Welcome to Pittsburgh

On behalf of the National Society of Genetic Counselors (NSGC), the Annual Education Conference (AEC) Planning Subcommittee and the NSGC Board of Directors, thank you for joining us!

NSGC is helping genetic counselors pioneer expanding roles and new areas of healthcare with more than 24 educational sessions designed to support your professional development. Sessions will cover a variety of topics at the forefront of genomics such as newborn and fetal sequencing, cancer panel testing, and sharing data as a means to improve patient care. Educational highlights you do not want to miss include the pre-conference symposium Diagnostic Exome Sequencing as the Standard of Care (page 10), the Dr. Beverly Rollnick Memorial Lecture featuring a documentary screening and discussion with filmmaker Kristen Powers (page 12) and the NSGC Professional Issues Panel (page 13). Reference pages 10-15 for sessions submitted/sponsored by your NSGC Special Interest Group (SIG). Maximize your AEC experience by building your schedule around education sessions specific to your professional interests.

Expanding your expertise and professional development goes far beyond the valuable education taking place within the lecture room walls. Take advantage of the Welcome Reception, SIG meetings and the AEConnect area to network with 2,000 of your peers. Visit the Exhibitor Suite to see the latest product offerings and services within our profession. Catch up with friends and make new connections during receptions, program reunions and daily breaks. Attend the State of the Society Address, the NSGC Business Meeting and the SIG Fair to learn more about the latest efforts of your professional organization. Experience all of the incredible activities this week has to offer!

We hope you enjoy your time here in Pittsburgh, absorbing content on the latest innovations and developments in the profession of genetic counseling, all while enjoying this amazing city!

Lori A.H. Erby, PhD, CGC
2015 AEC Subcommittee Chair

Jason Flanagan, MS, CGC
2015 AEC Subcommittee Vice-Chair

Download the Official AEC Mobile App

NSGC delivers everything AEC directly to your fingertips via the 2015 NSGC AEC mobile app. View conference session descriptions, speakers and scheduling information. Use the interactive maps to navigate the Exhibitor Suite with ease, search the exhibitor directory and stay in the know with conference alerts.

On your smartphone or tablet, search for “NSGC 2015 AEC” in your app store or direct your mobile browser to www.nsgc.org/mobileapp.

Follow what others are saying or post your own insights on Twitter during the AEC using #NSGC2015.
About the 34th Annual Education Conference

Statement of Purpose
The 34th Annual Education Conference (AEC) focuses specifically on the educational needs of genetic counselors. The AEC addresses a wide variety of genetic counseling practice areas and provides the latest information for the genetic counseling profession. Attendees will gain important information to support and enhance their current practice at sessions such as: Shift Happens: Penetrance, Pedigrees and New Perspectives on Development Brain Dysfunctional and Working with Payers to Develop and Apply Genetic Testing Policies. The Exhibitor Suite will provide current information and the opportunity to talk with exhibitors about new developments in genetics. The pre-conference symposia will provide in-depth information on specific topics relevant to the field of genetic counseling.

Continuing Education
NSGC has been approved to offer up to 3.32 CEUs or 33.25 Contact Hours at the Annual Education Conference. CEUs earned through these activities will be accepted by the American Board of Genetic Counseling (ABGC) as Category 1 CEUs for purposes of certification and recertification. Individuals must be certified at the time of participation in the activity in order for it to count towards recertification.

Pre-conference Symposia Earn up to: 0.50 CEUs | 5.00 Contact Hours
AEC General Sessions Earn up to: 2.17 CEUs | 21.75 Contact Hours
Sponsored Meal Sessions Earn up to: 0.65 CEUs | 6.50 Contact Hours
Total Earn up to: 3.32 CEUs | 33.25 Contact Hours

IMPORTANT: NSGC will only be able to verify the credits you earned for the sessions for which you provide an attendance verification code and complete an evaluation in the online system.

Evaluation Process/Claiming CEUs
Individuals claiming CEUs MUST complete evaluations, however NSGC greatly appreciates feedback from all attendees. An attendance verification code will be provided in each session. Please record this code as you will be required to enter the attendance verification code to evaluate the session. Codes are being used this year instead of scanning attendee badges to verify attendance. See page 40 for a grid to assist you in tracking verification codes for the sessions that you have attended.

To complete your evaluations, follow these steps:
1. Log in to the NSGC website at www.nsgc.org/2015aec and select the Evaluation link from the navigation menu.
2. Click on the Evaluation link to be directed to the evaluation website.
3. For each session, add the attendance verification code that you received in the lecture room and then evaluate the session.
4. Save each session as you go, because the website will log you out after 10 minutes of inactivity. (If this happens, you must go back to the NSGC website and repeat steps 1 and 2 to log back in and re-enter any unsaved information.)
5. Once you have completed evaluations for all sessions attended, you will be able to evaluate the overall conference by selecting “Return to Registered Events.”
6. Review your evaluation to make sure you claimed credit for each session you attended. Then print and email your final certificate of credits earned for your records. Note: once you have printed your certificate, you will NOT be able to go back and edit any more sessions.

The deadline to complete your evaluations is December 15, 2015.

Please contact the NSGC Executive Office at nsgc@nsgc.org if you need assistance.

Overall Conference Evaluation
To complete an evaluation of the overall conference, please follow the steps listed below:
1. Log in to the NSGC website at www.nsgc.org/2015aec and select the Evaluation link from the navigation menu.
2. Click on the Evaluation link to be directed to the evaluation website.
3. Select the Overall/Post-Event link; then evaluate the conference.

2015 AEC Session Recordings
Maximize your AEC experience — view sessions you missed in Pittsburgh, earn additional CEUs and access the valuable information you gathered by purchasing online session recordings.

Session recording packages featuring all pre-conference symposia*, plenary and educational breakout sessions* are available for purchase. The online recordings will contain synced audio and PowerPoint presentations for each session. To earn Category 1 CEUs, it is required that you complete and pass a quiz included at the conclusion of each session.

Registered attendees will be able to order online content during the AEC at the discounted rate, or following the conference at an increased rate. Purchase your online recording package in conjunction with your AEC registration for a special discounted rate.**

NEW THIS YEAR!
We have combined our previous packages to give you access to more education at one low price.

If you register for the AEC and/or pre-conference symposia, the full session recordings package of the pre-conference symposia and AEC recordings is available for the special price of $99.

Visit www.nsgc.org/2015aec to add session recordings to your registration.

* With speaker approval
** Discounted package rates only available when purchased in conjunction with a conference registration.
General Information

Registration Hours
David L. Lawrence Convention Center

<table>
<thead>
<tr>
<th>Date</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Tuesday, October 20</td>
<td>5:00 pm – 8:00 pm</td>
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<tr>
<td>Wednesday, October 21</td>
<td>7:00 am – 8:00 pm</td>
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<tr>
<td>Thursday, October 22</td>
<td>6:30 am – 8:00 pm</td>
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<tr>
<td>Friday, October 23</td>
<td>7:00 am – 8:00 pm</td>
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<tr>
<td>Saturday, October 24</td>
<td>7:00 am – 3:00 pm</td>
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Exhibitor Suite Hours
David L. Lawrence Convention Center

<table>
<thead>
<tr>
<th>Date</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Wednesday, October 21</td>
<td>6:15 pm – 8:30 pm</td>
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<tr>
<td>Thursday, October 22</td>
<td>11:30 am – 3:00 pm</td>
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<tr>
<td></td>
<td>6:00 pm – 8:00 pm</td>
</tr>
<tr>
<td>Friday, October 23</td>
<td>11:30 am – 4:30 pm</td>
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<tr>
<td></td>
<td>4:15 pm: Passport to Prizes Drawing</td>
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</tbody>
</table>

Message Center and Job Boards
Bulletin boards with push-pins are available at the AEConnect area, in the Exhibitor Suite for attendees to leave messages for colleagues or post job opportunities. Advertising is not permitted. Material posted will be monitored and inappropriate information is subject to removal at NSGC’s discretion.

Attendee List Information
Attendee lists were posted on the NSGC website prior to the conference and an updated list will be posted after the conference. Lists are available at the registration desk and are available for reproduction at the attendee’s expense at the FedEx Office Print and Ship Center across the street from the Convention Center. Attendee lists are provided solely for networking and may not be used for solicitation purposes. NSGC is not responsible for errors and/or omissions.

Handouts and Presentations
NSGC offers electronic versions of AEC session handouts when provided in advance by AEC speakers. A copy of the handouts will be available for reproduction at the attendee’s expense at the FedEx Office Print and Ship Center across the street from the Convention Center. All session handouts (if provided by the speaker) are posted on the NSGC website and will be available following the conference until March 1, 2016. To download handouts go to www.nsgc.org/2015AECHandouts.

If you are also registered for a pre-conference symposium, you will be given access to the pre-conference symposia page at www.nsgc.org/2015AECPCSHandouts.

Business Center Hours
The FedEx Office Print and Ship Center is located across the street from the David L. Lawrence Convention Center at 960 Penn Ave. and is open during the following hours:

<table>
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<tr>
<th>Day</th>
<th>Hours</th>
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<tr>
<td>Monday – Friday</td>
<td>7:30 am – 9:00 pm</td>
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<tr>
<td>Saturday</td>
<td>8:00 am – 6:00 pm</td>
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<tr>
<td>Sunday</td>
<td>Closed</td>
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Internet Access
NSGC attendees will have wireless Internet available in all meeting spaces and common areas at the David L. Lawrence Convention Center.

Internet at the Convention Center can be accessed by using the network “NSGC2015.” No password is required.

NSGC gratefully acknowledges our wireless Internet sponsor at the Convention Center: sequenom Laboratories

Many of our conference hotels also offer wireless Internet. Please check with the front desk at your hotel for more information.

Sponsored Sessions
Sponsored meal sessions are available for pre-registration. If you pre-registered to attend a session, a ticket was printed with your badge at registration. In order to be admitted to each session, please bring your conference badge and the ticket that pertains to that session. We encourage you to arrive early for each session to allow all attendees time to be seated. If you did not pre-register for a session but are still interested in attending, you are welcome to join the waiting line outside the room. We cannot guarantee you will be able to attend the session, but if all pre-registered attendees are seated and seats are available, we will accommodate anyone waiting on a first-come, first-served basis.

Please note that not all attendees will receive food and beverage with their admittance. Please check your ticket to see if the sponsor will provide food, or if you are encouraged to bring your own.

Executive Office Information
NSGC Executive Office
330 N. Wabash Avenue, Suite 2000
Chicago, IL 60611 USA
Phone: 312.321.6834
Fax: 312.673.6972
Email: nsgc@nsgc.org
Website: www.nsgc.org

Executive Director
Meghan Carey
mcarey@nsgc.org
### Wednesday, October 21

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:00 AM – 8:00 AM</td>
<td><strong>AEC Pre-conference Symposia Breakfast – West Atrium</strong></td>
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<td>8:00 AM – 2:00 PM</td>
<td><strong>CEU Pre-conference Symposia</strong></td>
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<tr>
<td></td>
<td><strong>A01</strong> Beyond the Usual Suspects: Updates on Counseling and Management</td>
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<td></td>
<td>Strategies for Rare Inherited Cancer Predisposition Syndromes</td>
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<td>Room 319/320/321</td>
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<td><strong>A02</strong> Diagnostic Exome Sequencing as the Standard of Care</td>
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<td>Room 315/316</td>
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<td><strong>A03</strong> Feeling Overwhelmed? Advocating for Resources in the</td>
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<td>Current Healthcare Environment</td>
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<td></td>
<td>Room 406</td>
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<td><strong>A04</strong> Qualitative Research 101: A Crash-course for Genetic</td>
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<td>Counselors</td>
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<td>Room 411</td>
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<td><strong>A05</strong> Sequence Variant Interpretation for the Clinical</td>
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<td>Genetic Counselor</td>
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<td>Room 317/318</td>
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<td><strong>A06</strong> A Womb with a View: A Fetal Surgery Primer for Genetic</td>
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<td>Counselors</td>
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<td>Room 403/404/405</td>
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<tr>
<td>11:00 AM – 3:00 PM</td>
<td><strong>Food and Beverage Concessions Open – West Atrium</strong></td>
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<tr>
<td>2:00 PM – 2:30 PM</td>
<td><strong>NSGC Sig Fair – Room 408/409/410</strong></td>
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<tr>
<td>2:00 PM – 3:15 PM</td>
<td>**AEC 101 and Welcome to the AEC Sig Fair: A Roadmap to Enhance Your</td>
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<td></td>
<td>First AEC Experience</td>
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<tr>
<td>3:30 PM – 3:45 PM</td>
<td><strong>AEC Opening Remarks – Spirit of Pittsburgh Ballroom</strong></td>
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<tr>
<td>3:45 PM – 5:15 PM</td>
<td><strong>CEU Janus Series – Spirit of Pittsburgh Ballroom</strong></td>
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<td><strong>A07</strong> Advances in the Understanding of Paragangliomas and</td>
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<td>Pheochromocytomas: Underappreciated and Highly Genetic</td>
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<td><strong>A08</strong> Preimplantation Genetic Testing: Ushering in a New Era</td>
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<td><strong>A09</strong> DICER1 Syndrome: A Newly Recognized Cancer Predisposition</td>
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<td>Syndrome</td>
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<td>5:15 PM – 5:45 PM</td>
<td>**Natalie Weissberger Paul National Achievement Award – Spirit of</td>
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<td>Pittsburgh Ballroom</td>
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<td>5:45 PM – 6:00 PM</td>
<td>**CEU A10 Beth Fine Kaplan Best Student Abstract Award – Spirit of</td>
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<td>Pittsburgh Ballroom</td>
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<td>6:00 PM – 6:15 PM</td>
<td>**CEU A11 Best Full Member Abstract Award – Spirit of Pittsburgh</td>
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<td>Ballroom</td>
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<tr>
<td>6:15 PM – 8:30 PM</td>
<td><strong>Welcome Reception in the Exhibitor Suite – Hall A</strong></td>
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<td>6:45 PM AND ON</td>
<td>**Various Program Reunions (See p. 8 for more information and</td>
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<td>8:30 PM</td>
<td><strong>Various Ancillary Meetings</strong></td>
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<td><strong>Genomic Technologies SIG</strong></td>
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<td>Room 328</td>
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<td><strong>Cincinnati Genetic Counseling Program</strong></td>
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<td><strong>University of Oklahoma Health Sciences Center</strong></td>
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<td><strong>Wayne State University</strong></td>
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<td>7:00 AM – 7:45 AM</td>
<td>**CEU B01 Hereditary Cancer Testing and the Genetic Counselor –</td>
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<td>Sponsored by Integrated Genetics</td>
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<td></td>
<td>Allegheny Grand Ballroom – Westin Hotel, Third Floor</td>
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<tr>
<td>7:00 AM – 7:45 AM</td>
<td><strong>NSGC 2016 Board and Committee Leadership Orientation – Room 330</strong></td>
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<tr>
<td>7:00 AM – 7:45 AM</td>
<td>NSGC SIG Leadership Orientation – Room 329</td>
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<td>7:00 AM – 7:45 AM</td>
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<td></td>
<td><strong>Cardiac SIG</strong></td>
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<td>Room 327</td>
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<td><strong>Counseling Women About Pregnancy</strong></td>
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<td>Room 306</td>
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<td></td>
<td><strong>Research SIG</strong></td>
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<td>Room 326</td>
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<tr>
<td>7:00 AM – 8:00 AM</td>
<td><strong>AEC Breakfast – Spirit of Pittsburgh Ballroom Gallery</strong></td>
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<td>8:00 AM – 9:00 AM</td>
<td>**CEU B02 Next Generation Thinking: Paths to Evidence-based Practice</td>
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<td>9:00 AM – 9:45 AM</td>
<td>**CEU B03 NSGC State of the Society Address – Spirit of Pittsburgh</td>
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<td>9:45 AM – 10:00 AM</td>
<td><strong>AEC Break – West Atrium</strong></td>
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<tr>
<td>10:00 AM – 11:30 AM</td>
<td><strong>CEU Educational Breakout Sessions</strong></td>
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<td>**B04 Media Training Workshop: Master the Art of Telling the Genetic</td>
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<td>**B05 Newborn and Fetal Sequencing: Exploring the Landscape before</td>
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<td></td>
<td>**B06 Practice Guidelines 2.0: Developing High Quality, Clinically</td>
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<td>Policies**</td>
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<td>Supported by Affymetrix, Inc.</td>
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<td>11:30 AM – 12:45 PM</td>
<td><strong>NSGC Committee Meetings</strong></td>
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<td><strong>Access and Service Delivery Committee</strong></td>
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<td>Room 326</td>
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<td><strong>Education Committee</strong></td>
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<td><strong>Membership Committee</strong></td>
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<td><strong>Practice Guidelines Committee</strong></td>
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<td><strong>Public Policy Committee</strong></td>
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<td>Room 326</td>
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### Thursday, October 22

