

# Paul Myles, M.B.B.S., M.P.H., D.Sc., Recipient of the 2017 Excellence in Research Award

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THE American Society of Anesthesiologists (ASA) Excellence in Research Award is the most prestigious research award in our specialty. First awarded in 1986, recipients of the Excellence in Research Award include names that can be found in every textbook of anesthesiology, including John Severinghaus (1986), Raymond Fink (1987), Francis Foldes (1988), and Edmond (Ted) I. Eger II (1989). In accordance with the philosophy that science knows no borders, the ASA wisely stipulated that the Excellence in Research Award may be awarded to any researcher whose research had a major impact on the specialty of anesthesiology. The nominee need not be a physician, an anesthesiologist, a member of ASA, or practice in the United States. The ASA Excellence in Research Award is thus truly international and based solely on the merits of academic accomplishment and scientific impact.

This year, the ASA selected an investigator who is widely regarded as one of the leading clinical trialists in our specialty: Paul Myles. Dr. Myles is the chair of the Department of Anesthesia and Perioperative Medicine at the Alfred Hospital and Monash University. In looking back over his remarkable career, we would like to highlight the substantial contributions that Paul Myles has made to our specialty.

Since his first publication in 1991, Dr. Myles has published more than 275 full articles, including many in top multispecialty journals, such as the *New England Journal of Medicine*, *Journal of the American Medical Association*, and *The Lancet*. His works have been cited nearly 15,000 times, generating an impressive h-index of 59. Since 1996, Dr. Myles has obtained more than 25 research grants from the Australian National Health and Medical Research Council (National Institutes of Health equivalent), totaling more than \$35 million. This amount ranks among the largest total for any living or deceased investigator in our specialty.

Dr. Myles was one of the original major trialists in anesthesiology and perioperative medicine. His first large trial, published in *The Lancet* in 2002, was the Multicentre Australian Study of Epidural Anaesthesia in High Risk Surgery (MASTER) trial that compared general and epidural anesthesia.<sup>1</sup> At the time, it was the largest randomized trial in



**Fig. 1.** Paul Myles, M.B.B.S., M.P.H., D.Sc., recipient of the American Society of Anesthesiologists 2017 Excellence in Research Award.

anesthesia. Dr. Myles realized early on that robust trials of hard outcomes require thousands of patients, that is, far larger studies than were then typical in anesthesia. Studies that large clearly exceed the capacity of any single anesthesia department. He thus created a platform that would allow him and his colleagues to conduct major clinical trials: the Australian and New Zealand College of Anaesthetists Clinical Trials Network (ANZCA CTN). The ANZCA CTN was the first large trial network in anesthesia and remains one of the world's three large anesthesia trial networks.

The ANZCA CTN has coordinated large international trials with investigators in Canada, United States, Europe, Asia, and South Africa. These studies have enrolled more

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than 40,000 surgical patients into practice-changing trials. The ANZCA CTN has been responsible for a remarkable series of major trials including studies on the safety of nitrous oxide (Evaluation of Nitrous Oxide in the Gas Mixture for Anesthesia [ENIGMA] and ENIGMA 2),<sup>2,3</sup> the safety and efficacy of tranexamic acid in cardiac surgery (Aspirin and Tranexamic Acid for Coronary Artery Surgery [ATACAS]),<sup>4</sup> stopping *versus* continuing aspirin before coronary artery surgery (ATACAS),<sup>5</sup> epidural anesthesia and analgesia and outcomes after major surgery (MASTER),<sup>1</sup> and bispectral index monitoring to prevent awareness (B-Aware).<sup>6</sup> It is very much to the credit of Dr. Myles that he has mobilized a large group of investigators who are committed to large pragmatic studies addressing major questions in perioperative medicine. He consistently aims to provide definitive answers to clinical questions of major importance to our specialty.

