NETWORK OF ACCREDITED SKILLS CENTRES IN EUROPE

Dear Colleagues and NASCE enthusiasts,

The Annual NASCE Business Meeting, held on February 9th, 2024, in Brussels, was organized by Professor Willaert Wouters from the Institute for Training and Clinical Innovative Technology, Gent.

The meeting commenced with a warm welcome from Professor Emin Aksoy, setting the tone for a day filled with discussions, presentations and setting the stage for the day's activities. This meeting served as a platform for members to align on key objectives, review progress, and plan for the future of NASCE. After each person introduced themselves in the room, Professor Nicla Settembre highlighted some points from the last NASCE Scientific Meeting in Nancy and expressed her gratitude to several individuals and teams for their contributions to the success of the recent NASCE Scientific Meeting. Professor Settembre's remarks highlighted the collaborative effort that contributed to the event's success and emphasized the importance of multidisciplinary training and accreditation in advancing simulation practices.

Highlighted from the last NASCE Scientific Meeting:

1. **Meeting Theme and Structure**:
    - The focus of the scientific meeting was on multidisciplinary training.
    - The meeting featured:
        - **Seven Sessions**
        - **Nineteen Speakers**
        - **Nine Abstracts**
2. **Participant Demographics**:
    - **Attendance**: Participants primarily came from France
    - **Engagement**: The objective was to engage a maximum number of participants, and the meeting successfully attracted over **50 attendees**.
3. **Outcomes**:
    - **Accreditation**: By the end of the four days, **three centres** were in the process of seeking accreditation, indicating the impact and value of the meeting in promoting high standards in simulation and training.

The First Presentation was delivered by Professor Li Fellander-Tsai from the Centre for Advanced Medical Simulation and Training (CAMST), Stockholm, Sweden. Her presentation highlighted CAMST's ongoing efforts in developing and expanding their veterinary training programs while addressing and overcoming the challenges faced in the field. Here are some key points from her presentation:

1. **CAMST Overview**:
    - **Workshops and Courses**: CAMST offers a variety of workshops and courses, including a new development focused on Veterinary Endoscopy and Minimally Invasive Surgery Skills. This new workshop will cover a broad range of veterinary courses.
2. **Faculty and Participation**:
    - **Team**: CAMST employs 20 teachers with diverse expertise in areas such as surgery, urology, orthopedics, and emergency medicine. The team also includes nurses and technicians.
    - **2023 Participation**: The centre hosted approximately 664 participants in 2023, comprising surgeons, medical students, and nurses.
3. **Challenges**:
    - **Veterinary Medicine**: The faculty of veterinary medicine in Sweden is overseen by a university under the Ministry of Rural Affairs, leading to some challenges:
        - **Resource and Knowledge Limitations**: There are issues with achieving the required proficiency due to limited resources and knowledge.
        - **Equipment and Costs**: Challenges include maintaining equipment, reinvestments, and managing costs associated with service contracts.
4. **Achievements**:
    - **Veterinary Medicine Simulation Initiative**: A significant achievement from last year was establishing a cooperative effort with the Veterinary Medicine Simulation Initiative, enhancing their simulation capabilities and collaboration in veterinary training.

The second presentation was delivered by Prof. Emin Aksoy from Centre for Advanced Simulation and Education (CASE), Istanbul, Turkey. His presentation highlighted CASE's innovative approaches to simulation training, including the integration of advanced technology such as AI, VR, and AR, as well as their emphasis on providing comprehensive, interactive, and multilingual training solutions. Here are some keys points from his presentation:

1. **Game Module and Project Benefits**:
    - **Game Module Importance**: Dr. Aksoy emphasized the value of the game module in simulation training. The module integrates both technical and non-technical skills and highlights the role of Artificial Intelligence (AI) in providing support and enhancing the training experience.
    - **The game module includes:**
        - **Multiplayer Mode**: Allows collaborative learning and interaction.
        - **Three Training Modes**: Offers different training scenarios.
        - **Exam Mode**: Assesses proficiency and performance in specific tasks.
2. **Advanced Training Course**:
    - **Hands-On Experience**: The advanced training course includes practical experience with machinery and live instructor-led sessions.
    - **Training and Exam Modes**: Provides various training and exam modes, along with access to references and literature.
    - **Language Options**: Available in multiple languages to cater to a diverse audience.

