Dear Colleagues

The Society’s annual report is a way of cataloging retrospectively all the activities and achievements of the Society and its Sections and Committees from the time of the last annual meeting. LIVES, up to the date of the next General Assembly. This annual report is proof that despite the massive upheavals and increased professional workloads we have all experienced, due to COVID-19, ESICM has risen to the challenge of this current pandemic.

Although we were unfortunately unable to hold our annual Spring Council meeting and Section meetings in March of this year, and postponed the Spring elections, together we have advanced numerous research projects, studies and trials, published prolifically, developed innovative training, new learning and development modules, delivered the EDIC Part 1 exam in 7 exam-centres across Europe and in India for 318 registered candidates - under the strictest of hygiene rules - and we organised abundant open-access COVID-19 resources and thematic webinars with international contribution and importance.

Furthermore, we are in the midst of the active engagement and delivery of a major pan-EU training programme for healthcare professionals not regularly working in ICUs, to assist and reinforce our intensive care professionals during the next waves.

Since the outbreak of the virus in Europe, the ICM Editorial team has fast-tracked the publication of many COVID-19 related articles in the ICM journal and the Surviving Sepsis Campaign (ESIC) Rapid Guidelines on the Management of Critically Ill Adult Patients with Coronavirus Disease 2019 were published on 20 March 2020 in the ICM journal. The ESICM website continues to host multiple open-access resources and has shared all of this information to the wider public outside the Society.

Since February, 27 different COVID-19 webinars – some thematic, one all-day marathons and one half-marathon – have been organised, with WHO speakers and international experts, including a number of joint webinars with CSCCM, the Global Intensive Care Working Group (for ALIVE) and N&AHP. All these events were recorded and archived for people to watch later on, as a re-play. To give you an example of their global importance and outreach, the COVID-19 Marathon Webinar on 28 March connected 145,000 persons in 160 different countries.

Our contacts with the European institutions have increased rapidly and greatly strengthened, as a result of the pandemic. Earlier this year, the European Commission DG SANTE invited the ESICM President and President-Elect to take part in live EU COVID-19 Clinicians Network Webinar on Intensive Care Medicine and Ethics. The discussions addressed the surge response, clinical aspects, management and the involvement of patients, their families and the personnel.

Although we were unfortunately unable to hold our annual Spring Council meeting and Section meetings in March of this year, and postponed the Spring elections, together we have advanced numerous research projects, studies and trials, published prolifically, developed innovative training, new learning and development modules, delivered the EDIC Part 1 exam in 7 exam-centres across Europe and in India for 318 registered candidates - under the strictest of hygiene rules - and we organised abundant open-access COVID-19 resources and thematic webinars with international contribution and importance.

Furthermore, we are in the midst of the active engagement and delivery of a major pan-EU training programme for healthcare professionals not regularly working in ICUs, to assist and reinforce our intensive care professionals during the next waves.

Since the outbreak of the virus in Europe, the ICM Editorial team has fast-tracked the publication of many COVID-19 related articles in the ICM journal and the Surviving Sepsis Campaign (ESIC) Rapid Guidelines on the Management of Critically Ill Adult Patients with Coronavirus Disease 2019 were published on 20 March 2020 in the ICM journal. The ESICM website continues to host multiple open-access resources and has shared all of this information to the wider public outside the Society.

Since February, 27 different COVID-19 webinars – some thematic, one all-day marathons and one half-marathon – have been organised, with WHO speakers and international experts, including a number of joint webinars with CSCCM, the Global Intensive Care Working Group (for ALIVE) and N&AHP. All these events were recorded and archived for people to watch later on, as a re-play. To give you an example of their global importance and outreach, the COVID-19 Marathon Webinar on 28 March connected 145,000 persons in 160 different countries.

Our contacts with the European institutions have increased rapidly and greatly strengthened, as a result of the pandemic. Earlier this year, the European Commission DG SANTE invited the ESICM President and President-Elect to take part in live EU COVID-19 Clinicians Network Webinar on Intensive Care Medicine and Ethics. The discussions addressed the surge response, clinical aspects, management and the involvement of patients, their families and the personnel.

We were very honoured to be approached by the European Commission this Summer in connection with its C19 SPACE Training Programme for doctors and nurses not regularly working in ICU. This programme is initiated and funded by European Commission, and our role has been to create the curriculum and learning modules and to recruit suitable trainers and trainers across the European Union.

A special ESICM-led task force coordinated the recording of training videos, podcasts and webcasts and the Society’s national societies have supported the project at national level. The European Commission’s target is to provide 10,000 healthcare professionals with online and face-to-face training in 10,000 EU hospitals by the end of 2020, and we are confident that we will achieve this. We would like to thank all those who have been involved in this decisive and far-reaching project.

ESICM endorsed a number of important COVID-19 research projects, including UNITE COVID-19: a one-day point prevalence observational study of the burden of the virus in ICUs across the world, 1,500 cases have been validated. Two endorsed COVID-19 Surveys followed with the McMaster University COVID-19 Survey, SARS-CoV-2 Pandemic and the PPE-SAFE Survey.

As we write this report, COVID-19 has not yet left our hospitals or our communities, but as intensivists, we are more knowledgeable and better prepared. We have learned to adapt, but we need to remain strong and continue to fight the virus with additional resources. The Society acknowledges and appreciates the enormous contributions and sacrifices that you have made this year. Although we will not be able to come together at this year’s annual meeting to commend your efforts and thank you publicly, we believe that the pandemic has brought us even closer professionally. We stand together as a result of what we are all going through, and we should all feel proud of those whose lives have been saved and who have left our ICUs to return to their families.

The following pages and reports written by the Chairs of the different Sections and Committees will help remind us of all that the Society has achieved collectively in the last twelve months, during the period October 2019-December 2020.

We would like to thank all the members of the Society’s Sections, Committees, the Executive Committee and the staff of the Brussels office for their efforts to keep ESICM connected and up to date for the benefit of our 9,000 members worldwide under such difficult and testing times. Our incoming President has been on this journey at my side and our hand-over will be smooth, confident and assured.

Yours sincerely

Jozef Kesecioglu
President

Maurizio Cecconi
President-Elect

"As an organisation representing a unique profession, we have a strong presence and reputation throughout the world”. 
1. Who we are

The European Society of Intensive Care Medicine is an association of individual persons and the voice of intensivists across Europe.

The Society was founded in March 1982 in Geneva, Switzerland and is a non-profit international association. ESICM has over 9,000 members worldwide, spanning 121 countries and comprising a diverse group of highly-trained professionals who provide care in specialised care units and work towards the best outcome possible for seriously ill patients.

Objectives_

ESICM supports and promotes the advancement of knowledge in intensive care medicine, in particular the promotion of the highest standards of multidisciplinary care of critically ill patients and their families through education, research and professional development.

Aims and Missions_

• To promote and coordinate activities in the different fields of intensive care medicine
• To foster research and education in these fields
• To provide recommendations for optimising facilities for intensive care medicine in Europe
• To organise and coordinate international congresses and meetings

Our Pledge_

We are continuing to grow and strengthen and provide our members with more and more opportunities to learn, participate in research programmes and clinical trials and to mobilise.

ESICM elects new leadership_

All officers of the ESICM, regardless of their position, provide their effort and time on a completely voluntary basis. Elections took place in 2019 for the following positions. We welcome all those elected and look forward to working with them to advance the effectiveness of our Society.

• Executive Committee
  EC Ex Officer – Chair of the Division of Professional Development: Frantisek Duska (Czech Republic)
  EC Ex Officer – Chair Editorial & Publishing Committee: Adrian Wong (United Kingdom)
  EC Ex Officer – Chair N&APH Committee: Johannes Möllenhoff (United Kingdom)
  EC Ex Officer – Chair NEXT Committee: Stefan Schaller (Germany)

• Congress Committee
  Chairperson AKI: Marlies Ostermann (United Kingdom)
  Chairperson ETH: Lennie Derde (The Netherlands)
  Chairperson N&APH: Charlotte Van Den Berg (The Netherlands)
  Chairperson TEM: Claudia Sandroni (Italy)

• National Representatives – Countries
  National Representative Austria: Thomas Hamp
  National Representative Czech Republic: Jan Benes
  National Representative Denmark: Nicolai Rosenkrantz Segelcke Haase
  National Representative Finland: Matti Reiniikainen
  National Representative France: Antoine Vieillard-Baron
  National Representative Ireland: Colman O’Laughlin
  National Representative Italy: Katia Donadello
  National Representative The Netherlands: Rik Gerritsen
  National Representative Poland: Mariusz Piechota
  National Representative Romania: Ioana Grintescu
  National Representative Russian Federation: Aleksei Shchegolev
  National Representative Sweden: Michelle Chew
  National Representative Switzerland: Matthias Hilty
  National Representative Country with less than 25 members: Dragana Loncar Stojiljkovic

• Research Committee
  Deputy AKI: Antoine Schneider (Switzerland)
  Deputy ETH: Diederik Van Dijk (The Netherlands)
  Deputy HSRO: Arzu Topeli Iskit (Turkey)
  Deputy SIIE: Marc Leone (France)
  Deputy TEM: Sophie Hamada (France)

• National Representatives – Regions
  International Rep North America: Nathan Nielsen (USA)
  International Rep South America: David Guerra (Brazil)
  International Rep Europe: Pascale Gruber (Switzerland)
  International Rep Asia: Katsuhiko Sato (Japan)
  International Rep Africa: Paul Lindeque (South Africa)

• Examinations Committee
  Chair: Lia Heit (Austria)
  Deputy Chair: Sven Balinus (Switzerland)
  Deputy Chair: Rene Schmidt (Germany)
  Deputy Chair: Petr Waidal (Czech Republic)

• Clinical Training Committee
  Chair: Lennie Derde (The Netherlands)
  Deputy Chair: Hynek Riha (Czech Republic)
  Deputy Chair: Charlotte Van Den Berg (The Netherlands)

• N&APH Committee Members
  Marta Borkowska (Belgium)
  Carole Boulanger (United Kingdom)
  Anne-Sophie Debue (France)
  Nikolaos Elstathios (United Kingdom)
  Katerina Iliopoulou (United Kingdom)
  Margo Van Me (The Netherlands)

• NEXT Committee
  Chair: Burcin Halaci (Turkey)
  George Karis (Greece)
  Maria Martinez Martinez (Spain)
  Mariana Pellegrini (Sweden)
  Laura Preis (Germany)

• EBICM
  Pascale Gruber (United Kingdom)
  Hans Ulrich Rothen (Switzerland)
We ensure that all members and sub-specialties are represented appropriately and that our national societies are given support and adequate say in the running of the Society. New societies keep joining and we have entered into partnerships to co-host joint events with several of our national members.

National Societies:
- AAI: Association of Anesthesiologists-Intensivists (Russia)
- ACCMG: Association of Critical Care and Catastrophe Medicine of Georgia
- AMCI: Asociación Colombiana de Medicina Crítica y Cuidado Intensivo
- ANZICS: Australian and New Zealand Intensive Care Society
- APAMCTI: Asociación Panameña de Medicina Crítica y Terapia Intensiva
- BSA: Bulgarian Society of Anaesthesiologists
- CCCS: Canadian Critical Care Society
- COCECATI: Consorcio Centroamericano y del Caribe de Terapia Intensiva
- CSARIM: Croatian Society of Anaesthesiology, Reanimation & Intensive Care
- CSGC: Chinese Society of Critical Care Medicine
- CSICM: Cyprus Society of Intensive Care Medicine
- CSIBM: Czech Society of Intensive Care Medicine
- CroSEMIC: Croatian Society of Emergency Medicine and Medical Intensive Care of Croatian Medical Association
- DASAIM: Danish Society of Anaesthesiology & Intensive Care Medicine
- DAガイ: Deutsche Gesellschaft für Anästhesiologie und Intensivmedizin
- DGIM: Deutsche Gesellschaft für Innere Medizin
- DIVI: Deutsche Interdisziplinäre Vereinigung für Intensiv- und Notfallmedizin
- DSIT: Danish Society of Intensive Care Therapy
- ECCC: Egyptian College of Critical Care Physicians
- EIC: Emirates Intensive Care Society
- EASA: Estonian Society of Anaesthesiologists
- ESCCE: Estonian Society of Critical Care and Emergency Medicine
- FAR: Russian Federation of Anaesthesiologists and Reanimatologists
- FSIC: Finnish Society of Intensive Care
- GSACCM: Georgian Society of Anaesthesiology & Critical Care Medicine
- HDIM: Creation Society of Intensive Care Medicine
- HCIC: Hellinic Society of Intensive Care
- ICS: Intensive Care Society
- ICIS: Intensive Care Society of Ireland
- ISAICM: Icelandic Society of Anaesthesiology & Intensive Care Medicine
- ISCCM: Indian Society of Critical Care Medicine
- ISCCM: Israeli Society of Critical Care Medicine
- JISR: Japanese Society of Intensive Care Medicine
- KSCCM: Korean Society of Critical Care Medicine
- LCCS: Lebanese Critical Care Society
- LASIC: Lithuanian Society of Anaesthesiology & Intensive Care
- MAITT: Hungarian Society of Anaesthesiology & Intensive Care Therapy
- MSA: Macedonian Society of Anesthesiology
- NAV: Norwegian Society of Anaesthesiology
- NCS: Neurocritical Care Society
- NVA: Nederlandse Vereniging voor Anesthesiologie
- NYIC: Nederlandse Vereniging voor Intensieve Zorg
- OEGARI: Österreichischen Gesellschaft für Anästhesiologie, Reanimation und Intensivmedizin
- OEGIA: Austrian Society of Medical and General Intensive Care Medicine
- PTAII: Polish Society of Anaesthésie & Intensive Therapy
- SAAI: Saudi Arabian Association of Anaesthesiologists & Intensivists
- SARRM: Society of Anesthesia & Reanimatology of the Republic of Moldova
- SATI: Sociedad Argentina de Terapia Intensiva
- SCS: The Saudi Critical Care Society
- SCSCCM: Society of Emergency & Critical Care Medicine, Taiwan, R.O.C.
- SEDAR: Sociedad Española de Anestesiologia, Reanimacion y Terapeutica del Dolor
- SEMICYUC: Sociedad Española de Medicina Intensiva, Crítica y Unidades Coronarias
- SFAI: Swedish Society of Anaesthesia & Intensive Care Medicine
- SFAR: Société Française d’Anesthésie et de Réanimation
- SGI-SSICM: Swiss Society of Intensive Care Medicine
- SIFA: Società Italiana di Anestesia Analgesia Rianimazione e Terapia Intensiva
- Sicm: Society of Intensive Care Medicine (Singapore)
- SICS: Scottish Intensive Care Society
- SIZ: Belgian Society of Intensive Care Medicine
- SLAR: Société Libyenne d’Anesthésie et de Réanimation
- SOCHIMI: Sociedade Chilena de Medicina Intensiva
- SODCIM: Catalans Intensive Care Association
- SOPEMI: Sociedad Peruana de Medicina Intensiva
- SPC: Sociedade Portuguesa Cuidados Intensivos
- SRLF: Société de Rénalisation de Langue Francaise
- SSICM: Serbian Society of Intensive Care Medicine
- SSIM: Slovenian Society of Intensive Medicine
- TARD: Turkish Society of Anaesthesiology and Reanimation
- TSCCM: Taiwan Society of Critical Care Medicine
- TSSICM: Turkish Society of Intensive Care Medicine
- VMACCEMT: Vietnam Association of Emergency Critical Care Medicine and Medical Toxicology
- WICS: The Welsh Intensive Care Society
- COCECATI: Catalans Intensive Care Association
- WICS: Welsh Intensive Care Society
- SVNACCEMT: Swiss Intensive Care Society

Council:
The Council is the governing body and assigns the Executive Committee, comprising the President, President-Elect, Secretary General and Treasurer, with the daily management of the organisation. The operating body is formed by the different committees and sections that enable interested volunteers to play an active role in shaping current and future ESICM initiatives.

