Wisconsin Perfusion Society
30th Annual Spring Educational Meeting

Hyatt Regency Downtown Milwaukee
April 26\textsuperscript{th} – 28\textsuperscript{th}, 2024

Program Director: Natalie Neisen CCP, LP

As the program director, I welcome you to the Wisconsin Perfusion Society’s 30th Annual Spring Educational Meeting. I, along with the WPS board, hope that you enjoy your time at this meeting. Please take advantage of this opportunity to learn from a great cross-section of speakers, to network with some old and new friends, and to share your ideas with the group. The WPS has always been about providing a comfortable atmosphere for the exchange of ideas.
Purpose:

The Wisconsin Perfusion Society was founded in 1994 to provide continuing education and promote dialogue among perfusionists and cardiovascular professionals throughout the state and nation. In this tradition, the goal of the 30th Annual WPS Educational Meeting is to create an environment of discovery through continuing education and provide a forum for clinicians and industry professionals to present materials that pertain to the profession of cardiovascular perfusion and cardiovascular surgery.

Intended Audience:

The society hopes our meeting will appeal to a wide range of health care providers. We welcome perfusionists, physicians, physician assistants, nurses, allied health care providers and representatives from companies supplying the needs of open-heart programs.

Recertification Points:
You must sign in and attend, to obtain the maximum number of CEUs.

Our program was submitted to The American Board of Cardiovascular Perfusion once it was finalized. The ABCP has awarded 20.7 Category I CEUs for this educational program.

Friday:  5.4
Saturday:  10.2
Sunday:  5.1
Total:  20.7 CEUs

2023-24 Wisconsin Perfusion Society Executive Board

President: Scott Niles, CCP, LP
Madison, WI
Vice-President: Jeff Edwards, CCP, LP
Marshfield, WI
Secretary: Jennifer Anderson, CCP, LP
Waukesha, WI
Treasurer: Kirsten Kallies, CCP, LP
Waukesha, WI
Board Members at Large: Carson Buss CCP, LP
Natalie Neisen CCP, LP

2023-24 Wisconsin Perfusion Society Committee Chairs

Manufacturer Liaison: Scott Brown, CCP, LP
Awards Committee: Jeff Edwards, CCP, LP
Education Committee: Scott Niles, CCP, LP and Marianne Pilger, CP, LP
Election/Nominating Committee: Scott Niles, CCP, LP
Membership Committee: Matthew Tittl, CCP, LP
Scholarship Committee: Carson Buss, CCP, LP
Webmaster: Matthew Tittl, CCP, LP
Friday, April 26th, 2024

1500 – 1930: Registration and Sign-in – Regency Ballroom Foyer

1530 – 1900: Vendor Fair – Regency Ballroom

**Poster Session:**

Social Hour with hors d’oeuvres and cash bar – Regency Ballroom

1530 – 1730: Circulatory Arrest and Neurologic Complications
Kayli Schofield BSN, RN, Quinnipiac University

AKI During CPB: Pulsatile or Non-Pulsatile Flow?
Michael Gallagher BS, AS, Quinnipiac University

Cold Renal Perfusion and Postoperative AKI
Jamie Merckling BS, Quinnipiac University

Hypothermia Associated Coagulopathies
Jason Van Beek BS, Milwaukee School of Engineering

Distal Limb Preservation Techniques for Peripherally Cannulated ECMO
Kameron Simpkin BS, Milwaukee School of Engineering

ECMO Circuit Associated Coagulopathies
Lauren Christensen BS, Milwaukee School of Engineering

Hypercoagulability in COVID-19 Patients
McKayla Zastrow BS, Milwaukee School of Engineering

Washing Packed Red Blood Cells: Benefits and Issues
Klaudia Mauro BS, Milwaukee School of Engineering

ABO-Incompatible Cardiac Transplantation
Lauren Croyle BS, Quinnipiac University

Bivalirudin versus Heparin Anticoagulation Strategies on ECMO
Zachary Dotson BS, Quinnipiac University
Scientific Presentations: Session 1

Keynote Presentation

Hors d’oeuvres and cash bar – Regency Ballroom

Moderated by Natalie Neisen CCP

1730 – 1745: Opening Remarks
Natalie Neisen CCP - Program Director

1745 – 1845: Keynote – 2%: My Journey to the Edge and Back
Delaney Kinstner

1900 – 2000: Social Hour and Cash Bar – VUE Rooftop
Saturday, April 27th, 2024

0730 – 1600: Registration and Sign-in – Regency Ballroom Foyer

0700 – 0800: Continental Breakfast with Juice and Coffee – Regency Ballroom Foyer

