abandoned by busy resident teams or chastised in front of patients. Again, students are asked to reflect about these situations and discuss possible responses.

The videos also depict common scenarios in the operating room, since for many students this is a new learning environment. Videos show challenging cases where an attending surgeon may physically manipulate the medical student’s hand on a retractor or laparoscopic camera, or physically push a medical student out of the way to address sudden bleeding. Students discuss the unique features of the operative environment and how these features impact their definition of mistreatment.

Throughout the intervening weeks of the clerkship, each teaching session begins with a group ‘check-in’ by the Clerkship Director or Surgical Education Fellows. Students are asked how the clinical rotations are going, from an expectation and educational environment standpoint, in a quiet protected environment, without residents or attendings. These weekly check-ins are designed to support a culture of safety of reporting and discussions of communication and education challenges. A student can either speak up in the group at these times in order to address a concern, have the collective discuss a situation, or discuss a situation in private with the clerkship director.

The mistreatment session during the final week of the clerkship is dedicated to a group debriefing, where students discuss experiences on the rotation or other rotations. They reflect about
their pre-surgery expectations and discuss again their definition of mistreatment in this context. They share experiences, positive or negative. The videos may again be viewed, and students now reflect about the realism of the depicted scenarios and if their responses have changed after completing the clerkship. It is following this session that students complete the online end-of-clerkship evaluations including ratings of the program and written responses to open-ended questions.

C. **Data Collection and Analysis**

The Stanford School of Medicine began to collect mistreatment reports through the Respectful Educator and Mistreatment Committee in January 2013. These reports were solicited from the Division of Evaluation’s end of clerkship evaluation, given to all students at the end of each clerkship. The end of clerkship evaluation instrument would only ask the students to respond to questions similar to the AAMC graduation questionnaire on mistreatment if the student answered "yes" to the question of whether the student observed and/or experienced incidents of mistreatment. These responses are reproduced in Appendix 1. Reports are collected and distributed to clerkship directors quarterly. Those reports for the surgery clerkship were reviewed in the context of the timing of the student mistreatment education intervention. The number, perpetrator and role, types of mistreatment, and initial reporting mechanism (during the clerkship versus end of clerkship evaluation) were collected and reviewed. The reported types of mistreatment were defined by the Respectful Educator and Mistreatment Committee as: offensive remarks, physical mistreatment, public embarrassment/humiliation, and performing personal services.

Students in the surgery core clerkship from March 2014 to February 2015 voluntarily completed an additional anonymous, electronic, end-of-clerkship survey evaluating each curricular element, including the mistreatment program, on a five-point Likert scale (1=poor, 2=fair, 3=average, 4=excellent, 5=outstanding). Means and standard deviations for Likert scale responses were calculated for all respondents and grouped by clerkship period. Student t-tests and Chi-square tests were
performed, with p < .05 considered statistically significant. Student demographic data was obtained from the School of Medicine for students enrolled in the surgery core clerkship during this period.

[IBM SPSS Version 22 (2013)]

At the start of the new academic year, we additionally performed a pilot qualitative study to evaluate the program’s effectiveness and immediate impact on students. The students enrolled in the first three clerkship periods (n=47), from January to August 2014, completed an anonymous open-ended written reflection regarding their impressions of the program. The survey is reproduced in Table 5. The researchers used a phenomenological qualitative methodological approach to analyze the responses to open ended questions. Two investigators (L.M.M., J.N.L) independently reviewed all text, inductively generated an initial set of themes, and discussed the themes they had identified until a final set of themes was agreed upon, following which they used the set of themes to analyze all free-text responses. In addition, each response was weighted as ‘positive’, ‘negative’, or ‘neutral’ as a program evaluation tool to gauge which aspects of the clerkship would require review and possible revision. The investigators discussed all code application disagreements, reaching 100% inter-rater agreement for all code applications and weights. After coding, we used narrative inquiry during team-based analysis (L.M.M, C.A.L., D.T.L., J.N.L) to enhance the trustworthiness and credibility of the resulting emergent themes for each of the three free-text questions. We report question domain themes within each domain, with representative quotes to illustrate respondents’ views. The narrative anonymous text was managed using Excel [Microsoft Excel, Microsoft Corp].

