

# Annual Report

**INSPIRE | 2021-2022**



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## Preface

Dear INSPIRE community,

We are excited to share the 2021-2022 Annual Report with you highlighting all the success of the INSPIRE community over this past year. This was a year of continued growth and expansion despite all the challenges of an ongoing pandemic. We are so incredibly proud of all the work of this community to pursue our mission of improving the lives of children through simulation science by promoting the development of high-impact simulation-based research and education.

This past year saw the return of some in-person events at both IMSH and IPSSW meetings with the wonderful opportunity to catch up with friends and colleagues. Virtual participation continued as well with hybrid inclusion at IPSSW and IMSH, and our first ever Fall Virtual Conference. This new event was a huge success with greater than a hundred attendees from many countries around the world and will continue moving forward, offering an annual fall opportunity for additional ALERT presentations in this format. INSPIRE launched its new Grand Round series with three interactive presentations discussing the importance of psychological safety, using systems simulation to build a new hospital, and using simulation to support team culture. We look forward to additional dynamic speakers who stretch our minds and the boundaries of simulation in 2023 and beyond!

INSPIRE is fortunate to have strong local financial support from the community and a generous anonymous donor. This past year, we were able to launch a call for three broad simulation-based awards, including for novice researchers and those from low- and middle-income countries. We look forward to learning more about the award winners in the new year and the new discoveries these projects bring. To continue to maintain the financial integrity of the community, the new Development Committee was formed to oversee all things financial. You'll be hearing more about this committee and its work in the coming months. In the meantime, INSPIRE has received yet another generous donation to support our work in 2023; this donation is critical to continuing our mission. We are able to commit to ongoing funding for the IPSS-INSPIRE fellowship and will be looking for additional ways to support the important work of our community.

This past fall we said goodbye and a huge "Thank You!" to our first Executive Director, Monica Evans-Lombe, who had been with us for **five** years. Monica's organization and passion for our work helped to strengthen and grow INSPIRE. We are deeply grateful for all she did for us and wish her well in her next adventures. As we said goodbye to Monica, we welcomed ARS (Associate Resource Solutions) and our new Executive Director, Leah Bozeman. Leah is a fantastic partner, and we are excited to continue to build this new relationship.

INSPIRE would not be who we are and have the success we do without all of you – the dedicated community of researchers, educators, simulationists, and supporters. As we reflect on this past year, we remain incredibly grateful for all of you. It is through your actions, work, and determination that we

are able to reach our vision of being the global community that catalyzes discoveries and promotes collaboration. We invite you to return, engage, participate, lead, and include others as we dive into 2023 and all the exciting opportunities.

Sincerely,

Kimberly Stone, Tensing Maa, and Cara Doughty  
INSPIRE Co-Chairs, on behalf of the INSPIRE Executive Board



# INSPIRE Overview

## Mission



## Vision

To serve as a global community that catalyzes discoveries and promotes collaboration in simulation-based research, scholarship, and innovation

## Values

### Community

We strive to create a **collaborative** environment with open sharing of ideas and **accessibility** between members while breaking down silos.

### Discovery

We encourage **innovation** through **taking risks** and challenging the status quo.

### Integrity

We believe in **transparency**, **trust**, **respect**, and high standards for **quality** in all of our endeavors.

1,220

364

66

A world map showing the number of countries in each region that have signed the Paris Agreement. The map uses a color scale from light blue (1) to dark blue (66). The regions and their respective counts are as follows:

Region	Number of Countries
North America	66
Central America and the Caribbean	1
South America	3
Europe	28
North Africa and Middle East	9
Sub-Saharan Africa	1
East Africa	1
South Africa	1
Asia	107
Oceania	13
Antarctica	5

# History

INSPIRE stands for the International Network for Simulation-based Pediatric Innovation, Research, and Education. INSPIRE was formed in 2011 from a large group of pediatric simulation-based researchers from a variety of disciplines and specialties looking to improve collaboration, mentorship, and productivity. We merged two large-scale existing pediatric simulation research networks, EXPRESS and POISE, into INSPIRE in 2011.

# Organization

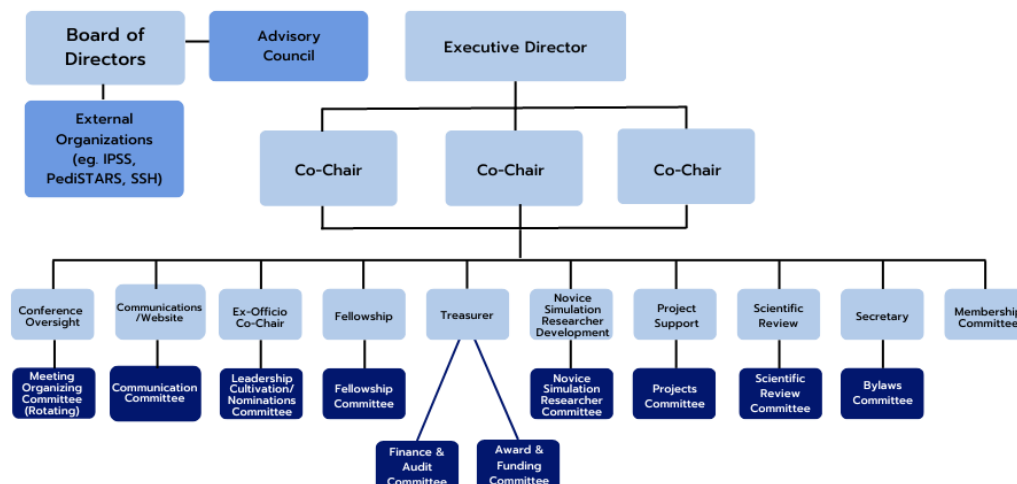
The process of centralizing all pediatric simulation research through INSPIRE has brought down the walls between institutions and allowed for sharing our resources and minds towards a common goal. Our work has helped synergize ongoing projects in overlapping domains. We are not a formal academic society; rather, we are a bottom-up, grassroots organization that formed to meet the needs of the rapidly changing landscape of pediatric simulation research. The network has been extremely productive in advancing and guiding simulation-based research activities. We provide a structure and process of mentorship to junior investigators.

## Organizational Structure of INSPIRE

### Executive Committee

INSPIRE is led by volunteers on the executive committee from institutions across the globe, and our network's success fully depends upon the time and energy they put into the network. Thank you to all those who have volunteered or were candidates in the election this year! INSPIRE's executive committee structure is given below:

**INSPIRE Executive Committee Structure**



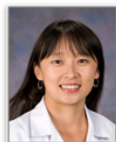
## Current Executive Committee Members



### 2022 – 2023 INSPIRE EXECUTIVE BOARD



**Kimberly Stone, MD,**  
MS, MA  
*Co-Chair*  
Seattle Children's  
Hospital & University of  
Washington School of  
Medicine, USA



**Tensing Maa, MD,**  
FAAP  
*Incoming Co-Chair*  
Nationwide Children's  
Hospital & Ohio State  
University, USA



**Cara Doughty, MD, MEd**  
*Past Co-Chair*  
Texas Children's Hospital  
& Baylor College of  
Medicine, USA



**Travis Whitfill, MPH,**  
MACE  
*Treasurer*  
Yale University, USA



**Kamal Abulebda, MD**  
Riley Hospital for  
Children, USA



**Aaron Calhoun, MD, FAAP,**  
FSSH  
University of Louisville &  
Norton Children's Hospital,  
USA



**Brittany Dahlen, MSN,**  
RN, NPD-BC, CPN  
Children's Minnesota,  
USA



**Jabeen Fayyaz, MD**  
The Hospital for Sick  
Children, CA



*Junior Director*  
**Ryan Fredricks, MD**  
UK Healthcare \_  
University of  
Kentucky, USA



**Isabel Gross, MD, PhD,**  
MPH  
Yale University School  
of Medicine, USA



**Priti Jani, MD, MPH**  
University of Chicago,  
Coker Children's  
Hospital, USA



*Junior Director*  
**Anisha Kshetrapal, MD,**  
MSEd  
Ann & Robert H. Lurie  
Children's Hospital, USA



**Anita Thomas, MD, MPH**  
Seattle Children's  
Hospital, USA



**Nancy M. Tofil, MD, MEd**  
University of Alabama at  
Birmingham & Children's  
of Alabama, USA



**T. Bram Welch-Horan,**  
MD  
Baylor College of  
Medicine, USA



**Hilary Woodward, MS, CCLS**  
New York-Presbyterian Morgan  
Stanley Children's Hospital at  
Columbia University Medical  
Center, USA

## INSPIRE Advisory Committee

Special thanks to our members serving in the senior role as advisors to the executive committee. The advisory committee is available in an ad hoc fashion to consult for and support the network on important matters.

- Mark Adler MD, Feinberg School of Medicine, USA
- Jennifer Arnold MD, Boston Children's Hospital, USA
- Marc Auerbach MD, MSci, Yale University, USA
- Aaron Calhoun MD, University of Louisville, USA
- Todd Chang MD, MAcM Children's Hospital of LA, USA
- Adam Cheng MD, Alberta Children's Hospital, Canada
- Jonathan Duff MD, University of Albert, Canada
- Jordan Duval-Arnould PhD, Readyworks Health Inc., USA
- David Grant MBChB, MRCPCH, FFICM, University of Bristol, UK
- David Kessler, MD MSci, Columbia University, USA
- Ralph Mackinnon MD, Royal Manchester Children's Hospital, UK
- Vinay Nadkarni MD, MS, Children's Hospital of Philadelphia, USA
- Akira Nishisaki MD, MSCE, Children's Hospital of Philadelphia, USA
- Martin Pusic MD, PhD, New York University School of Medicine, US

## Committees, Roles, and Positions

### Executive Committee

Role and suggested exec member	Description	Roles/activities	Selection process
<b>Network Co-chairs</b>  Tensing Maa Kimberly Stone Cara Doughty	The Co-chairs of the INSPIRE network are charged with maintaining the overall mission and vision of INSPIRE by overseeing and guiding the activities of the Executive Board and Scientific Review Committee. Once elected, co-chairs will serve for 2 years, followed by an additional mandatory year on the Exec Board afterward in an ex-officio position. The specific role of this position is Leadership Development.	<ul style="list-style-type: none"> <li>• Oversight of all current network activities with the goal of maintaining alignment with network mission, vision, and ethos/values.</li> <li>• Development/organization and leadership of core network research endeavors.</li> <li>• Decision-making, in collaboration with the Executive Committee, regarding new network initiatives and activities</li> <li>• Oversight of the financial status and health of INSPIRE</li> <li>• Carrying out (with the assistance of the Executive Committee) decisions made by the Executive Committee</li> <li>• Scheduling and chairing the monthly Executive Committee conference calls.</li> <li>• Establishing and maintaining collaborative relationships with other entities.</li> <li>• Identification and mentorship of potential new leaders within the network.</li> <li>• Overseeing and disseminating yearly network activity reports.</li> </ul>	Nominations for Network co-chair positions can be made by any executive board member. Self-nominations are acceptable. Minimum criteria for the position include 1 or more years of service on 1) the executive board, 2) within a committee, or 3) as the chair of an INSPIRE meeting. If a committee member/meeting chair self-nominates, the committee chair/executive member associated with that committee or meeting must approve. Nominations will be brought to the nominations committee, which reserves the right to nominate additional candidates and/or to veto any nomination. Elections will occur in June, with new terms beginning in July. Elections for the co-chair positions will be conducted in a staggered fashion, with only one director/co-director turning over per year. Only members will be eligible to vote in director/co-director elections.
<b>Secretary</b>	The Secretary is the conduit of information and communication between the Board of Directors and the Membership.	<ul style="list-style-type: none"> <li>• Attend all Business and Board of Directors meetings.</li> <li>• Responsibility for the minutes of the Board of Directors and Business meetings.</li> <li>• Chair the bylaws committee</li> <li>• Oversee the retention of all INSPIRE records.</li> <li>• Ensure that notices of meetings are sent to the membership.</li> </ul>	This position has a 3-year term.
<b>Treasurer</b> Travis Whitfill	The Treasurer oversees the Society's financial management to ensure	<ul style="list-style-type: none"> <li>• Attend all Business and Board of Directors meetings.</li> </ul>	This position has a 3-year term