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<tr>
<td>11:30 AM – 3:00 PM</td>
<td>**Exhibitor Suite Open and Food and Beverage Concessions Open –</td>
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<td>Hall A</td>
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<tr>
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<td><strong>NSGC Committee Meetings</strong></td>
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<td><strong>Education Committee</strong></td>
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<td><strong>Membership Committee</strong></td>
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<td><strong>Practice Guidelines Committee</strong></td>
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<td><strong>Public Policy Committee</strong></td>
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<tr>
<td>1:00 PM – 1:30 PM</td>
<td><strong>American Board of Genetic Counseling (ABGC) Business Meeting</strong> – <strong>Spirit of Pittsburgh Ballroom</strong></td>
</tr>
<tr>
<td>1:30 PM – 2:00 PM</td>
<td><strong>Accreditation Council for Genetic Counseling (ACGC) Presentation</strong> – <strong>Spirit of Pittsburgh Ballroom</strong></td>
</tr>
<tr>
<td>2:00 PM – 3:00 PM</td>
<td><strong>CEU B10</strong> Posters with Authors: Odd Numbered Presentations – Supported by Illumina – <strong>Hall A</strong></td>
</tr>
<tr>
<td>3:00 PM – 3:15 PM</td>
<td><strong>AEC Break</strong> – <strong>West Atrium</strong></td>
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<tr>
<td>3:15 PM – 4:45 PM</td>
<td><strong>CEU Educational Breakout Sessions</strong></td>
</tr>
<tr>
<td>4:45 PM – 5:00 PM</td>
<td><strong>CEU B11</strong> Blind Spots: Genetic Counselors and Conflicts of Interest <strong>Room 403/404/405</strong></td>
</tr>
<tr>
<td>5:00 PM – 6:15 PM</td>
<td><strong>CEU B12</strong> The Changing Face of Newborn Screening: Expanded Screening for Lysosomal Storage Disorders <strong>Room 301/302/303</strong></td>
</tr>
<tr>
<td>6:00 PM – 8:00 PM</td>
<td>**Exhibitor Suite Open – <strong>Hall A</strong></td>
</tr>
<tr>
<td>6:15 PM – 7:00 PM</td>
<td><strong>NSGC Leadership Awards</strong> – <strong>Spirit of Pittsburgh Ballroom</strong></td>
</tr>
<tr>
<td>7:00 PM – 9:00 PM</td>
<td><strong>Various SIG and Ancillary Meetings</strong></td>
</tr>
<tr>
<td>7:00 PM AND ON</td>
<td><strong>Various Program Reunions</strong> (See p. 8 for more information and locations)</td>
</tr>
<tr>
<td>7:15 PM – 8:45 PM</td>
<td><strong>CEU B17</strong> Termination of Pregnancy for Indications of Genetic Disorder in Advanced Gestations – Sponsored by Boulder Abortion Clinic Allegheny Grand Ballroom – Westin Hotel, Third Floor</td>
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**Friday, October 23**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:00 AM – 7:45 AM</td>
<td><strong>CEU C01</strong> Dissecting the Diagnostic Yield in Clinical Genomic Testing – Sponsored by Personalis, Inc. <strong>Allegheny Grand Ballroom – Westin Hotel, Third Floor</strong></td>
</tr>
<tr>
<td>7:00 AM – 7:45 AM</td>
<td><strong>Various SIG and Ancillary Meetings</strong></td>
</tr>
<tr>
<td>7:00 AM – 7:45 AM</td>
<td><strong>ACGC Site Visitor Training</strong> <strong>Room 329</strong></td>
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<tr>
<td>7:00 AM – 7:45 AM</td>
<td><strong>Cardiovascular Genetics SIG</strong> <strong>Room 327</strong></td>
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<tr>
<td>7:00 AM – 7:45 AM</td>
<td><strong>CF and CFTR Spectrum SIG</strong> <strong>Room 328</strong></td>
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<tr>
<td>7:00 AM – 7:45 AM</td>
<td><strong>Personalized Medicine SIG</strong> <strong>Room 326</strong></td>
</tr>
<tr>
<td>7:00 AM – 8:00 AM</td>
<td><strong>AEC Breakfast</strong> – <strong>Spirit of Pittsburgh Ballroom Gallery</strong></td>
</tr>
<tr>
<td>8:00 AM – 9:30 AM</td>
<td><strong>CEU Concurrent Papers</strong></td>
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<tr>
<td>8:00 AM – 9:30 AM</td>
<td><strong>C02</strong> Access and Service Delivery I <strong>Room 315/316</strong></td>
</tr>
<tr>
<td>8:00 AM – 9:30 AM</td>
<td><strong>C03</strong> Clinical Care: Cancer <strong>Room 319/320/321</strong></td>
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<tr>
<td>8:00 AM – 9:30 AM</td>
<td><strong>C04</strong> Genetic/Genomic Testing <strong>Room 301/302/303</strong></td>
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<tr>
<td>8:00 AM – 9:30 AM</td>
<td><strong>C05</strong> Professional Issues and Education <strong>Room 317/318</strong></td>
</tr>
<tr>
<td>9:30 AM – 9:45 AM</td>
<td><strong>AEC Break</strong> – <strong>West Atrium</strong></td>
</tr>
<tr>
<td>9:45 AM – 10:15 AM</td>
<td><strong>CEU C06</strong> Sharing Data as a Means to Improve Patient Care: The Emerging Role of Genetic Counselors in Variant Interpretation <strong>Spirit of Pittsburgh Ballroom</strong></td>
</tr>
<tr>
<td>10:15 AM – 10:45 AM</td>
<td><strong>CEU C07</strong> Behind the Scenes: Development and Scoring of the ABGC Certification Exam – <strong>Spirit of Pittsburgh Ballroom</strong></td>
</tr>
<tr>
<td>10:45 AM – 11:30 AM</td>
<td><strong>CEU C08</strong> Professional Issues Panel: The Genetic Counseling Workforce - Present and Future – <strong>Spirit of Pittsburgh Ballroom</strong></td>
</tr>
<tr>
<td>11:30 AM – 4:30 PM</td>
<td>**Exhibitor Suite Open and Food and Beverage Concessions Open – <strong>Hall A</strong></td>
</tr>
<tr>
<td>11:30 AM – 1:00 PM</td>
<td><strong>NSGC SIG Meetings</strong></td>
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<tr>
<td>11:30 AM – 1:00 PM</td>
<td><strong>ART/Infertility SIG</strong> <strong>Room 330</strong></td>
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<tr>
<td>11:30 AM – 1:00 PM</td>
<td><strong>Cancer SIG</strong> <strong>Room 326</strong></td>
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<tr>
<td>11:30 AM – 1:00 PM</td>
<td><strong>Metabolism/LSD SIG</strong> <strong>Room 328</strong></td>
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<tr>
<td>11:30 AM – 1:00 PM</td>
<td><strong>Psychiatric SIG</strong> <strong>Room 329</strong></td>
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<tr>
<td>11:30 AM – 1:00 PM</td>
<td><strong>Student/New Member SIG</strong> <strong>Room 327</strong></td>
</tr>
<tr>
<td>12:00PM – 1:00 PM</td>
<td><strong>AEC Subcommittee Meeting</strong> – <strong>Room 306</strong></td>
</tr>
</tbody>
</table>
### Schedule-At-A-Glance (continued)

#### Friday, October 23 (Continued)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>1:15 PM – 2:15 PM</td>
<td>C10 Posters with Authors: Even Numbered Presentations – Supported by Illumina – Hall A</td>
</tr>
<tr>
<td>2:15 PM – 3:00 PM</td>
<td>NSGC Business Meeting – Spirit of Pittsburgh Ballroom</td>
</tr>
<tr>
<td>3:00 PM – 3:30 PM</td>
<td>C11 Audrey Heimler Special Project Award – Spirit of Pittsburgh Ballroom</td>
</tr>
<tr>
<td>3:30 PM – 4:15 PM</td>
<td>C12 Jane Engelberg Memorial Fellowship – Spirit of Pittsburgh Ballroom</td>
</tr>
<tr>
<td>4:15 PM – 4:30 PM</td>
<td>Passport to Prizes Drawing – Hall A</td>
</tr>
<tr>
<td>4:30 PM – 4:45 PM</td>
<td>AEC Break – West Atrium</td>
</tr>
<tr>
<td>4:45 PM – 6:15 PM</td>
<td>Educational Breakout Sessions</td>
</tr>
<tr>
<td>6:15 PM – 6:30 PM</td>
<td>AEC Break – West Atrium</td>
</tr>
<tr>
<td>6:30 PM – 7:30 PM</td>
<td>C18 Shift Happens: Penetration, Pedigrees and New Perspectives on Developmental Brain Dysfunction – Spirit of Pittsburgh Ballroom</td>
</tr>
<tr>
<td>7:00 PM AND ON</td>
<td>Various Program Reunions (See p. 8 for more information and locations)</td>
</tr>
<tr>
<td>7:30 PM – 8:30 PM</td>
<td>Diversity SIG Interest Meeting – Room 328</td>
</tr>
<tr>
<td>7:30 PM – 9:00 PM</td>
<td>C19 Genetic Counseling Considerations Associated with Next-generation Sequencing across the Reproductive Health Continuum – Allegheny Grand Ballroom – Westin Hotel, Third Floor</td>
</tr>
</tbody>
</table>

#### Saturday, October 24

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:00 AM – 7:45 AM</td>
<td>D01 The Next Step in Noninvasive Prenatal Testing Innovation: Genome-wide NIPT with cfDNA – Sponsored by Sequenom Laboratories – Allegheny Grand Ballroom – Westin Hotel, Third Floor</td>
</tr>
<tr>
<td>7:00 AM – 8:00 AM</td>
<td>AEC Breakfast – Spirit of Pittsburgh Ballroom Gallery</td>
</tr>
<tr>
<td>8:00 AM – 9:30 AM</td>
<td>Educational Breakout Sessions</td>
</tr>
<tr>
<td>9:30 AM – 9:45 AM</td>
<td>AEC Break – West Atrium</td>
</tr>
<tr>
<td>9:45 AM – 10:45 AM</td>
<td>D07 Late-Breaking Plenary Session: Hope, Hype and Horror Movies: Contemplating Human Germline Modification – Spirit of Pittsburgh Ballroom</td>
</tr>
<tr>
<td>10:45 AM – 11:15 AM</td>
<td>Incoming Presidential Address – Spirit of Pittsburgh Ballroom</td>
</tr>
<tr>
<td>11:30 AM – 3:00 PM</td>
<td>Food and Beverage Concessions Open – West Atrium</td>
</tr>
<tr>
<td>11:30 AM – 12:45 PM</td>
<td>Various Ancillary Meetings</td>
</tr>
<tr>
<td>11:30 AM – 1:00 PM</td>
<td>D08 Finding Just Right: Balancing Provider and Payer Goals for Hereditary Genetic Testing – Sponsored by Invitae – Allegheny Grand Ballroom – Westin Hotel, Third Floor</td>
</tr>
<tr>
<td>1:00 PM – 1:45 PM</td>
<td>D09 The Match of the Decade: Gene Panels versus Whole Genomes/Exomes – Spirit of Pittsburgh Ballroom</td>
</tr>
<tr>
<td>2:00 PM – 3:30 PM</td>
<td>Concurrent Papers</td>
</tr>
<tr>
<td>3:30 PM – 4:30 PM</td>
<td>Educational Breakout Sessions</td>
</tr>
<tr>
<td>4:30 PM – 5:15 PM</td>
<td>Concurrent Papers</td>
</tr>
<tr>
<td>5:15 PM – 6:30 PM</td>
<td>Concurrent Papers</td>
</tr>
</tbody>
</table>
Embrace the new standard in chromosomal microarray analysis (CMA) testing

CytoScan® Dx Assay is the first and only FDA-cleared whole-genome blood test to aid in the diagnosis of developmental delay and intellectual disability. Through rigorous clinical trials, CytoScan Dx Assay demonstrated exceptional performance for the detection of chromosomal aberrations, providing clear and confident results.

Patients previously denied CMA testing may see improved access to testing and insurance coverage because CytoScan Dx Assay is FDA-cleared, not an investigational tool.

CytoScan® Dx Assay
Unrivaled performance. Results that matter.

Visit booth #402

What do you recommend for families struggling with the diagnostic odyssey?
## Reunion Information

### Wednesday, October 21

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:45 PM</td>
<td>University of Oklahoma Health Sciences Center</td>
<td>Olive or Twist 140 6th Street Pittsburgh 412-255-0525</td>
</tr>
<tr>
<td>7:30 PM</td>
<td>Canadian Programs</td>
<td>Sonoma Grille 947 Penn Avenue, Pittsburgh 412-697-1336</td>
</tr>
<tr>
<td>8:00 PM</td>
<td>Cincinnati Genetic Counseling Program</td>
<td>Olive or Twist 140 6th Street Pittsburgh 412-255-0525</td>
</tr>
<tr>
<td>8:30 PM</td>
<td>Wayne State University</td>
<td>Sharp Edge Bistro 922 Penn Avenue, Pittsburgh 412-338-2437</td>
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### Thursday, October 22 (continued)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>8:00 PM</td>
<td>University of Michigan</td>
<td>Olive or Twist 140 6th Street Pittsburgh 412-255-0525</td>
</tr>
<tr>
<td>8:00 PM</td>
<td>Stanford University Genetic Counseling Program</td>
<td>Bill's Bar &amp; Burger 1000 Penn Avenue, Pittsburgh 412-567-2300</td>
</tr>
<tr>
<td>8:00 PM</td>
<td>California State University Stanislaus</td>
<td>To Be Determined</td>
</tr>
<tr>
<td>8:00 PM</td>
<td>University of California Berkeley</td>
<td>To Be Determined</td>
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### Thursday, October 22

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<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>7:00 PM</td>
<td>University of Wisconsin–Madison</td>
<td>To Be Determined</td>
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<tr>
<td>7:00 PM</td>
<td>Arcadia University</td>
<td>To Be Determined</td>
</tr>
<tr>
<td>7:00 PM</td>
<td>Icahn School of Medicine at Mount Sinai</td>
<td>Six Penn Kitchen 146 6th Street, Pittsburgh 412-566-7366</td>
</tr>
<tr>
<td>07:00 PM</td>
<td>University of Minnesota</td>
<td>David L. Lawrence Convention Center Room 326 1000 Ft. Duquesne Blvd 412-565-6000</td>
</tr>
<tr>
<td>07:00 PM</td>
<td>University of Pittsburgh</td>
<td>Eddie Merlot’s 444 Liberty Avenue Suite 100, Pittsburgh 412-235-7676</td>
</tr>
<tr>
<td>7:30 PM</td>
<td>Case Western Reserve University</td>
<td>Tonic Bar and Grill 971 Liberty Avenue, Pittsburgh 412-456-0460</td>
</tr>
<tr>
<td>7:30 PM</td>
<td>Long Island University</td>
<td>Tonic Bar and Grill 971 Liberty Avenue, Pittsburgh 412-456-0460</td>
</tr>
<tr>
<td>7:30 PM</td>
<td>Johns Hopkins University/National Human Genome Research Institute</td>
<td>To Be Determined</td>
</tr>
<tr>
<td>8:00 PM</td>
<td>University of Maryland</td>
<td>Alihan’s Mediterranean Cuisine 124 6th Street, Pittsburgh 412-888-0629</td>
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### Friday, October 23

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>7:00 PM</td>
<td>Sarah Lawrence College</td>
<td>Church Brew Works 3525 Liberty Avenue, Pittsburgh 412-688-8200</td>
</tr>
<tr>
<td>7:30 PM</td>
<td>University of Alabama at Birmingham</td>
<td>Sonoma Grille 947 Penn Avenue, Pittsburgh 412-697-1336</td>
</tr>
<tr>
<td>8:00 PM</td>
<td>Northwestern University</td>
<td>The Livermore 5972 Baum Boulevard, Pittsburgh 412-471-1900</td>
</tr>
<tr>
<td>9:00 PM</td>
<td>Brandeis University</td>
<td>Tonic Bar &amp; Grill 971 Liberty Avenue, Pittsburgh 412-456-0460</td>
</tr>
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Please visit the AEC Message Center board or view the NSGC AEC mobile app for updated reunion information.
David L. Lawrence Convention Center Floor Plan

Second Floor

Third Floor

Fourth Floor
Session Speakers and Objectives

Pre-conference Symposia
8:00 am – 2:00 pm

**A01 Beyond the Usual Suspects: Updates on Counseling and Management Strategies for Rare Inherited Cancer Predisposition Syndromes**
5.00 Contact Hours
1: Gayun Chan-Smutko, MS, CGC, Massachusetts General Hospital; 2: Laura S. Schmidt, PhD, Leidos Biomedical Research, Inc.; 3: Frederick National Laboratories; 4: Michael Hall, MD, Fox Chase Cancer Center; 5: Kory Jasperson, MS, CGC, Huntsman Cancer Institute; 6: Brandie Headl Heath, MS, LCG, Cleveland Clinic; 7: Victoria Raymond, MS, CGC, Illumina, Inc.; 7: Tobias Else, MD, University of Michigan

- Identify testing and management strategies for BAP1, MTF1, Pten and other inherited renal cell carcinoma conditions.
- Describe the potential and phenotype management strategies for carriers of mutations in POLE, POLD1, SCG5/4REM1 and monoallelic MUTYH.
- Outline risk assessment and management strategies for endocrine tumor predisposition syndromes.

