National Society of Genetic Counselors

Celebrating 40 Years

1979 – 2019

38th Annual Conference

November 5-8, 2019

Salt Lake City, Utah

Salt Palace Convention Center

Conference Program Book Sponsored by:

Booth #232

avegis

REGENXBIO is a leading clinical-stage biotechnology company seeking to improve lives through the curative potential of gene therapy.

REGENXBIO®

- Committed to Patients
- Powered by Science
- Driven by Experience

Amelia, CLN2

Jason, MPS II

Charlie, HoFH

Christopher, MPS I

Geri, Wet AMD

Our investigational gene therapy product candidates are designed to deliver genes to cells to address the genetic defects or to enable cells in the body to produce therapeutic proteins that are intended to impact disease.

- 4 clinical stage programs in retinal, metabolic, and neurodegenerative diseases
- Proprietary NAV® Technology Platform includes exclusive worldwide rights to over 100 AAV vectors, including AAV7, AAV8, AAV9 and AAVrh10

REGENXBIO.com

Welcome to Salt Lake City!

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 education and networking opportunities designed to help you elevate the field of genetic counseling. Educational sessions will cover a variety of topics at the forefront of genomics, such as gene editing, polygenic risk scores and artificial intelligence.

Educational highlights you do not want to miss include: 40 years of the Genetic Counseling Profession: A Foundation for the Future, The NSGC and ASHG Joint Session: Genetic Counselors in Research: From Dabbling in Clinic to an NIH Grant and the Professional Issues Panel. 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 NSGC Central to network with more than 2,300 of your peers. Discover the latest products and services for our profession in the Exhibitor Suite. Catch up with old friends and make new, lasting connections during this year's conference.

This year, we will be celebrating NSGC's 40th anniversary throughout the conference! Learn more about our professional organization during the conference by exploring the timeline wall of major NSGC milestones, testing your knowledge of NSGC through daily quizzes and looking for fun facts woven into conference material.

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

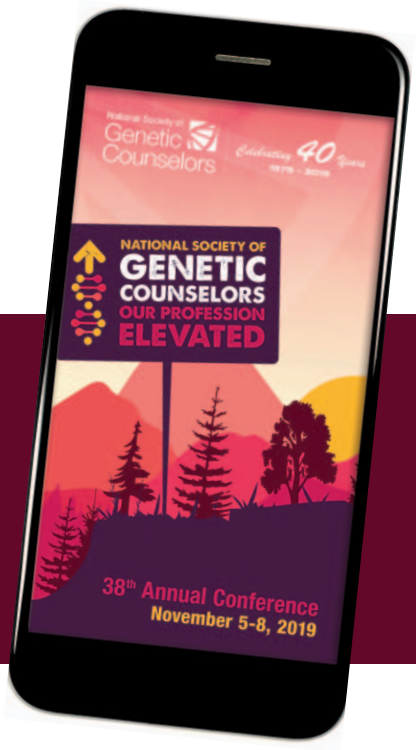
Table of Contents

Katherine Lafferty, MS, CGC
2019 Program Committee Chair

Rachel Mills, MS, CGC
2019 Program Committee Vice-Chair

Download the Official Annual Conference Mobile App

NSGC delivers everything Annual Conference directly to your fingertips via the 2019 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**" in your app store or direct your mobile browser to **www.nsgc.org/mobileapp**. Follow what others are saying or post your own insights on Twitter during the Annual Conference using **#NSGC19**.



The one-time-only dose to stop SMA progression

NOW APPROVED

zolgensma®
(onasemnogene abeparvovec-xioi)
suspension for intravenous infusion

ZOLGENSMA is a gene therapy for pediatric patients less than 2 years of age with spinal muscular atrophy (SMA), that is delivered as a single-dose, 1-hour intravenous infusion[1]

Significant survival

91% (20/22) of patients in the STR1VE trial were alive, free of permanent ventilation, and continuing in the study as of the March 2019 data cut (at a mean age of 13.8 months)[2,a-c]

Rapid onset

As early as 1 month post infusion, CHOP INTEND scores increased from baseline by a mean of 6.9 points (N=22)[2,a]

Sustained effect

In the ongoing study, patients continue to attain new milestones and have maintained existing milestones at successive data cuts. 50% (11/22) of patients achieved the ability to sit without support for ≥30 seconds at a mean of 8.2 months post treatment as of the March 2019 data cut[2,a]

The efficacy of ZOLGENSMA was studied in STR1VE, an ongoing, open-label, single-arm, multicenter, Phase 3 clinical trial of patients with SMA Type 1 (genetically confirmed bi-allelic *SMN1* deletion, 2 copies *SMN2*, and symptom onset <6 months of age; N=22).[1,a,b] STR1VE has completed enrollment and the data above represent a data cut from March 2019.[2]

Consider ZOLGENSMA today: Call 1-855-441-GENE (4363) or learn more at ZOLGENSMA-hcp.com

[a]One patient was initially classified as presymptomatic and removed from the intent-to-treat (ITT) data set included in the Prescribing Information. The patient was later confirmed to be symptomatic at baseline and will be included in the final ITT analysis.

[b]One patient died at 7.8 months due to causes unrelated to treatment. One patient withdrew consent at 11.9 months of age.

[c]Event is defined as death or the need for permanent ventilatory support consisting of ≥16 hours of respiratory assistance per day continuously for ≥14 days.

Indication and Important Safety Information

Indication

ZOLGENSMA is an adeno-associated virus vector-based gene therapy indicated for the treatment of pediatric patients less than 2 years of age with spinal muscular atrophy (SMA) with bi-allelic mutations in the *survival motor neuron 1* (*SMN1*) gene.

Limitations of Use

The safety and effectiveness of repeat administration or the use in patients with advanced SMA (e.g., complete paralysis of limbs, permanent ventilator dependence) has not been evaluated with ZOLGENSMA.

Important Safety Information

BOXED WARNING: Acute Serious Liver Injury

Acute serious liver injury and elevated aminotransferases can occur with ZOLGENSMA. Patients with pre-existing liver impairment may be at higher risk. Prior to infusion, assess liver function of all patients by clinical examination and laboratory testing (e.g., hepatic aminotransferases [aspartate aminotransferase (AST) and alanine aminotransferase (ALT)], total bilirubin, and prothrombin time). Administer a systemic corticosteroid to all patients before and after ZOLGENSMA infusion. Continue to monitor liver function for at least 3 months after infusion.

WARNINGS AND PRECAUTIONS

Thrombocytopenia

Transient decreases in platelet counts, some of which met the criteria for thrombocytopenia, were observed at different time points after ZOLGENSMA infusion. Monitor platelet counts before ZOLGENSMA infusion and on a regular basis for at least 3 months afterwards.

Elevated Troponin-I

Transient increases in cardiac troponin-I levels were observed following ZOLGENSMA infusion. Monitor troponin-I before ZOLGENSMA infusion and on a regular basis for at least 3 months afterwards.

ADVERSE REACTIONS

The most commonly observed adverse reactions (incidence ≥5%) in clinical studies were elevated aminotransferases and vomiting.

Please see Brief Summary of Prescribing Information on the adjacent page.

References: 1. ZOLGENSMA [prescribing information]. Bannockburn, IL: AveXis, Inc; 2019. **2.** Data on file. AveXis, Inc. Bannockburn, IL.

US-ZOL-19-0221 08/2019

avexis

Conference Information

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.

Session Evaluation Claiming/ Process CEUs

Individuals claiming CEUs must complete session 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 15) 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 photos of the signs as a reminder of sessions attended and codes. To complete your session evaluations, follow these steps:

1. Log in to the NSGC website, and go to www.nsgc.org/conferenceevaluations.
2. Click on the "Session 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.
4. 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.)

   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.
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 additional sessions. This certificate is your final CEU certificate for the conference.

The deadline to complete session evaluations is **December 19, 2019**. Please contact the NSGC Executive Office at **nsgc@nsgc.org** if you need assistance. NSGC will not issue CEU certificates if session evaluations are not completed by **December 19, 2019**. No exceptions will be made.

Overall Conference Evaluation

NSGC has commissioned Freeman Research and Measurement to conduct our 2019 overall conference evaluation. You will receive a link to the overall conference evaluation via email within one week following the conference. Please be assured that your answers will be used in summary form only, and your personal information will be held in strict confidence.

NSGC is continually looking to improve your conference experience and would greatly appreciate your feedback. Thank you in advance for completing the evaulation.

2019 Annual Conference Session Recordings

View sessions you miss in Salt Lake City, earn additional CEUs and review the valuable information you gathered during the conference by pre-purchasing the 2019 Annual Conference recordings. The conference recordings package includes synced audio and PowerPoint Presentations for pre- and post-conference symposia, plenary and educational breakout sessions.*

The session recordings package is available at a reduced price of $149 for all conference attendees.** Registered attendees will be able to order the Annual Conference session recordings through November 8, 2019, at the discounted rate, or following the conference at full price. The Annual Conference recordings package will be made available to purchasers in January 2020.

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.*

Attendee List Information

Attendee lists are posted on the NSGC website. An updated list will be posted following the conference along with session handouts. 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, 2020.

To download session handouts go to:
www.nsgc.org/conferencehandouts

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

Conference Information continued

Registration Hours

East Registration

MONDAY, NOVEMBER 4
5:00 pm – 7:00 pm

TUESDAY, NOVEMBER 5
7:00 am – 7:00 pm

WEDNESDAY, NOVEMBER 6
6:30 am – 7:00 pm

THURSDAY, NOVEMBER 7
7:00 am – 6:30 pm

FRIDAY, NOVEMBER 8
7:30 am – 2:30 pm

Exhibitor Suite Hours

Exhibit Halls A-B, Level 1

TUESDAY, NOVEMBER 5
5:00 pm – 8:00 pm

WEDNESDAY, NOVEMBER 6
9:30 am – 10:15 am
11:45 am – 1:30 pm
3:45 pm – 4:15 pm
5:30 pm – 7:30 pm

THURSDAY, NOVEMBER 7
9:45 am – 10:20 am
11:35 am – 3:00 pm

Job Boards

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

Business Center Hours

The Business Center is located on the second floor of the Salt Palace Convention Center near conference room 252.

Monday – Friday 9:00 am – 5:00 pm

Internet Access

Wireless Internet is available in all meeting spaces and common areas at the Salt Palace Convention Center.

To get onto the WiFi:

1. Connect to **NSGC2019**
2. Enter password **40years!**
3. Launch a web browser and click on the connect button on the splash page

Conflict of Interest Disclosures

All presenters are required to disclose any conflicts of interest (COI) related to their presentation.

To view COI disclosures, visit **www.nsgc.org/conferencedisclosures**.

Sponsored Meal 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 whether the sponsor will provide food, or if you are encouraged to bring your own.

Executive Office Information

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

EXECUTIVE DIRECTOR
Meghan Carey
mcarey@nsgc.org

Peanut butter & jelly.
Donuts & coffee.
Cookies & milk.

Some combinations are meant to be.

At Invitae, we are proud to work alongside genetic counselors, providing patients with the best possible care. By making genetic information more affordable and accessible, we are transforming healthcare. Together, we help patients make better decisions about:

- hereditary cancer
- reproductive health
- cardiology
- neurology
- pediatrics
- metabolic disorders
- and more

Invitae and genetic counselors—
making healthcare **better, together.**

INVITAE

Schedule-at-a-Glance

MONDAY, NOVEMBER 4					
12:00 pm – 6:00 pm	**NSGC Leadership Development Program** | *Room 258*				
5:00 pm – 7:00 pm	**Registration Open** | *East Registration*				
7:00 pm – 10:00 pm	**Association of Genetic Counseling Program Directors (AGCPD) Annual Meeting** | *Room 155D*				
TUESDAY, NOVEMBER 5					
7:00 am – 7:00 pm	**Registration Open** | *East Registration*				
7:30 am – 9:30 am	**Accreditation Council for Genetic Counseling (ACGC) Office Hours** | *Room 258*				
8:00 am – 2:00 pm	CEU **Pre-Conference Symposia** | *Pre-registration required*				
	A01: A Heart to Heart Training: Advanced Topics in Traumatic Events Using Cardiogenetics as an Illustration *Room 155BC*	**A02:** Building Skill for Cultural Conversations in Genetic Counseling *Room 155EF*	**A03:** Practical Tips for the Practicing Genetic Counselor: Somatic Testing and Hematologic Cancers *Room 255EF*	**A04:** Measuring Up: Incorporating Patient Reported Outcomes in Clinic and Research *Room 255BC*	**A05:** Perinatal Palliative Care and the Genetic Counselor: Optimizing Multi-Disciplinary Collaboration for Holistic Care of Critically Ill Infants and Their Families *Room 355BC*	**A06:** Redesigning the Way We Work to Improve Efficiency *Room 355EF*
1:30 pm – 2:30 pm	**Welcome to the Annual Conference: First-Time Attendees** | *Room 251*				
3:00 pm – 3:15 pm	**Opening Remarks** | *Grand Ballroom*				
3:15 pm – 3:45 pm	CEU **A07:** 40 Years of the Genetic Counseling Profession: A Foundation for the Future | *Grand Ballroom*				
3:45 pm – 4:15 pm	**Natalie Weissberger Paul National Achievement Award** | *Grand Ballroom*				
4:15 pm – 4:45 pm	CEU **A08:** Enabling the Beautiful Uncertainty of Life: My Journey With PGT-M | *Grand Ballroom*				
5:00 pm – 8:00 pm	**Welcome Reception in Exhibitor Suite** | *Exhibit Halls A-B, Level 1* ***Sponsored by: AveXis***				
5:45 pm – 7:00 pm	CEU **A09:** Posters With Authors, Group A Posters | *Exhibit Halls A-B, Level 1*				
7:00 pm – 8:15 pm	**Sanofi Genzyme Meeting** *Room 255D*	**Rhythm Gold Academy Program** *Room 355D*	**Late Career SIG** *Room 258*		
7:00 pm – 10:00 pm	**Various Program Reunions** | *See page 14 for more information*				
7:15 pm – 8:00 pm	**Public Health SIG** | *Room 260A*				
7:30 pm – 9:30 pm	***Journal of Genetic Counseling*** **Editorial Board Meeting** | *Room 257A*				
WEDNESDAY, NOVEMBER 6					
6:30 am – 7:00 pm	**Registration Open** | *East Registration*				
7:00 am – 7:45 am	**Sponsored Breakfast Sessions**				
	CEU **B01:** Look Before You Leap: The Clinical Value of Genome-Wide NIPT *Room 250* ***Sponsored by: Roche Diagnostics***	**B02:** Termination of Pregnancy for Indications of Genetic Disorder or Fetal Anomaly in Advanced Gestations at Boulder Abortion Clinic *Room 251* ***Sponsored by: Boulder Abortion Clinic***			
7:00 am – 7:45 am	**Student / New Member SIG Meeting** | *Room 258*				
7:00 am – 8:30 am	**Accreditation Council for Genetic Counseling (ACGC) Office Hours** | *Room 257A*				
8:00 am – 8:35 am	CEU **B03:** Janus Lecture: Enzyme Replacement Therapy for Mucopolysaccharidosis: How Ongoing Research Can Change the Understanding of Rare Diseases *Grand Ballroom*				
8:35 am – 9:35 am	CEU **B04:** Professional Issues Panel | *Grand Ballroom*				
9:30 am – 10:15 am	**Exhibitor Suite Open / Networking Break** | *Exhibit Halls A-B, Level 1*				

KEY:

- REGISTRATION AND BREAKS (PINK)
- PRE-CONFERENCE SYMPOSIA (ORANGE)
- POST-CONFERENCE SYMPOSIA (TEAL)
- PLENARY SESSIONS (LIME)
- NSGC COMMITTEE, SIG AND LEADERSHIP ACTIVITIES (YELLOW)
- EXHIBITOR SUITE (BLUE)
- CONCURRENT PAPERS/POSTER PRESENTATION (GREEN)
- EDUCATIONAL BREAKOUT SESSIONS & WORKSHOPS (FUCHSIA)
- SPONSORED SESSIONS (SALMON)
- PROGRAM REUNIONS (LILAC)
- ORGANIZATIONAL EVENTS (RED)

WEDNESDAY, NOVEMBER 6 CONTINUED

10:15 am – 12:15 pm	CEU **Workshops and Lectures** | **Pre-registration required*					
	B05: Should All Women With Breast Cancer be Offered Genetic Testing? A Debate *Grand Ballroom*	***B06:** Building Stronger Communities: Confronting White Womanhood *Room 155BC*	***B07:** How to Review a Manuscript for a Journal: A Practical Workshop Aimed at Facilitating Research and Professional Development for Genetic Counselors *Room 155EF*	***B08:** Improving Your Communication With All Your Patients: Techniques to Communicate Across Literacy and Language *Room 255BC*	***B09:** Leadership Workshop for New Genetic Counselors *Room 355EF*	***B10:** So Consumer Genetics Is Here... What Is the Role of the Genetic Counselor, and How Do We Deal With This in Clinic? *Room 355BC*
11:45 am – 1:30 pm	**Exhibitor Suite Open** | *Exhibit Halls A-B, Level 1*					
12:30 pm – 1:00 pm	**Marketing and Communications Workgroup Meeting** | *Room 259*					
12:30 pm – 1:30 pm	**Committee Meetings**					
	Education Committee *Room 355A*		**Outcomes Committee** *Room 260B*		**Public Policy Committee Meeting** *Room 257B*	
12:30 pm – 1:45 pm	CEU **Sponsored Lunch Sessions**					
	B11: Unparalleled Clarity and New Mutations: Clinical RNA Testing Provides Answers Beyond DNA *Room 250* ***Sponsored by: Ambry Genetics***			**B12:** Important Advancements for Precision Medicine in Oncology and Prenatal Genetics *Room 251* ***Sponsored by: Myriad Genetic Laboratories***		
12:45 pm – 1:45 pm	**Membership Committee** | *Room 260A*					
1:15 pm – 2:15 pm	**Committee Meetings**					
	Access and Service Delivery Committee *Room 257A*		**Program Committee** *Room 255D*		**Practice Guidelines Committee** *Room 258*	
2:30 pm – 3:45 pm	CEU **Educational Breakout Sessions**					
	B13: "Dear Seymour": The Work and Applications of Dr. Seymour Kessler's Seminal Papers on Psychosocial Aspects of Genetic Counseling *Room 155BC*	**B14:** Digging Into Polygenic Risk Scores for Complex Disorders: Cancer, Cardio, Psychiatry… and More! *Grand Ballroom*	**B15:** From Genetics to Genomics: Evolving Liability Implications for Practitioners *Room 255BC*	**B16:** Hot Topics in Teratology: Zika, Marijuana and Maternal Therapies for Genetic Disease *Room 255EF*	**B17:** Seriously, Can Online Education Work for Genetic Counseling? Adapting to the Demands of Training More and Diverse Genetic Counselors *Room 155EF*	
3:45 pm – 4:15 pm	**Exhibitor Suite Open / Networking Break** | *Exhibit Halls A-B, Level 1*					
4:15 pm – 5:20 pm	CEU **B18:** Dr. Beverly Rollnick Memorial Lecture: Living a Life Worth Celebrating | *Grand Ballroom*					
5:20 pm – 5:50 pm	CEU **B19:** Audrey Heimler Special Project Award Presentation | *Grand Ballroom*					
5:30 pm – 7:30 pm	**Exhibitor Suite Open** | *Exhibit Halls A-B, Level 1*					
6:00 pm - 7:15 pm	**SIG Leaders Reception** | *Room 255D*					
6:00 pm - 7:15 pm	**Past Board Member Reception** | *Room 355A*					
6:15 pm – 7:30 pm	CEU **B20:** Posters With Authors, Group B Posters | *Exhibit Halls A-B, Level 1*					
7:00 pm – 10:00 pm	**Various Program Reunions** | *See page 14 for more information*					
7:30 pm – 8:45 pm	CEU **Sponsored Evening Sessions**					
	B21: Understanding Residual Risk in Expanded Carrier Screening: Self-Reported Ancestry vs. Molecular Ancestry *Room 250* ***Sponsored by: Sema4***			**B22:** An Overview of the Historical Perspective and Current Status of Personalized/Precision Medicine *Room 251* ***Sponsored by: Sanofi Genzyme***		
8:00 pm – 8:45 pm	**Tour of Myriad Genetic Laboratories** | *Myriad Genetic Laboratories* | *Pre-registration required* | *See page 53 for more information*					
8:50 pm – 9:35 pm	**Tour of Myriad Genetic Laboratories** | *Myriad Genetic Laboratories* | *Pre-registration required* | *See page 53 for more information*					