	the Board of Directors and staff understand their fiduciary responsibility. The Treasurer's term is three years.	<ul style="list-style-type: none"> <li>Oversee the funds and financial matters of INSPIRE.</li> <li>Present an annual financial report to the membership.</li> <li>Signatory authority for tax and financial purposes.</li> <li>Assume other responsibilities as directed by the Co-Chairs.</li> </ul>	
<b>Executive Director</b> Leah Bozeman	The Executive Director serves as a long-term, paid position alongside the Network Co-directors, and is tasked with overseeing all administrative roles within the network. The executive director will also oversee and manage network finances and financial transactions.	<ul style="list-style-type: none"> <li>Management of the INSPIRE webpage and other IT infrastructure</li> <li>Direct oversight of financial status and associate accounts</li> <li>Coordinates network official communications.</li> <li>Oversees other administrative personnel</li> <li>Tracking/updating project-related databases in concert with other administrators</li> <li>Preparing/disseminating yearly reports.</li> </ul>	This is a long term-position not subject to election. New Executive Directors will be selected by the Network Co-chairs and Executive Committee, and their activities will be overseen by the same. Yearly performance evaluations will be provided.
<b>Executive Board</b> Cara Doughty Kimberly Stone Tensing Maa Aaron Calhoun Travis Whitfill Kamal Abulebda Brittany Dahlen Jabeen Fayyaz Ryan Fredricks Priti Jani Isabel Grsos Anisha Kshetrapali Anita Thomas Nancy Tofil Bram Welch-Horan Hilary Woodward Leah Bozeman	The executive board serves as the main governing body of INSPIRE. Each executive board member will have a specific role/area of oversight as outlined below. Together with the Network Director/Co-director and Executive Director, the Executive Board will oversee all activities of the network and function collectively to make needed decisions.	While roles are specified, this will not be construed to imply complete separation of function, and healthy crosstalk will be deliberately maintained. The Executive Board shall conduct monthly conference calls, during which each will report out regarding their specific role/function. Attendance at 80% of these calls is an expectation, and when calls must be missed, a brief electronic summary of their activities over the past month will be provided in advance of the monthly conference call. The period of service is 2 years for regular members, with an additional junior/trainee member with a 1-year term who must currently be in a training program. In addition to the named roles below, general at-large executive board slots may be created by the board as needed.	Nominations for the Executive board can be made by any member of the network. All members who have been part of INSPIRE for >2 years shall be eligible for nomination. Nominations will be brought to the nominations committee, which reserves the right to nominate or appoint additional candidates and/or to veto any nomination. Elections will occur in June, with new terms beginning in July. Elections will be conducted in a staggered fashion, so that no more than 50% of the Executive Board will turn over in any given year. Once elections have occurred, roles will be selected at the first executive meeting.
<b>Scientific Review Chair</b> Priti Jani	The Scientific Review Chair is responsible for overseeing and coordinating the consult and ALERT processes. These function as primary entrance points into the network. This	<ul style="list-style-type: none"> <li>Developing agenda, facilitating and taking/distributing minutes for SRC conference calls. These 1 hour calls occur at least every other month, with additional calls scheduled as committee activities require.</li> <li>Overseeing the ALERT call for proposals, review, and notification</li> </ul>	Standard executive board nomination or appointment



	individual shall convene a Scientific Review Committee for the purpose of conducting these activities, and for leadership development	<p>process. This occurs twice a year (Sept-Jan for INSPIRE at IMSH, March-May for INSPIRE at IPSSW).</p> <ul style="list-style-type: none"> <li>Overseeing the consultancy functions of the SRC. Each year, a number of external research consultancy/mentorship requests are forwarded to the SRC. The committee chair is responsible for initial triage of these requests and, with the help of the committee as a whole, locating an appropriate mentor within INSPIRE for the originator of the request.</li> <li>Presenting SRC activities and status to the INSPIRE Executive Committee at monthly conference calls.</li> </ul>	
<b>Award and Funding Chair</b> Travis Whitfill	The Finance and Award Chair is responsible for overseeing and coordinating study-related financial awards within the network as well as the acquisition of additional funding for the network itself. This individual shall convene a Finance and Award Committee for the purpose of conducting these activities, and for leadership development. The Finance and Award Chair will work closely with the Executive Director to accomplish these tasks.	<ul style="list-style-type: none"> <li>Developing agenda, facilitating and taking/distributing minutes for Finance and Award Committee conference calls. These 1-hour calls occur at least every other month, with additional calls scheduled as committee activities require.</li> <li>Overseeing the INSPIRE award selection process as well as the disbursement of funds and follow up regarding progress.</li> <li>Active monitoring for funding opportunities/grants that could be used to conduct network-related studies and/or enhance infrastructure.</li> <li>Presenting Finance and Award Committee activities and status to the INSPIRE Executive Committee at monthly conference calls.</li> </ul>	Standard executive board nomination or appointment
<b>Conference Oversight Chair</b> Brittany Dahlen	The Conference Oversight Chair is responsible for overseeing and coordinating all Network meetings. This includes INSPIRE@IMSH, INSPIRE@IPSSW, and any additional smaller meetings/retreats that may occur. This individual will be responsible for assuring that each of these meeting has co-chairs, and will fill in the absence of an appropriate individual. Individual meeting chairs will then convene a planning committee, with the overall Conference	<ul style="list-style-type: none"> <li>Selection of individual meeting co-chairs</li> <li>Service as “backup” chair in the event that one of the above cannot be found or cannot serve.</li> <li>Development and planning of official INSPIRE social events at network meetings</li> <li>Functioning as a liaison to the Executive Board for the individual planning committees created by the specific meeting co-chairs</li> <li>Presenting meeting related activities and status to the INSPIRE Executive Committee at monthly conference calls.</li> </ul>	Standard executive board nomination or appointment

	Oversight Chair functioning as an Executive Board Liaison.		
<b>Communications / Website Chair</b> Bram Welch-Horan	The Communications Chair is responsible for overseeing and coordinating IT and social-media related activities. This also includes any advertising for the network. This individual shall convene a Communications Committee for the purpose of conducting these activities, and for leadership development. The Communications Chair will work closely with the Executive Director and designated administrative IT personnel to accomplish these tasks	<ul style="list-style-type: none"> <li>Developing agenda, facilitating and taking/distributing minutes for Communications Committee conference calls. These 1-hour calls occur at least every other month, with additional calls scheduled as committee activities require.</li> <li>Overseeing social media communications and campaigns with the assistance of the Communications Committee.</li> <li>Active monitoring for Social media opportunities that could benefit INSPIRE.</li> <li>Presenting Communication Committee activities and status to the INSPIRE Executive Committee at monthly conference calls.</li> </ul>	Standard executive board nomination or appointment
<b>Leadership Cultivation Chair/Outgoing Network Chair:</b> Cara Doughty	The Leadership Cultivation Chair is occupied by the outgoing Network Chair and is tasked with assisting Executive Committee members as they develop and nurture leaders within their respective committees as well as in the network at large. This individual also convenes a Nominations Committee for the purpose of assuring that all potential Executive Board/Network Director nominees are appropriately qualified for the position and will maintain INSPIRE core values. The Nominations Committee also oversee all elections. The Leadership Development Chair works closely with the Executive Director to accomplish these tasks.	<ul style="list-style-type: none"> <li>Convening and overseeing activities of Nominations Committee, which shall occur yearly in March, allowing for 3 months of activity prior to elections.</li> <li>Observing and liaising with other Executive Board Members and their respective committees with the goal of developing/nurturing future leaders</li> <li>Active monitoring of INSPIRE network meetings for promising new leaders that could be encouraged to take on more core roles.</li> </ul>	Standard executive board nomination or appointment
<b>Membership Development Chair</b>	The Global Membership Development Chair is	<ul style="list-style-type: none"> <li>Outreach to under-represented national, ethnic, professional, and other social</li> </ul>	Standard executive board nomination or appointment

	<p>responsible for overseeing all INSPIRE membership growth related activities. This includes outreach and expansion of international and inter-professional membership growth, as well as assurance of healthy diversity. While a committee is not required, this individual is charged with convening <i>ad hoc</i> committees as needed to accomplish these goals.</p>	<p>groups with the goal of enhancing the network's global relevance and reach.</p> <ul style="list-style-type: none"> <li>• Overseeing membership processes and databases in partnership with the Executive Director</li> <li>• Active monitoring for external opportunities that could increase INSPIRE membership and value to the global community.</li> <li>• Convening of <i>ad hoc</i> committees as needed to accomplish these goals</li> <li>• Presenting global membership-related activities and status to the INSPIRE Executive Committee at monthly conference calls.</li> </ul>	
<p><b>Novice Simulation Researcher Development Chair</b> Ryan Fredericks Anisha Kshetrapal</p>	<p>This position is reserved for trainees with interest in the INSPIRE network. Novice development members serve for at least 1 year, with the potential for 2-years of service at their discretion provided they are still in a training program for the second year. The Novice Simulation Researcher Development Chair is tasked with forming a Novice Simulation Researcher Committee composed of trainees also interested in the network with the goal of obtaining ongoing feedback regarding current novice and trainee needs. Those within this role will receive intensive mentoring with the purpose of preparing them for future service once training complete.</p>	<ul style="list-style-type: none"> <li>• Development and oversight of a Novice Simulation Researcher Committee composed of trainees interested in INSPIRE (note, this committee will serve a 1-year term)</li> <li>• Ongoing monitoring and assessment of current trainee needs</li> <li>• Presentation of these activities to the INSPIRE Executive Committee at monthly conference calls.</li> </ul>	<p>Standard executive board nomination or appointment</p>
<p><b>Fellowship Committee Chair</b> Isabel Gross</p>	<p>The fellowship committee chair is responsible for overseeing INSPIRE's contributions to the INSPIRE-IPSS fellowship program. This includes developing and maintaining processes for the selection of new fellows, oversight of their scholarly work, and</p>	<ul style="list-style-type: none"> <li>• Convening and overseeing activities of the Fellowship Committee</li> <li>• Developing and maintaining processes for fellow selection,</li> <li>• Developing and maintaining processes to monitor and assist with fellow progress</li> <li>• Working with the Finance and Award Committee to manage fellowship-directed donations and other relevant funds</li> </ul>	<p>Standard executive board nomination or appointment</p>

	<p>assistance in professional growth. This individual is also charged with the convening of a committee to assist in these activities, and serving as a liaison to those members of the IPSS leadership involved with the fellowship program</p>	<ul style="list-style-type: none"> <li>• Serve as a liaison with IPSS leadership in matters pertaining to the fellowship</li> <li>• Assure, along with the IPPS fellowship committee chair, balanced representation of both INSPIRE and IPSS within the committee</li> <li>• Assure that outgoing fellows are involved, if they so desire, in committee activities</li> </ul>	
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## Committees

Committee	Description / terms of service	Chair
<b>Standing Committees</b>		
<b>Scholarship Oversight Committee</b>	2 years	Chair
<b>Leadership Cultivation/Nominations Committee</b>	Serves for a 3-month period prior to June elections	Outgoing Chair
<b>Finance and Audit Committee</b>	3-year term of service. The Finance & Audit committee shall provide financial reports, recommendations, and guidance to the Board of Directors. They are responsible for reviewing and authorizing internal and external financial audits as required by applicable laws or as otherwise deemed necessary to effectively provide oversight for INSPIRE's financial status and integrity.	Treasurer
<b>Bylaws Committee</b>	The Bylaws committee shall perform a review of the Society Bylaws every three years, or as needed, and provide recommended amendments (if applicable) of these Bylaws to the Board of Directors.	Secretary
<b>Ad Hoc Committees</b>		
<b>Award and Funding Committee</b>	2 years	Funding Chair
<b>Communication / Website Committee</b>	2 years	Communications Chair
<b>Project Support Committee</b>	2 years	Project Oversight Chair
<b>Novice Simulation Researcher Committee</b>	1 year, with option of one additional year if desired.	Novice Simulation Researcher Development Chair
<b>Conference Planning</b>	Serves for a period of 6-12 months prior to the meeting in question. During this preparatory period the meeting co-chairs shall be invited to INSPIRE Executive calls and shall function as <i>de facto</i> executive members	Individual Meeting Chair and Social Events Chair
<b>Membership</b>	As needed based on particular goals or events	Global Membership Development Chair
<b>Advisory Council</b>	The Advisory Committee will consist of previous Network chairs and/or founding members and exists for the purpose of advising current Network Directors and providing needed institutional memory. No standing meetings of this committee will be required.	

