Fri. Mar 1, 2019

第2会場

海外招請講演

[IL(E)1] 海外招請講演1

座長:布宮 伸(自治医科大学医学部麻酔科学・集中治療医学講座集中治療医学部門)

9:00 AM - 9:50 AM　第2会場 (国立京都国際会館2F Room A)

[IL(E)1] New sedation and delirium recommendations from the 2018 Society of Critical Care Medicine PADIS Guidelines

Dale M. Needham （Johns Hopkins University, USA）

海外招請講演

[IL(E)2] 海外招請講演2

座長:藤野 裕士(大阪大学医学部附属病院集中治療部)

3:05 PM - 3:55 PM　第2会場 (国立京都国際会館2F Room A)

[IL(E)2] What went wrong with ART, EPIVENT2 and PReVENT: Are the recent trials on lung protection contradicting lung physiology?

Marcelo Britto Passos Amato （University of São Paulo Heart Institute（INCOR）, Brazil）

海外招請講演

[IL(E)3] 海外招請講演3

座長:桑平 一郎(東海大学医学部付属東京病院呼吸器内科)

4:00 PM - 4:50 PM　第2会場 (国立京都国際会館2F Room A)

[IL(E)3] Electrical impedance tomography: The past, the present and the future

Inéz Frerichs （University Medical Centre Schleswig-Holstein, Germany）

第5会場

海外招請講演

[IL(E)4] 海外招請講演4

座長:森松 博史(岡山大学病院麻酔科蘇生科)

9:00 AM - 10:00 AM　第5会場 (国立京都国際会館1F Room D)

[IL(E)4-1] Update from TSCCM: Current status of rapid response system in Thailand

Thammasak Thawitsri （Chulalongkorn Univeraity, Thailand）

[IL(E)4-2] Update from TSCCM: Vasopressors in sepsis

Chairat Permpikul （Siriraj Hospital, Thailand）

海外招請講演

[IL(E)5] 海外招請講演5

座長:丸藤 哲(医療法人 徳洲会 札幌東徳洲会病院救急センター)

10:05 AM - 10:55 AM　第5会場 (国立京都国際会館1F Room D)

[IL(E)5] Tranexamic acid in life threatening bleeding

Ian Roberts （London School of Hygiene &Tropical Medicine, UK）

海外招請講演

[IL(E)6] 海外招請講演6

座長:中川 聡(国立研究開発法人国立成育医療研究センター集中治療科)

11:00 AM - 11:50 AM　第5会場 (国立京都国際会館1F Room D)

[IL(E)6] Moral distress: I know what to do but I can’ t !!!

Daniel Garros （University of Alberta Stollery Children’ s Hospital, Canada）

海外招請講演

[IL(E)7] 海外招請講演7

座長:坂本 哲也(帝京大学医学部救急医学講座)

2:00 PM - 2:50 PM　第5会場 (国立京都国際会館1F Room D)

[IL(E)7] The 50th anniversary of ARDS: What has been changed?

Massimo Antonelli （Catholic University of the Sacred Heart, Italy）

海外招請講演

[IL(E)8] 海外招請講演8

座長:江木 盛時(神戸大学医学部附属病院麻酔科)

2:55 PM - 3:45 PM　第5会場 (国立京都国際会館1F Room D)

[IL(E)8] Acute glycemic control in patients with diabetes

Adam Deane （Royal Melbourne Hospital, University of Melbourne, Australia）

海外招請講演

[IL(E)9] 海外招請講演9

座長:布宮 伸(自治医科大学医学部麻酔科学・集中治療医学講座集中治療医学部門)

3:50 PM - 4:40 PM　第5会場 (国立京都国際会館1F Room D)

[IL(E)9] Pain management in critical care; why, whom, and how? -The role of CPOT

Celine Gelinas （McGill University, Canada）

海外招請講演

[IL(E)10] 海外招請講演10

座長:川前 金幸(国立大学法人山形大学医学部附属病院麻酔科)

4:45 PM - 5:35 PM　第5会場 (国立京都国際会館1F Room D)

[IL(E)10] A multidisciplinary rehabilitation approach to facilitating early engagement and mobilization in the ICUs at Stanford Medical Center

Shohei Takatani （Stanford Health Care, USA）

海外招請講演

[IL(E)1] 海外招請講演1

座長:布宮 伸(自治医科大学医学部麻酔科学・集中治療医学講座集中治療医学部門)

Fri. Mar 1, 2019 9:00 AM - 9:50 AM 第2会場 (国立京都国際会館2F Room A)

[IL(E)1] New sedation and delirium recommendations from the 2018 Society of Critical Care Medicine PADIS Guidelines

Dale M. Needham （Johns Hopkins University, USA）

(Fri. Mar 1, 2019 9:00 AM - 9:50 AM 第2会場)

[IL(E)1] New sedation and delirium recommendations from the 2018 Society of Critical Care Medicine PADIS Guidelines

Dale M. Needham （Johns Hopkins University, USA）

【 同時通訳付き】

Dr. Needham is Professor of Pulmonary and Critical Care Medicine, and of Physical Medicine and Rehabilitation at the Johns Hopkins University in Baltimore, USA. He is Director of the “Outcomes After Critical Illness and Surgery” (OACIS) Research Group and core faculty with the Armstrong Institute for Patient Safety and Quality, both at Johns Hopkins. From a clinical perspective, he is an attending physician in the medical intensive care unit at Johns Hopkins Hospital and Medical Director of the Johns Hopkins Critical Care Physical Medicine and Rehabilitation program.

Dr. Needham received his MD degree from McMaster University in Hamilton, Canada, and completed both his residency in internal medicine and his fellowship in critical care medicine at the University of Toronto. He obtained his PhD in Clinical Investigation from the Bloomberg School of Public Health at Johns Hopkins University. Notably, prior to his medical training, he completed Bachelor and Master degrees in Accounting and practiced in a large international accounting firm, with a focus in the health care field.