Each section is assigned a set of responsibilities and tasks associated with the different activities of the ESICM and the reports from the Chairpersons of the different sections can be found in Chapters III & IV.
When I produced our report just over 12 months ago I could never have imagined what events were to unfold over the next few months.

After attending a meeting in early February in the USA I vividly remember waiting for my flight and noticing a few individuals wearing face coverings in the airport. Not that unusual, but more than I would normally see. Within days of my return we had the dreadful news from our colleagues in Lombardy together with dire warnings as to what was coming.

As we know these were not empty threats and the pandemic has thrust our specialty into the limelight in a way we never expected. However, I am delighted to report that your society has been in the vanguard of the European response to the C-19 outbreak and despite all the logistical problems it has maintained “business as usual” as far as we can in these unusual times. As many of you will be aware it is our commitment to research and education which has continued unabated.

Our UNITE Covid-19 project led admirably by Jan De Waele has provided so much needed direction in this important aspect of training. The publication of recommendations for POCUS training published this year and the launch of a number of webinars have helped us keep our members up to date with the latest developments in this area. As secretary I have been exercised by the need for transparency regarding equality and diversity within our membership. As we know these were not empty threats and the pandemic has thrust our specialty into the limelight in a way we never expected. However, I am delighted to report that your society has been in the vanguard of the European response to the C-19 outbreak and despite all the logistical problems it has maintained “business as usual” as far as we can in these unusual times. As many of you will be aware it is our commitment to research and education which has continued unabated.

Our UNITE Covid-19 project led admirably by Jan De Waele has provided so much needed direction in this important aspect of training. The publication of recommendations for POCUS training published this year and the launch of a number of webinars have helped us keep our members up to date with the latest developments in this area. As secretary I have been exercised by the need for transparency regarding equality and diversity within our membership. As we know these were not empty threats and the pandemic has thrust our specialty into the limelight in a way we never expected. However, I am delighted to report that your society has been in the vanguard of the European response to the C-19 outbreak and despite all the logistical problems it has maintained “business as usual” as far as we can in these unusual times. As many of you will be aware it is our commitment to research and education which has continued unabated.

One of our more significant roles is the organisation and running of our annual congress. Understandably this has proven a significant challenge but we await our first virtual congress in December not from the beautiful city of Madrid but from our offices! Although we did try to maintain our meeting in 3 dimensions when faced with pictures of our proposed conference site being used as a temporary clinical area we all could guess what would happen. However, with such adversity brings new challenges and so I for one am looking forward to our congress. We all wonder what the future will bring but hopefully in 2021 we will again meet in person.

As secretary I have been exercised by the need for transparency regarding equality and diversity within our number. Following on from our published aims as a society in Intensive Care Medicine we continue to address matters where necessary and maintain our workgroup to ensure we are proactive rather than paying lip-service to this important issue. I am delighted to tell you that at present we have some 8913 members (just 8 less than a year ago which is staggering given the worldwide events) of which 32% are female reflected in the number of female speakers at this years congress. 75% of our members are based in Europe with 35% of our members being between the ages of 35 to 44. Rest assured that we will be supporting this issue going forward as a society.

Despite the logistical challenges facing the office our CEO has kept all the staff happy but inevitably some have moved to pastures new. Sherihan Bensemmane who I know many of you know from her time spent as Guy’s right hand woman in the research office has left to pursue her career in public health and we wish her all the very best. And finally, with some sadness, I have to tell you that Celia Mccllements is moving to pastures new. Celia was one of the first staff members I got to know when joining the council has has helped me, and many others, in navigating the ESICM waters. I know she will be sorely missed by us all and we wish her the greatest of success in her new venture.
3. Membership
A constantly growing network of members

Our 9,000 global community of intensivists and allied health practitioners all benefit from the numerous advantages ESICM membership offers:

- Reduced fees for ESICM, workshops and the EDIC and EDEC diplomas
- Discounts for participation at our annual congress
- Free access to eLives webcasts (lectures from the scientific sessions held during ESICM congresses and meetings)
- Annual subscription to the Society’s, ICM journal, the first journal publishing only critical care (with an Impact Factor of 18.967)
- $500 discount on article processing charges for our second, open-access journal, ICMx (experimental research)
- The possibility to apply for Research grants and awards
- Regular live, interactive webinars with UEMS accreditation

As well as these very practical benefits, members can also get involved by joining specialist groups and sections, fellowships and mentoring, and strengthen the network of intensivists in Europe and beyond.

Lastly, if your national society is not yet affiliated to our Society, do not hesitate to contact our Membership Department at: members@esicm.org

Here are 13 other good reasons to become an ESICM member:

1. Discounts for congress participation
2. Free access to e-LIVES Webcasts
3. Annual subscription to ICM journal
4. $500€ discount on article processing charges for ICMx
5. Apply for research grants
6. Free access to e-Learning Academy and e-Modules (Former PACT Programme)
7. Reduced fees for ESICM Master Classes
8. Reduced fees for EDIC and EDEC
9. Participation in ESICM’s scientific activities
10. Full access to our interactive website content
11. Dual membership
12. Free webinars led by top experts
For those who enjoy figures, LIVES 2019 was the Society's 32nd annual congress with 5,655 attendees, a faculty of 297 experts (136 for the Master Classes and 84 for the industry sessions), 300 sessions (scientific and industry), 1394 submitted abstracts (1264 accepted), 17 major sponsors and 84 exhibitors.

The programme included 15 interactive debates, 11 Master Classes, 22 sessions in the NEXT Lounge, attended by 1268 "Nexters", the Tech Lounge and Simulation Centre – with five dedicated areas for ECMO, Bronchoscopy, Mechanical Ventilation, TEE/TOE, and a Neuro Lab, Poster Corners and the Arena, where the Unplugged and industry-sponsored sessions took place.

In February 2020 we held LIVES Physiology in Prague. The overarching objective of this conference was to emphasise the importance and understanding of physiology when solving daily clinical problems. In the magical setting of Prague, leading experts from around the world reviewed key physiology concepts – from basic level to the depth required to manage complex and real cases of critically ill patients.

The conference included frontal lectures, real-case-based participative meetings in small groups and interactive learning with simulation. This event was of value to practising intensive care clinicians, who wanted to refresh and deepen their understanding of physiology and more than 300 participants attended this was a very successful first edition.

EuroAsia 2020 took place on 12-13 September 2020 in Taipei as a hybrid physical and online conference during a COVID-19 pandemic era.

Almost 3,300 online participants from 88 countries and 1,300 on-site participants attended the two-day conference. The extensive scientific programme – developed between ESICM, TSCCM (Taiwan Society of Critical Care Medicine), TSECCM (Taiwan Society of Emergency and Critical Care Medicine), and our Asian Society partners - comprised a broad range of key lectures and interactive courses.

90 abstracts were presented, all stimulating ideas and data from both European and Asian perspectives. 31 of these were presented as hybrid online and on-site oral presentations, and 59 were video presentations, broadcast from the official website of EuroAsia 2020.

With the support and sponsorship of our industry partners, the conference featured demonstrations of many of the latest products and advanced services available to intensive care professionals.

ESICM, TSCCM, and TSECCM would like to thank all the delegates, faculty, national societies throughout Asia, and our industry partners for playing an essential part in putting together this unforgettable, world-class event. Together we made EuroAsia 2020 a wonderful memory.

Finally, LIVES 2020 will be our first entirely virtual and digital event, and as diverse and stimulating as the face-to-face congress.

We have prepared an outstanding programme of exceptional science that is both interactive, innovative and informative, while connecting our multidisciplinary network of physicians, researchers, nurses, and allied health professionals across the globe, despite the challenging times.
1. ESICM Annual Congress and LIVES Forum

- 5655 delegates
- Abstracts submitted: 1394
- Abstracts presented: 1264
- Abstracts rejected: 9%
- Abstracts Oral Pres: 90
- Abstract Poster Pres: 1070
- Abstracts Face-to-face Pres: 104
- NEXT Lounge Sessions: 22
- Tech Lounge: 19 sessions
- Arena: 17 sessions
- Simulation Centre: 4 areas
- 1 Neuro Lab
- 11 Master Classes
- EDEC Diploma
- EDIC Part 2
- Session Rooms 9
- Poster Corners 9
- Thematic sessions 60
- Clinical sessions 20
- ESICM speakers 297
- Industry speakers 84
- Major Sponsor 17
- Exhibiting companies 84
- Industry sessions: 22
- SQM: 1732

What our delegates liked best at LIVES 2019:

- Really terrific congress, one of the two best ICU meetings in the world.
- Friendly atmosphere in spite of the enormous number of presentations and visitors.
- Thanks to all the organisers.
- High quality programme and speakers and excellent overall organisation.
- Excellent congress, well organised. A lot of sections, good info, up to date lectures.
- Congratulations to ESICM
After the 32nd ESICM Annual Congress "LIVES", the last three months of 2019 were quite rich with new project and survey endorsement proposals and an almost 40% change in the Research Committee membership, with 7 new members joining after the General assembly held on Tuesday October 1st, 2019. Not surprisingly, since February 2020, the ESICM Research activities have been impacted like all other ESICM domains by the SARS-COV2 outbreak. This is reflected in the switch to online meetings and to research topics focusing on COVID19.

COMMITTEE AFFAIRS

The elections that took place in May 2019 were very important for the Research Committee: It was a crucial time for the different mandates: Five Section Deputies were replaced: AKI, HSRO, ETH, SIS, TEM. The Committee also welcomed Paul Elbers as Deputy of the newly-created Data Science Section. The October 2020 elections have also seen four Section deputies replaced for the ARF, CD, MEN and POIC Sections. Due to COVID-19, these four new deputies will start their mandates officially at the General Assembly on Tuesday 8 December 2020.

BUSINESS UNITS

i) Education
Within the NEXT Committee, all the Section deputies have been requested to propose names for their Mentoring Program. The further development of an educational course for researchers (as a successor for the Research Pre-congress course) has been halted, due to COVID-19.

ii) Awards
All the deadlines had to be re-shuffled. The number of applications remained at a high level, with 134 short applications.

iii) Patient and Family Engagement
This unit is reflecting on the need to have more awareness among patients and families about what research is and why it is important, but also why involving patient representatives in large projects is necessary, and why patient-centred outcomes are increasingly used.

iv) Surveys & projects
Several surveys originating from the Sections and independent groups were reviewed, and a total of four surveys were endorsed, topics included COVID-19 and education. Several project endorsement requests were received and reviewed. A number of epidemiological projects on COVID19 were turned down to prioritise the ESICM study UniteCOVID19. Details are below.

RESEARCH AWARDS

The 2020 campaign was completely re-organised to be able to cope with the drop in the number of applications and with the lack of availability of reviewers. However, we managed to postpone all the deadlines, and this has helped a great deal. 134 short applications were submitted compared to 219 in 2019. Eventually, we retained 63 full applications (compared to 67 last year).

It was the second time that the ESICM Research and Industry Awards process was divided into three steps: pre-selection, the external assessors’ review and the jury meeting.

The jury (Research Committee members with potential external invited members) met in two sessions - pre-selection and jury meetings. Pre-selected submitted projects that had passed the scientific quality, methodology and budget reviews were sent to external assessors. Assessors were volunteers who expressed their interest in joining our pool of reviewers to help us to assess projects and are able to express their interest at any time using the link https://www.surveymonkey.com/r/CallForReviewers

This link is open all year long. Assessors were selected according to specific criteria, among others academic and/or clinical experience, h-index, grant application experience and topic of expertise.

SURVEYS AND PROJECT ENDORSEMENT

During the October 2019- October 2020 period, seven survey endorsement applications were processed. One application was rejected: CritIHC, PPE-SAFE, Sur-CoVID and the survey from McMaster were endorsed. Ten project endorsement applications were received, three of which were refused: ERUPT, STROKE-ICU, InPUT, VENTIBRAIN, Toxie-Europe, CDVIP and PRONELIFE were endorsed.
EU-FUNDED PROJECTS

The INACTIVE project by the N&HHP Committee has successfully closed, with the final report and project results uploaded onto the Erasmus+ Project Results Platform (EPRR). Subsequently, a qualitative assessment and review of the project results has been undertaken in parallel. The final report will be available on the ESICM website when it is finally approved by the EPRP.

The D2ICE-Digital Diagnostics for the Intensive Care Environment project application was submitted in May 2020 to the Horizon2020 Research and Innovation Actions plan H2020-SC1-2020-Single-Stage-RTD. ESICM was included among the 18 other partners and was to lead the Work Package 15 on Communication, raising awareness and clustering events. The total amount requested for D2ICE was €13,498,078.00, of which €602,050 was requested for ESICM for a duration of four years.

Despite great deal of effort, the European Commission rejected the whole proposal on 23 October 2020.

TRIALS UPDATE

1. ESICM decided to launch its own COVID study called “ESICM UNITE-COVID”. This is an observational, multi-centre, international point prevalence study that aims to discover more about the incidence of specific patterns, such as respiratory phenotypes, AKI, infectious complications, thromboembolic events (venous and arterial), neurological complications and cardiac complications in ICU COVID patients. The eCRF platform opened on 3 July 2020 and is set to close end of October/safety November 2020. More than 4,000 cases have already been validated. 446 sites were registered.

2. DECUBICUS: A Multicenter International One-Day Prevalence Study on Pressure ulcers in Intensive Care Units. The objective is to provide an up-to-date, international “global” picture of the extent and patterns of pressure ulcers in ICUs. It is the first multicenter study to be led by ESICM Trials Group. The primary paper is published on 9 October 2020 in open access in JCM https://link.springer.com/article/10.1007/s00134-020-06234-9

3 PREVAKI: Biomarker Guided Implementation of the KDIGO Guidelines to reduce the occurrence of AKI in patients after cardiac surgery. A selection of ICUs in Europe is participating. This project received the ESICM Trials Group Award 2017. The recruitment is closed and the data cleaning and analysis are ongoing.

4. VITALIZE: Effect of high-dose vitamin D3 on 28-day mortality in critically ill patients with severe vitamin D deficiency. The recruitment of patients within a selection of European sites started in August 2017. The study is proceeding well and we now have >20 active centres in Austria and Belgium and, as of October 2020, have included 536 patients. UK and Germany have confirmation of funding, but it will still take a while before they will become active.

5. WEAN SAFE: Worldwide Assessment of Separation of pArents From ventilatory assistance is a multi-centre, prospective, observational, 4-week inception cohort study, initiated by the ESICM Acute Respiratory Failure (ARF) Section. The purpose of this study is to describe, in a large population of ICU patients, the burden, management and spectrum of approaches to weaning from ventilation, in patients that require invasive mechanical ventilation for any reason, for a time period of at least 24 hours. To date, data from approximately 10,000 cases from all over the world has already been validated in the eCRF platform. Data Cleaning is ongoing.

