National Society of Genetic Counselors

Program Book

36th Annual Conference

September 13-16, 2017

Greater Columbus Convention Center
Columbus, OH

• GROWING OUR PROFESSION TO NEW HEIGHTS •

CombiMatrix
High-Tech. High-Touch.

Your Choice for Prenatal and Pregnancy Loss Analysis

As one of the most experienced microarray laboratories in the U.S., CombiMatrix has become many clinicians' first choice for cytogenomic testing and offers diagnostic testing for patients from conception to childhood:

CombiSNP Array for Pregnancy Loss Analysis

Did you know over half of first trimester pregnancy losses are due to chromosomal abnormalities? ACOG recommends microarray analysis in lieu of karyotyping for intrauterine fetal death and stillbirth. CombiSNP Array for Pregnancy Loss Analysis has >90% success rate; provides you with the answers you seek and has clear advantages over karyotyping:

- Can be performed on both fresh tissue and formalin-fixed, paraffin-embedded (FFPE) samples
- Does not require a cell culture, which reduces the chance for culture bias or culture failure
- Can detect maternal cell contamination, triploidy, regions of homozygosity and molar pregnancies

CombiSNP Array for Prenatal Analysis

At CombiMatrix, we understand that counseling patients about any type of uncertain finding is challenging; particularly when it comes to variants of uncertain significance (VOUS) identified by prenatal microarray. For this reason, CombiMatrix offers two microarray options for prenatal diagnosis.

1. The CombiSNP Whole Genome Array provides high-resolution genome-wide analysis of regions of known clinical significance while maintaining a high level of probe coverage across the genomic backbone. The Whole Genome Array is ideal for those who are interested in obtaining the maximum amount of information possible.
2. The CombiSNP Targeted Array utilizes a proprietary and intelligent design that adjusts probe coverage across regions not associated with known disorders while maximizing coverage for regions of known clinical interest. The Targeted Array provides the added diagnostic power of microarray testing for the detection of microdeletion and microduplication disorders while minimizing the likelihood of identifying a VOUS.

	Targeted Array	Whole Genome Array
Effective Detection Resolution: Regions of Known Clinical Significance	20 kb	20 kb
Effective Detection Resolution: Genomic Backbone	1 Mb	100 kb
Effective Detection Resolution: Regions of Homozygosity (ROHs) for shared ancestry and uniparental disomy (UPD)	≥ 5 Mb	≥ 5 Mb

Genetic Counseling Services

CombiMatrix is proud to offer our clients complimentary access to expert assistance with case review, test selection and result interpretation through our Genetic Counseling Services program. Genetic counseling services available to clinicians and their professional staff include both telephone and email consultations with a board-certified genetic counselor.

To learn about our other test offerings, including pediatric cytogenomic analysis, PGS and PGD, please stop by the CombiMatrix booth #438.

Win an Amazon Echo Show!

Booth #438

CombiMatrix | 300 Goddard, Irvine, CA 92618 | T: 800.710.0624 | info@combimatrix.om

WELCOME TO COLUMBUS!

On behalf of the National Society of Genetic Counselors (NSGC), the Annual Conference Program Committee and the NSGC Board of Directors, thank you for joining us!

NSGC is excited to bring you new education and networking opportunities designed to help you grow your profession to new heights. Educational sessions will cover a variety of topics at the forefront of genomics, such as managing conflicts of interest, pharmacogenomics and a debate on carrier screening. Educational highlights you do not want to miss include: *The Expanding Genetic Counseling Landscape for Cancers of Childhood, Blood and Brain; Exploring Medical Tourism,* the *Jane Engelberg Memorial Fellowship (JEMF) Presentation* and the *Professional Issues Panel.* Reference page 22 for sessions submitted/sponsored by your NSGC Special Interest Group (SIG). You can make the most of your Annual Conference experience by building your schedule around education sessions specific to your professional interests.

The NSGC Annual Conference is about more than just education! We encourage you to take advantage of the Welcome Reception, SIG meetings, Program Reunions and the NSGC Central area to network with more than 2,100 of your peers. Discover the latest product offerings and services for our profession in the Exhibitor Suite. Catch up with old friends and make new, lasting connections during this year's conference.

We hope you enjoy your time in Columbus, learning about the latest innovations and developments in the profession of genetic counseling and exploring this energetic city!

Renée Chard, MS, CGC
2017 Program Committee Chair

Colleen Schmitt, MS, CGC
2017 Program Committee Vice-Chair

TABLE OF CONTENTS

DOWNLOAD THE OFFICIAL ANNUAL CONFERENCE MOBILE APP

NSGC delivers everything Annual Conference directly to your fingertips via the 2017 NSGC Annual Conference mobile app. View conference session descriptions, speakers and schedule 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 2017" in you 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 Annual Conference using **#NSGC17**.

ABOUT THE 36TH ANNUAL CONFERENCE

Statement of Purpose

The NSGC Annual Conference showcases advancements across the breadth of the genetic counseling profession to provide education and build community. Attendees will gain knowledge of clinical and scientific best practices and insights into emerging research. The conference provides a unique opportunity to engage and network with colleagues and pursue professional development.

Continuing Education

NSGC has been approved to offer up to 31.00 Contact Hours for education at the pre-conference symposia, Annual Conference general sessions and sponsored meal sessions. CEUs earned through these programs will be accepted by the American Board of Genetic Counseling (ABGC) as Category 1 CEUs for genetic counselor recertification. Individuals must be certified at the time of participation in the activity for CEUs to count towards recertification.

Pre-conference symposia	Earn up to:	5.00	Contact Hours
General sessions	Earn up to:	21.50	Contact Hours
Sponsored meal sessions	Earn up to:	4.50	Contact Hours
Total	**Earn up to:**	**31.00**	**Contact Hours**

IMPORTANT: NSGC will only be able to verify the credits you earn 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. Each session listing (beginning on page 13) has a blank space to assist you in tracking verification codes for the sessions that you have attended. Signs with session codes are posted inside of each session room. Some attendees also find it helpful to take a photo of the sign as a reminder of sessions attended. To complete your evaluations, follow these steps:

1. Log in to the NSGC website, and go to **www.nsgc.org/conferenceevaluations**
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 session room and then evaluate the session.
   - 3a. Save each session as you go. 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 in again.)
   - 3b. PLEASE NOTE: Although your responses to the individual session evaluation questions will save each time you click "Save and Continue," the attendance verification code will need to be re-entered if you re-enter that session to edit your responses.
4. Once you have completed evaluations for all sessions attended, you will be able to evaluate the overall conference by selecting "Return to Registered Events."
5. Review your evaluation to make sure you claimed credit for each session you attended. Then print your final certificate of credits earned for your records. Attendees are responsible for maintaining their own record of credits earned. **Note:** Once you have printed your certificate you are not able to go back and edit any more sessions.

The deadline to complete evaluations is November 16, 2017. Please contact the NSGC Executive Office at **nsgc@nsgc.org** if you need assistance.

NSGC will not issue CEU certificates if an evaluation is not completed by November 16, 2017. **No exceptions will be made.**

Overall Conference Evaluation

To evaluate the overall conference, please follow the steps listed below:

1. Log in to the NSGC website, and go to **www.nsgc.org/conferenceevaluations**.
2. Click on the "Evaluation" link to enter the evaluation website.
3. Select the "Overall/Post-event" link to evaluate the conference.

2017 Annual Conference Session Recordings

View sessions you miss in Columbus, earn additional CEUs and review the valuable information you gathered during the conference by pre-purchasing the 2017 Annual Conference recordings. The conference recordings package includes synced audio and PowerPoint Presentations for all pre-conference symposia, plenary and educational breakout sessions.*

The full session recordings package is available for a reduced price of $149 for all conference attendees.** Registered attendees will be able to order the Annual Conference recordings through September 16, 2017, at the discounted rate, or following the conference at an increased rate. The Annual Conference recordings package will be made available to purchasers in January 2018.

To earn Category 1 CEUs for recordings, it is required that you complete and pass a quiz included at the conclusion of each session.

Visit **www.nsgc.org/conference** or stop by the registration desk to add session recordings to your registration.

** With speaker approval*

*** Discounted package rates only available when purchased with conference registration.*

GENERAL INFORMATION

Registration Hours

Tuesday, September 12	5:00 PM – 8:00 PM
Wednesday, September 13	7:00 AM – 8:00 PM
Thursday, September 14	6:30 AM – 7:00 PM
Friday, September 15	7:00 AM – 7:00 PM
Saturday, September 16	7:30 AM – 1:00 PM

Exhibitor Suite Hours

Wednesday, September 13	5:00 PM – 8:00 PM
Thursday, September 14	9:50 AM – 10:15 AM 12:15 PM – 1:30 PM 3:00 PM – 3:45 PM 5:30 PM – 7:45 PM* **Visit Thermo Fisher at Booth #605 to pick up (1) drink ticket valid for beer/wine/soda at any of the bars on Thursday only. Tickets are available at a first-come, first-served basis.*
Friday, September 15	9:50 AM – 10:30 AM 12:00 PM – 3:00 PM 2:45 PM: Passport to Prizes Drawing at NSGC Central

Job Boards

Bulletin boards with push-pins are available in the NSGC Central area in the Exhibitor Suite for attendees to post job opportunities. Other forms of advertising are not permitted. Posted material will be monitored and inappropriate information is subject to removal at NSGC's discretion.

Attendee List Information

Attendee lists along with session handouts are posted on the NSGC website and an updated list will be posted following the conference. Attendee lists are provided solely for networking and may not be used for solicitation purposes. NSGC is not responsible for errors or omissions.

Handouts and Presentations

NSGC offers electronic versions of session handouts when submitted in advance by speakers. All session handouts (provided by speakers) are posted on the NSGC website and in the NSGC Annual Conference mobile app, and will be available until March 1, 2018.

To download session handouts go to:
www.nsgc.org/conferencehandouts
To download pre-conference symposia handouts go to:
www.nsgc.org/PCShandouts

Business Center Hours

Guest Services Centers are located near the South Café and Marketplace and in the north section of the Main Concourse.

Tuesday-Friday	7:30 AM – 5:30 PM
Saturday	9:30 AM – 3:00 PM

Internet Access

Wireless Internet is available in all meeting spaces and common areas at the Greater Columbus Convention Center. Internet at the Convention Center can be accessed by using the network **ALNYLAM#304**. The password is **nsgc2017**.

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

Alnylam® PHARMACEUTICALS

Conflict of Interest Disclosures

All presenters are required to disclose any conflicts of interest (COI) related to their presentation.
To view these COI disclosures, visit
www.nsgc.org/2017conferencedisclosures.

GENERAL INFORMATION (CONTINUED)

Sponsored Sessions

Sponsored meal sessions require pre-registration. If you pre-registered to attend a session, a ticket was printed with your badge. 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, please visit the registration desk to check availability for each session.

Please note that because quantities are limited, 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

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Executive Director
Meghan Carey
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Thank you to our
2017 Digital Ambassadors!

NSGC GENE POOL

National Society of Genetic Counselors

Meet our ambassadors and join the conversation:
#NSGCGenePool

Genetic Counselor Awareness Day

Partners in Your Genetic Health Care

November 9, 2017

#IAmAGeneticCounselor

SCHEDULE-AT-A-GLANCE

KEY:

- Registration and Breaks
- Pre-conference Symposia
- Plenary Sessions
- Committee, SIG and Leadership Activities
- Exhibitor Suite
- Platform and Poster Presentation
- Educational Breakout Sessions and Workshops
- Sponsored Sessions
- Program Reunions

WEDNESDAY, SEPTEMBER 13

7:00 AM – 8:00 AM	**Pre-conference Symposia Breakfast** – *Upper and Lower B Pod Foyers*					
7:00 AM – 8:00 AM	**Education SIG Meeting** – *D183*					
7:00 AM – 8:00 PM	**Registration Open** – *Hall C Foyer*					
8:00 AM – 2:00 PM	CEU **Pre-conference Symposia**					
	A01 Addressing Efficiency of the Genetics Workforce: Hiring Genetic Counseling Assistants, Advocating for Genetic Counselor Positions and Implementing Alternate Service Delivery Models *Room B130-132*	**A02** Cascade Testing When the Stakes Are High: Novel Research Findings, Innovative Technological Tools and Direct Contact to Assist in Family Communication and Evaluation of At-risk Relatives *Room C170-172*	**A03** The Expanding Genetic Counseling Landscape for Cancers of Childhood, Blood and Brain *Room C160 AB-162 AB*	**A04** Navigating Variant Interpretation in Cardiovascular Genetics: Current Challenges, Gene-specific Considerations and Efforts Towards Standardization *Room C150-151*	**A05** Unlocking the Acronyms: Research Genetic Counselors and the NIH Partnering Together to Improve Patient Care *Room B240-245*	**A06** What's Loss Got to Do With It? Working with Grief as a Genetic Counselor *Room B230-235*
10:00 AM – 10:30 AM	**Pre-conference Symposia Break** – *Upper and Lower B Pod Foyers*					
1:45 PM – 2:30 PM	**NSGC Special Interest Group (SIG) Fair** – *Short North Ballroom B*					
1:45 PM – 3:00 PM	**Welcome to the Annual Conference: First-time Attendee Orientation** – *Short North Ballroom A*					
2:00 PM – 3:00 PM	**Cystic Fibrosis SIG Meeting** – *Room D183*			**Leadership and Management SIG Meeting** – *Room D280*		
3:00 PM – 3:15 PM	**Opening Remarks** – *Battelle Grand Ballroom*					
3:15 PM – 3:45 PM	CEU **A07 Taking Genomics Mainstream: A Framework for Innovation** – *Battelle Grand Ballroom*					
3:45 PM – 4:15 PM	**Natalie Weissberger Paul National Achievement Award** – *Battelle Grand Ballroom*					
4:15 PM – 4:45 PM	CEU **A08 At a Crossroads of Genetic Fate: A Woman Affected by Muscular Dystrophy and the Olympic Medalist** – *Battelle Grand Ballroom*					
5:00 PM – 8:00 PM	**Welcome Reception in Exhibitor Suite** – *Halls C & D*					
5:15 PM – 6:30 PM	CEU **A09 Posters with Authors, Group A Authors** – *Halls C & D*					
6:30 PM – 7:30 PM	**ART/Infertility SIG Meeting** *Room D283*	**Health Information Technology SIG Meeting** *Room D183*		**Neurogenetics SIG Meeting** *Room D280*	**Precision Medicine SIG Meeting** *Room D181*	
6:30 PM – 8:00 PM	**Various Program Reunions** – See page 11 for more information					
7:30 PM – 8:30 PM	**Public Health SIG Meeting** – *Room D183*			**International SIG Meeting** – *Room D284*		

THURSDAY, SEPTEMBER 14

6:30 AM – 7:00 PM	**Registration Open** – *Hall C Foyer*	
7:00 AM – 8:00 AM	**Accreditation Council for Genetic Counseling (ACGC) Office Hours** – *Room D182*	
7:00 AM – 8:00 AM	**Conference Breakfast** – *Battelle Grand Foyer*	
7:00 AM – 7:45 AM	CEU **Sponsored Breakfast Sessions**	
	B01 How Do You Know? Key Factors in Quality Expanded Carrier Screening: From Parental Testing to Prenatal Diagnosis *Short North Ballroom B* *Sponsored by: Integrated Genetics & Sequenom*	**B02** Population Testing: Bringing Genetics to Mainstream Medicine *Short North Ballroom A* *Sponsored by: Invitae*

SCHEDULE-AT-A-GLANCE (CONTINUED)

KEY:

- Registration and Breaks
- Pre-conference Symposia
- Plenary Sessions
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THURSDAY, SEPTEMBER 14 (continued)

7:00 AM – 7:45 AM	**NSGC 2018 Board and Committee Leadership Program** – *Room D283*					
7:00 AM – 7:45 AM	**NSGC SIG Leader Networking Breakfast** – *Room D181*					
8:00 AM – 8:35 AM	CEU **B03 2017 Janus Lecture** – *Battelle Grand Ballroom*					
8:35 AM – 9:20 AM	CEU **B04 NSGC State of the Society Address** – *Battelle Grand Ballroom*					
9:20 AM – 9:50 AM	**Incoming Presidential Address** – *Battelle Grand Ballroom*					
9:50 AM – 10:15 AM	**Networking Break in Exhibitor Suite** – *Halls C & D*					
10:15 AM – 12:15 PM	CEU **Workshops and Lecture**					
	B05 Lecture: Are You Ready to Discuss Genetic Discrimination? Your Patients Expect You to Be *Battelle Grand Ballroom*	**B06 Workshop:** A Different Approach: Motivational Interviewing Methods of Information-giving *Room B130-132*	**B07 Workshop:** Deaf-blindness and Sensory Deficit: The Impact on Individuals with Genetic Syndromes and Strategies and Resources to Aid Families in Obtaining Appropriate Services *Room C150-151*	**B08 Workshop:** FOCUS on You: Highlighting Your Role in Genetic Counseling Outcomes *Room B230-235*	**B09 Workshop:** Teaching Genomic Medicine: A Train-the-trainer Workshop *Room C170-172*	**B10 Workshop:** Tips and Tools for Utilizing Clinical Resources for Variant Evaluation *Room C160 AB-162 AB*
12:15 PM – 1:00 PM	**Access and Service Delivery Committee Meeting** – *Room D284*					
12:15 PM – 1:30 PM	**Sponsored Lunch Sessions**					
	B11 The Clinical Impact of *De Novo* Variants Identified by NGS in Prenatal and Postnatal Cohorts *Short North Ballroom A* *Sponsored by: Baylor Genetics*			The First Trimester Genetic Risk Assessment: Methodology Matters *Short North Ballroom B* *Sponsored by: Counsyl*		
12:15 PM – 1:30 PM	**Break and Exhibitor Hours** – *Halls C & D*					
12:15 PM – 1:30 PM	**Cancer SIG Meeting** – *Room D281*					
12:30 PM – 1:15 PM	**Practice Guidelines Committee Meeting** – *Room D182*					
12:30 PM – 1:30 PM	**Membership Committee Meeting** *Room D280*		**Marketing & Communications Workgroup Meeting** *Room D282*		**Education Committee Meeting** *Room D283*	
12:30 PM – 1:00 PM	**American Board of Genetic Counseling (ABGC) Business Meeting –** *Battelle Grand Ballroom*					
12:45 PM – 1:30 PM	**Public Policy Committee Meeting** – *Room D183*			**Psychiatric SIG Meeting** – *Room D181*		
1:00 PM – 1:30 PM	**Accreditation Council For Genetic Counseling (ACGC) Presentation –** *Battelle Grand Ballroom*					
1:30 PM – 3:00 PM	CEU **Educational Breakout Sessions**					
	B12 Achieving True Diversity in the Age of Genomic Medicine *Room C170-172*	**B13** Bioinformatics for Genetic Counselors 3.0: New Methods in Clinical Testing *Room B230-235*	**B14** Inherited Lung Cancer Risks: Looking Beyond Environmental Factors *Batelle Grand Ballroom*	**B15** Reversing the Bystander Effect: Empowering Genetic Counselors to Identify Fraud, Waste and Abuse and Create Change in our National Healthcare System *Room C160 AB-162 AB*	**B16** Translational Medicine in Epilepsy Genetics *Room B130-132*	

THURSDAY, SEPTEMBER 14 (continued)

3:00 PM – 3:45 PM	**Exhibitor Hours and Networking Break** – *Halls C & D*				
3:45 PM – 5:00 PM	CEU **B17 Dr. Beverly Rollnick Memorial Lecture** – *Battelle Grand Ballroom*				
5:00 PM – 5:30 PM	CEU **B18 Jane Engelberg Memorial Fellowship (JEMF) Presentation** – *Battelle Grand Ballroom*				
5:30 PM – 7:45 PM	**Exhibitor Hours** – *Halls C & D*				
5:45 PM – 7:00 PM	CEU **B19 Posters with Authors, Group B Authors** – *Halls C & D*				
6:00 PM – 8:30 PM	**Various Program Reunions** – See page 11 for more information				
7:00 PM – 8:15 PM	CEU **Sponsored Evening Sessions**				
	B20 Precisely Paired: Applying Somatic and Germline Testing for Lynch Syndrome *Short North Ballroom B* *Sponsored by: Ambry Genetics*			**B21** The Power of a SNP-based Non-invasive Prenatal Test (NIPT) in Evaluating Twin Pregnancies: How Identifying Zygosity Can Inform Prenatal Care *Short North Ballroom A* *Sponsored by: Natera*	

