

The role of the International Pediatric Simulation Society in supporting your simulation journey

focus

Jennifer Peterson Neonatal Registrar and Simulation Fellow, Neonatal Intensive Care Unit, Manchester University NHS Foundation Trust
jennifer.peterson@mft.nhs.uk

Simulation has become an embedded learning modality in many healthcare professional education programmes. It provides learners with an interactive environment to explore new techniques, consolidate and refresh skills, and develop new expertise. Simulation can also be used as a powerful adjunct to many inter-related aspects of health care, such as patient safety and quality improvement initiatives. However, equity of access to simulation programmes is not consistent across healthcare facilities.¹ A factor contributing to this inequity is the difficulty in being able to adequately develop a simulation faculty. Obtaining the necessary skills to deliver high-quality simulation sessions can initially be an overwhelming task for novice departments due to the blend of educational theory and technical skills required. Instructors need to simultaneously set-up and troubleshoot equipment alongside continuously observing and noting individual and team performances, and then facilitate a functional debrief through which the learners dissect and critique their simulated experience and relate this back to their own future practice. Even for experienced simulation staff, there are always new techniques, skills and application of new technologies to learn thanks to the ever-increasing depth and breadth of simulation research being carried out around the world.

Being involved in simulation education is incredibly rewarding and worth the effort to learn the skills needed to run an impactful simulation programme. Entering the world of simulation gives the instructor a chance to be part of a global community of enthusiastic and motivated educationalists who are committed to improving the quality of health care delivered to their patients.

Peer support

Dipping your toe into the world of simulation can be a daunting prospect and navigating the vast range of simulation methods, debriefing tools and scenarios can be exceedingly time-consuming. Fortunately, there is a wide-reaching global community of simulationists who can help. Simulationists tend to be highly approachable professionals happy to share their experiences, and, usually, their resources too. This is particularly true of the International Pediatric Simulation Society community (IPSS; <https://ipss.org>). IPSS was established to support simulation research, training and the implementation of simulation-based paediatric care around the world. The society is passionate about the myriad of ways simulation can improve paediatric practice. IPSS provides support to members through access to peer support networks, an extensive library of over 100 paediatric-specific simulation scenarios and discounted rates to their conferences and webinars that run throughout the year.



FIGURE 1 Learning about bespoke simulation facilities vs *in situ* programmes.



FIGURE 2 Printed screens and moulage to recreate transport environments.

I have been lucky enough to attend the IPSS in-person conference twice during my time as a neonatal simulation fellow. My first time attending the conference was in May 2019 in Toronto, Canada, and I was struck by how friendly and approachable the IPSS community is. When you are new to a professional society or community, networking events can be intimidating. However, the atmosphere of IPSS is relaxed, approachable and collaborative. The conference takes place over a three-day period centering around twice daily keynote lectures with a vast range of interactive, interprofessional simulation abstract presentations and workshops in between. This format naturally lends itself to discussion enabling easy introductions and networking opportunities to share ideas with new colleagues. The



FIGURE 3 Simulation for parent education.

conference is an excellent way to be immersed into the world of simulation for novice simulationists and a great chance for those more experienced to gain new ideas to take back into their own practice and programmes (**FIGURES 1-4**). The keynote speaker sessions offered considered discussion of a wide range of simulation practices, such as the insightful lecture by world-renowned Adam Cheng on debriefing practices.² Topics also included the inspirational session delivered by Betsy Hunt who presented her incredible work using simulation to improve real-world cardiac arrest outcomes for children.³

Sharing ideas

Through attending the IPSS conferences, I was introduced to the idea of virtual reality (VR) simulation and the potential this brings for simulation learning to be accessed by an increased number of healthcare practitioners beyond those able to attend the in-person simulation sessions. Virtual simulation is an expanding modality and offers huge scope for interprofessional training and asynchronous education. Many VR programmes are currently adult medicine focused and expensive to purchase the necessary equipment, maintenance and scenarios. However, the level of interactivity these VR programmes bring is immersive and engaging for learners. Attendance at IPSS allowed me to interact with these commercially-developed VR programmes (**FIGURE 5**) and see first-hand the potential these bring. It also gave me the opportunity to hear about VR programmes being developed in-house by paediatric and neonatal units in the USA using lower cost techniques and allowing adaptation to their own specific learning needs. I have been able to take this learning back to my own hospital and have worked with our simulation education team at St Mary's, Manchester, to develop our own range of VR neonatal simulation scenarios. These are due to launch on the Health Education England e-learning website in summer 2023. The concept and techniques for this novel element of our simulation programme were inspired by the workshop sessions attended at IPSS.

Simulation research

For those more experienced simulationists, IPSS has plenty to offer. Alongside the conferences there are a range of webinars throughout the year covering in-depth simulation topics and facilitating useful peer-to-peer discussions. IPSS also works alongside its affiliate organisation INSPIRE (International



FIGURE 4 3D printing techniques for paediatric surgical education. Bespoke 3D prints can be made for individual patient heart conditions allowing better visualisation for parents when diagnosis and management are being explained, and enabling surgeons to pre-plan and practice individualised surgical approaches for complex cardiac conditions.