The Stanford University Institutional Review Board determined that the study did not meet federal regulations’ definition of Human Subject Research and was exempt from IRB review.
III. RESULTS

A. Participant Information

A total of 179 students completed the mistreatment program between January 2014 and December 2015. Starting in March 2014 and continuing through December 2015, 164 students were invited to complete the anonymous online end-of-clerkship survey. All students enrolled during the first three clerkship periods in 2014 (n=47), from January to August 2014, additionally completed the survey that included open-ended questions (Table 5). In the overall sample, mean age was 27.8 (standard deviation 3.2, range 21-40), 52% were female, and 36 students (22%) had prior advanced degrees (including PhD, MPH, or other master’s level degrees). Of the subset of 47 students completing the qualitative portion of the survey, 59% were female, mean age was 27.3 (standard deviation 2.5, range 25-34), and 35% had prior advanced degrees. There were no statistically significant differences in mean age or gender between the overall sample and the group that completed the qualitative responses.

B. Mistreatment Reporting

A total of 27 reports were collected by the Respectful Educator and Mistreatment Committee from medical students on the surgery core clerkship, for either witnessed or experienced mistreatment, from January 2013 to December 2015. Fourteen (14) reports were regarded as personally experienced mistreatment, 10 were regarded as witnessed episodes of mistreatment, 2 reports were regarded as both experienced and witnessed and 1 did not specify. Mistreatment reports are divided into the pre-intervention period (January-December 2013), the first intervention period (January-December 2014), and the second intervention period (January-December 2015), and are reported in Table 1.
C. **Mistreatment Reports**

In the year prior to the mistreatment program, there were 14 total mistreatment reports from the surgery clerkship, at an average of 1.17 reports per month. After introduction of the mistreatment program, there were 9 reports the first intervention year (0.75 reports per month) and 4 in the second intervention year (0.33 reports per month), as seen in Table 1. The number of faculty implicated in mistreatment incidents decreased from eight in the pre-intervention year to four in the first intervention year, and two faculty members were implicated in the second year (Table 2). Residents as the source of the mistreatment went up from three during the pre-intervention period to four during the first period, but then went down to one report in the second period. The most common forms of mistreatment reported were: offensive verbal remarks (8 total, 30%) and public embarrassment/humiliation (15 total, 56%). Reports of offensive verbal remarks decreased over the study period from five in the pre-intervention period, to three reports in the first intervention period, to no reports in the second intervention period. Reports of public embarrassment and humiliation also decreased with seven reports pre-intervention, four reports in the first intervention period and four reports in the second intervention period. Reports about students performing personal services for the faculty or residents stayed level from pre-intervention rates to the first year (two reports each year) and fell to zero during the second year (Table 3). Students reported the mistreatment at the time of the episode in 25% of cases pre-intervention, 75% of cases during the first post-intervention year, and 50% in the second intervention year (Table 4).

D. **Survey Ratings**

A total of 141 students (87% response rate) who participated in the mistreatment program between March 2014 and December 2015 completed the anonymous, electronic, end-of-curriculum survey, containing Likert scale responses. The mistreatment program sessions during the first and last weeks of the clerkship were rated as 4.02 (0.85) and 4.30 (0.74), mean and standard deviation
respectively, with 5 considered ‘outstanding’. Most students rated the initial mistreatment session as ‘excellent’ or ‘outstanding’ (n= 108, 77%), with two students rating it ‘poor’ (<1%). Students rated the mistreatment session during the final week of the clerkship similarly, with a majority rating the session as ‘excellent’ or ‘outstanding’ (n=120, 85%) and one student rating it ‘poor’ (<1%). There was no statistically significant difference in survey ratings between the subset who provided responses to open ended questions and the entire cohort.

E. **Thematic Analysis**

The two reviewers initially weighted the overall tone of each qualitative response as ‘positive’, ‘negative’, or ‘neutral’. All (100%) student responses were coded as positive. Student responses were organized by three question domains based on the free-text prompts: *Mistreatment Program Provided Intrinsic Value to Students*, *Mistreatment Program Broadens Students Views of the Surgical Environment*, and *Concrete Suggestions for Improvement*. The question domains and resulting 10 themes, as well as representative quotations, are presented in Table 6. Inter-rater percentage agreement on themes was 100% after consensus discussions on all coded quotes.