## INSPIRE Funding and Partners

INSPIRE would like to acknowledge the support of partners who have provided infrastructure funding, in-kind support, and/or loaner equipment for INSPIRE studies.



INSPIRE would also like to thank the **Society for Simulation in Healthcare** and the **International Pediatric Simulation Society** for providing meeting space and food to support INSPIRE meetings at their respective annual conferences.



Lastly, INSPIRE would like to acknowledge the support of an anonymous individual whose generous donation will support network activities and awards over the next year.

Through generous donations, INSPIRE is able to fund our investigators to conduct innovative and impactful research. Donations are also critical to help us support the infrastructure necessary to keep INSPIRE going.

We humbly invite our community to consider an annual donation to INSPIRE to help support our network and each other.

If you would like to make a donation to INSPIRE visit our website at: <https://inspiresim.org/inspire-donations/>

or email us at: [info@inspiresim.com](mailto:info@inspiresim.com)

# INSPIRE Highlights 2021-2022: Ongoing and Completed Projects and Initiatives

## PROJECTS & INITIATIVES

- **SQUIRE-SIM** - INSPIRE has assembled a group of diverse experts in quality improvement and simulation research to conduct a consensus process with the goal of creating simulation-specific extensions for the SQUIRE 2.0 reporting guidelines.
- **10 Year Alerts** – INSPIRE recently conducted an investigation of all past ALERT projects to determine the impact of the process on research productivity. Two example publications from this effort are complete:
  - Calhoun AW, Gross IT, Mallory LB, Shepard LN, Adler MD, Maa T, Auerbach MA, Cheng A, Kessler DO, Whitfill TM, Duff JP. From Concept to Publication: Effectiveness of the International Network for Simulation-Based Pediatric Innovation, Research, and Education Project Development Process at Generating Simulation Scholarship. *Simul Healthc*. 2022 Dec 1;17(6):385-393.
  - Mallory LA, Doughty CB, Davis KI, Cheng A, Calhoun AW, Auerbach MA, Duff JP, Kessler DO. A Decade Later-Progress and Next Steps for Pediatric Simulation Research. *Simul Healthc*. 2022 Dec 1;17(6):366-376.
- **Distance Simulation** - INSPIRE partnered with with IPSS, PediSTARS, SSH, and the Netzwerk Kindersimulation to develop the nomenclature of distance simulation as well as a bold research agenda.
  - Duff J, Kardong-Edgren S, Chang TP, Elkin RL, Ramachandra G, Stapleton S, Palaganas JC, Kou M, Gross IT. Closing the gap: a call for a common blueprint for remote distance telesimulation. *BMJ Simul Technol Enhanc Learn*. 2021 Apr 12;7(4):185-187.
  - Chang TP, Elkin R, Boyle TP, Nishisaki A, Walsh B, Benary D, Auerbach M, Camacho C, Calhoun A, Stapleton SN, Whitfill T, Wood T, Fayyaz J, Gross IT, Thomas AA. Characterizing preferred terms for geographically distant simulations: distance, remote and telesimulation. *Int J Healthc Simul*. 2022;1(3):55-65.
  - Bajwa M, Ahmed R, Lababidi H, Morris M, Morton A, Mosher C, Wawersik D, Herx-Weaver A, Gross IT, Palaganas JC. Development of Distance Simulation Educator Guidelines in Healthcare: A Delphi Method Application. *Simul Healthc*. 2023 Jan 5.
- **Diversity, Equity, and Inclusion (DEI)** - INSPIRE has recently launched a new initiative to develop a program of scholarship to address issues of diversity, equity and inclusion in simulation training.
- **IPSS-INSPIRE Fellowship** - INSPIRE continues to partner with IPSS to sponsor and train simulation fellows worldwide, with the goal of producing a lasting impact on patient care in diverse communities.



## Research Awards Funded in 2022

Thanks to generous donations- INSPIRE was thrilled to award funding for two new projects in 2022 around Diversity, Equity, and Inclusion. Congratulations to our winners!

Projects Funded in 2022		
INSPIRE DEI Award	<b>Fostering Equity and Allyship Through Simulation-based Education (FEATS)</b> Dr. Uchenna Ewulonu MD Lurie Children's Hospital	\$7,500
INSPIRE DEI Award	<b>Developing facilitators for diversity, equity, and inclusion simulation in higher education: Implications for curriculum development</b> Rachael McGraw MSN, RN and Brittany Dahlen MSN, RN, NPD-BC, CCRN-K, CPN St. Catherine's University and Children's Minnesota	\$7,500

## IPSS-INSPIRE Fellowship

The IPSS-INSPIRE Pediatric Simulation Fellowship was created to support early career investigators in simulation, exposing them to simulation related experiences and mentorship to broaden horizons, and promote excellence in education and investigative research.

An IPSS-INSPIRE Pediatric Simulation Fellow is based at a home institution where most of their simulation activities are conducted. Each fellow will be assigned two simulation mentors (one local mentor + one international mentor OR two international mentors, depending on the availability of local simulation expertise) to expand and enrich their learning experience. Both mentors will work together during the course of the fellowship. Applications to the fellowship must include a motivational statement, research proposal and an individualized development plan. These will be reviewed by the IPSS-INSPIRE Pediatric Simulation Fellowship Committee. The project idea will be presented at an IPSSW meeting in the form of an initial ALERT presentation during the INSPIRE meeting. ALERT presentations are brief 5-minute presentations followed by a round table discussion that serves as a platform to network as well as an opportunity to receive high quality feedback from simulation leaders on the project before launching it. The fellow will also submit a brief quarterly project progress report to the IPSS-INSPIRE Pediatric Simulation Fellowship Committee. The fellowship will be concluded with a research presentation at the following IPSSW meeting.

As part of the IPSS-INSPIRE Pediatric Simulation Fellowship, the fellows will meet every two months using an online meeting platform for networking and to exchange experiences.

Due to a generous donation to INSPIRE, the IPSS-INSPIRE fellowship is now funded with \$10,000 available for each fellow. The funding supports each fellow's project, career development, and travel related expenses, provided that the expense can clearly be associated with the fellow's career development in pediatric simulation scholarship. The 2021-2022 fellows are listed below:

2021-2022 Fellows		
Fellow	Country	Award
Vijayanand Jamalpuri	India	\$10,000
Mahima Singh	India	\$10,000
Katharina Bibl	Austria	\$10,000
Daniel Orqueda	Argentina	\$10,000

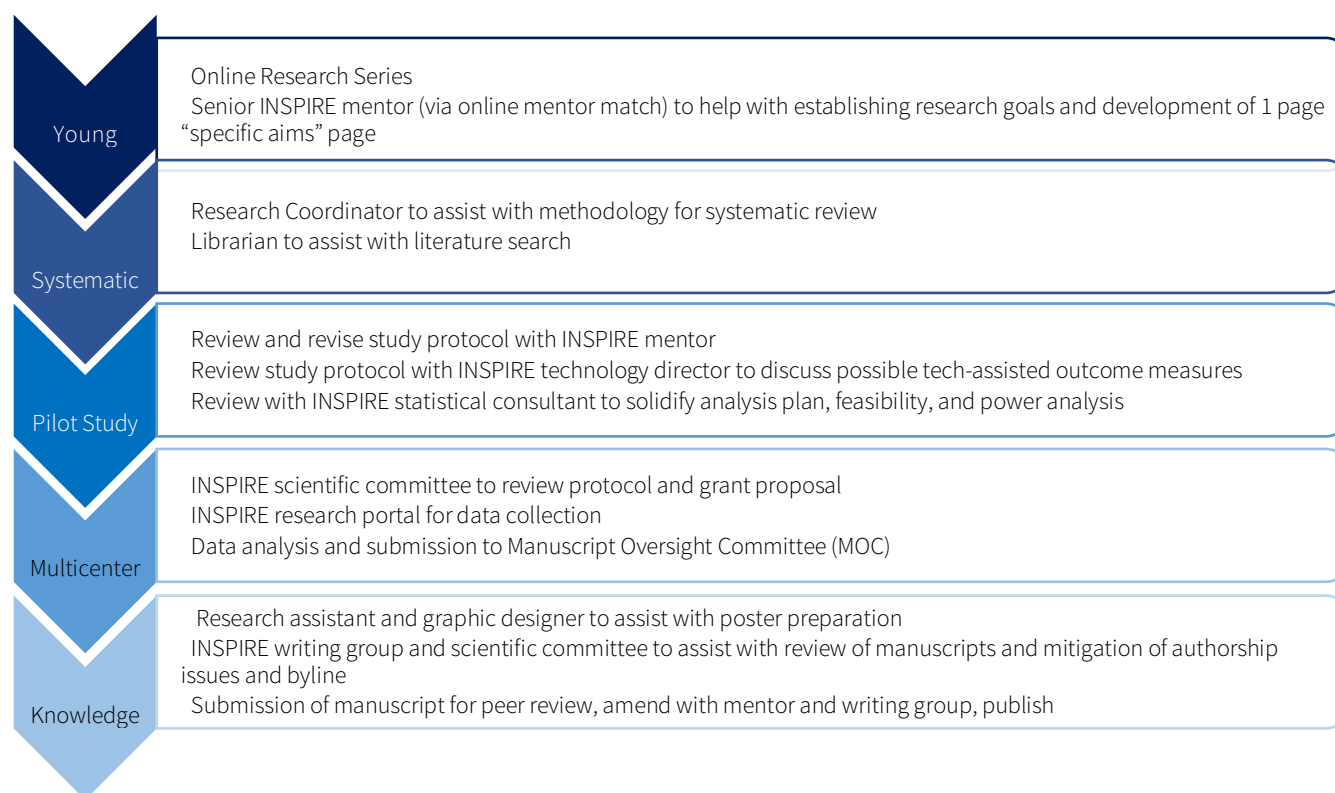
## Research Process and Network Support Structure

Investigators are encouraged to begin their work by submitting an ALERT presentation that is a brief description of their idea. Next, the investigator is paired with a mentor and provided the “lay of the land” of ongoing research in that area to promote collaboration across projects. The investigator then conducts a systematic review of the literature and plans an initial pilot study. The pilot study methods are reviewed by the INSPIRE Scientific Review Committee (SRC) and shared with the network to recruit collaborators for a subsequent collaborative study.

The INSPIRE SRC helps to facilitate multicenter studies with IRB templates, scope of work templates, data use agreements, collaborative oversight, and clear expectations from the start. INSPIRE can also provide specialty consultation with leading experts in biostatistics, educational research, technology, and psychometrics. When the team has completed their work, the manuscript oversight committee provides a pre-review of the work product and guidance on submission for publication. Additionally, for selected projects the Executive helps to provide letters of support for grant submission.