Schedule-at-a-Glance continued

THURSDAY, NOVEMBER 7

7:00 am – 6:30 pm	**Registration Open** | *East Registration*						
7:00 am – 7:45 am	**SIG Meetings**						
	CF and CFTR Spectrum SIG *Room 257A*	**Education SIG** *Room 257B*	**Leadership and Management SIG** *Room 255D*	**International SIG** *Room 355A*	**Psychiatric SIG** *Room 258*	**Ophthalmology and Hearing Loss SIG** *Room 260A*	**Metabolic/LSD SIG** *Room 260B*
7:00 am – 7:45 am	CEU **Sponsored Breakfast Sessions**						
	C01: Chromosomal Microarray: Going, Going, Gone? Comprehensive Copy Number Variant Detection from Next Generation Sequencing Data *Room 250* ***Sponsored by: PreventionGenetics***			**C02:** The Undiagnosed Second Diagnosis: Utilizing Genomic Technologies to Identify and Understand Complex Phenotypes *Room 251* ***Sponsored by: PerkinElmer***			
7:00 am – 8:00 am	**Mindful Yoga** | *Marriott Hotel, Deer Valley Room* | *Pre-registration required* ***Sponsored by: Progenity***						
8:00 am – 9:15 am	CEU **C03:** NSGC State of the Society Address | *Grand Ballroom*						
9:15 am – 9:45 am	**Incoming Presidential Address** | *Grand Ballroom*						
9:45 am – 10:20 am	**Exhibitor Suite Open / Networking Break** | *Exhibit Halls A-B, Level 1*						
10:20 am – 11:35 am	CEU **Platform Presentations**						
	C04: Access and Service Delivery *Room 255EF*	**C05:** Cancer *Grand Ballroom*	**C06:** Cardiovascular *Room 255BC*	**C07:** Conversations Around Diversity *Room 155EF*	**C08:** Prenatal *Room 155BC*		
11:35 am – 3:00 pm	**Exhibitor Suite Open** | *Exhibit Halls A-B, Level 1*						
12:00 pm – 1:15 pm	**SIG Meetings**						
	Cancer SIG *Room 155D*	**Research SIG** *Room 257B*	**Neurogenetics SIG** *Room 355A*	**ART/Infertility SIG** *Room 355D*	**Labratory/Industry SIG** *Room 258*	**Cardiovascular SIG** *Room 259*	**Pediatric and Clinical Genetics SIG** *Room 260B*
12:00 pm – 1:15 pm	CEU **Sponsored Lunch Sessions**						
	C09: Functional Modeling – The Next Frontier in Variant Interpretation *Room 250* ***Sponsored by: Invitae***			**C10:** How to Avoid Legal and Ethical Pitfalls as a Genetic Counselor *Room 251* ***Sponsored by: GeneDX***			
12:15 pm – 12:45 pm	**American Board of Genetic Counseling (ABGC) Business Meeting** | *Grand Ballroom*						
12:45 pm – 1:15 pm	**Accreditation Council for Genetic Counseling (ACGC) Presentation** | *Grand Ballroom*						
12:15 pm – 1:15 pm	**Precision Medicine SIG Meeting** | *Room 255D*						
1:20 pm – 2:35 pm	CEU **C11:** Posters With Authors, Group C Authors | *Exhibit Halls A-B, Level 1*						
2:45 pm – 3:00 pm	**The Gnome and Beyond Scavenger Hunt and Passport to Prizes Drawing** | *NSGC Central Booth #415*						
3:10 pm – 4:40 pm	CEU **Educational Breakout Sessions**						
	C12: A History of Genetic Discrimination: Reviewing Our Past and Looking Toward the Future *Room 255BC*	**C13:** NSGC and ASHG Joint Session: Genetic Counselors in Research: From Dabbling in Clinic to an NIH Grant *Room 255EF*	**C14:** Beyond Cystic Fibrosis: Pulmonary Genetic Disorders in Adulthood *Room 155BC*	**C15:** Challenging the Comfort Zone: Debated Testing Strategies in Cardiovascular Genetics *Room 155EF*	**C16:** The New GC in Town: Demystifying the Role of Gene Curation in Variant Interpretation, Clinical Reporting and Case Reanalysis *Grand Ballroom*		
5:00 pm – 5:35 pm	CEU **C17:** Human Genome Editing: The Current State of Research and Clinical Practice | *Grand Ballroom*						
5:35 pm – 5:50 pm	CEU **C18:** Best Full Member Abstract Award | *Grand Ballroom*						
5:50 pm – 6:05 pm	CEU **C19:** Beth Fine Kaplan Best Student Abstract Award Presentation | *Grand Ballroom*						
6:05 pm – 6:35 pm	CEU **C20:** Jane Engelberg Memorial Fellowship (JEMF) Presentation | *Grand Ballroom*						

KEY:

- REGISTRATION AND BREAKS (PINK)
- PRE-CONFERENCE SYMPOSIA (ORANGE)
- POST-CONFERENCE SYMPOSIA (TEAL)
- PLENARY SESSIONS (LIME)
- NSGC COMMITTEE, SIG AND LEADERSHIP ACTIVITIES (YELLOW)
- EXHIBITOR SUITE (BLUE)
- CONCURRENT PAPERS/POSTER PRESENTATION (GREEN)
- EDUCATIONAL BREAKOUT SESSIONS & WORKSHOPS (FUCHSIA)
- SPONSORED SESSIONS (SALMON)
- PROGRAM REUNIONS (LILAC)
- ORGANIZATIONAL EVENTS (RED)

THURSDAY, NOVEMBER 7 CONTINUED

6:45 pm – 7:30 pm	**Available Resources and Support for Telegenetics: Programs of the NYMAC Regional Genetics Network** | *Room 259*				
7:00 pm – 9:00 pm	**Code Talker Award Ceremony** *Room 251* ***Presented by: Invitae and NSGC***				
7:00 pm – 10:00 pm	**Unwind at Keys on Main** *242 South Main St.* ***Sponsored by: ARUP Laboratories***				
7:00 pm – 10:00 pm	**Various Program Reunions** | *See page 14 for more information*				

FRIDAY, NOVEMBER 8

7:00 am – 1:00 pm	**Annual Conference Outreach Event** | *Room 255D*				
7:30 am – 2:30 pm	**Registration Open** | *East Registration*				
7:00 am – 7:45 am	**Sponsored Breakfast Sessions**				
	CEU **D01:** A Brave New World: A Family's Experience With New Therapies for Spinal Muscular Atrophy *Room 250* ***Sponsored by: Integrated Genetics***		**D02:** The ABC's of DTC Genetic Testing *Room 251* ***Sponsored by: 23andMe***		
8:00 am – 9:30 am	CEU **Education Breakout Sessions**				
	D03: In Utero Stem Cell Transplantation: Historical Context, Present State and the Future of Fetal Molecular Therapies *Room 155BC*	**D04:** The Emerging Roles of Genetic Counselors as Consumers Embrace Healthy Genomic Screening *Room 255EF*	**D05:** Getting to the Heart of Our Practice: Developing an Evidence Base to Improve Cardiovascular Genetic Counseling *Room 255BC*	**D06:** How to Talk to Your Patients About Imaging: What to Do When There Aren't NCCN Guidelines *Grand Ballroom*	**D07:** Weighing the Alternatives: Non-traditional Approaches to Improve Genetic Counseling Access and Efficiency *Room 155EF*
10:00 am – 10:50 am	CEU **D08:** Meeting the Demand for Genetic Counseling Through Artificial Intelligence: Can We Clone Our Skill Set? | *Grand Ballroom*				
10:50 am - 11:50 am	CEU **D09:** Late-Breaking Plenary: Emerging Therapies for Adult-Onset Neurologic Diseases: Possibilities, Pitfalls and Patient Impact | *Grand Ballroom*				
12:15 pm – 1:30 pm	CEU **Platform Presentations**				
	D10: Education *Room 255EF*	**D11:** Ethical and Psychosocial Research *Room 255BC*	**D12:** Neuromuscular/ Psychiatric *Room 155EF*	**D13:** Patient Utilization of Genetic Test Results *Room 155BC*	**D14:** Innovations in Somatic Tumor Testing *Grand Ballroom*
2:00 pm – 5:30 pm	CEU **Post-Conference Symposia** | *Pre-registration required*				
	D15: Genetic Counselor Fingerprints on the Business Side: Clinical Product Strategy, Development and Lifecycle Skills Workshop *Room 355BC*		**D16:** Genetics Beyond the Binary: How to Incorporate Gender Diversity Into the Concepts of Genetics *Room 255EF*		**D17:** Late-Breaking Cancer Topics *Room 355EF*

Join us at the

NSGC

38th Annual Conference

November 5-8, 2019

Salt Palace Convention Center
Salt Lake City, Utah

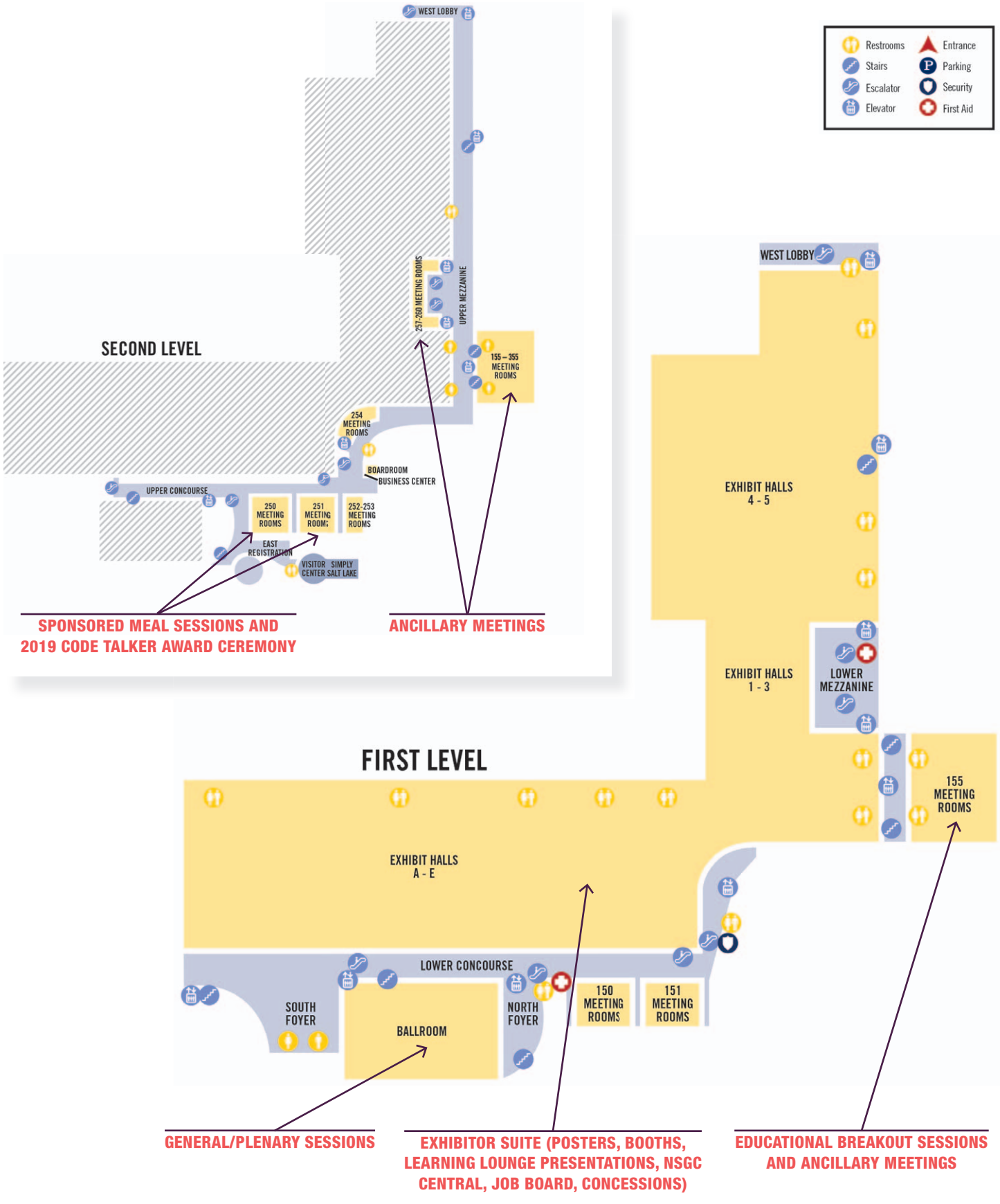
Visit Booth #802

to learn more about communication and collaboration in biomarker testing.

Stay up-to-date on precision medicine in oncology at **AZOncologyID.com**

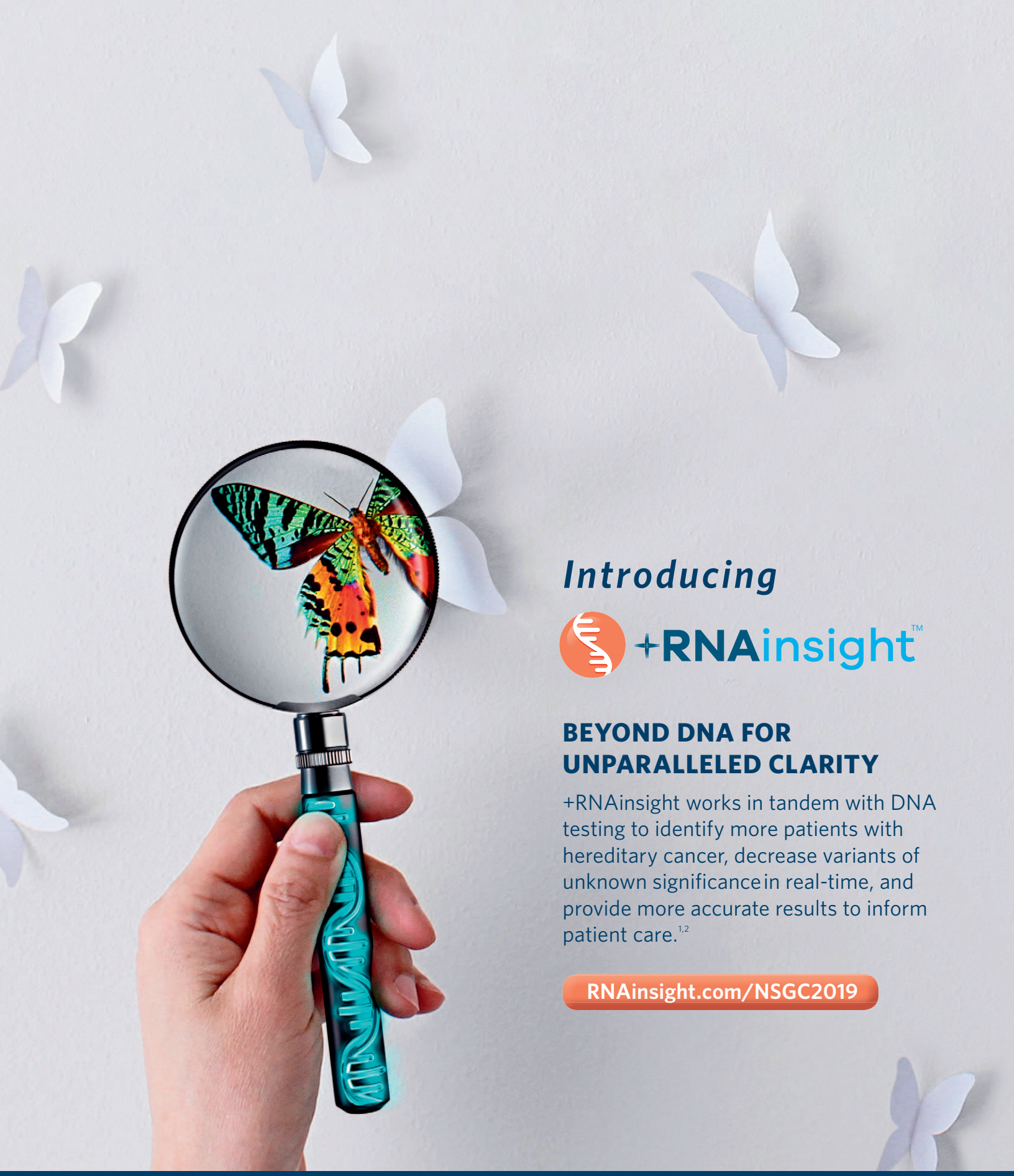
AstraZeneca

Convention Center Map



Reunion Information

Time	Reunion Name	Location
TUESDAY, NOVEMBER 5		
7:00 pm	University of Maryland	Lake Effect 155 West 200 Street | 801.285.6494
7:00 pm	University of Utah Graduate Program in Genetic Counseling	Squatters Pub 147 Broadway | 801.363.2739
7:30 pm	The Ohio State University Genetic Counseling Graduation Program	BTG Wine Bar 404 South West Temple Street | 801.359.2814
7:30 pm	Case Western Reserve University	Settebello 260 South 200 West | 801.322.3556
7:30 pm	University of Arkansas for Medical Sciences	Buca di Beppo 202 West 300 South | 901.575.6262
8:00 pm	Stanford Genetic Counseling Program	Under Current (Mezzanine) 270 South 300 East | 801.574.2556
WEDNESDAY, NOVEMBER 6		
7:00 pm	Sarah Lawrence College	Squatters Pub 147 Broadway | 801.363.2739
7:00 pm	University of Alabama at Birmingham	Buca di Beppo 202 West 300 South | 801.575.6262
7:00 pm	Keck Graduate Institute	T.F. Brewing 936 South 300 West | 385.270.5972
7:30 pm	Bay Path University Masters of Science in Genetic Counseling Program	Salt Lake Marriott Downtown at City Creek 75 South West Temple | 801.537.0800
7:30 pm	Boston University Genetic Counseling Program	Bourbon House 19 East 200 South | 801.746.1005
7:30 pm	University of Pittsburgh Genetic Counseling Program	Kimpton Hotel Monaco 15 West 200 South | 801.595.0000 | Please RSVP: publichealth.pitt.edu/nsgc
7:30 pm	Wayne State University	Poplar Street Pub 242 South 200 West | 801.532.2715
8:00 pm	Brandeis University	Lake Effect (Rabbit Hole Room) 155 West 200 Street | 801.285.6494
8:00 pm	Cincinnati Genetic Counseling Graduate Program	Squatters Pub (The Potting Shed Room) 147 Broadway | 801.363.2739
8:00 pm	University of Minnesota Genetic Counseling Program	Stanza Bistro and Wine Bar 454 East 300 South | 801.746.4441
8:00 pm	University of Michigan	Gracie's 326 South West Temple | 801.819.7565
THURSDAY, NOVEMBER 7		
6:30 pm	Augustana-Sanford Genetic Counseling Graduate Program	Gracie's 326 South West Temple | 801.819.7565
6:30 pm	Emory Genetic Counseling Training Program	Sonoma Grill 110 West Broadway | 801.890.6612
7:00 pm	LIU Post Genetic Counseling Graduate Program	Kimpton Hotel Monaco Salt Lake City (Bambara Restaurant) 15 West 200 South | 801.990.9731
7:00 pm	Mount Sinai Genetic Counseling Program	Sonoma Grill 110 West Broadway | 801.890.6612
7:00 pm	University of Texas Genetic Counseling Program	Squatters Pub (#134) 147 Broadway | 801.363.2739
7:30 pm	Northwestern University Graduate Program in Genetic Counseling	Caffe Molise 404 South West Temple | 801.364.8833
8:00 pm	Canadian Programs Reunion	From Scratch 62 East Gallivan Avenue | 801.961.9000



1. Ambry Genetics, internal data on file
2. Karam R. *et al*. RNA Genetic Testing in Hereditary Cancer Improves Variant Classification and Patient Management. ACMG 2019.

One Enterprise, Aliso Viejo, CA 92656 USA Toll Free +1.866.262.7943 Fax +1.949.900.5501 ambrygen.com

Ambry Genetics®
A Konica Minolta Company

Session Speakers + Objectives

TUESDAY, NOVEMBER 5

Pre-Conference Symposia

8:00 am – 2:00 pm

A01: A Heart to Heart Training: Advanced Topics in Traumatic Events Using Cardiogenetics as an Illustration

5.0 Contact Hours

Heather MacLeod, MS CGC, SDY Case Registry Data Coordinating Center; Samuel Sears, PhD, East Carolina University; Cindy James, ScM, PhD, CGC, Johns Hopkins University; Jodie Ingles, MPH, PhD, The University of Sydney; Christina Rigelsky, MS, LGC, Cleveland Clinic; Rebecca Miller, LCGC, Inova Health System; Rebecca McClellan, MGC, CGC, Johns Hopkins Center for Inherited Heart Disease; Tara Hart, MS, CGC, GeneDx; Shannon Hourigan, PhD, Inherited Cardiac Arrhythmia Program at Boston Children's Hospital

- Examine the psychosocial impact of traumatic cardiac events on the patient.
- Explore how traumatic diagnoses affect family members and family relationships.
- Illustrate the impact of genetic testing on patients and families facing traumatic events.
- Identify resources to support patients and families experiencing traumatic diagnoses events.

Attendance Verification Code: _____

A02: Building Skill for Cultural Conversations in Genetic Counseling

5.0 Contact Hours

Liza Talusan, PhD, LT Coaching and Consulting, LLC

- Examine our own individual identities and the role that our identities play in our work.
- Identify salient learned biases that have been developed in our work and lives.
- Build skills for engaging in difficult conversations around identity and identity-consciousness.
- Create individual, departmental and institutional action plans for how to get proximate to issues of identity.

Attendance Verification Code: _____

A03: Practical Tips for the Practicing Genetic Counselor: Somatic Testing and Hematologic Cancers

5.0 Contact Hours

Jennie Vagher, CGC, Huntsman Cancer Institute; Jaclyn Schienda, ScM, LGC, Dana-Farber Cancer Institute; Brian Shirts, MD, PhD, University of Washington; Jilliane Sotelo, MS, LGC, Thermo Fisher Scientific; Dana Farengo Clark, MS, MS, LCGC, University of Pennsylvania-Abramson Cancer Center; Kelly Knickelbein, MS, CGC, Thermo Fisher Scientific; Shannon Stasi, MS, LCGC, Seattle Children's Hospital; Pia Summerour, MS, CGC, Ambry Genetics; Prapti Patel, MD, UT Southwestern Medical Center; Elise Fiala, MS, CGC, Memorial Sloan Kettering

- Summarize the current state of the science of hematological malignancies, including new hereditary hematological malignancy gene discovery, common hematological malignancies encountered in family history, and clonal hematopoiesis of indeterminate potential (CHIP).
- Present a clinical toolkit for incorporating somatic testing into a genetic counselor's clinic workflow including referrals from oncologists, discussions at tumor boards and test selection.
- Compare the technologies and bioinformatic strategies used in different aspects of somatic testing including: solid tumors, hematologic cancers and liquid biopsies.

Attendance Verification Code: _____

A04: Measuring Up: Incorporating Patient Reported Outcomes in Clinic and Research

5.0 Contact Hours

Megan T. Cho, ScM, Johns Hopkins University, National Institute of Health Genetic Counseling Training Program; Kelly East, MS, CGC, HudsonAlpha Institute for Biotechnology; Karen Sepucha, PhD, Massachusetts General Hospital; Marion McAllister, MSc, PhD, Cardiff University, University Hospital of Wales; Barbara Biesecker, PhD, MS, CGC, RTI International; Janet L. Williams, MS, LGC, Geisinger; Vincent Staggs, PhD, Children's Mercy Kansas City, University of Missouri KC; Courtney Berrios, MSc, ScM, CGC, Children's Mercy Kansas City

- Summarize important criteria in evaluating and selecting patient reported outcome measures (PROMs) for use in clinic and research.
- Discuss interpretation and limitations of statistical analysis of PROMs.
- Practice applying PROMs to research questions.
- Consider ways to incorporate outcome measurement into one's clinical practice.

Attendance Verification Code: _____

A05: Perinatal Palliative Care and the Genetic Counselor: Optimizing Multi-Disciplinary Collaboration for Holistic Care of Critically Ill Infants and Their Families

5.0 Contact Hours

Rebecca Carter, MS, CGC, The University of Texas Health Science Center at Houston; Callie Diamonstein, MS, LCGC, UT Southwestern Medical Center, prior Inova Health System; Katrina Villegas, MA, Mama's Organized Chaos; Kristine Kowalski, MDiv, BCC, Johns Hopkins Hospital; Melissa Eatherly, MSN, FNP-BC, RNC-NIC, Inova Children's Hospital; Ryann Bierer, MD, University of Utah School of Medicine; Kathie Kobler, PhD, APRN, PCNS-BC,CHPPN, FPCN, Advocate Children's Hospital; Katelynn Sagaser, MS, CGC, Johns Hopkins Hospital

- Summarize existing literature surrounding palliative care in perinatal loss.
- Illustrate the roles of multiple healthcare professionals contributing to a perinatal palliative care team, including the distinct input of prenatal and pediatric genetic counselors.
- Describe proposed methods of collaboration with other disciplines and organizations to achieve optimal palliative care practice.
- Examine self-care techniques related to the professional and personal impact of working in palliative care.