0900 – 1630: Vendor Exhibitor Event Reception – Regency Ballroom

Scientific Presentations: Session 2

Regency Ballroom

Moderated by Scott Brown CCP

0730 – 0800: Development of Active Learning Activities for Didactic Perfusion Courses
Catherine Kim BS, Milwaukee School of Engineering. Milwaukee, WI

0800 – 0830: Flowing Forward: A Perfusion Experience in Cairo Egypt
Joe Sleep CCP, LP, University of Wisconsin Hospital and Clinics. Madison, WI

0830 – 0900: Heated Intraperitoneal Chemotherapy (HIPEC): A Quaternary Care Center Experience
Geoffrey Bellini MD, FACS, FSSO, Aurora Medical Group. Milwaukee, WI

0900 – 0930: Practical Use of TEG in Cardiac Surgery
Joe Deily PA-C, Fort Meyers, FL. Sponsored by Haemonetics

BREAK

Coffee and Soda Service – Regency Ballroom
Scientific Presentations: Session 3

Regency Ballroom

Moderated by Jenny Anderson CCP

0945 - 1015: To Vent or Not to Vent: Is Early LV Venting Beneficial for VA ECMO?
Tiffany Johnson BSN, RN, CES-A, E-AEC, Froedtert Hospital and Clinics. Milwaukee, WI

1015 - 1045: Advancements in Pediatric Mechanical Circulatory Support Options
Rob Niebler MD, Children’s Wisconsin. Milwaukee, WI

1045 - 1115: Extracorporeal Support of Sheep Gravid Uterus
Nick Starkey CCP, FPP, LP and Natalie Neisen CCP, LP, Children’s Wisconsin. Milwaukee, WI

1115 – 1145: Advancements in Preoperative Preparation and Anatomical Visualization: 3D Printing as an Economical and Practical Tool for Patient-Specific Care
Ben Neisen PhD, NatureWorks. Minneapolis, MN

1145 – 1245: Lunch and Awards Presentations – Madison Ballroom

Scientific Presentations: Session 4

Madison Ballroom

Moderated by Kirsten Kallies CCP

1245 – 1315: Rooted in Perfusion
Carson Buss CCP, LP, University of Wisconsin Hospital and Clinics. Madison, WI
LeRoy H. Ferries Award Recipient

1315 – 1345: Endocarditis Surgery: A Reflection on Infection
William Fischer III MD, Aurora Medical Group. Milwaukee, WI

1345 – 1415: Surgical Techniques in CHD: Reverse Subclavian Flap for Coarctation
Tracy Geoffrion MD, Children’s Wisconsin. Milwaukee, WI

1415 – 1445: Nuclear Cell-Free DNA to Predict Adverse Outcomes Following Pediatric Cardiothoracic Surgery
Justinn Tanem MD, Children’s Wisconsin. Milwaukee, WI
BREAKE
Coffee and Soda Service – Regency Ballroom

Scientific Presentations: Session 5
Regency Ballroom

Moderated by Carson Buss CCP

1500 – 1530: Current Research in Operating Room Monitoring Technology
Verna Nelson CCP Emeritus, Sponsored by Innovative Medical Devices

1530 – 1600: Essenz Experience at Cleveland Clinic
Randi Lackritz CCP, Cleveland Clinic. Sponsored by LivaNova

1600 – 1630: Can a Syringe Pump Do That?
Josene Carlson BSN, RN, CCP. Sponsored by Innovative Medical Devices
Sunday, April 28th, 2024

0730 – 1130: Registration and Sign-in – Lakeshore Ballroom Foyer

0700 – 0800: Continental Breakfast with Coffee and Juice – Lakeshore Ballroom Foyer

Scientific Presentations: Session 6

Lakeshore Ballroom

Moderated by Scott Niles CCP

0730 – 0800: The Future of Cardioplegia: the Next Step to Improved Myocardial Protection
Luke Juricek, RUSH University. Chicago, IL

0800 – 0830: Advancements in Ex Vivo Liver Perfusion
Ashton Warlick BS, RUSH University. Chicago, IL

0830 – 0900: Visual Aides Utilized in Perfusion Education
Camille Dang, BSN, RN, RUSH University. Chicago, IL