In exchange for this support the INSPIRE investigator provides acknowledgement of INSPIRE in any presentation/publication and support for the INSPIRE administration on grants. See Figure for details.

**Figure: INSPIRE Research Process and Network Support Structure**



## 2021-2022 INSPIRE Projects, Presentations, and Abstracts

1. Ahmed S, Yang CJ. Sustainability of an in situ simulation-based pediatric tracheostomy care quality improvement program. AAO-HNS/F Annual Meeting. SIMTank 2nd place. Oct 4, 2021. Los Angeles, CA.
2. Billings E, Kleinman K, Lee-Smith B, Canares T, Jeffers J. Development of Novel Augmented Reality System to Improve Pediatric Chest Compression Performance. Society of Academic Emergency Medicine (SAEM) 2022 National Meeting, May 2022, New Orleans LA.
3. Butragueño L, Mencía S. Communication: Protocol for Emergency Fire Evacuation and Training through Simulation in a Pediatric Intensive Care Unit. E-poster. 36th SECIP National Congress, Seville, June 12-15, 2022.
4. Butragueño, Mencía S. Communication: Training in Intubation and Difficult Airway with Practical Workshops in a Pediatric Intensive Care Department. E-poster. 36th SECIP National Congress, Seville, June 12-15, 2022.
5. Calhoun AW, Gross I, Mallory L, Shepard L, Adler M, Maa T, Auerbach M, Cheng A, Kessler D, Whitfill T, Duff J. From Concept to Publication: Effectiveness of the International Network for Simulation-based Pediatric Innovation, Research, and Education (INSPIRE) Project Development Process at Generating Simulation Scholarship. presented at the International Meeting on Simulation in Healthcare (IMSH), January 2022.
6. Cheng A, Lin J, Doughty C, Deutsch E et al. Writing for Publication: Structure, Story, and Content. Workshop at INSPIRE conference at IPSSV. Sept 10, 2021 (given virtually due to Covid)  
i. Alawa N, Doughty C, Lawrence J, Lichliter R, Bavare A, Penn C, Welch-Horan T. Implementing a Multi-Disciplinary System-wide Clinical Debriefing Program at an Academic Medical Center. Poster presentation at IPSSV, Sept 2021 (given virtually due to Covid).
7. Chipman M, Mallory L. Oral Presentation. Unraveling the Engagement Mystery: A Qualitative Study in Interprofessional Team Training. IPSSV. 9.18.2021.
8. Chipman M., Schreiber C, DiLisio C, Lane S, Fey J, Mallory, L. Oral presentation. Everyone Engaged! A Qualitative Debriefing Study of Pediatric Interprofessional Simulation-based Team Training. International Meeting on Simulation in Healthcare, January 17, 2022, Los Angeles, CA.
9. Davis K, Doughty C, Cashin M, Morrow A, Penn C, Tatem A, Walker D. DEI and Applied Improvisation: Communication and Empathy Exercises to Target Implicit Bias. Workshop at IPSSV September 2021. (given virtually due to Covid)
10. Davis K, Lichliter R, Doughty C. Simulation Games for Resilience Engineering. Workshop presented at IMSH, Los Angeles, January 2022.
11. Davis K, Kessler D, Doughty C. SIMprov! Workshop given at IMSH, Los Angeles, January 2022.
12. Doughty C, Elegores G. Simulation for Quality and Safety. Lecture during Advanced Quality Improvement Course. May 2022, Sept 2022.
13. Doughty C, Stone K. The future of INSPIRE. At IMSH 2022, January 2022
14. Elegores G, Doughty C. Psychological Safety. Lecture given at Texas Children's Hospital Resilience Engineering in Healthcare Course, The Woodlands, TX, August 2022.

15. Elkin R, on behalf of the Distance Simulation Scoping Review Core Team. Scoping Review Update. Second Annual Healthcare Distance Simulation Summit, 2021. (meeting held virtually on Zoom)
16. Ferguson, M., Ottolini, M, Zanno A., Augmented Reality Technology for Neonatal Resuscitation Simulation. IMSH Workshop, 2022.
17. Florez A, Calhoun A, Shepard L, Kessler D, Kerrey B, Justice L, Frey M, The Concise Assessment of Leader Management Tool: Evaluation of Healthcare Provider Leadership During Real-Life Pediatric Emergencies. Research Presentation. The Pediatric Cardiac Intensive Care Society (PCICS) September 2021 Virtual Annual International Meeting.
18. Fredericks R. Integrating Simulation into Your Healthcare Setting. Virtual Oral Presentation. Pediatric Emergencies: Early Assessment and Treatment of Children, Lexington, KY September 2021.
19. Harwayne-Gidansky I, Polikoff L, Malone M, Glater-Welt L, Page-Goertz C, Pinto M, Nett S, Nadkarni V, Nishisaki A. Resident Education Using the NEAR4KIDS Airway Bundle: Validation of a Scoring Tool, 51st Critical Care Congress, SCCM, Feb 2022, San Juan, Puerto Rico (Virtual)
20. Hazwani T. Pediatric resident simulation-based workshop, King Saud bin Abdulaziz University for Health Sciences, King Abdulaziz Medical City, Riyadh, KSA, June 2022
21. Hazwani T. Initial assessment and resuscitation of critically ill child workshop, King Saud bin Abdulaziz University for Health Sciences, King Abdulaziz Medical City, Riyadh, KSA, Sep 2022.
22. Hazwani T, Jamil S, Alnasser S, Ramesh D. Simulation Integration in Education and Training, Concrete Steps to Implement workshop, 5th Saudi Health Simulation Conference 2022, Riyadh, KSA, Nov 2022
23. Hazwani T, Ramesh D. Monitoring in simulation, What, When, Why, and How? workshop, 5th Saudi Health Simulation Conference 2022, Riyadh, KSA, Nov 2022
24. Heater, T., Coe, M., Firschau, G., et al. Use of Simulation to Break Barriers and Create Communication Synergy Between Nurses and Physicians. Oral presentation at 13th International Pediatric Simulation Symposia and Workshops, IPSSV 2021- A Virtual Experience, September 18, 2021, Virtual conference.
25. Jamalpur V, Ramachandra G, and Nadkarni V. Turning Adversity Into An Opportunity: Virtual Advanced Debriefing Workshop During Pandemic In A Resource Limited Setting. Presented oral at IPSSV September 2021
26. Johnston L. Elevate Your Simulation: Physical Mannequin Adaptations for ECMO. Simulation Based Medical Education Special Interest Group. Pediatric Academic Societies, Denver, CO, May 2022.
27. Kishida M, Nishisaki A. Does mode of student participation matter? Hybrid tele-simulation for pediatric emergency training. 14th International Pediatric Simulation Symposia and Workshops. St. Petersburg, Florida, Jan 2022
28. Kou, M, Amin, M, Benghanem, G, Halmon, K, Calardo, S, Lobo, K, Sanseau, E, Vora, S, Dahlen, B. Realizing Inclusion and Systemic Equity in Medicine. 13th International Pediatric Simulation Symposia & Workshops, Virtual, US, Sep 2021.
29. Kleinman K, Jeffers J. Johns Hopkins University AR-CPR System. International Network for Simulation-based Pediatric Innovation Research and Education at International Meeting on Simulation in Healthcare (INSPIRE@IMSH) 2022, January 2022, Los Angeles, CA.
30. Kleinman K. AR-CPR: Development of a Novel Augmented Reality System to Improve Pediatric Chest Compression Performance. Johns Hopkins Applied Physics Laboratory XR (Extended Reality) Symposium 2022, July 2022, Laurel MD.

31. Lichliter R, Elegores G, Doughty C. Simulation for Safety 1 and Safety 2. Simulation and Debriefing at Texas Children's Hospital Resilience Engineering in Healthcare Course, Houston, TX August 2022.
32. Lichliter R, Costilla M, Doughty C. Texas Children's Simulation-based Systems Tests: Behavioral Health in Acute Care. Lecture to Safety and Resilience TCH group, April 2022
33. Lin Y, Cheng A, Davidson J. Quantifying Simulated Contamination Deposition on Healthcare Providers Using Image Analysis. Poster: Alberta SIMposium, Calgary, Alberta, Canada 2022
34. Lin Y, Cheng A, Davidson J. The impact of the aerosol box on the workload of healthcare providers during simulated aerosol-generating medical procedures ,A randomized controlled trial. Oral presentation: Alberta SIMposium, Calgary, Alberta, Canada 2022
35. Lin Y, Cheng A, Davidson J. Impact of Aerosol Box Use on Provider Contamination and Time to Completion of Aerosol Generating Medical Procedures: A Randomized Controlled Trial. Oral Presentation: Alberta SIMposium, Calgary, Alberta, Canada 2022
36. Mallory, L. Invited presentation (virtual). A Decade Later- Progress and Next Steps for Pediatric Simulation Research. International Network for Simulation-based Pediatric Innovation, Research and Education Meeting, June 10, 2022 St. Petersburg, FL.
37. Mencía S. Speaker at the Round Table with Nursing: "Quality, Safety and Simulation. Use of Simulation for the training of CIP personnel in patient safety". 36th SECIP National Congress, Seville, June 12-15, 2022. Spain.
38. Mencía S. Communication: Design of an Objective and Structured Clinical Examination (OSCE) through Advanced Simulation for Accreditation in Pediatric Intensive Care. First Phase of the Project. E-poster. 36th SECIP National Congress, Seville, June 12-15, 2022.
39. Mencía S. Communication: Survey on the Use of Simulation for Staff Training and Training in Spanish PICUs. Eposter. 36th SECIP National Congress, Seville, June 12-15, 2022.
40. Mencía S. SPEAKER at the Workshop Pediatric Simulation Lab. 9th Congress of the European Academy of Paediatric Societies. Barcelona October 9-10, 2022.
41. Monachino, AnneMarie; Good, Grace. Using Systems-Focused Simulation to Safely Provide Care During a Pandemic. International Pediatric Simulation Society Virtual, Sep 2021.
42. Moran E, Lailani S, Little-Wienert K, Doughty C. Bedside Teaching during High-Stakes Events. Workshops given at Baylor College of Medicine PEM faculty development retreat October 2021.
43. Nadkarni, V, Lubrano, R, Kleinman, M, DeCaen, A, Berg, M, Reis, A, Sanseau, E. Pediatric Simulation Games. Resuscitation Bootcamp, Latina, Italy. June 2022
44. Nagar P, Ramachandra G, Kline A. Ades A. Deutsch E, Nadkarni V. Navigating difficult times - virtual simulation curriculum development training for 3 low resource countries. International Pediatric Simulation Society, Sep 2021.
45. Napolitano N, Amy Kelly David Schnabel, Alexandra Webb. From NIICU to Transport; Evaluating the Expert through Simulation Assessment. International Pediatric Simulation Society, Tampa FL, Feb 2022
46. Nassar M, Johnson KE, Myer CM, Rickert SM, Yang CJ. Challenging airway bronchoscopy: Dos and donts for a successful procedure. AAO-HNS/F Annual Meeting. Oct 4, 2021. Los Angeles, CA.
47. Ninan P, Bangar M, Yang CJ. Use of in-situ simulation to identify intubation-associated latent safety threats in critical care units in a COVID-19 epicenter. International Meeting on Simulation in Healthcare (IMSH). Jan 16, 2022. Los Angeles, CA.