3. **Virtual Reality (VR) Technology**:
    - **New Machine Guide**: Developed a VR-based machine guide specifically for advanced life support training, enhancing realism and immersion in training scenarios.
4. **Serious Gaming and Training Modules**:
    - **Pain Management Training**: Implementing a serious gaming module focused on pain management.
    - **Ultrasound Training with Augmented Reality**: Utilizing AR to improve ultrasound training.
    - **Robotic Surgery Training**: Employing optical brain imaging to measure cognitive and mental workload during robotic surgery training.

The Third Presentation was delivered by Dr. Teuvo Antikainen from Centre of Healthcare Expertise, Jyväskylä, Finland. Dr. Antikainen's presentation underscored the challenges faced by the Finnish healthcare system and the ongoing efforts to address these issues by shifting focus towards improving quality and reorganizing operations to better meet healthcare needs. Here are some keys points from his presentation:

1. **Healthcare Challenges in Finland**:
    - **Political and Financial Issues**: Dr. Antikainen highlighted significant challenges faced by the Finnish healthcare system in recent months, including:
        - Insufficient political commitment to cover all healthcare costs and no specific resources were allocated to medical education in the new wellbeing services counties at the beginning of the year.
2. **Impact on the Healthcare System**:
    - **Aging Population**: The cost burden from an aging population, coupled with a retiring workforce and increased hospital admissions, has exacerbated the challenges.
3. **Shift in Focus**:
    - **Survival Games**: In 2023, the focus was on survival games, which likely refers to efforts to manage and cope with immediate healthcare challenges.
    - **2024 Objectives**: Moving into 2024, the focus is shifting towards establishing high-quality healthcare. Efforts are being made to improve the system and reestablish high-quality healthcare skills training.
4. **Future Goals and Rebuilding**:
    - **Rebuilding and Reorganization**: The end of 2023 will bring opportunities to rebuild and reorganize operations.
    - **Alignment with NASCE**: The centre aims to align its training programs with NASCE standards to ensure high-quality healthcare skills training and maintain a strong educational.

Unfortunately, Dr. Nikolaos Psychalakis from ELPEN could not make it person but sent us a brief presentation about their centre that capture all key points and details about their centre.

The fourth presentation was delivered Prof. Nicla Settembre from the Hopital Virtuel de Lorraine (HVL), Nancy, France. Prof. Settembre's presentation highlighted HVL's significant strides in medical education and training, focusing on broadening educational offerings, enhancing training quality, and setting ambitious goals for future improvements. Here are some keys points from her presentation:

1. **Overview of Recent Activities**:
    - **Train the Trainer Course and Scientific Meetings**: These were conducted over four days and involved collaboration between three main institutions:
        - **CHRU** (Centre Hospitalier Régional Universitaire)
        - **University of Lorraine**
        - **Emergency Centre**
2. **Educational Advancements**:
    - **Expanded Offerings**: HVL has significantly broadened its educational scope and improved training quality by integrating clinical studies and increasing participation from a range of medical professionals.
    - **Participants**: Annually, around 150 trainer teachers participate in their programs, coming from various fields including: Emergency Medicine, Obstetrics, Gynecology, Pulmonology, Psychiatry and other Specialties. Not only doctors and surgeons but also paramedics and nurses.
3. **Enhancements in Training Programs**:
    - **University Diplomas**: HVL is actively working on improving their university diploma programs essential for robotic surgery. This includes:
        - **Workshops**
        - **Pilot Program**
    - **Skill Development**: Workshops focus on both non-technical and technical skills, alongside broader medical knowledge.
4. **Key Diplomas**:
    - **D.I.U. in Pedagogies and Simulation**
    - **D.I.U. in Advanced Pedagogical Techniques**
5. **Training Methods**:
    - **Practical Experience**: Includes hands-on training in microscopic surgeries and other medical procedures.
6. **Future Objectives**:
    - **OSCE Implementation**: A major goal for the upcoming year is the implementation and rollout of the **OSCE (Objective Structured Clinical Examination) centre**, aimed at further enhancing their training capabilities and ensuring comprehensive assessment of clinical skills.