6. TRAIN: Transfusion strategies in Acute brain Injury patients: it is a prospective multicenter interventional study that aims to assess the impact of two different strategies to administer blood transfusions in a large cohort of critically ill patients with a primary brain injury. Registration is open to sites which have at least 50 patients with acute brain injury admitted per year. During the first months, more than 400 patients have been screened in the active centers; approximately 600 patients have eventually been randomised. An interim report shall be drafted for end of 2020.

7. ICU-CONSERVATIVE 02: The purpose of the present study is to assess whether, in a wide population of mechanically ventilated critically ill patients, the strict maintenance of a state of normo-perimetry does not have any benefit in terms of ICU mortality, incidence of organ failure and new outbreaks of infections if compared to the application of more liberal strategies of oxygen administration. The eCRF platform is open and patient data entry has started since December 2019 for a selection of ICU from Italy, France, United Kingdom and Spain.

8. SYNAPSE-ICU: An international prospective observational study on INTRacranial Pressure in intensive care (ICU). The objectives of the study are to explore ICP monitoring variation in practice, in order to prioritise uncertainties in the clinical management of critical care patients with acute brain injury and support further collaborative hypotheses-based prospective studies. The eCRF platform has closed. Data analysis is ongoing. 41 countries in the world included 2,418 patients.

9. EUROACTB2: Epidemiology and Determinants of Outcomes of Hospitals Acquired Blood Stream Infections in the Intensive Care is a prospective observational multinational, multicentre cohort study. Almost 700 centres have registered. The eCRF platform opened in September 2019 and data entry is ongoing. More than 2,000 cases have already been validated.

10. COBALTATION: A multicentre cluster randomised trial of 14 ICU Departments from 14 academic referral hospitals located in Spain. The participating ICUs are general medical and surgical ICUs accredited to train three new residents in intensive care medicine per year. Additionally, the study sites have signed an agreement by their research infrastructures to ensure geographical diversity and proximity to simulation centres. The Cobaltation e-platform was set up in 2019 and basic simulation-based OSCEs have taken place.

11. SANDMAN: The SArDMan study Sedation, Analgesia and Delirium Management is an observational study that will assess sedation, analgesia, and delirium strategies used in ICUs around the world. The study is endorsed by the ESICM Neuro-Intensive Care (NIC) and Peri-Operative Intensive Care (POIC) Sections. Registrations of centres has closed. The eCRF is finalised and its opening is delayed due to COVID-19.

SYSTEMATIC REVIEW GROUP (SRG)

The plan is to resume the SRG as such and to set up an ESICM group that will work on a larger endorserment/infrastructure platform that shall include guidelines, systematic reviews, consensus statements and manuscript endorsement. This is led by the Chair of the Communications Committee. Due to COVID-19, this has been postponed until further notice.

The SRG selected the following topics in the 2020. Following the last call of September 2019, six proposals were received from the Sections. The AKI Section proposal “Association between normo-perimetry and the incidence of hospital acquired infection in critically ill adult patients” was selected. Work has been delayed due to COVID-19.

SURVIVING SEPSIS CAMPAIGN: The Surviving Sepsis Campaign (SSC) is a joint initiative between the ESICM and SCCM. The revision is ongoing. The latest recommendations have been published in 2016 (ref: JAMA. 2016;315(8):813-817). Visit www.sccm.org/sepsisredefined for a complete list of resources and articles.

PUBLIC AFFAIRS

ESICM has joined forces with the European Hematology Association (EHA) and other medical societies and patient advocates across disciplines in a coalition calling for urgent action to make clinical trials less bureaucratic and more patient-centered, efficient and cheaper. ESICM has co-signed the statement on reducing bureaucracy in clinical trials published on 25 September 2020 on the EHA website https://ehaweb.org/assets/Coalition-statement-Reducing-bureaucracy-in-clinical-trials.pdf. Jan De Waele will follow up this topic and others originating within the Biomedical Alliance Task Force on Clinical Trials. The proposed roadmap from February 2021 onwards will aim to discuss and agree with key stakeholders on concrete, pragmatic and feasible solutions to tackle excessive bureaucracy in CTs, as the basis for a future consensus document.

The Patient Safety Policy Summit took place on 3 March 2020 in the European Parliament. The European Consensus Statement on the Multi-disciplinary and patient-centred approaches to perioperative patient safety has been agreed and signed by The European Society of Anaesthesiology, the European Association of Hospital Pharmacists, the European Board of College of Obstetrics and Gynaecology, the European Patients’ Forum, the European Society of Intensive Care Medicine, the European Society of Vascular Surgery, the European Surgical Association, and the International Federation of Nurse Anaesthetists. The statement is published on the ESA website: https://www.esa2020.org/patient-safety-1

ESICM is a full member of the Biomedical Alliance and part of their Biomedical Alliance Strategic Action Plan and their cluster tasks for core and committed Model of Innovative Medical Research, H2020, Education, Policy Officers group. More at https://biomedeurope.org/

We are also a member of the European Sepsis Alliance. They had their 3rd Annual Meeting entirely online on 23 March 2020. https://www.europeansepsisalliance.org/

Visit www.sccm.org/sepsisredefined for a complete list of resources and articles.

Jan De Waele Chair, Research Committee
More on www.esicm.org/research/
Acute Kidney Injury (AKI)

At the annual congress, LIVES 2019, Marlies Ostermann and Antoine Schneider started their three-year term as Chair and Deputy Chair of the AKI Section respectively. The members thanked the outgoing Chair, Eric Hoste, for his significant contributions to the success of the Section under his leadership.

The Section continues to grow with an increasing number of new members from different countries. Education and research remain the key areas of activity and collaboration. In 2019/2020, the highlights were:

SECTION MEETINGS
The Section held two meetings: one during LIVES 2019 and a virtual meeting in October 2020. Both were very well attended.

MASTER CLASS IN RRT
which is traditionally held during the annual ESICM meeting. A two-day hands-on RRT Master Class was scheduled to take place in the ESICM head office in Brussels in May 2020. Due to the Coronavirus pandemic, a decision was made to change this to a two-day virtual Master Class. With fantastic support from the ESICM team and a very enthusiastic faculty consisting of Section members, the course was held on 29th/30th October 2020. It was fully booked and had participants from 26 different countries. Initial feedback from the participants and the faculty was very positive.

E-LEARNING ACTIVITIES
The e-learning modules were revamped under the leadership of Mat Schetz and Marjel Van Dam. Several Section members contributed to the development of the new ESICM C19_SPACE Training programme.

RESEARCH

• PrevAKI II
This randomized controlled study was supported by an ESICM trials award in 2016. The study has been completed and the manuscript has been submitted for publication.

• REVERSE AKI
This randomized controlled feasibility study investigating the role of liberal versus restrictive fluid management in AKI was developed following the Spring 2017 AKI Section meeting. Patient recruitment has now been completed and the analysis has started. Submission for publication is expected in early 2021.

• FOLLOW-UP FROM AKI ROUND TABLE
During LIVES 2018, the group held a one-day AKI Round Table and identified 9 key research projects, including three systematic reviews, two observational studies and two interventional trials. The outcome of the meeting was published in ICM Experimental. Since then, relevant working groups have been identified and work has begun to prepare these projects.

In 2020, the team was successful at securing support from the ESICM Systematic Reviews Group for one of the planned meta-analysis “Association between mean arterial pressure and acute kidney injury in critically ill adult patients”.

JOURNAL CLUB
The Section’s journal club has a new lead Eric Hoste. Together with members of the section, new relevant journal articles are identified, reviewed and posted on the website. We would like to take this opportunity to welcome all friends and colleagues who have recently joined the group and to thank the team in the ESICM head office and all our members for their contributions and support of the Section.

ARF Section
The Acute Respiratory Failure (ARF) Section is one of the largest of the ESICM Sections, with more than 1,000 voting members. The ARF Section members are actively engaged in research and educational activities proposed by the Society and by the Section itself. The Section held two meetings during the LIVES 2019 congress in Berlin. These meetings were very successful and had an active attendance and participation of numerous members.

Shortly after LIVES 2019, the ARF section organised and delivered an extremely successful Advanced Bedside Monitoring Master Class in Acute Respiratory Failure (November 2019), which was hosted in the ESICM Brussels Training Centre.

Early in 2020, the COVID-19 pandemic forced us to cancel our Spring meeting, as lockdowns and extreme infection prevention measures were enforced in many Countries worldwide.

In September 2020, we held our Mechanical Ventilation Master Class and, for the first time, this was fully virtual! Despite the organisational challenges, the course was fully booked and was a resounding triumph.

As usual, the ARF Section made substantial contributions to the drafting of the programme for the annual ESICM congress, LIVES. This is only possible due to the active input provided by the Section’s members. Under the present circumstances, LIVES 2020 will be fully virtual. We are certain that, despite the limitations, LIVES 2020 will be a great success.

The Section has closely cooperated with the Neuro-Intensive Care (NIC) Section to produce a consensus document on Mechanical Ventilation in Patients with Acute Brain Injury. This consensus has been endorsed by the European Society of Intensive Care Medicine Executive Committee and by the Board of Directors of the Neurocritical Care Society, and the manuscript has been accepted for publication in Intensive Care Medicine. The Advanced Bedside Monitoring Course in Acute Respiratory Failure was co-organised by the ESICM office and the ARF section in November 2019. This year, two virtual online meetings (in April and October) were organised to facilitate the presentation and discussion of cutting-edge clinical research in the field of applied respiratory physiology. These meetings were very successful, both in terms of attendance and the quality of research.

We have recently published a paper on Lung- and Diaphragm-Protection Ventilation in the Am J Respir Crit Care Med (PMID: 32516052). Members of the section have also been active regarding the clinical applications of high-flow nasal cannula in patients with acute respiratory failure: several meta-analysis have been published (Intensive Care Medicine, Critical Care Medicine, Chest), and finally the paper ‘The Role for High Flow Nasal Cannula as a Respiratory Support Strategy: A Clinical Practice Guideline’, endorsed by the ESICM, will be published in Intensive Care Medicine very soon.

Last but not least, we welcome the recently elected Deputy Chair of the Section Dr. Lise Piquiuloud (Lausanne, Switzerland) and thank wholeheartedly Luigi Camporota for his work as Deputy Chair during the past three years.

Jordi Mancebo Luigi Camporota
Chair of the ARF Section Deputy of the ARF Section

ESICM ANNUAL REPORT 2019-2020

Activities of the ESICM: Division Of Scientific Affairs

R E V E R S E AKI
and the analysis has started. Submission for publication is expected in early 2021.

The ARF Section makes significant contributions to the success of the Section under his leadership.

The Section continues to grow with an increasing number of new members from different countries. Education and research remain the key areas of activity and collaboration. In 2019/2020, the highlights were:

2021.

• PrevAKI II
This randomized controlled study was supported by an ESICM trials award in 2016. The study has been completed and the manuscript has been submitted for publication.

• REVERSE AKI
This randomized controlled feasibility study investigating the role of liberal versus restrictive fluid management in AKI was developed following the Spring 2017 AKI Section meeting. Patient recruitment has now been completed and the analysis has started. Submission for publication is expected in early 2021.

JOURNAL CLUB
The Section’s journal club has a new lead Eric Hoste. Together with members of the section, new relevant journal articles are identified, reviewed and posted on the website. We would like to take this opportunity to welcome all friends and colleagues who have recently joined the group and to thank the team in the ESICM head office and all our members for their contributions and support of the Section.

ARF Section
The Acute Respiratory Failure (ARF) Section is one of the largest of the ESICM Sections, with more than 1,000 voting members. The ARF Section members are actively engaged in research and educational activities proposed by the Society and by the Section itself. The Section held two meetings during the LIVES 2019 congress in Berlin. These meetings were very successful and had an active attendance and participation of numerous members.

Shortly after LIVES 2019, the ARF section organised and delivered an extremely successful Advanced Bedside Monitoring Master Class in Acute Respiratory Failure (November 2019), which was hosted in the ESICM Brussels Training Centre.

Early in 2020, the COVID-19 pandemic forced us to cancel our Spring meeting, as lockdowns and extreme infection prevention measures were enforced in many Countries worldwide.

In September 2020, we held our Mechanical Ventilation Master Class and, for the first time, this was fully virtual! Despite the organisational challenges, the course was fully booked and was a resounding triumph.

As usual, the ARF Section made substantial contributions to the drafting of the programme for the annual ESICM congress, LIVES. This is only possible due to the active input provided by the Section’s members. Under the present circumstances, LIVES 2020 will be fully virtual. We are certain that, despite the limitations, LIVES 2020 will be a great success.

The Section has closely cooperated with the Neuro-Intensive Care (NIC) Section to produce a consensus document on Mechanical Ventilation in Patients with Acute Brain Injury. This consensus has been endorsed by the European Society of Intensive Care Medicine Executive Committee and by the Board of Directors of the Neurocritical Care Society, and the manuscript has been accepted for publication in Intensive Care Medicine. The Advanced Bedside Monitoring Course in Acute Respiratory Failure was co-organised by the ESICM office and the ARF section in November 2019. This year, two virtual online meetings (in April and October) were organised to facilitate the presentation and discussion of cutting-edge clinical research in the field of applied respiratory physiology. These meetings were very successful, both in terms of attendance and the quality of research.

We have recently published a paper on Lung- and Diaphragm-Protection Ventilation in the Am J Respir Crit Care Med (PMID: 32516052). Members of the section have also been active regarding the clinical applications of high-flow nasal cannula in patients with acute respiratory failure: several meta-analysis have been published (Intensive Care Medicine, Critical Care Medicine, Chest), and finally the paper ‘The Role for High Flow Nasal Cannula as a Respiratory Support Strategy: A Clinical Practice Guideline’, endorsed by the ESICM, will be published in Intensive Care Medicine very soon.

Last but not least, we welcome the recently elected Deputy Chair of the Section Dr. Lise Piquiuloud (Lausanne, Switzerland) and thank wholeheartedly Luigi Camporota for his work as Deputy Chair during the past three years.

Jordi Mancebo Luigi Camporota
Chair of the ARF Section Deputy of the ARF Section
ESICM ANNUAL REPORT
2019-2020

Cardiovascular Dynamics (CD) section activities

LIVES 2019 (Berlin)
The major CD Section activity in 2019 was LIVES 2019 (Berlin). The Section participated in 19 sessions, including the plenary/abstract sessions. The attendance was excellent, as you can see in the photograph below.

PRE-CONGRESS MASTER CLASS
Together with the NEXT Section, we organised a joint full-day pre-congress Master Class entitled “What’s NEXT in Haemodynamics?”, which was fully booked and well-attended. Furthermore, there were other pre-congress Master Classes including the CD Section, including ‘Basic course in Echocardiography’, as well as an ‘Advanced course in echocardiography’, with 75 and 97 participants respectively.

HEMDY N AR M MASTER CLASS
For the second time, the CD Section organised a three-day Hemodynamic Master Class at the ESICM headquarters in Brussels (Feb 24-26, 2020), which was attended by 58 participants. The course directors were T.W.L. Scheeren (Groningen, Netherlands) and J.-L. Teboul (Paris, France). The faculty included Michelle CHEW (Sweden), Daniel De BACKER (Belgium), Alexander VLAAR (The Netherlands), Bart HEMMISTRA (The Netherlands), Johannes MELLINGHOFF (United Kingdom), Xavier MONNET (France), Bernd SAUGEL (Germany), Jean VAN DER HEST (The Netherlands), Frans VANWINGHE (Belgium) and Leen VERCAEMST (Belgium).