1. **Mistreatment Program Provided Value to Students**

The majority of comments focused on the program’s value to students. Four themes were identified from the student free-text responses. First, the program *guided how students established expectations about mistreatment*. Students indicated that by establishing expectations the program helped them to understand behaviors on the wards, and referred specifically to the videos in creating this shared understanding of expectations.

Second, students also commented that they *appreciated opportunities for sharing their experiences*. Several students commented that the program helped them to feel less alone, in recognizing that others were having similar experiences in the surgical learning environment.
Similarly, a third theme was identified, students valuing the program's *environment for emotional support*, for example with a student stating that they “*feel supported [because of the program]*”.

Finally, the fourth theme in how the mistreatment program provided value, students commented about an improved appreciation for the *provision of formal resources* such as the Clerkship Director’s availability to counteract mistreatment, even during the rotation. The mistreatment program relies heavily on personal interaction with the Clerkship Director (J.N.L.), and several of the comments reflected specific awareness of, and trust in, the Clerkship Director as a resource.

2. **Mistreatment Program Broadens Students Views of the Surgical Environment**

Three themes were identified regarding how the program, although focused on mistreatment, ultimately broadened their views about experiences in the surgical environment. First, students indicated that through the program and weekly check-ins, a learning environment of *openness to ask questions* was created because students became more comfortable, both in the sessions and also on their rotations. Second, along with the more open learning environment, students also discussed a perceived *noticeable culture change in the clerkship*. Students reflected that while the mistreatment program may be directed at them, it may also impact those who they work with, such as residents and faculty. Last, perhaps due to the supportive learning environment and a noticeable culture change within the clerkship, some students also described an *increased interest in surgery*, suggesting that there are positive shifts in the learning environment influencing students who would otherwise not consider a surgical career.

3. **Concrete Suggestions for Improvements**

Although all students were asked to comment about potential improvements for the mistreatment program, only a few students proposed improvements to the mistreatment program, resulting in three main themes on how to improve the program. Some suggested *increasing the student discussions*, either by increasing the amount of time given to group reflection or by bringing in former students to include in the discussion. A few other students suggested that the program could be
improved through a complementary program to also educate faculty and attendings for more immediate or real-time feedback regarding mistreatment topics. Although not discussed often, an important theme was identified focused on formalizing or streamlining the reporting process. A majority of students left this question blank; a large minority instead wrote generally positive comments instead, such as, “I think it is great as is.”
IV. DISCUSSION

Medical student mistreatment is not new. Abuse and mistreatment of medical trainees has been described for more than half a century.\textsuperscript{1, 24} The majority of mistreatment reports fall into the realm of public humiliation, classified by some authors as “misguided efforts to reinforce learning” or “a misperceived problem of student-faculty communication.”\textsuperscript{25} Residents or attendings may believe that medical students who experience mistreatment are simply overly sensitive.\textsuperscript{26} Whether attributed to poor communication, overly sensitive students, or simply the cultural norms within medicine, it is well established that perceptions of mistreatment carries with it significant consequences for the recipients.\textsuperscript{8-10}

In the published reports of mistreatment interventions, there are very few success stories. Wagner et al describe a surgery clerkship director’s efforts to solicit real time reports of mistreatment from an anonymous Internet link.\textsuperscript{18} He would then address these concerns, either with focused discussions with all students, or individually, and post his response on the same website, for transparency. Overall, reports of mistreatment did not significantly decrease, but the faith in reporting and in the clerkship director improved, as did the student interest in the surgical field. The continued occurrence of mistreatment, despite improvements in reporting and transparency, may result from a lack of consensus about the definition of mistreatment. It is likely that, whatever the root cause, this is not a problem that can be solved by policies alone. In surgery clerkships, the learning environment includes operating rooms, trauma bays, and quick decisions where delay can be fatal. These are essential features of the environment that alter the range of acceptable behaviors. Grabbing a student’s hand to correct a mistake may be inappropriate in the classroom, but appropriate in the operating room.