48. Parisi F, Moita V, Spellman J, Kingon A, Matiz M, Kessler D. The Impact of an Online Self-Directed Medical Crisis Resource Management Course on Perceived Confidence and Behavior. Poster presentation. Celebration of Teaching and Learning Symposium, March, 2022.
49. Patterson, SJ, Hallowell, Sunny. How to incorporate Safe Socio-Emotional Principles for Learning Within Virtual Gaming Simulation. International Pediatric Simulation Society Conference, St. Petersburg, Fla. 2022
50. Ramachandra G, Vuppali NK. Identifying Latent Threats and System Changes during in- situ simulation in a Low Resource Country. Presented Oral at IPSSW May 2022 Florida Tampa.
51. Restivo A,\* Singh M,\* Guha G,\* Jafri F, Yang CJ. \*in-person panelists. In Situ and QI during a Pandemic, a How To. IMSH. Jan 17, 2022. Los Angeles, CA.
52. Rogers, T., Halling, C., Bapat, R., Maa, T. Retention of Neonatal Airway Management Skills Using Repetitive Simulation for Team Training. Poster presentation at 13th International Pediatric Simulation Symposia and Workshops, IPSSV 2021- A Virtual Experience, September 2021, Virtual conference.
53. Sanseau E. Invited Speaker. Pediatric Readiness in Rural and Underserved Communities: Indian Health Service Emergency Medical Services for Children (IHS-EMSC) Hybrid Simulation Program. American Academy of Pediatrics (AAP) Section on Emergency Medicine Pediatric Readiness Subcommittee. Dec 2021.
54. Sanseau E. The Emerging Role of TeleSim in Education - Lessons Learned From the Pandemic. Making Up for Lost Time: Addressing Children's Needs Post-pandemic. 13th Annual Pediatric Global Health Conference. Children's Hospital of Philadelphia, Philadelphia, PA, USA. Oct 2021
55. Sanseau E. Helping Babies Breathe (HBB) Master Trainer Course, 2nd edition. 13th Annual Pediatric Global Health Conference. Children's Hospital of Philadelphia, Philadelphia, PA, USA. Oct 2021
56. Sanseau E. Invited Lecture. IHS EMSC Hybrid Simulation Program. Alaska Native Medical Center Clinical Directors meeting. June 2022
57. Sebelik M, Basura G, Johnson K, Feintuch J, Yang CJ. Global Surgical Skills Training: Can it be Done Remotely? AAO-HNS/F Annual Meeting. Oct 6, 2021. Los Angeles, CA.
58. Schafer, KM, Kremer, MJ. Outcomes of simulation-based experiences related to family presence during resuscitation: A systematic review. Poster: Midwest Nursing Research Society 46th Annual Research Conference, Schaumburg, IL. March 30-April 2, 2022. (Received 2nd Place PhD Student Poster Award).
59. Schafer, KM, Lawrence, C. Rapid conversion to remote simulation: Pediatric clinical simulation-based for prelicensure graduate nursing students. Poster: International Pediatric Simulation Society 13th International Pediatric Simulation Symposia and Workshops, Virtual. September 17-19, 2021.
60. Schafer, KM, Kremer, MJ. Outcomes of simulation-based experiences related to family presence during resuscitation: A systematic review. Poster: Rush University Trainee Research Day, Chicago, IL. March 17, 2022.
61. Schoppel K, Keilman A, Fayyaz J, Padlipsky P, Carmen Diaz M, Whitfill T, Wing R, Hughes M, Franco M, Pearson K, Walsh B. Comparing Leadership Skills of Emergency Medicine Physicians During Pediatric Resuscitation: Does Length of Training Matter? A Pilot Study, ALERT presentation, International Network for Simulation-based Pediatric Innovation, Research, & Education (INSPIRE) Virtual Meeting, 2022.
62. Short K, Ingram D, Potts J, Norwood C, Rutledge C, Tofil NM, Askenazi D. Improving clinician confidence in performing neonatal dialysis through the neonatal and infant course for kidney support. International Acute Kidney Injury Symposium October 2022 Cincinnati, OH.



63. Sobana R, Dinker Pai. Effectiveness, merits, and challenges of simulation based remote clinical skills teaching compared to face-to-face teaching - an interventional case control study. Poster:S3 conference, Transforming Healthcare Simulation Spectrum. Now, Next and Beyond, Singapore Oct 19-21,2022.
64. Spencer F, Sen A, Kessler D, Salabay K, Compagnone D, Choudhury T. Critical Event Checklists for Pediatric In-hospital Cardiac Arrests in Children with Heart Disease. Oral Presentation. Leonard Steinfeld Pediatric Cardiology Research Symposium. May, 2021
65. Spencer F, Sen A, Kessler D, Salabay K, Compagnone D, Choudhury T. Critical Event Checklists for Pediatric In-hospital Cardiac Arrests in Children with Heart Disease. Oral Presentation. Leonard Steinfeld Pediatric Cardiology Research Symposium. May, 2021 Virtual Poster. American Academy of Pediatrics National Meeting Cardiology Section. September, 2021
66. Stavroudis TA, Halamek LP, Dadiz R, Wolbrink T, White ML, Lopreiato JO, Ali N, Weiner DL, Moussa A, Afonso N. Clinical event debriefing: how to build and operationalize patient safety-focused clinical event debriefing programs. E-PAS 2022;3515. PAS, Denver, CO 2022.
67. Stavroudis TA, Dadiz R, White ML, Wolbrink T, Ali N, Riccio J, Weiner D, Lopreiato J, Olech-Smith M, Halamek L. Clinical event debriefing: tips and techniques for novice and advanced debriefers. IPSS, St. Petersburg, FL 2022.
68. Walsh, B. Clapper, T.C. Gross, I., Kirkpatrick, M.J. & Kou, M. Establishing criteria for the use of pictograms in distance simulation reporting using international sim expertise. Accepted research poster at IPSSW2022, 10-13 June 2022.
69. Welch-Horan TB, Leon Castelao E, Szyld D, Arnold J, Diaz-Navarro C, Doughty C, Ingrassia P, Mullan P, Rock L, Rose S, Servotte J-C. Clinical Event Debriefing: International Approaches Before, During, and After Covid-19. Prerecorded educational course. Virtual format. 22nd International Meeting on Simulation in Healthcare. Los Angeles, California. January 15, 2022.
70. Wetzel E, Ali N, Castera M, Gray M, Ades A, Hightower H, Reed D, Schierholz E, Gupta R, Johnson B. Simulation Practices in Level IV Neonatal Intensive Care Units. International Pediatric Simulation Society, Sep 2021.
71. Yang CJ, Deutsch E. Lunch with the Experts: Using Simulation as a Quality Improvement and Patient Safety Tool. AAO-HNS/F Annual Meeting. Sept 11, 2022. Philadelphia, PA.
72. Zanno A, Melendi, M, et al. A Simulation-Based Outreach Program Improves Rural Hospital Team Confidence in Neonatal Resuscitation. IPSS (International Pediatric Simulation Society) Poster Presentation 2021.
73. Zanno A, Melendi, M, et al. A Novel Telesimulation Program Improves Neonatal Resuscitation Skills in a Rural Hospital. IPSS (International Pediatric Simulation Society) Oral Presentation 2021.
74. Zanno, A, Melendi, M et al. A Novel Telesimulation Program, Maine Ongoing Outreach Simulation Education (MOOSE), Improves Adherence to NRP in a Rural Hospital. American Academy of Pediatrics (AAP) 2021.
75. Zanno A, Melendi, M, et al. A Novel Telesimulation Program, Maine Ongoing Outreach Simulation Education (MOOSE), improves adherence to Neonatal Resuscitation Program (NRP) in a Rural Hospital. Oral presentation and Poster Presentation, IMSH Society for Simulation in Health Care, 2022.
76. Zanno A, Melendi, M, et al. A Simulation-Based Outreach Program Improves Rural Hospital Team Confidence in Neonatal Resuscitation. Poster Presentation, MSH Society for Simulation in Health Care, 2022.

## 2021-2022 Grant & Project Funding for INSPIRE Collaborators

### Project and Funding Agency

**Title:** Revolutionizing Urgent Care Telehealth One Disease at a Time: A Novel AI-Driven Strep Throat Screening System for Children Using Smartphone Video

**PI:** Dr. Therese Canares, Johns Hopkins University

**Funded by:** Innovation Grant Committee of Johns Hopkins Children's Center (Radiothon)

**Amount:** \$35,000 USD

**Title:** Neonatal Emergency Readiness Project (NERP):

Development of virtual simulation curriculum to improve emergency department neonatal resuscitation care among interprofessional teams

**PI:** Jabeen Fayyaz, The Hospital for Sick Children, University of Toronto

**Funded by:** The Hospital for Sick Children

**Amount:** \$10,000 CAD

**Title:** Improving Pediatric Cardiopulmonary Resuscitation Performance via Augmented Reality Coaching in Community Hospital Pediatric Emergency Departments

**PIs:** Dr. Keith Kleinman, Dr. Justin Jeffers, Johns Hopkins University

**Funded by:** Innovation Grant Committee of Johns Hopkins Children's Center (Radiothon)

**Amount:** \$26,000 USD

**Title:** Co-designing cultural humility with LGBTQ+ youth: Addressing provider biases and barriers to healthcare access

**PI:** Tensing Maa, Nationwide Children's Hospital

**Funded by:** Ohio Department of Medicaid, Centers of Medicare and Medicaid

**Amount:** \$774,352 USD

**Title:** Safety VR: Virtual reality for behavioral health patient and employee safety

**PI:** Tensing Maa, Nationwide Children's Hospital

**Funded by:** NCH Foundation Grant

**Amount:** \$43,200 USD

**Title:** Active Bleeding Control (ABC)-Stop the Bleed in Bangalore. Assessment of Implementation of a live and virtual simulation-based ABC- Stop the Bleed Curriculum in Bangalore, India

**PI:** Vinay Nadkarni, Children's Hospital of Philadelphia

**Funded by:** India Research and Engagement Funds, University of Pennsylvania Perelman School of Medicine, Corporate and Social Responsibility Grant

**Amount:** \$25,000 USD

**Title:** Active Bleeding Control (ABC)-Stop the Bleed, Hyderabad High Schools. Assessment of a novel Hybrid TeleSimulation ABC-Stop the Bleed program with Multiplier Effect in Hyderabad, India

**PI:** Vinay Nadkarni, Children's Hospital of Philadelphia

**Funded by:** University of Pennsylvania Institute for the Advanced Study of India (UPIASI) Corporate and Social Responsibility

**Amount:** \$25,000 USD

**Title:** Resuscitation, Emergency, and Acute Care Education – Vellore: Assessment of a novel Hybrid TeleSimulation Septic Shock recognition and treatment program at CMC Vellore in India: COVID 19 Publication

**PI:** Vinay Nadkarni, Children's Hospital of Philadelphia

**Funded by:** University of Pennsylvania Institute for the Advanced Study of India (UPIASI) COVID19 Corporate and Social Responsibility Grant

**Amount:** \$3,000 USD

**Title:** Evaluation of a variety of seizure cases and management in Massachusetts Community Emergency Departments using simulation.