FRIDAY, SEPTEMBER 15

7:00 AM – 8:00 AM	**Conference Breakfast** – *Battelle Grand Foyer*				
7:00 AM – 7:00 PM	**Registration Open** – *Hall C Foyer*				
7:00 AM – 7:45 AM	CEU **Sponsored Breakfast Sessions**				
	Termination of Pregnancy For Indications of Genetic Disorder in Advanced Gestations *Short North Ballroom B* *Sponsored by: Boulder Abortion Clinic, PC*			**C01** What Genetic Counselors Should Know: Clinical Whole Genome Sequencing for Patients with Rare and Undiagnosed Genetic Disease *Short North Ballroom A* *Sponsored by: Illumina*	
7:00 AM – 7:45 AM	**NSGC Past Board Member Breakfast** – *Room D181*				
7:00 AM – 7:45 AM	**Cardiovascular SIG Meeting** – *Room D283*	**Industry SIG Meeting** – *Room D182*		**Pediatric SIG Meeting** – *Room D284*	
7:00 AM – 8:00 AM	**Accreditation Council for Genetic Counseling (ACGC) Office Hours** – *Room D183*				
8:00 AM – 8:35 AM	CEU **C02 Genetic Travel Agent? Exploring Medical Tourism and Genetic Counselors' Role in Discussing Controversial Genetic Treatments on the International Stage** – *Battelle Grand Ballroom*				
8:35 AM – 8:50 AM	CEU **C03 Best Full Member Abstract Award** – *Battelle Grand Ballroom*				
8:50 AM – 9:50 AM	CEU **C04 Professional Issues Panel** – *Battelle Grand Ballroom*				
9:50 AM – 10:30 AM	**Break and Exhibitor Hours** – *Halls C & D*				
10:30 AM – 12:00 PM	CEU **Educational Breakout Sessions**				
	C05 Inside Pandora's Box: Implications of ACMG Secondary Findings for Cardiology and Oncology Clinical Practice *Batelle Grand Ballroom*	**C06** Is More Better? A Debate on Carrier Screening for the Next Generation *Room C160 AB-162 AB*	**C07** Returning Clinically Relevant Exome Results for Developmental Brain Disorders to Adult Research Participants *Room B230-235*	**C08** Using Evidence to Inform Your Practice: What Do We Know from Studies That We Can Put to Good Use? *Room C170-172*	**C09** Valuating Genetic Counseling: Health Economics and Outcomes Research for Genetic Counselors *Room B130-132*
12:00 PM – 1:15 PM	**Genomic Technologies SIG Meeting** *Room D182*	**Late Career SIG Meeting** *Room D283*	**Metabolism/LSD SIG Meeting** *Room D280*	**Research SIG Meeting** *Room D183*	**Student/New Member SIG Meeting** *Room D181*
12:00 PM – 3:00 PM	**Exhibitor Hours** – *Halls C & D*				
12:00 PM – 1:15 PM	CEU **Sponsored Lunch Sessions**				
	C10 Touchdown, NGS! A Champion in Variant Detection *Short North Ballroom A* *Sponsored by: GeneDx*			**C11** Increasing the Refinement of Breast Cancer Risk Utilizing SNPs *Short North Ballroom B* *Sponsored by: Myriad Genetic Laboratories*	

SCHEDULE-AT-A-GLANCE (CONTINUED)

KEY:

- Registration and Breaks
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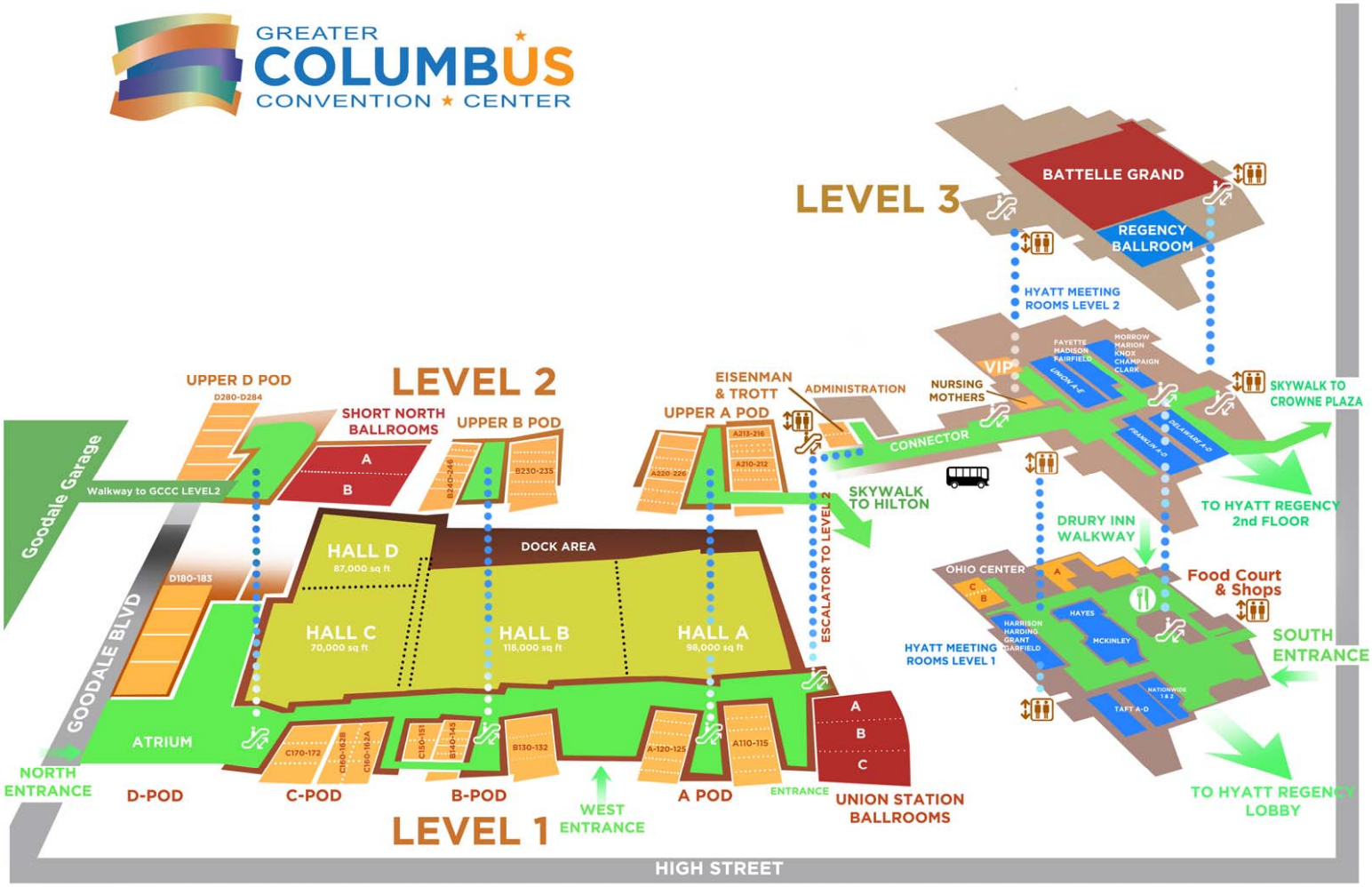
FRIDAY, SEPTEMBER 15 (continued)					
1:15 PM – 2:30 PM	CEU **C12 Posters with Authors, Group C Authors** – *Halls C & D*				
2:30 PM – 3:00 PM	**Networking Break in Exhibitor Suite** – *Halls C & D*				
2:45 PM	**Passport to Prizes** – *Halls C & D, NSGC Central*				
3:00 PM – 4:15 PM	CEU **Platform Presentations**				
	C13 Patient Diversity *Room C160 AB-162 AB*	**C14** Professional Issues *Batelle Grand Ballroom*	**C15** Counseling/ Psychosocial *Room C170-172*	**C16** Neurology/ Cardiology *Room B230-235*	**C17** Variant Classification *Room B130-132*
4:30 PM – 5:35 PM	CEU **C18 JEMF Research Plenary Session** – *Battelle Grand Ballroom* *Sponsored by the Jane Engelberg Memorial Fellowship (JEMF)*				
5:35 PM – 5:50 PM	CEU **C19 Beth Fine Kaplan Best Student Abstract Award** – *Battelle Grand Ballroom*				
5:50 PM – 6:20 PM	CEU **C20 Audrey Heimler Special Project Award Presentation** – *Battelle Grand Ballroom*				
6:30 PM – 8:30 PM	***Genome* Magazine Code Talker Award Ceremony and Celebration** – *Short North Ballroom A* *Presented by: Genome* Magazine*; Sponsored by: Invitae*				
8:00 PM	**Various Program Reunions** – See page 11 for more information				
SATURDAY, SEPTEMBER 16					
7:00 AM – 8:00 AM	**Conference Breakfast** – *Battelle Grand Foyer*				
7:00 AM – 7:45 AM	CEU **Sponsored Breakfast Sessions**				
	Recent Development of No-cost Testing Programs for Pediatric Epilepsy and Select Lysosomal Storage Disorders *Short North Ballroom A* *Sponsored by: BioMarin Pharmaceutical Inc.*	**D01** Preeclampsia Screening for the Prenatal Genetic Counselor *Short North Ballroom B* *Sponsored by: Eurofins NTD*			
7:30 AM – 1:00 PM	**Registration Open** – *Hall C Foyer*				
8:00 AM – 8:50 AM	CEU **D02 Conflict of Interest: Aren't We All Conflicted on Some Level?** – *Battelle Grand Ballroom*				
8:00 AM – 11:30 AM	**Annual Conference Outreach Event** – *Room D281*				
8:50 AM – 9:50 AM	CEU **D03 Late-Breaking Plenary Session** – *Battelle Grand Ballroom*				
9:50 AM – 10:10 AM	**Networking Break** – *Upper and Lower B-Pod Foyers*				
10:10 AM – 11:15 AM	CEU **Educational Breakout Sessions**				
	D04 A Cardiac Crash Course on Metabolic Disease *Room B130-132*	**D05** Ethical Principles and Shifting Paradigms for Genetic Testing of Minors for Adult Onset Conditions *Battelle Grand Ballroom*	**D06** Into the Weeds of NIPS: A Survey of Algorithms for Analysis of Aneuploidies, Fetal Fraction and Microdeletions *Room C160 AB-162 AB*	**D07** Mitochondria: Functions, Genomics and Disease *Room C170-172*	**D08** Pharmacogenetics for Genetic Counselors *Room B230-235*
11:30 AM – 12:45 PM	CEU **Platform Presentations**				
	D09 Access and Service Delivery *Room C170-172*	**D10** Education and Training *Room C150-151*	**D11** Cancer *Room C160 AB-162 AB*	**D12** Prenatal and Pediatrics *Room B230-235*	**D13** Testing Innovations *Room B130-132*

REUNION INFORMATION

Please visit the NSGC Annual Conference mobile app for updated reunion information.

Time	Reunion Name	Location
Wednesday, September 13		
6:30 PM	The Emory University School of Medicine	The Elevator Brewing Co. | 161 N. High St., Columbus, OH 43215 | (614) 228-0500
6:30 PM	University of Utah	Three Legged Mare Irish Pub | 401 N. Front St., Columbus, OH 43215 | (614) 222-4950
6:45 PM	University of Oklahoma	Nada | 220 W. Nationwide Blvd., Columbus, OH 43215 | (614) 715-8260
7:00 PM	University of Alabama at Birmingham	Callahan's Pub | 520 Park St., Columbus, OH 43215 | (614) 223-1200
7:00 PM	University of Arkansas for Medical Sciences	Gordon Biersch Brewery Restaurant | 401 N. Front St., Columbus, OH 43215 | (614) 246-2900
7:30 PM	University of Colorado	Harvest Pizzeria – German Village | 495 S. 4th St., Columbus, OH 43206 | (614) 824-1769
7:30 PM	University of Maryland	Barley's Brewcadia | 467 N. High St., Columbus, OH 43215 | (614) 228-8831
8:00 PM	Case Western Reserve University	The Pearl | 641 N. High St., Columbus, OH 43215 | (614) 227-0151
8:00 PM	Stanford University	Novak's Tavern & Patio | 475 N. High St., Columbus, OH 43215 | (614) 224-8821
8:30 PM	Canadian Programs	Eleven | 591 N. High St., Columbus, OH 43215 | (614) 225-9611
8:30 PM	CSU Stanislaus UC Berkeley	Hubbard Grille | 793 N. High St., Columbus, OH 43215 | (614) 291-5000
Thursday, September 14		
6:30 PM	The Ohio State University	Hubbard Grille | 793 N. High St., Columbus, OH 43215 | (614) 291-5000
7:00 PM	Boston University	Short North Pint House | 780 N. High St., Columbus, OH 43201 | (614) 429-3986
7:00 PM	Mt. Sinai (Icahn School of Medicine)	Blackpoint Restaurant | 570 N. High St., Columbus, OH 43215 | (614) 487-0539
7:00 PM	Sarah Lawrence College	Bodega | 1044 N. High St., Columbus, OH 43201 | (614) 299-9399
7:00 PM	University of Pittsburgh	Gordon Biersch Brewery Restaurant | 401 N. Front St., Columbus, OH 43215 | (614) 246-2900
7:00 PM	University of South Carolina	Callahan's Pub | 520 Park St., Columbus, OH 43215 | (614) 223-1200
7:00 PM	University of Wisconsin - Madison	Hofbräuhaus | 800 Goodale Blvd., Columbus, OH 43212 | (614) 294-2437
7:30 PM	Northwestern University	Barley's Brewcadia | 467 N. High St., Columbus, OH 43215 | (614) 228-8831
7:30 PM	University of Texas at Houston	Sidebar | 122 E. Main St., Columbus, OH 43215 | (614) 228-9041
7:30 PM	Wayne State University	Novak's Tavern & Patio | 475 N. High St., Columbus, OH 43215 | (614) 224-8821
Friday, September 15		
8:00 PM	Arcadia University	Callahan's Pub | 520 Park St., Columbus, OH 43215 | (614) 223-1200
8:30 PM	Brandeis University	Denmark on High | 463 N. High St., Columbus, OH 43206 | (614) 914-6700
8:30 PM	University of Michigan	Gordon Biersch Brewery Restaurant | 401 N. Front St., Columbus, OH 43215 | (614) 246-2900
8:30 PM	University of Minnesota	Tastings – A Wine Experienced | 958 N. High St., Columbus, OH 43201 | (614) 867-5525

CONVENTION CENTER MAP



SESSION SPEAKERS + OBJECTIVES

WEDNESDAY, SEPTEMBER 13

Pre-conference Symposia

8:00 AM – 2:00 PM

A01 Addressing Efficiency of the Genetics Workforce: Hiring Genetic Counseling Assistants, Advocating for Genetic Counselor Positions and Implementing Alternate Service Delivery Models

5.0 Contact Hours

Bradley Williams, MS, CGC, GeneDx; Parker Read, MS, CGC, UT Southwestern; Kirsty McWalter, MS, CGC, GeneDx; Jennifer Gamm Ruschman, ScM, Cincinnati Children's Hospital Medical Center; Margaret Bradbury, MS, CGC, MSHS, GeneDx; Sara Pirzadeh-Miller, MS, CGC, UT Southwestern; Erin Armenti, MS, LCGC, Reprogenetics; Lauren Desrosiers, GeneDx

- Describe two key benefits and challenges to employing a genetic counseling assistant, implementing a genetic counselor career/salary ladder and using alternate service delivery models.
- Identify three roles within your workplace that a genetic counseling assistant could assume.
- Produce a personalized plan to support, hire and utilize a genetic counseling assistant at your workplace.
- Produce a proposal for implementing a career/salary ladder within your workplace.

Attendance Verification Code: _____

A02 Cascade Testing When the Stakes Are High: Novel Research Findings, Innovative Technological Tools and Direct Contact to Assist in Family Communication and Evaluation of At-risk Relatives

5.0 Contact Hours

Amy Sturm, MS, CGC, LGC, Geisinger Health System; Janet Williams, MS, LGC, Geisinger Health System; Susan Vadaparampil, PhD, Moffitt Cancer Center; Patrick Lynch, JD, MD, University of Texas MD Anderson Cancer Center; Stephanie Harris, CGC, Brigham and Women's Hospital; Leigha Senter, MS, LGC, Ohio State University Wexner Medical Center; Nicola Poplawski, MBChB, FRACP, MD, South Australian Clinical Genetics Service; Jennifer Wagner, JD, PhD, Geisinger Health System; Jessica Mozersky, PhD, Washington University School of Medicine; Karen Kovak, MS, CGC, Oregon Health & Science University; Cassandra Pisieczko, BA, CHRA, Geisinger Health System

- Appraise factors influencing uptake of genetic services by at-risk relatives.
- Formulate novel methods of contacting at-risk relatives to promote uptake of genetics services including the evaluation of technological tools and direct contact.
- Evaluate the ethico-legal issues that arise with direct contact.
- Assess health policy issues regarding the systematic implementation of cascade testing.

Attendance Verification Code: _____

A03 The Expanding Genetic Counseling Landscape for Cancers of Childhood, Blood and Brain

5.0 Contact Hours

Michelle Jackson, MS, CGC, Ambry Genetics; Krista Qualmann, MS, CGC, University of Texas Health Science Center at Houston; Sarah Bannon, MS, CGC, University of Texas MD Anderson Cancer Center; Courtney DiNardo, MD, University of Texas MD Anderson Cancer Center; Brian Reys, MS, CGC, UT Southwestern Medical Center; Elizabeth Varga, MS, LGC, Nationwide Children's Hospital; Kami Wolfe Schneider, MS, CGC, Children's Hospital Colorado, University of Colorado; Erin Dunbar, MD, Piedmont Healthcare

- Summarize the differences between adult and pediatric cancer approaches in a variety of clinical genetic counseling settings.
- Apply a genetic risk assessment on a patient with a personal and/or family history of brain tumors, hematologic malignancies and pediatric cancers in a variety of clinical genetic counseling settings.
- Formulate referral protocols for brain tumors, hematologic malignancies and pediatric cancers in a variety of clinical genetic counseling settings.
- Examine clinical quandaries and ethical considerations in the setting of these indications.

Attendance Verification Code: _____

A04 Navigating Variant Interpretation in Cardiovascular Genetics: Current Challenges, Gene-specific Considerations and Efforts toward Standardization

5.0 Contact Hours

Emily James, MS, LCGC, Invitae; Jill Dolinsky, MS, CGC, Ambry Genetics; Colleen Caleshu, ScM, LCGC, Stanford University; Juliann McConnell, MS, LCGC, GeneDx; Katherine Spoonamore, MS, CGC, LGC, Indiana University; Birgit Funke, PhD, FACMG, Veritas Genetics; John Garcia, PhD, Invitae; Ana Morales, MS, CGC, Ohio State University; Melissa Kelly, MS, CGC, Geisinger Health System; Melanie Care, MSc, CCGC, University Health Network, Toronto General Hospital; Leah Williams, MS, CGC, GeneDx

- List potential sources of differing variant interpretations between laboratories.
- Describe laboratory efforts to resolve differences in variant interpretation.
- Summarize recent research findings on the role clinical genetic counselors can play in variant interpretation.
- Identify ways to address discrepancies between laboratory interpretations, or between laboratory and clinician interpretations, for variants in your own practice.

Attendance Verification Code: _____

SESSION SPEAKERS + OBJECTIVES (CONTINUED)

A05 Unlocking the Acronyms: Research Genetic Counselors and the NIH Partnering Together to Improve Patient Care

5.0 Contact Hours

Lucia Hindorff, PhD, MPH, National Institutes of Health; Joni Rutter, PhD, National Institutes of Health; Carrie Blout, MS, CGC, Brigham and Women's Hospital; Sarah Scollon, MS, CGC, Baylor College of Medicine; Shawn Fayer, MSc, MS, CGC, Brigham and Women's Hospital; Julianne O'Daniel, MS, CGC, University of North Carolina, Chapel Hill; Toni Pollin, MS, PhD, CGC, University of Maryland School of Medicine; Lori Orlando, MD, MHS, Duke University; Maureen Smith, MS, CGC, Northwestern University; Christin Hoell, MS, CGC, Northwestern University; Danielle Azzariti, MS, CGC, Partners Healthcare; Juliann Savatt, MS, LGC, Geisinger Health System

- Describe the goals of six NIH-funded genomic medicine networks.
- Define the roles of genetic counselors in these NIH-funded genomic medicine networks.
- Describe how the research generated by these networks is improving knowledge of genomic medicine and impacting patient care.