We present an initial evaluation of an innovative mistreatment program that is grounded in this surgery clerkship landscape. We acknowledge, at the outset, that the definition of mistreatment can be subjective and heavily context-based, especially in the surgical environment. We use video
scenarios to trigger discussions of specific experiences, both as students begin and end the clerkship. We used a mixed methods analysis in order to more richly explain the quantitative decrease in mistreatment reports after this program was included into the surgery core clerkship. In this initial study, our students had an overwhelmingly positive response to the program. The mistreatment reports from end of clerkship evaluations fell from pre-intervention levels in each successive year. It is likely that students reported problems in the clerkship learning environment to the Clerkship Director as they happened and fewer events went unreported in real time. It was the qualitative assessment in which the students identified multiple immediate benefits, including establishing learning environment expectations for the rotation, providing emotional support, sharing experiences with other students, and increasing awareness of resources. Students also see potential for a broader impact from this type of program in the surgical environment, to create long-term culture changes in surgery, and increased career interest in surgery.

When discussing the program's potential long-term impact, it is worth emphasizing that reports of abuse and mistreatment are so prevalent in the literature that they are considered an integral part of medical culture. Medical students initially approach the clinical learning environment from the perspectives of novices and semi-outsiders. During early clerkships, students exist in a process of "legitimate peripheral participation," unconsciously adopting both the knowledge and values of the culture around them. To create long-term durable change in the surgical education culture, there are two necessary and equally important targets: improving the professionalism of the residents or attendings who mistreat students, and ensuring that medical students approach such incidents prepared to effectively address them. By ensuring that students who encounter these behaviors do not assume they are normal, the cycle of mistreatment can be broken. A mistreatment program directed at medical students has the potential to create long-term cultural change from the ground up, by educating students explicitly about what has too often only been part of the hidden curriculum.
This is a single clerkship, single-institution study at one academic center, with the associated limitations. The overall quantitative reports of mistreatment decreased, but the reported numbers were small to begin with and throughout the study. An increased effort by the School of Medicine to address student mistreatment, in creating a mistreatment committee, appointing an ombudsperson, and implementing a reporting schema had begun in July of 2012. It is likely a combination of efforts focused on mistreatment at Stanford that has contributed to the decreasing reports of mistreatment. This study analyzes student reports of mistreatment, along with ratings and qualitative data regarding the perceptions and immediate impact of this mistreatment program. Student qualitative responses were collected only from new clerkship students from July to August 2014 during the intervention period; perceptions of these students may not be representative of all third-year medical students at the institution. To fully understand the impact of this type of program, multi-institutional and long-term studies are necessary. It is also worth noting that while the surveys were anonymous, students did develop rapport with the Clerkship Director and responses may be more positive due to that personal relationship. It is unclear how a similar video- and discussion-based mistreatment program would be perceived if implemented in a different institution and setting.
V. CONCLUSION

Mistreatment is an extremely personal experience and it can have detrimental effects on students’ emotional wellbeing and clinical learning. Medical student mistreatment is pervasive in the clinical clerkships and especially so in surgery and its subspecialties. A video-based rotation-specific mistreatment program focusing on creating a shared understanding about mistreatment is well received amongst surgery core clerkship students at our institution, and after initiation, the number of mistreatment reports decreased each year. This program may help to establish individual expectations and definitions, improve the clinical learning experience for the student, and promote cultural change. Further research is warranted to better understand the long-term impact of this program, and its feasibility at other institutions.
VI. REFERENCES

APPENDIX A
End of Clerkship Medical Student Mistreatment Questionnaire

Please complete the following table regarding mistreatment experienced or witnessed during this clerkship rotation.

If you experience or witness mistreatment that is concerning to you, please contact the Associate Dean for Medical Student Life Advising, Dr. Rebecca Smith-Coggins by email smithr@stanford.edu, phone (408) 725-1402, or paper 15461.

Please select if you witnessed, personally experienced mistreatment, or both. (Question 1 of 8, Confidential)

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(Question 2 of 8, Confidential)

Please indicate which person(s) engaged in mistreatment

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<th>Check here if you witnessed any other students being subjected to mistreatment</th>
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<td>Other Institution Employee</td>
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(Question 3 of 8, Confidential)

If you reported the mistreatment, please indicate whom you contacted (check all that apply).