BREAK

Coffee and Soda Service – Lakeshore Ballroom

Scientific Presentations: Session 7

Lakeshore Ballroom

Moderated by Natalie Neisen CCP

0915 – 0930: Hypobaric Oxygenation
Craig Fruth BS, Milwaukee School of Engineering. Milwaukee, WI

0930 – 0945: The Use of Levosimendan in Patients Requiring Mechanical Circulatory Support and/or Cardiopulmonary Bypass
Gabriel Kong BS, Milwaukee School of Engineering. Milwaukee, WI

0945 – 1015: Balancing Osmolarity in Cardiopulmonary Bypass Primes
Carrie Striker CCP, FPP, LP, Children’s Wisconsin. Milwaukee, WI
Coordinating a meeting like this is no small task, but when you have a great organization like WPS, it becomes much easier. As program director, I was able to focus the majority of my attention on the educational content of the meeting because of the WPS team. Very special thanks go out to the entire WPS Board. Also, to our vendors, thank you for supporting this meeting - you and your companies are truly supporting the education of us all, and we appreciate it!

I would like to extend a very special thanks to our program faculty. I understand what a major task it is to not only put your talks together, but to give up your personal weekend to present at this meeting. I hope that you enjoy your experience speaking at this meeting, and I hope you will come back in the future.

Thanks again to everyone for attending the 30th Annual Wisconsin Perfusion Society Meeting! We hope to see you back next year!
30th Annual Spring Educational Meeting
Award Recipients

**William P. Young Award**
Heidi Wellner BSN, RN, Children’s Wisconsin. Milwaukee, WI

**LeRoy H. Ferries Award**
Carson Buss MSP, CCP, LP, University of Wisconsin Hospitals and Clinics. Madison, WI

**Ronald D. Nichols Merit Award**
Marianne Pilger CCP Emeritus

25 Year Service Awards:
- Class A: 2024: Matthew P. Tittl CCP

30 Year Service Awards:
- Class C: 2024: Roy M. Kalu CCP

35 Year Service Awards:
- Class A: 2024: Shawn E. Mergen CCP

50 Year Service Awards:
- Class A: 2024: Michael G. Harloff Emeritus

**2024 Tony Taraskiewicz Award Winner**
Catherine Kim – Milwaukee School of Engineering

**2024 WPS Scholarship Essay Contest Winners**
McKayla Zastrow – Milwaukee School of Engineering

Scholarships this year were sponsored by donations from:
Ron Nichols and WPS Membership

Thank you to all of the other WPS members who donated to the essay scholarship fund!

Your contributions are greatly appreciated!
30th Annual Spring Educational Meeting Sponsors

Abbott Laboratories
CardioQuip
Century HLM
EPIC Cardiovascular Staffing Group
Getinge
Haemonetics
Heartbeat Perfusion Solutions, Inc.
Innovative Medical Devices, Inc.
LivaNova
Medtronic
Perfusion Life
Perfusion Solution
Quest Medical
Spectrum Medical
Terumo Cardiovascular
Attendee Program Evaluation Form

30th Annual Wisconsin Perfusion Society Spring Educational Meeting
April 26th – April 28th, 2024

Scoring: 1-5 (1 = poor, 5 = excellent)

Friday, April 26th, 2024

Poster Session:

Circulatory Arrest and Neurologic Complications
Kayli Schofield BSN, RN, Quinnipiac University. Hamden, CT
Content: 1 2 3 4 5

AKI During CPB: Pulsatile or Non-Pulsatile Flow?
Michael Gallagher BS, AS, Quinnipiac University. Hamden, CT
Content: 1 2 3 4 5

Cold Renal Perfusion and Postoperative AKI
Jamie Merckling BS, Quinnipiac University. Hamden, CT
Content: 1 2 3 4 5

Distal Limb Preservation Techniques for Peripherally Cannulated ECMO
Kameron Simpkin BS, Milwaukee School of Engineering. Milwaukee, WI
Content: 1 2 3 4 5

Hypothermia Associated Coagulopathies
Jason Van Beek BS, Milwaukee School of Engineering. Milwaukee, WI
Content: 1 2 3 4 5

ECMO Circuit Associated Coagulopathies
Lauren Christensen BS, Milwaukee School of Engineering. Milwaukee, WI
Content: 1 2 3 4 5