Attendance Verification Code: _____

A06 What's Loss Got to Do With It? Working with Grief as a Genetic Counselor

5.0 Contact Hours

Amanda Bergner, MS, CGC, Sarah Lawrence College; Julie C. Sapp, ScM, CGC, National Institutes of Health; Summer Segal, MS, LCGC, PhDc, UCSF Medical Center; Morgan Similuk, ScM, National Institutes of Health

- Explore models of grief theory and narrative medicine and their applicability to many areas of genetic counseling practice, including prenatal, pediatrics and adult medicine, as well as cancer, neurology and cardiology.
- Evaluate how case examples of patients and counselors working around areas of grief and loss in a variety of clinical specialties can further the integration of theory, tools and techniques into participants' own practices.
- Discuss how genetic counselors can engage themselves and clients around issues of grief and loss to advance the profession and their own practice.

Attendance Verification Code: _____

Plenary Sessions

3:15 PM – 3:45 PM

A07 Taking Genomics Mainstream: A Framework for Innovation

0.50 Contact Hour

Elizabeth Kearney, MS, LCGC, MBA, PWNHealth

- Examine broad technology and societal trends for their relevance to genetic counseling service delivery.
- Deconstruct genetic counseling to identify where genetic counselors uniquely fill gaps that will persist over time.

Attendance Verification Code: _____

4:15 PM – 4:45 PM

A08 At a Crossroads of Genetic Fate: A Woman Affected by Muscular Dystrophy and the Olympic Medalist

0.50 Contact Hour

Jill Viles

- Identify characteristics of one individual affected by Emery-dreifuss muscular dystrophy.
- Discuss hurdles faced by a person with a very rare genetic disorder in terms of achieving an accurate diagnosis.

Attendance Verification Code: _____

THURSDAY, SEPTEMBER 14

Sponsored Breakfast Sessions

7:00 AM – 7:45 AM

B01 How Do You Know? Key Factors in Quality Expanded Carrier Screening: From Parental Testing to Prenatal Diagnosis

0.50 Contact Hour

Ruth Heim, PhD, FACMG, Integrated Genetics; Ellen Schlenker, MS, CGC, Integrated Genetics; Brittany Dyr, MS, CGC, Integrated Genetics

- Explain the need for expanded carrier screening.
- Recognize key factors in quality expanded carrier screening, including clinically relevant tests, technology considerations, data analysis and interpretation and prenatal diagnosis.
- Identify clinical scenarios in carrier screening for which combinations of quality considerations support the continuum of patient care.

Attendance Verification Code: _____

Sponsored by: Integrated GENETICS sequenom

B02 Population Testing: Bringing Genetics to Mainstream Medicine

0.50 Contact Hour

Jillian Huang, MS, MPH, CGC, UT Southwestern Medical Center; Peter Hulick, MD, NorthShore University Health System

- Determine the utility of population screening for inherited colorectal cancer.
- Explore implementing proactive population-based screening into a large health system.

Attendance Verification Code: _____

Sponsored by: INVITAE

Plenary Sessions

8:00 AM – 8:35 AM

B03 2017 Janus Lecture

0.50 Contact Hour

Dee Quinn, MS, CGC, University of Arizona

- Discuss the past, present and future of teratology.

Attendance Verification Code: _____

8:35 AM – 9:20 AM

B04 NSGC State of Society Address

0.75 Contact Hour

Mary Freivogel, MS, CGC, Invision; Sally Jobe

- 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 2017.
- Identify opportunities for professional development through participation in NSGC volunteer opportunities.

Attendance Verification Code: _____

9:20 AM – 9:50 AM

Incoming Presidential Address

Erica Ramos, MS, CGC, Illumina, 2018 NSGC President

- Welcome NSGC President-Elect Erica Ramos, as she introduces herself to NSGC members and outlines her vision for NSGC and the genetic counseling profession in 2018.

Lecture (Concurrent with Workshops)

10:15 AM – 12:15 PM

B05 Are You Ready to Discuss Genetic Discrimination? Your Patients Expect You to Be

2.0 Contact Hours

Anya Prince, JD, MPP, University of Iowa School of Law; Jennifer Wagner, JD, PhD, Geisinger Health Systems; Ida Ngueng Feze, JD, LLM, McGill University; Misha Rashkin, MS, CGC, Helix

- Identify key provisions of Genetic Information Nondiscrimination Act (GINA), including how GINA interacts with other federal laws and legislative gaps that GINA does not cover.
- Distinguish privacy and anti-genetic discrimination laws as well as the varying scopes of the federal anti-genetic discrimination law (GINA) and a model state anti-discrimination law (Cal-GINA).
- Identify key features and challenges of genetic discrimination laws and policies around the world.
- Indicate emerging fields of genetic discrimination, beyond those of insurance and employment.

Attendance Verification Code: _____

Workshops

Space is limited; pre-registration required.

B06 A Different Approach: Motivational Interviewing Methods of Information-giving

2.0 Contact Hours

Erin Ash, MS, CGC, Stamford Hospital

- Identify current challenges for information-giving in the genetic counseling encounter.
- Apply Motivational Interviewing (MI) spirit to Reciprocal Engagement Model educational goals in genetic counseling encounters.
- Contrast MI strategies for information giving in genetic counseling encounters.

Attendance Verification Code: _____

B07 Deaf-blindness and Sensory Deficit: The Impact on Individuals with Genetic Syndromes and Strategies and Resources to Aid Families in Obtaining Appropriate Services

2.0 Contact Hours

Meg Hefner, MS, CGC, Saint Louis University School of Medicine; Emily Fassi, MS, CGC, Washington University School of Medicine; Susan Wiley, MD, Cincinnati Children's Hospital Medical Center; Leanne Parnell, BA, Ohio Center for Deafblind Education; Jennifer Kile; Holly Ward; Sally Strange, RN, CHARGE Syndrome Foundation

- List three examples of genetic disorders associated with major sensory deficits and/or deaf-blindness.
- Identify the four most important features in making a clinical diagnosis of CHARGE syndrome.
- Compare early child development in typical children with development in children with hearing loss, vision loss and other sensory deficits.
- Identify the relevance of state deaf-blind projects to genetic counselors.

Attendance Verification Code: _____

B08 FOCUS on You: Highlighting Your Role in Genetic Counseling Outcomes

2.0 Contact Hours

Heather Zierhut, PhD, MS, CGC, University of Minnesota; Krista Redlinger-Grosse, PhD, ScM, CGC, University of Minnesota; Deborah Cragun, PhD, MS, CGC, University of South Florida; Joy Redman, MS, MBA, CGC, Quest Diagnostics; Gillian Hooker, PhD, ScM, CGC, NextGxDx

- Describe the Framework for Outcomes in Clinical Communication Services (FOCUS) and list component domains.
- Identify goals, strategies, process measures and outcomes that are applicable to clinical care, research, education or industry.
- Apply FOCUS by tailoring the framework according to your desired goals or outcomes.

Attendance Verification Code: _____

SESSION SPEAKERS + OBJECTIVES (CONTINUED)

B09 Teaching Genomic Medicine: A Train-the-trainer Workshop

2.0 Contact Hours

Richard Haspel, MD, PhD, Beth Israel Deaconess Medical Center; Kate Shane-Carson, MS, LGC, The Ohio State University; Madhuri Hegde, PhD, FACMG, Emory University; Elizabeth Varga, MS, LGC, Nationwide Children's Hospital

- Describe the core components of an introductory genomics curriculum for clinical trainees.
- Demonstrate teaching techniques involved in a team-based learning/ flipped classroom activity.
- Apply the team-based learning and flipped classroom approach including use of online genomics tools.

Attendance Verification Code: _____

B10 Tips and Tools for Utilizing Clinical Resources for Variant Evaluation

2.0 Contact Hours

Erin Riggs, MS, CGC, Geisinger Health System; Danielle Azzariti, MS, CGC, Partners HealthCare Personalized Medicine; Anne O'Donnell Luria, MD, PhD, Boston Children's Hospital, Harvard Medical School; Karen Wain, MS, LGC, Geisinger Health System

- Describe the elements of variant interpretation and how to gather evidence for evaluation using publicly available resources.
- Perform queries using ClinGen tools, NCBI resources such as ClinVar and the gnomAD browser for common use cases.
- Determine which tools to use in different clinical scenarios.
- Apply variant evaluation concepts to genetic counseling practice.

Attendance Verification Code: _____

Sponsored Lunch Sessions

12:15 PM – 1:30 PM

The First Trimester Genetic Risk Assessment: Methodology Matters

Dale Muzzey, PhD, Counsyl; Beth Denne, MS, CGC, Counsyl; Sarah Hash, MS, CGC, Maternal-Fetal Medicine Associates of Maryland

- Review technological advances in carrier screening that maximize detection rates for serious, actionable disorders.
- Assess the impact on aneuploidy detection, false negatives and invasive procedures among available non-invasive prenatal screening (NIPS) methods.
- Translate how test methodology impacts your clinic and your patients.

Sponsored by: Counsyl

B11 The Clinical Impact of *De Novo* Variants Identified by NGS in Prenatal and Postnatal Cohorts

1.00 Contact Hour

Xia Wang, PhD, Baylor Genetics; Sandra Peacock, MS, CGC, Baylor Genetics; Christine Eng, MD, FACMG, Baylor Genetics

- Summarize the clinical utility of exome/panel sequencing when employed as both a prenatal diagnostic test and a postnatal test in a neonatal/ pediatric intensive care setting.
- Define the clinical implications of a non-invasive prenatal multi-gene sequencing screen that detects *de novo* changes in single gene disorders.
- Examine the unique clinical challenges related to pre and post-test counseling for the non-invasive multi gene sequencing screen.

Attendance Verification Code: _____

Sponsored by: BAYLOR GENETICS

Educational Breakout Sessions

1:30 PM – 3:00 PM

B12 Achieving True Diversity in the Age of Genomic Medicine

1.5 Contact Hours

Molly McGinniss, MS, LCGC, Illumina; Marnie Gelbart, PhD, Harvard Medical School; Tshaka Cunningham, PhD, George Mason University; Rev. Chad Baldanza, Christ the King Church

- Recognize the impact of past abuses of genetics, including eugenics, on the current landscape of genomics and health care disparities.
- Identify barriers to engaging minority and underserved populations and methods that have successfully been used to overcome them.
- Summarize how genetic counselors can support educational efforts and increase diversity in genomics initiatives.

Attendance Verification Code: _____

B13 Bioinformatics for Genetic Counselors 3.0: New Methods in Clinical Testing

1.5 Contact Hours

Andrea Forman, MS, LCGC, Fox Chase Cancer Center; Eric W. Klee, PhD, Mayo Clinic; Stephen Lincoln, Invitae; Erica Ramos, MS, CGC, Illumina

- Describe both established and emerging bioinformatics tools, databases and genomic technologies used in the rapidly evolving field of clinical testing.
- Evaluate new approaches to variant detection, variant interpretation and to identifying those variants in need of confirmation, in light of new clinical data on these subjects.
- Review various genetic tests under new best practices, including the AMP 2017 guidelines on both test validation and bioinformatics and the ClinGen expert panel findings on variant interpretation.

Attendance Verification Code: _____

Supported by an unrestricted educational grant from Sarepta

B14 Inherited Lung Cancer Risks: Looking Beyond Environmental Factors

1.5 Contact Hours

Geoffrey Oxnard, MD, Dana-Farber Cancer Institute; Diane Koeller, MS, MPH, LGC, Dana-Farber Cancer Institute; Michael Fallis, Elizabeth Grantham; Carol Bryant

- Anticipate counseling issues surrounding lung cancer genetics.
- Recognize families who should be tested for inherited lung cancer risk.
- Incorporate discussions of inherited lung cancer risks into counseling.

Attendance Verification Code: _____

B15 Reversing the Bystander Effect: Empowering Genetic Counselors to Identify Fraud, Waste and Abuse and Create Change in our National Healthcare System

1.5 Contact Hours

Stephanie Gandomi, MS, LCGC, Blue Shield of California; Christina Wang, Blue Shield of California

- Identify signs of fraud, waste and abuse in the healthcare system.
- Demonstrate how to recognize opportunity for intervention.
- Describe legal and ethical codes of conduct that exist for genetic counselors when faced with professional situations involving fraud, waste and/or abuse in the healthcare system.
- Explore resources that exist for genetic counselors when faced with fraud, waste and abuse situations in the professional setting.

Attendance Verification Code: _____

B16 Translational Medicine in Epilepsy Genetics

1.5 Contact Hours

Beth Rosen-Sheidley, MS, CGC, Boston Children's Hospital; Ann Poduri, MD, MPH, Boston Children's Hospital; Lacey Smith, MS, CGC, Boston Children's Hospital; Katherine Helbig, MS, LCGC, Ambry Genetics Laboratory; Ingo Helbig, MD, Children's Hospital of Philadelphia; Candace Myers, PhD, University of Washington

- Identify current gaps in knowledge that make obtaining a definitive genetic diagnosis in epilepsy particularly challenging.
- Outline efforts to provide functional analysis for variants in genes associated with epilepsy as well as efforts for drug-screening in animal models.
- Describe examples of how findings have translated back to the clinic to inform patient care, and identify ways in which such efforts need to be expanded.
- Describe ongoing collaborative efforts in clinical research relevant for patients with seizure disorders.

Attendance Verification Code: _____

Plenary Sessions

3:45 PM – 5:00 PM

B17 Dr. Beverly Rollnick Memorial Lecture

1.25 Contact Hours

Whitney Bowman-Zatzkin, MPA, MSR, Flip the Clinic; Robert Wood Johnson Foundation

- Define a Flip.
- Give an example of a Flip.
- Share something learned about patient inclusion in problem-solving.

Attendance Verification Code: _____

5:00 PM – 5:30 PM

B18 Jane Engelberg Memorial Fellowship (JEMF) Presentation

0.50 Contact Hour

Melanie Myers, PhD, MS, CGC, University of Cincinnatti; Julia Wynn, MS, MS, CGC, Columbia University

- Review the history of the JEMF award and provide an update on current initiatives.
- Describe the parental psychosocial experience of diagnostic exome sequencing.
- Evaluate the effect of educational videos to augment the genetic counseling session for exome sequencing.

Attendance Verification Code: _____

Sponsored Evening Sessions

7:00 PM – 8:15 PM

B20 Precisely Paired: Applying Somatic and Germline Testing for Lynch Syndrome

1.00 Contact Hour

Laura Panos Smith, MS, CGC, Ambry Genetics; Kory Jasperson, MS, CGC, Ambry Genetics; Andrea Forman, MS, LCGC, Fox Chase Cancer Center

- Identify the dilemmas clinicians face when patients present with "Lynch-like" syndrome.
- Review the current literature regarding somatic gene testing after abnormal MSI/IHC.
- Compare the utility of paired somatic and germline Lynch syndrome testing to other testing strategies.
- Describe the process of utilizing paired somatic and germline Lynch syndrome testing in clinical practice.
- Provide case examples of paired somatic and germline Lynch syndrome testing.

Attendance Verification Code: _____

Sponsored by: Ambry Genetics®

SESSION SPEAKERS + OBJECTIVES (CONTINUED)

B21 The Power of a SNP-based Non-invasive Prenatal Test (NIPT) in Evaluating Twin Pregnancies: How Identifying Zygosity Can Inform Prenatal Care

1.00 Contact Hour

Katie Krepkovich, MS, MS, CGC, Akron Children's Hospital

- Describe the current NIPT technologies for screening twin gestations.
- Identify the unique clinical considerations for twin gestations.
- Examine SNP-based NIPT with specific focus on the ability to identify zygosity.

Attendance Verification Code: _____

Sponsored by: natera® Conceive. Deliver.

FRIDAY, SEPTEMBER 15

Sponsored Breakfast Sessions

7:00 AM – 7:45 AM

Termination of Pregnancy for Indications of Genetic Disorder in Advanced Gestations

Warren M. Hern, MD, MPH, PhD, Boulder 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: Boulder Abortion Clinic

C01 What Genetic Counselors Should Know: Clinical Whole Genome Sequencing for Patients with Rare and Undiagnosed Genetic Disease

0.50 Contact Hour

Eric Klee, PhD, Mayo Clinic; Erin Thorpe, MS, CGC, Illumina

- Identify technical aspects of clinical whole genome sequencing (cWGS).
- Define current state of CWGS and potential clinical utility.

Attendance Verification Code: _____

Sponsored by: illumina®

Plenary Sessions

8:00 AM – 8:35 AM

C02 Genetic Travel Agent? Exploring Medical Tourism and Genetic Counselors' Role in Discussing Controversial Genetic Treatments on the International Stage

0.50 Contact Hour

Leila Jamal, ScM, PhD, CGC, Johns Hopkins Berman Institute of Bioethics; Christopher Scott, PhD, MA, Baylor College of Medicine Center for Medical Ethics and Health Policy

- Describe the landscape of medical tourism and its implications for genetic counseling practice.
- Summarize the main ethical and policy issues raised by international medical tourism in pursuit of novel or unproven therapies.
- Practice strategies for discussing medical tourism with patients and families.

Attendance Verification Code: _____

Best Full Member Abstract Award

8:35 AM – 8:50 AM

C03 A Randomized Controlled Trial to Test Non-inferiority of Web-based to In-person Education by a Genetic Counselor about Carrier Results from Exome Sequencing

0.25 Contact Hour

Barbara Biesecker, PhD, MS, CGC, National Human Genome Research Institute, NIH

- Model a study design (RCT) that can yield evidence to guide practice.
- Deliberate evidence for a web-based platform as a non-inferior results delivery mode to in-person genetic counseling for carrier results.

Attendance Verification Code: _____

8:50 AM – 9:50 AM

C04 Professional Issues Panel

1.0 Contact Hour

John Richardson, NSGC; Stephanie Cohen, MS, CGC, Saint Vincent Health; Katie Stoll, MS, CGC, Genetic Support Foundation

- Describe how genetic counselors are using different service delivery models to collaborate with other healthcare providers and increase access for patients.
- Identify how genetic counselors are reframing challenges presented by new technology, testing and patient volume, into opportunities to work more efficiently, effectively and in partnership with patients and other providers.
- Review the status of federal legislation to add genetic counselors as authorized providers under Medicare.
- Outline NSGC member involvement in supporting the pending bill.

Attendance Verification Code: _____

Educational Breakout Sessions

10:30 AM – 12:00 PM

C05 Inside Pandora's Box: Implications of ACMG Secondary Findings for Cardiology and Oncology Clinical Practice

1.5 Contact Hours

Allison Cirino, MS, LGC, Brigham and Women's Hospital; Zoe Powis, MS, CGC, Ambry Genetics; Anna Kamp, MD, MPH, Nationwide Children's Hospital; Megan Frone, MS, CGC, National Cancer Institute, NIH, DHHS; Cynthia A. James, ScM, PhD, CGC, Johns Hopkins Medicine; Rebecca McClellan, MS, CGC, Johns Hopkins Medicine; Stephanie Harris, CGC, Brigham and Women's Hospital

- Examine the various approaches used to evaluate and manage patients in both clinical and research settings with secondary findings in genes associated with inherited arrhythmia/cardiomyopathy and cancer conditions identified through exome sequencing.
- Identify the psychosocial implications of ACMG secondary findings for the patient and the broader family.
- Apply an ethical framework to the handling of secondary findings in clinical practice.

Attendance Verification Code: _____

Supported by an unrestricted educational grant from Color

C06 Is More Better? A Debate on Carrier Screening for the Next Generation

1.5 Contact Hours

Wayne Grody, MD, PhD, UCLA School of Medicine; Gabriel Lazarin, MS, CGC, Counsyl; Janice Edwards, MS, CGC, University of South Carolina

- Compare expanded and conventional carrier screening approaches and the technological benefits and limitations of each.
- Understand the ability of each testing type to detect at risk couples carriers.
- Evaluate the optimal carrier screening approach for various clinical circumstances and patient populations.
- Summarize the pros and cons of expanded and conventional carrier screening.

Attendance Verification Code: _____

C07 Returning Clinically Relevant Exome Results for Developmental Brain Disorders to Adult Research Participants

1.5 Contact Hours

Brenda Finucane, MS, LGC, Geisinger Health System; Emily Palen, MS, LGC, Geisinger Health System; Karen Wain, MS, LGC, Geisinger Health System

- Describe emerging new perspectives on shared genomic etiologies of developmental brain disorders (DBD) in children and adults.
- Evaluate potential medical, psychological and family benefits of returning DBD-related genomic test results to adults with cognitive and psychiatric symptoms.
- Identify potential challenges and negative outcomes of returning DBD-related genomic test results to adults with cognitive and psychiatric symptoms.
- Recognize the implications of DBD-related genomic results across diverse genetic counseling practice areas.

Attendance Verification Code: _____

C08 Using Evidence to Inform Your Practice: What Do We Know from Studies That We Can Put to Good Use?