Attendance Verification Code: _____

A06: Redesigning the Way We Work to Improve Efficiency

5.0 Contact Hours

Maria Ana Barrera, BA, MPS, Designit; Erin Miller, MS, LGC, Cincinnati Children's Hospital Medical Center; Kendra Schaa, ScM, CGC, University of Iowa Hospitals and Clinics; Alekhya Narravula, MSc, MS, CGC, Centogene AG

- Identify common areas of inefficiencies and the benefits of addressing such areas to the genetic counseling workforce.
- Recognize principles of creative problem solving and design methodologies in the healthcare setting.
- Discuss application of learned methods in the healthcare setting.
- Apply learned methods to arrive at creative solutions to common inefficiencies reported by genetic counselors.

Attendance Verification Code: _____

Plenary Sessions

3:15 pm – 3:45 pm

A07: 40 Years of the Genetic Counseling Profession: A Foundation for the Future

0.50 Contact Hour

Wendy Uhlmann, MS, CGC, University of Michigan Medical Center; Jennifer Malone Hoskovec, MS, CGC, University of Texas Medical School Houston; Mary Freivogel, MS, CGC, Invitae

- Examine the specific ways NSGC has supported growth of the profession of genetic counselors in the past, present and future.
- Illustrate strategies that successful genetic counselors have used to elevate our profession in the past and present that can be applied to the future.
- Examine how the history of our profession and its professional organization impacts genetic counselors today and in the future.

Attendance Verification Code: _____

4:15 pm – 4:45 pm

A08: Enabling the Beautiful Uncertainty of Life: My Journey With PGT-M

0.50 Contact Hour

Lee Cooper, JD, MBA, The IGDP

- Summarize a patient's practical, clinical and emotional experience with having a life-threatening inherited genetic condition and using PGT-M to have a child free from the inherited disease.
- Examine the important role, from a patient's perspective, of genetic counselors and other healthcare providers in communicating patient's family planning options.
- Outline "take-home" messages that will improve messaging/knowledge about PGT-M.

Attendance Verification Code: _____

WEDNESDAY, NOVEMBER 6

Sponsored Breakfast Sessions

7:00 am – 7:45 am

B01: Look Before You Leap: The Clinical Value of Genome-Wide NIPT

0.50 Contact Hour

Sarah Brandenberger, MS, CGC, MBA, Medical and Scientific Liaison, Women's Health, Roche Diagnostics; Liz Kunz, MD, Global Medical Affairs Director, NIPT/Women's Health, Roche Sequencing Solutions

- Examine the technology that makes whole-genome NIPT possible.
- Explore why whole-genome NIPT is not equivalent to a noninvasive whole genome screening test.
- Review the clinical data surrounding an expanded menu with NIPT screening.
- Give examples of potential dilemmas surrounding counseling patients on expanded NIPT results.

Sponsored by: Roche

Attendance Verification Code: _____

B02: Termination of Pregnancy for Indications of Genetic Disorders or Fetal Anomaly in Advanced Gestations at Boulder Abortion Clinic

Warren Hern, PhD, Director of the 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

Session Speakers + Objectives continued

Plenary Sessions

8:00 am – 8:35 am

B03: Janus Lecture: Enzyme Replacement Therapy for Mucopolysaccharidosis: How Ongoing Research Can Change the Understanding of Rare Diseases

0.50 Contact Hour

Ashley Simpson Volz, MS, CGC, BioMarin Pharmaceutical, Inc.

- Describe the historical and current landscape of enzyme replacement therapies (ERT) for Lysosomal Storage Disorders (LSD).
- Examine how the pharmaceutical industry has adapted clinical trial design and support of post-marketing research to meet the needs of patients with Mucopolysaccharidosis (MPS).
- Discuss how the genetic counseling role within clinic and industry is evolving to address new challenges presented by MPS patients receiving ERT.

Attendance Verification Code: _____

8:35 am – 9:35 am

B04: Professional Issues Panel

1.00 Contact Hour

Jodi Glickman

- Summarize the fundamentals of executive presence.
- Review techniques for increasing your confidence when speaking in front of a group.
- Identify ways to communicate with more clarity and credibility.

Attendance Verification Code: _____

Workshops and Lectures

10:15 am – 12:15 pm

B05: Should All Women With Breast Cancer Be Offered Genetic Testing? A Debate

No Pre-registration required

2.0 Contact Hours

Mark E. Robson, MD, Memorial Sloan Kettering Cancer Center; Peter Beitsch, MD, Dallas Surgical Group - TME/Breast Care Network; Sue Friedman, DVM, FORCE; Lisa Madlensky, PhD, CGC, UC San Diego – Moores Cancer Center; David Euhus, MD, Johns Hopkins University

- Distinguish the relative risks and benefits of germline genetic testing for all women with breast cancer.
- Compare different panel testing strategies for all women with breast cancer.
- Propose potential implementation of germline genetic testing for all women with breast cancer.

Attendance Verification Code: _____

B06: Building Stronger Communities: Confronting White Womanhood*

2.0 Contact Hours

Rhiannon Childs, Ohio Women's Alliance; Heather Marie Scholl, BA, MFA, Confronting White Womanhood; Sophie Ellman-Golan, BA, Jews Against White Nationalism

- Define privileged identity.
- Articulate experiences of privilege and racial harm.
- Examine how to use one's own experiences to engage with other privileged people with differing views.
- Analyze areas where one can use their privileged identity to support underrepresented individuals.

Attendance Verification Code: _____

**We do not believe in creating white-only spaces; all people are welcome to attend our workshop. We recognize that as a society, there are many areas to tackle in order to fully address privilege and discrimination. We designed this particular workshop to focus on educating and informing white women, committed to being part of an intersectional feminist movement, to unpack the ways they uphold and benefit from white privilege. We anticipate that these frank discussions and stories may be triggering, especially for people of color, and invite you to share your concerns with our trained moderators.*

B07: How to Review a Manuscript for a Journal: A Practical Workshop Aimed at Facilitating Research and Professional Development for Genetic Counselors

2.0 Contact Hours

Kami Wolfe Schneider, MS, CGC, University of Colorado, Children's Hospital Colorado; Beverly Yashar, MS, PhD, University of Michigan; Heather Zierhut, PhD, MS, LGC, University of Minnesota; Melanie Myers, PhD, Cincinnati Children's Hospital Medical Center; Christina Palmer, MS, PhD, LCGC, UCLA

- Summarize the personal and professional benefits of acting as a peer reviewer for manuscripts that have been submitted for potential publication in journals.
- Differentiate elements of the process of manuscript review.
- Formulate the critical features of a manuscript review.
- Identify ethical considerations associated with reviewing a manuscript for a journal.

Attendance Verification Code: _____

B08: Improving Your Communication With All Your Patients: Techniques to Communicate Across Literacy and Language

2.0 Contact Hours

Galen Joseph, PhD, University of California San Francisco; Mari Gilmore, MS, CGC, Kaiser Permanente Center for Health Research; Laura Amendola, MS, CGC, University of Washington; Robin Tropp Lee, MS, LCGC, University of California San Francisco

- Identify principles of and evidence-based strategies for effective communication with patients of various health literacy and numeracy levels.
- Identify excerpts in transcripts of genetic and genomic counseling sessions in which communication strategies impeded and enhanced the genetic counseling process.
- Discuss specific communication strategies and techniques for improving patient engagement, comprehension and satisfaction in the counseling session.
- Practice strategies that improve patient comprehension and engagement.

Unrestricted educational support provided by: Amicus Therapeutics

Attendance Verification Code: _____

B09: Leadership Workshop for New Genetic Counselors

2.0 Contact Hours

Elizabeth Kearney, MS, CGC, MBA; Erica Ramos, MS, LCGC, Geisinger

- Explore qualities of leadership.
- Examine unconventional examples of leadership.
- Define leadership in terms of outcomes instead of title or position.
- List core values to begin an authentic leadership journey.

Attendance Verification Code: _____

B10: So Consumer Genetics Is Here... What Is the Role of the Genetic Counselor, and How Do We Deal With This in Clinic?

2 Contact Hours

Teresa Kruisselbrink, MS, LCGC, Mayo Clinic; Johanna Schmidt, MPH, MGC, LCGC, Westside Genetic Counseling; Robin King, MS, LCGC, PWNHealth; Altovise Ewing, PhD, LCGC, 23andMe; Amy Sturm, MS, LGC, Geisinger; Shannon Kieran, MS, LCGC, MBA, Intelliger Consulting; Sara Riordan, MS, LCGC, Intelliger Consulting; Elissa Levin, MS, CGC, Helix

- Formulate an approach to critically assess consumer genetic testing products and services in order to best serve your patients, friends and family.
- Examine how genetic counselors are applying their core skills within the consumer genetics industry across a spectrum of roles to apply patient-centric approaches.
- Examine how clinical genetic counselors are creating roles to address the needs of consumers who have engaged in consumer-initiated genetic testing services, in both private and traditional clinical practice.

Attendance Verification Code: _____

Sponsored Lunch Sessions

12:30 pm – 1:45 pm

B11: Unparalleled Clarity and New Mutations: Clinical RNA Testing Provides Answers Beyond DNA

1.0 Contact Hour

Rachid Karam, MD, PhD, Ambry Genetics

- Explain basic information about the role of RNA genetic testing in variant detection and classification.
- Demonstrate that overall impact of paired DNA/RNA genetic testing in the positive yield and VUS rate.
- Discuss latest data and specific simultaneous DNA/RNA genetic testing case examples.

Sponsored by: Ambry Genetics, A Konica Minolta Company

Attendance Verification Code: _____

B12: Important Advancements for Precision Medicine in Oncology and Prenatal Genetics

1.0 Contact Hour

Dale Muzzey, PhD; Nassim Taherian, M.Sc.

- Highlight the importance of genetics in all aspects of human health and disease.
- Define the critical role that genetic testing plays in oncology treatment.
- Define the history of expanded carrier screening.
- Illustrate the limitations of ethnicity-based carrier screening guidelines.

Spnsored by: myriad

Attendance Verification Code: _____

Session Speakers + Objectives continued

Educational Breakout Sessions

2:30 pm – 3:45 pm

B13: "Dear Seymour": The Work and Applications of Dr. Seymour Kessler's Seminal Papers on Psychosocial Aspects of Genetic Counseling

1.25 Contact Hours

Liane J. Abrams, MS, LCGC, UCSF, CSU Stanislaus; Barbara Biesecker, PhD, MS, CGC, RTI International; Andrea Fishbach, MS, MPH, LCGC, Kaiser Permanente Medical Group; Kathryn Sptizer Kim, MS, CGC, Stanford University; Robert Resta, MS, LCGC, Hereditary Cancer Clinic, Swedish Medical Center

- Review how teaching and counseling models can be integrated to meet client needs using challenging case examples.
- Examine the differences between client shame and guilt and how proper assessment is essential to achieving positive client outcomes.
- Identify the importance of understanding the inner world of the counselor to recognize and manage counter-transference.
- Underscore the importance of social systems and family coping assessment as part of genetic counseling practice.
- Highlight Dr. Kessler's central and innovative contributions to the genetic counseling practice.

Attendance Verification Code: _____

B14: Digging Into Polygenic Risk Scores for Complex Disorders: Cancer, Cardio, Psychiatry… and More!

1.25 Contact Hours

Lasse Folkersen, MSc, PhD, Sankt Hans Mental Hospital; Tatiane Yanes, BSc, MSc, So+Gi Scan, UNSW Sydney; Jehannine Austin, PhD, CGC, University of British Columbia; Colleen Caleshu, MS, CGC, Stanford Center for Inherited Cardiovascular Diseases

- Identify diseases best suited to polygenic risk scores.
- Critique the performance of different polygenic risk scores.

Attendance Verification Code: _____

B15: From Genetics to Genomics: Evolving Liability Implications for Practitioners

1.25 Contact Hours

Susan M. Wolf, JD, University of Minnesota; Gary Marchant, PhD, JD, Sandra Day O'Connor College of Law, Arizona State University; Bonnie S. LeRoy, MS, LGC, University of Minnesota

- Describe the liability risks facing genetic counselors and other clinicians as genomic-scale testing becomes a part of medical care.
- Discuss how the current law addressing genetics must evolve to address genomics.

Attendance Verification Code: _____

B16: Hot Topics in Teratology: Zika, Marijuana and Maternal Therapies for Genetic Disease

1.25 Contact Hours

Victoria Wagner, MS, CGC, McGovern Medical School at The University of Texas Health; Myla Ashfaq, CGC, McGovern Medical School at The University of Texas Health; Jennifer Lemons, CGC, McGovern Medical School at The University of Texas Health

- Summarize key features of congenital Zika syndrome and related genetic counseling considerations.
- Examine existing data regarding marijuana use in pregnancy and reported postnatal outcomes.
- Critique available information concerning potential teratogenicity of novel therapies for common genetic disorders.

Unrestricted educational support provided by: Capital Women's Services

Attendance Verification Code: _____

B17: Seriously, Can Online Education Work for Genetic Counseling? Adapting to the Demands of Training More and Diverse Genetic Counselors

1.25 Contact Hours

Jennifer Eichmeyer, MS, LCGC, Boise State University; Janice Berliner, MS, LCGC, Bay Path University; Nicolle Dickey, MS, Boise State University; Megan Parker, MS, Methodist Le Bonheur Healthcare; Stephanie Gandomi, MS, LCGC, Boise State University; Colleen Dougherty, MS, LCGC, Bay Path University; Leslie Ordol, MSc, CGC, Boise State University

- Identify online education pedagogy and process.
- Summarize online education standards as well as methods for meeting ACGC standards for genetic counselor training utilizing online learning.
- Examine online versus on-ground adult learner characteristics, and how online education is used in adult learning.
- Generalize student and teacher experiences in the online learning processes.

Attendance Verification Code: _____

Plenary Sessions

4:15 pm – 5:20 pm

B18: Dr. Beverly Rollnick Memorial Lecture: Living a Life Worth Celebrating

1.00 Contact Hour

Rebecca Alexander, LCSW-R, MPH

- Examine the lived patient experience during the delivery of a genetic diagnosis.
- Illustrate one patient's journey of loss, resilience, perseverance and hope following a diagnosis of Usher Syndrome.

Attendance Verification Code: _____

B19: Audrey Heimler Special Project Award Presentation

0.50 Contact Hour

Sara Pirzadeh-Miller, MS, CGC; Andrea Durst, MS, DrPH, LCGC; Rebecca Vanderwall, MS, MPH; Raluca Kurz, MS, LCGC

- Review the history of the Audrey Heimler Special Project Award and provide an update on current initiatives.
- Describe the Public Health Genetics and Precision Medicine Roles fellowship and its impact in the first year of implementation through the NSGC Public Health Genetics SIG.

Attendance Verification Code: _____

Sponsored Evening Sessions

7:30 pm – 8:45 pm

B21: Understanding Residual Risk in Expanded Carrier Screening: Self-Reported Ancestry vs. Molecular Ancestry

1.0 Contact Hour

Ashley Birch, PhD, FCCMG, DABMGG; Mitchell W. Dillon, MS, CGC

- Describe how to calculate residual risk for autosomal recessive and X-linked conditions.
- Discuss how modifiers of residual risk may be used, focusing on Spinal Muscular Atrophy.
- Review molecular ancestry determination and how it might be used in personalized residual risk calculation.

Sponsored by: sema4

Attendance Verification Code: _____

B22: An Overview of the Historical Perspective and Current Status of Personalized/Precision Medicine

1.0 Contact Hour

Nadene Henderson, MS, LCGC, UPMC Children's Hospital of Pittsburgh; Neil Weinreb, MD, FACP, University of Miami Miller School of Medicine Miami, University Research Foundation for Lysosomal Storage Diseases, International Collaborative Gaucher Group, National Gaucher Foundation

- Examine how defining the phenotype/genotype relationship have clinical and therapeutic implications.
- Describe disease variability and associated conditions.
- Discuss prenatal screening and diagnosis as well as recommendations for managing patients with Gaucher disease (GD).
- Review genetic counseling issues, genetic testing, inheritance patterns and screening recommendations for GD.
- Apply knowledge gained of GD through a review of sample case examples.

Sponsored by: SANOFI GENZYME

Attendance Verification Code: _____

THURSDAY, NOVEMBER 7

Sponsored Breakfast Sessions

7:00 am – 7:45 am

C01: Chromosomal Microarray: Going, Going, Gone? Comprehensive Copy Number Variant Detection From Next Generation Sequencing Data

0.50 Contact Hour

Diane J. Allingham-Hawkins, PhD, FCCMG, FACMG, PreventionGenetics

- Explain the benefits and limitations of copy number variant detection by next generation sequencing.
- Compare copy number variant detection by next generation sequencing to other methods of copy number variant detection such as chromosomal microarray.
- Provide examples of how performing copy number variant detection by next generation sequencing adds value to a sequencing test.

Sponsored by: PREVENTION GENETICS

Attendance Verification Code: _____

C02: The Undiagnosed Second Diagnosis: Utilizing Advanced Genomic Technologies to Identify Dual Diagnoses and Understand Complex Phenotypes

0.50 Contact Hour

Madhuri Hegde, PhD, FACMG, PerkinElmer Genomics

- Summarize the challenges of identifying dual diagnoses from a clinical perspective and a molecular laboratory perspective.
- Evaluate cases of complex histories resulting from dual diagnoses.

Sponsored by: PerkinElmer | PerkinElmer GENOMICS

Attendance Verification Code: _____

Plenary Sessions

8:00 am – 9:15 am

C03: NSGC State of the Society Address

1.00 Contact Hour

Amy Sturm, MS, CGC, LGC

- 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 2019.
- Identify opportunities for supporting diversity and inclusion in the profession of genetic counseling.

Attendance Verification Code: _____

Session Speakers + Objectives continued

9:15 am – 9:45 am

Incoming Presidential Address

Gillian Hooker, PhD, ScM, LCGC

- Welcome NSGC President-Elect Gillian Hooker, as she introduces herself to NSGC members and outlines her vision for NSGC and the genetic counseling profession in 2020.

Attendance Verification Code: _____

Sponsored Lunch Sessions

12:00 pm – 1:15 pm

C09: Functional Modeling – The Next Frontier in Variant Interpretation

1.0 Contact Hour

Brandie Heald Leach, MS, LGC, Cleveland Clinic; Carlos Araya, PhD, Invitae

- Indicate how often to expect VUS results with diagnostic testing and describe traditional approaches to VUS resolution.
- Describe the role of functional modeling as an additional evidence type that can assist in variant classification.
- Describe different functional approaches to variant interpretation and their utility.
- Review data from the retrospective implementation of a novel functioning modeling platform in a clinical laboratory, including impact on VUS rates.

Sponsored by: INVITAE

Attendance Verification Code: _____

C10: How to Avoid Legal and Ethical Pitfalls as a Genetic Counselor

1.0 Contact Hour

Jane Pine Wood, Esq., BioReference Laboratories, Inc., Stephanie DeWard, MS, CGC, GeneDx, Rachel T. Klein, MS, CGC, My Gene Team, LLC

- Describe legal and compliance considerations with billing and genetic test ordering.
- Discuss policies and best practice around duty to recontact.
- Identify and discuss clinical scenarios that present legal and ethical challenges from a HIPAA and compliance perspective.

Sponsored by: GeneDx an OPKO Health Company

Attendance Verification Code: _____

Educational Breakout Sessions

3:10 pm – 4:40 pm

C12: A History of Genetic Discrimination: Reviewing Our Past and Looking Toward the Future

1.5 Contact Hours

Laura Hercher, MA, MS, CGC, Sarah Lawrence College; Tina Sacks, PhD, UC Berkeley's School of Social Welfare; Vivian Ota Wang, PhD, CGC, FACMG, NHGRI

- Examine historical examples of eugenics and discrimination and their impact on current healthcare inequities and racial disparities in genetic medicine and research.
- Propose strategies that genetic counselors can implement in their own institutions to highlight existing genetic discrimination and proactively reduce barriers to genetic-based care.

Attendance Verification Code: _____

C13: NSGC and ASHG Joint Session: Genetic Counselors in Research: From Dabbling in Clinic to an NIH Grant

1.5 Contact Hours

Julia Wynn, MS, MS, CGC, Columbia University Irving Medical Center; Adam Buchanan, MS, MPH, CGC, Geisinger; Allison Cirino, MS, CGC, MGH Institute of Health Professions; Kira Dies, ScM, CGC, Boston Children's Hospital; Sarah Scollon, MS, CGC, Baylor College of Medicine, Texas Children's Hospital

- Describe variable roles for genetic counselors in research.
- Recognize genetic counselor-led research activities and outcomes.
- Demonstrate strategies for engaging in research across variable practice areas.
- Prepare all types of genetic counselors to engage in research activities.

Attendance Verification Code: _____

C14: Beyond Cystic Fibrosis: Pulmonary Genetic Disorders in Adulthood

1.5 Contact Hours

Nikkola Carmichael, MSc, CGC, Boston Children's Hospital, Brigham and Women's Hospital; Janet Talbert, MS, CGC, InformedDNA, National Jewish Health; Maimoona Zariwala, MSc, PhD, FACMG, University North Carolina at Chapel Hill

- Identify characteristics of pulmonary genetic disorders in personal or family medical histories.
- Describe the health implications of pulmonary genetic disorders for the affected individual and their family.
- Explore resources for referring patients to appropriate specialty centers and patient support groups for additional care.

Attendance Verification Code: _____

C15: Challenging the Comfort Zone: Debated Testing Strategies in Cardiovascular Genetics

1.5 Contact Hours

Lisa Castillo, MS, CGC, Northwestern University; Kyla Dunn, MS, LCGC, Stanford Center for Inherited Cardiovascular Disease; Melanie Care, MSc, CCGC, University Health Network – Toronto General Hospital; Melissa Kelly, MS, LGC, Geisinger; Heather MacLeod, MS, CGC, Sudden Death in the Young Case Registry

- Determine whether readily available expanded testing can replace more conservative options.
- Evaluate the clinical utility of genetic testing for indications without irrefutable evidence.
- Examine clinical scenarios which challenge the traditional genetic testing approach in a family.

Attendance Verification Code: _____

C16: The New GC in Town: Demystifying the Role of Gene Curation in Variant Interpretation, Clinical Reporting and Case Reanalysis

1.5 Contact Hours

Alicia Scocchia, MS, LCGC, Illumina, Inc.; Erin Riggs, MS, CGC, Geisinger; Jackie Tahiliani, MS, CGC, Invitae; Kelly Radtke, PhD, Ambry Genetics; Erin Thorpe, MS, LCGC, Illumina, Inc.