The fifth presentation was delivered by Dr. Ruther Cooney from the Irish Centre for Applied Patient Safety and Simulation (ICAPPS), Galway, Ireland. Dr. Ruther Cooney's presentation offered a comprehensive view of the Irish Centre for Applied Patient Safety and Simulation (ICAPPS) and its impactful work in Galway, Ireland. The centre's vision is to transform healthcare delivery through evidence-based quality improvement and education, with a mission focused on enhancing patient safety and care quality via research and practical application. Overall, ICAPPS is dedicated to advancing healthcare through simulation and practical training, enhancing both individual skills and overall patient safety. Dr. Cooney highlighted several key initiatives and programs at ICAPPS:

1. **Co-designed Scenarios**: ICAPPS employs a range of co-designed simulation scenarios, including Quality Improvement (QI) initiatives. These scenarios involve a variety of healthcare learners such as pharmacists, medical scientists, physiotherapists, occupational therapists, and speech-language therapists.

2. **Expansion and Development**: The National Simulation Office is working to expand the Healthcare Simulation Collaborative Program (HSCPS) throughout Ireland. New programs are in development, such as the HSCP Postgraduate Development, to support this growth.
3. **Program Scope**: The centre's programs cater to undergraduate and postgraduate students, more than 600 hospital staff members, and 20 external participants. They offer workshops covering procedural and technical skills, community engagement, and outreach activities.
4. **Specialized Training**: ICAPPS provides step-by-step training for endoscopic procedures, a Pathology Boot Camp, and CAESAR (CadAvEric Simulated Autopsy workshop). They also use videos and case studies for enhanced learning.
5. **Innovative Tools**: They have developed HELP (Hyperkalemia Emergency Learning Pack) for testing and treating hyperkalemia and use mannequins to simulate lifeboat scenarios in collaboration with the RNLI.
6. **Future Plans**: The centre aims to appoint a centre manager to further career advancement and engagement. They also plan to increase participation in Train the Trainer (TTT) programs and simulation summer school sessions.

The sixth presentation was delivered by Dr. Isabelle Van Herzeele from the Institute for Training and Clinical Innovative Technology, Gent, Belgium. Dr. Van Herzeele' s presentation from ITCIT in Belgium focused on the intersection of surgeon leadership styles and team behaviours within the hybrid operating room environment. The hybrid operating room integrates high-performance imaging systems with standard operating room facilities, offering a sterile environment equipped with laminar airflow and advanced X-ray imaging technology. Here are some keys points from her presentation:

1. **Hybrid Operating Room Setup**: The hybrid room features a sophisticated setup including 4 HD cameras, 3 microphones, 1 touchscreen PC, 1 capture server, and 1 storage server. This setup supports the OR Black Box project, which was initiated in 2016 and saw its first test cases in 2019.
2. **OR Black Box Project**: The "black box" serves as a critical tool for analysing surgical procedures. However, Dr. Van Herzeele emphasized that while the black box is important, the leadership style and team behaviours of the surgical team are equally crucial.
3. **Leadership Styles and Team Behaviour**: The study explored three primary leadership styles—transformational, transactional, and passive. Transformational leadership was found to be the most effective, particularly during complex surgical phases. The research observed and analysed how different leadership styles influenced team behaviours such as communication, knowledge sharing, and collaboration.
4. **Methodology**: The study involved extensive video recording—47 hours and 27 minutes—covering 154 operative phases, with detailed analysis of seven stages: patient preparation, disinfection and draping, pre-procedural planning, access, lesion treatment, closure, and final check. This allowed for an examination of intra- and inter-rater reliability and the impact of leadership style on team behaviours.
5. **Findings**: The results demonstrated that transformational leadership significantly enhances team behaviours, including increased speaking up, better knowledge sharing, and improved collaboration. The study highlighted that leadership style fluctuates during endovascular procedures and that training future surgeons in transformational leadership could greatly improve patient safety and team performance.