1.5 Contact Hours

Barbara Biesecker, PhD, MS, CGC, National Human Genome Research Institute, NIH; Katie Lewis, ScM, CGC, National Human Genome Research Institute, NIH; Robin Lee, MS, LCGC, UCSF Medical Center; Lori Erby, ScM, PhD, National Human Genome Research Institute, NIH

- Judge the strength of evidence from systematic literature reviews and randomized control trials in genetic counseling.
- Delineate guidance on what may constitute sufficient evidence to inform clinical practice.
- Design solutions to audience-generated common challenges in clinical practice using evidence-based practices in small and large group settings.
- Identify what additional research would help to address common challenges in clinical practice.

Attendance Verification Code: _____

C09 Valuating Genetic Counseling: Health Economics and Outcomes Research for Genetic Counselors

1.5 Contact Hours

Jack Needleman, PhD, FAAN, University of California, Los Angeles; Heather Shappell, MS, CGC, Beacon LBS; Karen Lewis, MS, CGC, AIM Specialty Health

- Explain health economics and outcomes research and its role in the field of genetic counseling.
- Demonstrate how genetic counselors can apply health economics and outcomes research in their practice.
- Debate how genetic counselors can improve communication and discussions with health economists, with the goal of forging collaborations that are mutually beneficial and result in measures of evaluating genetic services.

Attendance Verification Code: _____

SESSION SPEAKERS + OBJECTIVES (CONTINUED)

Sponsored Lunch Sessions

12:00 PM – 1:15 PM

C10 Touchdown, NGS! A Champion in Variant Detection

1.0 Contact Hour

Kyle Retterer, MS, GeneDx; Jessica Mester, MS, GeneDx; Audra Bettinelli, MS, GeneDx

- Discuss the technical capabilities for next-generation sequencing and other technologies, including challenges and limitations to the detection of unusual variants.
- Examine alternate testing methodologies and approaches for detection of complex genetic alterations.
- Identify clinical scenarios and results for select cases with challenging results in hereditary cancer, pediatric genetic disorders and other disease testing indications.

Attendance Verification Code: _____

Sponsored by: GeneDx an OPKO Health Company

C11 Increasing the Refinement of Breast Cancer Risk Utilizing SNPs

1.0 Contact Hour

Susan Manley, MBA, CGC, Myriad; Eric Rosenthal, PhD, CGC, Myriad; Jennifer Saam, PhD, CGC, Myriad

- Define what single-nucleotide polymorphisms (SNP) are and how they are identified.
- Explain how a SNP's association with disease is determined and which mathematical concepts are used to develop risk scores.
- Describe how SNPs can be utilized to refine the risk of cancer in the clinical setting.

Attendance Verification Code: _____

Sponsored by: myriad

Plenary Sessions

4:30 PM – 5:35 PM

C18 Jane Engelberg Memorial Fellowship (JEMF) Research Plenary Session

1.0 Contact Hour

Christina Palmer, PhD, MS, University of California, Los Angeles; Jehannine Austin, PhD, MSc, University of British Columbia; Sharon Terry, MA, Genetic Alliance; Dawn Allain, MS, LGC, OSU Genetic Counseling Graduate Program

- Describe the role genetic counseling research can play in advancing the genetic counseling profession and promoting effective delivery of genetic services.
- Discuss the current gaps in evidence-based genetic counseling research and delivery of genetic services.
- Address the impact of genetic counselor-driven research on professional development.

Attendance Verification Code: _____

Sponsored by Jane Engelberg Memorial Fellowship

Beth Fine Kaplan Best Student Abstract Award

5:35 PM – 5:50 PM

C19 Genetics Hide or Seek: An Investigation of Differential Effects of Monitoring and Blunting on Information Preferences in a Hypothetical Cancer Diagnosis Scenario

0.25 Contact Hour

Katie Plamann, MS, Marshfield Clinic

- Describe and recognize monitoring and blunting coping styles.
- Develop strategies to gauge patient coping style during genetic counseling sessions.

Attendance Verification Code: _____

5:50 PM – 6:20 PM

C20 Audrey Heimler Special Project Award Presentation

0.50 Contact Hour

Rayza Priscila Delgado Hodges, MS, CGC, VT Health McGovern Medical School; Carrie Atzinger, MS, LGC, University of Cincinnati Genetic Counseling Graduate Program

- Discuss the language gap and the bridge to address it.
- Discuss the role of supervision models and how assessment and revision of supervision models may lead to changes in supervision training and practice.

Attendance Verification Code: _____

SATURDAY, SEPTEMBER 16

Sponsored Breakfast Sessions

7:00 AM – 7:45 AM

Recent Development of No-cost Testing Programs for Pediatric Epilepsy and Select Lysosomal Storage Disorders

Katie Angione, MS CGC, Children's Hospital Colorado Neurology; Stephanie Cagle, MS, CGC, The Emory Clinic

- Increase audience awareness of early triggers to test for mucopolysaccharide (MPS) and neuronal ceroid lipofuscinosis (NCL) disorders.
- Discuss why early and accurate diagnosis is critical.
- Discuss program mechanics and availability of the Simply Test for MPS™ and Behind the Seizure™ no-cost testing programs.

Sponsored by: BIOMARIN

D01 Preeclampsia Screening for the Prenatal Genetic Counselor

0.50 Contact Hour

Sarah Hash, MS, CGC, Maternal Fetal Medicine Associates of Maryland

- Identify common topics genetic counselors address outside of inherited genetic conditions.
- Delineate the signs and symptoms of preeclampsia.
- Define the various components of preeclampsia screening.
- Recognize the benefits of early screening for prevention and early detection of preeclampsia.
- Describe logistics and the role of the prenatal genetic counselor in preeclampsia screening.
- Summarize genetic counselor concerns regarding implementation of preeclampsia screening.

Attendance Verification Code: _____

Sponsored by: NTD | Eurofins Clinical Diagnostics

Plenary Session

8:00 AM – 8:50 AM

D02 Conflict of Interest: Aren't We All Conflicted on Some Level?

0.75 Contact Hour

Amy Sturm, MS, CGC, LGC, Geisinger Health System; Steven Keiles, MS, LCGC, Quest Diagnostics; Quinn Capers, MD, Ohio State University Wexner Medical Center; Mikaela Hunt, Mikaela Media

- Explain the importance of identifying a real or perceived conflict of interest (COI), financial or non-financial.
- Describe the circumstances in which COI might occur in the genetic couselor-patient encounter.
- Analyze various situations to determine if real or perceived COI might exist.

Attendance Verification Code: _____

Late-Breaking Plenary Session

8:50 AM – 9:50 AM

D03 The Informed Patient: Impacts of DTC Genetic Testing

1.0 Contact Hour

Sara Riordan, MS, CGC, Exploragen; Deanna Alexis Carere, MA, MS, ScD, CGC, CCGC, London Health Sciences Center; Erynn Gordon, MS, CGC, Genome Medical; Rachel Mills, CGC, Duke University Center for Applied Genomics and Precision Medicine

- Identify current sources of Direct-to-Consumer (DTC) genomic testing and their regulations.
- Examine patient characteristics and situations that may influence patients to look for 'non-traditional' methods of acquiring health information or care.
- Illustrate how genetic counselors are adapting to changes in the genetic counseling profession as a result of DTC testing.

Attendance Verification Code: _____

Educational Breakout Sessions

10:10 AM – 11:15 AM

D04 A Cardiac Crash Course on Metabolic Disease

1.08 Contact Hours

Dawn Laney, MS, CGC, CCRC, Emory University; Amy White, MS, CGC, Mayo Clinic Biochemical Genetics Laboratory

- Identify lysosomal storage diseases most likely to manifest a cardiac phenotype and their treatments.
- List inborn errors of metabolism that can lead to sudden death and how they are diagnosed or ruled out.

Attendance Verification Code: _____

D05 Ethical Principles and Shifting Paradigms for Genetic Testing of Minors for Adult-onset Conditions

1.08 Contact Hours

Curtis Coughlin II, MS, MBe, CGC, University of Colorado Denver; Kami Wolfe Schneider, MS, CGC, Children's Hospital Colorado, University of Colorado

- Summarize ethical principles applicable to deciding whether or not a child should be tested for an adult onset condition.
- Identify instances in which children may be tested for adult onset conditions.
- Formulate a clinical approach to pediatric genetic counseling for adult onset conditions, such as hereditary breast and ovarian cancer.

Attendance Verification Code: _____

SESSION SPEAKERS + OBJECTIVES (CONTINUED)

D06 Into the Weeds of NIPS: A Survey of Algorithms for Analysis of Aneuploidies, Fetal Fraction and Microdeletions

1.08 Contact Hours

Dale Muzzey, PhD, Counsyl; John Tynan, PhD, Sequenom, Inc.

- Differentiate the two most-common NIPS platforms based on their respective input data and analysis algorithms, thereby enhancing interpretation of clinical NIPS reports.
- Inspect the various methods by which fetal fraction can be inferred from NIPS data.
- Recognize that both method and lab-specific differences make fetal-fraction percentile a more informative metric than fetal-fraction percentage.
- Describe the methods by which known and *de novo* microdeletions are identified with different NIPS techniques, highlighting their strengths and limitations.

Attendance Verification Code: _____

D07 Mitochondria: Functions, Genomics and Disease

1.08 Contact Hours

Sumit Parikh, MD, Cleveland Clinic

- Explain the basics of mitochondrial disease and available diagnostic testing, based on mitochondrial function.
- Recognize the different methods of evaluating patients for mitochondrial dysfunction.
- Identify the variable sensitivity and specificity of some of the testing, along with the benefits and potential pitfalls of genetic testing.
- Summarize the goals of therapy and present the current treatments available based on the most recent studies presented in the peer reviewed medical literature.

Attendance Verification Code: _____

D08 Pharmacogenetics for Genetic Counselors

1.08 Contact Hours

Rachel Mills, CGC, Duke University Center for Applied Genomics and Precision Medicine; Jill Davies, MS, CGC, Gene Matters; Tara Schmidlen, MS, LGC, Geisinger Health System; Jennifer Eichmeyer, MS, LCGC, St. Luke's Mountain States Tumor Institute; Adriana Malheiro, MS, NIH/NLM/NCBI

- Review general information including nomenclature, terminology, genotype/phenotype and guidelines regarding clinical pharmacogenetics and pharmacogenetic testing.
- Describe specific roles for genetic counselors in facilitating pharmacogenetic testing.
- Recognize patient and care situations that could benefit from pharmacogenetic testing.
- Identify resources for incorporating pharmacogenetics into practice or supporting other health care professionals.

Attendance Verification Code: _____

NSGC thanks the following SIGS for their sponsorship support of this year's educational sessions:

A02: Cardiovascular SIG
A03: Cancer SIG
A04: Cardiovascular SIG
A06: Cardiovascular SIG
B14: Cancer SIG
C05: Cardiovascular and Cancer SIG
D04: Cardiovascular SIG

PLATFORM PRESENTATIONS

FRIDAY, SEPTEMBER 15 | 3:00 PM – 4:15 PM | CEU 1.25 CONTACT HOURS

	C13 Patient Diversity *Room C160AB-162AB* • Explore experiences and perspectives of patients from varying backgrounds. • Understand issues related to equitable access to genetic counseling services. • Examine attitudes and possible biases of counselors towards patients.	**C14** Professional Issues *Batelle Grand Ballroom* • Understand factors impacting genetic counselor professional growth/development. • Identify emerging professional genetic counseling opportunities. • Explore counselor and patient attitudes towards professional issues.	**C15** Counseling/ Psychosocial *Room C170-172* • Explore unique challenges in providing genetic/genomic testing. • Develop frameworks for expanding and evaluating genetic counselor practice. • Identify novel ways of addressing patients' clinical/emotional needs.	**C16** Neuro/Cardio *Room B230-235* • Explore utilization of testing and its impact on outcomes and diagnostics rates. • Understand challenges in diagnosis of genetic disorders. • Recognize varied spectrum of disorders and the barriers of identification by non-genetic providers.	**C17** Variant Classification *Room B130-132* • Understand factors underlying variant classification and calls. • Explore possible genotype/phenotype relationships. • Examine the implications of variant reclassification.
3:00 PM – 3:15 PM	Use of a Genetic Patient Navigator to Improve Cancer Surveillance Compliance in Underserved Gene Mutation Carriers *J. Huang*	Genesurance Counseling: Patient Perspectives *C. Wagner*	Impact of Familial Adenomatous Polyposis: An Emerging Adult Perspective *N. D'Orlando*	Trio-based Autism/ Intellectual Disability Panel Reveals Significant Recurrence Risk in Over 20% of Positive Cases *D. Stolar*	Genetic Variant Reclassification: Impact on Patients and Families *A. Parrott*
3:15 PM – 3:30 PM	An African American, African and Afro-Caribbean Genomic Sequencing Study Cohort: Motivations, Expectations and Implications for Recruitment *K. Lewis*	Piloting Genetic Test Utilization Guidance in the Esoteric Hematology Reference Laboratory *S. Dugan*	Evidence for the Crucial Role of Psychosocial Counseling in Addressing Unmet Patient Information Needs *M. Dudek*	Yield of an ALS Genetic Testing Algorithm in a Tertiary Care ALS Clinic: Test Outcomes in 100 Patients *J. Roggenbuck*	Variant Reclassification in a Clinical Cohort: A Decade of Experience *J. Mersch*
3:30 PM – 3:45 PM	Genetic Counselors' and Genetic Counseling Students' Implicit and Explicit Attitudes Toward Lesbian Women and Gay Men *M. Nathan*	Where Do We Draw the Line? Navigating Conflicts of Interest in the Genetic Counseling Profession *S. Laudisi*	Mindfulness among Genetic Counselors is Associated with Improved Empathy, Burnout, Compassion Fatigue and Work Engagement *J. Silver*	A Review of Previous Genetic Testing in a Cohort of Neurology Patients with Genetic Diagnoses Made through Research Whole Exome Sequencing *M. Mulhern*	Phenotype and Colorectal Cancer Risk in *APC* I1307K Homozygotes *K. Jasperon*
3:45 PM – 4:00 PM	An Exploration of the Art of Prenatal Genetic Counseling in Catholic Hospitals *K. Schwarting*	Addition of a Remote Genetic Counselor to the Breast Specialist's Team Improves Clinical Decision Making *E. O'Leary*	Update on Psychological Functioning at Enrollment in Research Participants in a Li-Fraumeni Syndrome Study *J. Peters*	Noonan Spectrum Disorders in a Pediatric Population with Valvar Pulmonary Stenosis *K. Anderson*	Software-assisted Manual Review of NGS Results as an Alternative to Routine Sanger Sequencing *D. Muzzey*
4:00 PM – 4:15 PM	Trans-counseling: A Case Series of Transgender Individuals at High Risk for *BRCA1* Mutations *R. Saca*	Survey of Genetic Counselors On Attitudes Towards Direct-to-Consumer Testing and of Integrating Result Interpretation into Genetic Counseling Practice *T. Braid*	"An Empowering Encounter": Exploring How the Process of Genetic Counseling Influences Outcomes for Individuals with Mental Illnesses *A. Semaka*	Barriers to the Identification of Familial Hypercholesterolemia Among Primary Care Providers *J. Zimmerman*	Pathogenic and Likely Pathogenic Variants Identified on a Multi-gene Renal Cancer Panel *R. Winfrey Williams*

PLATFORM PRESENTATIONS (CONTINUED)

SATURDAY, SEPTEMBER 16 | 11:30 AM - 12:45 PM | CEU 1.25 CONTACT HOURS

	D09 Access & Service Delivery *Room C170-172* • Explore novel approaches to improve genetic counseling service delivery. • Understand how to use electronic tools to deliver genetics-focused education. • Discuss varied approaches to providing genetic counseling.	**D10** Education/Training *Room C150-151* • Explore the utilization of conceptual frameworks and validated tools to improve genetic counseling training. • Understand the perception of genetic counseling by other professions. • Evaluate challenges faced by new and transitioning genetic counselors.	**D11** Cancer *Room C160 AB-162 AB* • Evaluate the effectiveness of recommendations and guidelines for genetic testing and screening. • Understand factors influencing the decision making process for individuals at risk for cancer. • Identify potential gaps in patient risk assessment and care plans.	**D12** Prenatal/Pediatrics *Room B230-235* • Examine available resources and tools that can be used in the prenatal and postnatal period for screening and diagnostic purposes. • Address the impact of hierarchical testing approach in varied populations. • Discuss the implications of incidental findings for patients and family members.	**D13** Testing Innovations *Room B130-132* • Explore the utility of different genetic testing methodologies in clinical practice. • Understand the impact of genetic test results and implications for patients and families. • Compare testing strategies and their value in the field of genetics and genomics. **Supported by an unrestricted educational grant from Ambry Genetics*
11:30 AM – 11:45 AM	Increasing Genetics Awareness via Online Patient Education: Evaluating a Targeted Tool for Parents of Children with Hearing Loss *S. Drewes*	Commencement is Only the Beginning: Transitional Challenges Encountered by Novice Genetic Counselors *D. Ramachandra*	Factors Influencing Clinical Follow-up for Individuals with a History of Breast and/or Ovarian Cancer and Uninformative *BRCA1* and *BRCA2* Testing *S. Chadwell*	First Trimester Detection of Prader-Willi Syndrome Caused by Uniparental Disomy by Single–nucleotide Polymorphism-based Non-invasive Prenatal Testing *M. Pastrick*	Development and Validation of a Residual Risk Score to Predict Breast Cancer Risk in Unaffected Women Negative for Mutations on a Multi-gene Hereditary Cancer Panel *E. Hughes*
11:45 AM – 12:00 PM	Creation and Implementation of an Environmental Scan to Assess Cancer Genetics Services at Three Oncology Care Settings *E. Bednar*	Expanding a Model of Advanced Training to Promote Career Advancement for Certified Genetic Counselors *B. Baty*	NCCN Testing Guidelines Miss People at Risk of Hereditary Cancer *L. Servais*	NIPS for High BMI Patients: Evaluating the Impact of Deep Whole Genome Sequencing *C. Haverty*	Following Somatic Tumor Testing with Germline Analysis: Considerations for Genetic Counseling Practice *A. Blanco*
12:00 PM – 12:15 PM	Impact of a Genetic Counseling Assistant on Genetic Counselor Time Utilization and Patient Accessibility *E. Tricou*	Strategies Genetic Counselors Use to Supervise Students: An Extension of the Reciprocal-engagement Model of Supervision *M. Suguitan*	The Decision-making Process for Individuals at Risk for Hereditary Diffuse Gastric Cancer *A. Prose*	Counseling Experience with Incidental Cancer Genes in Expanded Carrier Screening *K. Wong*	Targeted Cascade Testing: Are We Missing the Forest for the Trees? *J. Holle*
12:15 PM – 12:30 PM	Diagnostic Yield of Whole Exome Sequencing in Patients with Undiagnosed Diseases and Payer Denial of Genetic Testing *C. Reuter*	Awareness and Perceptions of Genetic Counseling Among Physician Assistant Trainees *E. Bonham*	Are Heterozygous *MUTYH* Carriers at Increased Risk for Cancer? *A. Bartenbaker Thompson*	High-depth Multi-gene Panel Analysis with Integrated Sequence and Copy Number Detection is a Useful First-tier Test with a High Diagnostic Yield and Broad Mutation Spectrum Detection in Childhood Epilepsy *D. Riethmaier*	Clinical Whole Genome Sequencing as a First-tier Test Yields Significant Findings for Patients from a Resource-limited Clinic in Mexico *A. Scocchia*
12:30 PM – 12:45 PM	Inheritance Pattern Prediction: An Ophthalmic Model for Digital Pedigree Feature Extraction and Machine Learning *D. Schlegel*	Development of the Genetic Counseling Self-efficacy Scale *S. Caldwell*	Beyond *BRCA:* Germline Genetic Testing in Prostate Cancer, Do We Need Disease-specific Guidelines? *I. Wilson*	Up-front vs. Post-reporting Parental Co-segregation Analysis: Is One Approach Superior? *E. Weltmer*	The Incremental Value of Whole Exome Sequencing in the Evaluation of Fetal Structural Anomalies: Prospective Analysis of 199 Cases in a Tertiary Care Center *J. Giordano*

Join Us:
Breakfast Symposium

Recent Development of No-Cost Testing Programs For Select Lysosomal Storage Disorders

Early genetic testing can play an important role in shortening the diagnostic journey for patients with rare diseases. Learn about convenient, comprehensive tests that can help open the way to accurate diagnosis and optimized care.



Saturday | September 16, 2017

7:00 am – 7:45 am
Greater Columbus Convention Center
Room: Short North Ballroom A & B
Breakfast Provided

Advance registration is required.
Please reserve your space at the Registration Desk.

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POSTERS WITH AUTHORS

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.
- Evaluate the varied settings in which genetic counseling expertise is utilized.

