## 9th Annual Fetal Imaging Conference 2019

**Outflow Tracts: Pipes, Pressure, and Pathology**  
**September 27–28, 2019**

### Registration

**Online:** primarychildrens.org/fetalimaging

**By Mail:**

Intermountain Healthcare Inc.  
Interprofessional Continuing Education  
675 East 500 South, Salt Lake City, Utah 84102  
**Toll Free:** 800.910.7282 | **Fax:** 801.442.0480

---

<table>
<thead>
<tr>
<th>Name (please print):</th>
<th>Title/Credentials:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] MD</td>
<td>[ ] Sonographer</td>
</tr>
<tr>
<td>[ ] Resident/Fellow</td>
<td>[ ] Other</td>
</tr>
<tr>
<td>[ ] Other:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organization:</th>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] City:</td>
<td>[ ] State: Zip Code:</td>
</tr>
<tr>
<td>[ ] Daytime Phone:</td>
<td></td>
</tr>
<tr>
<td>[ ] E-mail:</td>
<td></td>
</tr>
</tbody>
</table>

**Please indicate any special needs:**

**One question about these topics I would like to be addressed is:**

---

### Tuition

Payment must accompany this registration form:

- [ ] Full conference: $175 (MD)  
- [ ] Full conference: $150 (Non-MD)  
- [ ] Printed syllabus: $50 (online syllabus free)  
- [ ] Pre-Conference Workshop: $50

**Tuition total:**

(All workshops are subject to a $10 processing fee; no refunds will be made after Sept. 1, 2019.)

### Payment

Payment must accompany registration. No purchase orders accepted.

- [ ] Check (payable to Interprofessional Continuing Education)  
- [ ] Visa  
- [ ] American Express  
- [ ] Master Card  
- [ ] Discover

**Authorized Cardholder Name:**  
**CVV:**

**Account Number:**  
**Expiration Date:**

**Signature:**

---

**Tuition:**

- [ ] Full conference: $275 (MD)  
- [ ] Full conference: $150 (Non-MD)  
- [ ] Printed syllabus: $50 (online syllabus free)  
- [ ] Pre-Conference Workshop: $50

**Tuition total:**

---

*All refunds are subject to a $10 processing fee. No refunds will be made after Sept. 1, 2019.*

### Target Audience

Sonographers, Cardiologists, Obstetricians, Radiologists, Residents, and Fellows

---

**Target audience:** Sonographers, Cardiologists, Obstetricians, Radiologists, Fellows
Basic screening tips and tricks 4C, outflows, 3V, image optimization with simultaneous hands on scanning
Describe pearls to help determine the specific CHD in this condition
Describe methods to identify anatomic abnormalities
Review normal anatomic findings for basic heart images
Demonstrate techniques to obtain outflow tract images
Describe why detection matters
Review management and outcome of different extracardiac masses
Review fetal anomalies associated with diabetic mothers
Describe which markers are affected and how they are interpreted when an anomaly is present
Identify abnormal versus normal outflow tracts
Identify the impact on delivery and the child when diagnoses are missed
Demonstrate the imaging features when the left outflow tract is small
Describe pearls to help determine the specific CHD
Describe fetal features to distinguish what is needed postnatally
Discuss factors to consider when weighing risks to fetus and mother
Describe imaging findings in 22q11 fetuses and children
List differential diagnoses for fetal outflow tract abnormalities

Guest speakers will highlight ROPS (UI, OR, AE), RPY
Will Ullrich has been a sonographer for 10 years and has spent the majority of his time in maternal fetal medicine and fetal echocardiography. He currently serves as the educator for a large NIH department in Austin, TX, Austin Maternal, and serves as an invited speaker with the St. David’s Women’s Center. The focus of his primary interest is improving the management and outcomes of fetal screening, particularly fetal heart screening.
Joyce Johnson, MD, MSCI
Dr. Johnson’s primary clinical interests include fetal and pediatric echocardiography and her primary academic interest is in value (outcomes and cost) research in congenital heart disease. Dr. Johnson’s academic pursuit is to develop a cardiovascular care research mission in which she aims to develop a value-based health care delivery model to improve the efficiency and efficacy of care provided to children with congenital heart disease in order to transform the way we care for the mother or child with possible congenital heart disease. The first day will focus on the importance of ultrasound screening for heart defects in the fetus and the impact of extracardiac anomalies on the fetal heart. The second day will focus on more in-depth imaging of congenital defects such as DORV, transposition of the great arteries, and tricus arteriosus. This day will also include hands on imaging, pathology and a parent panel. These sessions will increase the expertise of participants on imaging these anomalies and will also add to their knowledge of the expected courses and outcomes in different types of congenital defects.

Accreditation
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Intermountain Healthcare, Intermountain Pediatrics, the Department of Pediatrics, Developmental and Congenital Cardiology at the University of Utah School of Medicine. Intermountain Healthcare is accredited by the ACCME to provide continuing medical education for physicians.