Dr. Needham is Principal Investigator on a number of NIH research grants and has authored more than 350 publications. His research interests include evaluating and improving ICU patients’ long-term physical, cognitive and mental health outcomes, including research in the areas of sedation, delirium, early physical rehabilitation, and knowledge translation and quality improvement.

Sedative medications are widely used in the management of critically ill adults, but these patients are prone to many adverse effects from sedatives. Clinicians must assess specific indications for the use of sedative medications and perform frequent assessments of pain, sedation, and delirium status using reliable and validated instruments, as recommended in the 2013 Society of Critical Care Medicine (SCCM) Pain, Agitation and Delirium (PAD) guidelines (Crit Care Med 2013; 41:263–306).

Delirium is a particularly common and important complication associated with the use of sedatives. Delirium has a significant burden on patients, families, and health systems, with negative short and long-term sequelae. Multiple pharmacological and non-pharmacological strategies have been considered to prevent or treat delirium in critically ill patients.

In the 2013 SCCM PAD guidelines, targeting light sedation and minimizing the use of benzodiazepines were suggested as means of improving the short-term outcomes of critically ill adults. Given the important effects of sedation on patient outcomes after discharge from the intensive care unit, these longer-term outcomes were an important focus of the sedation and delirium recommendations in the recent 2018 SCCM Pain, Agitation/Sedation, Delirium, Immobility, and Sleep Disruption (PADIS) guidelines.

The 2018 PADIS guidelines are based on a rigorous and innovative implementation of the Grading of Recommendation Assessment, Development and Evaluation (GRADE) methodology, and included participation of ICU survivors throughout the entire guideline development process. This presentation will highlight selected sedation and delirium recommendations from the 2018 PADIS guidelines, including the related evidence and recommendations for future research in the field.

Free access to the full-text of four publications related to the 2018 SCCM PADIS guideline is available at this webpage:
http://www.sccm.org/ICULiberation/Guidelines

海外招請講演

[IL(E)2] 海外招請講演2

座長:藤野 裕士(大阪大学医学部附属病院集中治療部)

Fri. Mar 1, 2019 3:05 PM - 3:55 PM 第2会場 (国立京都国際会館2F Room A)

共催:コヴィディエン ジャパン株式会社

[IL(E)2] What went wrong with ART, EPIVENT2 and PReVENT: Are the recent trials on lung protection contradicting lung physiology?

Marcelo Britto Passos Amato （University of São Paulo Heart Institute（INCOR）, Brazil）

(Fri. Mar 1, 2019 3:05 PM - 3:55 PM 第2会場)

[IL(E)2] What went wrong with ART, EPIVENT2 and PReVENT: Are the recent trials on lung protection contradicting lung physiology?

Marcelo Britto Passos Amato （University of São Paulo Heart Institute（INCOR）, Brazil）

【 同時通訳付き】

He initiated his medical studies in 1980 at the Faculdade de Medicina da Universidade de São Paulo, and graduated in December, 1985.
After graduating, he had a year of training in Internal Medicine and Intensive Care Medicine, as a resident doctor, followed by two years of specialization in Pneumology and Intensive Care Medicine at the Pulmonary Division of the Hospital das Clínicas - Faculdade de Medicina da Universidade de São Paulo.
In 1996 (January) he presented his Doctoral Thesis ("A New Approach to Mechanical Ventilation in ARDS: Effects on Pulmonary Function and Mortality"), finishing with success his doctoral post-graduation. 2
In 1996 he spent 4 months in Minneapolis, working at the Laboratory of Prof. John Marini on a project about pleural pressure measurements during acute lung injury and partial liquid ventilation.
In 1997 he spent 3 months in Rotterdan, working at the Laboratory of Prof. Lachmann on a project about the Open Lung Approach and how to monitor Lung Function.
In 2008 (January) he presented his Thesis for “Livre-Docência”（“Lung Stress during Artifical Ventilation:how to monitor and how to minimize it”), finishing with success and obtaining his professorship at the University of São Paulo, Pulmonary Department.

We will present the results of 3 large multicenter randomized clinical trials about lung protection. The results of the 3 trials combined were disappointing. The ART and EPIVENT2 trials tested PEEP settings based on lung mechanics in ARDS, encompassing more than 1200 patients with moderate/severe disease. The results were surprising, showing either greater harm associated with high PEEP use (ART) or a neutral result (EPIVENT2). Of note, the control group of both trials used much higher PEEP levels than usual, with average levels of 13 and 16 cmH2O, respectively, making the interpretation of results extremely complex. In the ART trial, the harm was especially evident when the patients started assisted ventilation, 4-5 days after entering the trial, and especially so for those in whom Driving Pressures increased after PEEP increments. In this conference, we will provide some mechanistic explanations for the failure, providing also possible solutions and new clinical tools and procedures that should be used in future trials on lung protection. Of note, it is very likely that a large amount of unintended errors happened in both trials. Regarding the PReVENT, the use of a stricter protective tidal volume (6 mL/kg) failed in showing some positive outcome in patients with near normal lungs. The most likely explanation for this finding was the low power of the study, associated also with non-intended consequences of a too restricted tidal volume (breath-staking). In fact, the period of assisted ventilation is now the major problem during mechanical ventilation – how to propose and effective strategy for lung protection, when patients are breathing spontaneously and self-inflicting lung injury?

