

5-2019

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## Recommended Citation

Yeager, Danielle; Schneider, Samantha L; Madigan, Lauren M; Balle, Mark R; and Ozog, David M, "The Role of Cadavers in Resident Education" (2019). *Teaching and Education*. 5.  
<https://scholarlycommons.henryford.com/merf2019edu/5>

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# The Role of Cadavers in Resident Education

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# Background

- ACGME requires proficiency in a variety of surgical & cosmetic procedures prior to graduation from dermatology residency
- In a 2009 survey, only 55% of dermatology residents were satisfied with their procedural training<sup>1</sup>
- Classical methods of teaching alone may be inadequate
- In 2016, only 34.5% of program directors reported using human cadavers to augment bedside teaching<sup>2</sup>
- Since 1986, our department of dermatology has been incorporating simulation with human cadavers

# Objective

- To determine the educational value of cadavers in dermatology resident education
- To determine if cadaveric simulation improves self assessed proficiency among residents and graduates

# Materials and Methods

- **Annual 1 hour lecture followed by intensive half-day simulation cadaver course**
  - Taught by 2 board certified Mohs surgeons
  - Facial prosection to identify anatomical structures
  - Perform flaps, grafts, nail procedures & soft tissue fillers
- **Surveyed recent graduates to assess satisfaction with procedural training & level of comfort**
- **Surveyed current residents pre- & post-session to assess comfort with procedures**
  - Likert scale: 1 being “uncomfortable” and 5 being “comfortable”

## PROSECTION



Senior residents performing prosection of the facial nerve & posterior triangle.

## NAIL INSTRUCTION



A senior Mohs surgeon discusses nail biopsy techniques to residents at all training levels.

# Results

**X** : Average from Pre-Course Survey

**X** : Average from Post-Course Survey

## PGY-2

**X** : Average from Pre-Course Survey

**X** : Average from Post-Course Survey

### Flaps



### Nails



### Fillers



## PGY-3

### Flaps



### Nails



### Fillers



## PGY-4

**X** : Average from Pre-Course Survey

**X** : Average from Post-Course Survey

### Flaps



### Nails



### Fillers



Likert scale: 1 being “uncomfortable” and 5 being “comfortable”

# Results

- **96% of residents surveyed determined this session to be of “excellent” educational value**
- **Self-assessed proficiency with flaps & grafts increased an average of 2 points for each residency class**
  - **Similar findings of increased comfort with nail procedures & fillers following the course**
- **100% of graduating residents felt satisfied with their procedural training**
- **100% of recent graduates felt “sufficiently prepared to perform the dermatologic surgeries & procedures required in their practice”**



# Conclusions

- **Cadaveric dissection has been integral in improving our residency's procedural and surgical competency**
- **Education by cadaveric simulation is not universally available to dermatology residents**
- **Simulation allows ample time for exploration of anatomy and exposure to sophisticated techniques in a low stress environment**

# References

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Thank you!