Submitted and Sponsored by: NSGC Cancer SIG

**A02 Diagnostic Exome Sequencing as the Standard of Care**
5.00 Contact Hours
1: David Goldstein, PhD, Columbia University; 2: Kelly Farwell Hagman, MS, CGC, Ambyr Genetics; 3: Holly LaDuca, MS, CGC, Ambry Genetics; 4: Elizabeth Chao, MD, University of California, Irvine; 5: Christie Eng, MD, Baylor College of Medicine; 6: Joshua Deignan, PhD, FACMG, University of California, Los Angeles; 7: Cheryl Scarchelli, MS, CGC, GenNetx; 8: Shu Tang, PhD, FACMG, Ambry Genetics; 9: Emily Farrow, PhD, CGC, Children’s Mercy Hospital, Center for Pediatric Genomic Medicine; 10: Julia Wynn, MS, New York Presbyterian Columbia; 11: Julie Cohen, ScM, CGC, Kennedy Krieger Institute; 12: Layla Shahrizaid, MS, CGC, LGC, Ambry Genetics; 13: Kelly E. Ormond, MS, CGC, LGC, Stanford University; 14: Leslie Bieseker, MD, FAAP, FACMG, National Human Genome Research Institute

- Outline the current state of diagnostic exome sequencing (DES) from technological, research, clinical and genetic counseling perspectives.
- Recall data regarding the clinical use of DES, such as detection rates, and how these data contribute to clinical genetics diagnosis and management of patients.
- Recognize that the high diagnostic rate of DES, the implications for patient care after a diagnosis and the clear cost savings are making DES well suited to become the standard of care in diagnostic medicine.
- Identify current perspectives, policies and recommendations surrounding secondary findings.

**A03 Feeling Overwhelmed? Advocating for Resources in the Current Healthcare Environment**
5.00 Contact Hours
1: Dawn Allain, MS, LGC, The Ohio State University Wexner Medical Center; 2: Kimberly Banks, MS, CGC, MBA, Guardant Health; 3: Michelle Jackson, MS, CGC, Ambyr Genetics; 4: Jodie Vents, MGC, LGGC, Children’s Hospital of Pittsburgh of UPMC; 5: Linda Robinson, MS, CGC, University of Texas Southwesten; 6: Kathy Noorduyn, BSNL, CGC, CFC, UPMC Mercy and Magee Women’s Hospital; 7: Nicholas J. Barcellona, MBA, Children’s Hospital of Pittsburgh

- Define best practices for negotiating for institutional resources with both clinicians and administrators.
- Compare and contrast metrics used to evaluate genetic counselor services in the current healthcare environment.
- Recognize the impact that billing models, revenue, credentialing and licensure have on institutional resources for genetic counseling services.
- Summarize available resources that can support your efforts to garner more institutional support, including lessons learned from other genetic counselors.

Submitted by: NSGC Access and Service Delivery Committee

**A04 Qualitative Research 101: A Crash-course for Genetic Counselors**
5.00 Contact Hours
1: Robin Grube, MS, PhD, LGCC, University of Pittsburgh; 2: Melanie Myers, PhD, MS, LGCC, Cincinnati Children’s Hospital Medical Center and University; 3: Pat McCarthy Veach, PhD, LP, University of Minnesota; 4: Bonnie LeRoy, MS, CGC, University of Minnesota; 5: Katie L. Lem, MS, CGC, Duke University Medical Center; 6: Cahira Hipman, MSc, CGC, BC Mental Health and Addictions Research Institute; 7: Carrie Gay, MS, LGCC, Guest Diagnostics; 8: Martha Terry, PhD, University of Pittsburgh; 9: Amy Reed, PhD, Rowan University

- Describe the value and principles of qualitative research.
- Recognize different types of qualitative methodologies, ethical considerations and methods to support rigor.
- Develop analytical and publication skills through hands-on experience.
- Review introductory knowledge and skills to support the inclusion of qualitative methodologies in research endeavors.

Submitted by: NSGC Research SIG

**A05 Sequence Variant Interpretation for the Clinical Genetic Counselor**
5.00 Contact Hours
1: Colean Calcetu, ScM, LGCC, Stanford Center for Inherited Cardiovascular Disease; 2: Heidi Rehm, PhD, FACMG, Laboratory for Molecular Medicine, PCGM; 3: Megan Grove, MS, LGCC, Stanford University; 4: Sarah Garcia, PhD, MS, LGCC, PersonalOne, Inc.; 5: Julie Culver, MS, LGCC, LGC Norris Comprehensive Cancer Center; 6: Julie Cohen, ScM, CGC, Kennedy Krieger Institute

- Illustrate why genetic counselors should be aware of variant interpretation principles and how these principles can inform their clinical practice.
- Describe general strategies for interpretation of evidence underlying gene-disease associations and variant-disease associations.
- Name specific variant interpretation considerations for cancer, cardiology and neurology.

Submitted by: NSGC Cardiovascular SIG and NSGC Personalized Medicine SIG

**A06 A Womb with a View: A Fetal Surgery Primer for Genetic Counselors**
5.00 Contact Hours
1: Sara Reichert, MS, MPH, LGCC, Children’s Hospitals and Clinics of Minnesota; 2: Stefanie Kasperski, MS, LGCC, The Center for Fetal Diagnosis and Treatment at The Children’s Hospital of Philadelphia; 3: Martha Dudek, MS, LGCC, Vanderbilt University; 4: Louise Wilkens-Haug, MD, PhD, Brigham and Women’s Hospital, Harvard University; 5: Anthony Johnson, DO, UT Health-University of Texas Medical School at Houston; 6: Julie Minklebacher, MD, FACOG, FACMG, Children’s Hospital of Philadelphia; 7: Emily Putnick, MS, LGCC, Cincinnati Children’s Hospital; 8: Rachael Bradshaw, MS, CGC, St. Louis University School of Medicine; 9: Bethany Tackett, MS, CGC, MBA, Colorado Institute for Maternal & Fetal Health; 10: Holly Hedrick, MD, Children’s Hospital of Philadelphia; 11: Jill Stamos, MAT, MS, LGCC, Vanderbilt University; 12: Blair Stevens, MS, CGC, UT Health-University of Texas Medical School at Houston; 13: Rachel Nusbaum, MS, CGC, Genetic; 14: Stephanie Rodriguez; 15: Billie Lianoglou, ScM, LGCC, University of California, San Francisco Fetal Treatment Center

- Outline the history of fetal intervention and surgery.
- Describe available resources for genetic counselors seeking services of fetal therapy centers.
- Outline congenital anomalies amenable to open fetal surgery.
- Discuss ethical scenarios regarding genetic and psychosocial issues that may arise when screening women as fetal surgery candidates.

Submitted by: NSGC Prenatal SIG

Janus Series
3:45 pm – 5:15 pm

**A07 Advances in the Understanding of Paragangliomas and Pheochromocytomas: Underappreciated and Highly Genetic**
0.50 Contact Hour
1: Shana L Merritt, MS, LGCC, Hospital of The University of Pennsylvania

- Describe the pathophysiology of paragangliomas and pheochromocytomas (PGL/PHEOs) as it applies directly to various known tumor predisposition genes and syndromes.
- Understand recent advances in clinical testing options and management recommendations for patients with PGL/PHEO.
- Illustrate the evolution of our knowledge of PGL/PHED genetics as it applies more broadly to our understanding of rare tumor genetics.
- Discuss how thorough interpretation and application of genetic testing results can positively impact patient care.
Thursday October 22

Sponsored Breakfast Session
7:00 am – 7:45 am

B01 Hereditary Cancer Testing and the Genetic Counselor
0.50 Contact Hour
1: Alexia Willis, PhD, FACMG, Laboratory Corporation of America; 2: Kara Bus, MS, CGC, Greenville Hospital System Cancer Center
- Discover the science behind hereditary cancer testing, gene selection and the impact of a variant of uncertain significance (VUS) on test results.
- Explain the purpose of hereditary cancer testing, the importance of testing based on personal and family medical history, and the distinctions between the possible results.
Sponsored by: Integrated Genetics

Plenary Session
8:00 am – 9:00 am

B02 Next Generation Thinking: Paths to Evidence-based Practice in Genetic Counseling
1.00 Contact Hour
1: Barbara R. Biesecker, PhD, MS, National Human Genome Research Institute; 2: Heather Zierhut, PhD, MS, CGC, University of Pennsylvania; 3: Craig A. Umscheid, MD, MS, University of North Carolina; 4: Gillian W. Hooker, PhD, LCGC, NextGx
- Evaluate genetic counseling research studies conducted to investigate the effectiveness and clinical utility of genetic counseling and genetic counseling interventions.
- Describe stakeholder opinions regarding priorities for research in genetic counseling.
- Define important attributes of research questions designed to inform clinical practice.
Submitted by: NSGC Practice Guidelines Committee, NSGC Access and Service Delivery Committee and NSGC Research SIG

B03 NSGC State of the Society Address
0.75 Contact Hour
1: Joy Larsen Haidle, MS, CGC, NSGC President
- Describe the activities of NSGC over the past year as related to the advancement of the profession of genetic counseling.
- Assess NSGC’s advocacy efforts over the course of 2015.
- Identify opportunities for professional development through participation in NSGC volunteer opportunities.

Educational Breakout Sessions
10:00 am – 11:30 am

B04 Media Training Workshop: Master the Art of Telling the Genetic Counseling Story
1.50 Contact Hours
1: Wendi Kozol, Public Communications, Inc.; 2: Veronica Jackson, Public Communications, Inc.
- Review media interview best practices and practical tips.
- Home media interview skills.
- Practice advocating on behalf of the profession.

B05 Newborn and Fetal Sequencing: Exploring the Landscape before We Leap
1.50 Contact Hours
1: Julianne M. O’Daniel, MS, CGC, University of North Carolina at Chapel Hill; 2: Flavia Facio, MS, CGC, Johns Hopkins Bloomberg School of Public Health; 3: Megan A. Lewis, PhD, RTI International, Center for Communication Science; 4: Emily Hartley, MS, CGC, University of North Carolina
- Appreciate the technical strengths and limitations of applying genome sequencing as a diagnostic or screening test in newborn and fetal populations.
- Recognize clinical and ethical challenges that arise with genome/exome sequencing, including the selection of genetic information that should be returned and the role of parental choice to learn expanded categories of information.
- Gain insight regarding the motivations and expectations of parents faced with the decision to enroll their anomalous fetus or presumed healthy newborn in a genome sequencing study.
- Explore attributes that parents consider when making a decision about genome sequencing for their infants.

B06 Practice Guidelines 2.0: Developing High-Quality, Clinically Relevant Practice Guidelines
1.50 Contact Hours
1: Deepthi Babu, MS, CGC, Ambry Genetics; 2: Christina Palmer, PhD, CGC, University of California, Los Angeles; 3: Craig A. Umscheid, MD, MS, University of Pennsylvania; 4: Ravi Sharan, MD, MS, North Shore-LIJ Health System, Hofstra University School of Medicine; 5: Gillian W. Hooker, PhD, LCGC, NextGx
- Describe the process of creating a practice guideline.
- Discuss the types of evidence that can support practice guidelines.
- Identify the components of a high-quality clinical practice guideline.
Submitted by: NSGC Practice Guideline Committee
### Session Speakers and Objectives (continued)