AMA Credit
Intermountain Healthcare designates this live educational activity for a maximum of 10 AMA PRA Category 1 Credit™ for the main conference and an additional 2 credit hours for the optional pre-conference workshop. Physicians should claim only the credit commensurate with the extent of their participation in the activity. Credit hours are subject to change and are based on actual learning hours based on the discretion of IPCE.

SDMS CME
Credit approval is pending.

Speakers
Jan Jason, MD
Professor, Obstetrics/Gynecology
Adjunct Professor, Pediatrics
University of Utah School of Medicine
Michelle Deblois, MD, PhD
Instructor of Obstetrics and Gynecology and Developmental and Congenital Cardiology
University of Utah School of Medicine
Melinda Boushel, MB, BS
Assistant Professor, Pediatrics
University of Utah School of Medicine
Jason T. Su, DO
Assistant Professor, Pediatrics
University of Utah School of Medicine
Shaji C. Menon, MD
Pediatric Cardiology Fellow
University of Utah School of Medicine
Carol McFarland, MD
Pediatric Cardiology Fellowship Program Director
University of Utah School of Medicine
Will Lindsley, RDMS (FE, OB, AB), RVT
Fellows and Sonographers
Lance Erickson, PA (ASCP), HTL, MB
Fellows and Sonographers
Guest Speakers
Will Lindsley, RDMS (FE, OB, AB), RVT Ultrasound Educator
Jeffery и Associates Women’s Center of Texas
Joyce Johnson, MD, MSCI
Fellows and Sonographers
Nelangi M. Pinto, MD
Fellows and Sonographers
Jason T. Su, DO
Fellows and Sonographers
Jill Packard, FNA
Fellows and Sonographers
Fellows and Sonographers
Lancaster, PA 17601-2800
(717) 299-6768

Ultrasound Imaging
9th Annual Fetal Imaging Conference 2019
Friday, September 27 (Pressure)
10 AM–12 PM Pre-Conference Workshop
Basic screening tips and tricks 4C, outflows, 3V, image optimization with simultaneous hands on scanning
1-3 PM Registration and Exhibits
1-3:30 PM Why Do We Screen for Heart Defects—What Happens When a Diagnosis Is Missed?
Jason T. Su, DO
Discuss why certain defects
• Identify the impact on delivery and the child when diagnoses are missed
3-3:15 PM Diabetic Embryopathy—When Everything Can Go Wrong
Janine Byars, MD
Discuss tips to detect these anomalies on ultrasound imaging
3-3:30 PM Pressure—Extracardiac Masses (Imaging)
Polly Woodcock, MD
Identify key imaging findings to diagnose extracardiac masses
3-3:45 PM Pressure—Extracardiac Masses (Pathology)
Stephen Fenton, MD, FACS
Review normal anatomic findings of outflow tract abnormalities
3:45–4:15 PM Pressure—The Impact of Extracardiac Masses on the Heart
Joyce Johnson, MD, MSCI
Discuss how extracardiac masses can impact the heart
4:15–4:45 PM Following Growth and Well-Being in a Fetus with Anomalies
Michael D. Puchalski, MD, MPH
• Identify markers of well-being in the normal fetus
• Discuss which anomalies are affected and how are interpreted when an anomaly is present
4:45–5:15 PM Panel—Delivery Decisions in the Face of Multiple Defects and Growth Issues
Joyce Johnson, MD, MSCI
• Identify markers of well-being in the normal fetus
• Discuss which anomalies are affected and how are interpreted when an anomaly is present
• Discuss outcomes of delivery and decision
5:15–5:45 PM Wrap-up and Quiz
• Friday Morning Pre-Conference Workshops
Attendees of the pre-conference workshop will have the opportunity to participate in small groups (no more than 2 participants per faculty) to practice basic and advanced cardiac imaging. This session will also include short presentations on imaging tips prior to hands-on practice. The workshop will be from 10 am to noon on Friday. Please indicate your interest in participating when registering for the conference. The fee for this additional opportunity will be $50.