Hypercoagulability in COVID-19 Patients
McKayla Zastrow BS, Milwaukee School of Engineering. Milwaukee, WI
Content: 1 2 3 4 5

Washing Packed Red Blood Cells: Benefits and Issues
Klaudia Mauro BS, Milwaukee School of Engineering. Milwaukee, WI
Content: 1 2 3 4 5
**ABO-Incompatible Cardiac Transplantation**
Lauren Croyle BS, Quinnipiac University. Hamden, CT
Content: 1 2 3 4 5

**Bivalirudin Versus Heparin Anticoagulation Strategies on ECMO**
Zachary Dotson BS, Quinnipiac University. Hamden, CT
Content: 1 2 3 4 5

**Session One:**

**Keynote – 2%: My Journey to the Edge and Back**
Delaney Kinstner
Content: 1 2 3 4 5
Saturday, April 27th, 2024

**Session Two:**

**Development of Active Learning Activities for Didactic Perfusion Courses**
Catherine Kim BSed, Milwaukee School of Engineering. Milwaukee, WI
Content: 1  2  3  4  5

**Flowing Forward: A Perfusion Experience in Cairo Egypt**
Joe Sleep CCP, LP, University of Wisconsin Hospitals and Clinics. Madison, WI
Content: 1  2  3  4  5

**Heated Intraperitoneal Chemotherapy (HIPEC): A Quaternary Care Center Experience**
Geoffrey Bellini MD, FACS, FSSO. Aurora Medical Group. Milwaukee, WI
Content: 1  2  3  4  5

**Practical Use of TEG in Cardiac Surgery**
Joe Deily PA-C, Fort Meyers, FL. Sponsored by Haemonetics
Content: 1  2  3  4  5

**Session Three:**

**To Vent or Not to Vent: Is Early LV Venting Beneficial for VA ECMO?**
Tiffany Johnson BSN, RN, CES-A, E-AEC, Froedtert Hospital and Clinics. Milwaukee, WI
Content: 1  2  3  4  5

**Advancements in Pediatric Mechanical Circulatory Support Options**
Rob Niebler MD, Children’s Wisconsin. Milwaukee, WI
Content: 1  2  3  4  5

**Extracorporeal Support of a Sheep Gravid Uterus**
Nick Starkey CCP, FPP, LP and Natalie Neisen CCP, LP, Children’s Wisconsin. Milwaukee, WI
Content: 1  2  3  4  5

**Advancements in Preoperative Preparation and Anatomical Visualization: 3D Printing as an Economical and Practical Tool for Patient Specific Care**
Ben Neisen PhD, NatureWorks. Minneapolis, MN
Content: 1  2  3  4  5
Session Four:

Rooted in Perfusion
Carson Buss CCP, LP, University of Wisconsin Hospitals and Clinics. Madison, WI
Content: 1 2 3 4 5

Endocarditis Surgery: A Reflection on Infection
William Fischer III MD, Aurora Medical Group. Milwaukee, WI
Content: 1 2 3 4 5

Surgical Techniques in CHD: Reverse Subclavian Flap for Coarctation
Tracy Geoffrion MD, Children’s Wisconsin. Milwaukee, WI
Content: 1 2 3 4 5

Nuclear Cell-Free DNA Predicts Adverse Outcomes Following Pediatric Cardiothoracic Surgery
Justinn Tanem MD, Children’s Wisconsin. Milwaukee, WI
Content: 1 2 3 4 5

Session Five:

Current Research in Operating Room Technology
Verna Nelson CCP Emeritus, Sponsored by Innovative Medical Devices
Content: 1 2 3 4 5

Essenz Experience at Cleveland Clinic
Randi Lackritz CCP, Cleveland Clinic. Sponsored by LivaNova
Content: 1 2 3 4 5

Can a Syringe Pump Do That?
Josene Carlson BSN, RN, CCP. Sponsored by Innovative Medical Devices
Content: 1 2 3 4 5
Sunday, April 28th, 2024

Session Six:

The Future of Cardioplegia: the Next Step to Improved Myocardial Protection
Luke Juricek RUSH University. Chicago, IL
Content: 1 2 3 4 5

Advancements in Ex Vivo Liver Perfusion
Ashton Warlick BS, RUSH University. Chicago, IL
Content: 1 2 3 4 5

Visual Aides Utilized in Perfusion Education
Camille Dang BSN, RN, RUSH University. Chicago, IL
Content: 1 2 3 4 5