**Thursday (continued)**

<table>
<thead>
<tr>
<th>Session ID</th>
<th>Title</th>
<th>Time</th>
<th>Contact Hours</th>
<th>Description</th>
</tr>
</thead>
</table>
| B07        | The Role of Genetic Counselors in Cancer Prevention: A Focus on Modifiable Risk Factors | 1:30 pm – 2:45 pm | 1.50 Contact Hours | 1: Deborah Lindner, MD, FACMG, FACPh, Bright Pink; 2: Martha Slattery, PhD, MPH, University of Utah; 3: Scott Walters, PhD, University of North Texas Health Science Center  
- Identify functional pathway studies that help patients make decisions with regard to modifiable risk factors  
- Review relevant literature related to modifiable risk factors for breast, colorectal and gynecologic cancers  
- Review the current state of breast, colorectal and gynecologic cancer detection and prevention  
- Describe how motivational interviewing can be incorporated into genetic counseling sessions to help patients make decisions with regard to modifiable risk factors  
- Submitted and Sponsors: NSGC Cancer SIG  
Supported by: Unrestricted Educational Grant from Quest Diagnostics |
| B08        | Working with Payers to Develop and Apply Genetic Testing Policies     | 11:15 am – 12:30 pm | 1.50 Contact Hours | 1: Shannon Drell, MS, CGC, JD, CareCure National/MedSolutions; 2: Tracy Benson, MS, CGC, Humana, Inc.; 3: Bill Campbell, MS, CGC, Kaiser Permanente  
- Identify the benefits, limitations and struggles associated with expanded newborn screening for lysosomal storage disorders  
- Discuss how genetic counselors benefit healthcare system by being involved in development and implementation of genetic testing policies  
- Review own genetic testing ordering habits and consider how they are contributing to saving healthcare dollars for patients and the healthcare system as a whole  
- Submitted by: NSGC Industry SIG  
Supported by: Unrestricted Educational Grant from Affymetrix, Inc. |
| B09        | New Technologies: New Paradigms                                       | 11:45 am – 11:55 am | 1.00 Contact Hour | 1: Sarah Elinea, PhD, Baylor College of Medicine; 2: Yunru (Kathy) Shao, MMSc, CGC, Baylor College of Medicine; 3: Timika Vaughn, MS, CGC, Baylor Miraca Genetics Laboratories  
- Describe how functional pathway studies assist in determination of pathogenicity of variants of uncertain significance  
- Identify when functional pathway studies are appropriate for a specific clinical patient  
- Assess when analysis outside the American College of Medical Genetics (ACMG) guidelines for expanded carrier screening is appropriate for a specific clinical patient  
- Submitted by: Baylor Miraca Genetics Laboratories  
Sponsored by: NSGC Industry SIG |
| B10        | Educational Breakout Sessions                                          | 3:15 pm – 4:45 pm | 1.50 Contact Hours | 1: Michelle Stiecker, MS, LGCC, Combimatrix; 2: Robert Resta, MS, CGC, Hereditary Cancer Clinic/Swedish Cancer Institute; 3: Kate Schaub, AdViseGen; 4: Kate Stall, MS, LGCC, Providence Health & Services/The Genetic Support Foundation; 5: Catriona Hippman, MS, CGC, BC Mental Health Addictions Research Institute  
- Review your own genetic test ordering habits and consider how they are contributing to saving healthcare dollars for patients and the healthcare system as a whole  
- Review relevant literature related to modifiable risk factors for breast, colorectal and gynecologic cancers  
- Review the current state of breast, colorectal and gynecologic cancer detection and prevention  
- Describe how motivational interviewing can be incorporated into genetic counseling sessions to help patients make decisions with regard to modifiable risk factors  
- Submitted and Sponsors: NSGC Cancer SIG  
Supported by: Unrestricted Educational Grant from Quest Diagnostics |
| B11        | Blind Spots: Genetic Counselors and Conflicts of Interest              | 1:30 pm – 2:45 pm | 1.50 Contact Hours | 1: Linda Manwaring, MS, CGC, Washington University School of Medicine; 2: Andrea Ahlton, MS, CGC, Children’s Mercy Hospitals and Clinics; 3: Dawn Peck, MS, CGC, University of Missouri, Columbia; 4: Joshua Petrink, MD, University of Missouri, Kansas City School of Medicine; 5: Karla Jacobson, MA, ES; 6: Catherine Johnson; 7: Lindsay Gibbs  
- Identify the benefits, limitations and struggles associated with expanded newborn screening for lysosomal storage disorders based on the experiences in Missouri over two years  
- Evaluate the merits of genomic sequencing as part of care for the neonatal intensive care population and its future role in newborn screening  
- Compare the different experiences of families who had a child diagnosed with a lysosomal storage disease through Missouri’s newborn screening program  
- Submit by: NSGC Metabolism/Lysosomal Storage Diseases SIG and NSGC Public Health SIG  
Sponsored by: NSGC Metabolism/Lysosomal Storage Diseases SIG |
| B12        | The Changing Face of Newborn Screening: Expanded Screening for Lysosomal Storage Disorders | 1:00 pm – 2:15 pm | 1.50 Contact Hours | 1: Kara Maxwell, MD, PhD, University of Pennsylvania; 2: Holly Dubbs, MS, LGCC, Children’s Hospital of Philadelphia; 3: Kaylene Ready, MS, CGC, Counsyl  
- Describe current knowledge regarding genes with increased cancer risk in the carrier state and their associated pediatric syndromes in the homozygous state  
- Contrast possible clinical management for those with mono or biallelic mutations for these conditions when identified in the pediatric, adult cancer or prenatal clinic  
- Present challenging clinical scenarios including virtual audience input about possible courses of action, then discussion by the multidisciplinary panel representing prenatal, pediatric and adult cancer disciplines |
| B13        | Theoretical Tools for Psychotherapeutic Genetic Counseling             | 5:00 pm – 6:15 pm | 1.50 Contact Hours | 1: Jeannine Austin, PhD, CGC, University of British Columbia; 2: Barbara Bowles Berecek, MS, CGC, PhD, National Human Genome Research Institute; 3: Colleen Caleshu, SCM, LGCC, Stanford Center for Inherited Cardiovascular Disease  
- Identify positive outcomes associated with psychotherapeutic genetic counseling  
- Describe cognitive behavioral theories and employ specific interventions that are appropriate for genetic counseling client needs  
- Apply the findings of decision-making science to genetic counseling regarding genetic testing decisions  
- Submitted by: NSGC Metabolism/Lysosomal Storage Diseases SIG and NSGC Public Health SIG  
Sponsored by: NSGC Metabolism/Lysosomal Storage Diseases SIG |
| B14        | Thriving vs. Surviving: Strategies for Excelling as a Novice Genetic Counselor | 1:00 pm – 2:15 pm | 1.50 Contact Hours | 1: Rebecca K. Tryon, MS, CGC, University of Minnesota, Health; 2: Pat McCarthy Veatch, PhD, LP, University of Minnesota; 3: Bonnie S. LeRoy, MS, CGC, University of Minnesota; 4: Craig R. Adamak, MS, CGC, Children’s Hospital of Wisconsin; 5: Sara Velden, MS, LGCC, ARUP Laboratories; 6: Kate Foreman, MS, CGC, University of North Carolina at Chapel Hill  
- Summarize relevant literature on professional development for novice genetic counselors  
- Recognize common challenges novice genetic counselors face in daily practice  
- Formulate strategies for addressing practice challenges  
- Submitted by: NSGC Industry SIG  
Sponsored by: Dr. Beverly Rollnick Memorial Fund |
| B15        | When Worlds Collide: Genetic Counseling and Testing Conundrums in Identifying Cancer Risk for the Prenatal, Pediatric and Cancer Genetic Counselor | 3:00 pm – 4:15 pm | 1.50 Contact Hours | 1: Jodi Samuels, MD, PhD, University of Pennsylvania; 2: Holly Dubbs, MS, LGCC, Children’s Hospital of Philadelphia; 3: Kaylene Ready, MS, CGC, Counsyl  
- Present challenging clinical scenarios including virtual audience input about possible courses of action, then discussion by the multidisciplinary panel representing prenatal, pediatric and adult cancer disciplines |
| B16        | Twitch Documentary Screening and Discussion with Kristen Powers       | 5:00 pm – 6:15 pm | 1.25 Contact Hours | 1: Kristen Powers, Filmmaker, Twitch  
- Describe the experience of patients undergoing genetic testing or the decision making process to test  
- Examine Huntington’s disease (HD) and the stigma associated with it  
- Recognize the role of children in HD families not only as individuals at risk, but as under-recognized caregivers in need of stronger age-appropriate support structures  
- Submitted by: Dr. Beverly Rollnick Memorial Fund |
| B17        | Dr. Beverly Rollnick Memorial Lecture                                 | 5:00 pm – 6:15 pm | 1.25 Contact Hours | 1: Kristen Powers, Filmmaker, Twitch  
- Describe the experience of patients undergoing genetic testing or the decision making process to test  
- Examine Huntington’s disease (HD) and the stigma associated with it  
- Recognize the role of children in HD families not only as individuals at risk, but as under-recognized caregivers in need of stronger age-appropriate support structures  
- Submitted by: Dr. Beverly Rollnick Memorial Fund |
Sunday
October 22

Sponsored Evening Session
7:15 pm – 8:45 pm
B17 Termination of Pregnancy for Indications of Genetic Disorder in Advanced Gestations

1:00 Contact Hour
1. Warren M. Herr, MD, MPH, PhD, Boulter Abortion Clinic
• Describe the relevance of these services to genetic counseling.
• Identify the purpose, basic principles and components of clinical practice including grief support.
• Outline the basic operative procedures and clinical results of this care.
Sponsored by: Boulter Abortion Clinic

10:15 am – 10:45 am
C07 Behind the Scenes: Development and Scoring of the ABGC Certification Exam

0.50 Contact Hour
1. Daniel Breidtenbach, PhD, Applied Measurement Professionals, Inc.
• Outline the industry standards for professional certification examination development.
• Describe the steps in the development of the ABGC examination.
• Discuss how the passing score is determined and why we are now able to offer instant scoring.
• Cite the factors that impact differences in passing scores from exam to exam and between professions.

10:45 am – 11:30 am
C08 Professional Issues Panel: The Genetic Counseling Workforce - Present and Future

0.75 Contact Hour
1. Robin L. Bennett, MS, CGC, Disc Hon, University of Washington Medical Center; 2. Susan Hahn, MS, CGC, Quest Diagnostics; 3. Jennifer Hoekewa, MS, CGC, University of Texas Medical School at Houston; 4. John Richardson, National Society of Genetic Counselors; 5. Cathy Wicklund, MS, CGC, Northwestern University Feinberg School of Medicine
• Review current initiatives within the American Board of Genetic Counseling (ABGC), the Accreditation Council for Genetic Counseling (ACGC), the Association of Genetic Counseling Program Directors (AGCPD) and NSGC that are focused on expanding and increasing access to the genetic counselor workforce.
• Outline strategies the workforce working group is pursuing to support expansion of the genetic counselor workforce to meet the future demand for genetic services.
• Describe the relationship of workforce issues to other professional issues facing the genetic counseling profession.
Sponsored by: Personalis, Inc.

Monday
October 23

Sponsored Breakfast Session
7:00 am – 7:45 am
C04 Dissecting the Diagnostic Yield in Clinical Genomic Testing

0.50 Contact Hour
1. Sarah Garcia, PhD, MS, CGC, Personalis, Inc.; 2. Gemma Chandrakalu, MPH, PhD, MS, LCGC, Personalis, Inc.
• Describe how an exome sequencing test can be augmented to improve accuracy and diagnostic yield.
• Describe challenges in the analysis and interpretation of next-generation sequencing (NGS) data.
• Outline the decision-making process for using panels vs. standard exome vs. augmented exome vs. whole genome for testing of suspected genetic conditions.
Sponsored by: Personalis, Inc.

Plenary Sessions
9:45 am – 10:15 am
C06 Sharing Data as a Means to Improve Patient Care: The Emerging Role of Genetic Counselors in Variant Interpretation

0.50 Contact Hour
1. Brianne Kirkpatrick, MS, LGC, Geisinger Health System; 2. Meredith Weaver, PhD, ScM, CGC, American College of Medical Genetics and Genomics; 3. Martha Thomas, MS, CGC, University of Virginia Health System
• Review the NSGC position statement on data sharing and highlight and clarify the common areas for misunderstanding.
• Discuss the relationship between genotypic and phenotypic data sharing and variant interpretation, using case studies to relate these to actual clinical practice.
• Describe various national and international efforts focused on addressing the need to safely share, standardize, store, update and integrate genomic information into clinical care.
• Describe the importance of genetic counselors participating in data sharing efforts.

10:15 am – 10:45 am
C07 Diagnostic Testing, Evolving Phenotypes and Impact on Patient Care: A GeneDx Update on XomeDxXpress and Inherited Cancer Testing

1.00 Contact Hour
1. Sara Knapke, MS, CGC, GeneDx; 2. Audra Bittinelli, MS, CGC, GeneDx; 3. Stephanie DelHart, MS, CGC, GeneDx
• Describe the inherited cancer (IC) and rapid turn-around whole exome sequencing (XomeDxXpress) testing offerings provided by GeneDx and discuss testing strategies.
• Examine the clinical utility, genetic counseling and experiences of families considering IC gene panels and XomeDxXpress.
• Review case examples in which IC panel testing and XomeDxXpress aided in defining a patient’s diagnosis and clinical management.
Sponsored by: GeneDx

Plenary Sessions
3:00 pm – 3:30 pm
C11 Audrey Heimler Special Project Award Presentation

0.50 Contact Hour
• Review the history of the Audrey Heimler Special Project Award (AHSPA).
• Discuss the progress of the 2014 AHSPA Awardee project Development of a Website to Facilitate the Recruitment of African Americans and Latinos into the field of Genetic Counseling.
• Discuss the progress of the 2014 AHSPA Awardee project Genetic Counseling Assistants: An Integral Piece of the Evolving Genetic Counseling Service Delivery Model.

3:30 pm – 4:15 pm
C12 Jane Engelberg Memorial Fellowship Presentation

0.75 Contact Hour
1. Leslie Evans, MS, CGC, Thermo Fischer Scientific, JEMF Advisory Group Chair; 2. Flavia Malheiro Facio, MS, CGC, Inova Translational Medicine Institute, 2014 JEMF Full Member Award winner
• Introduce the Jane Engelberg Memorial Fellowship (JEMF) Student Award winners for 2015 and the JEMF Full Member Award winner for 2016.
• Review the history of the JEMF award and provide an update on current initiatives.
• Discuss the current data pertaining to the 2014 JEMF Full Member Award: Genomic Sequencing in a Population of Healthy Infants: Exploring Parental Motivations, Expectations and Utilization of Sequencing Results.

Sponsored Lunch Session
11:45 am – 1:15 pm
C09 Diagnostic Testing, Evolving Phenotypes and Impact on Patient Care: A GeneDx Update on XomeDxXpress and Inherited Cancer Testing

0.50 Contact Hour
1. Sarah Knapke, MS, CGC, GeneDx; 2. Audra Bittinelli, MS, CGC, GeneDx; 3. Stephanie DelHart, MS, CGC, GeneDx
• Describe the inherited cancer (IC) and rapid turn-around whole exome sequencing (XomeDxXpress) testing offerings provided by GeneDx and discuss testing strategies.
• Examine the clinical utility, genetic counseling and experiences of families considering IC gene panels and XomeDxXpress.
• Review case examples in which IC panel testing and XomeDxXpress aided in defining a patient’s diagnosis and clinical management.
Sponsored by: GeneDx
### Session Speakers and Objectives

#### Educational Breakout Sessions

**4:45 pm – 6:15 pm**

**C13 DTC Ancestry Testing: Gateway to Genetics Education of the Public and an Emerging Professional Role for Genetic Counselors**

1.50 Contact Hours

1: Briaune Kirkpatrick, MS, LGC, Geisinger Health System; 2: Elizabeth Bakker, MS, CGC, Genetic Genealogy Consultant; 3: Elisa Scalise Powell, Certified GenealogistSM, Certified Genealogical LecturerSM, Genealogical Research Institute of Pittsburgh

- Present case studies to demonstrate areas in which skills and knowledge of genetic counselors could be utilized to benefit consumers’ understanding of and adaptation to ancestry test results.
- Discuss how outcomes of ancestry testing can influence a test taker’s perception of health, risk-assessment, genetic and social relationship and identity-formation.
- Identify website tools and resources for expanding familiarity with admixture and genetic genealogy testing.
- Discuss the emerging role for genetic counselors as genetic genealogists.

**C14 Mosaicism Revealed: How Technological Advances are Increasing Our Understanding of Mosaicism in Genetic Disorders**

1.50 Contact Hours

1: Leslie G. Biesecker, MD, FAAP, FACMG, National Human Genome Research Institute; 2: Nancy B. Spinnier, PhD, University of Pennsylvania, Children’s Hospital of Philadelphia; 3: Colleen Calesku, ScM, LGCG, Stanford Center for Inherited Cardiovascular Disease; 4: Janet L. Williams, MS, LGC, Geisinger Health System

- Summarize current understanding of the role of mosaicism in genetic disorders.
- Recognize the impact of advanced genomic technologies’ increased sensitivity to detect mosaicism on clinical genetic testing.
- Identify key counseling issues related to mosaicism.

**C15 Next Generation Sequencing: Challenges and Strategies in Testing Patients with Circulating Hematopoietic Malignancies**

1.50 Contact Hours

1: Heather Zerhut, PhD, MS, University of Minnesota; 2: Anne Deucher, MD, PhD, University of California, San Francisco; 3: Federico A. Monzon, MD, Invitae Corporation

- Identify genetic syndromes that give rise to hematopoietic malignancies.
- Recognize the complications that may arise when performing genuine genetic testing in the background of hematologic malignancies.
- Describe the technical issues and clinical utility of mosaic results with next generation sequencing testing.

**C17 Will the Real Testing Cost Please Stand Up?**

1.50 Contact Hours

1: Brandy Freschi, MS, CGC, Perinatal Associates of Northern Nevada; 2: Rachel Draz, Cigna Healthcare; 3: Laura Martin, MS, Counsyl

- Review the advantages and disadvantages of maximum out-of-pocket programs for clinics and patients.
- Describe how maximum out-of-pocket programs are viewed from a payer perspective.
- Discuss efforts and obstacles in providing patients with accurate estimates of insurance coverage and out-of-pocket responsibility.

**C18 Roe v. Wade, Kennedy-Brownback and Beyond: The Legal Landscape of Reproductive Rights and Prenatal Testing**

1.50 Contact Hours

1: Laura Hercher, MA, MS, CGC, Sarah Lawrence College; 2: Stephanie Meredith, MD, National Center for Prenatal and Postnatal Resources; 3: Nancy Iannone, Esq, Rutgers University School of Law; 4: Ginny Engham, PhD, Our Lady of the Lake College

- Recognize the historical importance and regional variation in laws related to abortion on reproductive autonomy and disability rights.
- Discuss the Down Syndrome Information Acts and recognize the effect that these new laws have on the genetic counseling profession.
- Discuss the role that genetic counselors may take in shaping future legislation that is consistent with our professional code of ethics.

Submitted by: NSGC Prenatal SIG

### Plenary Session

**6:30 pm – 7:30 pm**

**C18 Shift Happens: Penetrance, Pedigrees and New Perspectives on Developmental Brain Dysfunction**

1.00 Contact Hour

1: Brenda Finucane, MS, LGC, Geisinger Autism & Developmental Medicine Institute; 2: Christa Lese Martin, PhD, FACMG, Geisinger Health System

- Describe developmental brain dysfunction as an emerging conceptual framework that has important implications for genetic counseling.
- Reexamine existing notions of clinical penetrance in disorders involving quantitative, cognitive and behavioral traits that represent a continuum of human functioning.
- Recognize the important role of parental background in determining patterns of phenotypic expression in neurodevelopmental and psychiatric disorders.

**Sponsored Evening Session**

**7:30 pm– 9:00 pm**

**C19 Genetic Counseling Considerations Associated with Next-Generation Sequencing across the Reproductive Health Continuum**

1.50 Contact Hours

1: Laurie Black, MS, LGCG, Pacific Reproductive Genetic Counseling; 2: Jennifer Hoskovec, MS, CGC, University of Texas-Houston Medical School; 3: Julianne O’Daniel, MS, CGC, University of North Carolina at Chapel Hill

- Describe common next-generation sequencing (NGS) options that are available throughout the reproductive and genetic health continuum of care.
- List key considerations a genetic counselor should think of when counseling patients about NGS testing options.
- Summarize recommendations for managing clinical considerations and become aware of available patient resources.