By performing both a pre- and post-test, we were able to evaluate the knowledge increase of the participants, which was significant: 13.7% (p-value=0.0002).

LIVES DIGITAL 2020
• Several members of the Section participated in the abstract selection process for the scientific contributions to LIVES Digital 2020. The Chair and Deputy Chair also participated in an abstract selection meeting and several Congress Committee meetings.
• Several active members of the CD Section were also involved in Society’s annual Awards selection process.

JOURNAL REVIEW CLUB
Members of the Section actively participate in the Journal Review Club (to be found on the “news” section of the ESICM website).

WEBINARS:
The Section held a webinar on “Why and How to use vasopressors in septic shock?” on February 13th, 2020, presented by Prof. Jean-Louis Teboul and moderated by Prof. Jan Bakker.

PUBLICATIONS:
The Section has participated actively in the following publications:

RESEARCH STUDIES/ SURVEYS:
The Section is preparing the following studies/surveys:
• TRACE II survey (Transfusion practice in the bleeding critically ill).
• INPUT: point prevalence study that captures clinical transfusion practice.

We would like to thank all the members of the Section for their on-going and active support.

Thomas Scheeren
Chair of the CD Section

Jan Bakker
Deputy Chair of the CD Section

Guidelines - The ESICM Transfusion Guideline Part I
The Task Force began by writing the first ESICM Transfusion Guideline. This will be an evidence-based Blood Transfusion Guideline, tailored for the intensive care patient. Part 1 will be on non-bleeding critically ill patients and is expected to be published in 2019.

Guidelines - The ESICM Transfusion Guideline Part II
Part II of the ESICM Transfusion Guideline will be an evidence-based Blood Transfusion Guideline tailored for the bleeding intensive care patient. The group has been formed and the first meeting took place this year. The guideline is expected to be published at the end of 2020.

Research:
• TRACE I survey
This is an international survey to understand transfusion practice in ICUs worldwide. Since international transfusion guidelines for the intensive care setting are lacking, we hypothesise that a large variation in transfusion practice exists. The aim of this survey is to use the information gathered as a baseline measurement prior to implementation of the new Transfusion Guideline being prepared by the ESICM Transfusion Task Force. The results of the survey are now submitted for publication.
• TRACE II survey
This is a follow-up on the TRACE I survey. We will now focus on bleeding critically ill patients. The survey is expected to be online in Summer 2019.

Upcoming projects:
• INPUT trial
This is an international multicentre prospective observational point prevalence study to quantitively current transfusion practice in ICUs and investigate differences in transfusion practice between and within different world regions (Europe, Americas and Asia). The study will collect during one week all transfusion data in participating ICUs. A pilot trial has successfully been performed. We are now recruiting centres to participate. Please contact the Transfusion Task Force Chair if you have any questions at: a.p.vlaar@amsterdamumc.nl

Alexander Vlaar
Chair of the Transfusion Task Force

Maurizio Cecconi
Co Chair du Transfusion Task Force

ETHICS [EHT] Section

The Ethics Section promotes debate around ethical issues in the ICU and has a good presence at the annual congress. This last year also brought the fruits of long-term endeavours with several major publications (see below). In October 2019, Christine Hartog (GBR) took over as Chair of the Section from Rik Gerritsen (NLI), and Diederik van Dijk (NLI) started as Deputy Chair, continuing a fine Dutch tradition. It is good to see that the Section continues to grow and now has close to 800 voting members.

During the 2019 LIVES conference in Berlin, the Section provided ethical perspectives during several clinical lectures and sessions among others, and also in a pre-congress Master Class, where we taught an interactive class with role play on a difficult family conference.

The last in-person Section meeting occurred during the 2019 LIVES congress in Berlin. It was well attended and lively, maybe because it followed an equally well-attended and joyous Section dinner, held to celebrate the publication in JAMA of the first main paper from the Ethics2 study [Sprung CL et al. Changes in End-of-Life Practices in European Intensive Care Units From 1999 to 2016. JAMA 2019; 322: 1492-1704]. Ethics2 was a 6-month prospective observational study under the auspices of the Ethics Section under the leadership of Charles Sprung (IL). More publications are underway. The DISPROPRICUS study group, under the leadership of Dominique Benoit, published further results in high-ranking journals [Jensen HI et al., Perceptions of Ethical Decision-Making Climate Among Clinicians Working in European and U.S. ICUs: Differences Between Nurses and Physicians. Crit Care Med 2019; 47: 1714-1722]. Two Pls are currently carrying out research projects with funding from the Ethics Section: Victoria Metaxa (ESICM grant for systematic reviews; Metaxa V. et al. Palliative care interventions in intensive care unit patients - a systematic review protocol. Syst Rev 2019; 8: 148) and Chrystiane Hartog (ESICM family partnership award for the MECAPICS project on animated cartoons to increase health literacy on PICUs).

This year, more than ever, the pandemic has taught us to focus on what is most important and to have patience. We are looking forward with trust and hope to the coming year and send our good wishes to all of you.

Christianne Hartog
Chair, ETHICS Section

Diederik Van Dijk
Deputy of the Ethics Section

Transfusion Task Force

Background
The topic blood transfusion is highly relevant for intensive care medicine and the ESICM Transfusion Task Force was launched in 2017. The current Chair is Alexander Vlaar.

Mission
To support knowledge, research and education of blood transfusion in the context of intensive care medicine.
HSRO section

In 2019/2020, the HSRO Section Chair and Deputy both participated in preparing and shaping the Society’s annual congress in Berlin and the upcoming congress in Madrid. They were present at all the preparation meetings, and reviewed and selected the abstracts for the poster presentations. This resulted in a prominent presence of outcome issues during the 2019 congress and there were several interesting and well-attended sessions.

Various sessions took place with a number of interesting patient groups to discuss outcomes and there were also sessions on the methodology of outcome measurement and benchmarking. Very importantly, the HSRO provides a podium for young researchers and health professionals to present their posters.

In 2020, the majority of the HSRO members were involved in the COVID-19 pandemic in one way or the other. This halted many of our activities. After a couple of months, the life of our Section’s was re-ignited online. We started weekly online meetings between various members and study groups. Now we see each other more than we did before COVID-19!

Despite the pandemic, the HSRO Section has been involved - and participating in numerous research projects, including the VIP-3 study, the VIP 4 study, the SAPS-3D initiative, the TOXC study and the SANDMAN study.

The VIP collaboration, which started in 2016, has resulted in an impressive 26 publications about very elderly patients in the last three years (you can find the links to the publications here: https://vipstudyst.org/vip-papers/). In 2020, the VIP study group quickly amended their study protocol and focused on elderly COVID-19 patients.

This so-called “COVIP-study” was performed in 285 ICUs in Europe and currently >1750 patients are included. Now we are hit by “the second wave” of COVID-19 and we are again including new patients. This enables us to look at trends in time in the elderly Corona-patients.

Units that want to participate in observational research in elderly COVID-19 patients (>70 years old) can find more information on the specifically-designed website: www.vipstudyst.org.

The VIP study group wanted to host a scientific meeting specifically focused on “elder ICU patients”, but due to COVID-19 this had to be postponed.

Another research project that has started from the HSRO Section and is supported by the ESICM is the TOXC Europe study. This is an observational study in intubated patients who have been admitted to the ICU. The aim is to look at the various parameters and outcomes.

The SANDMAN. This is a multinational observational study into the sedative and analgesic usage and outcomes. The study has been delayed due to COVID-19, but is currently recruiting centres and patients.

SAPS-3D. This study by the SAPS study group aims to provide a score that predicts death and re-admission after ICU discharge. This study is currently recruiting centres that want to participate. More detailed information can be found on their website: www.saps3.org.

LOGIC: Linking of Global Intensive Care Registries (LOGIC). This study is trying to find common ground in all registries and to propose a minimal set of data entries that is needed to compare and analyse the ICU patients in different countries throughout the world.

LIVES 2020. The HSRO Section invites you to become a member of our Section.

We hope to meet you soon!

Dylan de Lange
Chair of the HSRO Section

Arzu Topeli
Deputy Chair

Chair Quality and Safety: Dave Dongelmans (NL)
Chair Health Economics: Peter van der Voort (NL)
Chair Outcomes: Paul Zajic (AT)
Chair Very-elderly ICU patients (VIP): Hans Flaatten (NO)

ONGOING PROJECTS:

SEEHI study (project research responsible, Andreas Valentim)
Study inclusion has closed and analyses of the data are being performed. Results will be presented shortly.

Very Old Intensive Care Patients (VIP2) project. This study is now completed and more than 3,800 patients acutely admitted elderly patients have been included. What determinants (frailty, cognition, ADL independence, comorbidity, medications, etc.) are associated with short term and long term mortality? The first publications are online (see: www.vipstudyst.org/vip-papers/ and more are expected soon).

The COVIP-study (COVID-19 in Very elderly ICU Patients) is currently recruiting patients from the ‘second wave’. The publications about the first wave are now available.

QoR-ICU. This study looks at the quality of recovery after ICU treatment. Members of the HSRO are participating in Delphi rounds for consensus-making on selection of variables, parameters and outcomes.

The SANDMAN. This is a multinational observational study into the sedative and analgesic usage and outcomes. The study has been delayed due to COVID-19, but is currently recruiting centres and patients.

SAPS-3D. This study by the SAPS study group aims to provide a score that predicts death and re-admission after ICU discharge. This study is currently recruiting centres that want to participate. More detailed information can be found on their website: www.saps3.org.

LOGIC: Linking of Global Intensive Care Registries (LOGIC). This study is trying to find common ground in all registries and to propose a minimal set of data entries that is needed to compare and analyse the ICU patients in different countries throughout the world.

LIVES 2020. The HSRO Section invites you to become a member of our Section.

We hope to meet you soon!

Dylan de Lange
Chair of the HSRO Section

Arzu Topeli
Deputy Chair

Chair Quality and Safety: Dave Dongelmans (NL)
Chair Health Economics: Peter van der Voort (NL)
Chair Outcomes: Paul Zajic (AT)
Chair Very-elderly ICU patients (VIP): Hans Flaatten (NO)

Infection Section

The INF Section has been busy in recent months and this report The Infection Section has been actively developing activities in several fields, even during the pandemic, when we have all been deeply involved in caring for COVID-19 patients.

The Section was involved in the organisation of both LIVES 2020 and the LIVES Forum 2020, but the pandemic had a profound impact on both events. LIVES 2020 Madrid became an online event and the LIVES Forum in Dublin has been postponed to 2021.

For the digital format for LIVES 2020 and the video on-demand sessions, the INF Section will be holding six thematic sessions and another six with the SIS, Data Science, Ethics, ARF, N&AH and HSRO Sections. For the live sessions, our Section will be collaborating with the QoR-ICU initiative to organise three Clinical-based Fundamentals on Septic Shock as well as a Round Table. In January 2020, just before the start of the pandemic in Europe, in collaboration with the SIS section, we delivered another edition of the Master Class on Sepsis and Severe Infections in Brussels. This received the accreditation from the EACCEM (11 CME credits) and it was again very successful with attendees coming mainly from European countries.

This Section is also deeply involved in the C19_SPACE (COVID-19 – Skills PreParation Course), the EU-funded training programme aiming to provide Intensive Care skills required for health care professionals (doctors and nurses) not regularly working in Intensive Care in case of deployment during potential new surges of COVID-19.

The Section has also endorsed several surveys. Some have been completed, while others have not yet finished the data analysis.

The surveys include:

Structure of the survey and organisation of Intensive Care Units in Israel, A Makontos Dessap (FRI).
International survey: Invasive Aspergillosis among Patients with Severe Inflammation in Intensive Care Units, J Wauters, M Hittiappics (BE) FV Veerdonk and P’ Verweij (NL).
A-TEAM-ICU study group: Antibiotic Stewardship, Therapeutic Drug monitoring and Early Appropriate infection Management in European ICUs, therapeutic drug monitoring (TDM) to optimise the application of anti-infectives;

WG Antibiotic use in the ICU: H Bracht and C Lanckohr (GER).

The ESICM COVID-19 Project (UNIT-E-COVID).

The INF Section has a number of ongoing Clinical Studies, including:

DIANA (Antibiotic de-escalation) - Jan de Waale (BE). Data was presented in Berlin at LIVES 2019 and published in the ICM (2020;44:1406-1417).
EURECA (encephalitis) - update from JF Timot (FRI). >500 cases enrolled, dominated by French units (BRI). This aim is to prolong this study to achieve >650 cases and to bring more countries on-board (including Brazil and Portugal).
BLING 3 (continuous vs intermittent beta-lactams) – Jeff Lippman (AUS). This study is ongoing on >3000 patients included and due to be completed in 2022.
EUROBAT II – led by JF Timot (FRI). 55 countries, 56 centres recruiting, >2000 cases enrolled. AURORA – led by Jan de Waale (BE) – is an annual survey of antibiotic resistant organisms. Currently on hold.

Another important aspect of our Section’s work is guideline development.

Antibiotic de-escalation (A Tabah, JMaracho-Montero, with ESICM, ESCMID and ESICOP endorsement) ICM 2020 Feb;46(2):245-265.
TDM (J Roberts, with ESICM, ESCMID, IATDMCT, ISAC endorsement) ICM 2020 Jun;46(6):1127-1153.

Antibiotics Working Group (Chair: Hendrik Bracht)

The WG is conducting the major INF Section-endorsed A-TEAM study and also involved in the position paper on TDM previously mentioned. The WG is also planning to develop a Master Class on TDM in critically ill patients.

Pneumonia Working Group (Chair: Maria Deja)

We welcome the recently elected chair, Maria Deja. Several studies of this WG are underway:

“Pneumopsir study”, >1600 patients (D Keulien),
The ALL-ICU study of lung antibiotic levels (a joint project with the Antibiotics Working Group). Funding has been secured for sample analysis as part of an NHMRC (AUS) grant (planned to start set up during 2nd semester of 2020).

The HAP2 Study (led by Antoine Roguill) FR). The results of the second stage application are awaited. It successfully, the planned start date is 1 January 2020.

Severe CAP project - Multiple-Criteria Decision Analysis (MCDA) analysis on severe CAP diagnosis U Coimbra, J Rello; Non-pharmacological CAP prevention guidelines: Joint initiative of the WG on Pneumonia and N&AHP and WG on Physiotherapy (led by S.Blitz & D Koulent)

Liver-Pancreas (lead V. Fuhrman -Deputy), Micronutrients function (lead A. Reintam Blaser), Education (lead J. Starkopf), care. The MEN section aims at improving these views. The different organs involved is required to conduct integrative integral part of any ICU pathology. When metabolic care is not well attended. Abdomen, Acute liver failure, and Pancreatitis modules were completed.

MEN Section annual report Oct 2019-Sept 2020 _

Only one Section meeting was held during the LIVES 2019 congress in Berlin. Due to the COVID pandemic, communication was by mails and webinars.

LIVES 2019
The programme concept was completely revisited, going transversal and interdisciplinary, with fewer “pure-MEN” sessions, but in collaboration principally with the AKI, N&AHP, and ARF sections. The two hands-on sessions on indirect calorimetry and ultrasound were well attended. High-quality abstracts were presented during three poster sessions, and one oral. Feedback from our members about this new inter-disciplinary positioning was positive, it enabled delegates to attend more not purely MEN sessions.

Master Class: The MEN collaborated with the AKI Section.

