

# CHARTING THE COURSE FOR ONLINE PA EDUCATION: THE NEXT HORIZON



M. Jane McDaniel, MS, MLS(ASCP)SC  
James A. Van Rhee, MS, PA-C, DFAAPA

# Disclosures

**No  
Conflicts of Interest**

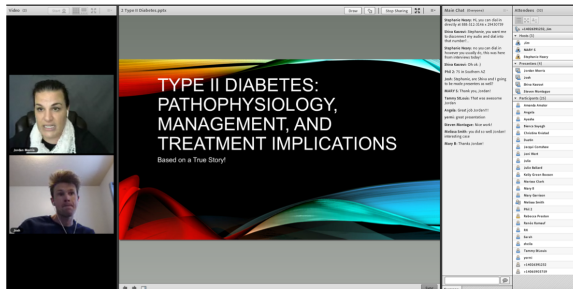
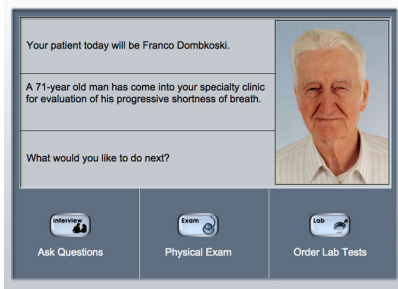
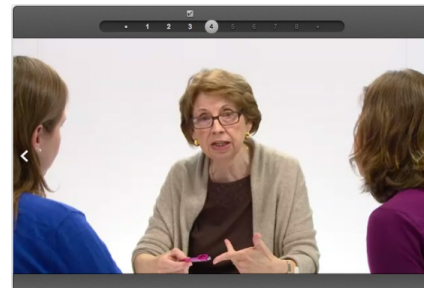
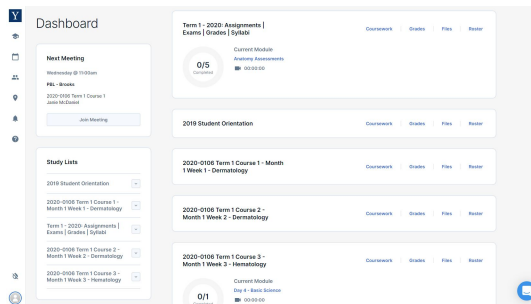


# Background

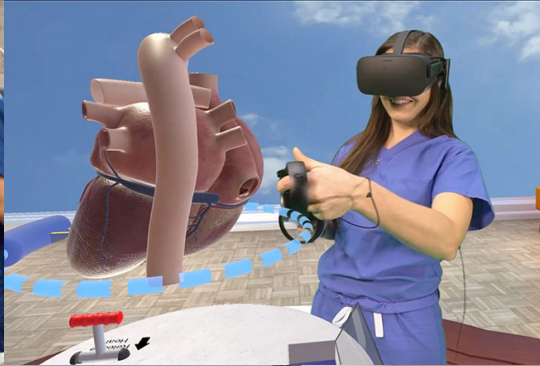
The move to online learning has become one of the most challenging events in Physician Assistant (PA) education. The Yale PA Online Program has incorporated these new advances in online technology making it possible to deliver an entire PA didactic curriculum online.

- Blended learning
- Problem-based learning using Socratic method
  - Feedback in real time
  - Asynchronous lectures
  - On-campus immersions

# Approaches to Delivering Content



# On-Campus Immersions



Yale SCHOOL OF MEDICINE  
*Physician Assistant Online Program*

# Clinical Experience in Early Didactic (CEED)

- Yale approved site and preceptor
- Clinical and professional skill development
- 4-6 hours per week
- Over 120 hours during didactic year




# Clinical Rotations

Seven focus areas of mandatory rotations, three elective rotations, master's capstone.

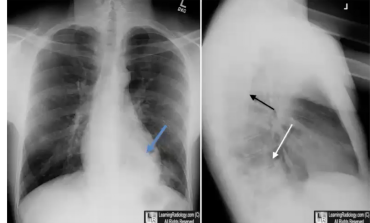
1. Primary Care (three rotations)
2. Internal Medicine (three rotations)
3. Pediatrics (two rotations)
4. Behavioral Medicine
5. Emergency Medicine
6. General Surgery
7. Women's Health

Rotations are completed in students' home communities.