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<tr>
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<td>Clerkship Director or Clerkship Site Director</td>
</tr>
<tr>
<td></td>
<td>Director of Clerkships (currently Dr. Lau)</td>
</tr>
<tr>
<td></td>
<td>Medical Education Dean (Assistant, Associate, or Senior Associate)</td>
</tr>
<tr>
<td></td>
<td>Counselor/Associate Houseman</td>
</tr>
<tr>
<td></td>
<td>Other medical school administrator</td>
</tr>
</tbody>
</table>
If other, please specify:  

If you reported the mistreatment, please indicate how satisfied you are with the outcome of having reported the mistreatment. 

Very Dissatisfied Dissatisfied Neutral Satisfied Very Satisfied

If there were any incident(s) of mistreatment that you did NOT report, why didn’t you? Check all that apply. 

Selection | Option
---|---
 | The incident did not seem important enough to report
 | I resolved the issue myself
 | I did not think anything would be done about it
 | Fear of reprisal
 | I did not know what to do
 | Other
 | I reported all instances of mistreatment

If other, please specify: 

Confidential Comments (optional) 
This area is for providing any comments you may have regarding the mistreatment you experienced or witnessed. Comments will be kept anonymous. Please include the specific site name, and if possible, the name of the person responsible for the mistreatment reported.

If you do not wish to comment here, but are willing to share your experience directly with Dr. Smith-Goppins so that the issues can be addressed, please contact her at smithgo@stanford.edu.

Review your answers in this evaluation. If you are satisfied with the evaluation, click the SUBMIT button below. Once submitted, evaluations are no longer available for you to make further changes.
**FIGURE 1**
Surgical Clerkship Mistreatment Program and Evaluation

<table>
<thead>
<tr>
<th>Week 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Written Exercise on Definitions of Mistreatment</td>
</tr>
<tr>
<td></td>
<td>• Learning Environment Videos&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>• Group Discussion led by Clerkship Director and Surgical Education Fellows</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weeks 2-7</th>
<th>Weekly:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Group Discussion led by Clerkship Director and Surgical Education Fellows</td>
</tr>
<tr>
<td></td>
<td>• Opportunity to Debrief one-on-one with Clerkship Director and Surgical Education Fellows</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 8</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Written Exercise on Definitions of Mistreatment</td>
</tr>
<tr>
<td></td>
<td>• Learning Environment Videos&lt;sup&gt;1&lt;/sup&gt; (optional)</td>
</tr>
<tr>
<td></td>
<td>• Group Discussion led by Clerkship Director and Surgical Education Fellows</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post Clerkship</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Evaluations: End-of-Clerkship Likert Scale Ratings and Free-Text Responses</td>
</tr>
<tr>
<td></td>
<td>• Mistreatment Reports</td>
</tr>
</tbody>
</table>

Citation:
TABLE 1
Reported Mistreatment Incidences by Period

Red = Year prior to intervention
Blue = First year of intervention
Green = Second year of intervention
TABLE 2
Mistreatment Incidence by Perpetrator Group

- Pre-Int Jan-Dec 2013
- Int-First Year Jan-Dec 2014
- Int-Second Year Jan-Dec 2015

faculty | resident | other
--------|----------|--------
8       | 4        | 1      
4       | 4        | 2      
1       | 1        | 1      

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TABLE 3
Mistreatment by Type

- Offense remarks/verbal
- Physical
- Public embarrassed/humiliation
- Perform personal services

Jan-Dec 2013
Jan-Dec 2014
Jan-Dec 2015
<table>
<thead>
<tr>
<th>Question 1:</th>
<th>In what ways, if any, did these discussions about the clerkship educational environment influence your experience during the clerkship?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 2:</td>
<td>What is the value of these sessions?</td>
</tr>
<tr>
<td>Question 3:</td>
<td>What would you predict as the larger result(s) or impact(s) of this program?</td>
</tr>
<tr>
<td>Question 4:</td>
<td>How could the program be improved to better prepare you and your fellow students for the surgery clerkship educational environment?</td>
</tr>
</tbody>
</table>