EDUCATIONAL ACTIVITIES

• Academy courses
  - The MEN Section participated in the joint ESICM-CSSM (Chinese Society of Critical Care Medicine) COVID-19 Webinar on 22 June, in an education session supported by Nestlé on 20 May, and generated a short educational session on nutritional & Metabolic specificities of COVID patients on 20 April.

• Virtual Congress
  - The concept of the programme has been completely reviewed.
  - The MEN section has elaborated a series of web-presentations

RESEARCH ACTIVITIES

The academic activity of the Section has been “intensive”.


The ISOFA study was completed, and discussed at the meetings in Berlin during LIVES 2019. 540 patients from 11 sites worldwide were included. Two manuscripts are in the final phase of preparation and will be submitted within the next few weeks.

The Gastrointestinal dysfunction systematic review and research agenda was completed, and published in Critical Care 2020: the 25 members of the GI section were coordinated by A. Reintam Blaser.

After publication of previous web survey VITRACEL, the MEN Section could proceed with the Hypophosphatemia project. Point-prevalence survey and the systematic review.

- The Systematic review on hypophosphatemia was endorsed by and received support from the ESICM Research Committee (project ranked 2nd out of 16 submissions). Coordination by A-Reintam Blaser. Clinical Nutrition has accepted the manuscript.

- The one-day point prevalence survey of hypophosphatemia was conducted in March 2020, after multiple Ethical Committee submissions, just before the pandemic peaked. Altogether, 60 ICUs from 23 countries participated. 687/969 (75.6%) patients had serum/plasma phosphate determined, revealing a hypop in 15%. This is the first point prevalence survey addressing this issue.

The study is under publication. Coordination by M. Berger. The major difficulties getting Ethics approval under the GDPR rules must be stressed. The manuscript is submitted to Clin Nutr.

The VITDLIZE trial is still recruiting (target 1200 for interim analysis, 2400 for full study). Coordination K. Amrein. Completion date is projected end 2022.

FUTURE MEETINGS
A virtual meeting is planned during LIVES 2020 Digital, our virtual 2020 congress.

Neurointensive care (NIC) section_

In spite of the challenges in this COVID-year, the NIC section has been able to remain very active with ongoing and novel projects, and we can only be proud of the open collaborative spirit and motivation of our members. Geert MEYROD (Leuven, Belgium) has succeeded Fabio TACCONE as new chair, while Chiara ROBBA (Genova, Italy) is now in her second year as deputy.

EDUCATIONAL ACTIVITIES

• LIVES 2020
  - The NIC section is again well-represented in LIVES 2020, even while the program had to be adapted to an online format as an alternative to the originally planned LIVES 2020 meeting in Madrid. In addition to the NIC sessions, we have collaborated with Education for one of the novel Case Based Fundamental sessions on TBI, as well as with many other sections on varying themes.

• ESICM TRAUMA MASTER CLASS 2020
  - The NIC has an important teaching assignment in this course, but unfortunately the course had to be postponed to 2021 because of COVID.

• eLearning platform and Education The NIC Section is contributing to the development of “neuro” topics for the e-Learning platform within ESICM and four new modules have been completed.

• Future projects
  - ESICM NEURO MASTER CLASS If the schedule permits, the NIC section has the ambition to organize a Neuro Master Class in Brussels, in 2021 or 2022.

RESEARCH ACTIVITIES

CONSENSUS PROJECTS AND GUIDELINES

• Updated algorithm for the management of Severe TBI
  - Different members of the NIC Section have been involved in this great consensus meeting, held in Seattle, which will result in a new and comprehensive algorithm to manage severe Traumatic Brain Injury (TBI) patients. In addition, a second algorithm on the management of severe TBI based on ICP and brain oxygen monitoring has also been designed. Both algorithms have been published in Intensive Care Medicine, in 2019 and 2020, and have impressive download and citation metrics already.

• VENTILATyri strategies in patients with severe traumatic brain injury: the VENTILo Survey of the European Society of Intensive Care Medicine (ESICM)
  - International survey to investigate the practice in the ventilatory management of TBI patients with and without respiratory failure. PI: Eduardo Picetti, Parma. The project has been finalized and a manuscript was published in Critical Care, 2020.

• Expert panel: “Mechanical ventilation in patients with acute brain injury: recommendations of the European Society of Intensive Care Medicine consensus”
  - A subgroup of the NIC section has taken the initiative for this very important project, led by Chiara Robba and Robert Stevens, which has been finalized and has resulted in a publication in Intensive Care Medicine, 2020.

  - The Consensus Project Committee has been finalized. December 2020, the group will meet and the steering committee and working groups will be assigned.

• Ongoing Consensus projects:
  - Consensus on preprocessed EEG monitoring of Sedation in critically ill patients (Frank RASULO)
  - Fever and temperature management in brain injured patients (Raimund HELBOK and Fabio S TACCONE)

ONGOING TRIALS

• Transfusion strategies in acute brain injured patients: TRAIN Study. The TRAIN study, supported by an ESICM award of 50,000 Euro, is a multicenter trial that aims at evaluating two different thresholds of hemoglobin (Hgb/L vs. 9 g/dL) to initiate red blood cells transfusions in patients with an acute brain injury (traumatic brain injury, subarachnoid hemorrhage and intracranial hemorrhage). The study has now completely the second year of inclusion and, at the moment, 40 recruiting centres have randomized 640 patients so far. The PI of the study is Fabio Silvio Tacco (Brussels, Belgium).
• Indications of ICU admission and inTensive caRe management of patients with acute ischemic stroke: the STRIKE survey, is an international survey, endorsed by the ESICM, to assess current criteria for admission to ICU, clinical practice variability, and critical care management of stroke patients. The electronic questionnaire included 25 items divided into 3 sections, and was available on the ESICM website and mailed to the NIC members. There were 214 respondents from 198 centers. A manuscript has been submitted and is currently under review.

• Extubation in Neuro-ICU patients and Associations with Outcomes (ENIO), is an international (worldwide) observational multicenter cohort study, led by Raphael Ciotti and Karim Asehnoune from Nantes (FR), where the investigators will collect data from mechanically ventilated brain injured patients, and describe management and extubation practice in these patients. The aim is to include 1500 patients and the study is close to being finalized.

• International prospective observational Study on iNtrAcranial PreSsurE in intensive care unit (ICU): an international, prospective observational study, aimed to improve the management of intracranial pressure in acute brain trauma patients. Partially funded by the effects of ketamine on sedative sparing and intracranial pressure in acute brain trauma patients. Recruitment has ended this summer.

• SANDMAN received an ESICM 2018 trials group award. PI’s Prof Sangeeta Mehta (Toronto) & Dr Lara Prisco (Oxford).

• International PreSpecTive oBserVaTional study On StroKe managemEnt in Intensive Care Unit (STROKE ICU): PI Chiara Robba and Giuseppe Citerio. This prospective observational study will use the SYNAPSE ICU network for a similar data collection on stroke patients.

We employ techniques that encourage maximum learning through participation and knowledge retention by avoiding frontal lectures, while stimulating interaction between the participants. The Master Class scheduled for April 2020 in Brussels was fully booked, but unfortunately had to be cancelled, due to the pandemic lockdown throughout Europe.

Section members organised a (fully-booked) postgraduate course on Delirium management during LIVES 2019, in the Delirium Simulation Centre in Berlin. This was in cooperation with the Department of Anaesthesia and Intensive Care of the Charité University Hospital, Berlin.

The Section is further developing the European Intensive Care Curriculum (EIPICC) as a part of the ESICM e-learning Academy. Dr. Bernardes Pinto-Bollen, who coordinated this tremendous project for the POIC Section over the last couple of years, handed the leadership over in September 2020 to Drs. Yin-Lan Nguyen and Victoria Anne Bennett. They will further coordinate this important project, on behalf of the POIC Section.

LIVES DIGITAL 2020

This has been a special year, also in regard to congress planning. The Congress Committee did a tremendous job in re-planning the conference towards a fully-virtual version. Digital meetings have the opportunity to become more inclusive for lecturers, since traveling to the congress location is no longer possible. As usual, the POIC Section members participated in the abstract reviewing and programme process. In addition, the Section is going transversal and interdisciplinary, increasing collaboration with other Sections, such as AKI, CD, ETH, HSRO, ARF, and the N&AHP Committee.

ELECTIONS

This year both the Chair and Deputy Chair positions were open for election. Ib Jammer stepped down after finishing his regular term as Chair and is succeeded by the former Deputy Chair, Aarne Feldheiser. The new POIC Section Deputy Chair is Ben Creagh-Brown.

PLANNED TRIALS/TRIALS IN PREPARATION

• Brain Injury and Ketamine (BIKE): a prospective, randomized controlled double blind clinical trial to study the effects of ketamine on sedative sparing and intracranial pressure in acute brain trauma patients. Partially funded by ESICM established investigator award (2016), will run as Belgian multicenter trial. Additional support: Pfizer Global Medical Grant. Status: Submitted to the ethical committee of the University Hospitals Leuven, Belgium.

• SANDMAN: Sedation, ANAalgesia and Delirium MAnagement – an international audit of medical, surgical, trauma, and neuro-intensive care patients: observational study that will describe sedation, analgesia, and delirium strategies used in ICUs around the world, endorsed by 3 ESICM sections; the NIC section, as well as the Health Services Research & Outcome (HSRO), and Peri-Operative Intensive Care (POIC) sections. SANDMAN received an ESICM 2018 trials group award. PI’s Prof Sangeeta Mehta (Toronto) & Dr Lara Prisco (Oxford).

• International PreSpecTive oBserVaTional study On StroKe managemEnt in Intensive Care Unit (STROKE ICU): PI Chiara Robba and Giuseppe Citerio. This prospective observational study will use the SYNAPSE ICU network for a similar data collection on stroke patients.

We employ techniques that encourage maximum learning through participation and knowledge retention by avoiding frontal lectures, while stimulating interaction between the participants. The Master Class scheduled for April 2020 in Brussels was fully booked, but unfortunately had to be cancelled, due to the pandemic lockdown throughout Europe.

Section members organised a (fully-booked) postgraduate course on Delirium management during LIVES 2019, in the Delirium Simulation Centre in Berlin. This was in cooperation with the Department of Anaesthesia and Intensive Care of the Charité University Hospital, Berlin.

The Section is further developing the European Intensive Care Curriculum (EIPICC) as a part of the ESICM e-learning Academy. Dr. Bernardes Pinto-Bollen, who coordinated this tremendous project for the POIC Section over the last couple of years, handed the leadership over in September 2020 to Drs. Yin-Lan Nguyen and Victoria Anne Bennett. They will further coordinate this important project, on behalf of the POIC Section.

LIVES DIGITAL 2020

This has been a special year, also in regard to congress planning. The Congress Committee did a tremendous job in re-planning the conference towards a fully-virtual version. Digital meetings have the opportunity to become more inclusive for lecturers, since traveling to the congress location is no longer possible. As usual, the POIC Section members participated in the abstract reviewing and programme process. In addition, the Section is going transversal and interdisciplinary, increasing collaboration with other Sections, such as AKI, CD, ETH, HSRO, ARF, and the N&AHP Committee.

RESEARCH ACTIVITIES:

• An international observational trial about post-operative vasopressor usage is being run by POIC members. ESICM and the European Society of Anaesthesia (ESA) are collaborating in this trial to use common synergies. There are currently 400 hospitals from 38 countries participating and we expect to include >40,000 patients. Results of an online survey performed before the start of the study will be presented at LIVES 2019.

• The Section recently participated in a cross-sectional working group in cooperation with the HSRO and NIC Sections. It focuses on Delirium and Long Term Outcome (DoLTO). The first meeting took place at LIVES 2018. Several research projects and consensus statements are already planned within this working group.

• A joint meeting with members working with intensive care registries from the HSRO and POIC section took place in March in Brussels. The aim is to agree on common registry variables to enhance and ease cooperation of registries beyond national borders.

ELECTIONS

This year both the Chair and Deputy Chair positions were open for election. Ib Jammer stepped down after finishing his regular term as Chair and is succeeded by the former Deputy Chair, Aarne Feldheiser. The new POIC Section Deputy Chair is Ben Creagh-Brown.
1. The Section played a significant part in the composition of the scientific programme of ESICM e-Lives 2020. Very well attended both VOD and Live sessions.

2. The activities of the ESICM Research Committee were supported and coordinated by the Section Deputy Marc Leon.

3. Academia:
   1. The SIS section continues to be a strong contributor to the activities of the ESICM Academy. One of the newest ACE Courses of the Academy «Disseminated Intravascular Coagulation» was authored by SIS members Nicole Juffermans and Marcia Muller, and this course is already in the Top 5 most viewed courses in the entire Academy despite only being released this year!
   2. In the effort to ensure that all Academy material is »state of the art« and properly updated, we would like each significant course to be updated every two years. Of the core SIS-authored courses, the ACE course most in need of updating is the Sepsis and Septic Shock ACE Course. Volunteers interested in writing/updating this course should contact the SIS Section Editor for the Academy, Nathan Nielsen at nathan.nielsen@gmail.com.

4. Master class on the Management of Sepsis was successfully provided at the ESICM training centre in January 2020 during Covid-19 outbreak and feedback from the delegates was very positive. 43 participants.

5. Lives Forum in Dublin has been postponed to 2021. Lives Forum, Trinity College, Dublin, 03-05 June 2021. Septic shock: From the bug to organ failure. (Academy Critical Care Education)

6. The Chair of the Section contributed to the composition of the Surviving Sepsis Campaign Guidelines Steering Committee: Adult SSC guidelines are progressing. A bit behind schedule.

7. SIU section members are actively contributing to the ALIVE Initiative (sepsis education in resource limited settings).

8. SIS section also have collaborated actively with some NEXT committee activities.

9. Only one regular meetings of the SIS Section took place during LIVES 2020 by Zoom because meeting during eLICEM 2020 has been cancelled.

Trauma and Emergency Medicine (TEM) _

During the societal year 2019 (October 2019 until September 2020) the TEM Section actively participated in both LIVES 2019 in Berlin and in the preparation of the programme for LIVES 2020. We also organised a webinar on Burn Management and collaborated with the European Resuscitation Council (ERC) for the preparation of the ERC-ESICM Guidelines on Post-Resuscitation Care. The scientific activity of our Section has been outstanding.

ESICM LIVES

The TEM Section participated in the programme of LIVES 2019 by organising seven sessions (four thematic sessions, one clinical challenge session, one live debate and one unplugged session), and took part in four joint sessions with other ESICM Sections.

This year, the LIVES 2020 congress is in digital format, with a reduced number of sessions, most of which are multidisciplinary, made in collaboration with other Sections. The TEM Section has organised eight thematic sessions:

1. “Controversies in targeted temperature management after cardiac arrest” in collaboration with the Neuro Intensive Care (NIC) Section
2. “Controversies in haemorrhagic shock”
3. “How do I manage the thromboprophylaxis of my trauma patient?”
4. “After cardiac arrest” - a joint session with the European Resuscitation Council
5. “Long-term outcome of ICU patients”, in collaboration with the Acute Kidney Injury (AKI), Neuro-Intensive Care (NIC) and Acute Respiratory Failure (ARF) Sections
6. “Neurological controversies in neuro critical care” in collaboration with the Neuro-Intensive Care (NIC) Section
7. “Update on Advanced Life Support” in collaboration with the Cardiovascular Dynamics (CDI) and Acute Respiratory Failure (ARF) sections
8. “Myth buster – facing the myths” in collaboration with the Acute Respiratory Failure (ARF), Infection INFL, Health Services Research & Outcome (HSRO) and Cardiovascular Dynamic (CDI) Sections.

