4th INTERNATIONAL MEDICAL CLASS
PAEDIATRIC CRITICAL CARE

under the patronage of
Prof. Dr. med. Frank Ulrich Montgomery
President of the German Federal Medical Association

29th Symposium Intensive Care Medicine + Nursing
Bremen Exhibition and Conference Centre
February 20 - 22, 2019
Welcome to the Free Hanseatic City of Bremen.

We are delighted to welcome you.

Physicians, nurses, and medical technicians from our international projects in Africa, the Middle East, and Asia but also from our European partnered organizations and Germany are invited to participate in the 4th International Medical Class Paediatric Critical Care within the 29th Symposium on Intensive Care Medicine + Nursing.

Bremen is a fitting place for this unique educational opportunity held in February each year under the patronage of the President of the German Federal Medical Association, Prof. Dr. Frank Ulrich Montgomery.

Open-minded and multilingual, Bremen citizens will welcome you to their midst.

The Free Hanseatic City of Bremen looks back on 1,200 years of history and it claims to be one of the oldest city republics of the world. During the Middle Ages, Bremen developed into one of the most important and wealthy commercial towns in northern Europe. As a member of the legendary and honored Hanseatic League, tolerance and open-mindedness towards the unknown became a characteristic feature of this town and its citizens.

Today, Bremen is a cosmopolitan city with an international population hosting scientists from all around the world. English-language teaching and courses are naturally offered as standard at its universities. International schools and multilingual nurseries promote integration and understanding in all groups of age.

Bremen is proudly ranking not only among one of the most beautiful but also among the most liberal and multicultural cities in Germany: enjoy your stay.
Open-minded and kind, symposium participants welcome you to their midst.

The International Medical Class Paediatric Critical Care is a joint project between RobinAid Academy and the Symposium on Intensive Care Medicine + Nursing which is one of the largest medical congresses in Germany dealing with anaesthesia, intensive care as well as emergency care.

More than 4,500 participants are coming to Bremen each year. During the symposium, approximately 180 scientific sessions and workshops are being performed and up to 200 exhibitors present their products in anaesthesia and critical care.

In its 28-year history, the Symposium on Intensive Care Medicine + Nursing has developed a unique charm that combines scientific lectures, continuing education, exchange of experience, personal encounters and having some fun in a perfect manner. That’s why the event is so likeable. We are grateful that we have been able to establish our International Medical Class within this framework.

Thanks for following our invitation.

Once again, we warmly welcome you. Health professionals from different countries and continents are coming together working on current topics in the field of paediatric critical care, sharing their personal experiences, interacting in a respectful manner with all their differences, and building up trusting relationships.

Coming as colleagues and leaving as friends. Our symposium provides a showcase for international understanding and cooperation how we can learn from each other by following the same vision: building bridges with medicine.
Disparities in the burden of disease and healthcare provision.

In spite of unprecedented progress in science, technology and medicine marked disparities in the distribution of healthcare resources are apparent.

Low and middle-income countries bear 90% of the world’s disease burden yet account still for only 12% of global health spending; and the situation has not significantly improved over the last decades. The international disparities in healthcare provision comprise the gravest problem of medical ethics but also great challenges of social and political ethics.

Access to critical care is a crucial and life-saving component of healthcare.

Carrying out critical care in rich and developed countries involves a coordinated system of triage, emergency management, and specialized critical care units. This is not affordable for most of the less developed countries because of many factors including limitations in the existing infrastructure, low numbers of trained healthcare workers, lack of pharmaceuticals and disposables.

Above all, this applies especially in paediatric critical care. Global efforts to reduce child mortality have focused on reducing death from communicable diseases with little to no attention on critical care medicine. But, an estimated 15 million children suffer or die annually from treatable or preventable heart diseases in less developed countries.

Lack of awareness, competing health priorities, high costs, and a critical shortage of specialists are the most important reasons why critical illnesses in children are still not addressed adequately in low resourced settings.
The special topic:

**International migration movement: reflections on the causes, challenges, and opportunities.**

**Session chairs:**

Stefan Buchen (Hamburg, DE)
Matthias Angrés (Hamburg, DE)

**Opening and introduction.**

Matthias Angrés (Hamburg / DE)

**Welcome address of the patron.**

Frank Ulrich Montgomery (Berlin, DE)

**From history to presence: causes and impact of human migration.**

Stefan Buchen (Hamburg, DE)