Preamble: *Write down your impressions of and reactions to the program. Consider the following questions to help you guide your responses.*
<table>
<thead>
<tr>
<th>Question Domains and Themes</th>
<th>Illustrative Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question Domain 1. Mistreatment Program Provided Intrinsic Value to Students</strong></td>
<td></td>
</tr>
<tr>
<td>Theme 1. Guided How Students Established Expectations About Mistreatment</td>
<td>“[The program helps with] setting expectations, knowing how to interpret behaviors.”  “[The program] exposes students to what various forms of mistreatment look like so they are prepared and know when to seek help.”  “Helped me know what to expect; made me realize many things I took personally were universal.”</td>
</tr>
<tr>
<td>Theme 2. Students Appreciated Opportunities for Sharing Experiences</td>
<td>“It was great to talk about [mistreatment] with other students to normalize what we were experiencing and feeling.”  “[The discussions] allowed me to recognize that my peers were sharing similar experiences.”  “[The discussions] allowed a forum to discuss ways of dealing with problems and that we’re not alone.”</td>
</tr>
<tr>
<td>Theme 3. Supportive Environment for Emotional Support</td>
<td>“[The program] helped me cope with the rough times.”</td>
</tr>
<tr>
<td>Theme 4. Provided Formal Resources</td>
<td>“[Through the program, it] helped me turn to the clerkship director for help when I felt that my chief resident was mistreating me.”  “[I was] assured there was someone to call who has your best interests in mind.”  “Great to know [clerkship director] and team are aware and supportive!”</td>
</tr>
<tr>
<td><strong>Question Domain 2. Mistreatment Program Broadened Students Views of the Surgical Environment</strong></td>
<td></td>
</tr>
<tr>
<td>Theme 1. Openness to Ask Questions</td>
<td>“[We have] more opportunities for learning since we aren’t apprehensive about asking questions.”</td>
</tr>
<tr>
<td>Theme 2. Noticeable Culture Change in the Clerkship</td>
<td>“Cultural change among surgical faculty, residents, interns, and students.”  “[The program is] training next generation of educators (when we’re residents/attendings).”</td>
</tr>
<tr>
<td>Theme 3. Increased Interest in Surgery</td>
<td>“[This showed me a] supportive environment fostering surgical interest.”</td>
</tr>
<tr>
<td><strong>Question Domain 3. Concrete Suggestions for Improvement</strong></td>
<td></td>
</tr>
<tr>
<td>Theme 1. Increasing Student Discussions</td>
<td>“More discussion in small groups for introverts.”  “Bring in former students to discuss.”</td>
</tr>
<tr>
<td>Theme 2. Need to Also Educate Faculty and Attendings</td>
<td>“[Need] more timely feedback to faculty so things that are negative about the learning environment can be changed.”</td>
</tr>
<tr>
<td>Theme 3. Formalize Reporting Processes</td>
<td>“A more formalized way to anonymously submit incidents of mistreatment.”</td>
</tr>
</tbody>
</table>
VITA

NAME: James Nathan Lau

EDUCATION: 
B.S., Bio-Engineering/Pre-Medical, University of California San Diego, La Jolla, California, 1990

M.D., Loyola University Stritch School of Medicine, Maywood, Illinois, 1995

M.H.P.E. (Master Health Profession Education), University of Illinois Chicago, Chicago, Illinois, 2016

PROFESSIONAL: 
Internship, General Surgery, Loyola University Chicago Stritch School of Medicine, Maywood, Illinois, 1995 – 1996

Residency, General Surgery, Indiana University School of Medicine, Indianapolis, Indiana, 1998 – 2002

Fellowship, Minimally Invasive-Bariatric Surgery, Stanford University School of Medicine Stanford, California, 2006 - 2007

TEACHING: 
Clinical Associate Professor of Surgery, Department of Surgery Stanford School of Medicine, October 2009 – Present

Assistant Dean for Clerkship Education, Stanford School of Medicine, August 2015 - Present

Associate Residency Program Director, Department of Surgery Stanford School of Medicine, April 2011 – Present