海外招請講演

[IL(E)3] 海外招請講演3

座長:桑平 一郎(東海大学医学部付属東京病院呼吸器内科)

Fri. Mar 1, 2019 4:00 PM - 4:50 PM 第2会場 (国立京都国際会館2F Room A)

[IL(E)3] Electrical impedance tomography: The past, the present and the future

Inéz Frerichs （University Medical Centre Schleswig-Holstein, Germany）

(Fri. Mar 1, 2019 4:00 PM - 4:50 PM 第2会場)

[IL(E)3] Electrical impedance tomography: The past, the present and the future

Inéz Frerichs （University Medical Centre Schleswig-Holstein, Germany）

【 同時通訳付き】

Prof Frerichs is a graduate of the Comenius University in Bratislava, Slovakia in 1985 (MD), where she completed her PhD in physiology (1991). She held research fellowships in respiratory physiology at the Max Planck Institute for Experimental Medicine, Göttingen (1988-1990), Germany, the Zürich University, Switzerland (1992-1993) and Department of Anaesthesiology, Emergency and Intensive Care Medicine, University of Göttingen as a senior researcher (1993-2004). Currently, she is a Professor of Physiology at the Christian Albrechts University in Kiel, Germany. She is the head of the Electrical impedance tomography (EIT) group at the Department of Anaesthesiology and Intensive Care Medicine at the University Medical Centre Schleswig-Holstein, Campus Kiel. Prof Frerichs has published 143 original articles, 14 reviews, 17 book chapters and 1 book in her career. Although she was active in various research fields, especially related to the respiratory system, her major research focus has been EIT since 1993. She is internationally recognized as one of the leading experts on EIT, since she decisively contributed to the development, validation and implementation of this method in the clinical setting. This is evidenced by the fact that 99 out of the total of her 143 original papers are dedicated to EIT. Prof Frerichs has given 66 invited presentations at national and international meetings. Her research papers are frequently cited by other scientists (h-index: 35, total citations 3617). She is an active member of the International Steering Committee on EIT. She initiated the TREND Chest EIT international consensus group promoting the translation of EIT into clinical practice. She has provided decisive inputs in the publication of the first consensus statement on chest EIT resulting from the collaboration among EIT researchers from Europe, North and South America, Australia and Asia. Thanks to her expertise on EIT, her group has become part of three international research consortia funded by the European Union grant programs.

Electrical impedance tomography (EIT) is a functional imaging method invented already in the early eighties of the last century. Its use in a clinical setting is rather recent but still often limited to clinical studies in neonatal, paediatric and adult intensive care units. EIT generates cross-sectional images (i.e. scans) of the body like all other established medical imaging tomographic techniques (i.e. computed tomography or magnetic resonance imaging). In contrast to these radiological methods, EIT examinations can be performed continuously at the bedside without the need of patient transport to specialized radiological departments and without any exposition to radiation. The maximum scan rate of modern EIT devices is in the range of about 40 to 80 images per second. This very high scan rate allows the imaging of dynamic physiological processes like pulmonary ventilation and perfusion, their pathophysiological changes as well as their instantaneous responses to therapy. This feature of EIT explains the suitability of this method for long-term patient monitoring. Because of its limited spatial resolution, anatomical imaging is not considered to be the primary application of EIT, its strength lies in functional imaging. Chest EIT dominates the clinical use of EIT [1], imaging of other organs than the lungs is very limited. The measuring principle of EIT is based on the repetitive rapid measurement of electrical voltages at the surface of the chest resulting from cyclic applications of very small alternating currents of only a few millivolts. To accomplish this, an array of single electrodes or an electrode belt is placed on the chest circumference. The acquired data is used to calculate the distribution of electrical bioimpedance within the chest which typically is modulated by the instantaneous changes in regional air content. This in turn enables EIT to assess regional lung ventilation and aeration. EIT lung imaging is most frequently used in critically ill mechanically ventilated patients of all age groups. The main benefits of EIT in these patients are 1) the early identification of adverse events like

pneumothorax or tube malposition and 2) the guidance in ventilation therapy. EIT enables the assessment of regional ventilation and aeration during spontaneous breathing, assisted and controlled modes of mechanical ventilation. It also can trace the regional lung behavior in response to ventilation manoeuvres like the quasi-static low-flow inflation and deflation, incremental and decremental positive end-expiratory pressure (PEEP) trial or a step change in airway pressure. Functional EIT images and various EIT parameters continuously derived from the patient examinations enable the visualization of regional ventilation distribution or local changes in end-expiratory lung volume and identification of lung recruitment, atelectasis formation or overdistension. It is expected that this information will allow individual optimisation of ventilation therapy and lung-protective ventilation with the least injurious ventilator settings.

References:

[1] Frerichs et al. Chest electrical impedance tomography examination, data analysis, terminology, clinical use and recommendations: consensus statement of the TRanslational EIT developmeNt stuDy group. Thorax 2017;72:83-93.

海外招請講演

[IL(E)4] 海外招請講演4

座長:森松 博史(岡山大学病院麻酔科蘇生科)

Fri. Mar 1, 2019 9:00 AM - 10:00 AM 第5会場 (国立京都国際会館1F Room D)

[IL(E)4-1] Update from TSCCM: Current status of rapid response system in Thailand

Thammasak Thawitsri （Chulalongkorn Univeraity, Thailand）

[IL(E)4-2] Update from TSCCM: Vasopressors in sepsis

Chairat Permpikul （Siriraj Hospital, Thailand）

(Fri. Mar 1, 2019 9:00 AM - 10:00 AM 第5会場)

[IL(E)4-1] Update from TSCCM: Current status of rapid response system in Thailand