Sponsored by: Illumina
Saturday
October 24

Sponsored Breakfast Session
7:00 am – 7:45 am

D01 The Next Step in Noninvasive Prenatal Testing Innovation: Genome-wide NIPT with cfDNA
0.50 Contact Hour
1: Ron McCullough, PhD, Sequenom Center for Molecular Medicine
• Examine the application of NIPT for whole genome analysis in the clinical prenatal setting.
Sponsored by: Sequenom Laboratories

Educational Breakout Sessions
8:00 am – 9:30 am

D02 At the Heart of the Pregnancy: What Prenatal and Cardiovascular Genetic Counselors Need to Know about Maternal Heart Disease
1.50 Contact Hours
1: Ana Morales, MS, LGC, The Ohio State University; 2: Marissa Smith, MS, LGC, Cleveland Clinic; 3: Janette Strasburger, MD, Children’s Hospital of Wisconsin; 4: Maria Mendelson, MD, Northwestern Adult Congenital Heart Center
• Outline maternal and fetal risks associated with cardiovascular genetic disorders in pregnancy.
• List three family history questions that genetic counselors should ask when a cardiac disease is reported in a prenatal session.
• Illustrate the psychosocial issues that affected and at-risk women go through in order to make informed decisions.
Submitted by: NSGC Cardiovascular SIG and NSGC Prenatal SIG

D03 Cancer Panels From Research to Better Patient Care: Challenges and Current Practices
1.50 Contact Hours
1: Jill Stopfer, MS, LCGC, Abramson Cancer Center, University of Pennsylvania; 2: Michael Hall, MD, MS, Gastrointestinal Risk Assessment, Fox Chase Cancer Center; 3: Erin Sabo-Mullen, MS, LGC, Memorial Sloan-Kettering Cancer Center; 4: Barbara Hamilton, MS, LGC, Rocky Mountain Cancer Centers
• Describe the cancer spectrum among mutation carriers for hereditary cancer syndromes identified through clinical testing using a 25-gene panel, compared to previously published data.
• Describe the goals and background of the Prospective Registry of Multiplex Testing (PROMPT) and its importance in furthering the genetics community’s knowledge of non-BRCA cancer-related genes that are currently included on hereditary cancer multi-gene panels.
• Discuss challenges and current practices associated with cancer panel testing using a case-based approach including audience feedback on their perception of the cases.

D04 Mind the Gap: Bridging the Health Literacy Divide
1.50 Contact Hours
1: Ashley Erick, MS, University of Utah; 2: Alix Darden, PhD, University of Oklahoma Health Sciences Center; 3: Christine Colon, MS, LCGC, Organization of Test Interpretation Information Specialists
• Describe levels of health literacy among US adults and how average health literacy varies across social groups.
• Apply educational theories of health literacy and cognitive load to develop genetic counseling techniques which clearly communicate key genetic and genomic information to all patients.
• Evaluate the organization and incorporation of differing visual tools to aid in the communication of complex information to patients of all health literacy levels.
Submitted and Sponsored by: NSGC Education SIG

D05 Moving Genetics from the Clinic to the Community: Cancer as a Model of Population Screening
1.50 Contact Hours
1: Robert Nussbaum, MD, University of California San Francisco; 2: Megan Doen, MS, LGC, Cleveland Clinic; 3: Heather Hampel, MS, LGC, The Ohio State University; 4: Linda Robinson, MS, CGC, UT Southwestern Simmons Comprehensive Cancer Center; 5: Beth Crawford, MS, CGC, University of California, San Francisco
• Describe how historical trends in population screening have influenced the intersection of genetic counseling and public health genetics.
• Formulate potential strategies for the implementation of a population-based screening program at the genetic counselor’s own institution, such as modifying the electronic medical record.
• Evaluate the clinical and ethical benefits and limitations of population screening for a specific population, including, implementation issues, infrastructure, the need for follow up and costs.
Submitted and Sponsored by: NSGC Cancer SIG

D06 Where Do These Results Come from and Why Do I Care? Bioinformatics for Genetic Counselors
1.50 Contact Hours
1: Eric W. Klee, MD, College of Medicine at Mayo Clinic; 2: Stephen F. Lincoln, Invitae Corporation; 3: Erica Ramos, MS, LGCG, Illumina, Inc.; 4: Robert Nussbaum, Invitae Corporation, and University of California, San Francisco Medical Center; 2: Brent J. O’Connell, MD, MHS, Christopher Place Health Care Solutions; 3: Katherine Spoonamore, MS, CGC, LGC, Indiana University School of Medicine; 4: Amber P. Trivedi, MS, LGCG, InformedDNA; 5: Michelle A. Fox, MS, LGCC, Independent Consultant, Invitae Corporation
• Identify and summarize the main bioinformatics tools used with next generation sequencing, including read alignment, variant calling and variant annotation.
• Distinguish various quality metrics and assess their use in test reports and in studies.
• Evaluate validation studies and test specifications.
• Recognize the utility and limitations of bioinformatic tools in clinical practice and identify relevant resources.
Submitted by: NSGC Cancer SIG

Late-Breaking Plenary Session
9:45 am – 10:45 am

D07 Hope, Hype and Horror Movies: Contemplating Human Germline Modification
1.00 Contact Hour
1: Laura Hercher, MS, CGC, Sarah Lawrence College Joan H. Marks Program in Human Genetics; 2: Carl Zimmer, New York Times
• Describe the advances in DNA editing techniques, including the CRISPR-Cas9 system, that may enable human germline editing.
• Explain the potential of mitochondrial transfer as a reproductive option for women with mitochondrial disease, and the reasons why this technique is controversial.
• Identify potential options for the regulation of human germline editing, and the pros and cons of limiting its use in research or clinical practice.

Sponsored Lunch Session
11:30 am – 1:00 pm

D08 Finding Just Right: Balancing Provider and Payer Goals for Hereditary Genetic Testing
1.00 Contact Hour
1: Robert Nussbaum, MD, Invitae Corporation, and University of California, San Francisco Medical Center; 2: Brent J. O’Connell, MD, MHS, Christopher Place Health Care Solutions; 3: Katherine Spoonamore, MS, CGC, LGC, Indiana University School of Medicine; 4: Amber P. Trivedi, MS, LGCG, InformedDNA; 5: Michelle A. Fox, MS, LGCC, Independent Consultant, Invitae Corporation
• Define the needs and goals of genetic testing from both the payer and the genetic counselor’s perspective and how those needs and goals are evolving.
• Assess the gap between how genetic counselors use genetic testing and how current coverage policies provide these services.
• Outline how the genetic counseling community can work with payers to improve access to genetic testing coverage and create efficient programs to ensure appropriate utilization and testing.
Sponsored by: Invitae

Plenary Session
1:00 pm – 1:45 pm

D09 The Match of the Decade: Gene Panels versus Whole Genomes/Exomes
0.75 Contact Hour
1: Robert Nussbaum, MD, Invitae Corporation, and University of California, San Francisco Medical Center
• Describe the benefits and limitations between gene panels and whole genomes/exomes in regards to different subspecialties of the genetic counseling profession.
• Explore which testing modality is better and when this testing is beneficial for the patient and society.
• Discuss the complex legal implications with genetic testing and advancing technology.
• Examine the role of the genetic counselor in determining the best test for the patient.
## Concurrent Papers

**Friday, October 23**

1.50 Contact Hours

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td><strong>C02 – Access and Service Delivery I</strong></td>
<td>Identify roles for genetic counselors in specialized clinical populations. Recognize novel approaches in the provision of genetic counseling care. Explore the ways in which genetic counselors enhance patient care beyond a clinical encounter.</td>
<td>A. Inglis</td>
</tr>
<tr>
<td><strong>C03 – Clinical Care: Cancer</strong></td>
<td>Identify the latest developments in evaluation and testing for inherited cancer predispositions. Discuss issues that are unique to individuals with an inherited cancer predisposition. Explore the impact of emerging technology on cancer-focused clinical care.</td>
<td>S. Bannon</td>
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<tr>
<td><strong>C04 – Genetic/Genomic Testing</strong></td>
<td>Discuss the latest developments in the field of diagnostic testing and test interpretation. Describe the impact of next-generation sequencing on patient diagnosis. Understand ways of transitioning genetic testing discoveries into optimal patient care.</td>
<td>M. Barr</td>
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<tr>
<td><strong>C05 – Professional Issues and Education</strong></td>
<td>Describe approaches and issues in clinically-focused genetic counseling education. Evaluate tools for providing genetics/genomics education to students, patients and clinicians. Identify approaches of applying research discoveries to clinical care.</td>
<td>C. Guy</td>
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Room 315/316

Supported by unrestricted educational grant from:

<table>
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<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>8:00 AM – 8:15 AM</td>
<td>Psychiatric Genetic Counseling: A Practice Model from the World’s First Clinic</td>
<td>A. Inglis</td>
<td></td>
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<tr>
<td>8:15 AM – 8:30 AM</td>
<td>A Novel Genetic Counseling Service Delivery Model in a Pediatric/General Genetics Clinic Setting</td>
<td>C. Harper</td>
<td></td>
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<tr>
<td>8:30 AM – 8:45 AM</td>
<td>Role for Genetic Counselors in Creating Clinical Decision Support Messages for Genomic Results</td>
<td>S. Aufox</td>
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<tr>
<td>8:45 AM – 9:00 AM</td>
<td>Leveraging Data to Provide Financial Justification for Additional Genetic Counselor Full Time Equivalent and Resources: Turning a Pilot into Reality</td>
<td>J. Cropper</td>
<td></td>
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<tr>
<td>9:00 AM – 9:15 AM</td>
<td>Partnering with Patient Services Associates to Streamline Insurance Authorization Requests for Genetic Testing</td>
<td>W. Ulmann</td>
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<tr>
<td>9:15 AM – 9:30 AM</td>
<td>Genetic Counselors are Underutilized in Their Professional Capacities</td>
<td>V. Raymond</td>
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<tr>
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<tr>
<td>8:00 AM – 8:15 AM</td>
<td>Hereditary Hematological Malignancies: A Hereditary Leukemia Clinic, One Year in Review</td>
<td>S. Bannon</td>
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<tr>
<td>8:30 AM – 8:45 AM</td>
<td>Incidence and Spectrum of Germline Mutations in Cancer-Predisposing Genes in Children with Cancer: A Report from the Pediatric Cancer Genome Project</td>
<td>R. Nuccio</td>
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<tr>
<td>8:45 AM – 9:00 AM</td>
<td>Evaluating the NCCN Clinical Criteria for BRCA1/2 Genetic Testing in Breast Cancer Patients</td>
<td>C. Cropper</td>
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<tr>
<td>9:00 AM – 9:15 AM</td>
<td>High Frequency of Germline Mutations Among Unselected Patients Enrolled in a Tumor/Normal Cancer Genomic Sequencing Project</td>
<td>J. Everett</td>
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<tr>
<td>9:15 AM – 9:30 AM</td>
<td>The Angelina Jolie Boomerang Effect: How Are Things Different This Time Around?</td>
<td>J. Huang</td>
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<tr>
<td>8:00 AM – 8:15 AM</td>
<td>Genetic Testing for Hereditary Cancer Predisposition: The Impact of the Number of Tests Presented and a Provider Recommendation on Decision Making Outcomes</td>
<td>M. Barr</td>
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<tr>
<td>8:15 AM – 8:30 AM</td>
<td>Characterizing Personal Utility: A Systematic Literature Review</td>
<td>J. Kohler</td>
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<tr>
<td>8:30 AM – 8:45 AM</td>
<td>Variant Sign-out Practices for Exome and Genome Sequencing Results: Current Roles of Genetic Counselors</td>
<td>L. Amendola</td>
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</tr>
<tr>
<td>8:45 AM – 9:00 AM</td>
<td>Interpreting for Genetic Counselors: Identifying Common Pitfalls and Solutions</td>
<td>R. Delgado Hodges</td>
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<tr>
<td>9:00 AM – 9:15 AM</td>
<td>The Importance of Carrier Screening in Individuals of Sephardic, Mizrahi and Persian Jewish Descent</td>
<td>S. Farner</td>
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</tr>
<tr>
<td>9:15 AM – 9:30 AM</td>
<td>Updates from the Canadian Open Genetics Repository (COGR): A Unified Clinical Genome Database as a Community Resource for Standardizing and Sharing Genetic Interpretations</td>
<td>S. White</td>
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<tr>
<td>9:00 AM – 9:15 AM</td>
<td>Design, Implementation, and Outcomes of a “Psychiatric Genetics for Genetic Counselors (PG4GC)” Workshop in the UK</td>
<td>J. Austin</td>
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</tr>
<tr>
<td>9:15 AM – 9:30 AM</td>
<td>Development of EMPOWER: Evaluation Model for Patient Outcomes When Engaging in Reciprocal Communication as Part of Genetic Service Delivery</td>
<td>H. Zierhut</td>
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1.50 Contact Hours

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<tr>
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<th>Room 319/320/321</th>
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<tr>
<td><strong>D10 – Access and Service Delivery II</strong></td>
<td><strong>D11 – Clinical Care: Counseling and Psychosocial Perspectives</strong></td>
<td><strong>D12 – Clinical Care: Pediatrics and Adults</strong></td>
<td><strong>D13 – Clinical Care: Pre/Perinatal</strong></td>
</tr>
<tr>
<td>1. Identify roles for genetic counselors in specialized clinical populations.</td>
<td>1. Discuss the ways in which the lived experience of a genetic diagnosis impacts care.</td>
<td>1. Discuss the latest developments in genetic testing for adult/pediatric patients and their families.</td>
<td>1. Discuss the latest developments in prenatal testing.</td>
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<tr>
<td>2. Recognize novel approaches in the provision of genetic counseling care.</td>
<td>2. Develop novel clinical approaches for providing genetic counseling to varied communities.</td>
<td>2. Understand the impact of research on pediatric/adult-focused care.</td>
<td>2. Explore unique aspects of care in the prenatal setting.</td>
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<td>3. Explore the ways in which genetic counselors enhance patient care beyond a clinical encounter.</td>
<td>3. Describe the ways in research can inform/enhance clinical care.</td>
<td>3. Describe the attitudes and experiences of patients and providers in adult &amp; pediatric clinics.</td>
<td>3. Describe the experiences and attitudes of patients and providers in prenatal clinics.</td>
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<th>2:30 PM – 2:45 PM</th>
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<tr>
<td><strong>The Beneficial Role of the Laboratory Genetic Counselor in Test Utilization Management: Evidence and Opportunities from a Multisite Study of Provider Satisfaction</strong></td>
<td><strong>Roles for Religion and Spirituality in Genetic Counseling</strong></td>
<td><strong>ACMG Recommended Secondary Findings are Identified in Only 2.25% of Pediatric Patients Undergoing Exome Sequencing</strong></td>
<td><strong>Retesting Patients with Multi-Gene Hereditary Cancer Panels: The Impact on a Genetic Counselors’ Patient Volume</strong></td>
</tr>
<tr>
<td>J. Conta</td>
<td>K. Salsbery</td>
<td>Z. Powis</td>
<td>C. Mauer</td>
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<tr>
<td><strong>Spiritual Exploration in the Prenatal Genetic Counseling Session</strong></td>
<td><strong>Peering Down the Rabbit Hole: Living with Von Hippel-Lindau Syndrome from the Young Adult Perspective</strong></td>
<td><strong>Exploring How the Risk of Sudden Cardiac Death is Discussed in Families with a Diagnosis of a SADS Condition</strong></td>
<td><strong>Development and Use of a Novel Scale: Parents’ Uncertainties about Their Child’s Health</strong></td>
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<tr>
<td>K. Salsbery</td>
<td>L. Schmidt</td>
<td>K. Wiley</td>
<td>E. MacNamara</td>
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<tr>
<td><strong>Predispositional Genome Sequencing in Healthy Adults: First Findings from the PeopleSeq Study</strong></td>
<td><strong>NIPS + FTS = ?: A Consideration of the Next Steps of Prenatal Screening</strong></td>
<td><strong>Research Participation in the Duchenne Muscular Dystrophy Community: Parent Perceived Barriers and Their Impact on Families</strong></td>
<td><strong>Knowledge and Use of a Novel Scale: Parents’ Uncertainties about Their Child’s Health</strong></td>
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<tr>
<td>M. Helm</td>
<td>E. Suskin</td>
<td>K. Clinard</td>
<td>E. MacNamara</td>
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<tr>
<td><strong>Something Extra on Chromosome 5: Couples’ Understanding of Positive Prenatal Chromosomal Microarray Analysis (CMA) Results</strong></td>
<td><strong>Patient Responses to cfDNA Testing for Aneuploidy in a General Pregnancy Population: Preliminary Results of the Rhode Island Experience</strong></td>
<td><strong>Smith-Lemli-Opitz Syndrome is as Common in Caucasians and Ashkenazi Jewish as Spinal Muscular Atrophy: Accurate Carrier Frequencies Identified through Expanded Carrier Screening</strong></td>
<td><strong>Psychological Impact of Exercise Restrictions in Recreational Athletes with Hypertrophic Cardiomyopathy</strong></td>
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<td>E. Kloza</td>
<td>G. Lazarin</td>
<td>R. Luiten</td>
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<td>B. Greene Crissman</td>
<td>D. Bro</td>
<td>R. Luiten</td>
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<tbody>
<tr>
<td><strong>Decision Making across Cultures: Cancer Counseling of Low-income Latina Women Using Medical Interpreters</strong></td>
<td><strong>Comparing Knowledge Gain between In-person and Teledmedicine Genetic Counseling for Hereditary Breast Cancer</strong></td>
<td><strong>Psychological Impact of Exercise Restrictions in Recreational Athletes with Hypertrophic Cardiomyopathy</strong></td>
<td><strong>The Clinical Utility of A Multi-Gene Panel for Neuromuscular Disorders</strong></td>
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<td>M. Hallquist</td>
<td>R. Luiten</td>
<td>M. Bradbury</td>
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<td><strong>Prenatal Diagnosis of Down Syndrome: Genetic Counseling as a Significantly Unique Service</strong></td>
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<td>M. Bradbury</td>
<td>K. Berner</td>
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   - E. Denne
3. **Evaluating the Impact of Group Genetic Counseling Sessions in the BRCA Community Study**
   - B. Georges
4. **Facilitating the Continuum of Care: A Model for Utilization of the Electronic Medical Record to Transition Patients from Perinatal to Pediatric Genetics**
   - C. Grabarits
5. **Community-based Cancer Genetics: Evaluating the Planned Parenthood System**
   - S. Greenberg
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    - S. Morrison
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14. **Genetic Telecounseling: Ensuring Quality Patient Care by Examining Initial Experiences**
    - N. Paolino
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16. **Fetal Center Web Directory Provides Easy Access to Fetal Center Genetic Counselors**
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    - C. Tamura
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    - S. Stasi
20. **Developing a Cancer Genetic Counseling Service at an Institution Serving Minority Populations: The Howard University Cancer Center Experience**
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    - J. Stone
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    - K. Trapek
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    - J. Tahiliani