FIGURE 5 Exploring virtual reality simulations.

Network for Simulation-based Pediatric Innovation, Research and Education).⁴ The INSPIRE network offers support in developing research ideas and proposals, advice regarding funding options and has numerous funding awards that can be applied for to support your simulation research. INSPIRE has an international scope encouraging collaboration across borders and facilitating peer support and mentoring partnerships to enable these collaborations to be successful.

Getting involved in IPSS

Anyone working in paediatrics should consider becoming involved in IPSS and attending the conferences and webinars,

which cover a wide range of simulation topics relevant to neonatal and paediatric practice. In addition, the IPSS website is expanding over the next year to include more educational resources for members. Membership comes with access to the scenario library, a supportive peer network and heavily discounted conference registration rates. The IPSS conferences run twice yearly, with one in-person event in the summer (locations alternating between USA, Canada and Europe each year) and one virtual conference every autumn. The conferences have a range of international speakers and are an opportunity to learn how simulation can be used to better support delivery of safe and high-quality health care to children and newborns.

Simulation is a fun and flexible learning modality and an incredibly welcoming and supportive community. Whether you have an interest in healthcare professional education, parent education, quality improvement, patient safety or healthcare research, simulation can provide you with a powerful tool to enable you to reach your goal and improve care to your patients.

We hope to see you at the next conference.

Declaration of interest

Jennifer Peterson is a neonatal subspecialty trainee in the North West of England and a trainee board member for IPSS.

References

1. **Health Education England.** Simulation. Online at: www.hee.nhs.uk/our-work/simulation
2. **International Pediatric Simulation Society.** IPSSW 2019 conference programme. Toronto, 2019, online at: www.eventscribe.com/2019/IPSSW2019/reports/dynamicProgram.asp
3. **Hunt E, Jeffers J, McNamara L, et al.** Improved cardiopulmonary resuscitation performance with CODE ACES2: a resuscitation quality bundle. *J Am Heart Assoc* 2018;7:e009860.
4. **International Network of Simulation-based Pediatric Innovation, Research and Education.** INSPIRE funding awards. 2023 online at: <https://inspiresim.org/inspire-awards>

The IPSS website contains up-to-date information including details of the next conference in the beautiful city of Lisbon, Portugal (17-19 May 2023), visit: ipss.org/IPSSW2023

CONFERENCE PLANNER

22-23 APRIL 23

STAN Course

Stabilisation and Transfer of the Acutely unwell Neonate.

Venue: Engineers House, Bristol

Cost: £499-599

Contact: Lee Collier

lee@brighterlouder.co.uk

<https://neonatalskills.uk>

28 APRIL 23

Spring Conference: Learning as a Team

Brought to you by the British Association of Perinatal Medicine, the Neonatal Nurses Association and the Association of Paediatric Chartered Physiotherapists.

Venue: Hybrid: Edinburgh International Conference Centre and online

Cost: £65-135

Contact: www.bapm.org/events/

bapm-spring-conference-2023-learning-as-a-team

18-21 MAY 23

EAP 2023 Congress

The European Academy of Paediatrics conference covers in-depth and important

clinical subjects to promote the health of children and young people in Europe.

Venue: Padova, Italy

Contact: <https://eap-congress.org>

9 JUNE 23

Annual International Neonatal Conference

A one-day advanced neonatal conference aimed at consultants, trainees, nurses and advanced nurse practitioners.

Venue: The James Cook University Hospital, Middlesbrough

Cost: £150

Contact: nicky.robinson@nhs.net

<https://events.southtees.nhs.uk/events/annual-international-neonatal-conference-thursday-8th-friday-9th-june-2023>

23 JUNE 23

Medela's Breastfeeding and Lactation Symposium

Four globally renowned speakers will share their knowledge and latest research outcomes under the theme of 'Advancing Lactation Science to Improve Care'.

Abstract submission deadline: 12 May 2023.

Venue: A hybrid symposium: virtual and Munich, Germany

Cost: Free of charge

Contact: www.medela.com/breastfeeding-professionals/news-events/congress-2023/europe-symposium

26-27 JUNE 23

REaSoN 2023

Bringing together doctors, nurses and other healthcare professionals, the REaSoN Neonatal Meeting 2023 will deliver hot topics in neonatology through lectures, discussions and networking opportunities.

Venue: A hybrid event with virtual or live-attendance options in Warwick

Contact: www.reasonmeeting.co.uk

25-26 SEPTEMBER 23

NeoCard-UK 2023

The 14th Neonatal Cardiology and Haemodynamics Conference includes case-based discussions, hot topics and lectures given by international experts in the field.

Venue: A hybrid event: online and Edgbaston Park Hotel, Birmingham

Contact: www.neonatalcardiology.co.uk

7-8 NOVEMBER 23

Meningitis Research Foundation Conference

Bringing together world leading experts to share the latest advances and discuss today's challenges for meningitis and septicemia.

Venue: Hybrid and in-person at the British Museum, London

Contact: www.meningitis.org/healthcare-professionals/conferences-and-symposia/mrf-conference-2023

Visit the *Infant* online Calendar for more meetings, conferences and study days
www.infantjournal.co.uk/conferences.html