- Define the key principles and resources utilized in the practice of gene curation.
- Discuss how gene curation impacts variant interpretation.
- Examine the basic framework for gene curation, proposed by ClinGen.
- Examine how this framework is currently adapted by laboratories.
- Apply knowledge of gene-curation principles to critically assess clinical reports and ask informed questions of laboratories regarding gene-curation protocols.
- Illustrate the benefits and complexities of gene-curation reanalysis and how this may impact updated clinical reports.

Attendance Verification Code: _____

Plenary Session

5:00 pm – 5:35 pm

C17: Human Genome Editing: The Current State of Research and Clinical Practice

0.50 Contact Hour

Forough Noohi, MSc, Human Genetics, McGill University

- Summarize current human gene therapy basic research and clinical trial initiations and results around the world.
- Examine genetic counselors' role in informing patients' choices in the fast growing field of gene editing technologies.

Attendance Verification Code: _____

Best Full Member Abstract Award Presentation

5:35 pm – 5:50 pm

C18: Clinical False-Negative Rate of Direct-to-Consumer Genetic Screening for Familial Hypercholesterolemia

0.25 Contact Hour

Sienna Aguilar, MS, LCGC

- Describe a patient-initiated approach to genetic testing.

Attendance Verification Code: _____

Beth Fine Kaplan Student Abstract Award Presentation

5:50 pm – 6:05 pm

C19: Navigating Through Burden: Communicator Perspectives of Familial Risk Communication After a Sudden Cardiac Death of a Young Family Member

0.25 Contact Hour

Franceska Hinkamp, MS, UCLA Institute for Precision Health, Division of Genetics, Department of Pediatrics

- Identify the core challenges of risk communication faced by families who have experienced a sudden cardiac death in a young family member.

Attendance Verification Code: _____

Jane Engelberg Memorial Fellowship Presentation

6:05 pm – 6:35 pm

0.50 Contact Hour

Beverly Yashar, MS, PhD, CGC; Heather Zierhut, PhD, MS, CGC

- Review the history of the Jane Engelberg Memorial Fellowship (JEMF) award and provide and update on current initiatives.
- Define motivational interviewing and give an example of how the strategy can be used in the context of communicating risk information to family members.

Attendance Verification Code: _____

Session Speakers + Objectives continued

FRIDAY, NOVEMBER 8

Sponsored Breakfast Sessions

7:00 am – 7:45 am

D01: A Brave New World: A Family's Experience With New Therapies for Spinal Muscular Atrophy

Bob Wallerstein, MD; Amanda Schlemme

- Summarize how new spinal muscular atrophy (SMA) therapies are playing a critical role in the evolution of patient care for babies with SMA.
- Illustrate the importance of screening for SMA to identify affected children presymptomatically.
- Illustrate the clinical journey and genetic testing process that led to Colin's diagnosis.
- Examine the psychosocial journey that Colin's parents faced throughout the process.

Sponsored by: Integrated GENETICS LabCorp Specialty Testing Group

Attendance Verification Code: _____

D02: The ABC's of DTC Genetic Testing

Stacey Detweiler, MS, LCGC, 23andMe. Inc.; Altovise Ewing, PhD, LCGC, 23andMe, Inc.; Anne Greb, MS, CGC, 23andMe, Inc.

- Demonstrate how DTC genetic testing relates to other categories of genetic/genomic testing.
- Describe different types of DTC genetic tests including criteria for FDA regulation (analytical/clinical validity; clinical utility).
- Develop a mutually agreed upon genetic counseling agenda based on client motivations for DTC genetic testing.
- Summarize the importance of understanding the DTC genetic testing consumer experience, including examples of how customers can tailor their experience.

Sponsored by: 23andMe®

Educational Breakout Sessions

8:00 am – 9:30 am

D03: In Utero Stem Cell Transplantation: Historical Context, Present State and the Future of Fetal Molecular Therapies

1.5 Contact Hours

Stefanie Kasperski, MS, LCGC, The Center for Fetal Diagnosis and Treatment at The Children's Hospital of Philadelphia; Billie Rachael Lianoglou, MS, UCSF Center for Maternal-Fetal Precision Medicine; Julie Harris-Wai, PhD, MPH, University of California San Francisco

- Detail the history of in utero stem cell transplantation.
- Summarize the risks and benefits of hematopoietic stem cell transplantation and the target diseases for which this therapy is currently offered.
- Describe target diseases for applying both in utero hematopoietic stem cell transplantation and other fetal molecular therapies including gene therapy.

Attendance Verification Code: _____

D04: The Emerging Roles of Genetic Counselors as Consumers Embrace Healthy Genomic Screening

1.5 Contact Hours

Carrie Blout, MS, CGC, Brigham and Women's Hospital; Michelle Moore, MS, LCGC, Sanford Health Imagenetics; Allison Hazell, MSc, CGC, CCGC, Medcan; Sienna Aguilar, MS, LCGC, Invitae; Elissa Levin, MS, CGC, Helix; Jill Davies, MS, CGC, GeneMatters

- Define important considerations when developing a genomics clinic or program designed to provide preventive genomic screening options to seemingly healthy patients.
- Describe how clinical laboratories are adapting to meet consumer demands by offering healthy screening options.
- Describe healthy genomic screening options and considerations outside of the traditional clinical space.

Attendance Verification Code: _____

D05: Getting to the Heart of Our Practice: Developing an Evidence Base to Improve Cardiovascular Genetic Counseling

1.5 Contact Hours

Susan Christian, MSc, University of Alberta, Alberta Health Services; Katherine Spoonamore, MS, CGC, Indiana University School of Medicine; Brittney Murray, MS, CGC, Johns Hopkins University; Cynthia A. James, ScM, PhD, CGC, Johns Hopkins University; Jodie Ingles, MPH, PhD, The University of Sydney; Charlotte Burns, MGC, The University of Sydney, Hannah Ison, MS, LCGC, Stanford Center for Inherited Cardiovascular Disease

- Summarize predictors of uptake of cascade genetic testing.
- Describe the role of the genetic counseling-client relationship and demographic factors in predicting change in patient empowerment.
- Plan how to collect outcomes measures at your center.

Attendance Verification Code: _____

D06: How to Talk to Your Patients About Imaging: What to Do When There Aren't NCCN Guidelines

1.5 Contact Hours

Yelena Wu, PhD, Huntsman Cancer Institute, University of Utah; Wendy Kohlmann, MS, Huntsman Cancer Institute, University of Utah; Saundra Buys, MD, Huntsman Cancer Institute, University of Utah; Luke Maese, DO, Huntsman Cancer Institute, University of Utah; Kristin Zelley, MSc, CGC, CCGC, Children's Hospital of Philadelphia; Mary-Louise Greer, MBBS, FRANZCR, The Hospital for Sick Children; Samantha Greenberg, MS, MPH, CGC, Huntsman Cancer Institute

- Define the principles of screening and related imaging options.
- Evaluate screening recommendations for hereditary cancer syndromes to determine surveillance guidelines for rare and novel conditions.
- Differentiate standard and novel imaging approaches to make tailored recommendations to patients.

Attendance Verification Code: _____

D07: Weighing the Alternatives: Non-Traditional Approaches to Improve Genetic Counseling Access and Efficiency

1.5 Contact Hours

Julia Wynn, MS, MS, CGC, Columbia University Medical Center; Tara Schmidlen, MS, LGC, Geisinger; Andrew Faucett, MS, LGC, Geisinger; Miranda Hallquist, MSc, LCGC, Geisinger; Sharon Aufox, MS, CGC, Center for Genetic Medicine, Northwestern University

- Apply the CADRe framework to leverage the genetic counseling resource most effectively.
- Evaluate the design, implementation and assessment of alternative delivery models for different aspects of genetic counseling and education.
- Argue the benefits and risks of the use of alternative approaches to genetic counseling.

Unrestricted educational support provided by: natera

Attendance Verification Code: _____

Plenary Session

10:00 am – 10:50 am

D08: Meeting the Demand for Genetic Counseling Through Artificial Intelligence: Can We Clone Our Skill Set?

0.75 Contact Hour

Kaylene Ready, MS, CGC, GeneMatters; Cathy Wicklund, MS, CGC, Northwestern University; Tara Schmidlen, MS, LGC, Geisinger; Shivani Nazareth, MS, CGC, Clear Genetics

- Define the use cases for artificial intelligence (AI) in healthcare, and the relevance to the field of genetic counseling.
- Provide a balanced perspective on creative ways to achieve scale and promote access in genetics.
- Demonstrate how chatbots, as an example of AI, can enable scale in genetic counseling.
- Highlight the overall trends in AI and debate their merits.

Attendance Verification Code: _____

Session Speakers + Objectives continued

Late-Breaking Plenary

10:50 am – 11:50 am

D09: Emerging Therapies for Adult-Onset Neurologic Diseases: Possibilities, Pitfalls and Patient Impact

1.0 Contact Hour

Sonia Vallabh, JD, PhD, Broad Institute

- Describe two genetically targeted therapeutic approaches in clinical trials to treat adult-onset neurologic diseases.
- Summarize which hereditary adult-onset neurologic diseases currently have ongoing clinical trials of genetically targeted therapies.
- Describe the roles that motivated at-risk individuals play in all stages of drug development.
- Discuss forms of positive action available to at-risk individuals independent of drug development, including IVF-PGD.
- Appreciate the perspective of an individual who is gene positive for an adult-onset hereditary neurologic disease.

Attendance Verification Code: _____

Post-Conference Symposia

2:00 pm – 5:30 pm

D15: Genetic Counselor Fingerprints on the Business Side: Clinical Product Strategy, Development and Lifecycle Skills Workshop

3.0 Contact Hours

Carrie Haverty, MS, LGC, Myriad Women's Health; Shivani Nazareth, MS, CGC, Clear Genetics; Kaylene Ready, MS, CGC, Gene Matters; Sarah Witherington, MS, LCGC, Quest Diagnostics

- Describe specific roles for genetic counselors in clinical product development.
- Create a strategy for an imaginary genetic testing or services product.
- Formulate an elevator pitch for an imaginary genetic testing or genetic services product.

Attendance Verification Code: _____

D16: Genetics Beyond the Binary: How to Incorporate Gender Diversity Into the Concepts of Genetics

3.0 Contact Hours

Kaitlyn Brown, MS, CGC, Children's Hospital at Montefiore; Candice Metzler, MSW, CSW, Utah Pride Center, University of Utah; Clair Rock, Logic Dept.

- Summarize the importance of using gender-inclusive language in the practice of genetic counseling.
- Apply inclusive language that remains scientifically accurate while describing genetic information.
- Evaluate resources for inclusivity of patients who identify as intersex, gender non-binary/non-conforming (GNB/GNC).

Attendance Verification Code: _____

D17: Late-Breaking Cancer Topics

3.0 Contact Hours

Sayoni Lahiri, MS, CGC, UT Southwestern Medical Center; Sara Pirzadeh-Miller, MS, CGC, UT Southwestern Medical Center; Veronica Greve, MS, CGC, HudsonAlpha Institute for Biotechnology;Carrie Blout, MS, CGC, Brigham and Women's Hospital; Miranda Hallquist, MSc, LCGC, Geisinger; Barry Tong, MS, CGC, UCSF Cancer Genetics and Prevention Program; Dena Goldberg Linder, MS, LCGC, UCSF Cancer Genetics and Prevention Program; Wendy Kohlmann, MS, CGC, Huntsman Cancer Institute; Sheryl Walker, MS, CGC, Medical City Dallas; Jacqueline Mersch, MS, CGC, Moncrief Cancer Institute, UT Southwestern; Amber Aelts, MS, LGC, The Ohio State University

Session 1: Implementation of Population Genetic Screening Programs Across Populations and Institutions

- Identify challenges with implementation and automation of screening processes for population-based screening programs.
- Identify methods for improving access to genetics services in underserved populations.
- Describe various methods for patient recruitment, including online recruitment, for population-level genetic screening.

Session 2: Lie, Cheat & Steal: The Growing Epidemic of Genetic Testing Fraud in America

- Identify appropriate channels for reporting fraudulent health insurance activity.
- Improve strategy for evaluating genetic testing laboratories.

Attendance Verification Code: _____

TEST EARLY. DIAGNOSE SOONER.

CUSTOMIZE CARE FASTER WITH NO-COST TESTS

Simply Test for MPS™

AN MPS ENZYME PANEL FOR:

- Patients exhibiting signs and/or symptoms consistent with an MPS disorder.

Sara, 27
Diagnosed with SED at age 8. Correct diagnosis of MPS IVA diagnosed at age 26.

BEHIND the SEIZURE®

A COMPREHENSIVE EPILEPSY GENE PANEL FOR:

- Children 0 to 60 months old who have experienced unprovoked seizures.

Eli, 3
Diagnosed with CLN2 disease at age 2.

Consider no-cost testing for your eligible patients today

VISIT SIMPLYTESTFORMPS.COM

VISIT BEHINDTHESEIZURE.COM

BIOMARIN®

Platform Presentations

THURSDAY, NOVEMBER 7 | 10:20 am – 11:35 am | 1.25 CONTACT HOURS

	C04 Access and Service Delivery	C05 Cancer	C06 Cardiovascular	C07 Conversations Around Diversity	C08 Prenatal
	Room 255EF • Explore novel approaches to improve access to genetic counseling. • Examine tools and modalities to improve efficiency in clinical genetic counseling.	*Grand Ballroom* • Summarize various research studies related to hereditary cancer genetics. • Examine different components of the cancer genetic counseling process.	*Room 255BC* • Evaluate the application of molecular genetic technologies in cardiovascular genetic counseling. • Examine the patient experience in cardiovascular genetic counseling.	*Room 155EF* • Examine methods for facilitating genetic counselor diversity. • Illustrate the value of diversity in genetic counselor training programs.	*Room 155BC* • Examine available resources and tools that can be used in prenatal genetic counseling. • Illustrate the role of key stakeholders in the prenatal experience.
10:20 am – 10:35 am	Impact of Service Delivery Model on Patient Perceptions and Utility of Genetic Counseling for Hereditary Breast and Ovarian Cancer: An Exploration of Group Genetic Counseling *Alyssa Gates*	Gaps in Genetic Testing Results Interpretation: Lessons Learned From Five Years of Education Efforts *Emily Edelman*	How Does Age at Diagnosis Impact Physical Activity and Health Related Quality of Life for Children Diagnosed With an Inherited Arrhythmia or Cardiomyopathy? *Susan Christian*	Assessing the Impact of Diversity and Inclusion Among Individuals in Genetic Counseling Student Cohorts *Gnyapti Majmudar*	"It is in God's Hands": An Investigation of Genetic Counselors' Responses to Prenatal Patient Religious/ Spiritual Statements *Alina Sitaula*
10:35 am – 10:50 am	Improving Genetic Counselor Efficiency While Maintaining High Patient Satisfaction *Kiley Johnson*	How Do Adolescents and Young Adults Experience Genetic Testing for Li-Fraumeni Syndrome? *Rowan Forbes Shepherd*	Clinical Evidence of Long QT Syndrome in Patients With *KCNQ1* Variants *Robyn Hylind*	Genetic Counseling Training Program Admissions Teams and Racial and Ethnic Diversity: Surveying the Gatekeepers *Ana Sarmiento*	Fragile X Carrier Screening Accompanied by Genetic Consultation Has Clinical Utility in Populations Beyond Those Recommended by Guidelines *Katie Johansen Taber*
10:50 am – 11:05 am	Re-Contacting Women With Previous Negative *BRCA1* & *BRCA2* Genetic Testing for Updated Testing Using a Multi-Gene Panel *Ryan Mooney*	Returning Polygenic Risk Scores to Participants in a Pragmatic Clinical Trial of Risk-Based Population Screening for Breast Cancer *Galen Joseph*	Molecular Autopsy: Experience in a Multidisciplinary Inherited Arrhythmia Clinic *Emma Leach*	Increasing Diversity in the Genetic Counseling Profession: A Pilot Study on Development of Effective Recruitment Tools for Black Undergraduate Students *Erica Price*	Exploring the Potential Yield of Prenatal Testing by Evaluating a Postnatal Population With Structural Abnormalities *Peyton Busby*
11:05 am – 11:20 am	No Thank You: Referrals Resulting in a Declined Appointment Over a Five Year Period *Heather Rocha*	Downstream Revenue Generated by a Cancer Genetic Counselor *Caitlin Mauer*	The Cardiac Genome Clinic: A Model for Integrating Whole Genome Sequencing Into Clinical Cardiology *Eriskay Liston*	Moderated Discussion	Deciding Whether to Take Antidepressants During Pregnancy: A Grounded Theory *Catriona Hippman*
11:20 am – 11:35 am	Breast Cancer Genetic Testing Station: A Model for Increasing Access for Large Patient Volume *Desiree Stanley*	Pathogenic Variants in Cancer and Hematologic Disease Susceptibility Genes Identified in Blood and Marrow Transplant Patients With Acute Myeloid Leukemia and Myelodysplastic Syndrome and Their HLA-Matched Unrelated Donors *Lara Sucheston-Campbell*	Evaluation of Clinical Practices and Needs About Variants of Uncertain Significance Results in Inherited Cardiac Arrhythmia and Inherited Cardiomyopathy Genes *Reka Muller*		The First Prenatal Visit: An Opportunity for Collaboration Between Genetic Counselors and Obstetric Healthcare Providers to Support Patients' Prenatal Genetic Testing Decisions *Ruth Farrell*

FRIDAY, NOVEMBER 8 | 12:15 pm – 1:30 pm | 1.25 CONTACT HOURS					
	D10 Education *Room 255EF* • Summarize appraches in genetic counseling education. • Examine the patient experience in cardiovascular genetic counseling.	**D11 Ethical and Psychosocial Research** *Room 255BC* • Illustrate ethical implications across the genetic counseling process. • Evauate psychological and social issues for genetic counseling patients.	**D12 Neuromuscular/ Psychiatric** *Room 155EF* • Explore various aspects of patient experiences with neurological disorder diagnoses and testing. • Summarize students' perspectives of psychiatric illness. *Unrestricted educational support provided by:* bluebirdbio	**D13 Patient Utilization of Genetic Test Results** *Room 155BC* • Identify responses to genetic testing and results disclosure. • Explore the impact of cascade testing.	**D14 Innovations in Somatic Tumor Testing** *Grand Ballroom* • Explore the utility of somatic genetic testing methodologies in clinical practice. • State the impact of somatic genetic test results and implications for patients and families.
12:15 pm – 12:30 pm	Application of the Reciprocal Engagement Model of Supervision (REM-S): What Is Happening in Genetic Counseling Student Supervision Meetings? *Carrie Atzinger*	Examining the Relationship Between Parenting Stress and Anxiety in Children With 22q11.2 Deletion Syndrome *Jacquelynn Berton*	Genetic Counseling Students' Attitudes Towards Psychiatric Illness *Rebecca Haegedorn*	Ready or Not: Hypothetical Reactions to Receiving Unsolicited Results of Family Member's *BRCA1/2* Gene Testing *Amber Aeilts*	Paired Tumor-Germline Sequencing in Adolescents: Motivators, Attitudes and Knowledge *Michelle F. Jacobs*
12:30 pm – 12:45 pm	Genetic Counselors With Advanced Skills: A New Career Trajectory Framework *Bonnie Baty*	The Role of Ethnicity in Views and Attitudes Toward Precision Medicine Research: A Systematic Review of Qualitative and Quantitative Studies *Elena Fisher*	Rates and Causes of Mortality in Pediatric Patients With Known or Presumed Genetic Epilepsy *Colleen Kennedy*	Assessing Readiness for Hereditary Cancer Cascade Genetic Testing *Erica Bednar*	Evaluation of a Referral Triage Protocol Based on Tumor Genomic Profiling Results and Personal/ Family History: A Pilot Study at a Community Cancer Center *Kate Partynski*
12:45 pm – 1:00 pm	Entrustment Decisions in Genetic Counseling Training: Exploring Supervisor Perspectives *Kelsey N. Lenhart*	Investigation of Media Type of Educational Resources on Patient Knowledge and the Role of Health Literacy *Jacqueline Neminski*	Mosaic Sequence and Copy Number Variants in a Large Clinical Genetic Testing Cohort *Daniel Pineda-Alvarez*	The Effect of a Video Intervention on Research Participant Understanding and Perceived Usefulness of Negative Genetic Test Results *Austin Bland*	Baylor College of Medicine Advancing Sequencing in Childhood Cancer Care (BASIC3): A Synopsis of Germline and Tumor Exome Sequencing Results in 283 Pediatric Oncology Patients *Sarah Scollon*
1:00 pm – 1:15 pm	Educational Session to Increase Awareness, Knowledge, Attitudes and Behaviors Towards Family Health History and Referral to Genetic Services in Hispanic Community Health Workers *Laura Moreno*	Decisional Conflict Among Adolescents and Parents Making Decisions About Genomic Results *Preethi Raghuram Pillai*	Genetic Test Disclosure and Genetic Counseling in Parkinson's Disease: Outcomes From the Widespread Recruitment Initiative (WRI) *Jenny Verbrugge*	Uptake of Post-Result Disclosure Follow-Up and Cascade Genetic Testing Chatbots Among Patients Receiving Clinically Actionable Exome Sequencing Results *Tara Schmidlen*	Germline *BRCA* Alterations Detected by Circulating Tumor DNA Testing Among Patients With Advanced Cancer *Krysten Shipley*
1:15 pm – 1:30 pm	The Results Are In: Examining Whole Exome Sequencing Follow-Up Care for Pediatric Patients *Katherine Ozelius*	The Role of Genetic Counselors in the Recognition and Prevention of Sexual Abuse in Populations With Intellectual Disability *Rebecca Sheedy*	Current Attitudes and Practices Regarding Discussion of Disease-Modulating Treatment for Spinal Muscular Atrophy Among Prenatal Genetic Counselors *Bethany Zettler*	Cascade Testing Uptake in First-Degree Relatives After Receiving a Cancer or Cardiovascular Result From a Population Genomic Screening Program *Amy Sturm*	Germline Testing Recommendations for Patients With *BRCA1/2* Mutations on Somatic Tumor Testing at Stanford *Katherine Vlessis*

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.