Thammasak Thawitsri （Chulalongkorn Univeraity, Thailand）

【 同時通訳付き】

Education:
Doctor of Medicine (M.D.), Chulalongkorn University, 1993
Thai Board of Anesthesiology, Chulalongkorn University, 1999
Thai Board of Critical Care Medicine, Thai Society of Critical Care Medicine, 2006
Master of Science Program in Health Development, Chulalongkorn University, 2016
Current status:
Instructor at Department of Anesthesiology,
King Chulalongkorn Memorial Hospital
Committee of Thai Society of Critical Care Medicine (2011-2020)
Publication:
Thawitsri T, Chittawatanarat K, Chaiwat O, Charuluxananan S, THAI-SICU Study Group. Self-Reporting of Medication Errors in Critically Ill Surgical Patients in the THAI-SICU Study. J Med Assoc Thai. 2016 Nov;99 Suppl 6:S69-S73.
Thawitsri T, Thongdee S, Chokengarmwong N, Kongwibulwut M, Kumwilaisak K,Poonyathawon S, Chatkaew P, Charuluxananan S. Lactate Non-Clearance versus lactate Clearance: A Comparison of Hospital Mortality in High-Risk Surgical Patients. J Med Assoc Thai. 2016 Nov;99 Suppl 6:S201-S208.
Thawitsri T, Chittawatanarat K, Kumwilaisak K, Charuluxananan S, THAI-SICU Study Group. Treatment with Vasoactive Drugs and Outcomes in Surgical Critically Ill Patients: The Results from the THAI-SICU Study. J Med Assoc Thai. 2016 Sep;99 Suppl 6:S83-S90.
Thawitsri T, Chittawatanarat K, Kumwilaisak K, Kongsayreepong S, THAI-SICU Study Group. The Impacts of Surgical Intensive Care Unit Admission Source on Morbidity and Mortality Outcomes: The Results from the THAI-SICU Study. J Med Assoc Thai. 2016 Sep;99 Suppl 6:S15-S22.

The healthcare providers have tried to improve the work on patient safety for many years. In Thailand, we have been announced the first national patient safety goals in 2006. One of the most important goals for patient safety is the responses to the deteriorating patients in hospital. Adverse events can be categorized to be the rapid deteriorating group and the gradually deteriorating group. The rapidly deteriorating patients might be the difficult group to prevent cardiac arrest or sudden death. Although, the gradually deteriorating group has revealed the information that approximately two-third of patients shows the abnormal signs and symptoms within 6-8 hours before the critical events. Abnormal clinical observations associated with an increasing risk of mortality are the decreasing level of consciousness, tachypnea, hypoxia and hypotension. If we analyze all of the vital signs together with some specific clinical parameters, each of the physiological parameters should be allocated a score demonstrated the magnitude of physiological disturbance. After that, we will get the sum of each physiological score, and then turn to be a single number to interpret how risk of the patient conditions. Modified early warning score (MEWS) has been introduced despite limited high quality studies to demonstrate their sensitivity, specificity and usefulness. There are many MEWS used around the world, and Search Out Severity (SOS) score is a MEWS widely used in Thailand. The SOS score 4 is demonstrated to be a cut-off point of trigger threshold to initiate action for worsening adverse events. Anyway, MEWS functions as a monitoring tool for screening the risk patients. Then, when we apply MEWS in the hospital setting, we should couple MEWS with an effective outreach service. Eventually, each score should be used as an adjunct to the good clinical judgement.

(Fri. Mar 1, 2019 9:00 AM - 10:00 AM 第5会場)

[IL(E)4-2] Update from TSCCM: Vasopressors in sepsis

Chairat Permpikul （Siriraj Hospital, Thailand）

【 同時通訳付き】

• Chairman, Department of Medicine and the chief of Medical ICU, Siriraj Medical School, Mahidol University, Bangkok, Thailand
• Chairman of Education and International Relation, The Thai Society of Critical Care Medicine
Research Interests
• Sepsis and septic shock, focusing on hemodynamic management and monitoring.
• Mechanical ventilation, focusing on monitoring
• ICU administration, focusing on ICU design and quality improvement

Sepsis pathophysiology includes generalized vasodilatation and vascular leakage from generalized inflammation which arises from uncontrolled infection. Depressed cardiac contractility is also noted in some patients. Hypotension is considered as distributive event and resuscitation thus consists of fluid therapy to restore intravascular volume depletion and vasopressors to correct vasodilatation.
Regarding the uses of vasopressors, norepinephrine (NE) is advocated as the first line agent. When compared with dopamine, use of NE resulted in lower mortality and less occurrence of arrhythmia. Vasopressin or antidiuretic hormone is introduced lately as low natural level was noted in sepsis patients. At present, the 2016 Surviving Sepsis Campaign suggests vasopressin in patients who are not responsive to high dose NE. Epinephrine is preserved in refractory shock but its use as a first line agent is not advocated due to reports of high mortality and morbidity.
Use of vasopressors requires close monitoring. First, macrocirculation target, the mean arterial pressure of 65 mmHg, needs to be frequently assessed. Tissue perfusion or “ microcirculation” is another important concern since intense vasoconstriction might compromise microcirculation. Moreover, local complication needs to be frequently assessed, especially in those whom NE is given via peripheral vein.
Perfect timing of vasopressors has long been discussed. Evidences supporting early use are accumulating. Recently, our double blind RCT disclosed that the administration of low dose NE during the initiation of resuscitation resulted in higher shock reversal rate at 6 hours, nonsignificant lower mortality and less cardiac complication.