## Objectives:

- Recognize varied approaches to building an evidence base to support best practices in genetic counseling.
- Identify opportunities for the genetic counseling community to expand the reach of genetic/genomic-based care.
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170 A Rigorous Approach for Evaluating the Importance of Sanger Confirmation of Next-generation Sequencing Findings: A Call for Collaboration S. Lincoln
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Posters with Authors (continued)
Boulder Abortion Clinic
Specializing in Late Abortion for Fetal Disorders
Quality Care for Women Since 1973

Warren M. Hern, MD, MPH, PhD
Director
American Board of Preventive Medicine
Fellow, American College of Preventive Medicine
Associate Clinical Professor, Department of Obstetrics & Gynecology
University of Colorado Health Sciences Center

Author
Abortion Practice
Philadelphia: J.B. Lippincott, 1984
Boulder: Alpenglo Graphics, 1990
(soft cover edition)

- Outpatient abortion over 30 menstrual weeks for selected patients with documented fetal anomaly, fetal demise, or medical indications
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- Routine preoperative use of laminaria for maximum safety
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- Highly experienced and dedicated professional staff
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- Founding institutional member, National Abortion Federation
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Vendor-Sponsored Presentations

Vendor-Sponsored Presentations are 30-minute presentations given by select vendors in the Vendor Theater located in AEConnect. These presentations are a great way to learn more about a company’s products and services in a quick and easy manner. Make the most of your time in the Exhibitor Suite by attending one of the following presentations:

Wednesday, October 21

6:45 pm – 7:15 pm

CancerGene Connect: A Pedigree and Risk Assessment Tool Developed by Genetic Counselors for Genetic Counselors
Megan Frone, MS, CGC
This session will summarize CancerGene Connect (CGC), a cloud-based validated tool for genetic risk assessment and testing. This presentation will include an overview of the program including the updated unlimited pedigree, clinical test tracking, report writing functionalities, mobile office utilities and clinical and research database capabilities of CGC. We will also review published data on time studies and tool validation.

Thursday, October 22

11:45 am – 12:15 pm

Ambry Genetics
Variant Assessment in the Next Generation Sequencing Age: Addressing the Challenges of Complex Phenotypes and Moderate Risk Genes
Tina Pesaran, MA, MS, CGC
Genes with varying levels of penetrance challenge traditional variant assessment paradigms. In this presentation, we will review Ambry’s variant assessment process, describe issues that variable expressivity and reduced penetrance present and discuss how our experience with next generation sequencing has led to a customized algorithm for the assessment of alterations.

12:30 pm – 1:00 pm

Advanced Technologies and Automation Appreciably Enhance Quality and Accessibility of Expanded Carrier Screening
Shivani Nazareth MS, CGC, Gabriel Lazarin, MS, CGC, Dale Muzzey, PhD
Using next-generation sequencing and custom-built automation, Counsyl is increasing detection rates and expanding the number of mutations identified for complex genes while significantly lowering costs. Based on data from over 400,000 patients, we will discuss how this technology enables cost-effective expanded carrier screening that better serves couples of all ethnicities.

Friday, October 23

11:45 am – 12:15 pm

FDA-clearance of CMA: Why Do We Care?
Kellie Walden, MS, CGC
While FDA clearance of the first genomic test is a significant milestone for medical genetics, what really matters is its impact on patient care. This presentation will review the validation process, what distinguishes a test with FDA clearance and one diagnostic lab’s first year of experience offering the CytoScan® Dx Assay.

12:30 pm – 1:00 pm

Exploring Exome Sequencing in Pediatrics
Beth Denenberg MS, LCGC
In the Children’s Hospital of Philadelphia Genomic Diagnostics Laboratory, we offer clinical exome sequencing for the diagnosis of rare pediatric disease. Within the first year we were able to successfully identify a variety of disease-causing variants. This talk will discuss our analysis process, including the use of the human gene mutation database (HGMD) in the context of clinical cases.

7:30 pm – 8:00 pm

Rapid Diagnostic Testing for Newborns Using Targeted NGS
Julie Rousseau
This session will discuss the benefits of a rapid targeted next-generation sequencing (TNGS) panel, using dried blood spots, for second-tier newborn metabolic and hearing loss screening and its immediate utility for diagnostic testing in the neonatal intensive care unit.
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Christina Palmer, PhD, CGC
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Gillian Hooker, PhD, ScM, LCGC
Outstanding Volunteer
Emily Edelman, MS, CGC

Best Abstract Awards
Best Full Member Abstract Award
Assessment of Complexity among Cancer, Cardiovascular, General Pediatric/Adult, and Prenatal Genetic Counseling at a Single Institute: A Tool to Improve Efficiencies and Help Guide Patient Volumes
Allison Schreiber, MS, CGC
Beth Fine Kaplan Student Abstract Award
Alex M. Yragui, MS

Cultural Competency Scholarship
Kanchi N. Barfiwala
Michelle Ning

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Networking Activities and Business Meetings

NSGC Special Interest Group (SIG) Fair
Wednesday, October 21
2:00 pm – 2:30 pm
Room 408/409/410
All AEC attendees are invited to the NSGC SIG Fair to meet with SIG leaders and to learn more about current SIG projects and how you can become involved.

First Time Attendees
AEC 101: A Roadmap to Enhance Your First AEC Experience
Wednesday, October 21
2:00 pm – 3:15 pm
Room 407
Are you a first-time AEC attendee? Make your way to this event to network with other new attendees and learn about the different types of educational sessions available at the AEC.

There will also be a special SIG fair just for first-time attendees and new NSGC members. Meet with SIG leaders at this event devoted specifically to fostering relationships between SIGs and new NSGC members.

Welcome Reception
Wednesday, October 21
6:15 pm – 8:30 pm
Hall A
Make new contacts and greet your friends as you preview the vendors and their services in the Exhibitor Suite. Join your colleagues for this special kickoff to the AEC. Light hors d’oeuvres and a cash bar will be available.

State of the Society Address
Thursday, October 22
9:00 am – 9:45 am
Spirit of Pittsburgh Ballroom
Join President Joy Larsen Haidle, MS, CGC, as she provides an overview of NSGC activities and accomplishments over the past year, reviews NSGC’s advocacy efforts and strategic initiatives and provides highlights from 2015.

ABGC Annual Business Meeting
Thursday, October 22
1:00 pm – 1:30 pm
Spirit of Pittsburgh Ballroom

ACGC Presentation
Thursday, October 22
1:30 pm – 2:00 pm
Spirit of Pittsburgh Ballroom

NSGC Annual Business Meeting
Friday, October 23
2:15 pm – 3:00 pm
Spirit of Pittsburgh Ballroom

Incoming Presidential Address
Saturday, October 24
10:45 am – 11:15 am
Spirit of Pittsburgh Ballroom
Welcome NSGC President-Elect Jehannine Austin, MSc, PhD, CGC, CCGC, as she introduces herself to NSGC members and outlines her vision for NSGC and the genetic counseling profession in 2016.

Meals and Breaks
Continental breakfast will be served Wednesday through Saturday outside of the Spirit of Pittsburgh Ballroom from 7:00 am – 8:00 am.

Concessions
Concessions will be located in the Exhibitor Suite on Thursday and Friday. Concessions will also be available in the West Atrium on Wednesday and Saturday.

Refreshment Breaks
Thursday, October 22
9:45 am – 10:00 am
3:00 pm – 3:15 pm
Friday, October 23
9:30 am – 9:45 am
4:30 pm – 4:45 pm
6:15 pm – 6:30 pm
Saturday, October 24
9:30 am – 9:45 am
All refreshment breaks are sponsored by:
Baylor Genetics

Join Us at the Booths Below for a Special Treat
Wednesday, October 21
11:00 am – 3:00 pm
Invitae – Booth #601
Counsyl – Booth #631
Quest Diagnostics – Booth #203
Thursday, October 22
11:30 am – 3:00 pm
Ambry Genetics – Booth #720
Quest Diagnostics – Booth #203
Thursday, October 22
6:00 pm – 8:00 pm
Invitae – Booth #601

Friday, October 23
11:30 am – 4:30 pm
Invitae – Booth #601

*Limited quantities available on a first-come, first-served basis

AEConnect
Located in the Exhibitor Suite, Hall A
Open Wednesday - Friday during Exhibitor Suite hours
AEConnect is designed to help you network with your professional community. While in the Exhibitor Suite, stop by to view available job postings, learn more about our social media efforts, engage with NSGC’s Special Interest Groups, take in a sponsored presentation in the Vendor Theatre, and meet up with colleagues and friends.
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Abcodia
Booth #534
Phone: 857.245.7050
Fax: 844.236.6157
contactus@abcodia.com
www.therocatest.com
Abcodia is a specialist company engaged in developing biomarkers for the early detection of cancer. The company’s first commercial product will be ROCAtm, a test that determines the likelihood of a woman having ovarian cancer.

Affymetrix, Inc.
Booth #402
Phone: 408.731.5000
Fax: 408.731.5380
sales@affymetrix.com
www.affymetrix.com
Affymetrix, your partner for pediatric genetics, offers the only FDA-cleared whole genome blood test kit, CytoScan® Dx Assay, proven to help diagnose developmental delays and intellectual disabilities in children.

AliveAndKickn
Booth #739
Phone: 201.694.8282
robin@aliveandkickn.org
www. Aliveandkickn.org
AliveAndKickn is a hereditary cancer foundation whose mission is to improve the lives of individuals and families affected by Lynch Syndrome and associated cancers through research, education and screening.

Allele Diagnostics
Booth #713
Phone: 844.255.3532
Fax: 509.232.5779
info@allelediagnostics.com
www.allelediagnostics.com
Allele Diagnostics provides exceptional microarray and cytogenetic testing services. Our laboratory is highly experienced in performing microarray, karyotyping, and FISH testing and has optimized performance for high-quality and rapid results.

Alpha-1 Foundation
Booth #723
Phone: 877.228.7321
info@alpha1.org
www.alpha1.org
The Alpha-1 Foundation is committed to finding a cure for Alpha-1 Antitrypsin Deficiency and to improving the lives of people affected by Alpha-1 worldwide.

Ambry Genetics
Booth #720
Phone: 949.900.5500
Fax: 949.900.5501
info@ambrygen.com
www.ambrygen.com
Ambry Genetics is CAP-accredited and CLIA-certified. Together with its subsidiary Prenogen Genetics, Ambry leads in clinical genetics diagnostics and software solutions. Ambry is known for unparalleled reporting, securely sharing data, and responsibly applying new technologies.

American Board of Genetic Counseling (ABGC)
Booth #105
Phone: 913.895.4617
Fax: 913.895.4652
info@abgc.net
www.ABGC.net
The American Board of Genetic Counseling (ABGC) is the credentialing organization for the genetic counseling profession in North America. ABGC certifies and recertifies qualified genetic counseling professionals and promotes the profession’s ongoing growth and development.

American Thrombosis & Hemostasis Network
Booth #204
Phone: 800.360.2846
Fax: 647.572.0967
info@athn.org
www.athn.org
The American Thrombosis and Hemostasis Network (ATHN) is a non-profit organization committed to advancing and improving care for individuals affected by bleeding and thrombotic disorders. ATHN manages a national database of patient health data that can be used to improve care and support vital research.

Ariosa Diagnostics
Booth #628
Phone: 408.229.7500
www.ariosadx.com
Ariosa Diagnostics, Inc. is a leading global molecular diagnostics company committed to improving overall patient care by developing and delivering innovative, affordable and widely-accessible testing services through their CLIA laboratory. Tests are fully validated to CLIA requirements by rigorous and comprehensive methodologies to ensure health care practitioners and patients can be confident in the test’s performance. Ariosa has developed leading-edge technologies to perform a directed analysis of cell-free DNA in blood. Ariosa is located in San Jose, California and was acquired by Roche in 2015.

ARUP Laboratories
Booth #505
Phone: 801.584.2787
Fax: 801.584.5209
www.aruplab.com
ARUP, a nonprofit enterprise of the University of Utah, has a full-service genetics laboratory offering testing in maternal serum screening and molecular, cyt, and biochemical genetics, with experience in sequencing, FISH, microarray and biochemical assays.

Association of Public Health Laboratories
Booth #118
Phone: 240.485.2745
Fax: 240.485.2700
info@aphl.org
www.aphl.org/NBS
APHL represents state, county and city government laboratories that perform 97% of newborn screening and genetic testing in the US, saving or improving the lives of more than 12,000 babies each year.

Asuragen
Booth #501
Phone: 512.681.5200
Fax: 512.681.5201
asuragen@asuragen.com
www.asuragen.com
Asuragen offers innovative PCR-based fragile X testing, including AmpliSeq® PCR and mPCR assays for CGG size and methylation status, and Xpansion Interpreter®, for AGG interruption status, which refines the risk of expansion upon maternal transmission.

Baby’s First Test
Booth #328
Phone: 202.966.5557
Fax: 202.966.8553
Info@Baby’sFirstTest.org
www.Baby’sFirstTest.org
Baby’s First Test is a health education program focused on increasing awareness and knowledge about newborn screening and its system. The sites, Baby’sFirstTest.org and Spanish.Baby’sFirstTest.org, inform and empower families and healthcare providers.

Basser Center for BRCA
Booth #215
Phone: 215.662.2748
Fax: 215.243.2232
basserinfo@uphs.upenn.edu
www.basser.org
The Basser Center for BRCA of the University of Pennsylvania aims to deliver cutting edge research in basic and clinical sciences to advance the care of individuals who carry BRCA mutations.

Batten Disease Support and Research Association
Booth #330
Phone: 614.973.6011
info@bdtra.org
www.bdtra.org
BDTRA is dedicated to funding research for treatments and cures, providing family support services, advancing education, raising awareness and advocating for legislative action. Founded in 1987 by parents seeking to build a network for those diagnosed with Batten disease, BDTRA is now the largest support and research organization dedicated to Batten disease in North America. BDTRA believes that to effectively unravel the mysteries of Batten disease, the worlds of medical science, research, and families must work together toward a common goal: discover treatments and cures while assuring a better quality of life for those living with the disease.