The seventh presentation was delivered by Miss Jelana Godjevac from the Swiss Foundation for Innovation and Training in Surgery (SFITS), Geneva, Switzerland. Her presentation introduced the new hospital support project in Geneva, which represents a significant advancement in surgical training and research and highlighted SFITS's commitment to advancing surgical training through a state-of-the-art facility and innovative pedagogical methods, fostering a collaborative environment for medical professionals and researchers. Here are some keys points of her presentation:

1. **Hospital Overview**: The new hospital, developed through a public-private collaboration board, aims to enhance surgical and interventional practices. It provides a platform for interactive exchange among clinicians, researchers, and engineers and supports research projects focused on new interventional surgical techniques and technologies.
2. **Facility Layout**: The hospital spans 8 floors and includes a lounge, an administration office, a simulation room, a comprehensive studio for video production, a research lab, and on the 7th floor an auditorium, a video room, a wet lab, and a hybrid operating room dedicated to various types of training.
3. **Pedagogical Approach**: The hospital employs the West Approach, which integrates:
    - **Theory**: Instructional videos and e-learning modules
    - **Practical Exercises**: Face-to-face workshops
    - **Self-Training**: Kits for individual practice
4. **Educational Offerings**: The hospital provides a wide range of activities including:
    - Hospital and external courses
    - Medical association events
    - Pre-grad and industrial courses
    - Multidisciplinary sessions
5. **Training Methods**: They utilize a variety of training tools and methods:
    - Simulators
    - Virtual Reality (VR) modules
    - Anatomical models
    - 3D printing
    - An e-learning library
    - Practical courses with anatomical specimens
    - Courses involving anesthetized animals and animals' parts.
6. **Virtangio Machine**: A notable piece of equipment is the Virtangio machine, which mixes blood and has 45 modules installed, evolving from 2016 to 2022. This machine supports realistic simulation scenarios.

The eight presentation was delivered by Dr. Cecilie Vapenstad from the Norwegian National Research Centre for Minimally Invasive and Image-Guided Diagnostics and Therapy (NSALK/MiDT) in Trondheim, Norway. She provided a detailed overview of their simulation-based training initiatives, organizational structure, and future goals. Dr. Vapenstad's presentation highlighted the innovative approaches and collaborative efforts at NSALK/MiDT to enhance laparoscopic surgical training through advanced simulation technologies and stress management techniques. Here are some keys points from her presentation:

1. **Simulation New Project**:
    - **Focus**: The project emphasizes simulation-based training and assessment for laparoscopic surgical procedures.
    - **Stress Management**: Participants are trained to manage and cope with stress through simulation, with boxing training integrated to improve their laparoscopy skills.
2. **Training and Technology**:
    - **Portable Simulator**: A low-cost portable simulator provides formative feedback to trainees.
    - **KOSIM Study**: An ongoing research project collecting data on box trainer and suture tasks to enhance training methods.
    - **T-box**: A new portable box trainer under development, incorporating motion tracking and formative feedback powered by artificial intelligence.

3. **Collaboration**:
    - **Partners**: The centre collaborates with MiDT, NTNU (Norwegian University of Science and Technology), SINTEF (a research organization in Norway), and some French centres.
4. **Participants and Staffing**:
    - **Courses**: In 2023, approximately 575 individuals participated in courses, including 25 undergraduates, postgraduates, and specialists in various stages of training.
    - **Team**: The hospital employs specialists in gastrointestinal surgery, thoracic surgery, gynecology, and urology, along with nurses, engineers, and social scientists.
5. **Challenges and Future Goals**:
    - **Challenges**: They are facing challenges related to organizational reorganization and the implementation of a new electronic health records system.
    - **Future Objectives**: Plans include demonstrating the clinical impact of their courses, investing in new simulators, and acquiring advanced equipment.

The ninth presentation was delivered Dr. Korneel Vandenbroucke from the Operating Room and Surgical Innovation (ORSI,), Melle, Belgium. She provided an overview of their innovative approach to surgical training and the challenges and achievements they have experienced. Dr. Vandenbroucke's presentation showcased ORSI's dynamic approach to surgical training, highlighting their achievements in integrating advanced technologies, expanding international collaboration, and addressing the challenges of modern surgical education. Here are some keys points from her presentation:

1. **Staff and Expertise**:
    - **Network**: ORSI does not employ full-time teachers but relies on a network of technicians and healthcare professionals with expertise in various surgical fields including urology, orthopedics, general surgery, gynecology, and spinal surgery.
2. **Achievements and Initiatives**:
    - **PBP Initiatives**: ORSI has achieved significant milestones in their PBP (Professional Best Practices) program, including:
        - Initiatives focusing on undergraduates.
        - Advancements in surgical AI
        - Recruitment of two orthopedic specialists
    - **Certified Courses**: Achievements include the first certified PBP Train the Trainer (TTT) course, the first international course, and the first lung cancer surgery using ORSI's Augmented Reality technology.