A09 Group A Posters

Wednesday, September 13

5:15 PM – 6:30 PM

CONTACT HOURS: 1.25

B19 Group B Posters

Thursday, September 14

5:45 PM – 7:00 PM

CONTACT HOURS: 1.25

C12 Group C Posters

Friday, September 15

1:15 PM – 2:30 PM

CONTACT HOURS: 1.25

WEDNESDAY POSTERS

Access/Service Delivery

A-1 Understanding Characteristics of Industry Genetic Counselors to Inform Ongoing Workforce Discussions
A. Bergner

A-4 Recruitment and Utilization of Rare Disease Registries within the Genetic Counseling Community
A. Yarrow

A-7 Improving the Identification and Genetic Counseling Referral of Women at Risk for Hereditary Breast and Ovarian Cancer
C. Bellcross

A-10 Clear Indication for Cardiogenetics Testing; No Good Genetic Counselor Referral Options. How Do Genetic Counselors Think a Cardiologist Should Proceed?
E. Griffith

A-13 Reduction of Healthcare Costs and Improvement of Test Orders after Genetic Counselor Review in an Academic Genetic Testing Laboratory
E. Wakefield

A-16 The Impact of Tricare's Policies Concerning Prenatal Genetic Testing and Termination on the Genetic Counseling Process
J. Brown

A-19 Comparing In-person and Telegenetic Cancer Genetic Counseling with a Focus on Psychosocial Support
J. Huang

A-22 A Pilot Study of Patient Experience with an Automated Assessment Tool for Hereditary Cancer Risk
J. Lim-Harashima

A-25 Utilization and Findings of a Rapid Turnaround Laboratory Process for Hereditary Breast Cancer
K. King-Spohn

A-28 Consumer and Healthcare Provider Motivations and Concerns about Personalized Genomic Sequencing among 2,500 Individuals
L. Shahmirzadi

A-31 Genetics Counselors' Practices of and Preparedness for Communicating Risk for Psychiatric Illness
M. Gleason

A-34 Lexigene®: Bridging the Communication Gap through an Online English-French-Spanish Genetic Counseling Lexicon
R. Vanneste

A-37 Development of *PALB2* Testing Criteria
S. Lahiri

Cancer

A-40 The HEROIC Registry: Opportunities for Collaboration
A. Burton-Chase

A-43 Universal Mismatch Repair IHC Screening Experience For Endometrial Cancer at a Multi-site Community-based Cancer Hospital
A. Henshaw

A-46 Assessing Reproductive Risks for Recessive Conditions that Arise from Cancer Panel Testing
A. Stacy

A-49 The Impact of Genetic Counseling on Patient Engagement
A. Zakas

A-52 Understanding How Clients Make Meaning of Their Variants of Uncertain Significance in the Age of Multi-gene Panel Testing for Cancer Susceptibility
D. Bonner

A-55 The Impact of NCCN Management Guidelines On APC I1307K Carriers Unaffected with Colorectal Cancer
E. Webb

A-58 Understanding Patient and Clinician Perspectives on the Role of Genomic Testing in Cancer Treatment Decisions
G. St-Martin

A-61 Two-Thirds of *PTEN* Pathogenic/Likely Pathogenic Variants Occur *De Novo* in a Large Clinical Cohort
J. Mester

A-64 Analyze.Myvariant.Org: Comparison of Quantitative Cosegregation Analysis Methods for the Clinical Setting
J. Rañola

A-67 Prenatal Genetic Counselors' Practices and Confidence Level When Counseling on Carrier Cancer Risk Identified on Expanded Carrier Screening
J. Thompson

A-70 Where Culture Meets Genetics: Exploring Latina Immigrants' Causal Attributions of Breast and Colon Cancer and Models of Disease Inheritance
K. Fiallos

A-73 Pediatric Cancer Predisposition Genetic Counseling: Current Practices
K. Zajo

A-76 Genetic Counseling Referrals Among Cancer Registry Patients Meeting NCCN Guidelines: An Ohio Study
L. Byrne

A-79 Multi-gene Hereditary Cancer Panel Testing Identifies Mutations Unexpected Based on Family Pedigree: Four Case Reports
L. Ryan

A-82 Paperwork Matters! The Importance of Clinical Phenotype Information in Variant Interpretation
M. Anderson

A-85 Identification of Primrose Syndrome in an Adult Male on WES
M. Jacobs

A-88 A Comparison of Returners and Non-returners for Updated Hereditary Cancer Testing
M. Nichols

A-91 Assessing Geography as a Barrier in Choosing to Undergo Genetic Testing in a Cohort of Young Women with Breast Cancer
M. Stein

A-94 Frequency and Characteristics of Variants of Uncertain Significance in a Clinical Setting at Multiple Institutions
R. Luiten

A-97 Synchronous Hepatoblastoma and Adrenocortical Neoplasm Detected During Beckwith-Wiedemann Syndrome Surveillance in an Infant: A Case Report
R. Nuccio

A-100 Incidental Detection of Colon Cancer via Non-invasive Prenatal Screening and Comparative Re-screen after Treatment
S. Hancock

A-103 A Multidisciplinary Approach to Prenatal Diagnosis for Constitutional Mismatch Repair Deficiency: A Case Report
S. Koch

A-106 Reclassification of Pathogenic Variants: Clinical Impact of Downgrading on Patients and Families
S. Rao

A-109 The Results Are In: Who Is Testing Positive For *NF1* on Hereditary Cancer Multi-gene Panels?
Z. Powis

Cardio

A-112 Gene Characterization: A Scientific Approach to Multi-gene Panel Testing Design
B. Wayburn

A-115 Developing Genetic Education to Improve Postmortem Genetics – The NSGC Postmortem Working Group Collaborative Experience
H. MacLeod

A-118 Exercise Recommendations for Active Adults at Risk for Sudden Cardiac Death: "Can I Continue To Exercise?"
K. Baker

A-121 Impact of Variant Reclassification in the Clinical Setting of Cardiovascular Genetics
R. Schymanski

Counseling/Psychosocial

A-124 Direct-to-consumer Genetic Testing and Third-party DNA Analysis Tool Uncovers Origins of Incest: A Case Report
B. Kirkpatrick

A-127 The Psychosocial Effects of Next Generation Sequence Panels for Predictive Testing of Hereditary Dementias: A Report on Pilot Data
D. Green

A-130 Client Utilization of Donor Genetic Testing Information When Choosing a Sperm Donor
E. Lutz

A-133 Expansion of the Molecular and Phenotypic Spectrum of *CAMTA1*-related Neurological Disorders
H. Sroka

A-136 The Impact of Preconception AGG Interruption Testing on Fragile X Syndrome Carriers in the Fertility Setting
J. Wilkinson

A-139 "It's Hard to Not See Yourself in Some of These Patients": Personal and Professional Challenges of Infertility Genetic Counselors
K. Liker

A-142 More than Just a Theoretical Risk: Evidence of Mosaicism in *MED13L* Haploinsufficiency Syndrome
K. Small

A-145 Effects of Social Circle Size on Self-esteem, Social Disconnectedness and Perceived Isolation in Adults with Neurofibromatosis
M. Dohvoma

A-148 Assessing Health Behavior Modification for Participants in the OSU-Coriell Personalized Medicine Collaborative following Genomic Counseling
M. McMinn

A-151 Genetic Counselors' Assessment of Videos to Augment Whole Exome Sequencing Patient Education
R. Hernan

POSTERS WITH AUTHORS (CONTINUED)

A-154 Prevalence of Mental Health Conditions in the Skeletal Dysplasia Population
S. Jennings

A-157 Family Responses following Receipt of Complex Genomic Sequencing Results
W. Kelley

Education/Training

A-160 Newborn Screening Educational Module for Healthcare Providers in the States of Colorado and Wyoming
A. Mitchell

A-163 Educational Tools for Genetic Counselors: Facilitating Better Understanding of Statistical Concepts Related to NIPS
C. Lucinese

A-166 Evaluation of Service Learning: A Genetic Counseling Course Experience
H. Eckl

A-169 Practice Patterns Regarding the Use of Clinical Genetics Services for Autism: A Nationwide Survey of Primary Care and Specialist Physicians
J. Kianmahd

A-172 The Complex Side of NIPT Gender Discrepancies Revealed… Karyotype Party Tricks
J. Wardrop

A-175 The Utilization of Prenatal Microarray: A Survey of Current Genetic Counseling Practices and Barriers
L. Durham

A-178 Holding Your Genome in Your Hands: Engagement Outcomes of an Online Whole Genome Sequencing Visualization Tool
M. McGinniss

A-181 Preconception Health Education Assessment in Middle School Students to Reduce Infant Mortality and Birth Defect Risks
R. Wills

A-184 Curbside Counseling: Genetic Counselors' Experiences and Perspectives on Counseling Friends Outside of A Clinical Setting
S. Heineman

Neuro/Psych

A-187 Bigger is Not Always Better: The Benefits of a Smaller Gene Panel for Charcot-Marie-Tooth Neuropathy
C. Downtain Pickersgill

A-190 ***WITHDRAWN*** Helping Hands: Narrative Evaluation of a Therapeutic Farming Community for Adults with Developmental Disability
H. Meddaugh

A-193 Behavioral Changes after Psychiatric Genetic Counseling: An Exploratory Study
S. Huynh

Prenatal/Pediatric

A-196 Emotional and Decision Making Responses to All Aneuploid Results in Preimplantation Genetic Screening
A. Narkeviciute

A-199 Genetics Professionals' Attitudes Towards Prenatal Exome Sequencing
C. Brew

A-202 A Unique Preimplantation Genetic Diagnosis Case of Germline Mosaicism in a Sperm Donor
D. Baxi

A-205 Developmental Milestones in CHARGE Syndrome
E. Fassi

A-208 Zero to Four: How Many AGG Interruptions are Commonly Seen in *FMR1* Premutation Alleles: An Update
E. Repass

A-211 Evolving Trend in Patient Decision-making on Non-invasive Screening versus Invasive Testing following a Prenatal Diagnosis of Ultrasound Anomaly
J. Carroll

A-214 Assessing Reproductive Behaviors of Parents of Children with Metabolic Conditions Identified through Newborn Screening
J. Knazik Phelps

A-217 Laboratory Experience with Expanded Carrier-screening Panels
J. Wallace

A-220 Segregation of a Complex Recessive Phenotype due to Digenic Inheritance Of *SLC26A2* and *SH3TC2* Variants Causing Diastrophic Dysplasia and Charcot-Marie-Tooth Neuropathy
K. Brigatti

A-223 Maternal Serum Screen Positive Result: What Do Patients Elect Next?
K. Fissell

A-226 Expanding the Clinical Phenotype of The *MECP2* Variant c.925C>T (P.Arg309Trp) in Five Family Members without Classic Features of Rett Syndrome or Atypical Rett Syndrome
K. Widmeyer

A-229 One in a Billion Baby: Case Study and Phenotype Correlation of a Child with Both Wolf-Hirschhorn and Cri Du Chat Syndrome
L. Fuqua

A-232 Heterozygous *De Novo GNAI1* Gene Variants Are Associated with Epileptic Encephalopathy
L. Rhodes

A-234 *De Novo* Variants at Residue 480 in *FAR1* Are Associated with an Autosomal Dominant Early-onset Neurological Disorder with Overlapping Yet Differing Features Compared to the Recessive *FAR1* Disorder
M. Cho

A-235 The Detection of Occult Maternal Malignancy by Non-invasive Prenatal Screening: Case Report and Approach to Clinical Follow-up
M. Coleridge

A-238 A Case Report Illustrating the Benefits and Limitations of NIPT for Sex Chromosomes
R. Silver

A-241 The Many Faces of Monosomy X: Unexpected Outcomes of Monosomy X NIPT Results
S. Caldwell

A-244 Primary Care Physicians' Understanding and Utilization of Whole Exome Sequencing Results
S. Mazzola

A-247 Genome Wide cfDNA: Emerging Data Trends in 28K Clinical Samples
T. Hopkins Boomer

A-250 Bringing Closure: Looking Beyond Non-invasive Prenatal Test Screening Results – The Importance of Pregnancy Loss Workups for Low-risk, High-risk, and Low Fetal Fraction Cases
W. DiNonno

Professional Issues

A-253 Decisions among Women with Primary Ovarian Insufficiency to Participate in a Genome Sequencing Study: A Randomized Controlled Trial of Consent Interventions
B. Biesecker

A-256 Incidental Findings with Large Multi-gene Cancer Panels: The Importance of Informed Consent
D. Goldberg

A-259 Do Genetic Counselors Have a Duty to Warn? Perspectives from the Medical Ethics Community
K. Curry

A-262 Ethical Considerations in Research Whole Exome Sequencing: A Case Series
M. Ernst

A-265 Exploring Prenatal Genetic Counselors' Perceptions of Abortion Laws in Their State
S. Koenig

Testing Innovation

A-268 Parental Microarray Testing Identifies a Deletion of Maternal Origin in an Assumed *De Novo* Preimplantation Genetic Diagnosis Case
A. Machaj

A-271 Autosomal Dominant Polycystic Kidney Disease with Co-occurring Marfanoid Habitus: A Case Report and Review of a Novel Phenotypic Association
B. Shayota

A-274 Mapping the Terrain of Incidental Findings: Experiences and Lessons Learned in Returning Incidental Findings to Patients
C. Rost

A-277 Topological Domain Variations Among Patients Undergoing Microarray Testing
J. Shank

A-280 Same Variants, New Interpretation: Use of Data Mining in Exome Reporting
L. Mighion

A-283 Exome-backbone Panels: Genetic Professionals' Perspectives in the Next Generation of Panel Testing
R. Pelletier

A-286 ***WITHDRAWN*** Linked-read Sequencing Addresses Common Technical Challenges of Short Reads
S. Garcia

A-289 Interviews of Genetic Counselors on Attitudes towards Direct-to-Consumer Genetic Testing and of Integrating Result Interpretation into Genetic Counseling Practice
V. Hsieh

A-292 Generating a a Cellular Model for Pyruvate Dehydrogenase Complex Deficiency
J. Preslar

THURSDAY POSTERS

Access/Service Delivery

B-2 Experience Providing Genetic Counseling and "Preventive Genetic Testing" for Generally Healthy Individuals in a Primary Care Setting: Developing a Scalable Approach
A. Hanson-Kahn

B-5 Experience with Screening Collegiate Athletes for Sickle Cell Trait in Accordance with the National Collegiate Athletic Association Policy
B. Harrison

B-8 Next-generation Counseling: A Model for Non-invasive Prenatal Screening Results Disclosure and Patient Management
C. Schmitt

B-11 Down Syndrome, Autism and Parent Experiences with the Dually Diagnosed
E. Kellom

B-14 Real-time Tracking of Laboratory Genetic Counselor Roles at an Academic Genetic Testing Laboratory
E. Wakefield

B-17 Performance of NCCN Guidelines in Identifying Hereditary Breast and Ovarian Cancer Syndrome and Lynch Syndrome: Results From a Large Cohort Study
J. Culver

B-20 Psychosocial Aspects of Spanish-speaking Research Participants in Genomic Medicine
J. Kohler

B-23 An Investigation of the Satisfaction with the Diagnosis Experience of Hispanic Parents of Children with Down Syndrome
J. Whitleigh

B-26 A Qualitative Comparison of Telegenetics vs. In-person Genetic Counseling: The Counselor's Experience
K. Pugh

B-29 Assessing the Availability and Quality of Spanish Genetics Resources for Patients on the Internet
L. Westrate

POSTERS WITH AUTHORS (CONTINUED)

B-32 Patient Satisfaction with Various Genetic Counseling Models: A Cancer Genetics Pilot Study
M. Helm

B-35 Digging a Little Deeper: What Do College Career Advisors Know About Genetic Counseling? What Do They Want to Know?
S. Carroll

B-38 Assessing Women's Attitudes Towards Genetic Testing for Hereditary Breast Cancer
T. Apostolico

Cancer

B-41 Assessing Cancer Risk in Germline Genetic Conditions
A. Emery

B-44 Do Patients with Wolf-Hirschhorn Syndrome (4p-) Have an Increased Risk of Hepatic Neoplasms?
A. Lortz

B-47 Uptake of Genetic Testing after Genetic Counseling in a Pediatric Sarcoma Population: An Institutional Perspective
A. Suttman

B-50 Support Systems for Male *BRCA* Mutation Carriers: An Interview-based Needs Assessment
C. Deffer

B-53 Retrospective Analysis of Preliminary Results from a Medically Actionable Genetic Screening Panel for Healthy Individuals
E. Haverfield

B-56 Spectrum of Pathogenic Variants Identified on a Hereditary Paraganglioma/Pheochromocytoma Panel
E. Wiley

B-59 Physician Awareness of and Attitudes toward Multigene Germline Panel Testing for Hereditary Cancer Predisposition
J. Gold

B-62 Impact of Gene Penetrance on Communication and Educational Preferences of Individuals with Lynch Syndrome and Their Family Members
J. Petersen

B-65 Ascertainment of Hereditary Leiomyomatosis and Renal Cell Carcinoma through Fibroid Pathology
J. Shi-lan Mak

B-68 Quantitative and Qualitative Study of Adherence Rates to Screening Guidelines for Individuals with Lynch Syndrome
K. Branham

B-71 Ethical and Logistical Challenges on a Multidisciplinary Genomic Tumor Board: A Secondary Qualitative Analysis
K. Fishler

B-74 *De Novo* Germline *PTEN* Mutation Identified in Twin Males with Varying Phenotypes
K. Sesock

B-77 Is Bigger Always Better? An Updated Comparison of Multi-gene Panel Results for Common Cancers
L. Panos Smith

B-80 Family Communication of Test Results among an Unselected Pancreatic Ductal Adenocarcinoma Cohort Who Underwent Germline Genetic Testing
L. Stobie

B-83 Clinical Applicability of Proposed Algorithm for Identifying Individuals at Risk for Hereditary Hematologic Malignancies
M. Clifford

B-86 Variants that Cross the Line: An Internal Review of Classification Evidence for Truncations of the C-terminus
M. Judkins

B-89 Why Do Patients Return for Additional Cancer Genetic Testing after a Negative Test Result?
M. Nichols

B-92 Revisiting the Role of Inherited Variants in Non-epithelial and Low Malignant Potential Ovarian Tumors
N. Carter

B-95 Patient Experiences with Genetic Counseling Referral following Colon Cancer Tumor Screening
R. Mills

B-98 Ohio Colorectal Cancer Prevention Initiative
R. Pearlman

B-101 Extra-adrenal Neuroendocrine and Pituitary Tumors in Two Patients with *MAX* Mutations
S. Hyde

B-104 Sources of Agreement and Disagreement among Variant Classifications in Clinvar: Critical Factors for Genetic Counselors
S. Lincoln

B-107 Moving Beyond Somatic Testing in Brain Tumors: A Pilot Study to Integrate Genetic Counseling for Germline Testing
S. Stasi

Cardiovascular

B-110 Preventing Sudden Cardiac Death(?): Exome Secondary Findings in Cardiovascular Genes
B. Feldmann

B-113 *LMNA* Variant Associated with Cardiomyopathy and Aortic Dilatation
C. Rigelsky

B-116 Down the Rabbit Hole: Tales of a Tiered Approach to Genetic Testing for Hypertrophic Cardiomyopathy
H. Workman

B-119 A Unique Familial and Molecular Presentation of a Novel *FBN1* Multi-exon Deletion
L. Williams

Counseling/Psychosocial

B-122 Influence of Personal and Professional Experiences on Prenatal Genetic Counseling
A. Randall

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POSTERS WITH AUTHORS (CONTINUED)

B-125 The Impact of a Quality Improvement Program on Genetic Counseling
D. Cutillo

B-128 Adolescent Perspectives on Genetic Testing for Adult Onset Conditions
E. Davidson

B-131 Psychological Impact on Patients and Families of the Diagnostic Odyssey in Mitochondrial Disease
E. McCormick

B-134 Beyond Karyotype and *FMR1*: Genetic Testing for Primary Ovarian Insufficiency
J. Helgeson

B-137 What Counts? Cord Blood Banking Unit Volume Alone is a Poor Predictor of Transplant Use
J. Zoladz

B-140 Isodicentric Y Chromosome Karyotypes Identified following Positive Prenatal Noninvasive Cell-free DNA Screening Results: A Case Series
K. Owens

B-143 Attitudes Towards 'Disorders of Sex Development' Nomenclature among Physicians, Genetic Counselors and Mental Health Clinicians
L. Miller

B-146 Genetics Counselors' Attitudes about Communicating Risk for Psychiatric Illness
M. Gleason

B-149 A Quantitative Study of Attitudes, Familiarity and Knowledge Regarding Prenatal Genetic Counseling in Appalachian Women
M. Yoho