In 2013, Paul Myles received the Australian National Health and Medical Research Council Excellence Award for the top-ranked grant application in the country. He was a founding board member and director of the Australian Clinical Trials Alliance in 2013, and an inaugural fellow of the Australian Academy of Health and Medical Sciences (2014). Paul Myles is a member of three international guideline committees and has contributed to many systematic reviews that inform clinical practice. In 2011, he was awarded the Orton Medal by ANZCA for his outstanding achievements in anesthesia. In 2008, he was made an honorary fellow of the Royal College of Anaesthetists for his achievements in clinical research, and in 2017 he received Monash University's highest academic award, a doctorate in science. He was awarded an honorary doctorate from Örebro University in December 2016. He serves on the editorial board of *ANESTHESIOLOGY*, the *British Journal of Anesthesia*, and *Anesthesia and Intensive Care*, and is an editorial consultant to *The Lancet*.

Dr. Myles has mentored numerous research mentees and has established the world's first university-based master's degree in perioperative medicine. To date the course has enrolled more than 1,000 physicians in a short course, and 250 physicians have enrolled in the master's program. He is not only actively leading educational programs but also strongly engaged in collaborating with institutions all over the world, including in the United States, Canada, England, Italy, The Netherlands, and Sweden. He has organized many conferences, symposia, and meetings in which trialists from all over the world discuss recent results and future collaborations, such as his justifiably celebrated Collaborative Clinical Trials Conference at the Monash Center in Prato, Italy.

A lesser known but equally important achievement is his pursuit of meaningful patient-centered outcomes, including validated quality of postoperative recovery scales and

measurable disability. In this regard, Paul Myles is leading a global initiative to standardize clinical trial endpoints. Primarily through his efforts, the Standardize Clinical Trial Endpoints project has literally brought together the world's leading perioperative clinical investigators and trialists, across all subspecialties of perioperative medicine, a remarkable accomplishment.

The impressive list of Paul Myles's accolades and accomplishments makes it readily apparent that he has to be considered among the very best physician-researchers our specialty has ever seen. He has had an extraordinary career as investigator, and his robust findings will stand the test of time. We are thus profoundly pleased that the 2017 ASA Excellence in Research Award will go to our friend, colleague, mentor, and inspiration, Paul Myles.

### Competing Interests

The authors declare no competing interests.

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### References

1. Rigg JR, Jamrozik K, Myles PS, Silbert BS, Peyton PJ, Parsons RW, Collins KS; MASTER Anaesthesia Trial Study Group: Epidural anaesthesia and analgesia and outcome of major surgery: A randomised trial. *Lancet* 2002; 359:1276–82
2. Myles PS, Leslie K, Chan MT, Forbes A, Paech MJ, Peyton P, Silbert BS, Pascoe E; ENIGMA Trial Group: Avoidance of nitrous oxide for patients undergoing major surgery: a randomized controlled trial. *ANESTHESIOLOGY* 2007; 107:221–31
3. Myles PS, Leslie K, Chan MT, Forbes A, Peyton PJ, Paech MJ, Beattie WS, Sessler DI, Devereaux PJ, Silbert B, Schricker T, Wallace S; ANZCA Trials Group for the ENIGMA-II investigators: The safety of addition of nitrous oxide to general anaesthesia in at-risk patients having major non-cardiac surgery (ENIGMA-II): A randomised, single-blind trial. *Lancet* 2014; 384:1446–54
4. Myles PS, Smith JA, Forbes A, Silbert B, Jayarajah M, Painter T, Cooper DJ, Marasco S, McNeil J, Bussi eres JS, McGuinness S, Byrne K, Chan MT, Landoni G, Wallace S; ATACAS Investigators of the ANZCA Clinical Trials Network: Tranexamic acid in patients undergoing coronary-artery surgery. *N Engl J Med* 2017; 376:136–48
5. Myles PS, Smith JA, Forbes A, Silbert B, Jayarajah M, Painter T, Cooper DJ, Marasco S, McNeil J, Bussi eres JS, Wallace S; ATACAS Investigators of the ANZCA Clinical Trials Network: Stopping vs. continuing aspirin before coronary artery surgery. *N Engl J Med* 2016; 374:728–37
6. Myles PS, Leslie K, McNeil J, Forbes A, Chan MT: Bispectral index monitoring to prevent awareness during anaesthesia: The B-Aware randomised controlled trial. *Lancet* 2004; 363:1757–63