**Pis:** Drs. Barb Walsh and Eliza Szuch, Boston Medical Center and BU School of Medicine.

**Funded by:** The Alpert Grant.

**Amount:** \$25,000 USD

**Title:** The MOOSE (Maine Ongoing Outreach Simulation Education) Project: Improving Neonatal Resuscitation in Rural Community Hospitals

**Co-Pis:** Allison Zanno & Misty Melendi

**Funded by:** Maine Health Community Physicians Funding Award

**Amount:** \$275,000 USD

**Title:** MOOSE: Telesimulation for Neonatal Resuscitation Training in Rural Community Hospitals

**Co-Pis:** Allison Zanno & Misty Melendi

**Funded by:** COBRE in Acute Care Research and Rural Disparities Pilot Project NIH Award

**Amount:** \$50,000 USD

**Title:** Using simulation to improve history & physical exam skills in children with severe autism

**Funded by:** University of Alabama at Birmingham Department of Pediatrics Founders Fund Education Grant Program

**Amount:** \$1000

## INSPIRE Publications

### Peer-Reviewed Publications:

1. Abulebda K, Whitfill T, Mustafa M, Montgomery EE, Lutfi R, Abu-Sultaneh S, Nitu ME, Auerbach MA; Improving Pediatric Acute Care Through Simulation (ImPACTS). Improving Pediatric Readiness and Clinical Care in General Emergency Departments: A Multicenter Retrospective Cohort Study. *J Pediatr*. 2022 Jan;240:241-248.e1. doi: 10.1016/j.jpeds.2021.08.084. Epub 2021 Sep 6. PMID: 34499944.
2. Abulebda K, Yuknis ML, Whitfill T, Montgomery EE, Pearson KJ, Rousseau R, Diaz MCG, Brown LL, Wing R, Tay KY, Good GL, Malik RN, Garrow AL, Zaveri PP, Thomas E, Makharashvili A, Burns RA, Lavoie M, Auerbach MA; Improving Pediatric Acute Care Through Simulation (ImPACTS). Preparedness for Pediatric Office Emergencies: A Multicenter, Simulation-Based Study. *Pediatrics*. 2021 Sep;148(3):e2020038463. Doi: 10.1542/peds.2020-038463. PMID: 34433688.
3. Adler M, Kshetrapal A, Calhoun A. Convince Me! How a Well-Constructed Validity Argument Supports the Decisions We Make About Learners. *J Pediatr*. 2022 Jun;245:11-12. doi: 10.1016/j.jpeds.2022.03.029. Epub 2022 Mar 22. PMID: 35331779.
4. Ahmed S, Yang C, Deng J, Bottalico D, Matta Arroyo E, Cassel-Choudhury G, Yang CJ. Implementation of an Online Multimedia Pediatric Tracheostomy Care Module for Healthcare Providers. *Laryngoscope*. 2021 Aug;131(8):1893-1901. PMID: 33459406.
5. Alonso-Calvete A, Lorenzo-Martínez M, Padrón-Cabo A, Pérez-Ferreirís A, Kalón A, Abelairas Gómez C, Rey E. Does Vibration Foam Roller Influence Performance and Recovery? A Systematic Review and Meta-analysis. *Sports Med Open*, published Mar 2022 . Doi: 10.1186/s40798-022-00421-2.
6. Alsaedi H, Lutfi R, Abu-Sultaneh S, Montgomery EE, Pearson KJ, Weinstein E, Whitfill T, Auerbach MA, Abulebda K. Improving the Quality of Clinical Care of Children with Diabetic Ketoacidosis in General Emergency Departments Following a Collaborative Improvement Program with an Academic Medical Center. *J Pediatr*. 2021 Sep 3:S0022-3476(21)00866-0. doi: 10.1016/j.jpeds.2021.08.081. Epub ahead of print. PMID: 34481806.
7. Atkins D, Sasson C, Hsu A, Aziz K, Becker LB, Berg RA, Bhanji F, Bradley SM, Brooks SC, Chan M, Chan PS, Cheng A et al. 2022 Interim Guidance to Healthcare Providers for Basic and Advanced Cardiac Life Support in Adults, Children, and Neonates with Suspected or Confirmed COVID-19: From the Emergency Cardiovascular Care Committee and Get With the Guidelines: Resuscitation Adult and Pediatric Task Forces of the American Heart Association in Collaboration with the American Academy of Pediatrics, American Association for Respiratory Care, The Society of Critical Care Anesthesiologists, and the American Society of Anesthesiologists. *Circulation: Cardiovascular Quality and Outcomes*. Published online, January 24, 2022.
8. Barcala-Furelos R, Barcala-Furelos M, Cano-Noguera F, Otero-Agra M, Alonso-Calvete A, Martínez-Isasi S, Aranda-García S, López-García S, Rodríguez-Núñez A. A Comparison between Three Different Techniques Considering Quality Skills, Fatigue and Hand Pain during a Prolonged Infant Resuscitation: A Cross-Over Study with Lifeguards. *Children (Basel)*. 2022 Jun 17;9(6):910. doi: 10.3390/children9060910. PMID: 35740847; PMCID: PMC9221895.
9. Boyle TP, Feldman J, Camargo CA, Nadkarni V, Medzon R, Walsh B, Stapleton S, Corey P, Hubitowski S, Kerrie N, Liu J, Dugas J. Adaptation of a simulation model and checklist to assess pediatric emergency care performance by prehospital teams. *Simulation in Healthcare*. 22 Dec 2021
10. Buléon C, Caton J, Park YS, Eller S, Buyck M, Kardong-Edgren S, Walsh BM, Gross IT, Maxworthy J, Reedy G, Palaganas JC. The state of distance healthcare simulation during the COVID-19 pandemic:

- results of an international survey. *Adv Simul (Lond)*. 2022 Apr 5;7(1):10. doi: 10.1186/s41077-022-00202-7. PMID: 35382889; PMCID: PMC8980782.
11. Buser S, Gessler N, Gmuender M, Feuz U, Jachmann A, Fayyaz J, Keitel K, Brandenberger J. The use of intercultural interpreter services at a pediatric emergency department in Switzerland. *BMC Health Serv Res*. 2022 Nov 17;22(1):1365
  12. Calhoun AW, Gross IT, Mallory LB, Shepard LN, Adler MD, Maa T, Auerbach MA, Cheng A, Kessler DO, Whitfill TM, Duff JP. From Concept to Publication: Effectiveness of the International Network for Simulation-Based Pediatric Innovation, Research, and Education Project Development Process at Generating Simulation Scholarship. *Simul Healthc*. 2021 Dec 27. doi: 10.1097/SIH.0000000000000628. Online ahead of print. PMID: 34966128
  13. Cao A, Feintuch J, Feintuch J, Tran L, Senior B, Yang CJ. Advancing global medical education in otolaryngology through hands-on skills training and simulation-based learning. *Journal of Global Health*. 2021 Oct 23;11:03111. PMID: 34737855.
  14. Carballo-Fazanes A, Abelairas-Gómez C, Rodríguez-Ruiz E, Barcala-Furelos R, Rodríguez-Nuñez A. Anti-choking suction devices use. A pilot simulated study with parents and kindergarten teachers. *Resuscitation*. 2022. DOI: 10.1016/j.resuscitation.2022.06.005
  15. Cheng A, Eppich W, Epps C, Kolbe M, Meguerdichian M, Grant V. Embracing Informed Learner Self-Assessment during Debriefing: The Art of Plus-Delta. *Advances in Simulation*. 2021; 6:22.
  16. Chang TP, Elkin R, Boyle TP, Nishisaki A, Walsh BM, Benary D, Auerbach M, Camacho CA, Calhoun A, Stapleton SN, Whitfill T, Wood T, Fayyaz J, Gross IT, & Thomas AA. Characterizing preferred terms for geographically distant simulations: distance, remote, and telesimulation. *International Journal of Healthcare Simulation*. 2022;1(3):56-65.
  17. Chu J, Alawa N, Sampayo EM, Doughty C, Camp E, Welch-Horan TB. Evolution of clinical event debriefs in a quaternary pediatric emergency department after implementation of a debriefing tool. *AEM Educ Train*. 2021 Aug 1;5(4):e10709.
  18. Clapper T.C. (2022). Mastery learning and deliberate practice: Do simulationists need clarification? *Simulation & Gaming*. 53(6), 602-614. doi:10.1177/10468781221132850
  19. Cramer-Bour C, Peterson J, Walsh B, Klings ES. Common complications of sickle cell disease: a simulation-based curriculum. *MedEdPORTAL*. 2021;17:11139. [https://doi.org/10.15766/mep\\_2374-8265.11139](https://doi.org/10.15766/mep_2374-8265.11139)
  20. Corazza F, Arpone M, Snijders D, Cheng A, Stritoni V, Ingrassia PL, De Luca M, Tortorolo L, Frigo AC, Da Dalt L, Bressan S. PediAppRREST: effectiveness of an interactive cognitive support tablet app in reducing deviations from guidelines in the management of paediatric cardiac arrest: protocol for a simulation-based randomised controlled trial. *BMJ Open*. 2021; 11:e047208.
  21. Data S, Mirette D, Cherop M, Bajunirwe F, Kyakwera C, Robinson T, Josephine NN, Abesiga L, Namata T, Brenner JL, Singhal N, Twine M, Wishart I, McIntosh H, Cheng A. Peer Learning and Mentorship for Neonatal Management Skills: A Cluster-Randomized Trial. *Pediatrics*. 2022 Aug 1;150(2):e2021054471. doi: 10.1542/peds.2021-054471. PMID: 35794462.
  22. Dennis DM, van Heerden PV, Khanna R, Knott C, Zhang S, Calhoun AW. The Different Challenges in Being an Adult Versus a Pediatric Intensivist. *Critical Care Explorations*. 2022 Mar 1;4(3):e0654.

23. Dessie AS, Calhoun AW, Kanjanapoom P, Gilbert GE, Ekpenyong A, Lewiss RE, Rabiner JE, Tsze DS, Kessler DO. Development and Validation of a Point-of-Care-Ultrasound Image Quality Assessment Tool: The POCUS IQ Scale. *J Ultrasound Med.* 2023 Jan;42(1):135-145.
24. Duff, J., Kardong-Edgren, S., Chang, T. P., Elkin, R. L., Ramachandra, & Gross, I. T. (2021). Closing the gap: a call for a common blueprint for remote distance telesimulation. *BMJ Simulation & Technology Enhanced Learning*, 7(4), 185.
25. Elgohary M, Palazzo F, Breckwoldt J, Cheng A, Pellegrino J, Schnaubelt S, Greif R, Lockey A, on behalf of the Education, Implementation and Teams Task Force of the International Liaison Committee on Resuscitation (ILCOR). Blended Learning for Accredited Life Support Courses ,À A Systematic Review. *Resuscitation Plus.* 2022; 10:100240.
26. Farrell C, Dorney K, Mathews B, Boyle T, Kitchen A, Doyle J, Monuteaux MC, Li J, Walsh B, Nagler J, Chung S. A Statewide Collaboration to Deliver and Evaluate a Pediatric Critical Care Simulation Curriculum for Emergency Medical Services. *Front Pediatr.* 2022 Jun 14;10:903950. doi: 10.3389/fped.2022.903950. PMID: 35774102; PMCID: PMC9237480.
27. Frey-Vogel, A; Ching K; Dzara K; Mallory L. The acceptability of Avatar Patients for teaching and assessing pediatric residents in communicating medical ambiguity *Journal of Graduate Medical Education.* *Journal of Graduate Medical Education*; 9.27.2022 accepted for publication.
28. Grabinski ZG, Babineau J, Jamal N, Silberman AP, Dufault J, Ford BL, Kessler DO. Reporting of Unsafe Conditions at an Academic Women and Children's Hospital. *Jt Comm J Qual Patient Saf.* 2021 Nov;47(11):731-738. doi: 10.1016/j.jcjq.2021.08.004. Epub 2021 Aug 11. PMID: 34544657.
29. Gross, I.T; Clapper, T.C; Ramachandra, G.; Thomas, A.; Ades, A.; Walsh, B.; Kreuzer, F.; Elkin, R.; Wagner, M.; Whitfill, T.; Chang, T.; Duff, J.; Deutsch, E.; Loellgen, R.; Palaganas, J.; Fayyaz, J.; Kessler, D.; Calhoun, A. Setting an agenda: Results of a consensus process on research directions in distance simulation. *Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare:* (2022, Ahead of Print). 10.1097/SIH.000000000000066.
30. Hansen MV, Lofgren B, Nadkarni VM, Lauridsen KG. Impact of different methods to activate the pediatric mode in automated external defibrillators by laypersons - A randomized controlled simulation study. *Resusc Plus.* 2022 Mar 31;10:100223. doi: 10.1016/j.resplu.2022.100223. PMID: 35403071; PMCID: PMC8983416.
31. Harwayne-Gidansky, I., Askin, G., Fein, D. M., McNamara, C., Duncan, E., Delaney, K, Greenberg, J., Mojica M., Clapper, T.C., & Ching, K. (2022). Effectiveness of a simulation curriculum on clinical application: A randomized educational trial. *Simulation in Healthcare*, 17(2), 71-77. doi:10.1097/SIH.0000000000000598
32. Hsu A, Sasson C, Kudenchuk P, Atkins D, Aziz K, Becker L, Berg RA, Bhanji F, Bradley SM, Brooks SC, Chan M, Chan PS, Cheng A, Clemency B et al, from the Emergency Cardiovascular Care Committee and Get With the Guidelines-Resuscitation Adult and Pediatric Task Forces of the American Heart Association in collaboration with the American Academy of Pediatrics, American Association for Respiratory Care, American College of Emergency Physicians, The Society for Critical Care Anesthesiologists, and American Society of Anesthesiologists. 2021 Interim Guidance to Healthcare Providers for Basic and Advanced Cardiac Life Support in Adults, Children, and Neonates with Suspected or Confirmed COVID-19. *Circulation: Cardiovascular Quality and Outcomes.* 2021; 14:e008396
33. Jafri FN, Yang CJ, Kumar A, Torres RE, Ahmed ST, Seneviratne N, Zarowin D, Bajaj K, Edwards RA. In Situ Simulation as a tool to longitudinally identify and track latent safety threats in a structured Quality Improvement Initiative for SARS-CoV-2 Airway Management: A single center study. *Simulation in Healthcare.* 2022 Jan 26. Online ahead of print. PMID: 35085181