**FLiCK**  
FOCUSED LECTURES IN CLINICAL KNOWLEDGE



### Spine Sign



Lateral view thoracic spine appears whiter just above the hemidiaphragm (white arrow), the opposite of normal

BASIC SCIENCE



# Evaluating Efficacy of Curriculum

## Students:

- PA Clinical Knowledge Rating and Assessment Tool (PACKRAT)
  - Administered at end of didactic and end of clinical curriculum
- Didactic Year Curriculum Survey
  - All students complete at end of didactic curriculum
- End of Rotation Surveys
  - All students complete at end of each rotation, evaluating both preceptors and clinical rotation experience

## Preceptors:

- Complete survey evaluating student readiness for clinical rotation

# PACKRAT Performance and Task Area Report

	<b>Class of 2020 First Year 2018 Yale PA Online Year One (n=40)</b>	<b>2018 National Average Year One (n=8667)</b>	<b>Class of 2021 First Year 2019 Yale PA Online Year One (n=58)</b>	<b>2019 National Average Year One (n=1859)</b>
<b>All Examinations Year One Score</b>	137.9 (SD = 19.4)	134.5 (SD = 19.6)	131.2 (SD = 17.0)	128.8 (SD = 17.2)
<b>Clinical Intervention (% correct)</b>	63.17	63.45	57.70	57.19
<b>Clinical Therapeutics (% correct)</b>	54.24	51.02	52.89	52.40
<b>Diagnosis (% correct)</b>	66.45	67.93	68.79	68.76
<b>Diagnostic Studies (% correct)</b>	56.02	56.42	52.05	51.70
<b>Health Maintenance (% correct)</b>	64.90	62.43	60.58	57.97
<b>History and Physical (% correct)</b>	65.18	62.10	59.48	58.22
<b>Scientific Concepts (% correct)</b>	59.98	54.27	54.87	51.13

Yale SCHOOL OF MEDICINE

*Physician Assistant Online Program*

# End-of-Didactic Curriculum Survey

	Strongly Agree		Agree		Neutral		Disagree	
	Class 2020	Class 2021	Class 2020	Class 2021	Class 2020	Class 2021	Class 2020	Class 2021
<b>The first-year curriculum adequately prepared you in the process of assessing patients and suggesting treatment plans.</b>	22%	8%	72%	92%	6%	-	-	-
<b>The curriculum provided you with a sufficient foundation of knowledge.</b>	67%	17%	33%	67%	-	8%	-	8%
<b>It was helpful having the course material presented by organ system.</b>	100%	100%	-	-	-	-	-	-
<b>The curriculum was presented in a way that encouraged integration of knowledge and clinical application.</b>	56%	25%	44%	50%	-	17%	-	8%
<b>The Clinical Experience in Early Didactic (CEED) enabled you to apply your clinical knowledge.</b>	78%	58%	16%	42%	6%	-	-	-



# Clinical Preceptor Evaluation of Preparedness for Rotations

	Number of Students	History Taking	Physical Exam Skills	Oral Presentation Skills	Fundamental Knowledge for Rotation	Overall
<b>Primary Care (3 rotations)</b>	40	4.68	4.53	4.53	4.57	4.58
<b>Internal Medicine (3 rotations)</b>	40	4.59	4.46	4.61	4.52	4.54
<b>Pediatrics (2 rotations)</b>	35	4.55	4.49	4.58	4.52	4.54
<b>Emergency Medicine (1 rotation)</b>	15	4.44	4.44	4.06	4.11	4.26
<b>Behavioral Medicine (1 rotation)</b>	29	4.83	4.56	4.75	4.55	4.69
<b>Surgery (1 rotation)</b>	33	4.48	4.55	4.44	4.26	4.43
<b>Women's Health (1 rotation)</b>	24	4.73	4.62	4.73	4.69	4.69

Grading Scale: 5 = Strongly Agree; 4 = Agree; 3 = Somewhat Agree/Somewhat Disagree; 2 = Disagree; 1 = Strongly Disagree

# Summary

The Yale PA Online Program has successfully implemented these technologies in a blended curriculum which includes:

- Synchronous face-to-face PBL sessions
- Asynchronous lectures
- Bidirectional learning tools to provide faculty feedback
- Online testing technology
- On-campus immersions
- Clinical rotations in students' home communities



# Contact Information

M. Jane McDaniel, MS, MLS(ASCP)SC  
Director of Admissions and Lecturer  
Yale School of Medicine Physician Assistant Online Program  
[jane.mcdaniel@yale.edu](mailto:jane.mcdaniel@yale.edu)  
Website: <https://paonline.yale.edu/>

James A. Van Rhee, MS, PA-C, DFAAPA  
Program Director and Associate Professor  
Yale School of Medicine Physician Assistant Online Program  
[james.vanrhee@yale.edu](mailto:james.vanrhee@yale.edu)  
Website: <https://paonline.yale.edu/>

# Yale SCHOOL OF MEDICINE

Yale SCHOOL OF MEDICINE

*Physician Assistant Online Program*