



# MEDICINE and the MUSE INAUGURAL SEED GRANT AWARD PROJECTS

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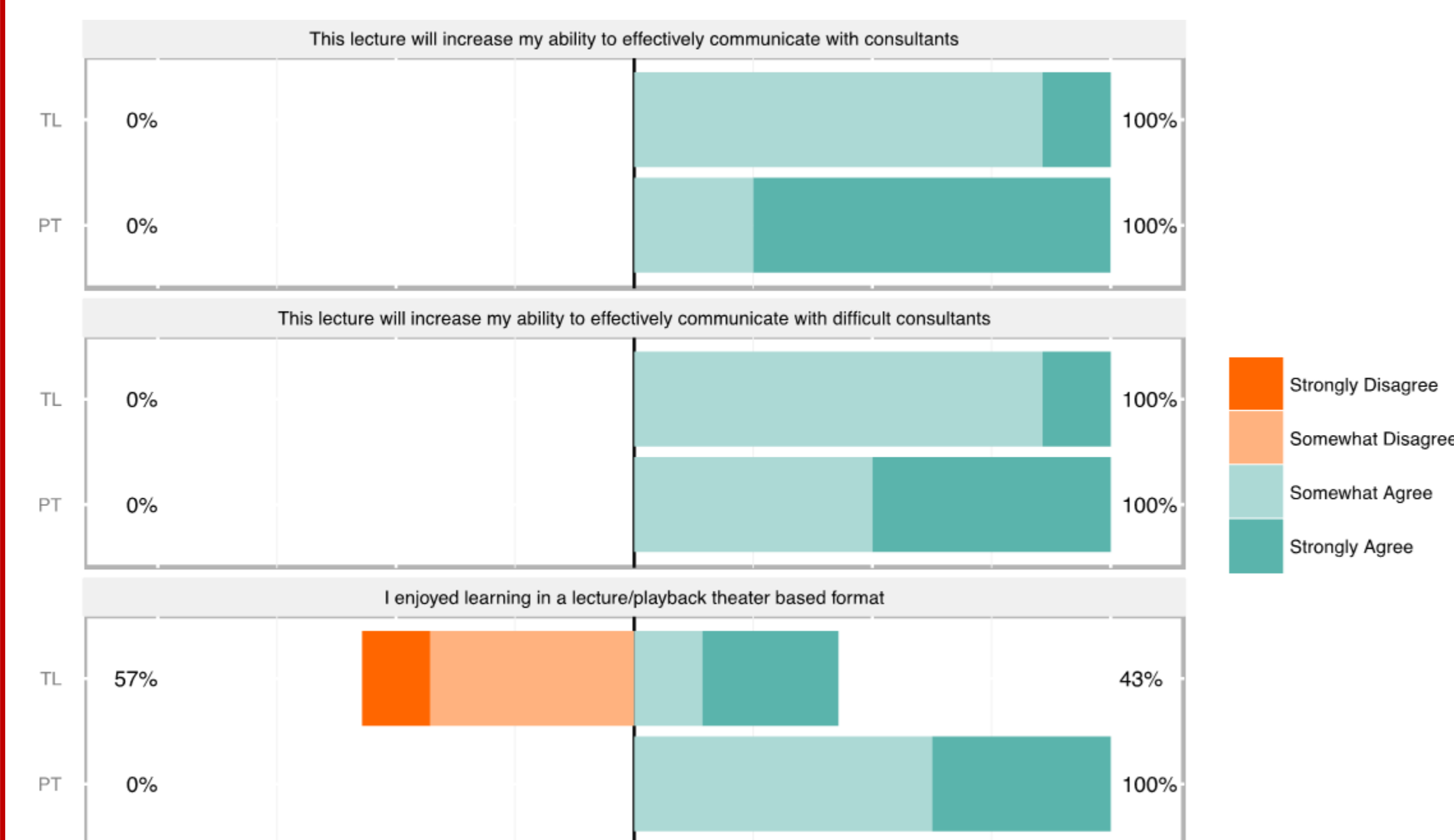
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### Curtis: Playback Theater for Emergency Medicine Milestone Education

Playback Theater is an original form of improvisational theater: members of a group recount meaningful stories from their lives, which are enacted on stage so that the group may derive benefit. This method has been used as a tool to understand communication, burnout, and medical training experiences.