Baylor Miraca Genetics Laboratories
Booth #607
Phone: 713.798.6555
Fax: 713.798.2787
geneticstest@bcm.edu
www.bmgli.com
Baylor Miraca Genetics Laboratories offer a broad range of diagnostic genetics tests. By building on our institution’s strengths in research and discovery, we aim to provide quality genetic testing services relevant to 21st century medicine.
BioMarin Pharmaceutical, Inc.

Booth #324
Phone: 415.506.6700
Fax: 415.382.7889
www.bmrrn.com

BioMarin develops and commercializes innovative biopharmaceuticals for serious diseases and medical conditions. Approved products include the first and only medications for PKU and LEMS, and the first and only enzyme replacement therapies for MPS I, MPS VI and Morquio A syndrome.

Blueprint Genetics

Booth #729
Phone: 650.452.9340
Fax: 650.636.9779
support.us@blueprintgenetics.com
www.blueprintgenetics.com

Blueprint Genetics is a genetics company based in Helsinki and San Francisco. We are a team of cardiologists, geneticists, bioinformaticians and DNA biologists providing comprehensive and high-quality genetic diagnostics with next-generation sequencing (NGS).

Boulder Abortion Clinic

Booth #416
Phone: 303.447.1361
Fax: 303.447.0020
bachern@msn.com
www.drhern.com

At Boulder Abortion Clinic, Dr. Hern offers the safest possible abortion care and termination of pregnancies for fetal anomalies or other medical indications. These specialized services are provided in a confidential and comfortable outpatient setting.

Bright Pink

Booth #719
Phone: 312.787.4412
Fax: 312.787.4414
brightpink@brightpink.org
www.brightpink.org

Bright Pink is a national non-profit on a mission to save lives from breast and ovarian cancer by empowering women to live proactively at a young age through risk assessment, reduction, and early detection.

CancerGene Connect

Booth #110
Phone: 214.862.1957
richard@synappslabs.com
www.cancergeneconnect.com

CancerGene Connect is a genetic counseling platform originally developed by UT Southwestern Medical Center and used to process over 12,000 patients to date. Originally developed by UT Southwestern Medical Center, CancerGene Connect is a genetic counseling platform that access to information extends beyond affordability. It is supported by expert pathologists who provide excellent clinical interpretation.

Center for Jewish Genetics

Booth #731
Phone: 312.357.4718
jewishgeneticsctr@juf.org
www.jewishgenetics.org

The mission of the Center for Jewish Genetics is to create a healthier, more informed community by educating healthcare professionals, clergy, and particularly individuals of Jewish descent, about genetic disorders, hereditary cancers and the importance of genetic screening and counseling.

Children's Hospital Colorado - Denver Genetics Laboratory

Booth #316
Phone: 720.777.0500
Fax: 720.777.7886
amber.brand@childrenscolorado.org
www.denvergenetics.org

Denver Genetic Laboratories aims to provide Complete Genetic Solutions™ for genetic disorders, to contribute to a better tomorrow for patients, families and healthcare providers. We specialize in three different areas through our Molecular, Biochemical and Mitochondrial genetic laboratories. Our laboratories provide service to all demographics as long as they have a referral.

Children's Hospital of Pittsburgh of UPMC

Booth #714
Phone: 412.692.7372
rarecare@chp.edu
www.chp.edu

The Center for Rare Disease Therapy at Children's Hospital of Pittsburgh of UPMC consists of international experts focused on treating children with rare diseases, defined by leading standards of care, pioneering protocols, and individualized services.

City of Hope National Med Center - Outreach Laboratories

Booth #420
Phone: 888.826.4362
Fax: 626.301.8142
cmdl@coh.org
www.cmdl.cityofhope.org

The City of Hope Outreach Laboratories utilizes the latest testing methodologies to diagnose diseases and is supported by expert pathologists who provide excellent clinical interpretation.

Claritas Genomics

Booth #418
Phone: 617.553.5800
Fax: 617.553.5842
info@claritasgenomics.com
www.claritasgenomics.com

Claritas Genomics serves children affected with complex genetic disorders by providing timely and accurate results, resolving families’ long search for answers. By combining clinical expertise of the world’s best pediatric specialists with innovative platform solutions, Claritas is working to improve patient care and enable new discoveries. We are committed to the highest quality and accessibility of information and our interpretive services and unique approach to reporting set the standard for reliably and clearly communicating genetic information. Now is the time to integrate genomics into clinical practice to inform, guide and improve medical treatment for kids around the world.

ClinGen

Booth #211
clinicalgen@clinicalgenome.org
www.clinicalgenome.org

The Clinical Genome Resource (ClinGen) is an NIH-funded resource dedicated to building an authoritative central resource that defines the clinical relevance of genomic variants for use in precision medicine and research.

Color Genomics

Booth #333, 432
www.getcolor.com

Combimatrix

Booth #615
Phone: 949.753.0624
Fax: 949.753.1504
info@combimatrix.com
www.combimatrix.com

Combimatrix provides valuable molecular diagnostic solutions and comprehensive clinical support to foster the highest quality in patient care. Combimatrix specializes in prenatal diagnostics, miscarriage analysis for recurrent pregnancy loss, pediatric genetics and pre-implantation genetic screening.

Connective Tissue Gene Tests

Booth #528
Phone: 484.244.2900
Fax: 484.244.2904
inquiries@ctgt.net
www.ctgt.net

Connective Tissue Gene Tests (CTGT) specializes in molecular diagnostic testing for inherited genetic disorders. CTGT offers a large test menu of over 1,000 NGS, sanger sequencing, deletion/duplication and comprehensive tests, and is continuously growing.

Cord Blood Registry

Booth #706
Phone: 888.CORDBLOOD (888.267.3256)
Fax: 650.635.1429
dduarte@cordblood.com
www.cordblood.com

At Cord Blood Registry, our mission is to enable breakthrough medical treatments for more families by significantly advancing the real-life clinical applications of newborn stem cells.

Counsyl

Booth #631
Phone: 888.COUNSYL (888.268.6975)
support@counsyl.com
www.counsyl.com

Counsyl is a health technology company that offers DNA screening at key times in people’s lives—for those starting a family and for those at risk for inherited cancer. At Counsyl, every screen includes a session with a board-certified genetic counselor, because we believe that access to information extends beyond affordability.

Emory Genetics Laboratory

Booth #725
Phone: 404.778.8499
Fax: 404.778.8559
egl.marketing@emory.edu
www.geneticslab.emory.edu

Emory Genetics Laboratory (EGL) offers a comprehensive menu of molecular, biochemical, and cytogenetics testing (clinical and research). EGL leadership includes board-certified laboratory directors and the lab itself has 45 years of experience providing diagnostic services.
Fulgent Diagnostics  
Booth #617  
Phone: 626.350.0537  
Fax: 626.454.1667  
Info@fulgentdiagnostics.com  
www.fulgentdiagnostics.com  
Fulgent Diagnostics, a CLIA certified high complexity molecular diagnostics lab, offers 4,600+ single gene tests, 170+ preset panels, including a clinical exome panel. Most importantly, Fulgent Diagnostics provides flexibility, high-quality testing, and affordable pricing.

FORCE: Facing Our Risk of Cancer Empowered  
Booth: #639  
info@facingourrisk.org  
www.facingourrisk.org  
FORCE is a national nonprofit dedicated to fighting hereditary breast and ovarian cancer (HBOC). With over 50 outreach groups throughout the US, FORCE provides support, education, awareness, advocacy and research on behalf of anyone affected by HBOC.

Geisinger Health System  
Booth #405  
Phone: 570.214.6918  
gbmccluskey@geisinger.edu  
www.geisinger.org  
The Genomic Medicine Institute partners with patients, health care providers and researchers worldwide to enhance the quality of life through research, education and clinical care innovation in genomic medicine.

Gene by Gene  
Booth #529  
Phone: 731.474.2401  
info@genebygene.com  
www.genebygene.com  
Gene by Gene is a CAP/CLIA approved laboratory with a product menu spanning clinical genetic testing, genealogy, gene sequencing and research partnerships. Included is expanded carrier screening that incorporates a greater number of minority mutations, and an extensive Sephardic Jewish disease offering.

Genedx  
Booth #115  
Phone: 301.519.2100  
Fax: 301.519.2892  
GeneDx@GeneDx.com  
www.GeneDx.com  
GeneDx specializes in genetic testing for inherited disorders, offering sequencing and deletion/duplication testing for cardiology, mitochondrial, neurological, inherited cancer, prenatal and other rare genetic disorders. GeneDx also offers whole exome sequencing, next-generation and microarray-based testing.

Genesix Genetics Institute  
Booth #404  
Phone: 313.579.9650  
Fax: 313.544.4006  
coordinator@genesigeneorganics.org  
www.genesigeneorganics.org  
Genesix Genetics is the pioneer of pre-implantation testing of embryos for genetic abnormalities. Genesix started as a lab performing pre-implantation genetic diagnosis and has grown to include pre-implantation genetic screening and other genetic testing services.

GeneTests.org  
Booth #206  
Phone: 888.729.1204  
geneests@geneests.org  
www.geneests.org  
GeneTests is an online medical genetics information resource with capability to search by test, disorder or gene. GeneTests searches retrieve links to GeneReviewsSM chapters, other online resources and genetic testing information.

Genome Magazine  
Booth #709  
Phone: 972.905.2920  
smccurle@bigsciencemedia.com  
www.genomemag.com  
Genome covers the personalized medicine stories of today and the breakthroughs of tomorrow, empowering readers to make informed health decisions that will help them live better longer.

GenPath Women’s Health  
Booth #208  
Phone: 800.633.4522  
info@genpathdiagnostics.com  
www.genpathdiagnostics.com  
GenPath Women’s Health, a division of BioReference Laboratories, specializes in the diagnostic needs of the OB/GYN and related subspecialties. GenPath offers a full-service test menu that includes cytology, pathology, infectious disease, prenatal/maternal risk assessment, carrier testing, pregnancy thrombophilia and a comprehensive suite of inherited cancer testing.

Genzyme, a Sanofi company  
Booth #707  
Phone: 617.768.9400  
www.genzyme.com  
Genzyme discovers and delivers transformative therapies for patients with rare and special unmet medical needs, providing hope where there was none before.

Good Start Genetics  
Booth #332  
Phone: 617.714.0828  
cmurphy@goodstartgenetics.com  
www.goodstartgenetics.com  
Good Start Genetics is a commercial-stage molecular genetic information company that benefits doctors and patients by setting the new gold standard for routine genetic carrier screening for inherited diseases. We conduct genetic diagnostic carrier testing for the reproductive market. Our clinical molecular diagnostics laboratory is CLIA and CAP certified.

Greenwood Genetic Center  
Booth #202  
Phone: 888.442.4363 (GGCGENE)  
www.GGC.org  
The Greenwood Genetic Center is a nonprofit institute organized to provide clinical genetic services, diagnostic laboratory testing, educational resources, and research in the field of medical genetics. Our laboratory offers biochemical, cytogenetic, and molecular testing.

Horizon Pharma  
Booth #103  
Phone: 224.383.3000  
Fax: 224.383.3001  
info@horizonpharma.com  
www.horizonpharma.com  
Horizon Pharma is a specialty biopharmaceutical company focused on improving patients’ lives by identifying, developing, acquiring and commercializing differentiated and accessible medicines that address unmet medical needs. The company markets seven medicines through its orphan, primary care and specialty business units. Horizon’s global headquarters are in Dublin, Ireland.

Illumina  
Booth #500  
Phone: 858.202.4500  
Fax: 858.202.4546  
info@illumina.com  
www.illumina.com  
Illumina serves customers in a broad range of markets, enabling the universal adoption of genomics solutions in research and clinical settings.

Insight Medical Genetics  
Booth #308  
Phone: 312.981.4400  
Fax: 312.981.4404  
info@insightmedicalgenetics.com  
www.insightmedicalgenetics.com  
Insight Medical Genetics is an integrated clinical and laboratory practice providing preconception, prenatal, and hereditary cancer risk counseling as well as screening and diagnostic testing for a range of genetic conditions with particular capabilities to handle prenatal cases and specimens.

Integrated Genetics  
Booth #301  
Phone: 800.848.4436  
www.integratedgenetics.com  
Integrated Genetics is a leading provider of reproductive genetic testing services. With an expansive menu of complex tests and technologies, Integrated Genetics spans the continuum of care from prenatal diagnostics to the largest commercial genetic counseling network in the laboratory industry.
Make sure to visit our exhibit booth #208 to discuss:

- Hereditary Cancers
- Pan-Ethnic Carrier Screening
- Non-Invasive Prenatal Testing
- Joining the CancerCare Fundraiser
- How to Enter Our Raffle
<table>
<thead>
<tr>
<th>International Institute for the Advancement of Medicine</th>
<th>Booth #108</th>
<th>Phone: 732.661.2364</th>
<th>Fax: 732.661.2527</th>
<th><a href="http://www.iiam.org">www.iiam.org</a></th>
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<tr>
<td>IIAM is the world-leading provider of freshly recovered, non-transplantable, healthy and diseased, human organs and tissues authorized for medical research, education and development.</td>
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<td>Invitae</td>
<td>Booth #601</td>
<td>Phone: 415.374.7782</td>
<td><a href="mailto:clinical@invitae.com">clinical@invitae.com</a></td>
<td><a href="http://www.invitae.com">www.invitae.com</a></td>
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<td>Invitae, a genetic information company, is aggregating the world’s genetic tests into a single service with better quality, faster turnaround time and a lower price than most single-gene diagnostic tests today.</td>
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<td>John Hopkins Center for Fetal Therapy</td>
<td>Booth #736</td>
<td>Phone: 844.JHFETAL (844.543.3825)</td>
<td>Fax: 410.614.1617</td>
<td><a href="mailto:fetalinstitute@jmi.edu">fetalinstitute@jmi.edu</a></td>
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<td>Johns Hopkins Center for Fetal Therapy provides state-of-the-art treatment for complex fetal conditions including twin-twin transfusion syndrome, spina bifida, congenital diaphragmatic hernia, urinary tract obstruction, fetal tumors and more.</td>
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<td>Kaiser Genetics- Northern California</td>
<td>Booth #106</td>
<td><a href="http://www.genetics.kp.org">www.genetics.kp.org</a></td>
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<td>Practice what you believe, practice at Kaiser Permanente! Kaiser Genetics is the employer of choice for over 70 genetic counselors in Northern California.</td>
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<tr>
<td>Laboratory for Molecular Medicine, Partners HealthCare Personalized Medicine</td>
<td>Booth #213</td>
<td>Phone: 617.768.8500</td>
<td>Fax: 617.768.8513</td>
<td><a href="mailto:lmm@partners.org">lmm@partners.org</a></td>
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<td>The Laboratory for Molecular Medicine, CLIA-certified molecular diagnostic laboratory within Partners HealthCare, translates genetic discoveries into clinical tests using next generation sequencing technologies. Testing areas include disease-targeted panels, clinical genome and exome sequencing with interpretation services.</td>
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<tr>
<td>Mayo Medical Laboratories</td>
<td>Booth #533</td>
<td>Phone: 800.533.1710</td>
<td>Fax: 507.284.1759</td>
<td><a href="mailto:mmi@mayo.edu">mmi@mayo.edu</a></td>
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<td>Mayo Medical Laboratories provides comprehensive testing and unparalleled expertise in laboratory genetics. Over 35 board-certified geneticists and genetic counselors at Mayo Clinic assist in appropriate test selection and interpretation of results.</td>
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<td>MEDomics, LLC</td>
<td>Booth: #738</td>
<td>Phone: 626.804.3646</td>
<td>Fax: 626.804.3648</td>
<td><a href="mailto:contact@medomics.com">contact@medomics.com</a></td>
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<td>MEDomics is a privately held genomics firm that performs genomics (highly analytical molecular diagnostics of the huge amount of genomic DNA sequence data generated). MEDomics was founded in 2008 with the mission to utilize the transforming power of NextGen DNA sequencing to provide mutation expert-based diagnosis (MED) of a patient’s genome and to partner with the referring physician to actuate personalized treatment (pMED).</td>
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<tr>
<td>MNG Laboratories</td>
<td>Booth #701</td>
<td>Phone: 678.225.0222</td>
<td>Fax: 678.225.0212</td>
<td><a href="mailto:jparker@mnglabs.com">jparker@mnglabs.com</a></td>
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<td>MNG provides expert diagnostics through clinical services, biochemical testing and Next Generation Sequencing. Our panels are the most cost effective and comprehensive available, particularly for cellular energetics, muscular dystrophies, and epilepsy. A focus is to provide rapid sequencing /metabolic diagnostics.</td>
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<tr>
<td>MotherToBaby Pregnancy Studies Conducted by OTIS</td>
<td>Booth #326</td>
<td>Phone: 877.311.8972</td>
<td>Fax: 858.246.1710</td>
<td><a href="mailto:otisresearch@ucsd.edu">otisresearch@ucsd.edu</a></td>
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<td>MotherToBaby, a service of the non-profit Organization of Teratology Information Specialists (OTIS), is dedicated to providing evidence-based information to mothers, healthcare professionals, and the general public about medications and other exposures during pregnancy and while breastfeeding. MotherToBaby Pregnancy Studies conducted by OTIS is currently evaluating the effects to the fetus from various diseases and the safety of medications used to treat them during pregnancy.</td>
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<tr>
<td>Mount Sinai Genetic Testing Laboratory</td>
<td>Booth #312</td>
<td>Phone: 212.241.7518</td>
<td>Fax: 212.241.0139</td>
<td><a href="http://www.mssm.edu/genetictesting">www.mssm.edu/genetictesting</a></td>
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<tr>
<td>Mount Sinai Genetic Testing Laboratory offers a comprehensive testing menu including molecular, cytogenetic and biochemical analyses in our CLIA-certified, NY state-approved and CAP-accredited facility. Our team provides superior service and state-of-the-art testing.</td>
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<td>Myriad Genetic Laboratories, Inc.</td>
<td>Booth #421</td>
<td>Phone: 801.746.6528</td>
<td><a href="mailto:cscomments@myriad.com">cscomments@myriad.com</a></td>
<td><a href="http://www.myriad.com">www.myriad.com</a></td>
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<td>Myriad Genetics is a leading molecular and companion diagnostics company dedicated to making a difference in patients’ lives through the discovery and commercialization of transformative products that assess a person’s risk of developing disease, aid in a timely and accurate diagnosis, determine the risk of disease progression and recurrence and guide personalized treatment decisions.</td>
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<td>Natera, Inc.</td>
<td>Booth #102, 104, 327</td>
<td>Phone: 650.249.9090</td>
<td><a href="mailto:info@natera.com">info@natera.com</a></td>
<td><a href="http://www.natera.com">www.natera.com</a></td>
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<td>Announcing the Panorama™ prenatal test—the comprehensive and accurate non-invasive prenatal test (NIPT) for aneuploidies of chromosomes 21,18, 13, X and Y.</td>
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<td>National Abortion Federation Hotline Fund</td>
<td>Booth #703</td>
<td>Phone: 800.772.9100</td>
<td><a href="http://www.prochoice.org">www.prochoice.org</a></td>
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<td>The mission of the National Abortion Federation is to ensure safe, legal, and accessible abortion care, which promotes health and justice for women.</td>
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<td>NextGxDx</td>
<td>Booth #429</td>
<td>Phone: 615.861.2641</td>
<td><a href="mailto:dkauke@nextgxdx.com">dkauke@nextgxdx.com</a></td>
<td><a href="http://www.nextgxdx.com">www.nextgxdx.com</a></td>
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<td>NextGxDx improves genetic test ordering for the GC community with its two solutions. GeneSource is a comprehensive and easy-to-use tool to search and compare genetic tests. GeneConnect provides advanced ordering/reporting tools to support genetic testing UM efforts.</td>
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<td>The National Center for Biotechnology Information (NCBI) at NIH advances science and health by providing access to biomedical and genomic information. Resources for medical genetics include MedGen, the NIH Genetic Testing Registry (GTR®) and ClinVar.</td>
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<td>NSGC Prenatal SIG</td>
<td>Booth #637</td>
<td>Phone: 713.486.2292</td>
<td>Fax: 713.383.1479</td>
<td><a href="mailto:blair.k.stevens@uth.tmc.edu">blair.k.stevens@uth.tmc.edu</a></td>
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<td>The Prenatal SIG was created to unite genetic counselors working or performing research in the prenatal setting. Membership benefits include networking with prenatal colleagues, access to valuable resources and educational opportunities.</td>
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an informed choice for prenatal testing
At Insight Medical Genetics (IMG), we offer a unique selection of prenatal screening and diagnostic tests to providers nationwide through our renowned send-in laboratories.