9th Annual Fetal Imaging Conference 2019
Friday, September 27 (Pressure)
7-8 AM Breakfast
8-8:30 AM Syndromes in Congenital Lesions—Focus on 2q37
Anne Kennedy, MB, BCh, BAO
• Describe imaging findings in 22q11 fetuses and children
• Review the spectrum of 22q11 CHD and clinical findings
8:30–9 AM Fetal Echocardiogram (Extended Views)
Will Lindsley, RDMS (FE, OB, AB), RVT
• Standard short protocol and larger protocol to obtain views
• Describe methods to identify anatomic abnormalities
9:20-9:50 AM How to Think About the Conotruncus—Pattern Recognition
Joyce Johnson, MD, MSCI
• Identify abnormal versus normal outflow tract
• List differential diagnoses for fetal outflow tract abnormalities
9:50-10 AM Break and Exhibits
10-10:30 AM Parallel Outlines—In Depth DTA, CCTGA
Thomas A. Ollier, DO
• Demonstrate fetal imaging for when the outflow tracts are parallel
• Describe pearls to help determine the specific CHD
10:40–11 AM One Outflow Is Too Small—The Right
Shay C. Abbot, MD
• Demonstrate imaging findings when the left outflow tract is small
• Review management and outcome of different extracardiac masses
• Discuss outcomes of delivery and decision
11:30 AM–12 PM Putting It All Together—DORV
Jason T. Su, DO
• Review the spectrum of double outlet right ventricle
• Describe fetal features to distinguish what is needed postnatally
12-1 PM Lunch and Exhibits
1-2 PM Low Scanning/Pathology
Laura Erickson, MA, (RCD, HTL)
Discuss how to approach sonography when weighing risks to fetus and mother
1-2:30 PM Parent Panel
• Impact paternal perspective of having a child with CHD
• Describe other consideration
3 PM Conference Wrap-up
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Intermountain Healthcare, Intermountain Pediatrics, the Department of Pediatrics, Developmental and Congenital Cardiology at the University of Utah School of Medicine. Intermountain Healthcare is accredited by the ACCME to provide continuing medical education for physicians.

AMA Credit
Intermountain Healthcare designates this live educational activity for a maximum of 10 AMA PRA Category 1 Credit™ for the main conference and an additional 2 credit hours for the optional pre-conference workshop. Physicians should claim only the credit commensurate with the extent of their participation in the activity. Credit hours are subject to change and are based on actual learning hours based on the discretion of IPCE.
Basic screening tips and tricks

4C, outflows, 3V, image optimization with simultaneous hands on scanning

List differential diagnoses for fetal outflow tract abnormalities

Describe pearls to help determine the specific CHD in this condition

Describe types of extracardiac masses

Discuss factors to consider when weighing risks to fetus and mother

Describe key findings that help classify cases

Demonstrate techniques to obtain outflow tract images

Review management and outcome of different extracardiac masses

Describe imaging findings in 22q11 fetuses and children

Describe pearls to help determine the specific CHD

Review fetal anomalies associated with diabetic mothers

Review the spectrum of 22q11 CHD and clinical findings

Describe which markers are affected and how they are interpreted when an anomaly is present

Review the spectrum of double outlet right ventricle

Identify the impact on delivery and the child when diagnoses are missed

Describe why detection matters

List differential diagnoses for fetal outflow tract abnormalities

Describe pearls to help determine the specific CHD

Review fetal anomalies associated with diabetic mothers

Review the spectrum of 22q11 CHD and clinical findings

Describe which markers are affected and how they are interpreted when an anomaly is present

Review the spectrum of double outlet right ventricle

Identify the impact on delivery and the child when diagnoses are missed

Describe why detection matters
Purpose
The purpose of this conference is to increase the knowledge and skills of sonographers and physicians who care for the mother or child with possible congenital heart disease. The focus will be on ultrasound screening for heart defects in the fetus and the impact of extracardiac anomalies on the fetal heart.

The second day will focus on more in-depth imaging of conotruncal defects such as DORV, transposition of the great arteries, and truncus arteriosus. This day will also include hands on imaging, pathology and a parent panel. These sessions will increase the expertise of participants on imaging these anomalies and will also add to their knowledge of the expected outcomes and differences in types of conotruncal defects.

Accreditation
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Intermountain Healthcare, Intermountain Pediatrics, the Departments of Pediatrics, Obstetrics and Gynecology, and Radiology at the University of Utah School of Medicine. Intermountain Healthcare is accredited by the ACCME to provide continuing medical education for physicians.

AMA Credit
Intermountain Healthcare designates this live educational activity for a maximum of 10 AMA PRA Category 1 Credit™ for the main conference and an additional 2 credit hours for the optional pre-conference workshop. Physicians should claim only the credit commensurate with the extent of their participation in the activity. Credit hours are subject to change and are based on actual learning hours based on the discretion of JIFCE.
9th Annual Fetal Imaging Conference
Park City Marriott
Outflow Tracts: Pipes, Pressure, and Pathology
September 27–28, 2019

Name (please print): 
Title/Credentials:
- MD
- Sonographer
- Resident/Fellow
- Other:
Organization:
Address:
City:
State: Zip Code:
Daytime Phone:
E-mail:

Please indicate any special needs:

One question about these topics I would like to be addressed is:

Tuition
Payment must accompany this registration form:
- Full conference: $175 (MD)
- Full conference: $150 (Non-MD)
- Printed syllabus: $50 (online syllabus free)
- Pre-Conference Workshop: $50

Tuition total: ________
*All refunds are subject to a $10 processing fee. No refunds will be made after Sept. 1, 2019.