This pilot study compared emergency resident education on communicating with consultants between a traditional lecture (TL) and playback theater (PT) interventions. In the post survey, residents in the PT group (compared to the TL group) felt their ability to communicate with consultants had increased ( $p=0.01$ ) and they enjoyed the education session more ( $p=0.07$ ). Further research is warranted to understand whether this perception of improved communication ability will translate to better communication outcomes.

### Griffin: Capturing Pain—Photographic Storytelling/youth in chronic pain

The Pediatric Rehabilitation Program (PRP) is an intensive, interdisciplinary, day-long outpatient pain management intervention which aims to improve quality of life and restore functioning for children living with chronic pain. Photovoice enables participants to utilize photography and descriptions in their own words. Pictorial Representation of Illness and Self Measure (PRISM) is a nonverbal tool to visually describe the impact of pain. These tools were implemented in an IRB approved study of pediatric patients with severe chronic pain.

Results of participants' photographic storytelling experience are positive; a number described the tool as the only way they were able to tell others what the pain was like. Further plans include studying the effects on caregivers.

The project has been featured in numerous outlets, including:  
Art Exhibit in Lucile Packard Children's Hospital, summer 2016

Stanford Medicine Magazine  
<http://stanmed.stanford.edu/2017winter/photography-helps-children-with-chronic-pain-communicate-and-cope.html>

Scopeblog  
<http://scopeblog.stanford.edu/2016/07/22/containing-the-pain-youth-use-photovoice-to-capture-their-experience/>  
<http://scopeblog.stanford.edu/2017/03/13/teens-use-photography-to-depict-journeys-through-chronic-pain/>

Anesthesiology Pipeline  
<http://med.stanford.edu/anesthesia/publications/gas-pipeline-summer-2016.html#picturing-pain>

Photographs by a participant who noted her life was "shattered" by pain. With treatment, the pieces came back together in a new way: "hold it up to the light it shines through and has this beautiful mosaic effect."



### Edwards: Narrative Medicine Group for Internal Medicine Residents

Narrative Medicine is the practice of medicine with the ability to truly hear patient stories, understand how illness fits into the larger context of patients' lives, and engage with compassion, empathy and professionalism. Narrative Medicine encourages reflection through creative writing and critically reading other's work.

The Narrative Medicine Group for Internal Medicine Residents was created and included dedicated time to write and workshop other's writing, and visiting guest session facilitators.

The Internal Medicine Residency Program decided to make the writing sessions mandatory during outpatient rotations; these sessions now occur the first Thursday of every month.

Evaluation included questionnaires to the entire residency program prior to initiation of the group, with follow-up questionnaires to session participants. The survey included two scales: The Jefferson Scale of Physician Empathy and Maslach Burnout Inventory Questionnaire.

Sessions included writing prompts on rounding, medical advocacy, first code, medical uncertainty and the language of medicine. Guest facilitators included Dena Rifkin, MD, UCSD, and Louise Aronson, MD, UCSF.

The project was featured in the department's news:  
<http://medicine.stanford.edu/news/current-news/standard-news/tapping-into-the-left-side-of-the-brain.html>

Results of the data collected were presented at the Regional ACP meeting, fall 2016.