B-152 Pre-symptomatic Genetic Testing in the Pediatric Ocular Genetics Clinic: A Case Report
R. Klatt

B-155 Patient Preferences for receiving ACMG Secondary Findings by Clinical Exome Sequencing
S. Siegler

Education/Training

B-158 Evaluation of a Genetic Counseling Mentorship Program
A. Gammon

B-161 Practices in Synagogues Regarding Jewish Genetic Disease Education
A. Thomsen

B-164 Investigating Student-athletes' Experiences with the NCAA Sickle Cell Trait Testing Program
E. Cutting

B-167 Barriers to Supervision: Are We on the Same Page?
J. Berg

B-170 Creating an Inclusive Genetic Counseling Workforce: A Local Educational Initiative
J. Morgan

B-173 High School Biology Teachers' Personal Experience with Genetic Counseling: An Opportunity to Collaborate and Increase Genetic Literacy
K. Stauff

B-176 Hereditary Diabetes Referral and Counseling Practices in a Prenatal Setting
L. Mizerik

B-179 Genetic Counselling Students' Behaviors and Attitudes toward Help Seeking for Stress and Anxiety
N. Quercia

B-182 The Relationship Between the Supervisory Working Alliance and Student Self-efficacy in Genetic Counseling Training
S. Caldwell

B-185 Evaluating FRAME (Faces Redefining The Art Of Medical Education) Videos: The Impact of Digital Storytelling on Medical Students' Attitudes to Disability and Their Learning Preferences
S. Malhotra

Neuro/Psych

B-188 Early Detection of Atypical Rett Syndrome through Diagnostic Testing Using Multi-gene Epilepsy Panels
C. Giummo

B-191 A Pilot Study to Implement Psychiatric Genetic Counseling at the Depressive Disorders Program, Douglas Mental Health University Institute
J. El Helou

Prenatal/Pediatric

B-194 Predictors of Velopharyngeal Dysfunction for Individuals with 22q11.2 Deletion Syndrome
A. Giordullo

B-197 Novel *De Novo TAOK1* Variants Associated with a Neurodevelopmental Phenotype, Macrocephaly and Joint Hypermobility
A. Noyes

B-200 Clinically Significant Small Indels Detected by Whole Genome Sequencing: A Proof of Concept Case Series
C. Brown

B-203 *GTF2I*: A Critical Gene in the Williams-Beuren Syndrome and 7q11.23 Microduplication Syndrome
D. Bertrand

B-206 Multifaceted Care and Adherence to Treatment for Individuals Living with Methylmalonic Acidemia and Propionic Acidemia: The Caregivers' Perspective
E. Harrington

B-209 Esoteric Aneuploidies and Genome-wide Cell-free DNA
E. Soster

B-212 Failure to Retrieve: Improving Timely Acknowledgement of Genetic Sendout Test Results
J. Conta

B-215 *ATM* Pathogenic/Likely Pathogenic Variants in Patients with Failed Severe Combined Immunodeficiency Newborn Screening
J. Mester

B-218 Where Are All the Girls? A Laboratory's Clinical Experience with Fragile X Diagnostic Testing in a Pediatric Population
J. Zdrodowski

B-221 A Retrospective Chart Review Examining the Clinical Utility of Family Health History
K. Dao

B-224 Strategies to Avoid False Positives Caused by Maternal Copy Number Variants in Noninvasive Prenatal Screening
K. Kaseniit

B-227 Riboflavin Transporter Deficiency with Gross Motor Delays and Regression in a Child with Response to Riboflavin Treatment
L. Carey

B-230 Prenatal Diagnosis of A 21q Microduplication after Positive NIPT Result for Trisomy 21: A Case Report
L. Petrarca

B-233 A Case of Multiple Genetic Conditions Present in One Individual
L. Rhodes

B-236 Trio-based Exome Sequencing Identifies *De Novo ARID4A* Variants as a Cause of Neurodevelopmental Disorders
N. Alexander

B-239 Finding Genotype-phenotype Correlations Using the DuchenneConnect Registry
R. Wang

B-242 Perspectives from Adolescents with Secondary Mitochondrial Disease
S. Collier

B-245 Prevalence, Perceptions and Predictors of Genetic Testing for Cornelia de Lange Syndrome
S. Noon

B-248 Uptake of Diagnostic Testing following Positive Cell-free DNA Screening Results in a General Obstetrical Population
T. Niemchak

B-251 Prenatal Genetic Counseling For a Novel Genetic Etiology Identified in a Fetus with Compound Heterozygous Alterations in *MYH6*
Z. Powis

Professional Issues

B-254 Personality Traits and Perfectionism Associated with Genetic Counselor Professional Quality of Life
B. Wong

B-257 Mitochondrial Replacement Techniques: Reactions and Opinions of Genetic Counselors
E. Wignall

B-260 Investigating Peer Mentorship in a Large Genetic Counselor Work Group
K. Healy

B-263 Attitudes of Clinicians Towards Cardiac Surgery and Trisomy 18
M. Kaulfus

B-266 The Duty to Warn At-risk Relatives: The Experience of Genetic Counselors and Medical Geneticists
T. Perry

Testing Innovation

B-269 The Impact of Re-analysis in Research Whole Exome Sequencing
A. Revah-Politi

B-272 Analysis of Differences in Detection Rates between Parent-proband Trios and Non-parent-trios in Diagnostic Exome Sequencing
C. Gund

B-275 Parental Experiences when Chromosomal Microarray Analysis is Ordered by a Geneticist vs. Non-geneticist
E. Andrew

B-278 Paired Tumor and Germline Molecular Profiling: Germline Findings and their Clinical Impact
L. Gunderson

B-281 Reanalysis of Whole Exome Sequencing Data to Identify Genetic Variants Associated with Retinal Dystrophies
M. Hricik

B-284 Process Review of *GJB6* Reflex Testing in Individuals with 0 or 1 *GJB2* Pathogenic Variants and Non-syndromic Hearing Loss
R. Supinger

B-287 Be Prepared: Understanding the Motivations, Expectations and Experiences of Direct-to-Consumer Clients Who Seek Genetic Counseling
T. Marzulla

B-290 Six Years In: Exome Sequencing is Becoming a First-line Test
Z. Powis

FRIDAY POSTERS

Access/Service Delivery

C-3 Journey of Fathers Following Their Child's Fragile X Diagnosis: Support-seeking Behaviors of Fathers
A. Kaur Mann

C-6 Utilization of Genetic Genealogy and YouTube Education to Increase Family Member Outreach
B. Kirkpatrick

C-9 CDC Tier 1 Genomic Applications: Awareness Among Genetic Counselors and Potential for Impact on Genetic Counseling Practices
E. Griffith

C-12 Factors Influencing Uptake of Evaluation Among Hemophilia Carriers and Potential Carriers
E. Parks

C-15 Risk Communication in Families of Children with Familial Hypercholesterolemia: Identifying Motivators and Barriers to Cascade Screening to Improve Diagnosis
E. Wurtmann

POSTERS WITH AUTHORS (CONTINUED)

C-18 Genetic Counseling for Adolescents with Sickle Cell Disease
J. Eun

C-21 The Internet's Black Box: What Parents of Children with Duchenne or Becker Muscular Dystrophy Are Finding Online
J. Leonard

C-24 Information is Power: Experiences in a Population Screening Initiative for Breast and Ovarian Cancer Risk
K. East

C-27 Comparison and Concordance of Reported Cancer Family History Between an Automated Patient Assessment Tool and Genetic Counselor Recorded Pedigrees: Findings from a Pilot Study
L. Bucheit

C-30 Comprehensive Management of Families with Hereditary Cancer Syndromes: Case Series
L. Haymon

C-33 Polydactyly and Parental Tenacity: How Reproductive Carrier Screening Opened the Door to a Diagnosis of *BBS1*-related Bardet-Beidl Syndrome
M. Walker Hardy

C-36 Rapid Inpatient Genomic Testing: Doing it the Right Way
S. Clowes Candadai

C-39 From Adversity to Advocacy: Factors Influencing Parental Growth toward Advocacy following the Diagnosis of Down Syndrome in a Child
T. Porter

Cancer

C-42 Pancreatic Cancer Prevention Program: An Institutional Experience
A. Gemmell

C-45 ***WITHDRAWN*** A Safety Net for Genetic Testing: Re-requisition Analysis
A. Martinez

C-48 Familial Communication of Positive *BRCA1/2* Results: A Relational Dialectics Theory Approach
A. Suzuki

C-51 Perceived Clinical Utility of Refined Risk Assessments for Carriers of Pathogenic *BRCA1/2* Gene Mutations
C. Heinlen

C-54 Living Under the Cloud of Cancer: Parent-child Communication about Genetic Testing for Li-Fraumeni Syndrome
E. Quinn

C-57 Genetic Testing Recommendations for Family Members At-risk for Familial Adenomatous Polyposis
F. Tubito

C-60 Evaluation of Multi-gene Panel Testing in Patients with Previous Negative or Uncertain *BRCA1* And *BRCA2* Results
J. Hopper

C-63 Experience of a Genetic Testing Laboratory with Customizable Hereditary Cancer Panels
J. Profato-Partlow

C-66 Brave New World: Wide Application of Pan-cancer Panel Screening in a High Volume Clinical Setting
J. Sotelo

C-69 Successful Pancreatic Screening in an Individual with *ATM* Mutation
K. Dempsey

C-72 Prevalence of Breast Cancer in Individuals with *ATM* Missense or Loss-of-function Variants
K. Skora

C-75 Prediction of Germline Mutations in Individuals Referred for "Multiple" Colorectal Polyps
K. Watkins

C-78 Multi-gene Hereditary Cancer Panel Testing Identifies Novel *GREM1* Duplication And *BRCA1* Mutation in Patient with Multiple Colon Polyps
L. Ryan

C-81 Hereditary Cancer Gene Panel Identifies 54 Concurrent Pathogenic Mutation Carriers
L. Servais

C-84 Multi-gene Panel Testing for Prostate Cancer: What Have We Learned So Far?
M. Jackson

C-87 Panel Testing in Men with Prostate Cancer
M. Marshall

C-90 The Mannogram: A Quantitative Analysis of Men's Views of Mammography
M. Snell

C-93 Assessment of Patient Satisfaction with the Provision of Fertility Information in Women with Lynch Syndrome
R. Hickey

C-96 Germline vs Somatic: Using Treatment as a Guide in Patient with AML
R. Moore

C-99 Outcomes of Germline Resequencing in Patients Re-evaluated in a Cancer Genetics Clinic
S. Dettwyler

C-102 Yield and Characterization of Multi-gene Hereditary Cancer Testing in Pediatric Patients
S. Knapke

C-105 Clinical Predictors for Identifying Variants on Cancer Genetic Testing Panels
S. Purcell

C-108 Results of Multi-gene Panel Testing in a Gastric Cancer Cohort: It's Not All *CDH1*
T. Paudyal

Cardio

C-111 A Partial Gene Deletion of *LMNA* Identified on Whole Exome Sequencing in Familial Dilated Cardiomyopathy: A Case Report
B. Psensky

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POSTERS WITH AUTHORS (CONTINUED)

C-114 Next-generation Sequencing and a Novel Bioinformatic Approach Identifies Copy Number Variation in Ion Channel Genes in a Clinical Laboratory
E. James

C-117 A Prospective Survey of Aortic Disease Biobank Participants' Preferences for Return of Research Genomic Sequencing Results
J. Love-Nichols

C-120 Direct Cascade Screening for Familial Hypercholesterolemia: Perspectives from U.S. Patients
R. Schwiter

Counseling/Psychosocial

C-123 Parents' Decision-making and Attitudes toward Conventional Invasive and Virtual Fetal Autopsies
A. Watts-Dickens

C-126 "This Could Be Me": Exploring the Impact of Genetic Risk for Huntington's Disease Young Caregivers
D. Dondanville

C-129 Counseling Healthy Individuals for Proactive Genetic Screening: A Case Report
E. Esplin

C-132 Professional Support Desired by Men and Women Following a Perinatal Loss
H. Mueller

C-135 Anxiety and Stress in Family Members of People with Huntington's Disease
J. Shaner

C-138 Advances in Molecular Therapies for Duchenne Muscular Dystrophy: Which Patients Could Benefit?
K. Beattie

C-141 Attitudes Toward and Uptake of Prenatal Genetic Screening and Testing in Twin Pregnancies
K. Reese

C-144 Further Evidence of the Utility of Whole Exome Sequencing as a Second-tier Test: Identification of a Novel *De Novo* Truncating Mutation in *EBF3*
L. Palange

C-147 Variable but Clinically Significant Findings in Miscarriage: The Vital Role of Genetic Counseling
M. Maisenbacher

C-150 Pitfalls in Communications in a Genetic Counseling Session Where Two Languages Are Required
R. Ault

C-153 An Analysis of State Newborn Screening and Parental Emotional Distress
R. Shapiro

C-156 Preparing Genetic Counselors for Patient Disclosure of Intimate Partner Violence: An Assessment of an Intervention Toolkit
T. St. Lewis

Education/Training

C-159 Undergraduate Student Perceptions and Awareness of Genetic Counseling
A. Gerard

C-162 Exploring the Genetic Counseling Workforce Pipeline
A. Wojcik

C-165 No One's Genome is More Interesting than Your Own: Understand Your Genome Through Experiential Education
E. Ramos

C-168 The Perceived Self-efficacy of Genetic Counselors as Teachers
J. Gasparini

C-171 Variant Interpretation Education in Genetic Counseling Programs: An Assessment of Current Practices
J. Neary

C-174 Genetic Counseling Awareness and Recruitment: How Are Students Finding Information about the Genetic Counseling Profession?
K. Steike

C-177 The Relationship between Genetic Counseling Course Grade Point Averages and ABGC Certification Examination Scores
M. Cho

C-180 Genetic Counselor Drift: Exploring Contributors to the Recent Growth of Non-clinical Genetic Counseling Positions and the Resulting Impact on the Profession
R. Rigobello

C-183 Screening for Preeclampsia in the First Trimester: An Experience from Private Practice
S. Hash

C-186 Knowledge and Attitudes after Using Videos to Educate a Non-clinical Cohort About Prenatal Cell-free DNA Screening
T. Cacchione

Neuro/Psych

C-189 Parkinson's Disease: Patients' Interest in Genetic Counseling and Their Knowledge and Attitudes on Genetics and Genetic Testing
D. Alaeddin

C-192 The Effect of Oral Literacy Demand on Knowledge after Alzheimer's Disease Risk Disclosure
L. Erby

Prenatal/Pediatric

C-195 Substantial Pain Burden in Frequency, Intensity, Interference and Chronicity among Children and Adults with Neurofibromatosis Type 1
A. Kongkriangkai

C-198 Prenatal Diagnosis of Kabuki Syndrome Due to a Deletion Involving Exons 5 And 6 of the *KDM6A* Gene
B. Tucker

C-201 Parental Decisional Factors Deliberated in Fragile X Syndrome Clinical Trial Enrollment
C. D'Amanda

C-204 Identification of Balanced Translocation Carriers through Routine Preimplantation Genetic Screening
D. Neitzel

C-207 Familial Cornelia de Lange Syndrome Due to a Novel Duplication in the *SMC3* Gene
E. Kessler

C-210 Pre- and Post-test Parent Perceptions of Genetic Testing for Children with Autism Spectrum Disorder
H. Winslow

C-213 Parental Expectations of the Future Functional Outcomes of Children Diagnosed with 22q11.2 Deletion Syndrome
J. Garman

C-216 Gonadal Mosaicism in Proximal 16p11.2 Microdeletion Syndrome
J. Rinsky

C-219 Copy Number Variant Calling on a 177-Gene Expanded Carrier Screening Panel
K. Beauchamp

C-222 Frequency of *PTEN* Gene Mutations in Children with Autism Spectrum Disorder, Intellectual Disabilities and Global Developmental Delays in the Presence of Macrocephaly
K. Dillahunt

C-225 A New Candidate Gene For a Syndromic Neurodevelopmental Disorder: *CYFIP2*
K. McWalter

C-228 The Frequency and Impact of Dependent Alleles in Expanded Carrier Screening
L. Cushman Spock

C-231 Whole Exome Sequencing in Developmental Ocular Disorders Confirms Genetic Heterogeneity and Unexpected Findings
L. Reis

C-237 ***WITHDRAWN*** Novel Molecular Mechanism for Fragile XE
R. McClellan

C-240 "Back to Where We Started": The Experience of Parents Receiving Uninformative Exome Sequencing Results for Their Children
S. Bivona

C-243 Full Gene Sequencing as a Follow Up to Carrier Screening: Utilization and Outcomes
S. Dorsey

C-246 The Impact of Genetic Counselor Assessment on Egg Donor Screening: A Two-year Pilot Study
S. Talcott Baughman

C-249 The Transgenerational Effect of Maternal Age on Fertility of Offspring
T. Reynolds

Professional Issues

C-252 Parental Attitudes and Expectations towards Receiving Genomic Test Results in Healthy Children
A. Rahm

C-255 Genetic Counselors Matter: Improving Genetic Counselor Satisfaction by Incorporating Genetic Counseling Feedback into Faculty Evaluations
C. Grey Spaeth

C-258 Introducing Genetic Counseling as a Career Option: Practices of College Professors
H. Krolewski

C-261 Genetic Counselors' Experience with and Opinions on the Management of Newborn Screening Incidental Carrier Findings
K. Leppert

C-264 Burnout and Workplace Isolation in Laboratory Genetic Counselors
R. Lehan

Testing Innovation

C-267 Adoptees' Experiences with Direct-to-consumer Genetic Testing: Emotions, Satisfaction and Motivating Factors
A. Childers

C-270 5p13.3-q11.2 Duplication Due to Supernumerary Marker Chromosome 5: Novel Features and Genetic Counseling Implications for a Rare Disorder
B. Helm

C-273 Variability among Clinical Genetics Professionals' Estimates of Complex Disease Risks Based on a Combination of Genetic and Environmental Factors
C. Heckman

C-276 Rare *NF1* Mutation in Complex Family with Spinal Neurofibromatosis, 1q21.1 Microduplication and 16p13.11 Microdeletion Syndrome
J. Propst

C-279 Likely Pathogenic, Possibly Pathogenic or Variant of Unknown Significance: Do Individuals Discern Differences between Uncertain Genetic Variant Classifications?
L. Hellwig

C-282 Comparison of Medical Management and Genetic Counseling Options Pre- and Post-whole Exome Sequencing for Patients with Positive and Negative Results
M. Matias

C-285 Subspecialty Genetic Test Utilization Guidance Supports Diagnostic Certainty: A Case Series in Hemophilia A
S. Dugan

C-288 Diagnostic Yield for Neurological and Neuromuscular Disorders Testing via High-depth Multi-gene Panel Analysis with Integrated Sequence and Copy Number Detection
T. Winder

C-291 Challenges of Diagnostic Exome Sequencing: A Patient for Life and Implications for Genetic Counselors
Z. Powis

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WEDNESDAY, SEPTEMBER 13

6:30 PM – 7:00 PM

MNG LABORATORIES

Challenging Cases and the Need for Complementary Test Methods to Improve Clinical Sensitivity of Genetic Testing

PRESENTERS: Dr. Peter L. Nagy, MD, PhD, Chief Medical Officer; Ymkje Cuperus, MS, Genetic Counselor

MNG Laboratories will present multiple case studies in which comprehensive testing methods incorporated into our next-generation sequencing test offerings, such as copy number assessment, mitochondrial genome sequencing with deletion analysis and repeat expansion testing can increase clinical sensitivity of genetic testing.

7:15 PM – 7:45 PM

Greenwood Genetic Center
Where Compassion Inspires Progress

New NGS Testing Strategies to Improve Diagnostic Yield

PRESENTER: Renee Bend, PhD, Greenwood Genetic Center Molecular Specialist

At the Greenwood Genetic Center, our Next Generation Sequencing (NGS) tests are changing to respond to the needs of clinicians and to increase patient diagnosis. We will highlight the variety of NGS tests we offer, and the *extras* provided for each, under our mission of "Giving Greater Care."

THURSDAY, SEPTEMBER 14

12:15 PM - 12:45 PM

BOULDER ABORTION CLINIC

Termination of Pregnancy for Indications of Genetic Disorder and Fetal Abnormality in Advanced Gestations

PRESENTER: Warren M. Hern, MD, MPH, PhD, Director, Boulder Abortion Clinic, Associate Clinical Professor, Department of Obstetrics & Gynecology, University of Colorado Denver Health Sciences Center

The diagnostic categories of fetal anomalies and genetic disorders for patients seen over a period of 35 years will be presented. The components of clinical care for patients seeking this service will be presented including preoperative evaluation, protocol for management of patients in different stages of pregnancy, operative techniques, postoperative management and evaluation and procedures for grief support.