*Throughout history, people have migrated in search of new opportunities, as well as to escape persecution, conflicts, poverty, and natural disasters. And migration has always benefited the world by powering economic growth, reducing inequalities, and connecting diverse societies as well as cultures.*

**The mission of Sea-Eye: People have to be found in order to be rescued.**

Nicole Grimske, Gordon Isler, Jan Ribbeck (Regensburg, DE)

*While migration is becoming a wedge issue that divides the political elite and large parts of the electorate in a rising number of European countries, desperate people, men, women, and children, are continuing to drown in the Mediterranean. In autumn 2015, Sea-Eye was founded as a non-profit civil sea rescue organization. The speakers just returned from a current mission and will report about the daily challenges on board of the "Sea-Eye 2" cruising along the coast of Libya.*

**Africa’s future is Europe’s future: plea for a partnership in fairness and respect.**

Team RobinAid (International)

*Africa is a powerful continent of youth and will progress forward. But it will succeed better and faster if we cooperate with our neighboring continent based on a real partnership: the social and environmental challenges of both continents have to be placed in a global context of the fight against poverty, exploitation, and ecocide. Working for a better common future is an obligation and will open new opportunities.*
Looking beyond the horizon:

“Where you live should not determine whether you live, or whether you die.”
(Bono from U2)

Session chairs:
Charles Mve Mvondo (Shisong, CM)
Matthias Angrés (Hamburg, DE)

Critical Care in Sub-Saharan Africa: the situation of critical care nursing practice in Cameroon.
Daniel Ntogwiachu (Kumbo, CM)

Cameroon belongs to the poorest countries in the world and has immature critical care services compared to countries in the developed world. But the situation is improving. This lecture tells about the needs and the way forward.

State-of-the-art medical services according to international quality standards: 10 years of experience in establishing the first Central African center in cardiology, cardiac surgery, and critical care.
Charles Mve Mvondo (Shisong, CM)

The Shisong Cardiac Centre is part of the TSSF St. Elizabeth’s Catholic General Hospital Complex Shisong placed in the Northwest Province of Cameroon. It was founded in 2009. Now, phase two has started: to increase the capacity significantly and to realize a teaching hospital as a center of reference.

Sepsis in Africa: what we know and what we should know.
Konrad Reinhart (Jena, D)

Sepsis is a leading cause of morbidity and mortality worldwide but there are only limited data available on the epidemiology, management and outcome in the African continent. However, this region is likely to account for a significant part of the global burden of sepsis which has not been extensively recognized yet.

Reducing neonatal mortality in Africa: high efforts are still necessary.
Ahmad Refaat (Cairo, EG)

The first 28 days of life are the most vulnerable time for a child’s survival. Following the implementation of the United Nation’s Millennium Development Goals child mortality declined significantly since 2000. However, Africa has the smallest reduction in child mortality rate and is still loaded with the highest neonatal mortality rate.
Clinical practice I:

**Understanding of monitoring principles, systems, and techniques in paediatric critical care.**

**Session chairs:**
Frank Jochum (Berlin, DE)
Matthias Angrés (Hamburg, DE)

**Monitoring of the hemodynamic and respiratory status: which parameters need to be monitored continuously?**
Taibullah Bandawal (Kabul, AF)

*Continuous monitoring of vital functions and function of life-support devices is essential for critically ill children and has become routine. The evidence supporting these practices is discussed.*

**The relevance of venous oximetry, lactate and acid base as a hemodynamic monitor and markers of cellular perfusion.**
Emad Nasr (Aswan, EG)

*Monitoring of venous saturation, lactate and acid-base has been advocated in paediatric critical care as surrogate markers of cardiac output, oxygen delivery, and cellular perfusion. Target setting is to illustrate the strengths and weaknesses of using these measurements.*

**Stop vampirism: blood testing in managing the critically ill child.**
Frank Jochum (Berlin, DE)

*Blood tests are mandatory to manage the critically ill child. However, frequent blood testing increases risk of iatrogenic anemia, infection, and blood transfusion, especially in infants. But, it’s still daily practice that more blood tests are being ordered than clinically indicated.*

**Point of care ultrasound (PoCUS) in paediatric critical care.**
Michael Sasse (Hanover, DE)

*Point-of-care ultrasound done by the intensivist is a very useful tool. It is not a replacement for comprehensive ultrasound done by the cardiologist or radiologist, but it quickly answers specific clinical questions that narrow differentials and guide clinical therapy by rapid and direct findings. Well trained, PoCUS can be used as a reliable tool in the management of the critically ill child.*
Clinical practice II:

**Anticipation, prevention, recognition, evaluation, and management of post-procedure complications in paediatric cardiac patients.**

**Session chairs:**
- Michael Sasse (Hanover, DE)
- Matthias Angrés (Hamburg, DE)

**Transfusion policies in paediatric cardiac patients: do they need more red blood cell transfusions than other critically ill children?**

Giuseppe Isgrò (Milan, IT)

*Perioperative red blood cell transfusion in paediatric cardiac surgery is commonly used. However, the uncertainty about the threshold hemoglobin level with the best risk/benefits ratio still arises. This lecture summarizes the available evidence regarding anemia management in cardiac children.*

**Loosing the beat: critical cardiac rhythm disturbances in postoperative cardiac children.**

Yasser Sedky (Aswan, EG)

*Arrhythmias following paediatric cardiac surgery are common and can be life-threatening. They may occur intraoperatively or during postoperative care. Early recognition and specific intervention are most important for the outcome.*

**Inflammation vs infection: postoperative fever in paediatric cardiac patients.**

Matthias Angrés (Hamburg, DE)

*Fever in the postoperative period in children undergoing surgery for heart disease is fairly common. Unfortunately, it tends to cause anxiety to the surgeon and often leads to a reflex-like application of antibiotics. An structured approach in the evaluation of fever in the postoperative course is mandatory.*

**Acute kidney injury (AKI) following paediatric cardiac surgery: do we have strategies for prevention?**

Mahmoud Aslan (Aswan, EG)

*Acute kidney injury (AKI) is a common complication in children undergoing cardiac surgery; it is associated with poor short-term outcomes. For prevention, early recognition, and management the intensivist needs to know the definition, staging, risk factors, biomarkers, and strategies in renal support.*
Session 5: February 22, 2019; 13:00 - 15:30 h; Room G3.

Common challenges:

Quality and performance improvement in paediatric critical care.

Session chairs:
Werner Kuckelt (Bremen, DE)
Matthias Angrés (Hamburg, DE)

Continuous learning and quality improvement: nursing in the paediatric cardiac critical care unit at the Aswan Heart Centre.
Mahmoud Elsayed (Aswan, EG)

Performing high nursing quality in a paediatric cardiac critical care unit is a constant challenge, especially in a developing country. Continuous learning as quality improvement is made most explicit when new nursing staff are hired and incorporated into the existing team.

System strategies to improve patient safety and error prevention: learning from high risk industries.
Helge Sachs (Hamburg, DE)

Promoting patient safety is a mandatory obligation for healthcare workers. But to err is human. High risk industries such as commercial aviation have achieved exemplary safety performance. The main reasons are the positive attitudes towards safety and the application of effective formal safety management systems.

The well-kept chaos: handover of paediatric cardiac surgery patients to the critical care unit.
Julia Kempe (Magdeburg, DE)

Transportation and clinical handover from operating room to the critical care unit is one of the most delicate phases in the management of paediatric cardiac patients. Lack in monitoring, loss of concentration, and inaccurate or omitted communication can lead to disaster. To follow a standardized multidisciplinary protocol improves the situation.

Closing of the 4th International Medical Class.

Summary.
Matthias Angrés (Hamburg, DE)

Farewell address.
Werner Kuckelt (Bremen, DE)
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About the Bremen Symposium on Intensive Care + Nursing.

The Bremen Symposium on Intensive Care Medicine + Nursing is jointly organized by the Scientific Association for the Promotion of Clinically Applied Research in Intensive Care Medicine / WIVIM, the Hospital & Critical Care Consulting / HCCM GmbH, and the MESSE BREMEN, M3B GmbH.

About RobinAid Foundation.

RobinAid is a Hamburg based charitable foundation, committed to establishing and supporting paediatric critical care medicine in poor and less developed countries. As a highly specialized medical expert organization we particularly focus on the treatment of congenital and acquired heart disease.

Under the roof of Chaîne de l’Espoir Europe, RobinAid is affiliated with La Chaîne de l’Espoir from France, Bambini Cardiopatici nel Mondo from Italy, De Keten van Hoop from Belgium, Cadeia da Esperança from Portugal, and Chaîne de l’Espoir from Luxembourg. This European organization is a non-profit network of medical experts who have been caring for people in need and sharing knowledge in Asia, Africa, the Middle East, Eastern Europe, and South America for over 20 years.
IT ALWAYS SEEMS IMPOSSIBLE UNTIL
IT’S DONE.

Nelson Mandela