In addition, TEM has organised a 45-minute interview with Jerry Nolan about Cardiac Arrest.

One third of the invited faculty includes new speakers and one third of the invited TEM speakers are female.

Chair of the TEM Section
Claudio Sandroni

Massimo Girandini

Sophie Hamada

Chair of the TEM Section

Deputy Chair of the TEM Section

Yasser Sakr

Concerning the ESICM ACE (Academy Critical Care Education) courses, the three online modules recently developed and updated by our Section, “Burns injury”, “Major Intoxication”, and “Multiple trauma” are proceeding well. They rank among the most successful modules, having enrolled 965, 887, and 779 participants so far. We congratulate Sophie Hamada (Paris, France) - the TEM Section Deputy Chair - and the numerous contributors for their great work.

In October 2019, the Section organised a webinar on Burn Management. Matthieu Legrand (Paris, France) was the presenter and Claudio Sandroni was the moderator.

RESEARCH

During this societal year, several clinical studies by TEM Section members have been published. Among them, a post-hoc analysis of the COMACARE trial from Markus Skrifvars (Helsinki, Finland), which investigated neural filament light chain (NFL), one of the most promising markers of hypoxic-ischaemic brain injury, in a cohort of 112 patients resuscitated from out-of-hospital cardiac arrest. The study showed that high blood levels of NFL predicted unfavourable outcome with an area under the receiver operating characteristic curve (AUROC) of 0.98 at 24h, 48h, and 72h from the arrest, and high precision. The study is currently in press in Intensive Care Medicine.

Jerry Nolan (Bath, UK) led a secondary analysis of the PARAMECIOUS randomised controlled trial comparing adrenaline with placebo after cardiac arrest. The analysis compared the effectiveness of the intravenous and intrathecal routes for adrenaline administration and included 7317 patients, among whom 2237 received the study drug via the intravenous route.

The study demonstrated that both the intravenous and the intrathecal routes of adrenaline administration are equally efficient in increasing 30-day survival or favourable neurological outcome with no difference vs. placebo. The study was published in the May 2020 issue of Intensive Care Medicine.

Aurora Magliocca (Milan, Italy), the 2018 winner of the Rita Lew-Montalcini ESICM Research Award, investigated cardiopulmonary resuscitation-associated lung edema (CPELA). This translational study included a porcine model of cardiac arrest and resuscitation and a multicentre cohort of adult out-of-hospital cardiac arrest patients.

Results showed that CPR was associated with lung edema that was more severe after mechanical vs. manual chest compression. The study is currently in press in the American Journal of Respiratory and Critical Care Medicine.

Members of the TEM Section have participated in the HYPERION trial, which compared moderate therapeutic hypothermia (33°C during the first 24 hours) with targeted normothermia (37°C) in patients with coma who had been admitted to the intensive care unit (ICU) after resuscitation from either in-hospital or out-of-hospital cardiac arrest with no- shockable rhythm. Results showed that moderate hypothermia was associated with a significantly higher rate of survival with favourable neurological outcome. The study was published in the December 2019 issue of The New England Journal of Medicine.

The TEM Section members are participating in two multicentre randomised controlled trials on post resuscitation care: the TAME Cardiac Arrest trial, comparing norepinephrine vs. mild therapeutic hypercapnia in resuscitated cardiac arrest patients and the TTM-2 trial, comparing TIM 30°C vs. fever control only for neuroprotection after cardiac arrest.

The TAME trial is ongoing, while the TTM-2 trial has been completed this year and its results will be announced in the
Amongst others. Working Group members were also involved in critical care and seminars in thrombosis and hemostasis, medicine, PLoS One, stroke, Lancet, New England journal of medicine, where some exciting proposals were to be shared, was also cancelled due to the pandemic. Several teleconferences, communications and telephone calls were held during the year pertaining to COVID-19 in low-middle income countries (LMICs), as well as relating to projects, collaborations, papers, initiatives and for support purposes. The book on “Sepsis Management in Resource-limited Settings” by members of the global intensive care working group has now been downloaded 79,000 times! This is a remarkable achievement. The book contains the recommendation papers and expanded versions thereof, that were previously published by the working group – the first such recommendation papers in this setting (i.e. relating to LMICs). Similarly, the unique book “Clinical Examination Skills in the Adult Critically Ill Patient” to which various members of the group contributed, has been downloaded more than 25,800 times and received excellent reviews. An overview and perspective on COVID-19 in LMICs was delivered on the ESICM Marathon Webinar on COVID-19 on 28 March 2020. This was extremely well-received, with multiple invites and follow-ups post webinar across the globe. An outstanding ESICM LMIC and ALIVE three-and-a-half hour webinar was held on 13 June 2020. Several working group members participated as well as invited guests. The entire programme was put together by the Global intensive Care Working Group. There was wonderful support from the ESICM leadership and executive who were also involved. The webinar was extremely well-received, informative, educational and moving. There was once again significant follow-up and further inquiries are made with respect to the group, its activities as well as participation and potential collaborations with it. A very productive and enthusiastic formal meeting was held at the ESICM LIVES Congress on 1 October 2019 in Berlin, Germany. The meeting planned for March 2020 to coincide with the ISICEM conference in Brussels, Belgium was cancelled due to the pandemic. An additional meeting planned with the executive of ESICM and editor-in-chief of intensive Care Medicine where some exciting proposals were to be shared, was also cancelled due to the pandemic.

Global Intensive Care (GIC) Working Group_ 

Although the past year has brought with it enormous challenges and constraints with the COVID-19 pandemic, it has nevertheless been another exciting, productive and meaningful year for the Global Intensive Care Working Group of ESICM, despite various activities having to be curtailed due to the pandemic. Membership numbers have continued to increase and regular inquiries have been made with respect to the group, its activities as well as participation and potential collaborations with it. This was to our knowledge the first detailed and dedicated webinar was extremely well-received, informative, educational and moving. There was once again significant follow-up and further inquiries are made with respect to the group, its activities as well as participation and potential collaborations with it. Several teleconferences, communications and telephone calls were held during the year pertaining to COVID-19 in low-middle income countries (LMICs), as well as relating to projects, collaborations, papers, initiatives and for support purposes. The book on “Sepsis Management in Resource-limited Settings” by members of the global intensive care working group has now been downloaded 79,000 times! This is a remarkable achievement. The book contains the recommendation papers and expanded versions thereof, that were previously published by the working group – the first such recommendation papers in this setting (i.e. relating to LMICs). Similarly, the unique book “Clinical Examination Skills in the Adult Critically Ill Patient” to which various members of the group contributed, has been downloaded more than 25,800 times and received excellent reviews. An overview and perspective on COVID-19 in LMICs was delivered on the ESICM Marathon Webinar on COVID-19 on 28 March 2020. This was extremely well-received, with multiple invites and follow-ups post webinar across the globe. An outstanding ESICM LMIC and ALIVE three-and-a-half hour webinar was held on 13 June 2020. Several working group members participated as well as invited guests. The entire programme was put together by the Global intensive Care Working Group. There was wonderful support from the ESICM leadership and executive who were also involved. The webinar was extremely well-received, informative, educational and moving. There was once again significant follow-up and further inquiries are made with respect to the group, its activities as well as participation and potential collaborations with it. A very productive and enthusiastic formal meeting was held at the ESICM LIVES Congress on 1 October 2019 in Berlin, Germany. The meeting planned for March 2020 to coincide with the ISICEM conference in Brussels, Belgium was cancelled due to the pandemic. An additional meeting planned with the executive of ESICM and editor-in-chief of intensive Care Medicine where some exciting proposals were to be shared, was also cancelled due to the pandemic.

Global	Intensive	Care	(GIC)	Working	Group_

albeit technology is aligned to the needs of patients and clinicians, it has the potential to impact very positively on many many lives and health care systems around the world.

A major focus of the group has been the very unique and exciting ALIVE Sepsis initiative. Following the extremely successful rollout of the first course in Kampala, Uganda in June 2019, two further superb courses were run in Karachi, Pakistan in November 2019 and in Barbados, Caribbean in February/March 2020. Both courses were quite simply outstanding! More than 450 delegates in total attended the course in Pakistan and more than 250 delegates, the course in Barbados. The enthusiasm, excitement, teaching, lessons and ambience in both domains was amazing and the feedback fantastic! A massive thanks is extended to the fabulous hosts, wonderful faculty members, terrific coordinators and facilitators, and all involved in the course and a rollup for their sterling contributions! Gracious thanks to the Society for their ongoing support. There is very little doubt that this is an exceedingly splendid, meaningful and important initiative. Nothing like it exists and it has the potential to impact very positively on many many lives and health care systems around the world.

Unfortunately the planned course in Mongolia for May 2020 was postponed due to the COVID-19 pandemic. Various standard operating procedures and checklists have been added to the course organizational aspects in order to further enhance the impact and ensure the slick running of future courses. Planned courses for 2021 will be relooked at.

Several exciting ventures are planned moving forward which we will continue to approach with heightened enthusiasm, vigour and passion. We would like to extend our most sincere and warmest regards

and very best wishes

Mervyn Mar

Data Science Section Annual Report_

This is the first report from the Data Science (DS) Section - the newest Section in the ESICM. Intensive care is one of the most data-dense areas of medicine and the Section’s aims are to promote innovation and research in this domain. Big Data, Artificial Intelligence and data-driven technology to improve the clinical care of the critically ill.

The Section has five key strategic goals:

1. To provide education for clinicians interested in developing or acquiring new technology.
2. Promoting research into clinical applications of data-driven healthcare, encouraging translation of novel computing and artificial intelligence techniques.
3. To drive ICU data sharing across Europe in a legal, ethical and publicly-acceptable way.
4. Standard-setting and benchmarking for electronic medical records (EMR) and other technologies to make sure technology is aligned to the needs of patients and clinicians.
5. To create a collaborative framework facilitating the collaboration of ICU professionals, data scientists and allied experts, as well as engaging industry partners for patient benefit.

It has been a busy year for the Data Science Section. In alignment with our educational aims, we ran the first interactive data science course as part of the LIVES 2019 programme, introducing clinicians to the skills needed to leverage data.

Following on from a highly successful Big Data Talk and Datathon in 2019, a second such event was run in Milan on 31 Jan - 2 Feb 2020. This was a highly popular event, bringing together clinicians and data scientists with an interest in intensive care applications, for a series of talks and also practical projects using real data. Further such events are planned as soon as the COVID-19 situation stabilizes sufficiently to allow face-to-face interactive events to take place again.

To facilitate standard-setting, the Section has launched a process which aims to establish contact with drivers for change in every ICU in Europe. We have begun this enormous process: When complete it will allow us to better understand the EMR and data sharing landscape, such that we can ensure technology is responsive to the needs of patients and clinicians. An initial list has been drawn up. A second roll-out request for contact will follow soon.

The DS Section came together with counterparts from the Society of Critical Care Medicine (SCCM) and the executive leadership of both organisations at the 2020 Datathon, to agree on a joint data science initiative paralleling the Societies’ Surviving Sepsis Campaign. A Joint Data Science Taskforce has been established to propose a detailed strategy, which will hopefully offer opportunities for DS members to be involved in the future.

The MIMIC and eICU open access ICU datasets have been instrumental in driving data-driven research for many years now, but did not previously have a European counterpart. The Data Science Section has been instrumental in releasing the Amsterdam UMC db open ICU research database: A dataset of over 20,000 anonymised patient records. This enterprise is ground-breaking, not only in its scope, but also as an exemplar of how to facilitate such data-driven research whilst simultaneously safeguarding privacy within the new GDPR legal framework.

Furthermore, the Section has published two pieces of original work this year in Intensive Care Medicine: A comprehensive systematic review of the technology readiness of Artificial Intelligence technologies in the ICU, providing a robust evaluation framework1 and systematic review of the state of the art of sepsis prediction algorithms2.

1. DPD

Division of Professional Development

The Division of Professional Development (DPD) comprises:

- The Examinations Committee
- The E-Learning Committee
- The Clinical Training Committee
- The CoBa Faculty/CoBa Forum
- The Editorial & Publishing Committee

The overarching objective of the DPD is to provide educational activities that are accessible, affordable and relevant to our members. We understand education as a link between scientific progress and delivery of care to our patients. Education is aligned with assessment and therefore the EDIC offers examinations that are fair, robust, reproducible and prestigious to boost careers of intensivists in Europe and beyond. Lastly, CoBaTrICE provides an up-to-date training framework by defining competences of fully qualified intensivists and offering a training syllabus that aims to serve as a template of training syllabi in Europe.

The DPD has had a challenging year, as all of these activities were influenced by the spreading pandemic that not only impaired the delivery of all types of face-to-face education and examination, but also required a significant re-focusing of the DPD activities to training personnel not normally working in intensive care in the C19 SPACE programme.

The EDIC Examinations Committee

The aim of the EDIC examination is to test specific theoretical Intensive Care Medicine knowledge, whereas the oral part (EDIC Part II) aims to test the competencies, expertise and professional conduct at the end of the specific training (2-3 years) in Intensive Care Medicine.

The COVID-19 Pandemic has influenced the activities of the Examinations Committee in several ways:

- The Spring editions of both parts of the exam were cancelled, due to government-enforced restrictions in travelling and assembly. Great efforts were required to deliver the Autumn edition of EDIC Part I - many thanks to all the centre directors, co-directors, auxiliary staff and the Examination Committee members for organising the exam, despite all the obstacles and precautions needed to keep candidates safe (see picture of the Autumn EDIC Part I exam held in Kolkata, India).
- The launch of the first non-English edition of EDIC I (yes, no secret, it is in Spanish) originally planned at LIVES 2020 had to be postponed. The Examinations Committee is now working hard on finding innovative ways to deliver the exam despite travel restrictions, whilst maintaining the highest standards and quality of examination.

The E-Learning Committee

The aim of the ELMIC examination for the European Diploma in Intensive Care Medicine (EDIC) is to promote standards in education and training in intensive care medicine in Europe and across the world. The exam is intended to be complementary to specialist postgraduate medical training and the taking of the two components of the exam should correspond to stages of experience/training in Intensive Care Medicine.

The aim of the written exam (EDIC Part I) is to test specific theoretical Intensive Care Medicine knowledge, whereas the oral part (EDIC Part II) aims to test the competencies, expertise and professional conduct at the end of the specific training (2-3 years) in Intensive Care Medicine.

The 2019-2020 has been on extending and optimising the EDIC Master Classes (MCs). There has been extensive work in re-modelling the MCs to be able to deliver them online (digital), due to the COVID-19 pandemic. All the Master Classes after first strike of the virus in February were delivered digitally, which was a great achievement and a success.

MCs are now an established part of the EDIC educational track. They use a variety of state-of-the-art education tools and have a high instructor-to-candidate ratio, with a diverse, multi-professional faculty. The courses are fully accredited with Continuous Medical Education (CME) points issued by the European Union of Medical Specialists (EUMS) and compliant with MedTech Ethical Business Practice.

Master Classes for the Society.

The focus in 2019-2020 has been on extending and optimising the EDIC Master Classes (MCs). There has been extensive work in re-modelling the MCs to be able to deliver them online (digital), due to the COVID-19 pandemic. All the Master Classes after first strike of the virus in February were delivered digitally, which was a great achievement and a success.