Payment (Payment must accompany registration. No purchase orders accepted.)
- Check (payable to Interprofessional Continuing Education)
- Visa
- American Express
- Master Card
- Discover

Authorized Cardholder Name: 
CVV:
Account Number: Expiration Date:
Signature:

Payment (Payment must accompany registration. No purchase orders accepted.)
- Check (payable to Interprofessional Continuing Education)
- Visa
- American Express
- Master Card
- Discover

Authorized Cardholder Name: 
CVV:
Account Number: Expiration Date:
Signature:

Tuition
Payment must accompany this registration form:
- Full conference: $175 (MD)
- Full conference: $150 (Non-MD)
- Printed syllabus: $50 (online syllabus free)
- Pre-Conference Workshop: $50

Tuition total: ________
*All refunds are subject to a $10 processing fee. No refunds will be made after Sept. 1, 2019.

Payment (Payment must accompany registration. No purchase orders accepted.)
- Check (payable to Interprofessional Continuing Education)
- Visa
- American Express
- Master Card
- Discover

Authorized Cardholder Name: 
CVV:
Account Number: Expiration Date:
Signature:

Tuition
Payment must accompany this registration form:
- Full conference: $175 (MD)
- Full conference: $150 (Non-MD)
- Printed syllabus: $50 (online syllabus free)
- Pre-Conference Workshop: $50

Tuition total: ________
*All refunds are subject to a $10 processing fee. No refunds will be made after Sept. 1, 2019.

Payment (Payment must accompany registration. No purchase orders accepted.)
- Check (payable to Interprofessional Continuing Education)
- Visa
- American Express
- Master Card
- Discover

Authorized Cardholder Name: 
CVV:
Account Number: Expiration Date:
Signature:

Tuition
Payment must accompany this registration form:
- Full conference: $175 (MD)
- Full conference: $150 (Non-MD)
- Printed syllabus: $50 (online syllabus free)
- Pre-Conference Workshop: $50

Tuition total: ________
*All refunds are subject to a $10 processing fee. No refunds will be made after Sept. 1, 2019.

Payment (Payment must accompany registration. No purchase orders accepted.)
- Check (payable to Interprofessional Continuing Education)
- Visa
- American Express
- Master Card
- Discover

Authorized Cardholder Name: 
CVV:
Account Number: Expiration Date:
Signature:

Tuition
Payment must accompany this registration form:
- Full conference: $175 (MD)
- Full conference: $150 (Non-MD)
- Printed syllabus: $50 (online syllabus free)
- Pre-Conference Workshop: $50

Tuition total: ________
*All refunds are subject to a $10 processing fee. No refunds will be made after Sept. 1, 2019.

Payment (Payment must accompany registration. No purchase orders accepted.)
- Check (payable to Interprofessional Continuing Education)
- Visa
- American Express
- Master Card
- Discover

Authorized Cardholder Name: 
CVV:
Account Number: Expiration Date:
Signature:

Tuition
Payment must accompany this registration form:
- Full conference: $175 (MD)
- Full conference: $150 (Non-MD)
- Printed syllabus: $50 (online syllabus free)
- Pre-Conference Workshop: $50

Tuition total: ________
*All refunds are subject to a $10 processing fee. No refunds will be made after Sept. 1, 2019.

Payment (Payment must accompany registration. No purchase orders accepted.)
- Check (payable to Interprofessional Continuing Education)
- Visa
- American Express
- Master Card
- Discover

Authorized Cardholder Name: 
CVV:
Account Number: Expiration Date:
Signature:

Tuition
Payment must accompany this registration form:
- Full conference: $175 (MD)
- Full conference: $150 (Non-MD)
- Printed syllabus: $50 (online syllabus free)
- Pre-Conference Workshop: $50

Tuition total: ________
*All refunds are subject to a $10 processing fee. No refunds will be made after Sept. 1, 2019.

Payment (Payment must accompany registration. No purchase orders accepted.)
- Check (payable to Interprofessional Continuing Education)
- Visa
- American Express
- Master Card
- Discover

Authorized Cardholder Name: 
CVV:
Account Number: Expiration Date:
Signature:

Tuition
Payment must accompany this registration form:
- Full conference: $175 (MD)
- Full conference: $150 (Non-MD)
- Printed syllabus: $50 (online syllabus free)
- Pre-Conference Workshop: $50

Tuition total: ________
*All refunds are subject to a $10 processing fee. No refunds will be made after Sept. 1, 2019.

Payment (Payment must accompany registration. No purchase orders accepted.)
- Check (payable to Interprofessional Continuing Education)
- Visa
- American Express
- Master Card
- Discover

Authorized Cardholder Name: 
CVV:
Account Number: Expiration Date:
Signature: