







10 February 2023

Dear Colleagues,

It is our pleasure to nominate Dr. Alison E. Turnbull, DVM, MPH, PhD for the Early Career Achievement Award of the Critical Care Assembly. Alison has carved out a distinctive role as an incisive thought leader and meticulous empirical scientist who had made fundamental improvements to the way many of us think about providing "goal-concordant" ICU care. She has both made her own crucial individual contributions, and has produced resources to make our collective research and clinical care enterprise better.

First, the basic numbers: She received her PhD in Epidemiology from Hopkins in 2013, putting her within 10 years of completion of training. She is a longstanding member of the Critical Care Assembly. She is a regular and highly sought-after speaker at ATS, and has twice contributed to ATS Critical Care Journal Club as a presenter or panelist. She served on the Official ATS/AAHPM/HPNA/SWHPN Policy Statement on "Palliative Care Early in the Care Continuum among Patients with Serious Respiratory Illness". She has written at least 48 original peer-reviewed papers, 13 of which have included her own mentees. She has written at least 9 important reviews. On the basis of these, she was promoted early to Associate Professor at Johns Hopkins in 2021, and despite that she remains within the eligibility window for this award.

While those numbers are impressive for someone eligible for the Early Career Achievement Award, it is the novelty, depth and significance of her scholarly achievement that makes her an outstanding nominee for this award. Dr, Turnbull asks hard—really hard—questions, and does not flinch from finding the honest answers, in an effort to ensure that clinical care provided to critically ill patients, and their families, are truly concordant with their goals—something that is exceptionally difficult to empirically investigate in order to inform and improve clinical care.

After initially completing DMV training as a veterinarian, part of Dr. Turnbull's pathway to investigating the epidemiology and ethics of patient/family communication and end-of-life care in the ICU was rooted in her own experience caring for her critically ill father. Suffice it to say, she personally experienced numerous opportunities for improvement in clinical care. As a family member, she knew there had to be a better way.

As a scientist, she wanted to find that better way. She began sophisticated longitudinal analyses demonstrating that both a patient's age and clinical trajectory are independent predictors of new Do Not Intubate (DNRI) and Do Not Resuscitate (DNR) orders, but that distinctly different patterns drive these decisions in the medical and surgical ICU setting. She expanded her focus to encompass the range of value-laden treatment decisions made by physicians and proxies (usually family) of ICU patients who lack decision-making capacity. This work included conducting one-on-one qualitative interviews with intensivists to understand perceived barriers and facilitators to disclosing expected long-term outcomes of critical illness with proxies, and studying the association between a physicians' religiosity and comfort talking to proxies.

To help advance this emerging field, Dr. Turnbull developed a conceptual framework for empirically evaluating goal-concordance—which has been particularly influential—and proposed a methodology for grading interventions as goal-concordant or discordant for a specific patient on a specific day. She evaluated the interrater agreement of intensivists using this measure to evaluate actual clinical cases in 2018, and presented it at American Thoracic Society in 2019. Her preeminence on this topic, generated an invitation to review of interventions to prevent under and over-treatment of ICU patients for *The Lancet Respiratory Medicine* and subsequently was invited and joined their international advisory board.

She has begun developing behavioral science-informed interventions to make it easier to articulate prognoses and meaningfully engage patients and families in true discussion—and testing these via novel randomized trials. Her research has demonstrated that such behavioral interventions can influence behavior—her simple, no-cost change to the electronic medical record could double the number of intensivists who disclosed a

patient's prognosis based on results from a randomized trial of a simulated family meeting involving paid actors with extensive training and scripting, working in a high fidelity simulation center.

Moreover, Dr. Turnbull recognized that as ICU clinical trials were turning towards so-called "long-term outcomes", the literature was a mess. More and more trials seemed to use more and more idiosyncratic, sometimes bespoke, outcome measures. Based on the recent trajectory, there was little hope for cumulative, reproducible, or even interpretable science. In 2016, Dr. Turnbull was the lead author on a landmark scoping review of 425 peer-reviewed publication on ICU survivorship; it is one of her 4 papers already cited more than 250 times. She was an integral part of achieving international consensus, among representatives from 17 countries, on a Core Outcome Set and Core Outcomes Measurement Set for studies of ICU survivorship. She was the lead and final author, respectively, on the publications reporting these achievements, which have played a foundational role in, for example, the NHLBI PETAL network's approach to long-term, patient-centered outcome measurement as well as the NHLBI national GRAIL and NEXIS randomized trials, the DoD-funded APICS study and approximately 40 other published studies or protocols.

We would be remiss without noting that Dr. Turnbull has found consistent opportunities to contribute clinically, including: (1) longstanding and major contributor to the busy Johns Hopkins Hospital Clinical Ethics Committee starting 10 years ago, (2) member of working groups tasked with preparing the hospital to implement Maryland Orders for Life-Sustaining Treatment (i.e. the Maryland POLST) forms, and (3) contributor to standardizing how ventilator support is withdrawn across adult ICUs at Johns Hopkins Hospital as part of compassionate extubation. She is a model of scholarship that is both informed by, and highly impacts, direct clinical care.

And, we are thrilled to add, just this morning Dr. Turnbull received notification that her hugely innovative R01 proposal, "Health Expectations after acute respiratory failure in survivor-care partner dyads," that brings together so much of this work in an innovative intervention, received a score of a 5th percentile, comfortably inside the funding range.

In sum, we believe Alison Turnbull represents an important model of early career achievement in critical care, pushing us to think harder about foundational issues, teaching us to measure better for those hard issues so we can bring data to bear, and then working cheek-by-jowl on the frontlines to apply that scholarship in some of the most clinically and ethically challenging situations.

Please do not hesitate to reach out if you have any questions.

Sincerely,

Theodore "Jack" Iwashyna, MD, PhD

Johns Hopkins

Dale M. Needham, MD, PhD Johns Hopkins

Johns Hopkins

Margaret "Molly" Hayes, MD, ATSF Beth Israel Deaconess Medical Center Gabriel T. Bosslet, MD, MA Indiana University School of Medicine