海外招請講演

[IL(E)5] 海外招請講演5

座長:丸藤 哲(医療法人 徳洲会 札幌東徳洲会病院救急センター)

Fri. Mar 1, 2019 10:05 AM - 10:55 AM 第5会場 (国立京都国際会館1F Room D)

[IL(E)5] Tranexamic acid in life threatening bleeding

Ian Roberts （London School of Hygiene &Tropical Medicine, UK）

(Fri. Mar 1, 2019 10:05 AM - 10:55 AM 第5会場)

[IL(E)5] Tranexamic acid in life threatening bleeding

Ian Roberts （London School of Hygiene &Tropical Medicine, UK）

【 同時通訳付き】

Expertise: large-scale clinical trials, systematic reviews, epidemiology.
Qualifications
• MB ChB (1985) • MRCP paediatrics (1988) • PhD (1994) • FRCP (2009) • FFPH (2001)
Employment
August 1995 - March 2001 Director, Child Health Monitoring Unit, Institute of Child Health.
Honorary Consultant, Great Ormond Street Hospital for Children.
Current appointment (since May 2001)
Professor of Epidemiology and Public Health, London School of Hygiene &Tropical Medicine
Director, LSHTM Clinical Trials Unit
Coordinating Editor, Cochrane Injuries Group, Cochrane Collaboration
Head, World Health Collaborating Centre on Research and Training in Violence and Injury Prevention
Honorary Consultant in Trauma Services, Barts and the Royal London NHS Trust
Selected relevant roles
Director, WHO Collaborating Centre on Violence and Injury Prevention
Editor-in-Chief and Founder, Cochrane Injuries Group (impact factor 7.7)
Founder and member, Climate and Health Council (http://www.climateandhealth.org/)
Founder and member, International Council for Road Safety
Trustee, RoadPeace (UK Victims of Road Traffic Crashes)

Relevant publications
WOMAN Trial Collaborators (Roberts I PI). Effect of early administration of tranexamic acid on mortality, hysterectomy, other morbidities in women with postpartum haemorrhage (The WOMAN trial): a randomised, placebo-controlled trial. Lancet 2017; 389: 2105-2116.

CRASH-2 collaborators, Roberts I (PI), Shakur H, Afolabi A, Brohi K, Coats T, et al. The importance of early treatment with tranexamic acid in bleeding trauma patients: an exploratory analysis of the CRASH-2 randomised controlled trial. Lancet. 2011;377(9771):1096-101, 101 e1-2. Epub 2011/03/29.

CRASH-2 trial collaborators, Shakur H, Roberts I (PI), Bautista R, Caballero J, Coats T, et al. Effects of tranexamic acid on death, vascular occlusive events, and blood transfusion in trauma patients with significant haemorrhage (CRASH-2): a randomised, placebo-controlled trial. Lancet. 2010;376(9734):23-32. Epub 2010/06/18.

Angèle Gayet-Ageron, David Prieto-Merino, Katharine Ker, Haleema Shakur, François-Xavier Ageron, Ian Roberts for the Anti-fibrinolytic Trials Collaboration. Effect of treatment delay on the effectiveness and safety of antifibrinolytics in acute severe haemorrhage: a meta-analysis of individual patient-level data from 40 138 bleeding patients. Lancet 2017 Nov 7. pii: S0140-6736(17)32455-8. doi: 10.1016/S0140-6736(17)32455-8

Selected current projects:
The international CRASH-3 trial: A randomised placebo controlled trial to quantify the effectiveness and safety of a short course of tranexamic acid (TXA) in 10,000 adults with acute traumatic brain injury (TBI).

Funded by the UK Medical Research Council, The Wellcome Trust, the UK Department for International Development and the National Institute of Health Research. (£3.7 million). https://ctu-web.lshtm.ac.uk/c3w/
The international HALT-IT trial: Tranexamic acid for the treatment of gastrointestinal haemorrhage: an international randomised, double blind placebo controlled trial in 8,000 patients. http://haltit.lshtm.ac.uk/
Getting research into practice: GATES Foundation US$3 million (to ensure that the results of the woman trial improve the care of women with post-partum haemorrhage world-wide).

The CRASH-2 trial was a large randomised placebo controlled trial of tranexamic acid in patients with or at risk of traumatic haemorrhage that was undertaken in 274 hospitals in 40 countries. A total of 20 211 adult trauma patients with, or at risk of, significant bleeding were randomly assigned within 8 h of injury to either tranexamic acid (loading dose 1 g over 10 min then infusion of 1 g over 8 h) or matching placebo. The results showed that early (within three hours of injury) tranexamic acid treatment reduces the risk of death due to bleeding by about 30% and that treatment beyond three hours is ineffective. Similar results were obtained in the Woman trial of tranexamic acid in the treatment of post-partum haemorrhage that included 20,060 recruited from 193 hospitals in 21 countries. An individual patient data meta-analysis of the two trials showed that tranexamic acid significantly increased overall survival from bleeding (odds ratio [OR] 1•20, 95% CI 1•08–1•33; p=0•001), with no heterogeneity by site of bleeding (interaction p=0•7243). However, treatment delay reduced the treatment benefit (p<0•0001). Immediate treatment improved survival by more than 70% (OR 1•72, 95% CI 1•42–2•10; p<0•0001). Thereafter, the survival benefit decreased by 10% for every 15 min of treatment delay until 3 h, after which there was no benefit. There was no increase in vascular occlusive events with tranexamic acid, with no heterogeneity by site of bleeding (p=0•5956). Treatment delay did not modify the effect of tranexamic acid on vascular occlusive events. These results have important implications for patient care both internationally and in Japan and suggest that pre-hospital tranexamic acid administration can substantially increase survival in patients with acute severe bleeding. Efforts to facilitate the pre-hospital use of tranexamic acid in Japan are are currently underway.

海外招請講演

[IL(E)6] 海外招請講演6

座長:中川 聡(国立研究開発法人国立成育医療研究センター集中治療科)

Fri. Mar 1, 2019 11:00 AM - 11:50 AM 第5会場 (国立京都国際会館1F Room D)

[IL(E)6] Moral distress: I know what to do but I can’ t !!!

Daniel Garros （University of Alberta Stollery Children’s Hospital, Canada）

(Fri. Mar 1, 2019 11:00 AM - 11:50 AM 第5会場)

[IL(E)6] Moral distress: I know what to do but I can’ t !!!

Daniel Garros （University of Alberta Stollery Children’ s Hospital, Canada）

【 同時通訳付き】

Daniel Garros, MD, is a Canadian-Brazilian PICU attending/staff physician at the Stollery Children's Hospital in Edmonton, Alberta, Canada.
He is also a Clinical Professor, Department of Pediatrics and John Dossetor Health Ethics Centre, F of Medicine, University of Alberta.

He co-lead of the PICU Quality&Safety committee as well as the PICU Bereavement &Compassion Committee and is a member of the same committee at the hospital level.
He sits at the Stollery Child Health Quality Assurance, Improvement &Patient Safety Collaborative QAC. He is also responsible for the PICU database system.
Dr Garros has published on moral distress in the PICU, end of life care in pediatrics, supporting staff in the PICU, end-of-life decision-making, quality and safety, ECMO and Renal replacement therapy.

He was the co-PI on a large multicenter study on Moral Distress in PICU, supported by a CHIR(Canadian Institute for Health and Research) grant. He was the technical director and co-producer of a Movie on Moral Distress for health care Professionals, titled "Just Keep Breathing", as the result of this project. His research interests include end-of-life care, bereavement, medical ethics, professional well being, and quality and safety in health care delivery.
Father of 3 teenager kids and still a soccer player on his spared time!"
He has been to Japan twice, the first time was in 1989 as a young PICU fellow presenting for the first time ever outside Brazil 2 papers at the World Conference in Critical Care in Kyoto!

Introduction: Moral distress is the term increasingly used by healthcare professionals to name the angst they experience when they feel unable to practice as they should.
It has been described as the pain or anguish affecting the mind, body, or relationships in response to a situation in which the person is aware of a moral problem, acknowledges moral responsibility, and makes a moral judgment about the correct action; yet, as a result of real or perceived constraints, participates in perceived moral wrongdoing.
Perception, however, is key to understanding this experience. In the exact same circumstance, one professional may believe that one course of action, such as extending life-sustaining treatment (LST) as far as possible, is the right thing to do, while another professional may find it unethical. Either professional may experience Moral Distress depending on the course chosen and the degree to which the professional feels s/he has been complicit in “ doing the wrong thing”.

Methods: Using personal narratives, a research was conducted in 6 pediatric Intensive Care units in Canada collecting stories, which were analyzed, changed and then a typology was created. A movie was made with some of the stories, depicting the ethical issues and how an ICU team deals with conflict and the stressful environment where they work.

Presentation: After elaborating on the concept described above, we will ascertain measures to resolve moral distress, from “ reframing the suffering” to building moral resilience and moral courage within ICU health care teams. The presentation will also discuss Burn Out and how this universal phenomenon is close intricate with Moral Distress in the ICU.

Conclusion: Moral Distress is here to stay; it is a sign of moral sensitivity and being humans. Resolving this condition is crucial to maintain good team work and keep the health care professionals engaged and motivated, to provide the best care they can to the patients.

海外招請講演

[IL(E)7] 海外招請講演7

座長:坂本 哲也(帝京大学医学部救急医学講座)

Fri. Mar 1, 2019 2:00 PM - 2:50 PM 第5会場 (国立京都国際会館1F Room D)

[IL(E)7] The 50th anniversary of ARDS: What has been changed?

Massimo Antonelli （Catholic University of the Sacred Heart, Italy）

(Fri. Mar 1, 2019 2:00 PM - 2:50 PM 第5会場)

[IL(E)7] The 50th anniversary of ARDS: What has been changed?

Massimo Antonelli （Catholic University of the Sacred Heart, Italy）

【 同時通訳付き】

MASSIMO ANTONELLI MD, CV

Born in Rome 23 February 1957, Nationality: Italian Sex: Male, Married, one son.

Professor of Intensive Care and Anesthesiology at the “Università Cattolica del Sacro Cuore” Rome Italy since November 1999.
Director of the Dept. of Anesthesiology and Intensive Care and Emergency Medicine and of the General ICU, Postoperative ICU and Neurosurgical ICU of the Fondazione Policlinico Universitario A.Gemelli IRCCS.
Director of the School of Specialty in Anesthesiology and Intensive Care Medicine.

School of Medicine at La Sapienza University from 1976 to 1981. Graduated in Medicine and Surgery with full qualification as a Medical doctor cum laude in 1981.
During 1983-984 visiting scholar at the Rayne Institute of the School of Medicine, University College of London and at the University of Berkeley, California, USA, Membrane Bioenergetics Group, directed by Prof. Lester Packer
Full qualification as specialist in Anesthesiology and Intensive Care Medicine in 1984.
In 1991 working period at the Reanimation Polyvalent, Cochin-Port Royal University Hospital, directed by prof J.F. Dhainaut
Assistant Professor of Anesthesiology and Intensive Care Medicine at the “Policlinico Umberto I-Università La Sapienza” from 1985 to 1999.

Editor in Chief of “Intensive Care Medicine” from 2007 to 2013. Associate Editor of the same Journal from 2000 to 2007.
Awarded with the Society Medal of the ESICM in the 2013.

Past President of the Italian Society of Anesthesiology and Intensive Care Medicine (SIAARTI).
President of the European Society of Intensive Care Medicine (ESICM) 2016-2018

Scientific fields of interest and research: Noninvasive Ventilation, Mechanical Ventilation, ARDS, Shock, sepsis and infections.
Involved as Principal Investigator in many phase II-III clinical and international trials in ICU patients

Author of more than 300 papers with more than 24,384 citations, H index 74. The majority of these scientific publications are on several aspects of Noninvasive Ventilation, ARDS, Shock and sepsis.
Invited lecturer or chairman in more than 300 International Meetings.