3. **Participants and Metrics**:
    - **Diverse Participants**: In 2023, ORSI engaged:
        - 327 postgraduate participants
        - 19,000 unique viewers for online events
        - 15 events for undergraduate participants
    - **Video Review**: Participants in TTT courses must submit a clinical video for review, with remediation or additional training provided if benchmarks are not met.
4. **Pedagogical Approach**:
    - **Skills Training**: Emphasis is placed on both technical and non-technical skills, using metrics and principles of deliberate feedback.

- **E-Learning Component**: All PBP courses include a mandatory e-learning component to prepare learners for hands-on training.

5. **Collaborations and Future Goals**:
    - **OCERT and AI**: In 2023, ORSI organized the OCERT (ORSI Consensus on European Robotic Surgery Training) and presented updates from Surgical AI Day.
    - **New Projects**: ORSI is involved in acquiring a new robotic system and organizing surgical AI for lung cancer surgery.
    - **International Engagement**: The undergraduate program is now open to international junior participants through the ORSI summer school.
6. **Challenges and Funding**:
    - **Challenges**: ORSI faced challenges related to infrastructure capacity, implementing PBP methodology in collaboration with the Medtech industry, and limited resources for PBP and AI development.
    - **Funding**: ORSI is 80% funded by the Medtech industry and 20% from organizing courses.
7. **Partnerships and Innovations**:
    - **Partnerships**: ORSI has established a 5-year partnership with Medicaroid.
    - **Summer School**: The international junior ORSI Summerschool is a new initiative, reflecting ORSI's commitment to global educational outreach.

The tenth presentation delivered by Dr. Dermot Daly from the National Surgical Training Centre (SIMS-RCSI), Dublin, Ireland and provided a comprehensive overview of their simulation facilities, mission, and innovative approaches to surgical training. Dr. Daly's presentation highlighted SIMS-RCSI's commitment to advancing surgical training through innovative simulation methods, a strong focus on patient care, and a robust network of faculty and trainers. Here are the keys points:

1. **Mission and Facilities**:
    - **Patient Care Focus**: The primary mission of SIMS-RCSI is enhancing patient care through advanced simulation training.
    - **Simulation Equipment**: Their facilities are equipped with a diverse range of simulation equipment, including pediatric mannequins used for scenarios such as spinal cord injuries.
2. **Team and Expertise**:
    - **Diverse Backgrounds**: The team includes experts with various backgrounds, including those skilled in moulages (lifelike anatomical models).
    - **Faculty and Trainers**: The Department of Surgical Affairs (DOSA) consists of six permanent SIM faculty members and a broader network of 600 trainers within the Surgery cohort.
3. **Educational Outreach and Tourism**:
    - **Education and Student Achievement**: SIMS-RCSI emphasizes education and student success, engaging in various outreach activities.
    - **Tourism Opportunities**: They also offer tourism opportunities, adding an extra dimension to their educational programs.

4. **Research Focus**:
    - **Innovative Courses**: Their research includes conversational learning, team dynamics, and model design, aiming to create cost-effective training modules.
    - **Robotic Surgery Training**: They focus on intuitive and CMR (Computer-Mediated Reality) site training, with an emphasis on developing reproducible high-fidelity simulations.

5. **Simulation Programs**:
    - **Pediatric Mannequins**: Used for training scenarios involving spinal cord injuries.
    - **Robotic Surgery**: Emphasizes the creation of high-fidelity simulations to train surgical teams effectively.