GROUP A POSTERS
Tuesday, November 5
5:45 pm – 7:00 pm
CONTACT HOURS: 1.25

GROUP B POSTERS
Wednesday, November 6
6:15 pm – 7:30 pm
CONTACT HOURS: 1.25

GROUP C POSTERS
Thursday, November 7
1:20 pm – 2:35 pm
CONTACT HOURS: 1.25

ACCESS AND SERVICE DELIVERY

A – 1 The Participant Perspective of a Novel Whole Genome Sequencing Delivery Model for Ostensibly Healthy Individuals
Kaitlyn Givens

A – 4 Integrating Genetic Counseling Services Into a Multi-Disciplinary Breast Clinic
Amanda Schott

A – 7 Cascade Screening With a Large, Multi-Gene Panel Test Identifies High Rate of Incidental, Clinically Actionable Findings
Lauren Ryan

A – 10 The Effect of an Educational Video on Knowledge and Intent in an OB/GYN Population
Brighton Goodhue

A – 13 Impact of Reminder Calls on Questionnaire Completion Rates
Elise Watson

A – 16 Use of BRCA-Related Familial Risk Stratification Tools Among Physician Assistants
Jason Murphy

A – 19 Webinar Stimulates Genetic Counseling Student Knowledge and Interest in Automation as a New Service Delivery Model
Sonja Higgins

A – 22 Uptake of Pre- and Post-Test Genetic Counseling for Individuals Undergoing Consumer-Directed Genetic Testing
Scott Weissman

A – 25 High Satisfaction With Genetic Counseling Using Telephone-Based Delivery Method for Return of Results: A Pilot
Lily Servais

A – 28 Bridging the Genetic Care Gap Between the Deaf and Hearing: A Study of Genetic Service Accessibility for the Deaf Community
Mackenzie Mosera

A – 31 Effective Communication of Genetic Test Results to Non-Specialist Clinicians and Patients
Gabriel Recchia

A – 34 Identifying Genetic Counseling Candidates by Utilizing Genetic Counseling Assistants and High Risk Navigators in a High Risk Breast Program
Jenna Harris

A – 37 Adolescents' Attitudes Towards Direct-to-Consumer Genetic Testing
J. Fitzpatrick Doyle

A – 40 Assessing the Utility of a Machine Learning Algorithm in the Provision of Genetics-Based Care
Lauren Seemann

ADULT

A – 43 Uptake of Genetic Testing in Patients With Early-Onset Colorectal Cancer in Traditional Cancer Genetics Versus Multidisciplinary Clinical Settings
Dianne Samad

A – 46 Investigating the Potential Impact of Gene Therapy on Identity in Individuals With Hemophilia
Mercedes Zoeteman

CANCER

A – 49 Possibly Mosaic *TP53* Mutation: Circulating Tumor Cells or Li-Fraumeni Syndrome?
Ryan Noss

A – 52 Somatic Tumor Testing Identifies Germline *BARD1* Mutation in a Patient With Ewing Sarcoma: Implications for Familial Testing and Genetic Counseling
Rosemarie E. Venier

A – 55 Adult Presentations of a Classic Pediatric Tumor Predisposition Syndrome: Hereditary Retinoblastoma
Christine Steele

A – 58 Clinical and Familial Characteristics of Children and Young Adults With Thyroid Cancer: A Case Series
Regina Nuccio

A – 61 Possible *CDKN2A* Founder Mutation Associated With Increased Risk for Pancreatic Cancer in Hispanic Population
Karlena Lara-Otero

A – 64 Incidental *MITF, p.E318K* Pathogenic Variant in Three Independent Cases Undergoing Hereditary Cancer Risk Assessment
Jessica Ordonez

A – 67 The Identification and Workup of Two *BRCA2* De Novo Cases
Rania Sheikh

A – 70 Alternative Genetic Counseling Model for Advanced Prostate Cancer Patients: Impact on Clinical Management
Kelsey Breen

A – 73 Improving Access to Genetic Counseling for Women With Epithelial Ovarian Cancer in Nova Scotia, Canada
Ashley Warias

A – 76 Women's Responses and Understanding of Polygenic Breast Cancer Risk Information
Tatiane Yanes

A – 79 The Effect of Select Modifiable Lifestyle Factors on Breast Cancer Risk in *BRCA1* and *BRCA2* Mutation Carriers: A Systematic Review of the Evidence
Laura Braunstein

A – 82 Utilization of Genetic Testing When Assessing Risk for *BRCA1*- and *BRCA2*- Associated Hereditary Breast and Ovarian Cancer: Education and Importance of Referral to Genetics
Erin Barone

A – 85 Genetics Clinic Re-Contact of Patients With Unexplained Defective Mismatch Repair
Julia Cooper

A – 88 Cascade Genetic Testing at an Interdisciplinary Program for Families With *CDH1*
Grace-Ann Fasaye

A – 91 Cascade Genetic Testing: Feedback From a Michigan-Based Patient Focus Group
Natalie Waligorski

A – 94 RNA Research Program Continues to be a Valuable Tool in Variant Reclassification
Susana San Roman

A – 97 Clinical Utility of Hereditary Cancer Panel Testing: Impact of *PALB2*, *ATM*, *CHEK2*, *NBN*, *BRIP1*, *RAD51C* and *RAD51D* Results on Patient Management and Adherence to Provider Recommendations
Katie Johansen Taber

A – 100 Communication Practices of Cancer Genetic Counselors
Morgan Danowski

A – 103 Investigating the Use of Electronic Distress Screening Questionnaires for Initiating Genetic Counseling Referrals
Kevin Capehart

A – 106 Clinical Experience With *MITF* in High Volume Cancer Genetics Program
Jordan Berg

A – 109 A Study of Germline Mutations and Family History in High Risk Pancreatic Cancer Cohort
Frances Oh

A – 112 Outreach Opportunities for the Genetic Counseling Community: Who Is Ordering Predictive Testing of Minors for Adult-Onset Cancer Risk?
Kylin Boehler

A – 115 Genetic Counseling in Pediatric Oncology is Associated With Improved Parental Levels of Knowledge and High Satisfaction
Olivia Juarez

A – 118 Prevalence and Characterization of Germline RET Proto-Oncogene Gene Mutations in a Pan-Cancer Cohort
Margaret Sheehan

A – 121 The Frequency of Cancer-Related Secondary Findings in a Cohort of Individuals Undergoing Clinical Exome Sequencing
Becky Milewski

A – 124 Tumor-Only Genetic Testing as an Indication for Dedicated Germline Testing: An Analysis of Current Practices
Amie Blanco

A – 127 Extending the Reach of Cancer Genetic Counseling to the Underserved: Genetic Counselors' Experience With Three Counseling Modes
Robin Lee

A – 130 Establishing a Partnership Between Cancer Genetic Counselors and a High-Volume Urology Practice to Increase Access to Genetic Counseling and Testing for Patients With High-Grade Prostate Cancer
Erin Borchardt

A – 133 Awareness of Breast Cancer Risk and Screening Guidelines Among Women With Neurofibromatosis Type 1
Kara Anstett

A – 136 Using Prevalence and Mutation Allele Frequency of Germline Variants Identified on the *Ucsf500* Paired Tumor/Germline Test to Guide Clinical Practice When Confronted With a Tumor Only Variant in a Cancer Predisposition Gene
Amie Blanco

CARDIOLOGY

A – 139 CATSHL Syndrome – Consider in the Differential Diagnosis for Marfan Syndrome Without Cardiac or Lens Involvement
KT Curry

A – 142 At Least One-Third of Patients With Amphetamine-Related Cardiomyopathy Have Evidence of Familial Disease
Tia Moscarello

Posters With Authors continued

A – 145 Process and Impact of Disclosing Genetic Research Results to Cardiovascular Biobank Participants
Adelyn Beil

A – 148 Hypertriglyceridemia Is Common in Patients With Familial Hypercholesterolemia
Emily Brown

COUNSELING/PSYCHOSOCIAL ISSUES

A – 151 Call Interrupted – Counseling Distracted Patients
Karina Nall

A – 154 Complexities in Genetic Counseling for Medically Actionable Variants in "Healthy" Individuals: Is It a Secondary Finding, a Primary Diagnosis or Somewhere in Between?
Margaret Harr

A – 157 Association of Coping Strategies and Effectiveness With Psychological Well-Being in Parents of Children With Undiagnosed Genetic Conditions
Courtney Berrios

A – 160 'Unless You've Been There, You Can't Understand': How Genetic Counselors Can Facilitate Peer-to-Peer Support Utilization Among Cancer Caregivers
Angela Wang

A – 163 Discussing History of Mental Illness in a General Genetic Counseling Setting: Patient and Caregiver Interest and Comfort
Alena Faulkner

A – 166 Attitudes of Genetic Counselors Regarding Affective Forecasting and Patient Decision-Making
Stacey Greanias Wallen

A – 169 "For Better or for Worse?" Disclosure of Genetic Information Within Relationships
Porter Pavalko

A – 172 Understanding the Patient Experience of Individuals With Differences in Sex Development
Marlise Combe

A – 175 Patient Coping as an Outcome of Genetic Counseling: Results From a Systematic Literature Review
Barbara Biesecker

Education

A – 178 Experience Is Key: Shadowing Remains an Important Component of Applications for Genetic Counseling Graduate Programs
Anna Essendrup

A – 184 An Assessment of Genetic Counselors' Knowledge and Attitudes Toward Counseling for Gene Therapy
Ashley Wong

A – 187 Creation of a Genetic Counseling Resource to Aid in Delivering Difficult News by Telephone
Caitlyn May

A – 190 Assessing Risk of Breast Cancer Through Outreach to Latinas With Education and Support (ARBOLES): A Genetics Education Program for Bilingual Community Health Workers Increases Knowledge, Genetic Literacy and Self-Efficacy
Charité Ricker

A – 193 Sickle Cell Trait Information on YouTube: A Content Analysis
Kelsie McVeety

A – 196 From One Clinical Rotation to Another: A Pilot Study on the Use of Standard Patient Encounters to Foster Transition in Genetic Counseling Training
Kathleen Swenson

A – 199 Genetic Counseling Student Demographics and How They Have Evolved: An Empirical Investigation
Andrea Stoddard

ETHICAL, LEGAL AND SOCIAL ISSUES

A – 202 Fostering Equitable Care: Pediatric Genetic Counseling Challenges in Cases of Children in Foster Care
Bri Dingmann

A – 205 Impact of Health Literacy and Genetic Knowledge on Patient Empowerment in Individuals With Inherited Retinal Diseases
Eleanor Westfall

A – 208 When Family Members Disagree: Implications of Family-Based Enrollment in Genomic Research for Return of Results and Data Sharing Policies
Carolyn Applegate

GENETIC/GENOMIC TESTING

A – 211 Application of Mosaicism Ratio From Cell-Free DNA (cfDNA) Screening to Multifetal Gestations
Jill Rafalko

A – 214 All Testing Platforms Are Not Created Equal – the Importance of Considering Maternal Cell Contamination in Products of Conception Analysis
Carrie Couyoumjian

A – 217 Hyperferritinemia-Cataract Syndrome Resulting From a Novel Missense Variant in the Non-Coding Region of FTL
Selina Casalino

A – 220 Success of NIPT Based on Maternal Weight and Gestational Age
Sidra Boshes

A – 223 Investigation of TTN Variants in Patients With Skeletal Myopathy and/or Cardiomyopathy Identifies Novel Titinopathies
Kelly Rich

A – 226 Patient Experience and Barriers With Family Communication After Receiving Genomic Information From a Biobank
Caitlin O'Brien

A – 229 Predictive Genetic Testing of Children for Adult-Onset Cancer Risk: Testing Indications and Value of the Laboratory Genetic Counselor
Elaine Weltmer

A – 232 Utility of Genomic Sequencing in Cases of Early-Onset and Familial Dementia
Meagan Cochran

A – 235 Gene Panel Based Prediction of Homologous Recombination Deficiency in Adolescent and Young Adult Breast Cancers
Tomoko Watanabe

A – 238 Impact of a Molecular vs. Clinical Diagnosis on the Illness Representation of Individuals With Ataxia
Arianna Guillard

A – 241 Patient Experience With the Sanford Preemptive Genetic Screening Program: Perspectives From the Pilot Population
Brittany Noble

A – 244 Noonan Syndrome Screening by Non-Invasive Prenatal Testing for Single-Gene Disorders
Pooja Mohan

A – 247 Utilization of Whole Genome Sequencing to Improve Diagnostic Yield in Pediatric Patients With a Suspected Genetic Disorder
Justin Leighton

A – 250 Integrating Genomics Research With Clinical Care in the NICU Setting
Laura Hendon

A – 253 *MYH9* Diagnostic Yield: Reported Phenotypic Specificity Highlights Opportunity for Increased Clinician-Laboratory Partnership
Stefanie N. Dugan

A – 256 SouthSeq: Genome Sequencing in Newborn Nurseries Across the Deep South
Kelly East

A – 259 Curating the Human Genome in an Objective and Scalable Process to Ensure Accurate Clinical Interpretation and Reporting
Jackie Tahiliani

A – 262 Whole Exome Sequencing Results Broken Down by Ethnicity, Diagnostic Yield and VUS Rates in a Diverse Patient Population: The Experience of One Institution
Samantha Augustyn

A – 265 Use of Direct-to-Consumer Genetic Testing by Adult Adoptees
Heewon Lee

PEDIATRICS

A – 268 One Thing Leads to Another: Infant With Three Independent Genetic Alterations; A Diagnostic and Counseling Challenge
Shannon Holtrop

A – 271 A Case Report of Epsilon Gamma Delta Beta Thalassemia: Implications for Genetic Counseling
Kristin Zajo

A – 274 Psychosocial and Ethical Implications of Secondary Findings From Pediatric Tumor Profiling: A Case of One Family
Krista Buch

A – 277 Identification of a Founder Variant in the ITGB4 Gene That Results in Epidermolysis Bullosa With Pyloric Atresia
Emily Bonnell

A – 280 Utilization of Genetic Services in Pediatric Emergency Medicine
Madeline Miller

A – 283 Parental Preferences for Genetic Testing Factors in a Pediatric Neurodevelopmental Disorder Population
Jessica Clark

A – 286 Parents' Reflections of Their Child's Initial Visit to Metabolic Clinic: A Qualitative Study
Laura Marx

A – 289 Diagnostic Yield of a Multi-Gene Panel for Neurodevelopmental Disorders at Children's Hospital Colorado
Calan Szmyd

A – 292 Genetic Testing Yield in a Cohort of Pediatric Patients With Immunohematologic Disorders
Elizabeth Varga

A – 295 Social Media and the Diagnostic Odyssey: The Experience of Parents of Participants in the Stanford Undiagnosed Disease Network (UDN)
Natalie Deuitch

A – 298 Development and Outcomes of a Multidisciplinary Pediatric Cancer Predisposition Program in Its First Two Years
Elena Kessler

A – 301 Utilization of Genetic Testing in the Diagnosis of Neurofibromatosis Type 1
Erin Moore

PRE- AND PERINATAL

A – 304 Implications of Chimerism for cfDNA/NIPT Prenatal Screening
Michelle Hackbardt

A – 307 Why Current ACOG Guidelines About Parallel Aneuploidy Screening May Prohibit Some Patients From Useful Information
Kendall Snyder

A – 310 Importance of Update Carrier Screening in the Setting of a Family History: Case Report in Family With Atypical Autosomal Recessive Polycystic Kidney Disease
Elizabeth Wignall

A – 313 Unusual Phenotype in an Infant With a 22q11.2 Deletion Ascertained Through cfDNA Screening
Sarah Belsky

Posters With Authors continued

A – 316 Whole Exome Sequencing for the Purpose of Carrier Screening in a Consanguineous Couple
Deirdre Sumski

A – 319 Fetal MRI and SNP-Array Lead to Identification of Intronic *POMT2* Variants in a Fetus With Severe Ventriculomegaly by Prenatal Ultrasound
Katelynn G. Sagaser

A – 322 Detection of X;18 Unbalanced Translocation After Multiple Aneuploidy on cfDNA Screen
Nevena Krstic

A – 325 Reproductive Endocrinologists' Utilization of Genetic Counselors and Their Services: Is There an Unmet Need?
Meaghan Dwan

A – 328 Uptake of Chromosomal Microarray in Women Undergoing Amniocentesis
Clare Gibbons

A – 331 Understanding of Clinical Variability, Perceived Disease Burden and Reproductive Decision-Making of Adults With Tuberous Sclerosis Complex
Diane Biederman

A – 334 WGS-Based NIPS Without a Fetal Fraction Threshold: What are the Clinical Outcomes of No-Calls?
Susan Hancock

A – 337 A First Look at the Accessibility of Prenatal Genetic Screening Services Among Incarcerated Women in the United States: Perspectives of Genetic Counselors
Natalie Waligorski

A – 340 Carrier Screening in 2019: Expanded Panels Are on the Rise
Dana Neitzel

A – 343 The Incidence of RASopathies in a Prenatal Polyhydramnios Cohort
Rachel Mangels

A – 346 Time to Screen for the Common: Reproductive Genetic Carrier Screening for Fragile X Syndrome With AGG Interruption Analysis in a Large, Diverse Patient Population
Casey Duld

A – 349 Impact of Infant Sex on Maternal Mood in a North American Population: Implications for Prenatal Counseling
Caitlin Slomp

A – 352 Impact of Co-Morbidity and Demographics on Effective Diagnosis and Treatment of 22q11.2 Deletion Syndrome in the Setting of Inpatient Consultations
Donna McDonald-McGinn

PROFESSIONAL ISSUES

A – 355 "I am a Genetic Counselor": A Qualitative Exploration of Field Leaders' Perceptions of the Title "Genetic Counselor"
Chandler Means

A – 358 Peer Group Supervision Practices Among Canadian Genetic Counselors
Courtney Ells

A – 361 Utilizing Genetic Counseling Assistants to Ease the Burden of Multi-State Genetic Counselor Licensure
Matt Tschirgi

A – 364 Factors Influencing Cultural Competency in Genetic Counselors
Nivedita Rajakumar

A – 367 How Genetic Counselor Personal Strengths Influence Career Choices and Job Satisfaction
Brita Christenson

A – 370 Perspectives on the Role of Genetic Counselors Within the Pharmaceutical Industry
Catherine Wicklund

A – 373 Streamlining Exposure to Genetic Counseling as a Profession Through Hospital-Based Genetic Counseling Career Day Event
Lori Dobson

PSYCHIATRY/NEUROLOGY

A – 376 Patient With Spastic Paraplegia and Congenital Cataracts Has Heterozygous *ATAD3A* Variant
Allison Schreiber

A – 379 Developing a Genetics Educational Intervention for Psychiatry Residents
Catherine Skefos

A – 382 Challenging the Huntington Disease Paradigm: Evaluation of Psychosocial Issues in Persons at-Risk for Genetic Prion Disease
Madeline Williamson

A – 385 Understanding the Diagnostic Experience of Individuals With Friedreich's Ataxia
Sarah Donoghue

Public Health

A – 388 SMA Prevention Readiness: Population-Based Carrier Testing and Presymptomatic Diagnosis in Old Order Amish, Mennonite and Hutterite (Plain) Populations
Karlla Brigatti

Research Issues

A – 391 IRB Practices in Reviewing Genetic Studies Involving Direct Contact of Relatives
Katherine Donohue

A – 394 Community Stakeholder Views on Data Sharing and the Consent Process
Heather Nick

UTILIZATION MANAGEMENT

A – 400 Impacts of a Unique Genetic Utilization Management Initiative at Sanford Health
Kaylee Dollerschell

A – 403 Genetic Counselor Involvement in Prior Authorization Case Review Improves Authorization Outcomes
Julie Kaylor

GROUP B POSTERS

ACCESS AND SERVICE DELIVERY

B – 2 Trans-Inclusive Genetic Counselling Services: Recommendations From the Transgender Community on Pedigree Symbols and Clinical Practice
Heather Barnes

B – 5 Use of an EMR-Based Tool for Identification and Referral of Patients Eligible for Cancer Genetic Counseling at an Academic Cancer Center
Melinda E Simonson

B – 8 Patient and Counselor Preferences Regarding Remote Genetic Counseling Service Delivery Models
Rebecca Baud

B – 11 Analysis of Key Factors in the Implementation of New Service Delivery Models in Genetic Counseling Practice
Ambreen Khan

B – 14 Exploring Perceptions of What Genetic Counseling Is Amongst Families Affected by Genetic Conditions, Who Have Not yet Had Genetic Counseling Themselves
Stephanie Cordeiro

B – 17 A Qualitative Evaluation of Patient Experiences With the UAB Undiagnosed Diseases Program
Dorothea Siebold

B – 20 Genetic Counselor Experiences Delivering Difficult News by Telephone
Caitlyn May

B – 23 Non-Genetics Healthcare Provider Training to Deliver Whole-Genome Sequencing Results
Veronica Greve

Posters With Authors continued

B – 26 Flipping the Model: Developing a Cutting-Edge Genetics Pipeline to Expand Access and Increase Capture of Patients at Risk for Hereditary Cancer
Dena Goldberg

B – 29 Facing the Facts: Alternative Genetic Health Service Delivery Settings May Not Be Preferred by Patients
Mackenziew Mosera

B – 32 Medical Care Needs, Gaps and Barriers for Young Children With Cornelia de Lange Syndrome
Shaydah Kheradmand

B – 35 Communication of Non-Disclosure Preimplantation Genetic Testing for Huntington's Disease
Elizabeth Schweitzer

ADULT

B – 41 Adult Patients With Undiagnosed Conditions and Their Responses to Clinically Uncertain Results From Exome Sequencing
Ahna Neustadt

B – 44 Searching for Answers: Assessment of Information-Seeking by Young People at Risk for Huntington Disease
Colby L. Chase

B – 47 Whole Exome Sequencing in the Adult Population: A Single Center Experience
Radhika Dhamija

CANCER

B – 50 Deep Intronic *PMS2* Variant Explains Early Onset Colon and Endometrial Cancers in Siblings
Julia Cooper

B – 53 De Novo SDHB Gene Mutation in a Family With a Sporadic Extra-Adrenal Paraganglioma
Caitlin Mauer

B – 56 Differentiated Thyroid Cancer in Teenagers With FAP: A Case for Earlier Screening?
Kristin Zelley

B – 59 The Introduction of a Novel Cell-Free Tumor DNA Test for Molecular Residual Disease Detection, Recurrence Monitoring and Therapeutic Response Monitoring in Cancer Care
Jody Wallace

B – 62 Clinical Phenotype of the MITF Gene Variant E318K in a Hereditary Cancer Clinic
Kelly Warsinske

B – 65 A Case Study: Ampullary Adenocarcinoma and an Inherited *BRCA1* Mutation
Forum Shah

B – 68 Case Review of Individual With *HOXB13* G84E Variant
Ashley Woodson

B – 71 Patient-Provider Dialogue Matters: Factors That Impact Medical Management Decisions Among Women With Pathogenic Variants in Moderate-Penetrance Genes Associated With Hereditary Breast Cancer
Melissa Henderson

B – 74 Outcomes of Panel Testing in the Context of a Known Familial Variant
Meghan Ferguson

B – 77 Uptake of Polygenic Breast Cancer Risk Information Among High-Risk Women
Tatiane Yanes

B – 80 *BRCA1* or *BRCA2* Mutations Identified Through Tumor Genomic Profiling: Assessing Genetic Counseling Outcomes
Jamie Warner