The 50 year from the diagnosis of ARDS and the evolution of the concepts and therapies will be reported and analysed.
Since first identification to the present time there was an incredible evolution of mechanical ventilation and supportive techniques with some improvement of the mortality rate.
The therapies are now allocated in specific time windows and timing of interventions, rendering more sophisticated and effective our approach as physician to this difficult syndrome.

海外招請講演

[IL(E)8] 海外招請講演8

座長:江木 盛時(神戸大学医学部附属病院麻酔科)

Fri. Mar 1, 2019 2:55 PM - 3:45 PM 第5会場 (国立京都国際会館1F Room D)

[IL(E)8] Acute glycemic control in patients with diabetes

Adam Deane （Royal Melbourne Hospital, University of Melbourne, Australia）

(Fri. Mar 1, 2019 2:55 PM - 3:45 PM 第5会場)

[IL(E)8] Acute glycemic control in patients with diabetes

Adam Deane （Royal Melbourne Hospital, University of Melbourne, Australia）

【 同時通訳付き】

Adam is a clinician/researcher with interests in critical care glucose metabolism, nutrition and gastrointestinal function, clinical trials and outcomes from critical illness. He currently serves as Senior Staff Specialist, Head of Intensive Care Unit Research, and Deputy Director Intensive Care Unit at The Royal Melbourne Hospital in Melbourne, Australia. Adam is also employed part-time role as Principal Research Fellow, Intensive Care with the University of Melbourne. He holds a Career Development Fellowship with the National Health and Medical Research Council (NHMRC).

Prevalence of type 2 diabetes mellitus in the critically ill

Type 2 diabetes mellitus (T2DM) is a frequent (15-25%) pre-existing medical condition in critically ill patients.

Hyperglycaemia in critically ill patients without diabetes

Observational data indicate that markedly elevated blood glucose concentrations are associated with adverse outcomes in critically ill patients without T2DM. The landmark multinational NICE-SUGAR trial allocated critically ill patients to receive ‘intensive glucose control’ (4.5-6.0 mmol/l) or ‘conventional glucose control’ (<10.0 mmol/l). In this cohort, conventional glucose control reduced 90-day all-cause mortality, probably via a reduction in hypoglycaemia.

Hyperglycaemia in critically ill patients with T2DM

Observational studies, including seminal work from Doctor Moritoki Egi, have consistently reported that the association between death and hyperglycaemia is markedly affected by adjustment for pre-existing T2DM, such that maintaining blood glucose >10.0 mmol/l appears to be associated with reduced mortality. Within the limitations of these observational studies, and their inherent risk of residual confounding variables, these data support the hypothesis that glucose concentrations that are regarded as safe and desirable in those without diabetes might, instead, be undesirable and harmful in patients with T2DM.

A substantial limitation of previous trials is that study participants with previously normal glucose tolerance and those with T2DM were considered together, with the latter group comprising only a small proportion of the sample population. This is important as the risk of treatment-induced hypoglycaemia is greatest in those with pre-existing T2DM and it also appears to be associated with greater harm.

Exploratory study of ‘liberal’ glucose control

Using a sequential period design three studies have been recently published that have compared ‘standard’ care and ‘liberal’ glucose targets. These studies, which all have substantial methodological limitations, suggest that hypoglycaemia and glycaemic variability, the latter is also associated with increased mortality, are reduced with this approach.

Summary

While these are promising data to support the hypothesis we, on behalf of the Australian and New Zealand Intensive Care Society Clinical Trials Group (ANZICS-CTG), are conducting a multicenter randomized clinical trial to compare the outcomes of targeting ‘liberal' blood glucose concentrations to ‘standard care’ glucose control (< 10 mmol/l) in critically ill patients with T2DM.

My presentation will focus on the concept of acute glycaemic control in patients with T2DM and the rationale for a more liberal approach, as well as emphasis on waiting for well conducted and adequately powered clinical trials before changing clinical practice.

海外招請講演

[IL(E)9] 海外招請講演9

座長:布宮 伸(自治医科大学医学部麻酔科学・集中治療医学講座集中治療医学部門)

Fri. Mar 1, 2019 3:50 PM - 4:40 PM 第5会場 (国立京都国際会館1F Room D)

[IL(E)9] Pain management in critical care; why, whom, and how? -The role of CPOT

Celine Gelinas （McGill University, Canada）

(Fri. Mar 1, 2019 3:50 PM - 4:40 PM 第5会場)

[IL(E)9] Pain management in critical care; why, whom, and how? -The role of CPOT

Celine Gelinas （McGill University, Canada）

【 同時通訳付き】

Céline Gélinas, RN, PhD is Associate Professor at Ingram School of Nursing, McGill University, and Researcher at the Centre for Nursing Research and the Lady Davis Institute of the Jewish General Hospital in Montréal, Québec, Canada. Her expertise is related to pain assessment and management in the adult intensive care unit, and she is the developer of the Critical-Care Pain Observation Tool (CPOT). She has been involved in the development of pain management and critical care guidelines at the national and the international level, and was the leader of the pain section of the 2018 Society of Critical Care Medicine practice guidelines.

Pain is highly prevalent in critically ill patients and is complex to manage. Pain assessment is the first essential step to pain management. Although the self-report is the gold standard measure for pain, many patients are unable to self-report in the intensive care unit (ICU) due to their critical condition and altered levels of consciousness. In such situations, alternative measures must be used for pain assessment and monitoring.