The eleventh presentation was delivered by Professor Apostolos E. Papalois' s from the Simulation and Biomedical Research Centre (SUBRE), Thessaloniki, Greece and provided insights into their organizational structure, current initiatives, and future goals. Professor Papalois' s presentation highlighted SUBRE's commitment to advancing simulation and biomedical research through diverse training programs, innovative use of technology, and future expansion projects. The integration of VR and the development of new courses reflect their focus on enhancing educational methods and broadening their educational offerings. Here are some keys points from his presentation:

1. **Organizational Structure**:
    - **Board of Directors**: The board is central to the management and direction of the centre.
    - **Expansion**: New buildings are under construction to establish a new research and innovation centre.
2. **Educational Focus**:
    - **Future Directions**: Upcoming scientific meetings are expected to emphasize integrating business aspects into classes and enhancing communication, technical, and non-technical skills.
    - **Diverse Faculty**: The centre employs 28 teachers with backgrounds in surgery, anatomy, dermatology, ENT, plastic surgery, and other fields, along with 13 nurses and 13 technicians.
3. **Current Training Initiatives**:
    - **Upper Limb Transfers**: Training sessions focused on upper limb transfers.
    - **Endocrine Surgery**: Courses on endocrine surgery using mannequin simulation.
4. **New Initiatives**:
    - **HBP Surgery and DSTC Courses**: These new courses are driving reforms within the centre.
    - **VR Technology**: They have incorporated Virtual Reality (VR) technology into their training, featuring a platform and an escape room scenario to enhance the learning experience.
5. **Future Projects**:
    - **SIMS**: Planned future projects include SIMS, a simulation initiative.
    - **Online Courses**: Development of online courses aimed at both the general public and professionals, expanding their reach and impact.

The twelfth presentation was delivered by Dr. Pier Luigi Ingrassia from the Society for Simulation in Europe (SESAM) and highlighted the society's mission, achievements, and strategic goals, as well as its role in advancing simulation in healthcare and education. Dr. Ingrassia's presentation underscored SESAM's role in advancing simulation through robust accreditation processes, international outreach, and a commitment to high-quality education and patient safety. The society's growth and strategic focus reflect its dedication to fostering excellence and innovation in simulation-based healthcare training. Here are some keys details from his presentation:

1. **SESAM Overview**:
    - **Mission**: SESAM aims to enhance healthcare through simulation and foster sustainable practices in simulation and education.

- **Diverse Membership**: The society comprises members from various professions beyond just healthcare.

2. **Core Values**:
    - **Knowledge**: Commitment to advancing simulation-based education.
    - **Strategic Partnerships**: Building strong collaborations.
    - **Community**: Fostering a supportive network of simulation professionals.

3. **Growth and Structure**:
    - **Membership and Conferences**: SESAM is experiencing growth in both membership and conference participation. The latest conference, SESAM Lisbon 2023, saw an increase in participants.
    - **Simulation Centre Networking**: One of SESAM's strengths is its network of simulation centres.
4. **Accreditation and Quality Assurance**:
    - **Accreditation**: SESAM offers accreditation to recognize high-quality simulation-based education linked to patient safety.
        - **Types**: Document-based and full accreditation.
        - **Process**: Includes visits from committee members and society representatives, with volunteers covering their own expenses.
        - **Re-accreditation**: Occurs every 4 years, with an approval period of 2 years.
        - **Fees**: Collected from membership fees and the centre; generally, issues are addressed within a six-month period.
    - **Public Trust**: SESAM's accreditation activities aim to increase public trust by ensuring quality assurance.
5. **Governance and Community**:
    - **Structure**: SESAM has executive meetings, an extended committee, an advisory board, and a community of practice.
    - **SAG**: A Special Advisory Group selected by the executive.
6. **International Perspective**:
    - **Global Reach**: SESAM's activities extend beyond Europe to North America (including Mexico) and Asia, acknowledging different regional needs and practices. SESAM maintains a European perspective but with international interests, addressing global demands and sharing experiences across diverse contexts.
7. **Comparison with NASCE**:
    - **Difference**: Unlike NASCE, SESAM does not hold meetings and it operates independently, whereas NASCE is part of the UEMS (European Union of Medical Specialists).
8. **SIM University and Future Goals**:
    - **SIM University**: Features a competitive annual event for finalists.
    - **Support Needed**: SESAM seeks support, especially in the surgical domain, to enhance capabilities and continue promoting excellence in healthcare simulation.