MCs now have an established part of the EDIC educational track. They use a variety of state-of-the-art education tools and have a high instructor-to-candidate ratio, with a diverse, multi-professional faculty. The courses are fully accredited with Continuous Medical Education (CME) points issued by the European Union of Medical Specialists (EUMS) and compliant with MedTech Ethical Business Practice.

The Clinical Training Committee (CTC) is primarily responsible for the development of educational courses and Master Classes for the Society. The focus in 2019-2020 has been on extending and optimising the EDIC Master Classes (MCs). There has been extensive work in re-modelling the MCs to be able to deliver them online (digital), due to the COVID-19 pandemic. All the Master Classes after first strike of the virus in February were delivered digitally, which was a great achievement and a success.

MCs are now an established part of the EDIC educational track. They use a variety of state-of-the-art education tools and have a high instructor-to-candidate ratio, with a diverse, multi-professional faculty. The courses are fully accredited with Continuous Medical Education (CME) points issued by the European Union of Medical Specialists (EUMS) and compliant with MedTech Ethical Business Practice.

Clinical Training Committee

The Clinical Training Committee (CTC) is primarily responsible for the development of educational courses and Master Classes for the Society. The focus in 2019-2020 has been on extending and optimising the EDIC Master Classes (MCs). There has been extensive work in re-modelling the MCs to be able to deliver them online (digital), due to the COVID-19 pandemic. All the Master Classes after first strike of the virus in February were delivered digitally, which was a great achievement and a success.

MCs are now an established part of the EDIC educational track. They use a variety of state-of-the-art education tools and have a high instructor-to-candidate ratio, with a diverse, multi-professional faculty. The courses are fully accredited with Continuous Medical Education (CME) points issued by the European Union of Medical Specialists (EUMS) and compliant with MedTech Ethical Business Practice.

Master Classes for the Society.

The focus in 2019-2020 has been on extending and optimising the EDIC Master Classes (MCs). There has been extensive work in re-modelling the MCs to be able to deliver them online (digital), due to the COVID-19 pandemic. All the Master Classes after first strike of the virus in February were delivered digitally, which was a great achievement and a success.

MCs now have an established part of the EDIC educational track. They use a variety of state-of-the-art education tools and have a high instructor-to-candidate ratio, with a diverse, multi-professional faculty. The courses are fully accredited with Continuous Medical Education (CME) points issued by the European Union of Medical Specialists (EUMS) and compliant with MedTech Ethical Business Practice.

Clinical Training Committee

The Clinical Training Committee (CTC) is primarily responsible for the development of educational courses and Master Classes for the Society. The focus in 2019-2020 has been on extending and optimising the EDIC Master Classes (MCs). There has been extensive work in re-modelling the MCs to be able to deliver them online (digital), due to the COVID-19 pandemic. All the Master Classes after first strike of the virus in February were delivered digitally, which was a great achievement and a success.

MCs are now an established part of the EDIC educational track. They use a variety of state-of-the-art education tools and have a high instructor-to-candidate ratio, with a diverse, multi-professional faculty. The courses are fully accredited with Continuous Medical Education (CME) points issued by the European Union of Medical Specialists (EUMS) and compliant with MedTech Ethical Business Practice.

Master Classes for the Society.

The focus in 2019-2020 has been on extending and optimising the EDIC Master Classes (MCs). There has been extensive work in re-modelling the MCs to be able to deliver them online (digital), due to the COVID-19 pandemic. All the Master Classes after first strike of the virus in February were delivered digitally, which was a great achievement and a success.

MCs now have an established part of the EDIC educational track. They use a variety of state-of-the-art education tools and have a high instructor-to-candidate ratio, with a diverse, multi-professional faculty. The courses are fully accredited with Continuous Medical Education (CME) points issued by the European Union of Medical Specialists (EUMS) and compliant with MedTech Ethical Business Practice.

Clinical Training Committee

The Clinical Training Committee (CTC) is primarily responsible for the development of educational courses and Master Classes for the Society. The focus in 2019-2020 has been on extending and optimising the EDIC Master Classes (MCs). There has been extensive work in re-modelling the MCs to be able to deliver them online (digital), due to the COVID-19 pandemic. All the Master Classes after first strike of the virus in February were delivered digitally, which was a great achievement and a success.

MCs are now an established part of the EDIC educational track. They use a variety of state-of-the-art education tools and have a high instructor-to-candidate ratio, with a diverse, multi-professional faculty. The courses are fully accredited with Continuous Medical Education (CME) points issued by the European Union of Medical Specialists (EUMS) and compliant with MedTech Ethical Business Practice.

Master Classes for the Society.

The focus in 2019-2020 has been on extending and optimising the EDIC Master Classes (MCs). There has been extensive work in re-modelling the MCs to be able to deliver them online (digital), due to the COVID-19 pandemic. All the Master Classes after first strike of the virus in February were delivered digitally, which was a great achievement and a success.

MCs now have an established part of the EDIC educational track. They use a variety of state-of-the-art education tools and have a high instructor-to-candidate ratio, with a diverse, multi-professional faculty. The courses are fully accredited with Continuous Medical Education (CME) points issued by the European Union of Medical Specialists (EUMS) and compliant with MedTech Ethical Business Practice.
ESICM prides itself on the vast informational resources it is able to offer members and non-members online.

EDITORIAL AND PUBLISHING COMMITTEE

Over the last few years, this Committee has led the Society in its use of various online platforms such as Twitter, to improve engagement of members and disseminate knowledge. The number of colleagues engaging on our various platforms continues to increase.

In my first year as Chair, the intention was to continue with this stream of work, but the COVID-19 pandemic has radically transformed the way we live, work and learn. In keeping with the overall goals of the Society, Committee activities were shifted to various online workstreams.

The Society conducted a series of free and open access COVID-19 webinars in order to share and disseminate the most current knowledge from international colleagues. Such exchanges were key to increasing our understanding of the illness and improving patient care. The pinnacle webinar was the #covidmarathon webinar held on 28 March 2020, comprising over 8 hours of learning and discussion.

More than 7,000 colleagues tuned in and the recording of the event has been viewed over 65,000 times. The lessons from these webinars were further distilled into approximately 65 blog pages (www.esicm.org/blog), which have been accessed by thousands of colleagues.

The Committee has continued its role in coordinating the inclusion in ACE courses and self-assessment.

2. Communication Committee

ESICM ANNUAL REPORT
2019-2020

The newly-endorsed guidelines being developed include:
• The Surviving Sepsis Campaign: Fluids and Vasopressors Research Priorities
• World Brain Death Consensus Statement
• Antimicrobial Therapeutic Drug Monitoring (TDM) in Critically Ill Adult Patients - Position paper

Whilst the output of the Committee has focused on the pandemic, other output streams including the Journal Review Club are ongoing. Despite the demands on people’s time during the current pandemic, our volunteers in the Journal Review Club have produced more than 20 article reviews for the Society’s website, e-newsletters and social media channels since October 2019. A large number related to COVID-19.

We have recruited more volunteers with different areas of interest in order to create a pool of reviewers, which has led to a more efficient use of the resources we have and taking into account the important issue of diversity. The reviews help to create more visibility and citations for our journal and with this goal in mind, the new Editor-in-Chief of the ICMex journal is currently forming a Journal Review Club for ICMex.

There has never been a more crucial period for the intensive care speciality to engage – not only with our international colleagues, but also policy makers, stakeholders, and importantly patients. Moving forward, the Committee is committed to this overarching goal. At the same time, high quality care requires the dissemination of high quality, evidence-based practice and hence the Committee will work together with other ESICM committees to develop clinically relevant guidelines and statements.

We will continue to play an important role of celebrating and acknowledging the hard work and contribution of colleagues within the Society.
NEXT represents the young members of the European Society of Intensive Care Medicine and attracts trainees and young specialists to the Society. This report represents the fourth term of the NEXT Committee since its founding at LIVES 2012 in Lisbon.

COVID-19 has halted several of the Committee’s activities which aim to promote exchange, for instance the Fellowship Programme, which had to be cancelled this year. Nevertheless, the NEXT Committee continues to drive innovation and creativity, and to meet the dynamic needs of a modern medical society.

We are proud to be one of the most active parts in the Society, representing a significant portion of ESICM members. Aside from enabling virtual and real mobility across Europe, NEXT creates a congress track that is particularly interesting for young specialists and trainees; awards research grants; and creates a congress track that is particularly interesting for young members of the European Society.

In the past year, NEXT has changed his Mentoring Programme. The 10 chosen mentees will now be part of a two-year programme, which will start virtually at LIVES Digital 2020, and can hopefully continue with real face-to-face meetings next year.

NEXT was also heavily involved in the organisation of the C19-SPACE project.

LEADERSHIP

After 7 years on the NEXT Committee, and a founder member of the Committee when it was established, Björn Weiss (Berlin, Germany) stepped down as the NEXT Chair, having served the Society remarkably. His successor is Stefan Schaller, who has recently relocated to Berlin, Germany. Together with the Deputy Chair, Laura Galarza, the Committee continues to serve the Society and its young members, and to help shape the future of intensive care medicine.

RESEARCH AND AWARDS

Research is a special focus of the new NEXT leadership and close cooperation of NEXT and Research Committees is therefore important. NEXT has worked on improving the award selection process and takes part in the process with great motivation each year. Furthermore, NEXT supports the cross-committee process of an educational track for research together with the Research Committee and DPD.

EUROPEAN JOURNAL REVIEW CLUB (ERJC)

NEXT has been an active part of the Editorial & Publishing Committee since 2013, helping represent the Society in several media formats, including websites and social media. NEXT members started writing short reviews of articles published in major international journals. The group of reviewers (Journal Review Club) has grown exponentially during last five years, and now has 45 active members from different sections of the Society.

It is interesting to note that 35 of these members are ICU trainees or young specialists. Three NEXTers contribute to different sections of the Society.


MENTORING V 3.0

After successful rounds of the pairing process for mentors and mentees, we have developed a structured programme. For the first time, we have invited an application process, followed by the selection of 10 NEXT members being matched with a mentor in cooperation with the Sections. The programme is set for two years, including a continuous evaluation. Mentees will get free access to (e)LIVES during the congress programme.

C19_SPACE

C19_SPACE is funded by the European Commission to train healthcare workers without ICU experience for a deployment to ICUs during a second COVID-19 wave. It is a chance to convince young trainees of the fascinations of intensive care medicine. NEXT participated in the C19_SPACE Task Force, as well in the creation of context.
It has been a busy period for the Nursing & AHP Committee, which continues to be very active in promoting the profile of Intensive Care Nursing and AHP within the Society. This is the first year of my mandate as ESICM N&AHP Chair, and the Committee I lead enjoys a proactive membership of nurses, physiotherapists and other AHPs, including clinical psychology and dietetics, many of whom participate across all levels of the Society.

Annual Congress
The ESICM LIVES congress in Berlin continued our year on-year increase in active and increasingly collaborative participation across all aspects of the programme. The N&AHP Abstract Award Programme 2019 saw a slight decrease in the number of abstracts submitted compared to the previous year, but an overall improvement in the quality of abstracts most likely linked to the scientific writing workshop that we have run for three consecutive years and which was sponsored by Intensive and Critical Care Nursing Journal in 2019.

Sessions of all types were submitted by N&AHPs throughout the congress, including live debates, thematic sessions, research and networking, critical care rehabilitation and clinical challenges sessions.

N&AHPs were pleased to embrace the changing methodology of LIVES with increased numbers of multi-professional sessions, mirroring how we deliver care to our patients in practice. Our representative, Margo Van Mol, has shown a great amount of flexibility with the development of the current practice. Our latest involvement in the C19 SPACE project in conjunction with the European Commission - by developing a training course for non-ICU staff during this pandemic - is a training course for non-ICU staff for the Southern European regions with the aim of delivering care in the pandemic.

Research
The Decubileus project – an epidemiologic point-prevalence study on pressure ulcers in ICUs, accepted as an ESICM Trials Group Study – has completed data collation and analysis with a publication in the Society’s Journal in October 2020. This study was a landmark trial with international collaboration of extraordinary magnitude.

N&AHP INACTIC-International Nursing Advanced Competency based training for Intensive Care
This project concluded in January 2020. Working with a secured Erasmus Plus grant, the study group has developed an international set of competencies, with an underpinning curriculum and resources, for advanced level intensive care nurses and translated the competency statements into 8 languages.

Like CoBaTrICE, INACTIC has the potential to be an educational framework for nurses across Europe in advanced practice nursing in ICU. As a partner of INACTIC, ESICM will act as the central platform for the provision of education at this level for nursing.

This year’s ESICM Family & Partnership Research Award has been won by a nurse researcher undertaking a qualitative research study to understand the family and carer experience of COVID-19. This is the first time that qualitative research methodology has won a Society award and it is therefore not only a great achievement for the investigators, but also indicates that a qualitative research study has a place in scientific agenda of the Society.

Education
N&AHP members continue to actively contribute to the Journal Review Club, led by N&AHP Committee member, Katerina Iliopoulou.

The N&AHP blended learning programme is now in its third year and we are seeing an increase in participants year on year. While last year’s programme focused on rehabilitation after critical illness (with 600 participants), the current Hot Topics series has more than 1200 subscribers, despite the interruptions due to the COVID pandemic. Overall, the courses are structured in a blended distance learning format comprising of:

- Six webinars
- Online support/classroom on the ESICM Academy Forum
- Evaluation system with Pre-Tests
- Final evaluation

Master Classes
Our increasing involvement in Master Classes held at the ESICM offices, with secured faculty places for N&AHP experts and reduced fees for N&AHP wishing to attend is proving popular. We have seen an increase in participants with N&AHP backgrounds throughout the year, echoing that the development of shared learning and education delivery by ESICM reflects how care is provided in clinical practice as teams.

COVID-19
C19_SPACE
Our latest involvement in the C19 SPACE project in conjunction with the European Commission - by developing a training course for non-ICU staff during this pandemic - is the biggest project to date that we - as a group - have been involved in.

As part of the COVID-19 Task Force, along with our colleagues from the DPD & NEXT, we have developed a three-part curriculum for N&AHP and medical staff while the roll-out is under way.

Webinars
During the Summer, ESICM ran several COVID-19 Marathon webinars to disseminate important information to healthcare professionals throughout the world. As such, under the organisational talents of Carole Boulanger, the N&AHP group held their own webinar with contributions from many international professionals, providing a great insight into N&AHPs experiences and lessons learned during the pandemic. Overall, N&AHP continue to enjoy significant support from the ESICM office and Executive Committee. I am delighted to report another significant year of successful N&AHP activity, despite the current challenges that we face during the pandemic. Needless to say, that all of us in the committee have been very excited to hear that the Society’s Medal has been awarded to Carole Boulanger for her work and commitment to the N&AHP group, her work on the Diversity Task Force, and our Society as a whole. As such, she is the first N&AHP member to have been awarded this honour and also the first female recipient.

As the Chair, I would like to thank my Committee and all the N&AHP members for their unflagging support and hard work, the Executive Committee, and all at the ESICM Brussels office for their assistance, expertise and commitment, without whom we would not be able deliver the many activities within the Society.

Johannes Mellinghoff, Chair, N&AHP Committee
ICM IMPACT FACTOR

The year 2020 has been the year of the COVID pandemic. This worrisome situation impacted not only our clinical activities, but also the medical journals, including Intensive Care Medicine (ICM).

