

How COVID-19 Has Improved Anesthesiology

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Disclosures

- No relevant financial disclosures

Objectives

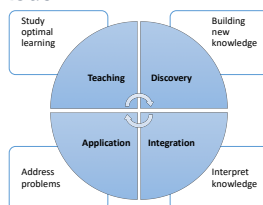
- Recall academic opportunities stemming from COVID-19
- Analyze career impacts which have occurred as a consequence of the COVID-19 pandemic
- Discuss clinical and leadership opportunities for anesthesiologists resulting from the pandemic



COVID-19 Effects

- Scholarship
- Clinical Practice
- Administrative Leadership

Boyer's Model



Boyer EL. Scholarship Reconsidered: Priorities of the Profession. Lawrenceville, NJ: Princeton University Press; 1996.



Medical Student Anesthesia Research Fellowship Program

- Highly competitive, match results in March
- 8 wk online prog w/: 3 – 1 hr components
 - 1) panel by faculty
 - 2) student-led journal club
 - 3) small group mentoring and networking sessions



<https://www.asahq.org/faer/program/medicalstudentfellowship/online>

Harriet W. Hoist. Adapting the Medical Student Anesthesia Research Fellowship Program to a Virtual Environment. ASA Monitor 2020; 34:41-42.



Immediate Scholarship Effects

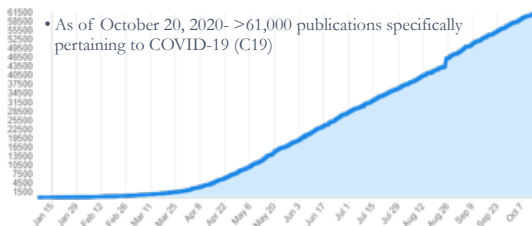
- Change in “currency”
- Inverse effect of health and academic progress
- Barriers to dissemination (new vs old)
 - \$\$, time, family, patient care
- Return to normalcy?
- Distance learning
- Conference democratization



Lensing PL, Anderson LB, Mark BM, Maggio LA, Dunning SJ. Academics in Absentia: An Opportunity to Rethink Conferences in the Age of Coronavirus Cancellations. Acad Med. 2020 Aug 25.

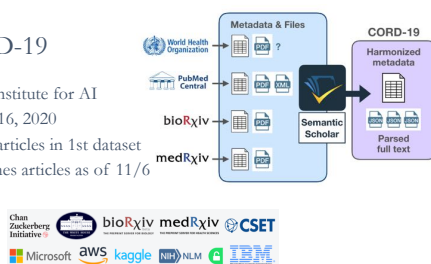


Research



CORD-19

- Allen Institute for AI
- March 16, 2020
- 8,000 articles in 1st dataset
- 175,500 articles as of 11/6



Lu Wang L, et al. CORD-19: The Covid-19 Open Research Dataset. ArXiv [Preprint]. 2020 Apr 22;arXiv:2004.13976v2.



Research ↔ Clinical Practice

- Clinical infrastructure
 - i.e.- ORs
- PPE
 - i.e.- Face shields
- Machines
 - i.e.- Printing, sharing
- Clinical paradigms
 - i.e.- Practice changes

Mittal et al. Logistical Considerations and Clinical Outcomes Associated with Converting Operating Rooms into an Intensive Care Unit during the Covid-19 Pandemic in a New York City Hospital. Anesth Analg. 2020 Oct 26.

Armijo, et al. 3D printing of face shields to meet the immediate need for PPE in an anesthesiology department during the COVID-19 pandemic. Am J Infect Control. 2020 Aug 6;S0196-6553(20)30762-6.

Cherry et al. Shared Ventilation: Toward Safer Ventilator Splitting in Resource Emergencies. Anesthesiology. 2020 Sep;133(3):681-685.

Burnett, et al. Managing COVID-19 from the epidemic: adaptations and suggestions based on experience. J Anesth. 2020 Oct 13-6.

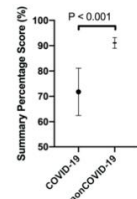


Lu Wang L, et al. CORD-19: The Covid-19 Open Research Dataset. ArXiv [Preprint]. 2020 Apr 22;arXiv:2004.13976v2.



Quality of Publications

- Project Quality
- Retractions
 - Lancet, NEJM, others
 - Author statements vs Journals
- Ramifications
 - Policy
 - Project funding and processes



Zdravkovic, et al. Scientific quality of COVID-19 and SARS-CoV-2 publications in the highest impact medical journals during the early phase of the pandemic: A case control study. *PLoS One*. 2020 Nov 5;15(11):e0241826.

Leeford, et al. High-profile coronavirus retractions raise concerns about data oversight. *Nature*. 2020 Jun;582(7811):160.

Pillar, et al. Authors, elite journals under fire after major retractions. *Science*. 2020 Jun 12;368(6496):1167-1168.



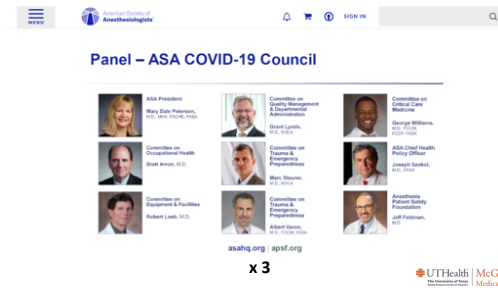
Public/Admin Perception



Burnett GW, Katz D, Park CH, Hyman JB, Dickstein E, Levin MA, Sam A, Salter B, Owen RM, Lalowitz AB, Hamberger L. Managing COVID-19 from the upstart: adaptations and suggestions based on experience. *J Anesth*. 2020 Oct 1-4.



My personal experience...



COVID Activated Emergency Scaling of Anesthesiology Responsibilities (CAESAR) ICU

Dated: 3-26-2020
New updates: 9-15-2020

Content developed and sourced in collaboration with ASA, SOCCA, SCCM and APSF. Read a letter from the CAESAR project contributors (PDF).

In response to the rapidly evolving COVID-19 pandemic, ASA, in collaboration with the Society of Critical Care Anesthesiologists (SOCCA), the Society of Critical Care Medicine (SCCM), and the Anesthesia Patient Safety Foundation (APSF), present this library of engaging resources and information pertaining to handling the COVID patient. This educational material includes informational statements from leaders in critical care medicine, presented to you in a written format, and as brief audio recordings.

Click here to self-enroll into the course on the ASA Education Center. In order to self-enroll, you must have an account with ASA. If you don't have an account with ASA, you may create an account here. Newly-created ASA member accounts take approximately 24 hours for the self-enrollment feature to be activated.



Critical Care and Resuscitation

NARRATIVE REVIEW ARTICLE

COVID-Activated Emergency Scaling of Anesthesiology Responsibilities Intensive Care Unit

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In response to the rapidly evolving coronavirus disease 2019 (COVID-19) pandemic and the potential need for physicians to provide critical care services, the American Society of Anesthesiologists (ASA) has collaborated with the Society of Critical Care Anesthesiologists (SOCCA), the Society of Critical Care Medicine (SCCM), and the Anesthesia Patient Safety Foundation (APSF) to develop the COVID-Activated Emergency Scaling of Anesthesiology Responsibilities (CAESAR) Intensive Care Unit (ICU) workgroup. CAESAR-ICU is designed and written for the practicing general anesthesiologist and should serve as a primer to enable an anesthesiologist to provide limited bedside critical care services. (*Anesth Analg* 2020;131:365-77)