34. Jamalpur, V., Gunda, R. K., Ramachandra, & Shepherd, M. (2022). Breaking barriers in establishing simulation in India-A collaborative approach by pediatric simulation training and research society (PediSTARS). *Frontiers in pediatrics*, 10, 927711-927711.
35. James EJG, Vyasam S, Venkatachalam S, Sanseau E, Cassidy K, Ramachandra G, Rebekah G, Adhikari DD, Deutsch E, Nishisaki A, Nadkarni VM. Low-Cost "Telesimulation" Training Improves Real Patient Pediatric Shock Outcomes in India. *Front Pediatr*. 2022 Jul 26;10:904846. doi: 10.3389/fped.2022.904846. PMID: 35967566; PMCID: PMC9364444.
36. Jeffers J, Schreurs B, Dean J, Scott B, Canares T, Tackett S, Lee-Smith B, Billings E, Billioux V, Sampathkumar H, Kleinman K. Paediatric Chest Compression Performance Improves via Novel Augmented-Reality Cardiopulmonary Resuscitation Feedback System: A Mixed-Methods Pilot Study in A Simulation-Based Setting. *Resuscitation* Plus. 9;11:100273. <https://doi.org/10.1016/j.resplu.2022.100273>. July 2022.
37. Johnston LC, Sawyer T, Nishisaki A, Whitfill T, Ades A, French H, Glass K, Dadiz R, Bruno C, Levit O, Auerbach M. Comparison of a dichotomous versus trichotomous checklist for neonatal intubation. *BMC Med Educ* 2022;22(1):645. doi: 10.1186/s12909-022-03700-4.
38. Jones KA, Jani KH, Jones GW, Nye ML, Duff JP, Cheng A, Lin Y, Davidson J, Chatfield J, Tofil N, Gaither S, Kessler DO; International Network of Simulation-based Pediatric Innovation, Research, Education (INSPIRE) CPR Investigators. Using natural language processing to compare task-specific verbal cues in coached versus noncoached cardiac arrest teams during simulated pediatrics resuscitation. *AEM Educ Train*. 2021 Aug 1;5(4):e10707.
39. Joseph MN, Sanseau E, Thomas A, Brandehoff N, Augenstein J, Shuster M, Tiyyagura G, Auerbach M. Pediatric Rattlesnake Envenomation: A Simulation Scenario With Optional Health Equity, Virtual Facilitation, and Senior Learner Modifications. *Cureus*. 2021 Sep 19;13(9):e18106. doi: 10.7759/cureus.18106. PMID: 34692317; PMCID: PMC8525906.
40. Kirkpatrick AJ, Palaganas J, Ahmed R, Bajwa M, Kutzin J, Kou M, Walsh B, Clapper T, Calhoun A, Eller S, Duff J, Adler M, Lopez C, Riggall V, Bajaj K, Elkin R, Kardong-Edgren S, Sanko J, Sanseau L, Good G, Thomas A, Ramachandra G, & Gross IT. (2022). 2021 Healthcare Distance Simulation Summit Proceedings - Looking into the Distance: Paving the Way Toward a Sustainable Future. The Healthcare Distance Simulation Collaboration.
41. Ko YC, Hsieh MJ, Cheng A, Lauridsen KG, Sawyer TL, Bhanji F, Greif R; International Liaison Committee on Resuscitation Education, Implementation, Teams (EIT) Task Force \*. Faculty Development Approaches for Life Support Courses: A Scoping Review. *J Am Heart Assoc*. 2022 Jun 7;11(11):e025661
42. Laiseca LB, Zanin A, Cid JL, Mencía S. [Simulation during COVID-19 pandemic in the spanish pediatric intensive care units. New challenges in medical education]. *An Pediatr (Engl Ed)*. 2021 Jun 16. Spanish. doi: 10.1016/j.anpedi.2021.06.007. Epub ahead of print. PMID: 3414984. scientific letter.
43. Lemke DS, Young AL, Won SK, Rus MC, Villarreal NN, Camp EA, Doughty CB. Improved Performance and Reduced Cognitive Load with Rapid Cycle Deliberate Practice-A Randomized Controlled Trial. *AEM ET*, December 2021.
44. Lin Y, Hecker K, Cheng A, Grant VJ, Currie G. Cost-effectiveness analysis of workplace-based distributed cardiopulmonary resuscitation training versus conventional annual basic life support training. *BMJ Simul Technol Enhanc Learn*. 2021;7(5):297-303.
45. Lin Y, Cheng A, Pirie J, Davidson J, Levy A, Matava C, Aubin CE, Robert E, Buyck M, Hecker K, Gravel G, Chang TP; INSPIRE Aerosol Generating Medical Procedures (AGMP) Investigators. Quantifying Simulated Contamination Deposition on Healthcare Providers Using Image Analysis. *Simul Healthc*. 2022 May 12. doi: 10.1097/SIH.0000000000000664. Epub ahead of print. PMID: 35561347.



46. Lin Y, Cheng A, Pirie J, Davidson J, Levy A, Matava C, Aubin CE, Robert E, Buyck M, Hecker K, Gravel G, Chang TP; INSPIRE Aerosol Generating Medical Procedures (AGMP) Investigators. Quantifying Simulated Contamination Deposition on Healthcare Providers Using Image Analysis. *Simul Healthc*. 2022 May 12. doi: 10.1097/SIH.0000000000000664. Epub ahead of print. PMID: 35561347.
47. Lombardi K, Bruno C J, French H, et al. (July 04, 2021) Pivot and Persist: A Technical Report on Adapting an Existing Multi-Institutional Bootcamp to a Hybrid Platform. *Cureus* 13(7): e16181. DOI 10.7759/cureus.16181
48. Mallory LA, Doughty CB, Davis KI, Cheng A, Calhoun AW, Auerbach MA, Duff JP, Kessler DO. A Decade Later-Progress and Next Steps for Pediatric Simulation Research. *Simul Healthc*. 2021 Sep 24. doi: 10.1097/SIH.0000000000000611. Epub ahead of print. PMID: 34570084.
49. Martínez-Isasi S, Jorge-Soto C, Barcala-Furelos R, Abelairas-Gómez C, Carballo-Fazanes A, Fernández-Mendez F, Gómez-González C, Nadkarni VM, Rodeiguez-Nuñez A. Performing Simulated Basic Life Support without Seeing: Blind vs. Blindfolded People. *Int J Environ Res Public Health*. 2021 Oct 13;18(20):10724. doi: 10.3390/ijerph182010724. PMID: 34682471; PMCID: PMC8536197.
50. Montgomery EE, Thomas A, Abulebda K, Sanseau E, Pearson K, Chipman M, Chapman JH, Kou M, Auerbach MA. Development and Implementation of a Pediatric Telesimulation Intervention for Nurses in Community Emergency Departments. *J Emerg Nurs*. 2021 Sep;47(5):818-823.e1. doi: 10.1016/j.jen.2021.01.013. Epub 2021 Mar 27. PMID: 33785197; PMCID: PMC8526161.
51. Morgan RW, Atkins DL, Hsu A, Kamath-Rayne BD, Aziz K, Berg RA, Bhanji F, Chan M, Cheng A, Chiotos K, de Caen A, Duff JP, Fuchs S, Joyner BL, Kleinman M, Lasa JJ, Lee HC, Lehotzky RE, Levy A, McBride ME, Meckler G, Nadkarni V, Raymond T, Roberts K, Schexnayder SM, Sutton RM, Terry M, Walsh B, Zelop CM, Sasson C, Topjian A; American Heart Association Emergency Cardiovascular Committee and Get with the Guidelines-Resuscitation Pediatric Task Force in Collaboration with the American Academy of Pediatrics, American Association for Respiratory Care, and American Society of Anesthesiologists. Guidance for Cardiopulmonary Resuscitation of Children With Suspected or Confirmed COVID-19. *Pediatrics*. 2022 Sep 1;150(3):e2021056043. doi: 10.1542/peds.2021-056043. PMID: 35818123.
52. Mullan P, Zinns L, Cheng A. Debriefing the Debriefings: Caring for our patients and caring for ourselves. *Hospital Pediatrics*. 2021; 11(12):e412-414.
53. Nitin, K., Tetali, S., Ramachandra, & Nadkarni, V. (2022). Are High School Students Ready to Stop the Bleed from Injuries? Needs Assessment in a Low Resource Country. *Open Journal of Epidemiology*, 12(3), 317-328.
54. Norwood C, Zinkan JL, Perry S, Tofil NM, Gaither S, Rutledge C. Professional Success: Utilizing simulation to remediate and retain nursing staff. In press, *J for Nurses in Professional Development* January 2022
55. Oriot D, Trigolet M, Kessler DO, Auerbach MA, Ghazali DA. Stress: A Factor Explaining the Gap Between Simulated and Clinical Procedure Success. *Pediatr Emerg Care*. 2021 Dec 1;37(12):e1192-e1196. doi: 10.1097/PEC.0000000000001962. PMID: 31977780.
56. Otero-Agra M, Jorge-Soto C, Cosido-Cobos Ó, Blanco-Prieto J, Alfaya- Fernández C, García-Ordóñez E, Barcala-Furelos R. Can a voice assistant help bystanders save lives? A feasibility pilot study chatbot in beta version to assist OHCA bystanders. *Am J Emerg Med*. 2022; 61. DOI: 10.1016/j.ajem.2022.09.013
57. Pirie, J., Fayyaz, J., Gharib, M., Simone, L., Glanfield, C., & Kempinska, A. (2021). Development and implementation of a novel, mandatory competency-based medical education simulation program for pediatric emergency medicine faculty. *Advances in Simulation*, 6(1), 1-8.
58. Poeppelman RS, Coles MT, Heater T, Vohsing L, Von Sadovszky V, Lutmer JE, Maa T. Assessing Competence With a Task Trainer: Validity Evidence for Novel Tracheostomy Care Skills Assessment Tool.