B – 83 The Co-Occurrence of *MUTYH* European Founder Variants and Pathogenic Variants in Separate Genes, One Laboratory's Experiences and Implications for Genetic Counseling on Direct-to-Consumer Genetic Test Results
Anna Victorine

B – 86 The Perspectives of Emerging Adults With Hereditary Diffuse Gastric Cancer
Carrie Anderson

B – 89 Multigene Panel Testing in *BRCA1/2* Mutation-Negative Breast Cancer Patients: Findings From a Community Genetics Clinic
Meridith Kidd

B – 92 Genetic Counselors' Approaches to Testing Cancer Genes in the Absence of Published Medical Management Guidelines
Ismam Islam

B – 95 Characterization of "Non-Core" Cancers in Individuals With Positive *BRCA1* or *BRCA2* Results Identified Through a Large-Scale Population Genomic Screening Program
Marci Schwartz

B – 98 Genetic Evaluation of Patients and Families With Concern for Hereditary Tumor Syndromes Within the OSU James Multidisciplinary Neuroendocrine/Thyroid Cancer Clinic
Jennifer Gauerke

B – 104 Survey of Attitudes Toward Preimplantation Genetic Diagnosis and Quality of Life for Individuals With Hereditary Diffuse Gastric Cancer Syndrome
Kimberly A. Amoroso

B – 107 Rates of Tumor Identification Amidst Screening of Patients With SDHx Pathogenic Variants
Samantha Greenberg

B – 110 Analysis of Individuals With Multiple Heterozygous Pathogenic or Likely Pathogenic Variants in Cancer Predisposition Genes
Kelsey Moriarty

B – 113 Where Have All the Patients Gone? Poor Genetic Testing Rates in the Male Breast Cancer and Young Female Breast Cancer Populations in Ontario, Canada
Ji-Sun Kim

B – 116 Decision-Making and Experience of Tamoxifen as Chemoprevention by Young Women With a *BRCA1/2* Mutation
Laura Forrest

B – 119 Reviewing Somatic Tumor Test Results: An Emerging Role for Genetic Counselors
Kristen Hanson

B – 122 Clinical Presentation and Germline Status of Individuals Referred for Multigene Hereditary Myelodysplastic Syndrome and Leukemia Testing
Amanda Bartenbaker Thompson

B – 125 Expanded Germline Panels Across Cancer-Types: Diagnostic Yield and Clinical Actionability in a 100,000 Patient Dataset
Barbara Hamlington

B – 128 EGFR-Associated Hereditary Lung Cancer Syndrome: Analysis of *EGFR* T790M Mutation Carriers Among Patients Undergoing Hereditary Genetic Testing
Darcy Berry

B – 134 Family Sharing of Genetic Test Results and Testing Rates Among Women With Mutations in BRCA Genes Compared to Other Inherited Breast Cancer Genes
Deborah Cragun

CARDIOLOGY

B – 137 Use of Cosegregation Data and Laboratory-Clinic Communication to Enhance Variant Classification: *TNNT2* p.Arg139His Segregates With Dilated Cardiomyopathy Phenotypes in a Four-Generation Family
Katrina Kotzer

B – 140 Three Patients With 7q36.1 Deletions at Risk for Long QT Syndrome Due to Hemizygosity of *KCNH2*
Julie Rutberg

Posters With Authors continued

B – 143 Genetic Testing in a Heterogeneous Cohort of HCM Patients: Implications for Genetic Counseling
Shea Rauch

B – 146 Acceptability and Familiarity of Genetic Treatment Technologies: A Survey of Individuals With Sudden Arrhythmic Death Syndrome Conditions
Katherine Myers

B – 149 Penetrance of Dilated Cardiomyopathy in at-Risk Children and Young Adults
Amy Shikany

COUNSELING/PSYCHOSOCIAL ISSUES

B – 152 Going Against the Grain: The Decision to Test a Minor for a Familial *BRCA1* Mutation in an Extenuating Circumstance
Niri Carroll

B – 155 Being the Bearer of Unexpected News: A Genetic Counselor's Reflections on Returning a Non-Actionable Finding From Healthy Exome Analysis
Emily Higgs

B – 158 Analyzing Non-Directive vs. Directive Counseling Trends in Genetic Counseling
Alexa Rosenblum

B – 161 Assessing the Impact of Predictive Testing Protocols on Provider Burden for Huntington's Disease
Paige Ernste

B – 164 Parental Support Needs of Children Diagnosed With Alopecia Areata
Dayna Cohen

B – 167 I'm Sorry: A Qualitative Exploration of Genetic Counselor Use of Self-Involving Responses in a Clinical Setting
Iman Kashmola-Perez

B – 170 Parental Perceptions of Pediatric Clinical Exome Sequencing in a Latino Population
Daniel Luksic

B – 173 "A Calming Reassurance": The Role of Patients' Religion/Spirituality in Prenatal Genetic Counseling Appointments at Religiously-Affiliated and Non-Religiously Affiliated Institutions
Ryan Kuehl

B – 176 Deaf Individuals' Attitudes and Perceptions of Genetic Counseling and Genetic Testing
Julie Howell

EDUCATION

B – 179 Further Validation of the Genetic Counseling Self-Efficacy Scale (GCSES): Its Relationship With Personality Characteristics
Haley Keller

B – 182 Understanding Disparities Due to Implicit Racial Bias in Genetic Counseling Communication: An Observational Analysis
Chenery Lowe

B – 185 A Genomic Variant Interpretation Video Series: Exploring a Social-Media Strategy to Provide Focused Educational Resources
Karen E. Wain

B – 188 Disability Service Learning: A Study on the Potential Impact of an Educational Intervention on the Attitudes and Biases of Genetic Counseling Students Toward Disability
Michelle Bina

B – 191 Assessing the Disease Specific Knowledge Gaps in Patients, Caregivers and Families Living With Lysosomal Storage Diseases
Georgia Loucopoulos

B – 194 Changes in Self-Perceived Breast Cancer Risk and Self-Perceived Impact of Breast Cancer Risk Factors After a Breast Cancer Education Session and Individualized Risk Assessment
Alexandra Magnante

B – 197 Gene Therapy on the Horizon: Perception and Understanding of Gene Therapy Research by the Bleeding Disorders Community
Meg Bradbury

B – 200 International Genetic Counseling: What Do Genetic Counselors Do?
Laura Hayward

ETHICAL, LEGAL AND SOCIAL ISSUES

B – 203 Therapy or Travesty: Genetic Counselor Experiences With and Attitudes Toward Growth Attenuation Therapy
Katherine Anderson

B – 206 New Insights to a CRISPR World: A Cross-Sectional Analysis of Individual's and Advocacy Group Views Into Genomic Editing
Dylan Platt

B – 209 Amish Perspectives of the Genetic Counseling Process
Brianna Teapole

GENETIC/GENOMIC TESTING

B – 212 Molecular Diagnosis of an Epileptic Encephalopathy Patient Aided by RNA Analysis
Taryn Athey

B – 215 Case Series: Identifying and Classifying Haplotype Results
Michael Setzer

B – 218 The Value of CNV Analysis for Inherited Retinal Diseases
Meghan DeBenedictis

B – 221 Participant Motivation, Satisfaction and Outcomes of Population-Based Genomic Research
Ashley Cannon

B – 224 Identifying Ethnicity-Associated Differences in Genetic Testing Results for Patients With Suspected Inherited Retinal Degeneration
Samuel Miller

B – 227 Exploring the Impact of Negative Genetic Test Results on Personal Utility and Perceived Value: Does Having a Personal or Family History of Condition Make a Difference?
Sinead Horgan

B – 230 Non-Genetics Pediatric Providers' Understanding and Interpretation of a VUS Result
Chelsea Menke

B – 233 Investigating Variants of Uncertain Significance: Reclassification Triggers and Drivers in Breast Cancer Predisposition Genes
Kirsten Kelly

B – 236 Seeking Authorization for Elective Genomic Tests: How Does Cost Play a Role?
Emily Qian

B – 239 Eight Years of Testing and Over One Million Patients Screened: A Statistical Review of the Latest MaterniT®21 PLUS Assay Enhancements
Kimberly Fanelli

B – 242 False Reassurance in Returning Uninformative Genomic Screening Results to Healthy Individuals
Megan Bell

B – 245 Triploidy: It's Not Just a First Trimester Diagnosis
Melissa K. Maisenbacher

B – 248 Experience From the First 150 Cases of Low Pass Genome Sequencing (5X) Demonstrates Clinical Utility and Provides Potential Alternative to Traditional Microarray in the Clinical Settings
Alka Chaubey

B – 251 Relationship Between Phenotypic Complexity and Diagnostic Results From a Large Autism/Intellectual Disability Cohort
Jane Schuette

B – 254 Understanding and Impact of Negative Direct-to-Consumer BRCA Test Results
Kristen Pauley

Posters With Authors continued

B – 257 Utility and Diagnostic Rates of Exome Sequencing for Ataxia-Related Disorders
Mary Beth Stosser

B – 260 Utilization of a SNP Array for Homozygosity: Prenatal Delineation of Recessive Diseases
Stuart Schwartz

B – 263 Expanding Patient Data Sharing: GenomeConnect's Pilot to Engage External Registries in Data Sharing
Juliann Savatt

B – 266 Interpreting VUSs: GSD1a
Kristy Nguyen

PEDIATRICS

B – 269 Novel De Novo Loss of Function Mutation in *PTDSS1* in a Female With Typical Growth, Autism Spectrum Disorder and Developmental Delay
Sara Gracie

B – 272 The Phenotypic Spectrum of Wiedemann-Steiner Syndrome in Minority Populations Based on Findings From P3EGS
Tiffany Yip

B – 275 Expanding the Molecular Basis and Phenotype of Grange Syndrome
Diane Clements

B – 278 Parental Beliefs and Attitudes Toward False Positive Newborn Screening Results for Krabbe Disease: A Qualitative Study
Laiken Peterson

B – 284 Assessing Parental Perceptions Toward Disclosure of Increased Risk of Psychiatric Illness to Their Child With 22q11.2 Deletion Syndrome
Jennifer Kennedy

B – 287 Adolescents' and Parents' Attitudes About Genetic Testing for Carrier Status and Adult-Onset Conditions
Bryana Rivers

B – 290 Genetic Counseling and Testing in a Pediatric Population With Autism Spectrum Disorder
Abigail Schaber

B – 293 Genotypic and Sociodemographic Associations With Increased Age of Diagnosis in Duchenne Muscular Dystrophy Patients
Kevin Counterman

B – 299 Pediatric Specialty Genetic Counselors: Clinical Activities and Position Structure
Katie Rembisz

B – 302 Exploring the Impact of Insurance on Pediatric Genetic Counseling Testing Practices
Kristen Young

PRE- AND PERINATAL

B – 305 A Case of Disputed Variant Classification: In-Frame Duplications of DMD Exons 17-30 Cannot be Categorized as Pathogenic
Jillian Tokarczyk

B – 308 Copy Number Variant Encompassing *SOX5* in Two Generations With a Normal Phenotype
Emily Chien

B – 311 Severe Prenatal Presentation of Familial Hypophosphatasia With Novel Mutation in ALPL Gene
Catherine Burson

B – 314 Recurrent Fetal Cystic Hygroma With Normal Pediatric Outcomes
Erin Swartz

B – 317 X-Linked Myotubular Myopathy Identified by Exome Sequencing in a Family With Two Neonatal Male Deaths With Non-Specific Autopsy Findings: A Case Report
Amanda Buchanan

B – 320 Mosaic Trisomy 21 Results by Cell Free DNA Screening in a Fetus With Low-Level Mosaicism Leads to Unique Genetic Counseling Challenges
Katelynn G. Sagaser

B – 323 Yield of NIPT After the Prenatal Identification of a Soft Maker: Experiences at UCSD Maternal-Fetal Care and Genetics
Amy Stenhouse

B – 326 Assessing Clinical Education Tools on Expanded Carrier Screening
Chloe Dugger

B – 329 Classifying the Severity of Conditions on an Expanded Carrier Screening Panel
Aishwarya Arjunan

B – 335 Current Practices and Perspectives of Genetic Counselors and Reproductive Endocrinologists Regarding Transfer of Mosaic Embryos
Angelica Starnes

B – 338 Cell-Free DNA Analysis for Prenatal Aneuploidy Assessment: An Analysis of International Professional Society Statements
Renee Jones

B – 341 The Meaning of Preparation: Parental Experiences Following the Prenatal Diagnosis of Aneuploidy
Molly Ford

B – 347 Underlying Causes of Fetal Sex Discordance Between NIPT and Ultrasound: A Case Series Review
Tess Levy

B – 350 Quality and Quantity: Outcome of Whole Gene Sequencing in Expanded Carrier Screening of Routine Preconception and Prenatal Female Patients
Heather Fecteau

PROFESSIONAL ISSUES

B – 353 Quagmire of Incidental Uncertain Maternal Result After POC Testing Without Informed Consent
Michelle Bosworth

B – 356 The Canadian Genetic Counselling Workforce: Perspectives From Employers and Recent Graduates
Taylor Costa

B – 359 Community Member Perspectives on Proposed Pedigree Nomenclature for Transgender and Non-Binary Patients
Hallie Lyninger

B – 362 Multiple Mini Interviews in Genetic Counseling Admissions: The Applicant Perspective
Holly Zimmerman

B – 365 Exploration of Formal Training for Genetic Counseling Assistants
Kelsey Hogan

B – 368 Factors Contributing to Job Satisfaction and Longevity in Millennial Genetic Counselors
Kimberly Kinnear

B – 371 Assessing Financial Recognition of Genetic Counseling Training Program Educators
Karin M. Dent

B – 374 Exploring the Ethical and Professional Challenges Encountered by Clinical Genetic Counselors Who Are Engaged in Research
Amanda Schaefer

PSYCHIATRY/NEUROLOGY

B – 377 Genetic Findings From 50 Patients in a Dementia Clinic
Bradley Rolf

B – 380 Perceived Utility of Genetic Counseling for Individuals With Eating Disorders
Juliann Streukens

B – 383 Identifying Interest in and Barriers to Psychiatric Genetic Counseling
Samantha Montgomery

Posters With Authors continued

PUBLIC HELATH

B – 386 Developing a Standardized Approach to Creating Patient Resources: Fetal Surgery for Myelomeningocele
Andrea Filthaut

B – 389 High School Carrier Screening: Feelings and Attitudes of Students in Cree Communities
Jessica Le Clerc-blain

RESEARCH ISSUES

B – 392 Do You Check All the Boxes? Current Reporting Practices in Genetic Counseling Research and How We Can Move Toward Evidence-Based Practice
Jessica Davidson

B – 395 The Evolution of a Natural History Database Framework Across Three Ultra-Rare Genetic Disorders
Puneet Rai

B – 398 Parental Perspectives on Research Genetic Testing: Distinction Among Sociodemographic Groups
Heather Hain

UTILIZATION MANAGEMENT

B – 401 Time to Electronic Reporting and Patient Notification of Germline Genetic Test Results: One Center's Experience
Hannah Chung

B – 404 Implementation of Whole Exome Sequencing Order Review at a Pediatric Institution
Erin McGinnis

GROUP C POSTERS

ACCESS AND SERVICE DELIVERY

C – 3 Genetic Counselor Perspectives and Opinions of Population Genetic Testing
Nicole Deckard

C – 6 Lost in Translation: Assessing Interpretation in Genetic Counseling Settings
Cassandra Gurganus

C – 9 Does Supply Equal Demand? The Workforce of Direct Patient Care Genetic Counselors in Wisconsin
Carlee Dawson

C – 12 Reducing Wait-Time for Genetic Services: Adapting an Older Model for the Needs of Today
Alex Whitaker

C – 15 Geographical Barriers to Genetic Counseling for Hereditary Cancer and Cardiovascular Disease
Stephanie E. Wallace

C – 18 Referral Trends to a Cancer Genetics Clinic Over Time
Sarah Austin

C – 21 Oncologist-Mediated Genetic Testing: The Holy Grail of Cancer Genetics?
Jeanna McCuaig

C – 24 *BRCA1/2* Mutation Carriers Support Direct Consumer Access to *BRCA1/2* Testing but Emphasize Role of Genetic Counseling
Caitlyn Mitchell

C – 27 Training Program Development and Clinical Continual Quality Improvement: A Telegenetics Success Story
Katharine Bisordi

C – 30 A Quantitative Content Analysis of Post-Visit Written Summary Communications in Genetic Counseling
Marissa Younan

C – 33 Telegenetic Education in Genetic Counseling Graduate Programs
Natasha Robin Berman

C – 36 Family Planning via Assisted Reproductive Technologies: Assessing Patient Advocacy Group Perceptions of, Access to and Utilization of Educational Resources on Reproductive Technologies
Meghan Dean

C – 39 The Role of Social Media in the Cystic Fibrosis Community and How It Relates to Healthcare Provider Relationships
Ashlee Vargason

ADULT

C – 42 Lived Experiences of Individuals With Cystic Fibrosis on CFTR-Modulators
Annelise Page

C – 45 Counseling the Active-Duty Military Population: Knowledge, Attitudes and Experience of Clinical Genetics Providers
Jennifer Jacober

CANCER

C – 48 Expanding the Phenotype: Case Report Detailing the Youngest Diagnosis of Renal Cancer Observed in an Individual With a *BAP1* Pathogenic Variant
Carolyn Garby Haskins

C – 51 Characterization of the Fumarate Hydratase (FH) c. 1431_1433dupAAA Variant in Hereditary Leiomyomatosis and Renal Cell Cancer: A Case Series
Nanor Haladjian

C – 54 Li-Fraumeni Syndrome – The Importance of Cascade Testing Even in Families That Meet Clinical Criteria
Rebekah Moore

C – 57 Glioblastoma and Multiple Café-Au-Lait Macules Diagnosed in the Context of a Family History of Cancer: Simultaneous *MSH2* and NF1 Mutations or Constitutional Mismatch Repair Deficiency Syndrome?
Maureen Mork

C – 60 Promoter Region RB1 Gene Pathogenic Variant: Saving Vision in Two Brothers
Debra Collins

C – 63 Double Check *CHEK2*: A Cautionary Tale of Variant Allele Frequency
Jennifer Brzosowicz

C – 66 Genetic Counseling Challenges Highlighted by a Novel Presentation of a Familial ATM Mutation and Ataxia-Telangiectasia
Morgan Turner

C – 69 Molecular Tumor Profiling: Expect the Unexpected
Rachelle Chambers

C – 72 Predictors of a Positive Genetic Test Result in a Cohort of Renal Cell Carcinoma Patients
Andrea Kokorovic

C – 75 An Investigation of Approaches to Genetic Counseling Regarding Moderate-Penetrance Breast Cancer Susceptibility Genes
Elizabeth Del Buono

C – 78 Comparison of Somatic and Germline Variant Interpretation in Hereditary Cancer Genes
Emily Moody

C – 81 Exploring Patient Perceptions and Misconceptions: Beliefs Regarding Hereditary Cancer
Margaret Flach

C – 84 Genetic Evaluation Following MUTYH Analysis for European Founder Variants Is Critical to Identify at-Risk Patients: A Laboratory's Experience
Anna Victorine

C – 90 Correlation Studies in Families With Familial Non-Medullary Thyroid Cancer
Marie-Louise Henry

C – 93 Pediatric Precision Oncology: Parent and Adolescent Experiences
Larissa Waldman

C – 96 Putative Germline *BRCA1/2* mutations in Patients (pts) With Advanced Gastrointestinal (GI) Cancers Using Circulating Cell-Free Tumor DNA (cfDNA) Analysis in the GOZILA study
Yumie Hiraoka

Posters With Authors continued

C – 99 Evaluating the Psychological Needs of Young Adults With Lynch Syndrome
Kathryn Dunn

C – 102 Somatic MMR Testing: The Gap Between Preferred and Current Practices
Danielle Williams

C – 105 Clinician-Initiated Retrospective Review of Variants of Uncertain Significance
Natalie Waligorski

C – 108 Inclusion of Genetics in a Multidisciplinary Endocrine Tumor Board: An Emerging Role for Genetic Counselors
Gwen Reiser

C – 111 Genetic Counselor Roles in Somatic Tumor Testing in a System-Wide Oncology Practice
Karen Huelsman

C – 114 Broadening the Germline Genetics of Inherited Renal Cancer
Tiffiney Hartman

C – 117 Determining the Proportion of Early-Onset Colorectal Cancer That is Potentially Preventable
Keith Pelstring

C – 120 Breast Cancer Screening Compliance in Women at Increased Risk for Breast Cancer
Samantha McAllister

C – 123 Attitudes Toward Dating BRCA-Positive Previvors
Kalisi Logan

C – 126 Genetic Testing for Therapeutic Implications in Patients With Metastatic Breast Cancer and Pancreatic Adenocarcinoma: A Comparison of a GC-Led Versus MD-Led Service Delivery Model
Breanna Roscow

C – 129 A Pilot Study to Evaluate Interventions Aimed to Improve Response to a Risk Notification Letter Following Mammography
Katharine Imrie

C – 132 Better Than the Guidelines? Pre- and Post-Genetic Testing Data Suggests Change in Management Trends
Zoe Powis

C – 135 Factors Influencing Compliance With National Comprehensive Cancer Network (NCCN) Guidelines Following a Positive Test Result for a Pathogenic Gene Mutation
Cortlandt Martin

CARDIOLOGY

C – 138 Dual Diagnoses of Inherited Cardiovascular Disease: Ascertainment, Clinical Management and Care of Patients and Family Members
Chloe Reuter

C – 141 Cantu Syndrome: A Longitudinal Review of Vascular Findings in Two Patients
Ashley Parrott

C – 144 Genetic Testing Interpretation: An Assessment of Cardiology Fellows' Knowledge
Cody Carlson

C – 147 Phenotypes Associated With Expected Pathogenic Cardiac Variants Identified Through Genomic Screening of Unselected Adult Biorepository Participants
Melissa Kelly

COUNSELING/PSYCHOSOCIAL ISSUES

C – 150 Now What Do We Do? A Case of Misdiagnosis of Myotonic Dystrophy Type 1
Lydia Hellwig

C – 153 AJ Ancestry Evaluation: A Tool for Cancer Genetic Counseling
Devin Cox

C – 156 Serving the Psychosocial Needs of Patients Following Telehealth Genetic Counseling Sessions Addressing Increased Reproductive Risk
Melanie Hardy

C – 159 Assessing Cutaneous Neurofibroma Related Intimacy Concerns in the Adult Neurofibromatosis Type I Population
Jacynda Woodman-Ross

C – 162 Genetic Counseling for Transgender Patients: Perceptions, Terminology and Disclosure of Transgender Status
Hallie Lyninger

C – 168 Evaluation of the Impact of Genetic Counseling on Psychological Well-Being and Perceived Risks in Cases on Sudden Unexplained Death in Childhood
Susan Reilly