1:00 PM – 1:30 PM

SAREPTA THERAPEUTICS

The Importance of Duchenne Muscular Dystrophy (DMD) Genotype in an Era of Variant Specific Clinical Trials and Therapies

PRESENTERS: Matthew Pastore, MS, LGC, Genetic Counselor, Nationwide Children's Hospital

Gain perspective on the evolving field of DMD clinical trials. Appreciate why interpretation of a DMD genotype is critical. Understand how a DMD genotype may directly impact clinical management. Become familiar with a range of HCP, patient and family DMD resources.

6:15 PM – 6:45 PM

PREVENTION GENETICS
DISEASE PREVENTION THROUGH GENETIC TESTING

Getting Better Mileage: Our Path to Creating a Genetic Counseling Assistant Program

PRESENTER: Christina Zaleski, MS, CGC, Director of Genetic Counseling and Client Services

By creating and implementing a laboratory Genetic Counseling Assistant (GCA) program, we created a pipeline to prepare applicants for graduate school and improved the productivity and scope of our genetic counselors' roles within the company. This presentation will describe the history and evolution of our GCA program at PreventionGenetics.

7:00 PM – 7:30 PM

PerkinElmer
For the Better

PerkinElmer Genetics: Enabling Access to Affordable Clinical Grade Whole Genome Sequencing

PRESENTER: Alice K. Tanner PhD, MS, CGC, FACMG, Director, Laboratory Testing and Clinical Education

WGS can identify many different types of mutations (SNVs, indels, CNVs) across the genome in one test, giving it an advantage over single gene, panel, and WES testing. As WGS moves into clinical testing for rare diseases, learn how PKIG can put the power of WGS to work for you.

FRIDAY, SEPTEMBER 15

10:00 AM – 10:30 AM

color

A New Approach to Genetic Counseling and Testing: Key Clinical Findings

PRESENTER: Lauren Ryan, MS, LCGC, Senior Genetic Counselor

Color Genomics offers high quality genetic testing for hereditary cancer risk in an innovative service delivery model that reduces barriers to accessing genetic counseling and testing. Key findings to be reviewed include positive rates by gene and by personal and family history, as well as concurrent mutations found. Case reports highlight the value of broader testing approaches.

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Heather A. Zierhut, PhD, MS, CGC

Audrey Heimler Special Project Award (AHSPA)
Carrie Atzinger, MS, LGC; Katherine Wasik Healy, LGC

NSGC LEADERSHIP AWARDS

Natalie Weissberger Paul National Achievement Award
Linda Robinson, MS, CGC

Strategic Leader
Heather A. Zierhut, PhD, MS, CGC

New Leader
Vivian Pan, MS, CGC

Outstanding Volunteer
Kate L. Wilson, MS, CGC

International Leader
Marion McAllister, PhD

Cultural Competency
Sara M. Pirzadeh-Miller, MS, CGC

BEST ABSTRACT AWARDS

Best Full Member Abstract Award
A Randomized Controlled Trial to Test Non-inferiority of Web-based to In-person Education by a Genetic Counselor about Carrier Results from Exome Sequencing
Barbara Biesecker, PhD, MS, CGC

Beth Fine Kaplan Student Abstract Award
Genetics Hide or Seek: An Investigation of Differential Effects of Monitoring and Blunting on Information Preferences in a Hypothetical Cancer Diagnosis Scenario
Katie Plamann, BS

JOURNAL OF GENETIC COUNSELING BEST PAPER TRAINEE AWARD

Caroline Rung Elsas, MS, CGC
Sabrina R. Williams, MS, CGC

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Student Annual Conference Scholarship
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Education Committee Chair

Kaylene Ready, MS, CGC

Education Committee Vice Chair

Kate Wilson, MS, CGC

Education Committee Board Liaison

Jason Flanagan, MS, CGC

NETWORKING ACTIVITIES + MEETINGS

NSGC SIG Fair

Wednesday, September 13

1:45 PM – 3:00 PM

Short North Ballroom B

All Annual Conference 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. The first half of the SIG Fair is open to all conference attendees. The second half will be dedicated to First-time attendees.

Welcome to the Annual Conference: First-time Attendee Orientation

Wednesday, September 13

1:45 PM – 3:00 PM

Short North Ballroom A

Are you a first-time Annual Conference attendee? Make your way to this event to network with other new attendees and learn about the Annual Conference. There will also be a special SIG fair just for first-time attendees and new NSGC members. Meet with SIG leaders at this event and learn more about what NSGC's SIGs have to offer.

Welcome Reception

Wednesday, September 13

5:00 PM – 8:00 PM

Halls C & D

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 Annual Conference. Light hors d'oeuvres and a cash bar will be available.

NSGC State of the Society Address

Thursday, September 14

8:35 AM – 9:20 AM

Grand Battelle Ballroom

Join NSGC President Mary Freivogel, MS, CGC, as she shares NSGC activities and accomplishments over the past year highlights, reviews NSGC's advocacy efforts and strategic initiatives.

Incoming Presidential Address

Thursday, September 14

9:20 AM – 9:50 AM

Battelle Grand Ballroom

Welcome NSGC President-Elect Erica Ramos, MS, CGC, as she introduces herself to NSGC members and outlines her vision for NSGC and the genetic counseling profession in 2018.

ABGC Annual Business Meeting

Thursday, September 14

12:30 PM – 1:00 PM

Battelle Grand Ballroom

ACGC Presentation

Thursday, September 14

1:00 PM – 1:30 PM

Battelle Grand Ballroom

Genome Magazine's Code Talker Award

Friday, September 15

6:30 PM – 8:30 PM

Short North Ballroom A

Join *Genome* Magazine for an evening of food, drinks and amazing stories at the 2017 Code Talker Award, honoring genetic counselors nominated by Genome readers. Featuring guest speaker Julia Sweeney of *Saturday Night Live*. Attendees will receive the 2017 Code Talker essay collection!

Presented by: Genome

Sponsored by:  INVITAE

Meals and Refreshments

Continental breakfast will be served Thursday – Saturday in the Batelle Grand Foyer and in the Upper and Lower B Foyer on Wednesday from 7:00 AM – 8:00 AM.

Refreshment Breaks

Wednesday, September 13

10:00 AM – 10:30 AM, *Upper and Lower B Foyer*

Thursday, September 14

9:50 AM – 10:15 AM, *Halls C & D*

3:00 PM – 3:45 PM, *Halls C & D*

Friday, September 15

9:50 AM – 10:30 AM, *Halls C & D*

2:30 PM – 3:00 PM, *Halls C & D*

Saturday, September 16

9:50 AM – 10:10 AM, *Upper and Lower B Foyer*

NSGC gratefully acknowledges our Refreshment Break Sponsor

myriad

Join Us at the Booths Below for a Special Treat

The following vendors are generously serving snacks at their booth at the following times. Be sure to stop by while supplies last.

Wednesday, September 13 | 5:00 PM – 8:00 PM

Booth #346 ABGC

Booth #417 WOMEN'S HEALTH genpath an OPKO Health Company

Booth #301 INVITAE

Booth #101 myriad

Thursday, September 14 | 5:30 PM – 7:45 PM

Booth #301 INVITAE

Booth #101 myriad

Friday, September 15 | 12:00 PM – 3:00 PM

Booth #301 INVITAE

Booth #101 myriad

Events within NSGC Central

Wednesday, September 13

6:00 PM – 7:00 PM: NSGC Digital Ambassador Meet-up

6:00 PM – 7:00 PM: NSGC Tweet-up

SIG Presentations

Engage with SIG leadership in NSGC Central at the following times:

Wednesday, September 13

5:00 PM – 5:30 PM: Neurogenetics SIG

5:30 PM – 6:00 PM: Leadership and Management SIG

6:00 PM – 6:30 PM: Late Career SIG

Thursday, September 14

5:30 PM – 6:00 PM: Industry SIG

6:00 PM – 6:30 PM: Psychiatric Disorders SIG

Friday, September 15

1:30 PM – 2:00 PM: Pediatric and Clinical Genetics SIG

2:30 PM – 3:00 PM: Cystic Fibrosis SIG

EXHIBITOR DIRECTORY BY COMPANY NAME

EXHIBITOR SUITE MAP

EXHIBITOR INDEX

23andMe
Booth 435

650.938.6300

customercare@23andme.com

Founded in 2006, 23andMe is the first and only genetic service available directly to consumers that offers over 75 reports on your genetic health risks, wellness, traits and ancestry that meet FDA requirements.

AbortionClinics.Org/AAF, Inc.
Booth 323

402.292.4164

acconebraska@gmail.com

Our mission is to provide pregnancy terminations, contraception and routine medical care to women and men in a compassionate, comfortable and personal environment. Our fund financially assists our patients seeking abortion care.

Admera Health
Booth 534

908.222.0533

ClientCare@admerahealth.com

Admera Health is a molecular diagnostics company focused on personalized medicine, non-invasive cancer testing and digital health. We utilize next generation technology platforms and advanced bioinformatics to redefine disease screening, diagnosis, treatment, monitoring and management.

Alexion Pharmaceuticals
Booth 627

Alexion is a global biopharmaceutical company focused on developing and delivering life-transforming therapies for patients with devastating and rare disorders. Alexion developed and commercializes Soliris® (eculizumab), the first and only approved complement inhibitor to treat patients with paroxysmal nocturnal hemoglobinuria (PNH) and atypical hemolytic uremic syndrome (aHUS), two life-threatening ultra-rare disorders. As the global leader in complement inhibition, Alexion is strengthening and broadening its portfolio of complement inhibitors, including evaluating potential indications for eculizumab in additional severe and ultra-rare disorders. Alexion's metabolic franchise includes two highly innovative enzyme replacement therapies for patients with life-threatening and ultra-rare disorders, Strensiq® (asfotase alfa) to treat patients with hypophosphatasia (HPP) and Kanuma® (sebelipase alfa) to treat patients with lysosomal acid lipase deficiency (LAL-D). In addition, Alexion is advancing the most robust rare disease pipeline in the biotech industry, with highly innovative product candidates in multiple therapeutic areas.

AliveAndKickn
Booth 247

201.694.8282

robin@aliveandkickn.org

AliveAndKickn is a patient advocacy organization whose mission is to improve the lives of individuals and families affected by Lynch Syndrome through research, education and screening. Ask us about The HEROIC Registry.

Allele Diagnostics
Booth 429

844.255.3532

info@allelediagnostics.com

Allele Diagnostics provides high-quality genetic testing and reporting services. Specializing in rapid microarray, we offer a unique test menu focused on neonatal/pediatric and prenatal patients.

Alnylam Pharmaceuticals
Booth 304

617.551.8200

info@alnylam.com

Alnylam is leading the translation of RNA interference (RNAi) into a whole new class of innovative medicines with the potential to transform the lives of patients who have limited or inadequate treatment options. RNAi therapeutics represent a powerful, clinically-validated approach for the treatment of a wide range of debilitating diseases.

Alpha-1 Foundation
Booth 226

877.228.7321

info@alphaone.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 401

949.900.5500

info@ambrygen.com

Ambry Genetics is a privately-held healthcare company with the most comprehensive suite of genetic testing solutions for inherited and non-inherited diseases. Ambry is dedicated to scientific collaboration to cure or manage all human disease.

American Board of Genetic Counseling, Inc.
Booth 346

913.222.8661

info@abgc.net

The American Board of Genetic Counseling is the credentialing organization for the genetic counseling profession in the US and Canada. ABGC works to protect the public and promotes the growth and development of the profession.

ARUP Laboratories
Booth 531

801.583.2787

info@aruplab.com

ARUP Laboratories' Genetic Division offers testing in molecular genetics, cytogenetics, FISH, maternal serum screening, genomic microarray and biochemical genetics. Medical directors and genetic counselors are available for pre- and post-test consultation and interpretation.

AstraZeneca

Booth 603

AstraZeneca is a global, science-led biopharmaceutical company that focuses on the discovery, development and commercialization of prescription medicines, primarily for the treatment of diseases in three main therapy areas – Oncology, Cardiovascular & Metabolic Diseases and Respiratory. The Company also is selectively active in the areas of autoimmunity, neuroscience and infection. AstraZeneca operates in over 100 countries and its innovative medicines are used by millions of patients worldwide. For more information, please visit www.astrazeneca-us.com and follow us on Twitter @AstraZenecaUS.

B.Braun CeGaT, LLC

Booth 539

773.255.2611

dawn.brooke@bbraun.com

B.Braun CeGaT is a leading global provider of genetic diagnostics and mutation-related disease analyses. Our extensive test menu offers more than 180 multi-gene diagnostic panels in 17 disease categories. We strive to secure a clinical diagnosis and help guide prevention and treatment options. CAP/CLIA accredited.

Basser Center for BRCA

Booth 325

215.662.2748

basserinfo@uphs.upenn.edu

The Basser Center for BRCA at Penn Medicine's Abramson Cancer Center is the first comprehensive center for the research, treatment and prevention of BRCA-related cancers. Devoted to advancing care for people affected by BRCA gene mutations, the Basser Center's unique model provides funding for collaborative research, education and outreach programs around the world.

Baylor Genetics

Booth 307

800.411.GENE (4363)

mail@baylorgenetics.com

Baylor Genetics has been helping healthcare providers solve the most complex cases for over 35 years with our unmatched genetic talent, deep patient data sets and advanced technology.

EXHIBITOR INDEX (CONTINUED)

BioMarin Pharmaceutical Inc.

Booth 510

415.506.6700

customersupport@bmrn.com

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

Blueprint Genetics

Booth 328

650.452.9340

jessica.kim@blueprintgenetics.com

Blueprint Genetics is a genetic diagnostic company that provides comprehensive genetics testing for all medical specialties. Blueprints innovative technologies in human rare diseases enable improved tests with higher quality, lower cost and faster lead time.

Boulder Abortion Clinic, PC

Booth 310

303.447.1361

Boulder Abortion Clinic's Dr. Warren Hern provides services to select patients beyond 30 menstrual weeks for fetal anomaly and maternal indications. Assistance with genetic testing and grievance services is available.

Bright Pink

Booth 205

312.787.4412

brightpink@brightpink.org

Bright Pink is the only national non-profit organization focused on prevention and early detection of breast and ovarian cancer in young women. Our aim is to reach the 52 million young women in the United States between the ages of 18 and 45 with our innovative, life-saving breast and ovarian health programs, thereby empowering this and future generations of women to live healthier, happier and longer lives.

CancerGene Connect

Booth 222

214.862.1957

info@cagene.com

CancerGene Connect is a cloud-based platform that remotely gathers patient history, runs risk assessment models, draws family trees, generates patient reports and creates a comprehensive database.

CancerIQ

Booth 306

888.80.CANCERIQ

info@cancer-iq.com

CancerIQ is an end-to-end software solution that automates the full administrative workflow for genetics providers including family history collection, pedigree drawing, test ordering and documentation.

CBR From AMAG Pharmaceuticals

Booth 342

888.932.6568

CBR is the world's largest newborn stem cell company. Our mission is to enable more breakthrough medical treatments for more families. We do that by significantly advancing the real life clinical applications of newborn stem cells.

Celmatix

Booth 235

646.389.0245

Celmatix is a next-generation women's health company transforming the way women and their physicians leverage genomics and data to make more informed, proactive reproductive health decisions.

Center for Fetal Diagnosis and Treatment at The Children's Hospital of Philadelphia

Booth 112

800.IN.UTERO (800.468.8376)

Experts in prenatal diagnosis and treatment, and home of the first specialized delivery unit exclusively for families carrying a fetus with a congenital anomaly, since 1995 we have provided care for 20,000 pregnancies.

Children's Hospital Colorado

Booth 614

720.777.6711

Provides a comprehensive test menu and reference services to pediatric and adult populations. With our highly skilled medical personnel we provide consultation to our esoteric areas such as Electron Microscopy, Molecular, Mitochondrial and Biochemical testing.

Citizens United for Research in Epilepsy (CURE)

Booth 629

Citizens United for Research in Epilepsy (CURE) is the leading nongovernmental agency fully committed to funding research in epilepsy. CURE is dedicated to the goal of "no seizures, no side effects."

City of Hope Laboratories

Booth 537

626.218.0100

laboutreach@coh.org

City of Hope was designated as one of only 47 comprehensive cancer centers in the nation by NCI. Our Laboratory combines an extensive array of diagnostic expertise into a single customer-focused program with continuous innovation. Goal is for exceptional care and quality service to the community.

Clinical Genome Resource (ClinGen)

Booth 527

clingen@clinicalgenome.org

ClinGen is an NIH-funded resource dedicated to creating a publicly available knowledge-base of clinically relevant genes and variants for use in precision medicine and research.

Clovis Oncology

Booth 208

303.625.5000

We are a biopharmaceutical company focused on acquiring, developing and commercializing cancer treatments in the United States, Europe and other international markets. Our development programs are targeted at specific subsets of cancer, combining precision medicine with companion diagnostics to direct therapeutics to those patients most likely to benefit from them.

Color

Booth 229

650.743.0657

pam@color.com

Color is a health technology service that offers physician-ordered genetic testing for hereditary cancer risk. The Color Test analyzes 30 genes that impact the most common hereditary cancers. Complementary genetic counseling is included.

CombiMatrix

Booth 438

949.753.0624

marketing@combimatrix.com

CombiMatrix is a clinical diagnostic laboratory specializing in cytogenomic testing for preimplantation genetic testing (PGS and PGD), prenatal diagnosis, miscarriage analysis and pediatric developmental disorders.

Concert Genetics

Booth 338

615.861.2634

info@concertgenetics.com

Concert Genetics is a software and data analytics company that builds products to simplify the comparison, selection, ordering, resulting, billing and payment of genetic tests.

EXHIBITOR INDEX (CONTINUED)

Connective Tissue Gene Tests (CTGT)
Booth 209

484.244.2900

inquiries@ctgt.net

CTGT offers over 1,500 molecular genetic tests and panels for inherited genetic disorders with high test sensitivity and accuracy, fast TAT, expert interpretation and superior customer service. All tests can be performed on prenatal specimens.

CooperGenomics
Booth 514

855.687.4363

info@coopergenomics.com

Reprogenetics, Recombine, and Genesis Genetics, together as CooperGenomics, are the pioneers and global leaders of comprehensive reproductive genetic testing. Through expanded carrier screening, PGD, PGS, NIPS, and beyond, our team is committed to advancing the field of reproductive genetics, improving outcomes and empowering families worldwide.

Counsyl
Booth 113

888.COUNSYL (888.268.6795)

counsyl.com/contact

Counsyl is a DNA testing and genetic counseling service committed to helping patients understand their DNA and how it can inform important health decisions.

Courtagen Life Sciences, Inc.
Booth 237

877.395.7608

info@courtagen.com

Courtagen Life Sciences, Inc. is a CLIA/CAP certified laboratory specializing in personalized genetic testing for neurological disorders, autism spectrum disorders, developmental delay, mitochondrial disorders and functional disorders.

DDC Clinic Molecular Diagnostics Laboratory
Booth 348

440.632.5532

lab@DDCclinic.org

Founded to help Amish children from Northeast Ohio suffering from rare devastating conditions, the non-profit DDC Clinic Molecular Diagnostics Laboratory now provides affordable CLIA-certified genetic testing services to children and adults from around the world.

Eurofins NTD
Booth 302

888.NTD.LABS (888.683.5227)

clientservices@ntd-eurofins.com

For more than 30 years, NTD has pioneered the research and development of prenatal screening protocols for open neural tube defects, Down syndrome, trisomy 13 and 18, and early onset preeclampsia screening. Today, NTD serves genetic counselors, obstetricians and maternal fetal medicine specialists worldwide.

EvolveGene
Booth 612

800.963.3203

support@evolvegene.com

EvolveGene® offers preconception and prenatal genetic screens for use during any reproductive stage: FertilityReady™, FamilyReady™, j-FamilyReady™, DonorReady™, Pre-IVF Genetic Screen™, EarlyPregnancy™ NIPT, EarlyPregnancy™ NIPT Plus.

Face2Gene
Booth 100

617.412.7000

molly@fdna.com

Face2Gene, developed by FDNA, is a suite of phenotyping applications that facilitate comprehensive and precise genetic evaluations using facial analysis, deep learning and artificial intelligence.

FORCE: Facing Our Risk of Cancer Empowered
Booth 106

866.288.HELP (7475)

info@facingourrisk.org

FORCE's mission is to improve the lives of individuals and families affected by hereditary breast, ovarian and related cancers. A national nonprofit, FORCE programs include outreach, education, support, advocacy and research on behalf of those affected by hereditary cancers.