In the last 12 months, ICM received 3,152 new submissions (12,426 since the beginning of the COVID-19 outbreak), with an increase of 60% compared with the previous year. The burden on the Editor-in-Chief, supported by the Editors, and the Editorial office has been huge. We selected for publication 426 manuscripts, while rejecting 1,956 without review (managed in-house by the Editor-in-Chief and the Editorial Board members) and 413 rejected after review.

The ICM editorial strategy during this period has been to provide rapid and prompt information on how to handle this crisis from a clinical point of view, by carefully selecting our topics. Speed of review and publication process will remain our hallmark for all articles. We are also proud to confirm that ICM is one of the fastest publications in the critical care track: the median interval from submission to first decision, including papers immediately rejected and manuscripts sent out for review, is 5.3 days. ICM’s speedy review process relies on high-quality reviewers, with the more active ones included in a Board of Reviewers, which was updated in April 2020.

A performance analysis, published as a letter in ICM, suggested that the turnaround time and the peer-review activity has continued as usual. For this tireless and endless work, we must be grateful to all the committed reviewers of our journal that added this burden to their clinical activities.

ICM continues to reward our reviewers with European CME Credits by the European Accreditation Council for Continuing Medical Education for their participation in reviewing scientific and educational material.

ICM also strictly collaborated with ESICM to make all our COVID-related articles available on the ESICM’s website as soon as they were accepted. Thanks to Springer, our Publisher, we are also very fast in the interval from acceptance to online publication (<15 days), with a final PDF immediately indexed in PubMed.

In 2019, ICM further consolidated its reputation in the critical care field when its top-ranking position in the field was confirmed, with an impact factor of 17.679, 2nd journal in the Critical Care category, and the first journal entirely devoted to critical care medicine. In the same year, the number of article-downloads increased over 2 million, further testimony to their clinical relevance and usefulness, which remain among the main objectives of the Journal’s strategy.

At the beginning of this year, one of our Deputy Editors ended his mandate and we would like to thank Anders Perner for helping the journal to become what it is today. New Editors joined the Board and some current Editors will soon end their mandate. We plan a partial changeover shortly. The two Deputy Editors are now Miet Schetz and Samir Jaber. The Associated Editors’ team now includes:

Whaleed Alhazzani, Yaseen Arabi, Anders Aneman, Thomas Bein, Kate Brown, Alain Combes, Michael Darmon, Audrey De Jong, Sharon Einav, Niall Ferguson, Julie Helms, Nico Juffermans, Ignacio Martin-Loeches, Paul Mayo, Geert Meyfroidt, Morten Hylander Møller, Garyphallia Poulakou, Otavio Ranzani, Claudio Sandroni, Manu Shankar Hari, and Arthur Slutsky, as guest editor 2020. Two of them are “new entries”, selected from among the reviewers who supported the journal the most in the last few years, and for their scientific profile.

Part of our future strategy also concentrates on a more fruitful and efficient collaboration with our sister Journal, ICM-experimental (ICMx). ICM helped to manage the transition phase to a new Editor-in-Chief, Nicole Juffermans. The collaboration with the new Editor-in-Chief of ICMx will help to better focus the journal’s objectives and to enrich the submissions to ICMx, thus hopefully contributing to the obtainment of an IF.
This year we published our first ICM Rapid Practice Guidelines (RPGs) on the management of ICU surge during the COVID-19 crisis and Neuromuscular blockade in patients with ARDS. The RPGs are intended for clinicians and other healthcare professionals caring for critically ill patients and aim to ensure the timely production of trustworthy clinical practice recommendations on topical questions related to critical illness diagnosis and/or management.

This issue had been planned before the onset of the COVID-19 pandemic, we have expanded the range of topics to address different COVID-19 specific issues, and we hope that this will be a timely aid during this extraordinary time. To make our articles more visible, and ultimately downloaded and cited, we have entrusted the management of the journal’s social media accounts, mainly Twitter and Facebook, to a professional user and the results are starting to show.

Finally, please, feel free to suggest any improvements, topics and ideas that can help us make this journal feel more like your journal. Let us know (by emailing icm@unimib.it) what you would like to read in your journal, @yourICM.

Stay safe, stay tuned!

Giuseppe CITERIO
Editor-in-Chief
ICM Journal

INTENSIVE CARE MEDICINE EXPERIMENTAL (ICMX)

Intensive Care Medicine Experimental (ICMX) is the platform for publication of experimental research aimed at an improved understanding of the underlying pathophysiology of critical care syndromes, with the ultimate aim to constitute a pipeline for novel discoveries that will advance clinical care for our patients. The need for such a platform is exemplified by a steadily increasing number of submitted manuscripts by researchers from all continents.

In line with a growing volume, the acceptance rate of ICMX has gone down in the past years. Similarly important to the amount of submissions, the number of articles downloaded from ICMX has been increasing annually; and the same is true for the number of citations and postings on social media. Together, these metrics mirror an increase in attraction of the journal.

Currently, ICMX is shifting gears. I recently took over from Peter Radermacher as Editor-in-Chief, with Marcin Osuchowski as the new Deputy Editor. We are very happy to announce the members of the Board: John Laffey, Claudia dos Santos, Michael Bauer, Elisa Zanier, Peter Pickkers and Alexander Vlaar. This Board constitutes a dedicated team of clinical and basic scientists. Each member has a track record in a specific area of critical care research. Together, they complementarily cover the full range of critical care pathobiology.

The new Board means a change to the current board, which contained a larger number of editors, both senior and junior. Re-arranging the Board was done to stimulate a wind of change. This does not mean that the other Board members were not appreciated. For the esteemed Board members who leave the Board, I sincerely thank you for your dedication to the journal. In our competitive and time-poor environment, your efforts as editors are recognised and highly appreciated. A special thank you goes to Peter Radermacher, whose scientific input into the journal I highly value.

With the new Board, ICMX will put a stronger focus on promoting translational research. In medicine, basic science refers to research that is not necessarily related to therapeutic strategies, whereas translational science refers to the translation of basic science findings into a development of potential therapeutic targets. This means that ICMX will publish experimental research as well as research performed in patients or with patients’ material. The baseline criterion for manuscripts is that data contribute to the development of potential therapies and the refinement of existing therapies, or to the development of diagnostic and monitoring tools that improve critical care. For experimental work, researchers are encouraged to provide a vision of clinical relevance. The overall aim of our change in publishing policy is to bring discoveries and improved treatments and/or diagnostics closer to the bedside of our patients.

Translational science is essential to improve critical care. A prime example of success has been the identification of specific phenotypes in sepsis and ARDS, moving into the era of personalised medicine. But we are only at the beginning of this approach. Successful implementation of personalised therapies requires an improved understanding of the complex biology of critical care syndromes.

To bridge the gap between successful pre-clinical interventions and follow-up clinical applications, ICMX will publish thematic issues summarising specific research questions with a high translational potential, aiming to improve the pre-clinical-to-clinical transition of knowledge. Furthermore, ICMX will continue its ambitions in obtaining an impact factor in the near future, which will further drive the journal.

Along with the new ICMX Board, and in a collaborative partnership with ICM, I am dedicated to serving the ESICM community.

Nicole Juffermans,
Editor-in-Chief, ICMX
Dear Colleagues,

Members of the Society, this is my annual Treasurer’s report for the business year 2018/2019.

The European Society of Intensive Care Medicine is a professional, non-profit organisation and its bylaws constitute the legal basis for the operation of the organisation.

ESICM is based in Brussels, Belgium, and complies with the legal rules of the Belgian Law of Associations with Number BE0467.040.944 in the Belgian Register of Associations. The organisation’s accounts comply with the Belgian fiscal provisions and are externally audited by Francesco Bandinelli on an annual basis.

Accounting and tax advice services are provided by our professional consultant firm, Belgian VAT Desk, supported by our CEO in the Secretariat. We follow a very rigorous process in establishing and monitoring our annual budgets and when considering the regulations of the non-profit law in our investments and financial policies.

In my position as Treasurer, my key interest is to carefully monitor the performances of our investment accounts to safeguard the organization in times of financial crisis. Together with my colleagues in the Council, the aim is to make the right strategic decisions to focus on a sustainable and secure future for the Society and to decide how far we can go in developing activities to deliver our mission and aims.

The following report gives a fair and true view of the assets and liabilities and the financial position of ESICM and I invite you to read my further explanations of the financial statement of the fiscal year 2019 below.

Overall, I am pleased to say that the financial position of the Society is in extremely good health, and currently stands at 6,335,000 Euros.

One of the biggest risks to the Society is the annual congress. We continue to ensure that we monitor the use of our funds by keeping to a strict policy on areas such as travel expenses and ensure we spend sensibly. As a result, we have been able to invest more, year on year, into research, and in addition we have agreed to invest in developing a new e-learning platform.

Jean Louis Teboul
ESICM Treasurer
ESICM Balance sheet 2019_

<table>
<thead>
<tr>
<th>Assets</th>
<th>€K</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Fixed assets</strong></td>
<td></td>
</tr>
<tr>
<td>I. Tangible assets</td>
<td></td>
</tr>
<tr>
<td>Land &amp; Buildings</td>
<td>2,030</td>
</tr>
<tr>
<td>Tools, furniture and fixtures</td>
<td>92</td>
</tr>
<tr>
<td><strong>II. Financial assets</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>2,122</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equity and liabilities</th>
<th>€K</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Net equity of Association</strong></td>
<td></td>
</tr>
<tr>
<td>I. Equity of Association</td>
<td>5,989</td>
</tr>
<tr>
<td>II. Balance sheet profit/loss</td>
<td>50</td>
</tr>
<tr>
<td>Profit of the year</td>
<td></td>
</tr>
<tr>
<td><strong>Total equity and liabilities</strong></td>
<td>6,039</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Current assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Inventories</td>
<td></td>
</tr>
<tr>
<td>II. Accounts receivables</td>
<td></td>
</tr>
<tr>
<td>Trade receivables</td>
<td>-145</td>
</tr>
<tr>
<td>Other receivables and assets</td>
<td></td>
</tr>
<tr>
<td>III. Cash on hands and in banks</td>
<td></td>
</tr>
<tr>
<td>Short-term investments</td>
<td>5,618</td>
</tr>
<tr>
<td>Cash at bank and in hand</td>
<td>1,062</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>6,335</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Provisions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Provision for liabilities &amp; charges</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Liabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Institution</td>
<td>-</td>
</tr>
<tr>
<td>Trade payables</td>
<td>807</td>
</tr>
<tr>
<td>Advances received on orders in progress</td>
<td>-</td>
</tr>
<tr>
<td>Income Taxes</td>
<td>209</td>
</tr>
<tr>
<td>Taxes, salaries and social security</td>
<td></td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>1,016</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D. Deferred charges and Accrued Income</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>127</td>
</tr>
<tr>
<td><strong>Total equity and liabilities</strong></td>
<td>8,335</td>
</tr>
</tbody>
</table>

**Explanation of the financial statement 2019_**

**GROUP OUTCOME**

In 2019, ESICM generated a total revenue of € 7,083,731.14. Total expenses amounted to € 7,033,900.64 which results in a positive outcome of € 49,830.50 for the fiscal year 2019.

In general, the overall development of ESICM’s equity is stable, and despite the challenging economic and regulatory environment, the Society is in a healthy position and is able to deliver all the objectives agreed in the ESICM Strategic Plan.

**MAIN REVENUE 2019 (IN EURO)**

<table>
<thead>
<tr>
<th>Source</th>
<th>€</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congress</td>
<td>4,068,000</td>
</tr>
<tr>
<td>Membership</td>
<td>1,225,000</td>
</tr>
<tr>
<td>Editorial</td>
<td>851,000</td>
</tr>
<tr>
<td>Education</td>
<td>839,000</td>
</tr>
<tr>
<td>Research</td>
<td>100,000</td>
</tr>
</tbody>
</table>

**REVENUE**

ESICM’s main sources of revenue are composed of the congress registration fees, sponsorship and other revenue streams, such as the ICM Journal.

**EXPENSES**

<table>
<thead>
<tr>
<th>Category</th>
<th>€</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants/awards/support/research</td>
<td></td>
</tr>
<tr>
<td>Services delivered by the contracted PCO (KIT)</td>
<td>2,93%</td>
</tr>
<tr>
<td>CONGRESS COSTS</td>
<td></td>
</tr>
</tbody>
</table>
| Costs attributed are rental costs for the congress and course venues, technical/life/network/IT, overall venue set up, with increased interactive provision, innovation from the Scientific Committee and other facility costs, which represent 20.02% of the total expenditure.
| Social events and Faculty costs (travel, hotel) represent 7.49%, while 2.88% of the costs were spent on onsite staff and hostesses (including travel and accommodation).
| Services delivered by the contracted PCO (KIT) represent 2,93% of the total costs. This also includes the fees for sales and delivery of the exhibition & sponsoring management, fees for registration services and abstract fees.

**ESICM ADMINISTRATION COSTS**

The ESICM Secretariat looks after the everyday activities of ESICM, including all the business related to ESICM services, such as support of the Boards and Committees and follow up, organising LIVES, alongside the PCO, and developing the educational programme, including the online platform. Besides this cost factor, all expenses (rental fees, annual running costs, etc.) for the ESICM office building are included.

**ACCOUNTING/TAX ADVICE/LEGAL/ BANK**

ESICM needs to spend a total 4.88% for the costs of services, including the depreciation of the tangible and financial assets for 2019 (3.99%). As we offer credit card payment for registration of the congress, a major part of this cost group is the credit card and bank charges. Other costs include fees for accounting, audit, tax and legal advice (1.31%).

**BOARDS & COMMITTEES**

4.21% is expenditure to support our volunteer work in ESICM. Board and Committee meeting expenses include travel, accommodation and catering costs for the respective meetings of governing boards (Council, Executive Committee, General Assembly and National Societies) and Operating Committees (Scientific, Education, National Societies) throughout the year.
KEY EVENTS 2020_
<table>
<thead>
<tr>
<th>2020</th>
<th>MASTER CLASSES</th>
<th>EVENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN</td>
<td>Sepsis and Severe Infections</td>
<td>31 JAN-2 FEB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CRITICAL CARE DATATHON</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MILAN</td>
</tr>
<tr>
<td>FEB</td>
<td>Haemodynamic Monitoring</td>
<td>6-8 FEB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LIVES PHYSIOLOGY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PRAGUE</td>
</tr>
<tr>
<td>MAR</td>
<td>European Perioperative Intensive Care Curriculum (EPICC)</td>
<td>14-16 MAY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LIVES FORUM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DUBLIN</td>
</tr>
<tr>
<td>APR</td>
<td>Renal Replacement Therapy in ICU State of the Art</td>
<td>2020</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LIVES EUROASIA</td>
</tr>
<tr>
<td>MAY</td>
<td>Mechanical Ventilation</td>
<td>10-14 OCT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LIVES 2020</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MADRID</td>
</tr>
<tr>
<td>JUN</td>
<td>The Art of Trauma Care</td>
<td></td>
</tr>
<tr>
<td>JUL</td>
<td>Point of Care Ultrasound [POCUS]</td>
<td></td>
</tr>
</tbody>
</table>
FROM THE BUG TO ORGAN FAILURE

Jointly organised with

Intensive Care Society of Ireland

www.esicm.org
ESICM ANNUAL REPORT
2019-2020

Join us_

For all inquiries, please contact:

ESICM CEO
Joël Alexandre
Tel.: +32 (0)2 559 03 50
joel.alexandre@esicm.org

www.esicm.org