C – 171 A Needs Driven Approach to Developing Disease Specific Patient Educational Materials for Pompe Disease
Jamie Love-Nichols

C – 174 Family Communication and Coping Strategies in Families With Huntington's Disease
Amanda Schatzle

C – 177 Knowledge and Attitudes about Genetic Counseling in Patients at a Major Hospital in Addis Ababa, Ethiopia
Michelle F. Jacobs

EDUCATION

C – 180 Webinar Outreach: An Effective Tool for Recruiting Potential Genetic Counseling Program Applicants
Sarah Huguenard

C – 183 A Fly on the Wall? A Study of the Experiences and Perceptions of the NSGC Community With Genetic Counseling Career Shadowing
Christine Koellner

C – 186 Assessing the Frequency With Which Practicing Physician Assistants Use Standardized Genetic and Genomic Competencies in Practice
Megan Parker

C – 189 Understanding Stigma Among Genetic Counselors and Students Towards Mental Illness Using the Opening Minds Stigma Scale for Health Care Providers (OMS-HC)
Anuja Anil Chitre

C – 192 Sources of Genetics Misconceptions in a Population Sample
Beth Lincoln Boyea

C – 195 International Genetics Provider Perspectives on Hosting Genetic Counseling Students for Summer Rotations
Smita Rao

ETHICAL, LEGAL AND SOCIAL ISSUES

C – 201 Somatic Testing for Optic Glioma: Incidental Findings and Implications for Minor Patient
Lauren Palange

C – 204 Secondary Data Usage in Direct-to-Consumer Genetic Testing: To What Extent are Customers Aware and Concerned?
Janessa Mladucky

C – 207 Deconstructing Culture Bumps: Interpreters' Views in the Genetic Counseling Setting
Marc Rosenbaum

GENETIC/GENOMIC TESTING

C – 210 Monosomy Seven: Uncovering the Enigma by Molecular Cytogenetics and Molecular Genetic Pathogenesis
Suneeta Madan-Khetarpal

C – 213 Diagnosing the Undiagnosed: Expanding the Genetic Etiology and Phenotypic Spectrum of Rare Pediatric Conditions
Theresa Mihalic Mosher

C – 216 Genotype vs Phenotype: Pathogenic Variant in *TSC1* in a Three-Generation Family Without Clinical Evidence of Tuberous Sclerosis Complex
Haley Streff

C – 219 Detection of Unbalanced and Balanced Chromosomal Rearrangements via a Genome Sequencing Test
Erin Thorpe

C – 222 Utility of Gene Panel Testing in Children With Seizure Onset After Two Years of Age: Results From a European and Middle Eastern Epilepsy Genetic Testing Program
Tero-Pekka Alastalo

C – 225 Understanding the Practice of Genetic Result Communication to Extended Family Members by Participants in the Undiagnosed Diseases Network (UDN)
Courtney Studwell

C – 228 Which Test is Best? Evaluating the Diagnostic Yield of Sequencing-based Testing Approaches for Patients With Neurodevelopmental Disorders at a Pediatric Institution: A Retrospective Chart Review
Nicholas Little

C – 231 Genotype-First Analysis of Whole Exome Sequencing: Diagnostic Yield of Whole Exome Sequencing Trio Testing Including CNV Analysis
Jennifer Schleit

C – 237 High Mapping Quality and Coverage in the Homologous PKD1 Gene Results in a High Diagnostic Yield
Shea Rauch

C – 240 A Review of Non-Traditional Indications for Non-Disclosure Preimplantation Genetic Testing (PGT)
Agnes Machaj

C – 243 Outcome of High Risk for Double Aneuploidy Results From SNP-Based Non-Invasive Prenatal Testing (NIPT) and Incidence in Products of Conception (POC) Testing
Trudy McKanna

C – 246 Gene Curation in a Clinical Whole Genome Sequencing Context and Its Effect on Variant Reporting
Amanda Buchanan

C – 249 Copy Number Variants (CNVs) in Inherited Retinal Disorders: Results From Genetic Testing of Over 2,700 Patients
Lauren Moissiy

C – 252 Lack of Genotype-Phenotype Correlation in Individuals With DMPK CTG Repeat Expansions
Seema M. Jamal

C – 255 Next Generation Sequencing With Copy Number Analysis for Primary Immunodeficiencies: Findings From a Cohort of Over 3,900 Unrelated Patients
Jessica Connor

C – 258 Theoretical Diagnostic Yield of a Rapid, Targeted Genetic Panel for Critically Ill Pediatric Patients and Newborns
Danuta Stachiw-Hietpas

C – 261 Early Experiences With Whole Genome Sequencing in a State-Funded Research Initiative
Whitley Kelley

C – 264 Trio-Based Genetic Testing for Leukodystrophies: High Positive Diagnostic Rate in Both Adults and Children
Courtney Downtain Pickersgill

PEDIATRICS

C – 267 De Novo *TFE3* Variants in Two Females With Severe Neurocognitive Delays, Pigmentary Mosaicism Following the Lines of Blaschko and Coarse Facial Features
Jullianne Diaz

Posters With Authors continued

C – 270 Further Evidence of *GABRA4* and *TOP3B* as Autism Susceptibility Genes
Jacquelyn Riley

C – 273 Cautions of a Case Report: An Update on a Previously Described Case of Digenic Inheritance
Leighann Sremba

C – 276 Homozygous *GNG3* Pathogenic Variants in Three Siblings With Epileptic Encephalopathy, Infantile Spasms, Global Developmental Delays, Hypotonia and Cortical Visual Impairment
Katie Angione

C – 279 Assessment of the Impact of a Positive Family History and Genetic Counseling on Parental Knowledge of Neurofibromatosis Type 1 (NF1)
Emily Solem

C – 282 Metabolic Control, Quality of Life and Body Image in Patients With Glycogen Storage Disease Type 1a
Alexa Bream

C – 285 Exploring the Intersection of Pediatric Genetic Counseling and the U.S. Foster Care System
Talia Flamos

C – 288 Attitudes of Healthcare Professionals Towards the Utilization of Genetics Professionals Following the Diagnosis of Autism Spectrum Disorder
Sydney Alexandra Lau

C – 291 Behind the Seizure(TM): Enabling Early Molecular Diagnosis for Children With Epilepsy
Hannah White

C – 294 What Should I Order? Genetic Testing Ordering Trends for Autism Spectrum Disorder
Catherine Schultz

C – 297 Genetics Referral Practices and Yield of Genetic Testing in a Pediatric Cancer Cohort
Kristin Zajo

C – 300 Newborn Screening for Four Lysosomal Storage Disorders: One Center's Experience Over Six Years
Meghan Strenk

C – 303 Parents' Perspectives on the Transition From Pediatric to Adult Healthcare in Cornelia de Lange Syndrome
Marisa Chamness

PRE- AND PERINATAL

C – 306 A Rare Case of Dizygotic Twins With Trisomy 13 and the Importance of Sampling Each Twin With Diagnostic Testing
Julia Weston

C – 309 Novel *L1CAM* VUS Identified via Whole Exome Sequencing in Patient With Two Male Pregnancies Affected With Agenesis of the Corpus Callosum
Jessalyn Gerber

C – 312 Prenatal Presentation of Megalencephaly-Polymicrogyria-Polydactyly-Hydrocephalus (MPPH) Syndrome
Catherine Burson

C – 315 Expanded Aneuploidy Analysis Reveals Trisomy Two: Evidence of Rare Aneuploidy via NIPS Provides Opportunity for Focused Care
Susan Hancock

C – 318 Recurrent Non-Immune Fetal Hydrops (NIFH) Due to Native American Myopathy (NAM) in an African-American Couple: Expanding the Phenotype of *STAC3*-Related Congenital Myopathy
Laura Hendon

C – 321 A Case of Mixoploidy in the Setting of a Normal Fetus
Nicole Poulos

C – 324 To Screen or Not to Screen: Perceived Barriers to Paternal Expanded Carrier Screening Following a Positive Maternal Result
Katherine Philo

C – 327 Termination for Fetal Anomaly: What Is the Impact of Genetic Counseling on Coping?
Cayleen Smith

C – 330 Minimizing Results Delivery Time for Couples Undergoing Carrier Screening: A "Tandem-Reflex" Strategy
Aishwarya Arjunan

C – 333 "On the Fringe:" Clinical Application of Less Commonly Used Ultrasound Markers for Down Syndrome
Emily Creque

C – 336 A First Look at the Accessibility of Prenatal Genetic Screening Services Among Incarcerated Women in the United States: Perspectives of Correctional Health Professionals
Natalie Waligorski

C – 339 An Innovative Non-Invasive Prenatal Testing (NIPT) Assay Offers the Potential for a Low-Cost, Highly-Accurate Aneuploidy Screen in the Global Population
Alka Chaubey

C – 342 Recall of Informed Consent for Prenatal Aneuploidy Screening
Pranali Shingala

C – 345 An Exploration of the Current Impressions and Experiences With NIPT Among Genetic Counselors
Charly Harris

C – 348 Exploring Experiences & Expectations of Prenatal Healthcare and Genetic Counseling/Testing in Immigrants Latinas
Georgiann Garza

C – 351 Observed and Modeled Positive Predictive Values Using cfDNA Testing for Fetal Trisomy in a Clinical Laboratory Population
Karen White

PROFESSIONAL ISSUES

PSYCHIATRY/NEUROLOGY

PUBLIC HEALTH

RESEARCH ISSUES

UTILIZATION MANAGEMENT

NSGC Thanks Our Year-Round Sponsors

DIAMOND

INVITAE

PLATINUM

Ambry Genetics
A Konica Minolta Company

AstraZeneca

GOLD

bluebirdbio®
recode for life™

SILVER

Amicus Therapeutics®

Capital Women's Services

natera®
Conceive. Deliver. Thrive.

NSGC Thanks Our Annual Conference Sponsors

DIAMOND

INVITAE

PLATINUM

Ambry Genetics
A Konica Minolta Company

myriad

GOLD

ARUP LABORATORIES

SILVER

avesis

EGL Genetics | Eurofins Clinical Diagnostics

Roche

RARE SCIENCE, INC. – RARE BEAR SPONSOR

illumina

EDUCATIONAL SUPPORT

METIS GENETICS
GENETIC COUNSELING MADE SIMPLE

Learning Lounge Presentations

Learning Loungue Presentations are 15-minute presentations given by select vendors and speakers in the Learning Lounge located in the NSGC Central (Booth #415) of the Exhibitor Suite. These presentations are a great way to learn more about a certain topic. Make the most of your time in the Exhibitor Suite by attending one of the following presentations:

Tuesday, November 5

Sponsored by: Rhythm PHARMACEUTICALS

5:15 pm – 5:30 pm

Best Poster Abstracts – Lightning Round

Various Speakers

Join the nominees for this year's Best Poster Award as they present their work in the lightning round! Each nominee will have 60 seconds to describe their work, and explain why you should visit them during their poster session!

5:45 pm – 6:05 pm

Not All Obesity Is the Same! Introduction to Rare Genetic Disorders of Obesity

Heidi Shea, MD

An introduction to rare genetic disorders of obesity as a subset within the disease of obesity and the urgency to appropriately identify the underlying causes of obesity.

6:20 pm – 6:35 pm

Genetic Counseling Trainee Participation in an Inter-Professional, Case-Based Clinical Genetics Curriculum for Medical Students: An Experience in Peer-to-Peer Learning

Kathleen Berentsen Swenson, MS, MPH, CGC

There are many ways to raise awareness of the field through inter-professional education in genetic counseling training programs and post medical education to residents and fellows. The objective of our session is to share more on our experience using a case-based clinical genetics curriculum that can be applied in a variety of settings.

6:50 pm – 7:05 pm

We Teach but Patients Teach Better: Building a National Patient-Teacher Registry

Jacob Athoe, MS Candidate, Genetic Counseling

Although the role of genetics in medicine is steadily increasing, awareness about rare diseases, especially biochemical or metabolic diseases remains poor. Teaching about the inborn errors of metabolism is inadequate in medical school and the vast majority of postgraduate medical training programs. This compromises patient care, as patients go for years without a diagnosis, resulting in lost opportunities for counseling and missed access to an increasing number of available treatments.

We will present the concept of a National Patient-Teacher Registry (NPTR), an initiative that utilizes the power of storytelling, and brings patients – live or recorded – into the educational realm for medical students, practicing medical and genetic health professionals, and their trainees.

7:20 pm – 7:35 pm

A Beginner's Guide to Artificial Intelligence

Elizabeth Kearney, MS, LCGC, MBA

Robots are taking over genetics! Or are they? Separate fact from fiction with a basic overview of AI for genetic counselors. Learn how technology is used in genetic testing and how technology may influence genetic counseling practice in the not-to-distant future.

Wednesday, November 6

Sponsored by: Takeda

6:00 pm – 6:15 pm

Implications of Early Diagnosis of Genetic Disease Through Carrier Testing and Newborn Screening

Karen Grinzaid, MS, LCGC, CCRC, Emry University School of Medicine

Discuss the impact that early diagnosis of genetic diseases has had on the health of patients with lysosomal storage diseases, and updates on carrier testing and newborn screening.

6:30 pm – 6:45 pm

Taking Care of Ourselves so We Can Serve Others

Colleen Caleshu, MS, LCGC

Genetic counselors spend much of their time oriented towards the needs of others. Yet we cannot serve others well if we are not taking care of ourselves. We need a professional culture that prioritizes and values self-care. We'll talk through self-care strategies and evidence that supports their efficacy.

7:00 pm – 7:15 pm

To Post or Not to Post: Establishing a Professional Social Media Presence

Rebecca L. McClellan, MGC, CGC

The age-old question in our modern world. Disclosure has always been a challenge in patient-provider relationships, but in today's world patient's have ever-increasing access to our online personal identities. Many institutional polices outline privacy, legal and ethical considerations, but also allow their providers freedom to act responsibly. But how is the question.

Thursday, November 7

Sponsored by: UNITY POWERED BY Billion

12:00 pm – 12:15 pm

NIH All of US Research Program Genetic Counseling Resource (GCR)

Brad Ozenberger, PhD

Learn about the All of Us GCR powered by Color, future delivery of genomic results and integration into the GC community. Leadership from All of Us, Color and the GCR Advisory Board will be there to answer your questions.

12:30 pm – 12:45 pm

The First Combined Carrier Screen and Single Gene NIPT That Identifies High-Risk Pregnancies

Sara Riordan, MS, LCGC

ACOG recommends all pregnant women be offered carrier screening for cystic fibrosis, spinal muscular atrophy and hemoglobinopathies. UNITY™ identifies carriers and reflexes to single gene NIPT (sgNIPT), allowing for early identification of high-risk pregnancies. Utilizing molecular counting technology, UNITY™ is the only sgNIPT that does not require paternal DNA.

1:00 pm – 1:15 pm

Hanging out on Your Own Shingle: Genetic Counseling Consulting

Linda Robinson, MS, CGC; Debra Collins, MS, CGC

Have you ever thought about consulting, whether as a full-time job or to make extra money on the side? If you have been asked to be on an advisory board or paid to give a lecture, you are a consultant. We will give you an introduction to the world of consulting. Examples and practical considerations such as contracts, resources, money, taxes, etc. will be covered.

1:30 pm – 1:45 pm

How to Perform a Single-Gene NIPT Without the Father's DNA

Brian Landry, PhD

UNITY™ conducts single-gene NIPTs for cystic fibrosis, spinal muscular atrophy, and hemoglobinopathies without requiring the father's DNA. Screening of these recessively inherited disorders in the fetus from cell-free DNA is a complex problem. This talk explains the novel cell-free DNA counting technology and bioinformatic analysis that powers the UNITY™ screen.

2:00 pm – 2:15 pm

Tools for Us by Us: Genetic Counselors Informing the Development of Technology for Our Profession

Jill Davies, MS, CCGC

Learn how genetic counselors can (and do!) guide and lead the development of technology solutions aimed at increasing access to our services and improving efficiency in the delivery of genomic medicine.

NSGC Awards

Fellowships and Special Project Awards

JANE ENGELBERG MEMORIAL FELLOWSHIP AWARD (JEMF)
Katherine Helbig, MS, LCGC

AUDREY HEIMLER SPECIAL PROJECT AWARD (AHSPA)
Jessica Hartley, MS, CGC
Angela Krutish, MSc, MSc

NSGC Leadership Awards

NATALIE WEISSBERGER PAUL NATIONAL ACHIEVEMENT AWARD
Vickie Venne, MS, LCGC

NEW LEADER AWARD
Katelynn Sagaser, MS, CGC

OUTSTANDING VOLUNTEER AWARD
Melanie Hardy, MS, MS, LCGC

CULTURAL ADVOCACY AWARD
Charité Ricker, MS, LCGC

STRATEGIC LEADER AWARD
Tara Schmidlen, MS, LGC

DIVERSITY AND INCLUSION LEADER AWARD
Gayun Chan-Smutko, MS, CGC

Best Abstract Awards

BEST FULL MEMBER ABSTRACT AWARD
Sienna Aguilar, MS, LCGC

BETH FINE KAPLAN STUDENT ABSTRACT AWARD
Franceska Hinkamp, MS

Scholarship and Journal Awards

JOURNAL OF GENETIC COUNSELING BEST PAPER TRAINEE ONLY CATEGORY

Development and Validation of the Genetic Counseling Self-Efficacy Scale
Sarah Caldwell, University of Cincinnati/Cincinnati Children's Hospital Medical Center

The Impact of Cardiovascular Genetic Counseling on Patient Empowerment
Hannah E. Ison, Indiana University School of Medicine

Genetic Counselors' and Genetic Counseling Students' Implicit and Explicit Attitudes Toward Homosexuality
Megan Nathan, Stanford University

Evolving Decisions: Perspectives of Active and Athletic Individuals With Inherited Heart Disease Who Exercise Against Recommendations
Trishna Subas, Stanford University

STUDENT ANNUAL CONFERENCE SCHOLARSHIP
Joseph Liu
Hebbah Sayed-Ahmad

Award Schedule

Make sure you are in the Grand Ballroom during the following times to see the award presentations:

NATALIE WEISSBERGER PAUL NATIONAL ACHIEVEMENT AWARD
Tuesday, November 5 | 3:45 pm

NEW LEADER AWARD
Wednesday, November 6 | 8:00 am

DIVERSITY AND INCLUSION LEADER AWARD
Wednesday, November 6 | 4:15 pm

AUDREY HEIMLER SPECIAL PROJECTS AWARD
Wednesday, November 6 | 5:20 pm

OUTSTANDING VOLUNTEER AWARD
Thursday, November 7 | 8:00 am

CULTURAL ADVOCACY LEADER AWARD
Thursday, November 7 | 5:00 pm

BEST FULL MEMBER ABSTRACT AWARD
Thursday, November 7 | 5:35 pm

BETH FINE KAPLAN ABSTRACT AWARD
Thursday, November 7 | 5:50 pm

JANE ENGELBERG MEMORIAL FELLOWSHIP AWARD
Thursday, November 7 | 6:05 pm

STRATEGIC LEADER AWARD
Friday, November 8 | 10:00 am

Networking Activities + Meetings

Welcome to the Annual Conference First-Time Attendee Orientation

TUESDAY, NOVEMBER 5

1:30 pm – 2:30 pm

Room 251

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.

Welcome Reception

TUESDAY, NOVEMBER 5

5:00 pm – 8:00 pm

Exhibit Halls A-B, Level 1

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.

Sponsored by: avexis

Tour Myriad Genetic Laboratories

WEDNESDAY, NOVEMBER 6

8:00 pm – 8:45 pm

8:50 pm – 9:35 pm

Shuttles to Myriad will depart from the South Foyer of Salt Palace Convention Center on the First Level near Exhibit Hall E.

Ever wonder what happens to a patient's sample once it arrives at Myriad Genetic Laboratories in Salt Lake City? Join Myriad for a personal tour of their labs to learn more about their commitment to precision medicine and genetic testing.

You will be guided by team members who collaborate daily with world-class scientists. The tour will provide a general introduction to Myriad's mission, history and research. Tours will be approximately 45 minutes long.

Register at **https://myriadlabtournsgc.rsvpify.com**

RSVP is required for tour access. Only confirmed guests will be allowed in.

Sponsored by: myriad

Mindful Yoga

THURSDAY, NOVEMBER 7

7:00 am – 8:00 am

Marriott Hotel, Deer Valley Room

Balance your mind and body before conference sessions begin! Join Progenity for a yoga session at the Marriott headquarters hotel on Thursday morning. Pre-registration is required; to register, visit booth #729 on Tuesday or Wednesday.

Sponsored by: progenity Prepare for life.

NSGC State of the Society Address

THURSDAY, NOVEMBER 7

8:00 am – 9:15 am

Grand Ballroom

Join NSGC President Amy Sturm, MS, CGC, LGC, as she shares NSGC activities and accomplishments over the past year, reviews NSGC's 2019 advocacy efforts and provides an update on NSGC's strategic initiatives.

Incoming Presidential Address

THURSDAY, NOVEMBER 7

9:15 am – 9:45 am

Grand Ballroom

Welcome NSGC President-Elect Gillian Hooker as she introduces herself to NSGC members and outlines her vision for NSGC and the genetic counseling profession in 2020.

2019 Code Talker Award Ceremony

THURSDAY, NOVEMBER 7

7:00 pm – 9:00 pm

Room 251

Join us for an evening of food, drinks, and amazing stories at the 2019 Code Talker Award Ceremony, honoring genetic counselors nominated by the families they serve

Registration is required, check at the registration desk for availability.

Presented by: INVITAE *and* National Society of Genetic Counselors

Unwind at Keys on Main

THURSDAY, NOVEMBER 7

7:00 pm – 10:00 pm

Keys on Main, 242 South Main St.

Hosted by ARUP Laboratories, this official event of the NSGC Annual Conference features an open bar, unique Utah food offerings, and the best all-request dueling piano show in the state. Bring your favorite song selections and be ready to party!

Sponsored by: ARUP LABORATORIES

Headshot Lounge

During Exhibitor Suite Hours

Exhibit Halls A-B, Level 1

Take your career to the next level with a complimentary professional headshot, sponsored by Myriad Women's Health. When the Exhibitor Suite is open, visit booth #711 to take advantage of this opportunity to update your LinkedIn profile picture.

