



## JUNE 2014

### CONGRATULATIONS

**Kirstyn Indgjer & Mairead Coleman!**

Some of NEASRNA's goals this year include:

- Gain nonprofit status with IRS
- Increase donations
- Increase participation (ALL students are invited to attend meetings!)
- Update website
- Fund mission trips

*Anything you want to add?*

Contact one of us!! The website will be updated shortly with contact information, or email Kirstyn Indgjer at [kindgjer@une.edu](mailto:kindgjer@une.edu) for the time being.



### NEASRNA ELECTION RESULTS FOR 2014-2015

**President: Lee Pohlman,**  
Columbia University

**Vice President: Kirstyn Indgjer,**  
St. Joseph's

**Treasurer: Jessica Szydowski,**  
Columbia University

**Secretary: Mairead Coleman,**  
UNE

## CRNA Cert Exam Review

### *Question #1*

State five risk factor for difficult mask ventilation, from greatest risk to least.

### *Question #2*

Which region of the respiratory tract serves as the principal "physiologic heat and moisture exchanger" (HME)?



## **President's Message: Welcome & Congratulations**

On behalf of the MNA Class of 2015, we would like to offer a warm welcome to the incoming class of 2016. We would also like to congratulate the following students on their election to the following NEASRNA positions! Well done!

*Mairead Coleman: Secretary - NEASRNA,*

*Elsa Rodriguez-Roth: Diversity Committee Chair - NEASRNA*

*Keoka Hunter: Mission Trip Committee Co-chair - NEASRNA*

Our choices, commitment to excellence and willingness to lead are what determine our individual and collective success as a profession. As you all embark on this new chapter in your lives, and those of us in the class of 2014 and 2015 continue on ours, remember to lead by example and keep your focus on the goal. Best of luck!

Sincerely,

Mark Alderson, MSN, RN, CNL, SRNA  
Class President – MNA Class of 2015

# Cardiac Output and TEE

Submitted by: Kirstyn Indgjer SRNA

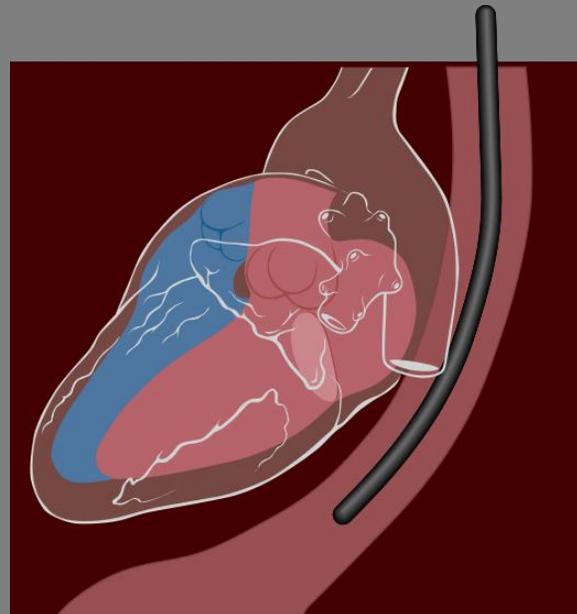
Much progress has been made in recent years regarding monitoring during cardiac surgery. One of these advances is the use of two- or three-dimensional echocardiography, also known as TEE.

After researchers studied the difference between the 2D version and 3D version, it was shown that 3D is superior when measuring cardiac output. The 2D version of TEE can underestimate the left ventricular outflow tract (LVOT), subsequently skewing the cardiac output.

*Cardiac output was consistently underestimated by 10% when 2D TEE was used compared to 3D. Good to know if you are in a cardiac case- that extra 10% can make a difference!*

Reference:

Montealegre-Gallegos, et al. (2014). Cardiac output calculation and three-dimension echocardiogram. *Cardiothoracic vascular anesthesia*. doi10.1053/j.jvca.2013.11.005



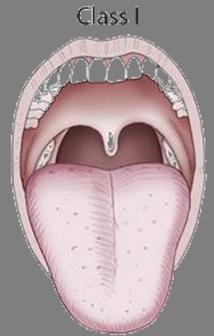
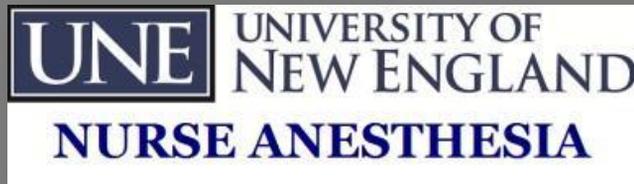
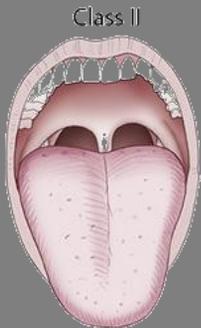
# HOW DID YOU DO?

## Answer #1

Five risk factors for difficult mask ventilation, from greatest to least risk are:

- (1) presence of a **beard**,
- (2) **body mass index**  $>26 \text{ kg/m}^2$ ,
- (3) **lack of teeth** (edentulous),
- (4) **age**  $> 55$  years, and (5) history of **snoring**.

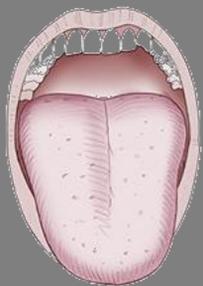
[Barash, *Clin. Anes.* 6e, 2009 pp756]



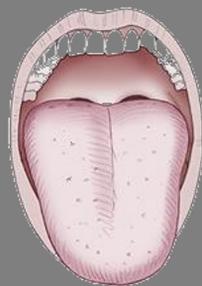
## Answer #2

The upper respiratory tract (especially the nose) functions as the principal heat and moisture exchanger (HME) to bring inspired gas to body temperature and 100% humidity in its passage to the alveoli.

[Miller and Pardo, *Basics.* 6e, 2011 pp209]



Class IV



Class III