The objectives of this presentation are to:

a) Review a stepwise approach to pain assessment and appropriate tools
b) Describe the use and recent development of the Critical-Care Pain Observation Tool (CPOT) with case studies
c) Describe the strategies to improve pain management in critical care and further research steps
During this presentation, key elements from the recent 2018 Society of Critical Care Medicine practice guidelines for pain management will be addressed. A stepwise approach to pain assessment which includes appropriate tools to use in ICU patients, and the potential role of family members will be discussed. The CPOT will be described and its recent development in brain-injured ICU patients will be addressed. Attendees will have the opportunity to practice scoring with the CPOT using case studies and videos. Limitations of vital signs for ICU pain assessment will be discussed. Pain management strategies including the use of assessment-driven protocols, multimodal and preventive analgesia will be described. Finally, future steps in ICU pain management research will be highlighted.

海外招請講演

[IL(E)10] 海外招請講演10

座長:川前 金幸(国立大学法人山形大学医学部附属病院麻酔科)

Fri. Mar 1, 2019 4:45 PM - 5:35 PM 第5会場 (国立京都国際会館1F Room D)

[IL(E)10] A multidisciplinary rehabilitation approach to facilitating early engagement and mobilization in the ICUs at Stanford Medical Center

Shohei Takatani （Stanford Health Care, USA）

(Fri. Mar 1, 2019 4:45 PM - 5:35 PM 第5会場)

[IL(E)10] A multidisciplinary rehabilitation approach to facilitating early engagement and mobilization in the ICUs at Stanford Medical Center

Shohei Takatani （Stanford Health Care, USA）

【 同時通訳付き】

Shohei Takatani is a Senior Occupational Therapist who works with Stanford Health Care as a primary occupational therapist on the Critical Care team at Stanford Hospital. As a part of a multi-disciplinary medical team, Shohei is dedicated to developing, enhancing and restoring functional capacity to his patients whose ability to cope with the tasks of daily living have been impaired or threatened by physical illness or injury, psychosocial disabilities, aging process or developmental deficits. Assessing patient needs in consultation with the individual patient, family, and other appropriate persons, Shohei considers elements such as pre-vocational evaluation, physiological and psychosocial re-conditioning, fabrication and training in the use of orthotic or prosthetic devices and other assistive technology devices, as well as the adaptation of environments and processes to enhance functional performance. Shohei also has extensive experience managing rehabilitation of critically ill patients in the ICU and cardiopulmonary patients requiring advanced therapies, such as mechanical circulatory support devices and solid organ transplants.

In addition to mentoring and advising new occupational therapists, Shohei has made presentations at the American Occupational Therapy Association, Stanford University Medical Center, Kaiser Permanente Santa Clara Medical Center, and San Jose State University among others. Shohei also holds an Advanced Practice Certification in Hand Therapy.

EDUCATION
BS, MS, Occupational Therapy (2007-2010)
San Jose State University

PROFESSIONAL EXPERIENCE
Customer Service Professional (2002-2003)
Japan Airlines Passenger Services of America
Occupational Therapy Intern: Pediatrics (2009)
San Jose State University
Occupational Therapy Level II Intern – Critical Care (2010)
Stanford Hospital and Clinics
Occupational Therapy Intern II (2010)
Santa Clara Valley Medical Center, Acute Psychiatric Services
Senior Occupational Therapist - Critical Care (2011-)
Stanford Hospital &Clinics

Advances in critical care have led to increased survival and, as a result, the recognition of prolonged physical and psychosocial morbidity after critical illness. Neuromuscular dysfunction has been identified in many intensive care unit (ICU) patients with sepsis, multi organ failure, or prolonged mechanical ventilation and is associated with a longer duration or mechanical ventilation and increased length of ICU and hospital stay [1].

Early Mobility (EM) and engagement is an essential component of the ABCDEF bundle that has been effective in reducing ICU - Acquired weakness as well as an effective intervention to significantly affect delirium.

The three ICUs at Stanford Medical Center (SMC) consist of the Cardiovascular ICU, the Medical Surgical Neurological ICU, and the Coronary Care Unit (CCU). Every ICU has a designated rehabilitation team comprised of occupational therapists (OT), physical therapists (PT), speech language pathologists (SLP) and rehabilitation aides (RA). At SMC, over 90% of ICU patients receive consults to PT and OT when medically appropriate, and are initiated on a standard, intermediate, or intensive rehabilitation program based on appropriateness. All rehabilitation programs emphasize the utilization of structured activity programs, progressive exercise programs and safe patient handling equipment such as hospital beds with tilting features, overhead lift systems, chairs with pressure relieving capabilities in order to facilitate safe and effective participation in EM and engagement for both patient and staff. Incorporating family involvement. In order to care for our critically ill patients, we collaborate with interdisciplinary members on a daily basis. EM can be performed by any part of the interdisciplinary team including nurses, physical therapists, occupational therapists, or physicians and it can consist of activities from passive range of motion to ambulation.

As a result of our ICU early mobility and engagement rehabilitation program, cardiac surgery and transplant patients’ length of stay (LOS) in the ICU and overall hospital length of stay has been reduced. Additionally, we have also noted a reduction in staff injury rates related to EM and engagement practices in the ICU.

EM has been a standard of practice in the ICUs at SMC and the emphasis on early mobility and engagement in structured ICU rehabilitation programs have been very safe and successful for our patients at SMC as well as for the care team members. Through close collaboration with nursing staff, primary medical team members, and other ancillary services, i.e., respiratory therapy (RT), perfusionists, dietitians (RD), we have a strong mobility culture and we continue to strive to provide effective EM and early engagement in our critically ill patients.

[1] Stevens RD, Dowdy DW, Michaels RK, Mendez-Tellez PA, Pronovost PJ, Needham DM, Neuromuscular dysfunction acquired in critical illness: a systematic review. Intensive Care Med 2007; 33:1876-91.