**Introduction**

- Empathy is the ability to understand a patient's inner experiences and perspective and to communicate this understanding<sup>1</sup>
- It is associated with increased patient satisfaction and improved medical outcomes<sup>2</sup>
- Burnout is a syndrome of emotional exhaustion (EE), depersonalization (DP), and decreased personal accomplishment (PA) at work<sup>3</sup>
- Associated with depression, self-reported medical errors, and poor patient care practices among residents<sup>4</sup>
- More prevalent among physicians and residents than the general public<sup>5,6</sup>
- Training interventions to target empathy and burnout
- Past investigators have examined impact of mindfulness workshops, medical humanities courses, Balint groups

**Objectives**

- Assess whether a creative writing curriculum might decrease burnout and increase empathy at our program
- Measure baseline prevalence and examine relationships between empathy and burnout

**Hypothesis**

- More empathic residents would report lower Depersonalization but higher Emotional Exhaustion

**Methods**

- Cross-sectional, survey-based study of internal medicine residents
- Primary questionnaire administered to monthly convenience sample
- Two validated surveys:
  - Jefferson Scale of Physician Empathy (JSE)
  - Maslach Burnout Inventory (MBI)
- Two "yes-or-no" questions:
  - Do you consider yourself a creative person?
  - Do you have prior creative writing experience?
- Statistical Analysis
  - Pearson's correlation coefficient to assess Empathy/Burnout relationship
  - T-test of means to compare empathy/burnout scores across residents who do vs not have self-identified creativity/writing experience

**Results**

- Subject Characteristics**
  - 45 residents completed at least one survey
  - All levels of training (R1-3) represented (27-40%)
  - 53% of residents identified themselves as creative
  - 29% reported prior creative writing experience
- Relationship Between Empathy and Burnout (table 1)**
  - Empathy was associated with significantly lower DP, with a trend toward lower EE

Index	Correlation coefficient	P value
Emotional Exhaustion	-0.29	0.053
Depersonalization	-0.36	0.016
Personal accomplishment	0.21	0.17
- Relationships Between Empathy, Self-Identified Creativity, and Creative Writing Experience (table 2)**
  - Higher empathy observed among residents who identified themselves as creative or reported prior creative writing experience

Question	Mean Empathy (sd)	Mean Empathy (sd)	P
Creative Person?	122.5 (10.7)	124.5 (9.2)	0.013
Writing Experience?	125.5 (7.8)	115.8 (10.3)	0.004

**Conclusions & Discussion**

- Conclusions**
  - Among residents at our program, empathy was associated with lower measures of burnout
  - Self-identified creativity and prior writing experience were associated with greater empathy
- Limitations**
  - Small Sample Size
  - Survey/Social Acceptability Bias
  - Little data on potential confounders:
    - Demographic
    - Contextual
  - No information on causality
  - No "after" data on the impact of creative writing training
- Discussion**
  - Previous authors paint a mixed picture of the relationship between empathy and burnout. Some suggest that empathy may be a risk factor for burnout<sup>1,11</sup>
  - Others suggest that empathy may be protective<sup>1,12</sup>
  - Our findings demonstrate that empathy is not inherently tied to burnout, and that interventions to improve empathy may also help to decrease burnout
  - Our findings also suggest a role for creative writing workshops to increase empathy among internal medicine residents

**References**

### Quaglietti & Lai: Post production documentary film Visions of Warriors

The feature documentary, "Visions of Warriors," enters the minds of four veterans from the Vietnam War era to the Iraq War who are battling against mental illness—Mark Pinto, Homerina "Merina" Bond, Ari Sonnenberg, and Priscila "Peni" Bethel. They participate in the groundbreaking Veteran Photo Recovery Project at the VA Menlo Park and use innovative photography therapy to treat their moral injury, post-traumatic stress disorder, military sexual trauma, and other mental illnesses. The documentary also profiles the Veteran Photo Recovery Project team—founder and nurse practitioner Susan Quaglietti, art therapist Jeff Stadler, clinical social worker Ryan Gardner, and clinical psychologist Kristen McDonald.

Post-production of the film included editing, color grading, music composition, sound design, sound mixing, and final film completion.

The world premiere is at the Vail Film Festival (March-April 2017), and the bay area premiere is at the Oakland International Film Festival (April 2017).

Humanist Films, LLC  
[www.visionsofwarriors.com](http://www.visionsofwarriors.com)