- Simul Healthc. 2022 Aug 1;17(4):220-225. doi: 10.1097/SIH.0000000000000597. Epub 2021 Jul 28. PMID: 34319269.
59. Ramachandra G, Ramana Rao G, Tetali S, Karabu D, Kanagala M, Puppala S, Janumpally R, Rajanarsing Rao H, Carr B, Brooks S, Nadkarni V. Active bleeding control pilot program in India: Simulation training of the community to stop the bleed and save lives from Road Traffic Injuries. *Clinical Epidemiology and Global health*. 2021
  60. Rex J, Banfer FA 3rd, Sukumar M, Zurca AD, Rodgers DL. Using Simulation to Develop and Test a Modified Cardiopulmonary Resuscitation Technique for a Child With Severe Scoliosis: A System-Based Approach From Theory, to Simulation, to Practice. *Simul Healthc*. 2022 Nov 4. doi: 10.1097/SIH.0000000000000695. Epub ahead of print. PMID: 36326755.
  61. Rizkalla C, Garcia-Jorda, D, Cheng A, Duff JP, Gottesman R, Weiss MJ, Koot DA, Gilfoyle E. The impact of clinical result acquisition and interpretation on task performance during a simulated pediatric cardiac arrest: a multicentre observational study. *CJEM*. Published online May 18. 2022.
  62. Rodríguez-Ruiz E, Campelo-Izquierdo M, Estany-Gestal A, Hortas AB, Rodríguez- Calvo MS, Rodríguez-Núñez A. Validation and psychometric properties of the Spanish version of the Measure of Moral Distress for Health Care Professionals (MMD-HP-SPA). *Med Intensiva (Engl Ed)*. 2022. Doi: 10.1016/j.medin.2021.03.002.
  63. Roze des Ordon A, Eppich W, Lockyer J, Wilkie R, Grant V, Cheng A. Guiding, Intermediating, Facilitating, and Teaching (GIFT): A conceptual framework for simulation educator roles in healthcare debriefing. *Simulation in Healthcare*. Published online Nov 29, 2021.
  64. Roze des Ordon A, Cheng A, Lockyer J, Wilkie R, Grant V, Eppich W. Approaches to interpersonal conflict in simulation debriefing: A Qualitative Study. *Medical Education*. 2021; 55:1284-1296.
  65. Santos-Folgar M, Fernández-Méndez F, Otero-Agra M, Abelairas-Gómez C, Murciano M, Rodríguez-Núñez A, Barcala-Furelos R. Infant Cardiopulmonary Resuscitation Quality While Walking Fast: A Simulation Study. *Pediatr Emerg Care*. 2022 Feb 1;38(2):e973-e977. doi: 10.1097/PEC.0000000000002505. PMID: 35100785.
  66. Schafer, KM., Kremer, MJ. Outcomes of simulation-based experiences related to family presence during resuscitation: A systematic review. *Clinical Simulation in Nursing*, published March 10, 2022. doi: 10.1016/j.ecns.2022.01.002
  67. Silberman AP, Rozenfeld RA, Kessler DO. Core Components of a Pediatric Critical Care Transport Curriculum: A Modified Delphi Approach. *Air Medical Journal*. 2021 Dec 26.
  68. Tay KY, Sanseau E, Carr L, Ortiz-Figueroa F, Rayburn D, Bank I. Simulation Case 9: Neonate Delivery. In: Burns RA, ed. *Emergency Medicine Resident Simulation Curriculum for Pediatrics (EM ReSCu Peds)*. Academic Life in Emergency Medicine; 2021:286-319. ISBN 978-0-9992825-8-8 <https://www.aliem.com/free-ebook-announcement-emrescupeds-em-resident-simulation-curriculum-for-pediatrics-em-rescu-peds/>
  69. Tay KY, Sanseau E, Carr L, Ortiz-Figueroa F, Rayburn D, Bank I. Simulation Case 4: Congenital Heart Lesion. In: Burns RA, ed. *Emergency Medicine Resident Simulation Curriculum for Pediatrics (EM ReSCu Peds)*. Academic Life in Emergency Medicine; 2021:111-144. ISBN 978-0-9992825-8-8 <https://www.aliem.com/free-ebook-announcement-emrescupeds-em-resident-simulation-curriculum-for-pediatrics-em-rescu-peds/>
  70. Thomas, A. A., Montgomery, E. E., Abulebda, K., Whitfill, T., Chapman, J., Leung, J., ... & Auerbach, M. (2022). The Feasibility of a Pediatric Distance Learning Curriculum for Emergency Nurses During the

COVID-19 Pandemic: An Improving Pediatric Acute Care Through Simulation Collaboration. *Journal of emergency nursing*.

71. Thyagarajan S, Ramachandra G, Jamalpur V, Calhoun AW, Nadkarni V, Deutsch ES; Pediatric Simulation Training and Research Society (PediSTARS). Simulathon 2020: Integrating Simulation Period Prevalence Methodology Into the COVID-19 Disaster Management Cycle in India. *Simul Healthc*. 2021 Aug 16. doi: 10.1097/SIH.0000000000000601. Epub ahead of print. PMID: 34405824.
72. Vora S, Dahlen B, Adler M, Kessler DO, Jones VF, Kimble S, Calhoun A. Recommendations and Guidelines for the Use of Simulation to Address Structural Racism and Implicit Bias. *Simul Healthc*. 2021 Aug 1;16(4):275-284. doi: 10.1097/SIH.0000000000000591. PMID: 34398114.
73. Vora S, Li J, Kou M, Ng V, Price A, Claudius I, Kant S, Sanseau E, Madhok M, Auerbach M. ACEP SimBox: A Pediatric Simulation-Based Training Innovation. *Ann Emerg Med*. 2021 Sep;78(3):346-354. doi: 10.1016/j.annemergmed.2021.03.040. Epub 2021 Jun 19. PMID: 34154842.
74. Waddell K, Gaither S, Tofil NM, Rutledge C. The impact of a multi-layered simulation education and feedback program for community hospital emergency rooms on pediatric DKA management. In press *Pediatric Emergency Care* April 2022
75. Wagner M, Jaki C, Löllgen R, Miledler L, Eibensteiner F, Ritschl V, Steinbauer P, Gottstein M, Abulebda K, Calhoun AW, Gross IT. Readiness for and response to COVID-19 among pediatric health care providers: The role of simulation for pandemics and other disasters. *Pediatric Critical Care Medicine*. December 21 online.
76. Wajsberg B, Li D, Kohanzadeh A, Bitners AC, Gorthey S, Gibber MJ, Rong E, Bent JP, Gangar M, Yang CJ. Impact of a postgraduate year one (PGY-1) otolaryngology bootcamp on procedural skill development. *MedEdPublish* 2022;12:47. PMID: 36168536.
77. Whalen AM, Merves MH, Kharayat P, Barry JS, Glass KM, Berg RA, Sawyer T, Nadkarni V, Boyer DL, Nishisaki A. Validity Evidence for a Novel, Comprehensive Bag-Mask Ventilation Assessment Tool. *J Pediatr*. 2022 Feb 16:S0022-3476(22)00116-0. doi: 10.1016/j.jpeds.2022.02.017. Epub ahead of print. PMID: 35181294.
78. Wilke R, Roze des Ordons A, Cheng A, Lin Y. Exploring facilitator gaze patterns during difficult debriefing through eye-tracking analysis: A Pilot Study. *International Journal of Healthcare Simulation, Advances in Theory and Practice*. 2022. DOI : 10.54531/pvrt9874,
79. Won SK, Doughty CB, Young AL, Welch-Horan TB, Rus MC, Camp EA, Lemke DS. Rapid Cycle Deliberate Practice Improves Retention of Pediatric Resuscitation Skills Compared With Postsimulation Debriefing. *Simul Healthc*. 2022 Feb 1;17(1):e20-e27.
80. Wyckoff M, Singletary E, Soar J, Olasveengen T, Greif R, Liley H, Zideman D, Bhanji F, Andersen L, Avis S, Aziz K, Bendall J, Berry D, Cheng A et al. 2021 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations. *Resuscitation*. 2021. 169:229-311.
81. Wyckoff M, Singletary E, Soar J, Olasveengen T, Greif R, Liley H, Zideman D, Bhanji F, Andersen L, Avis S, Aziz K, Bendall J, Berry D, Cheng A et al. 2021 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations. *Circulation*. 2021; Published online November 11.
82. Yang K, Hu H, Ades A. The Hidden Impact of Neonatology Boot Camp: A Qualitative Study. *Simulation in Healthcare*. Accepted. 16 Dec 2021.

83. Yuknis ML, Abulebda K, Whitfill T, Pearson KJ, Montgomery EE, Auerbach MA; Improving Pediatric Acute Care Through Simulation (ImPACTS). Improving Emergency Preparedness in Pediatric Primary Care Offices: A Simulation-Based Interventional Study. *Acad Pediatr*. 2022 Sep-Oct;22(7):1167-1174. doi: 10.1016/j.acap.2022.03.018. Epub 2022 Mar 30. PMID: 35367402.
84. Zanno A, Melendi, M\*, Cutler A, Holmes, J, Chipman M, and Craig A. Simulation-Based Outreach Program Improves Rural Hospitals, Team Confidence in Neonatal Resuscitation. *Cureus* 14(9): e28670, September 2022. Available at: doi:10.7759/cureus.28670. \*Co-first authors

## Other Publications:

1. Ades A, Halamek L, Sawyer T. Using Simulation to Improve Neonatal Care. *Comprehensive Healthcare Simulation: Improving Healthcare Systems*. Springer Nature. Eds: Deutsch E, Perry S, Gurnaney H. 2021
2. Boyer DL, Kaplan S, Kilgallon SB, Rosenblatt S. Simulation to improve capabilities of individuals. *Comprehensive Healthcare Simulation: Improving Healthcare Systems*. Springer Nature. Eds: Deutsch E, Perry S, Gurnaney H. 2021 Deutsch E, Perry S, Gurnaney H (eds). (July 2021). *Comprehensive Healthcare Simulation: Improving Healthcare Systems*. Springer. *Several INSPIRE members wrote chapters*
3. Calhoun AW, Register S, Peterson DT, White ML. Chapter 9.1: Research in Healthcare Simulation. In Palaganas JC, Maxworthy JC, Epps CA, Mancini ME (ed). *Defining Excellence in Simulation Programs*. Philadelphia, PA. Wolters Kluwer; 2022:860-873.
4. Elkin RL, Duff JP, & Gross IT. Distance Simulation. *Defining Excellence in Simulation Programs*, 2nd Edition.
5. Kessler D, Auerbach M, (2021) Simulation for Infant Lumbar Puncture Training. In Soghier L, Robin B. (eds) *Neonatal Simulation A Practical Guide*. American Academy of Pediatrics.
6. Kessler D.O., Schubert C.C., Calhoun A.W. (2021) Working with Simulation Experts. In: Deutsch E.S., Perry S.J., Gurnaney H.G. (eds) *Comprehensive Healthcare Simulation: Improving Healthcare Systems*. *Comprehensive Healthcare Simulation*. Springer, Cham. [https://doi.org/10.1007/978-3-030-72973-8\\_26](https://doi.org/10.1007/978-3-030-72973-8_26)
7. Kirkpatrick A.J., Palaganas J., Ahmed R., Bajwa M., Kutzin J., Kou M., Walsh B., Clapper TC, Calhoun A., Eller S., Duff J., Adler M., Lopez C., Riggall V., Bajaj K., Elkin R., Kardong-Edgren S., Sanko J., Sanseau L., Good G., Thomas A., Ramachandra G., & Gross I.T. (2022). 2021 Healthcare Distance Simulation Summit Proceedings - Looking into the Distance: Paving the Way Toward a Sustainable Future. The Healthcare Distance Simulation Collaboration. White Paper. <https://www.healthcaredistancesim.com/projects>
8. Watanabe I, Ades A, Nishisaki A. Tele-Simulation for Healthcare Team and System Improvement. *Comprehensive Healthcare Simulation: Improving Healthcare Systems*. Springer Nature. Eds: Deutsch E, Perry S, Gurnaney H. 2021