Director, ACS Education Institute/Goodman Simulation Center, Department of Surgery, Stanford School of Medicine, November 2011 – Present

Director, ACS Education Institute Accredited Surgical Education Fellowship, Department of Surgery, Stanford School of Medicine, November 2011 – Present

Director, Surgery Core Clerkship (Surg 300A), Stanford School of Medicine, October 2011 – Present

Residency Minimally Invasive Surgery (MIS) Residency Rotation Director, Department of Surgery, Stanford School of Medicine, June 2010 - Present

Residency Endoscopy Rotation Director, Department of Surgery, Stanford School of Medicine, July 2014 - Present

Fundamentals of Laparoscopic Surgery (FLS) Faculty Champion (Proctor), Department of Surgery, Stanford School of Medicine January 2010 – Present
Co-Course Director, Surgery 205 – Advanced Suturing, Stanford School of Medicine, 2013- Present

Clerkship Director, Surgery 338A-Advanced Surgery Clerkship (Sub-Internship), Stanford School of Medicine, 2013-Present

Clerkship Director, Surgery 398A- Clinical Electives in Surgery, Stanford School of Medicine, 2013-Present

Co-Course Director, Surgery 298-Procedure Based Specialty Capstone, Stanford School of Medicine, 2013-Present

Co-Program Director, Stanford Clinical Teaching Seminar Series, Stanford School of Medicine, Stanford CA, 2013 - Present

**MILITARY:**

Flight Surgeon, MacDill USAF Hospital, MacDill Air Force Base Tampa Bay, Florida, 1996 - 1998

Staff General Surgeon, Mike O’Callaghan Federal Hospital, Nellis Air Force Base, Las Vegas, Nevada, 2002 - 2004


**HONORS:**

Phillip J. Wolfson Outstanding Teacher Award, 2015 Association for Surgical Education, Awarded at Surgical Education Week, Seattle, WA on April 24, 2015

2014 Award for Excellence in the Promotion of the Learning Environment and Student Wellness, Stanford School of Medicine, Stanford, California

2014 Henry J. Kaiser Family Foundation Teaching Award for Clerkship Instruction, Stanford School of Medicine, Stanford, California

John Austin Collins, MD Memorial Teaching Award 2012, Department of Surgery, Stanford School of Medicine, Stanford, California

John Austin Collins, MD Memorial Teaching Award 2010, Department of Surgery, Stanford School of Medicine, Stanford, California

Poster of Distinction, 2007 SAGES Annual Meeting, Las Vegas, Nevada

Teaching Award 2006, Department of Surgery, University of Nevada School of Medicine, Las Vegas, Nevada

Special Recognition of Teaching 2005, Department of Surgery University of Nevada School of Medicine, Las Vegas, Nevada

Surgical Socrates Award 2001-2002 (Best Surgical Teaching Chief Resident-awarded by senior medical students), Department of Surgery, Indiana University Medical Center Indianapolis, Indiana

PROFESSIONAL MEMBERSHIP:

American College of Surgeons, Fellow

American College of Surgeons Education Institutes Consortium, Member, Curriculum Committee (2012-present)

American Society of Metabolic and Bariatric Surgery, Member Research Committee (2007-2012), Bariatric Surgery Training Committee (2014-present)

Association for Academic Surgery, Member

Association of Program Directors in Surgery, Member

Association for Surgical Education, Member Clerkship Committee (2012 – present)

Pacific Coast Surgical Association, Member

San Francisco Surgical Society, Member

Society of American Gastrointestinal and Endoscopic Surgeons, Member, Residency Education Committee (2012-2013)

Society of Asian American Surgeons, Member

Southwestern Surgical Society, Member

RESEARCH FUNDING:

Stanford University 2016, Stanford Teaching and Mentoring Academy, $10,000 Award, Why do residents leave? A multi-institutional study investigating the impact of culture on attrition from surgical residency, James Lau MD, Laura Mazer MD, Sylvia Bereknyei Merrell EdD

Stanford University 2016, Stanford Teaching and Mentoring Academy, $10,000 Award, The Impact of an Evidence-Based Emotional Intelligence Curriculum for Physicians on Physician EI and Well-being, Dana Lin MD, Cara Liebert MD, Micaela Esquivel MD, Sylvia Bereknyei Merrell EdD, James Lau MD, Claudia Mueller MD