a different kind of lab experience
Our licensed and board-certified genetic counselors work closely with our laboratory staff to produce comprehensive test results in rapid time, so you can stay focused on your patient.

work with insight
To learn more about our send-in laboratories and available tests, visit insightmedicalgenetics.com/lab-services

visit us at booth #308
Oregon Reproductive Medicine
Booth #535
www.oregonreproductivemedicine.org

Parabase Genomics
Booth #715
Phone: 857.288.0838
Fax: 866.604.9369
info@parabasegenomics.com
www.parabasegenomics.com
Parabase Genomics is committed to improving neonatal care through the development of comprehensive early diagnostics of inherited disorders that will help physicians inform treatment decisions based on an individual patient’s molecular profile.

Pathway Genomics
Booth #321
Phone: 858.450.6600
Marketing@pathway.com
www.pathway.com
Founded in 2008, Pathway Genomics is a clinical diagnostic and mobile healthcare technology company providing services worldwide. We offer genetic testing for multiple specialties including hereditary cancers, pharmacogenomics, and general health & wellness testing.

PC PAL
Booth #733
Phone: +33 1 69 53 46 20
Fax: +33 1 69 53 69 81
conf@pcpal.eu
www.pcpal.eu
PC PAL, an international medical specialist software company, presents PedigreeXP. This unique interactive drawing tool facilitates recording and interpretation of pedigrees. PC PAL also provides modules for integration into medical records.

PerkinElmer Labs
Booth #422
Phone: 855.PKI.LAB1 (855.754.5221)
www.nflabs.com
PerkinElmer is a global company committed to healthier pregnancies, healthier babies and healthier families. PerkinElmer Labs and our partners provide a comprehensive portfolio of products and services that include the latest advances that range from biochemical screening for aneuploidy and a first of its kind screening test for early onset preclampsia, to non-invasive prenatal testing (NIPT) and cord blood and tissue banking from ViaCord.

Personalis, Inc.
Booth #802
Phone: 650.752.1300
Fax: 650.752.1301
info@personalis.com
www.personalis.com
Personalis is pioneering genome-guided medicine utilizing the latest commercial sequencing tools and its proprietary ACE-Platform technology to provide end-to-end advanced genomic research and diagnostics services for inherited diseases and cancer.

PreventionGenetics
Booth #109
Phone: 715.387.0484
Fax: 715.384.3661
clinicaltesting@preventiongenetics.com
www.preventiongenetics.com
PreventionGenetics is a leader in providing comprehensive clinical DNA testing offering next-generation sequencing, Sanger sequencing and deletion/duplication testing via array CGH for over 1200 genes. PreventionGenetics is CAP/CLIA-accredited.

Proband, The Children's Hospital of Philadelphia
Booth #732
Phone: 267.426.7522
Fax: 215.590.5245
probandapp@chop.edu
www.probandapp.com
Proband is an iPad application designed to replace paper for drawing pedigrees during family history interviews. Proband uses intuitive gestures to make creating pedigrees fast and efficient. Check out our new features and functionality and the Proband Connect server component.

Progeny
Booth #322
Phone: 855.293.2639
Fax: 760.268.0771
events@progeny.com
www.progeny.com
Progeny is a molecular diagnostics company that provides specialized testing services for women and children. We partner with clinicians to offer patients high-quality tests with actionable results that enable informed medical decisions.

Progenity Genetics, LLC
Booth #716
Phone: 800.776.4369
Fax: 888.584.1210
mbrammer3@gmail.com
www.progenitygenetics.com
Progeny is now offering a cloud-based application for a nominal fee. Includes integrated risk modeling, patient screening, triage family history questionnaires, and the ability to integrate with your EMR. New iPad app also available.

QIAGEN Bioinformatics
Booth #600
Phone: 800.305.0670
info@biobase-international.com
www.qiagenbioinformatics.com
QIAGEN Bioinformatics is powered by CLC bio, Ingenuity, and BIODEX. We offer bioinformatics software tools for next generation sequencing (NGS) data analysis and interpretation. Our solutions are designed to be universal, so you can mix and match the technologies best suited to your needs.

Quest Diagnostics
Booth #203
Phone: 866.MYQUEST (866.697.8378)
www.QuestDiagnostics.com
Quest Diagnostics, the world’s leading provider of diagnostic testing, information and services, offers a comprehensive genetics testing menu including prenatal and neonatal, oncology, neurology and endocrinology. We empower health with diagnostic insights.

Raggen
Booth #737
Phone: 410.715.2111
Fax: 410.715.2119
email@raggen.com
www.raggen.com
Raggen specializes in noninvasive prenatal testing on fetal DNA at a diagnostic level. A safe blood sample from the pregnant woman can test for single gene disorders, chromosomal abnormalities, and paternity.

Recombine
Booth #504
www.recombine.com
Recombine was founded by experts in fertility and reproductive genetics. We offer CarrierMap, a comprehensive carrier screen for over 200 genetic conditions, and FertilityMap, a complete fertility genetic assessment for infertility. From sample collection to genetic counseling, we manage the entire genetic testing process. It is genetic testing, simplified.

Recordati Rare Diseases
Booth #116
Phone: 908.236.0888
Fax: 908.236.0028
info@recordatirarediseases.com
www.recordatirarediseases.com
Recordati Rare Diseases’ (RRD) mission is to partner with patients, healthcare providers, advocacy, and industry to make products available to treat rare diseases. RRD is a member of the Recordati Group, which includes Recordati and Orphan Europe.

Reproductive Genetic Innovations
Booth #530
Phone: 847.400.1515
Fax: 847.400.1516
info@rgipgd.com
www.rgipgd.com
Reproductive Genetic Innovations (RGI) is a world-renowned provider of pre-implantation genetic diagnosis and screening (PGD and PGS), offering testing for single gene disorders, chromosomal rearrangements and aneuploidy by next-generation sequencing (NGS), array CGH and FISH.

Reprogenetics
Booth #219
Phone: 973.436.5000
Fax: 973.710.4238
www.reprogenetics.com
Reprogenetics LLC is a pioneer in the field of pre-implantation genetic diagnosis (PGD). Genetic counseling is provided for all services including aneuploidy, translocation and single gene disorders.
A resource for practical & sustainable utilization management solutions through the PLUGS collaborative network of labs.

**Sequenom Laboratories**

**Booth #401**
www.sequenom.com

Sequenom Laboratories, a molecular diagnostics laboratory dedicated to improving patient care, commercialized the first noninvasive prenatal test for pregnant woman at increased risk. Through a routine blood draw, MaterniT21™ PLUS laboratory-developed test analyzes and reports clinically relevant fetal chromosomal abnormalities, including the core trisomies 21, 18, and 13, as well as trisomies 16 and 22; fetal sex aneuploidies and select microdeletions.

**Sharsheret**

**Booth #532**
Phone: 866.474.2774
Fax: 201.837.5025
info@sharsheret.org
www.sharsheret.org

Sharsheret supports women and families, of all Jewish backgrounds, living with and at high genetic risk for breast or ovarian cancer at every stage – before, during, and after diagnosis.

**Shire**

**Booth #717**
Phone: 781.482.9222
www.shire.com

Shire enables people with life-altering conditions to lead better lives. Our strategy is to focus on developing and marketing innovative specialty medicines to meet significant unmet patient needs. We focus on providing treatments in rare diseases, neuroscience, gastrointestinal and internal medicine and are developing treatments for symptomatic conditions treated by specialist physicians in other targeted therapeutic areas, such as ophthalmics.

**Simons Variation in Individuals Project (Simons VIP)**

**Booth #112**
Phone: 855.329.5638
Fax: 570.214.7342
coordinator@simonsvipconnect.org
www.simonsvipconnect.org

Simons VIP is a family-support community and research initiative aimed at better understanding the medical, learning, and behavioral features of individuals with genetic changes associated with autism spectrum disorder and developmental delay.

**SimulConsult**

**Booth #317**
Phone: 617.879.1670
Fax: 617.849.5993
feldman.lynn@simulconsult.com
www.simulconsult.com

SimulConsult’s® Genome-Phenome Analyzer® provides labs and clinicians fast, reliable genome interpretation and reporting in the clinical context. Also offered are phenotype collection tools integratable with EHRs and LIMs, which generates robust letters of medical necessity.

**Southwestern Women’s Options**

**Booth #217**
Phone: 505.242.7512
Fax: 505.242.0540
boydt02@bczacd.net
www.southwesternwomens.com
Curtis Boyd, MD owned clinics provide a full range of medical and surgical abortion services. The Albuquerque office specializes in third trimester abortion care and offers a unique fetal indications program geared to the special needs of the patient and her family.

**St. Jude Children’s Research Hospital**

**Booth #643**
Phone: 901.595.2339
Fax: 866.833.0113
christa.brown@stjude.org
www.stjude.org

St. Jude Children’s Research Hospital is a premier center for research and treatment of potentially fatal childhood diseases, including cancer, blood, genetic, and immunodeficiency disorders. Our mission is to advance cures and prevent pediatric catastrophic diseases.

**St. Louis Fetal Care Institute**

**Booth #219**
Phone: 314.268.4037
Fax: 314.678.4499
fetalcare@ssmhc.com
www.stlouisfetalcare.com

The St. Louis Fetal Care Institute is a comprehensive diagnostic and therapeutic program that specializes in treating congenital problems and structural abnormalities in babies, both in the womb and after birth.

**Transgenomic Inc**

**Booth #314**
Phone: 402.452.5400
Fax: 402.452.5401
info@transgenomic.com
www.transgenomic.com

Transgenomic, Inc. is a global biotechnology company specializing in genetic testing for cardiology (FAMILION), neurology, mitochondrial disorders and oncology. Transgenomic develops assays and offers testing with the goal to improve overall medical diagnosis and outcomes for patients.

**Tute Genomics**

**Booth #721**
Phone: 858.779.4363
adrienne.wallett@tutegenomics.com
www.tutegenomics.com

Tute Genomics is a Utah-based company that is powering the world’s genomic knowledge with a cloud-based solution for precision genome-guided medicine. Genomics is changing healthcare as we know it and Tute is helping to shape the future of medicine: unlocking the genome, personalizing treatment and powering discovery.

**UAB Medical Genomics Laboratory**

**Booth #431**
Phone: 205.934.5562
Fax: 205.998.2929
medgenomics@uabmc.edu
www.genetics.uab.edu/medgenomics

The MGL provides sensitive, comprehensive, reliable and cost-effective testing to help with early and accurate diagnosis of genetic disorders. The MGL has a special focus on and expertise in all forms of the neurofibromatoses, the rasopathies and tuberous sclerosis.

**UCLA Clinical Genomics Center**

**Booth #310**
Phone: 310.775.5884
scwebb@mednet.ucla.edu
www.pathology.ucla.edu/genomics

The UCLA Clinical Genomics Center offers clinical exome sequencing (CES), genetic counseling and expert interpretation by our genomic data board. CES is just part of an extensive menu of genetic and genomic testing for hereditary disorders, cancer diagnosis/management, and other conditions, which are all performed within our CLIA-certified and CAP-accredited molecular diagnostics laboratories. Other available techniques include sanger sequencing, FISH, and chromosomal microarray for both postnatal evaluation and neoplastic conditions.

**University of Chicago Genetic Services Laboratories**

**Booth #318**
Phone: 773.834.0555
Fax: 773.702.9130
ucghlabs@genetics.uchicago.edu
www.dnatesting.uchicago.edu

The University of Chicago Genetic Services Laboratory offers state-of-the-art DNA diagnostic services including exome sequencing. Our focus is on testing for rare genetic diseases, including brain malformations, monogenic diabetes, and ataxia.

**University of Washington**

**Booth #114**
Phone: 800.713.5198
kdestro@uw.edu
www.depts.washington.edu/labweb

**UNMC Human Genetics Laboratory**

**Booth #209**
Phone: 402.559.5070
Fax: 402.559.7248
humangenetics@unmc.edu
www.unmc.edu/geneticslab

Established in 1974, our full-service clinical cytogenetic and molecular genetic laboratory specializes in both constitutional (prenatal /postnatal) and cancer diagnostics (hereditary/hem/onc) and our board certified geneticists and genetic counselors are committed to providing personalized genetic services.

**WVU Medicine**

**Booth #435**
Phone: 304.595.5070
Fax: 304.595.7248
humangenetics@wvu.edu
www.wvuhealthcare.com
### Attendance Verification Codes

**NEW THIS YEAR** - In place of badge scanners, an attendance verification code will be provided in each session to verify attendance. Please utilize this page to record the attendance verification code for each session you attend. **You will be required to enter an attendance verification code for each session you attend** to complete an evaluation and claim CEUs.

See page 2 for additional instructions on evaluating sessions and claiming CEUs.

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