## Development of an Ethics Curriculum for Anesthesiology Trainees

Anesthesiologists have broad representation in clinical practice, the perioperative space, intensive care settings, pain management, palliative care and emergency care, as well as in research, medical school education, journal review boards and administrative teams. Despite this breadth of involvement and the ethical dilemmas that often arise in these settings, there is a documented lack of training in biomedical ethics in anesthesiology training programs. A 2019 needs assessment survey found that just half of the training programs in the US have an established ethics training program, and only 58% of respondents believed that residents were competent to handle ethical dilemmas upon graduation (Raymond et al 2019).

To wit, there is a need to establish which ethical topics are deemed most important for inclusion in a biomedical ethics curriculum for anesthesiology trainees. The current study, led by Dr. Raymond Pla, who is an anesthesiologist, assistant professor and ethics committee member at the George Washington University Medical School, aims to gather data in order to guide robust ethics curriculum development for anesthesiology training programs nationwide. The attached RedCap survey should take no longer than 10 minutes to complete, and responses will remain entirely anonymous. Recipients of the survey have been identified as scholars in the field of biomedical ethics, whose expertise will be immensely valuable to achieving the aim of the study.

Please read the attached consent form before completing the	ne survey.
[Attachment: "Consent Form.pdf"]	
I have read and understand the consent form for this survey.	○ Yes ○ No
What is your age?	
What is your gender?	<ul> <li>Male</li> <li>Female</li> <li>Non-binary</li> <li>Prefer not to say</li> </ul>
What is your race/ethnicity? For purposes of this question, persons of Spanish/Hispanic/Latino origin may be of any race.	<ul> <li>American Indian or Alaska Native</li> <li>Asian</li> <li>Black or African American</li> <li>Native Hawaiian or Other Pacific Islander</li> <li>White</li> <li>Other</li> <li>Prefer not to say</li> <li>(Check all that apply)</li> </ul>
What is your geographic region?	<ul> <li>Midwest - IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI</li> <li>Northeast - CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT</li> <li>Southeast - AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV</li> <li>Southwest - AZ, NM, OK, TX</li> <li>West - AK, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY</li> </ul>



Which of the following graduate degrees to you hold?	<ul> <li>Doctoral (Ph.D.)</li> <li>Doctor of Dental Surgery (D.D.S.)</li> <li>Juris Doctor (J.D.)</li> <li>Medical Doctor (M.D., D.O.)</li> <li>Master of Public Health (MPH)</li> <li>Other master degree</li> <li>Other graduate degree</li> <li>None</li> <li>(Check all that apply)</li> </ul>
Are you primarily a clinician or non-clinician?	<ul> <li>○ Clinician</li> <li>○ Non-clinician</li> </ul>

## The following is a list of topics that may be considered for inclusion in an ethics curriculum for anesthesiology trainees. Please rank EACH topic based on how relevant it is to this curriculum (0=not at all important, 4=extremely important)

(0-not at an important, 4-extremely important)						
Broad schools of thought: Principlism, Consequentialism, Virtue Ethics, Deontology	0		2 〇	3	4	
Cultural influences on autonomy	$\bigcirc$	0	$\bigcirc$	0	0	
Capacity to consent, with special attention to pediatrics	0	0	$\bigcirc$	0	0	
Capacity to refuse elective vs. life-saving treatment	0	0	0	0	0	
Precedent autonomy and advanced directives	0	0	0	0	0	
Application of surrogate decision-making	0	0	0	0	0	
Coercion, persuasion, manipulation: Which (if any) is ethical?	0	0	0	0	0	
Approach to "DNR status" in the operating room	0	0	$\bigcirc$	0	0	
Navigating patient beliefs that may impair care (i.e. Jehovah's witness and blood transfusion)	0	0	0	0	0	
Impact of restraints (medical, behavioral, law-enforcement) on patient autonomy	0	0	0	0	0	
Sensitive testing and reporting in pediatric populations (e.g. pregnancy, drugs/ alcohol, HIV)	0	0	0	0	0	
Applications of "double effect" in anesthesiology	0	0	0	0	0	



The role of surgical interventions: therapeutic trial vs. euthanasia	0	0	0	0	0
"Futility" in end-of-life care: when to withdraw life support	0	0	0	0	0
Clinical criteria for "brain death" and consequences of this definition	0	0	0	0	0
Ethical timelines for organ donation	0	0	0	0	0
Ethical obligations in pain treatment	$\bigcirc$	0	0	0	0
Ethical considerations in opioid prescribing, with special attention to addicted patients	0	0	0	0	0
The role of palliative care and justice in medicine	$\bigcirc$	0	0	0	0
Historical ethical failures/crimes (i.e. WWII, Tuskegee & Henrietta Lacks) and outcomes (i.e. Nuremberg Code, Belmont Report)	0	0	0	0	0
Ethics of research involving symptoms that have known effective treatments (i.e. pain, anxiety)	0	0	0	0	0
Enrollment and consent of vulnerable populations (children, women in labor, incarcerated individuals) in research	0	0	0	0	0
Conflicts of interest in research	$\bigcirc$	$\bigcirc$	0	0	$\bigcirc$
Ethical and regulatory functions of institutional review boards (IRBs)	0	0	0	0	0
Ethical implications of distinguishing research from quality improvement	0	0	0	0	0
Publication ethics: authors, data integrity, plagiarism, peer reviewers, journal editors	0	0	0	0	0



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The impaired anesthesiologist (e.g. addiction, sleep deprivation): ethical vs legal considerations	0	0	0	0	0
Ethical justifications for requiring diversity in clinical trials	0	0	0	0	0
Ethical considerations of diversity and inclusion initiatives	0	0	0	0	0
The disruptive/abusive physician: ethical vs legal considerations	0	0	0	0	0
Sexual harassment: ethical vs legal considerations	0	0	0	0	0
Discrimination: ethical vs legal considerations	0	0	0	0	0
Disclosure of medical errors: ethical vs legal considerations	0	0	0	0	0
Ethical considerations of expert testimony given by a physician	0	0	0	0	0
Ethical considerations of physician response to natural disasters	0	0	0	0	0
Justice vs consequentialism in a mass casualty or pandemic	0	0	0	0	0
Ethics of physician participation in state-sponsored execution	0	0	0	0	0
Ethical considerations of research involving animal subjects	0	0	0	0	0
Are there any topics not listed above that you believe should be included in a biomedical ethics training curriculum for anesthesiology trainees? (Optional)					
Other comments					

(Optional)

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