Session Seven:

Hypobaric Oxygenation
Craig Fruth BS, Milwaukee School of Engineering. Milwaukee, WI
Content: 1 2 3 4 5

The Use of Levosimendan in Patients Requiring Mechanical Circulatory Support and/or Cardiopulmonary Bypass
Gabriel Kong BS, Milwaukee School of Engineering. Milwaukee, WI
Content: 1 2 3 4 5

Balancing Osmolarity in Cardiopulmonary Bypass Primes
Carrie Striker CCP, FPP, LP, Children’s Wisconsin. Milwaukee, WI
Content: 1 2 3 4 5

Cesarean EXIT Procedure for the Perfusionist
Scott Niles CCP, LP, University of Wisconsin Hospitals and Clinics. Madison, WI
Content: 1 2 3 4 5

Training and Maintaining Competencies of ECMO Technicians
Heidi Wellner BSN, RN, Children’s Wisconsin. Milwaukee, WI
Content: 1 2 3 4 5

Efficacy of the Seraph 100
Stephanie Hubbard BSN, RN, CCRN, Milwaukee School of Engineering
Content: 1 2 3 4 5

The Creative Mind of Perfusion
Brittany Finger CCP, LP, Ascension Columbia St. Mary’s. Milwaukee, WI
Content: 1 2 3 4 5
### Venue Evaluation

<table>
<thead>
<tr>
<th>Category</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference Facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotel Room</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of Food</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convenience of Venue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of Meeting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FACULTY

Dr. Geoffrey Bellini, MD, General Surgeon, Surgical Oncology, Aurora Health Care. Milwaukee, WI

Carson Buss CCP, University of Wisconsin Hospital and Clinics. Madison, WI

Josene Carlson BSN, RN, CCP

Lauren Christensen BS, Milwaukee School of Engineering

Lauren Croyle BS, Quinnipiac University

Joe Deily PA, Haemonetics. Fort Myers, FL.

Zachary Dotson BS, Quinnipiac University

Camille Dang BSN, RN, RUSH University

Dr. William Fischer III, MD, Cardiothoracic Surgeon, Aurora Health Care. Milwaukee, WI

Brittany Finger CCP, Ascension Columbia St. Mary’s. Milwaukee, WI

Craig Fruth BS, Milwaukee School of Engineering

Michael Gallagher BS, AS, Quinnipiac University

Dr. Tracy Geoffrion, MD, Cardiothoracic Surgeon, Children’s Wisconsin. Milwaukee, WI

Stephanie Hubbard BSN, RN, CCRN, Milwaukee School of Engineering

Tiffany Johnson BSN, RN, Froedtert Hospital. Milwaukee, WI

Luke Juricek, RUSH University

Catherine Kim BSed, Milwaukee School of Engineering

Delaney Kinstner

Gabriel Kong BS, Milwaukee School of Engineering

Randi Lackritz CCP, Cleveland Clinic. Cleveland, OH

Klaudia Mauro BS, Milwaukee School of Engineering

Jamie Merckling BS, Quinnipiac University

Ben Neisen, PhD, NatureWorks. Minneapolis, MN

Natalie Neisen CCP, Children’s Wisconsin. Milwaukee, WI

Verna Nelson CCP Emeritus

Dr. Rob Niebler, MD, Critical Care Specialist, Children’s Wisconsin. Milwaukee, WI

Scott Niles CCP, University of Wisconsin Hospital and Clinics. Madison, WI
Kayli Schofield RN, BSN, Quinnipiac University

Kameron Simpkin BS, Milwaukee School of Engineering

Joe Sleep CCP, University of Wisconsin Hospital and Clinics. Madison, WI

Nick Starkey CCP, FPP, Children’s Wisconsin. Milwaukee, WI

Carrie Striker CCP, FPP, Children’s Wisconsin. Milwaukee, WI

Dr. Justinn Tanem, MD, Cardiac Anesthesiologist, Critical Care Specialist, Children’s Wisconsin. Milwaukee, WI

Jason Van Beek BS, Milwaukee School of Engineering

Ashton Warlick BS, RUSH University

Dr. Eric Weiss, MD, Cardiothoracic Surgeon, Aurora Health Care. Milwaukee, WI

Heidi Wellner BSN, RN, ECMO Coordinator, Children’s Wisconsin. Milwaukee, WI

McKayla Zastrow BS, Milwaukee School of Engineering