SAGES 2015, SAGES Research Grant, $29,000 Award, A Google Glass Driven Validated Competency Metric Platform For Real Time Surgical Performance, Vivian de Ruijter, MD and James N. Lau, MD

Stanford University 2014, Vice Provost for Online Learning Grant, $25,000 Award, Faculty Development in Increasing the Quality and Reliability of the Clinical Assessment of Trainee Performance, James N. Lau, MD, Dana Lin MD, Laura Mazer, MS MD, David Gaba MD, Sandi Feaster, RN MS MBA
**Stanford University 2013**, Vice Provost for Online Learning Grant, $25,000 Award, The Clerkship Educational Environment
James N. Lau, MD, Cara Liebert, MD

**Stanford University 2013**, Vice Provost for Online Learning Grant, $25,000 Award, Surgery Clerkship Blended Learning James N. Lau, MD, Cara Liebert, MD

**Stanford School of Medicine 2012**, CME Grant, $15,000 Award
Surgery Decision Making Gaming Platform CME, James N. Lau, MD, Dana Lin, MD, Lisa Shieh, MD, and Jamie Tsui

**Stanford School of Medicine 2012**, Medical School Technology Grant, $8000 Award, Resident/Student Surgery Survival Guide Dana Lin MD, Aarth Kanna Man MD, James N. Lau, MD.

**Stanford School of Medicine 2011**, CME Grant (Round 2), $15,000 Award, Single Site Surgery CME, James N. Lau, MD

**PUBLICATIONS:**


MENTORSHIP:

Brittany Hasty, MD - Surgical Education Fellow, Stanford School of Medicine, Department of Surgery, 2016-2018

Zachary Ichter, DO – MIS/Bariatric Fellow, Stanford School of Medicine, Department of Surgery, 2015-2016

Edward Shipper III, MD - Surgical Education Fellow, Stanford School of Medicine, Department of Surgery, 2015-2017

Vivian DeRuijter – Surgical Education/Innovation Fellow, Stanford School of Medicine, Department of Surgery, 2014-2016

Eric Luedke, MD MS - MIS/Bariatric Fellow, Stanford School of Medicine, Department of Surgery, 2014-2015

Laura Mazer, MD – Surgical Education Fellow, Stanford School of Medicine, Department of Surgery, 2014-2016

Michael Russo, MD - MIS/Bariatric Fellow, Stanford School of Medicine, Department of Surgery, 2013-2014
Cara Liebert, MD - Surgical Education Fellow, Stanford School of Medicine, Department of Surgery, 2013-2014

Brian Sung, MD - MIS/Bariatric Fellow, Stanford School of Medicine, Department of Surgery, 2012-2013

Julia Park, MD - Surgical Education Fellow, Stanford School of Medicine, Department of Surgery, 2012-2013

Dana Yip Lin, MD - Surgical Education Fellow, Stanford School of Medicine, Department of Surgery, 2011-2013

Aarthy Kannappan, MD - Surgical Education Fellow, Stanford School of Medicine, Department of Surgery, 2011-2012

Keith Scharf, DO - MIS/Bariatric Fellow, Stanford School of Medicine, Department of Surgery, 2011-2012

Lou Salamone, MD - Surgical Education Fellow, Stanford School of Medicine, Department of Surgery, 2010-2011

Ali Hazrati, MD - MIS/Bariatric Fellow, Stanford School of Medicine, Department of Surgery, 2010-2011

Tim Plerhoples, MD - Surgical Education Fellow, Stanford School of Medicine, Department of Surgery, 2009-2011

Yulia Zak, MD - Surgical Education Fellow, Stanford School of Medicine, Department of Surgery, 2009-2011

Saber Ghiassi, MD - MIS/Bariatric Fellow, Stanford School of Medicine, Department of Surgery, 2009-2010

Scott Perryman, MD - MIS/Bariatric Fellow, Stanford School of Medicine, Department of Surgery, 2009-2010

Richard Parent, MD - Surgical Education Fellow, Stanford School of Medicine, Department of Surgery, 2007-2009