Fulgent Genetics
Booth 201

626.350.0537

info@FulgentGenetics.com

At Fulgent our vision is understanding life at its most basic building block, DNA. Our goal is to create innovative tests that provide; the greatest flexibility and diverse choices that include oncology, pediatrics and cardiology. A relentless pursuit of quality...striving to make improvements in every area possible. Be passionate, compassionate and extraordinary.

Geisinger Health System
Booth 427

570.214.6918

gblowry@geisinger.edu

Geisinger is one of the nation's largest health service organizations. Dedicated to setting the standard for evidence-based care delivery and pursuing innovative new approaches to predictive precision medicine, such as our MyCode® genomic research initiative.

GeneDx
Booth 314

GeneDx is a world leader in genomics with an acknowledged expertise in rare and ultra-rare genetic disorders, as well as one of the broadest menus of sequencing services available among commercial laboratories. Providing testing to patients and their families in more than 55 countries, GeneDx is a business unit of BioReference Laboratories, a wholly owned subsidiary of OPKO Health, Inc.

GeneTests.org

Booth 415

GeneTests is an online medical genetics information resource with capability to search by test, disorder or gene. GeneTests searches retrieve links to GeneReviews™ chapters, other online resources and genetic testing information.

Genetic Support Foundation

Booth 616

844.743.6384

info@geneticsupportfoundation.org

Genetic Support Foundation is an independent nonprofit organization that provides genetic counseling services and educational resources.

Genome Magazine

Booth 327

972.905.2920

tstammen@genomemag.com

Genome Magazine explores the world of personalized medicine and the genomic revolution that makes it possible, empowering readers to make informed health decisions that will help them live better and longer.

Genome Medical

Booth 109

877.688.0992

info@genomemedical.com

Genome Medical is a nationwide genomics medical practice with a network of genetic experts. We help individuals and clinicians navigate the rapidly expanding field of genetic testing and use test results to make informed decisions.

GenPath Women's Health

Booth 417

GenPath Women's Health, a division of BioReference Laboratories, an OPKO Health Company, specializes in the diagnostic needs of the OBGYN 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.

EXHIBITOR INDEX (CONTINUED)

Good Start Genetics

Booth 613

617.714.0848

Good Start Genetics is dedicated to helping grow healthy families through its best-in-class genetics offerings. With GeneVu carrier screening, and EmbryVu preimplantation screening, clinicians and patients are armed with insightful and actionable information to promote successful pregnancies.

Greenwood Genetic Center

Booth 422

864.941.8100

rfletcher@ggc.org

GGC's Biochemical, Cytogenetics and Molecular Diagnostic Laboratories offer a comprehensive test menu consisting of enzyme analysis and treatment monitoring, chromosome and microarray analysis, Sanger and Next Generation Sequencing and other techniques that help provide diagnoses.

Harmony Prenatal Test

Booth 334

317.501.6804

Lori.perry@contractors.roche.com

Roche provides innovative diagnostic solutions to help clinicians make confident decisions for their patients' health, including the Harmony non-invasive prenatal test, a lab-developed (non-FDA approved) test to evaluate risk of Trisomy 21, 18, and 13.

Human Longevity Inc.

Booth 529

858.864.1127

rleavitt@humanlongevity.com

Human Longevity, Inc. is revolutionizing human health by generating and analyzing more data and deeper understanding into what can keep you living healthier longer and to uncover insights capable of transforming healthcare from reactive to proactive.

Huntington's Disease Youth Organization (HDYO)

Booth 329

+44.755.517.8340

catherine@hdyo.org

HDYO is a global organization that provides education, advice and support to children, young people and parents impacted by Huntington's Disease and support professionals working with HD families.

Integrated Genetics & Sequenom

Booth 522

800.848.4436

Integrated Genetics is a leading provider of reproductive genetic testing services driven by its commitment to physicians and their patients. With the addition of Sequenom, a pioneer in the fast-growing area of non-invasive prenatal testing, Integrated Genetics can now offer physicians and patients more options for prenatal testing.

Invitae

Booths 300, 301

www.invitae.com

Invitae offers high-quality, affordable genetic testing for oncology, cardiology, neurology, pediatrics, and more. Join us in our mission is to bring genetic information into mainstream medical practice to improve healthcare for everyone.

Kaiser Genetics- Northern California

Booth 207

Jazmine.Jung@kp.org

Practice what you believe, practice at Kaiser Permanente! Kaiser Genetics is the employer of choice for over 70 genetic counselors in Northern California. Stop by our booth to learn more about our rewarding positions!

KolGene

Booth 331

+97.252.688.2833

mcaspi@kolgene.com

KolGene – The New Way to Order Genetic Tests. With KolGene, clinicians receive customized offers from the world's leading labs, and can manage all aspects of ordering the test in one place.

Laboratory for Molecular Medicine

Booth 437

617.768.8500

lmm@partners.org

The Laboratory for Molecular Medicine (LMM) is a CLIA-certified molecular diagnostic laboratory, operated by Partners HealthCare Personalized Medicine and is led by a group of Harvard Medical School-affiliated faculty, geneticists, clinicians and researchers.

Le Bonheur Children's Hospital

Booth 615

901.287.5080

patricia.tripp@mlh.org

Le Bonheur is a free standing pediatric acute care facility located in Memphis, TN. Recognized among the nation's "Best Children's Hospital" by US News & World Report for seven consecutive years.

Lettercase

Booth 344

770.310.3885

stephanie.meredith@uky.edu

The Lettercase and Down Syndrome Pregnancy programs at the University of Kentucky's Human Development Institute offer accurate, up-to-date and balanced resources for medical providers to give new and expectant parents about Down syndrome and other genetic conditions.

Li-Fraumeni Syndrome Association

Booth 102

LFSA provides awareness, patient support, education and funding for LFS cancer research with collaboration from the leading international medical consortium of LFS investigators and providers.

Manchester University Master of Science In Pharmacogenomics

Booth 530

260.470.2747

dfkisor@manchester.edu

Manchester University offers the Nation's only online Master of Science in Pharmacogenomics Program. The flexible two-year program is designed for professionals who wish to expand their knowledge and expertise in the application of genetics related to drug therapy.

Mayo Medical Laboratories

Booth 610

800.533.1710

mml@mayo.edu

Mayo Medical Laboratories provides advanced laboratory testing and pathology services to support 5,000 health care organizations around the world. The department maintains a robust diagnostic test-development program, launching more than 150 new tests each year.

Medical Diagnostic Laboratories L.L.C.

Booth 619

MDL is a CLIA certified CAP Accredited reference laboratory specializing in the DNA-based detection of multiple pathogens from a single OneSwab®.

EXHIBITOR INDEX (CONTINUED)

Metis Genetics
Booth 335

844.463.8474

Support@metisgenetics.com

Metis Genetics is your partner for expert, genetic counseling services. Through Genetics Maven, our HIPAA-compliant, web-based platform, our network of genetic counselors offer nationwide services and resources to support testing in the most cost-effective way.

MNG Laboratories
Booth 228

678.225.0222

quickresponse@mnglabs.com

MNG Laboratories is an internationally recognized clinical diagnostic leader specializing in neurogenetic and complex biochemical testing. With over 15 years of neurogenetic experience, we deliver results that make a difference for patients and their families.

Myriad Genetic Laboratories, Inc.
Booth 101

800.4.MYRIAD (800.469.7423)

cscomments@myriad.com

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.

Natera
Booth 515

650.249.9090

smaynarich@natera.com

Natera® is driven by a passion for elevating the science of reproductive testing. We offer highly accurate solutions for noninvasive prenatal testing (NIPT), genetic-carrier screening, preimplantation genetic testing (PGD/PGS) and miscarriage testing.

National Coordinating Center for the Regional Genetics Networks
Booth 611

301.718.9603

mlyon@acmg.net

The National Coordinating Center for the Regional Genetics Networks (NCC), a cooperative agreement between ACMG and HRSA, will be sharing genetic service and newborn screening resources for healthcare providers, public health professionals and consumers.

NCATS/Genetic and Rare Diseases Information Center (GARD)
Booth 624

888.205.2311

GARDinfo@nih.gov

GARD is a program of the National Center for Advancing Translational Sciences (NCATS) that provides current, reliable, and easy-to-understand information about rare or genetic diseases in English or Spanish.

NIH Genetic Testing Registry/MedGen/ClinVar
Booth 308

clinvar@ncbi.nlm.nih.gov

10,800 conditions, 5,600 genes, 322,100 variants and 52,200 genetic tests in 100 square feet. See what's new with NCBI's Medical Genetics resources: ClinVar, GTR and MedGen.

Northside Hospital
Booth 631

404.300.2762

neal.partadiharja@northside.com

Northside is so much more than just a hospital. It's an extensive network of state-of-the-art facilities staffed with skilled, caring professionals who are dedicated to the health and wellness of the communities they serve.

Norton & Elaine Sarnoff Center for Jewish Genetics
Booth 118

312.357.4988

jewishgenetics@jewishgenetics.org | jewishgenetics.org

The Sarnoff Center for Jewish Genetics provides resources for the Jewish community and healthcare professionals about recessive disorders, hereditary cancers, and other genetic health issues common among Jewish persons and in interfaith families.

PerkinElmer
Booth 535

800.762.4000

CustomerCareUS@perkinelmer.com

PerkinElmer Genetics provides screening programs and genetic testing and has analyzed more than 6 million samples. Our accredited laboratories are led by Dr. Madhuri Hedge and offer cutting edge testing such as whole genome sequencing.

Pfizer
Booth 426

The Pfizer focus on rare disease builds on more than two decades of experience, a dedicated research unit focusing on rare disease, and a global portfolio of multiple medicines within a number of disease areas of focus.

Phosphorus Diagnostics

Booth 350

855.746.7423

scarlett@phosphorus.com

Phosphorus is a computational genomics company with the vision to create a world where every healthcare decision is optimized with genomics. Founded in 2016 and based in New York City, Phosphorus develops powerful data-driven software that enables labs around the world to deliver the most advanced clinical genetic tests. Phosphorus is committed to an active research and development program with an initial focus on decoding the genetic causes of infertility. With a team of experts in computational biology and computer science, Phosphorus is building a data network that will help providers, researchers and patients around the world better understand and harness the power of the human genome.

PreventionGenetics

Booth 411

715.387.0484

newtests@preventiongenetics.com

Founded in 2004 and located in Marshfield, Wisconsin, PreventionGenetics is a CLIA and ISO 15189:2012 accredited clinical DNA testing laboratory. PreventionGenetics provides patients with sequencing and deletion/duplication tests for nearly all clinically relevant genes. These tests include our powerful and comprehensive whole exome sequencing test, PGxome™.

Proband

Booth 439

267.425.1652

vitod@email.chop.edu

Proband is a free iPad application designed to enable counselors and clinicians to quickly and efficiently capture a patient's genetic family history during the clinical encounter. Users create the pedigree using a series of gestures similar to drawing.

Progenity

Booth 434

855.293.2639

client.services@progenity.com

At Progenity, we partner with clinicians to offer advanced diagnostic tests that help patients Prepare for Life. Progenity's genetic counselors work as part of the healthcare team.

Progeny Genetics

Booth 601

800.776.4369

info@progenygenetics.com

Progeny Genetics is a world leader in family history tracking software that combines integrated risk models to target patients that meet genetic testing criteria, and used by clinicians and researchers for over 20 years.

Quest Diagnostics

Booth 223

973.520.2700

Quest Diagnostics empowers people to take action to improve health outcomes. Derived from the world's largest database of clinical lab results, our diagnostic insights reveal new avenues to identify and treat disease, inspire healthy behaviors and improve health care management.

Recordati Rare Diseases

Booth 423

908.236.0888

info@recordatirarediseases.com

Recordati Rare Diseases is a biopharmaceutical company committed to providing often overlooked orphan therapies to the underserved rare disease communities of the United States. Our experienced team works side-by-side with rare disease communities to increase awareness, improve diagnosis and expand availability of treatments.

Retrophin, Inc.

Booth 528

760.260.8600

Retrophin is a biopharmaceutical company dedicated to delivering life-changing therapies to people living with rare diseases who have few, if any, treatment options.

Sanford Health

Booth 626

701.417.4856

sarah.julsrud@sanfordhealth.org

Sanford Health is the largest rural not-for-profit health care system in the nation and is dedicated to excellence in patient care, innovation and pioneering integrated care.

Sanofi Genzyme

Booth 617

Sanofi Genzyme focuses on developing specialty treatments for debilitating diseases that are often difficult to diagnose and treat, providing hope to patients and their families.

Sarepta Therapeutics Inc.

Booth 224

Sarepta Therapeutics is a U.S. commercial-stage biopharmaceutical company focused on the discovery and development of unique RNA-targeted therapeutics for the treatment of rare neuromuscular diseases. Sarepta is working to rapidly advance its exon-skipping platform for the development of treatments for Duchenne muscular dystrophy and is proud to support the National Society of Genetic Counselors.

EXHIBITOR INDEX (CONTINUED)

SCRIPPS HEALTH
Booth 625

858.554.9217

tijerina.lorraine@SCRIPPHEALTH.ORG

Scripps and MD Anderson (top cancer care systems in the world) have joined forces in a full partnership begining 1/1/18 that will align the services provided by 2 great insututions. Scripps is undergoing signficant growth as we prepare to "co-brand" with MDA and the expansion of cancer support staff is one key piece.

Seattle Children's Hospital – The PLUGS Program
Booth 339

206.987.5400

plugs@seattlechildrens.org

PLUGS is a laboratory stewardship (utilization management) collaboration whose mission is to improve test ordering, retrieval, interpretation and reimbursement. Stop by to learn more about PLUGS and tools for GC training programs!

Sema4
Booth 243

800.298.6470

support@sema4genomics.com

Sema4 is an interdisciplinary health information company committed to providing open access to data and creating practical tools that help patients, clinicians and researchers better predict health trajectories. (Formerly the Mount Sinai Genetic Testing Lab at the Icahn School of Medicine at Mount Sinai.)

Sharsheret
Booth 512

201.833.2341

info@sharsheret.org

Sharsheret supports young Jewish women and families facing breast and ovarian cancer – before, during, and after diagnosis – including those at high genetic risk. We provide educational resources, offer individualized support and create local awareness programs.

Shire
Booth 513

216.470.0547

kschaffer0@shire.com

Today, Shire is the leading global biotechnology company focused on serving people with rare diseases and those with specialty needs.

Simons VIP Connect – Geisinger
Booth 428

570.214.0169

svipcoordinator@gesinger.edu

Simons VIP Connect is on an online community, resource center, and portal to research opportunities for families with genetic diagnoses associated with features of autism and developmental delay.

Thermo Fisher Scientific
Booth 605

408.731.5000

Thermo Fisher Scientific supplies innovative solutions for the world's genetic analysis industry. With applications that span the reproductive health research continuum – from prenatal to postnatal research – we provide a broad range of products and services including microarrays, next-generation sequencing and qPCR.

ThinkGenetic, Inc.
Booth 511

866.417.7348

contact@thinkgenetic.com

ThinkGenetic, Inc. aims to reduce the time to a genetic diagnosis with accessible content, tools and data services that spark meaningful action. We empower people alongside their journey of living with genetic conditions.

UAB Medical Genomics Laboratory
Booth 425

205.934.5562

medgenomics@uabmc.edu

The UAB Medical Genomics Laboratory (MGL) is a CAP-certified, non-profit clinical laboratory, offering comprehensive testing for both common and rare genetic disorders, while specializing in the neurofibromatoses, rasopathies and tuberous sclerosis.

UCHealth
Booth 637

With nationally recognized award-winning hospitals and facilities, UCHealth pushes the boundaries of medicine in big ways through learning, healing and discovery. Located throughout Colorado, your potential will have no limits at UCHealth.

UCLA Clinical Genomics Center
Booth 538

310.775.5884

scwebb@mednet.ucla.edu

UCLA Clinical Genomics Center offers clinical exome sequencing (CES), genetic counseling, and expert interpretation by our Genomic Data Board. CES and our extensive menu of genetic and genomic testing for hereditary disorders, cancer diagnosis/management and other conditions, are performed within our CLIA-certified CAP-accredited Molecular Diagnostics Laboratories. Available techniques include Sanger sequencing, FISH, chromosomal microarray for postnatal and prenatal evaluation, neoplastic conditions and targeted next gen sequencing panels for lung, colorectal, thyroid and hematologic malignancies.

UCLA Health
Booth 536

310.267.3292

UCLA Health defines greatness by the quality of the patient experience we are able to deliver. Each and every time. To every single patient. If that's where your ambitions lie, UCLA is where you belong.

UCSF Fetal Treatment Center

Booth 622

800.793.3887

fetus@ucsf.edu

The UCSF Fetal Treatment Center is a world leader in diagnosing and treating birth defects before delivery. We offer comprehensive, family-centered care in one location, from diagnosis and prenatal management through postnatal care and long-term follow-up.

Undiagnosed Diseases Network (UDN)

Booth 526

844.746.4836

UDN@hms.harvard.edu

The Undiagnosed Diseases Network (UDN) is a research study funded by the National Institutes of Health Common Fund that seeks to provide answers to patients and families affected by undiagnosed conditions.

United Mitochondrial Disease Foundation (UMDF)

Booth 525

888.317.8633

info@umdf.org

The Mission of The United Mitochondrial Disease Foundation (UMDF), founded in 1996, is to promote research and education for the diagnosis, treatment and cure of mitochondrial disorders and to provide support to affected individuals and families.

University of Washington

Booth 430

UW-OncoPlex is a multiplexed gene sequencing panel that detects mutations in tumor tissue in 194 cancer-related genes; BROCA genetic risk panel for 62 genes; Coloseq and Coloseq Tumor genetic test using NGS.

University of Chicago Genetic Services Laboratories

Booth 523

773.834.9801

ucgslabs@genetics.uchicago.edu

University of Chicago Genetic Services Laboratories is a CLIA- and CAP-certified laboratory offering cutting-edge DNA diagnostic services. We offer a wide range of tests for rare diseases including exome sequencing and panel based testing.

UNMC Human Genetics Laboratory

Booth 431

402.559.5070

humangenetics@unmc.edu

The Human Genetics Laboratory at the University of Nebraska Medical Center (UNMC) is a full-service clinical cytogenetics and molecular genetics laboratory specializing in both constitutional (prenatal and postnatal) and cancer diagnostics for over 40 years.

UPMC

Booth 337

412.454.9685

davisap@upmc.edu

A world-class health care system with over 65,000 employees, Pittsburgh-based UPMC operates more than 20 academic, community, and specialty hospitals (including four awarded MAGNET recognition), plus over 500 doctors' offices, outpatient sites, rehabilitation, retirement and long-term care facilities. UPMC also insures over 2.9 million people through the UPMC Health Plan.

Valley Children's Healthcare

Booth 108

559.353.7058

dyee@valleychildrens.org

Join Valley Children's Healthcare, one of the nation's ten largest pediatric hospitals located in affordable Central California. Excellent full-time Genetic Counselor opportunity in our Metabolic Genetics and Maternal Fetal Center. Come visit our booth!

Variantyx Inc.

Booth 114

617.209.2090

info@variantyx.com

Variantyx is a genomic diagnostic solutions provider. We offer whole genome testing services to clinicians for collaborative diagnosis of rare inherited disorders. We also enable genomic labs to expand their test menu.

Western States Regional Genetics Network

Booth 609

808.733.9063

sylvia@hawaiigenetics.org

The Western States Regional Genetics Network is a federally-funded, multi-state project under the Hawaii Department of Health that seeks to improve access to genetic services and education throughout the life course.

NOTES

Introducing

DuchenneAndYou.com,

a comprehensive Website for information about Duchenne muscular dystrophy to support you and your family. Register to receive the latest news and updates about Duchenne.

DuchenneAndYou.com is here to help you learn more about Duchenne muscular dystrophy

Understanding Duchenne

- Learn about the disease, including signs and symptoms, how it is diagnosed, how it progresses, and ways to manage it

Understanding genetics

- Learn about the importance of genetic testing and the role it plays in diagnosis and disease management

Living with Duchenne

- Discover ways to care for your family and yourself

Support resources

- Find healthcare professionals who manage Duchenne and patient advocacy groups that can help provide guidance and support

Visit **today** and register to receive the latest news and updates about Duchenne at www.DuchenneAndYou.com

Prepared Jul 2017
www.ptcbio.com

PTC THERAPEUTICS

SAVE *the* DATE

National Society of Genetic Counselors

Call for Speakers Opens: November 8, 2017
Call for Speakers Closes: January 23, 2018

Call for Abstracts Opens: February 19, 2018
Call for Abstracts Closes: May 14, 2018

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