Sponsored by: myriad

Annual Conference Program Committee

NSGC EXPRESSES ITS GRATITUDE TO THESE VOLUNTEERS FOR THEIR HARD WORK AND DEDICATION:

Program Committee Chair
Katherine Lafferty, MS, CGC

Program Committee Vice-Chair
Rachel Mills, MS, CGC

Program Committee Members
Carrie Blout, MS, CGC
Colleen Caleshu, MS, LCGC
Melanie Hardy, MS, MS, LCGC
Katie Krepkovich, MS, MS, CGC
Lauren Lichten, MS, CGC
Margaret Sheehan, MS, CGC
Barry Tong, MS, CGC
Tara Hart, MS, CGC
Carolyn Applegate, MGC, CGC
Sandy Woo, MS, LCGC

Abstract Workgroup
Abstract Workgroup Chair
Courtney Berrios, MSc, ScM, CGC

Abstract Workgroup Vice Chair
Chris Tan, MS, LCGC

Abstract Workgroup Members
Meg Bradbury, MS, CGC, MSHS *(Past Chair)*
Kathleen Aaron, MS
Carrie Atzinger, MS, CGC
Danielle Azzariti, MS, CGC
Riyana Babul-Hirji, MSc, CGC
Karlla Brigatti, MS, LCGC
Carrie Castonguay, MS, CGC
Emily Fassi, MS, LGC
Sara Fitzgerald-Butt, MS, LGC
Caitlin Grabarits, MGC, LCGC
Tracey Grant, MS
Katherine Helbig, MS, LCGC
Jodie Ingles, GDCD, MPH, PhD,
Yelena Kemel, MS, ScM, CGC
Jessica Laprise, MS, CGC
Gabriel Lazarin, MS, CGC
Meghan Lundy, MS, LCGC
Megan Marshall, MS, LCGC
Jessica Mester, MS, LCGC
Erin Miller, MS, CGC
Ashley Parrott, MS, LGC
Betsy Peach, MS, CGC
Andrea Procko, PhD, LCGC
Gretchen Schneider, MS, LCGC
Jennifer Schwab, MS, CGC
Morgan Similuk, ScM, CGC
Jill Slamon, MA, MS, LCGC
Katie Wusik, MS, LGC
Sarah Yarnall, MS, CGC
Sharon Aufox, MS, CGC
Kyle W. Davis, ScM, LCGC
Kate Foreman, MS, CGC
Maria Gyure, MS, LCGC
Meadow Heiman, MS, LCGC
Michelle Jacobs, MS, CGC
Sara Knapke, MS, LCGC
Amy Lemke, PhD, MS, CGC
Katie Lewis, ScM, CGC
Khalida Liaquat, MS, LCGC
Chinmayee Nagaraj, LGC
Sarah Noblin, MS, CGC
Kailey Owens, MS, CGC
Vivian Pan, CGC
Zöe Powis, MS, CGC
Lauren Propst, MS, CGC
Chloe Reuter, MS, CGC
Katherine Skora, MS, MPH, CGC
Alicia Scocchia, MS, CGC, LGC
Caitlin Mauer, MA, MS CGC
Carolyn Haskins, MS, CGC
Erica Bednar, MS, CGC
Emily Suskin, MS, CGC
Karen Hurley, PhD
Jennifer Leonhard, MS, LCGC
Jennifer Brzosowicz, MS, CGC
Kyla Patek, MS, CGC
Kunal Sanghavi, MBBS, MS, LCGC
Lauren Westerfield, MS, CGC
Laura Godfrey Hendon, MA, MS, CGC
Melanie Baxter, ScM, CGC
Randa Newman, MS, LCGC
Sarah Bannon, MS, CGC
Katelynn Sagaser, MS, CGC
Shifra Krinshpun, MS, CGC, LCGC
Sheila Solomon, MS, LCGC
Haley Streff, MS, CGC
Lara Sucheston-Campbell, MS, Ph.D.
Susan Christian, MSc, PhD, CGC
Victoria Wagner, MS, CGC
Wendy McKinnon, MS, CGC

Meals + Refreshments

Continental breakfast will be served Wednesday – Friday in the Grand Ballroom Foyer and in the 155, 255 and 355 foyers on Tuesday from 7:00 am – 8:00 am for pre-conference symposia attendees.

Refreshment Breaks

TUESDAY, NOVEMBER 5*

10:00 am – 10:30 am — 155 Foyer, 255 Foyer and 355 Foyer

*Pre-conference attendees only

WEDNESDAY, NOVEMBER 6

9:30 am – 10:15 am — Exhibit Hall A-B, Level 1

3:45 pm – 4:15 pm — Exhibit Hall A-B, Level 1

THURSDAY, NOVEMBER 7

9:45 am – 10:20 am — Exhibit Hall A-B, Level 1

4:40 pm – 5:00 pm — Grand Ballroom Foyer

FRIDAY, NOVEMBER 8

9:50 am – 10:10 am — 155 Foyer, 255 Foyer and 355 Foyer

Wine Down Tasting

TUESDAY, NOVEMBER 5

5:00 pm – 8:00 pm

Booth #423 Ambry Genetics, A Konica Minolta Company

Join Us at the Booths Below for a Special Treat

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

TUESDAY, NOVEMBER 5

5:00 pm – 8:00 pm

Booth #301 INVITAE

Booth #423 Ambry Genetics, A Konica Minolta Company

Booth #711 myriad

WEDNESDAY, NOVEMBER 6

9:30 am – 10:15 am

Booth #711 myriad

11:45 am – 1:30 pm

Booth #307 Boulder Abortion Clinic

Booth #116 UNITY, Powered by Billion

3:45 pm – 4:15 pm

Booth #301 INVITAE

Booth #116 UNITY, Powered by Billion

Booth #729 progenity, Prepare for life.

5:30 pm – 7:30 pm

Booth #423 Ambry Genetics, A Konica Minolta Company

THURSDAY, NOVEMBER 7

9:45 am – 10:20 am

Booth #301 INVITAE

Booth #423 Ambry Genetics, A Konica Minolta Company

11:35 am – 3:00 pm

Booth #108 variantyx

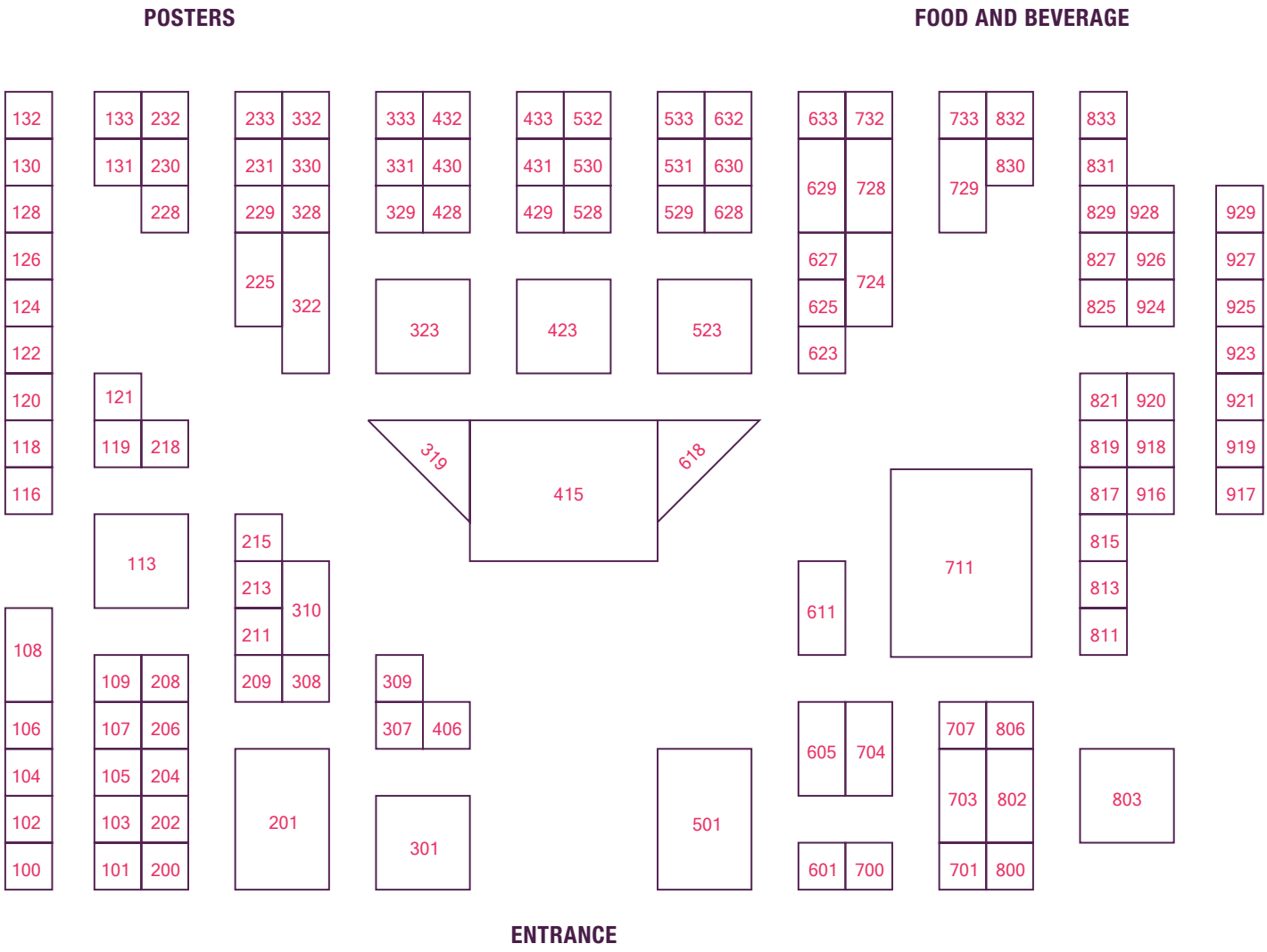
Booth #711 myriad

Booth #729 progenity, Prepare for life.

Exhibitor Directory by Company Name

Exhibitor Name	Booth Number
23andMe	831
AbortionClinics.Org, Inc.	200
Acer Therapeutics	109
Admera Health	528
Agios Pharmaceuticals, Inc.	121
AiLife Diagnostics, Inc.	106
Alexion Pharmaceuticals, Inc.	120
AliveAndKickn	701
Allele Diagnostics	330
Ambry Genetics, A Konica Minolta Company	423
American Board of Genetic Counseling (ABGC)	130
American Society of Human Genetics	815
Amicus Therapeutics	406
Ancestry.com Operations, Inc.	101
ArcherDX, Inc.	632
ARUP Laboratories	323
Association for Creatine Deficiencies (ACD)	918
AstraZeneca	802
Atlantic Fetal Medicine	916
AveXis, Inc.	232
AveXis, Inc.	233
AXYS	927
Basser Center for BRCA	204
Batten Disease Support & Research Association	531
Baylor Genetics	201
BillionToOne, Inc. (UNITY screen)	116
Biogen	728
BioMarin Pharmaceutical, Inc.	707
Blueprint Genetics Inc.	629
Boulder Abortion Clinic, PC	307
Capital Women's Services	832
Center for Fetal Diagnosis and Treatment (CHOP)	308
Center for Genomic Interpretation	229
Centogene AG	821
Clear Genetics	133
Clinical Genome Resource	827
Clovis Oncology, Inc.	929
Color	630
Connective Tissue Gene Tests	703
Cord Blood Registry	215
Department of Veterans Affairs	917
DNA ALLY, Inc.	532
Down Syndrome Diagnosis Network	928
EGL Genetics	310
FamHis, Inc.	428
FORCE: Facing Our Risk of Cancer Empowered	919
Fulgent Diagnostics	825
Geisinger Health System	829
Gene42, Inc.	813
GeneDx	501
GeneMatters	811
Genome Medical	208
GenPath Women's Health	611
Glut1 Deficiency Foundation	118
Greenwood Genetic Center	704
IGENOMIX	124
InformedDNA	732
InformedDNA	733
Integrated Genetics	322
Invitae	301
Invitae Photobooth	100
Johns Hopkins Center for Fetal Therapy	230
Johns Hopkins Genomics	231
JScreen at Emory University	601
Kaiser Genetics – Northern California	206
Le Bonheur Children's Hospital	119
Lettercase: National Center for Prenatal and Postnatal Resources	104
MNG Laboratories	225
Myriad Genetic Laboratories	711
Natera	429
National Coordinating Center for the Regional Genetic Networks	103
National Down Syndrome Congress (NDSC)	925
Nationwide Children's Hospital	924
NIH Genetic Testing Registry/MedGen/ClinVar	817
Northside Hospital	433
Norton & Elaine Sarnoff Center for Jewish Genetics	806
Norton Genetic Specialists, Part of Norton Healthcare	102
Now I Lay Me Down To Sleep	126
NSGC Central	415
NSGC Job Board	319
NTD Eurofins	209
NxGen MDx	830
Parent Project Muscular Dystrophy/Decode Duchenne	923
Partners Personalized Medicine Laboratory for Molecular Medicine	107
PerkinElmer	523
Pfizer Oncology	530
Phoenix Children's	921
Prevention Genetics	605
Progenity	729
PTC Therapeutics, Inc.	920
PWN Health	131
Quest Diagnositcs	113
RARE Science, Inc. – RARE Bear Sponsor	803
Recordati Rare Diseases	623
Retrophin, Inc.	430
Retrophin Medical Affairs	431
Rhythm Pharmaceuticals	633
Roche Diagnostics	202
Sanford Health	800
Sanford Research – CORDS Registry	122
Sanofi Genzyme	211
Sarepta Therapeutics	628
Seattle Children's Hospital – PLUGS Program	329
Sema4	724
Sharsheret	213
Simons Searchlight	926
Southwestern Women's Options	819
Spark Therapeutics	625
Special Angels Adoption	228
Specialist TeleMed	432
Stealth BioTherapeutics	700
Texas Children's Pavilion for Women – Fetal Center	332
UAB Medical Genomics Lab	627
UCLA Health Sciences	218
UCSF Health	533
Ultragenyx	833
Undiagnosed Diseases Network	105
University of Chicago Genetic Services Laboratories	309
University of Washington	331
UNMC Human Genetics Laboratory	529
Valley Children's Healthcare	328
Variantyx, Inc.	108
Women's Care Florida	128
YourDNA.com	333

Exhibitor Suite Map



Who Will Be Named Code Talker of the Year?

Honoring genetic counselors who interpret complexity with compassion.

Come celebrate your profession with the emotional stories of what excellent care feels like to patients and find out who will be the 2019 Code Talker. This year's essay book will be available to all. You don't want to miss it!

Thursday, November 7
7:00pm to 9:00pm
Doors open at 6:45pm.

Featuring guest speaker, Amylynne Santiago Volker

Rare disease advocate and mother of Nic Volker, the first child saved by DNA sequencing.

PRESENTED BY

INVITAE

National Society of Genetic Counselors

Exhibitor Index

23andMe
Booth 831
650.938.6300
customercare@23andme.com
www.23andme.com

Founded in 2006, 23andMe is the only genetic testing company to receive FDA authorization to provide carrier status, genetic health risks, cancer predisposition and pharmacogenetic information directly to consumers.

AbortionClinics.Org
Booth 200
402.292.4164 or 888.684.3599
info@arhc.online
www.abortionclinics.org

Specializing in 2nd and 3rd trimester abortion care. For over 45 years we have been providing abortion care with kindness, courtesy, justice, love and respect.

Acer Therapeutics
Booth 109

Admera Health
Booth 528
908.222.0533
clientcare@admerahealth.com
www.admerahealth.com

Admera Health's CLIA-certified, CAP-accredited diagnostic testing laboratory utilizes Next-Generation Sequencing technology to advance personalized medicine. Our expertise includes pharmacogenomics, cardiovascular disease, and oncology. Physicians and patients receive test results to make more informed treatment decisions.

Agios Pharmaceuticals, Inc.
Booth 121

AiLife Diagnostics, Inc.
Booth 106

Alexion
Booth 120
475.230.2596
gretchen.prins@alexion.com
www.alexion.com

Alexion has delivered life-changing therapies to patients suffering from rare diseases and has a highly innovative enzyme replacement therapy for patients with a ultra-rare metabolic disorder, hypophosphatasia (HPP).

AliveAndKickn
Booth 701
201.774.1843
dave@aliveandkickn.org
www.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 330
844.255.3532
kleiser@allelediagnostics.com
www.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 patients.

Ambry Genetics, A Konica Minolta Company
Booth 423
714.788.2540
zjensen@ambrygen.com
www.ambrygen.com

Ambry Genetics is a leader in clinical diagnostic and software solutions, combining both to offer comprehensive and high-quality genetic testing. As part of the Konica Minolta family, Ambry Genetics is responsibly applying new technologies to the molecular diagnostics market to bring about precision medicine.

American Board of Genetic Counseling
Booth 130
913.222.8661
info@abgc.net
www.abgc.net

The American Board of Genetic Counseling (ABGC) 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.

American Society of Human Genetics
Booth 815
301.634.7300
society@ashg.org
www.ashg.org

The American Society of Human Genetics is the primary professional organization for human genetics specialists worldwide. Our mission is to adavnce human genetics in science, health, and society through excellence in research, education and advocacy.

Exhibitor Index continued

Amicus Therapeutics
Booth 406
609.662.3897
msorrentino@amicusrx.com
www.amicusrx.com

Ancestry
Booth 101
801.762.7372
lwagner@ancestry.com

Ancestry, the global leader in family history and consumer genomics, brings together science and self-discovery to help everyone, everywhere discover the story of what led to them.

ArcherDX, Inc.
Booth 632
303.357.9001
sales@archerdx.com
www.archerdx.com

ArcherDX addresses the bottlenecks associated with using next-generation sequencing in translational research by offering a robust platform for targeted sequencing applications.

ARUP Laboratories
Booth 323
801.583.2787
info@aruplab.com
www.aruplab.com

ARUP Laboratories offers high quality testing in molecular genetics, cytogenetics, biochemical genetics and maternal serum screening. Accurate testing, timely results, and on-demand consultation with our experts translates to optimal patient outcomes.

Association for Creatine Deficiencies
Booth 918
info@creatineinfo.org
www.creatineinfo.org

The Association for Creatine Deficiencies (ACD) is a nonprofit organization dedicated to the three Cerebral Creatine Deficiency Syndromes (CCDS): CTD, AGAT and GAMT. Our mission is to provide patient, family, and public education, to advocate for early diagnoses, and to promote and fund medical research for treatments and cures for CCDS.

AstraZeneca
Booth 802
301.398.0000
alyssa.u@astrazeneca.com
www.astrazeneca-us.com

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. Follow us on Twitter @AstraZenecaUS.

Atlantic Fetal Medicine
Booth 916
910.667.7451
Kathy.Gresham@nhrmc.org
www.nhrmc.org

Atlantic Fetal Medicine is part of the New Hanover Regional Medical Center located in beautiful coastal Wilmington, North Carolina. We seek to add a genetic counselor to our growing team.

AveXis, Inc.
Booth 232 & 233
844.428.3947
info@avexis.com
www.avexis.com

AveXis is the world's leading gene therapy company, reimagining the treatment of genetic diseases. We are focused on developing and delivering transformational gene therapies for patients and families devastated by rare and life-threatening neurological genetic diseases.

AXYS
Booth 927
888.999.9428
info@genetic.org
www.genetic.org

AXYS, the Association for X and Y Variations, is an advocacy, education and support organization for individuals with X and Y chromosome variations and their families. AXYS improves the lives of those impacted by the X and Y chromosome aneuploidies including Klinefelter syndrome (47,XXY), Trisomy X (47,XXX), 47,XYY, 48,XXYY, and related genetic conditions through support, education, research and treatment.

Basser Center for BRCA

Booth 204

215.662.2748

basserinfo@uphs.upenn.edu

www.basser.org

The Basser Center for BRCA is the first comprehensive center for the research, treatment, and prevention of BRCA-related cancers. These hereditary mutations can increase lifetime risk for cancers including breast, ovarian, pancreatic, prostate and melanoma.

Batten Disease Support and Research Association

Booth 531

614.768.1159

info@bdsra.org

www.bdsra.org

Our long term vision is a world without Batten disease. Our mission is to support Batten families, fund and Facilitate research, and advocate for action. BDSRA is the largest support organization dedicated to Batten disease in North America

Baylor Genetics

Booth 201

800.411.4363

help@baylorgenetics.com

www.baylorgenetics.com

A pioneer of precision medicine for nearly 40 years, Baylor Genetics now offers a full spectrum of clinically relevant genetic testing, access to world-renowned experts, and the confidence to provide patients with the best care.

BillionToOne Inc.

Booth 116

617.602.0277

shan@billiontoone.com

www.unityscreen.com

BillionToOne is a precision diagnostics company behind UNITY test, the first and only carrier screen with reflex single-gene NIPT for CF, SMA and hemoglobinopathies.

Biogen

Booth 728

781.464.2000

www.biogen.com

At Biogen, our mission is clear: we are pioneers in neuroscience. Biogen discovers, develops and delivers worldwide innovative therapies for people living with serious neurological and neurodegenerative diseases as well as related therapeutic adjacencies.

BioMarin Pharmaceutical Inc.

Booth 707

415.506.6700

www.biomarin.com

BioMarin develops innovative biopharmaceuticals. Approved products include therapies for PKU, LEMS, MPS I, MPS VI, MPS IVA, and CLN2 disease. Development programs include investigational therapies for Hemophilia A, Achondroplasia, MPS IIIB, Friedreich's Ataxia.

Blueprint Genetics

Booth 629

650.452.9340

joe.jacher@blueprintgenetics.com

www.blueprintgenetics.com

Blueprint Genetics is one of the fastest growing genetics laboratories globally. We provide world-class genetic testing and clinical interpretation for rare inherited diseases in 14 medical specialties with a customer-base spanning over 40 countries.

Boulder Abortion Clinic, PC

Booth 307

303.447.1361

bac.conf@gmail.com

www.drhern.com

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.

Capital Women's Services

Booth 832

202.400.0235

molly@capitalwomensservices.com

www.capitalwomensservices.com

Capital Women's Services is dedicated to providing women with quality reproductive healthcare.

Center for Fetal Diagnosis and Treatment (CHOP)

Booth 308

800.IN UTERO (468.8376)

www.fetalsurgery.chop.edu

Celebrating twenty five years of dedication to advances, excellence and hope, the world's largest prenatal therapy program has welcomed more than 24,000 families from around the world. Team members pioneered the surgical techniques and protocols that today define the field. A leader of the landmark Management of Myelomeningocele Study proving the efficacy of fetal surgery for MMC. Since 2008, CHOP remains the world's first delivery unit dedicated exclusively to delivering pregnancies complicated by birth defects.

Exhibitor Index continued

Center for Genomic Interpretation

Booth 229

801.810.4097

contact@genomicinterpretation.org

www.genomicinterpretation.org

Center for Genomic Interpretation (CGI) is an independent nonprofit with the mission to drive quality in clinical genetics and genomics. Clinicians can compare lab test quality by asking labs for their CGI ELEVATEGenetics quality scores.

Centogene AG

Booth 821

617.580.2102

customer.support-us@centogene.com

www.centogene.com/

CENTOGENE – Worldwide leader in the field of genetic diagnostics for rare hereditary diseases. Our mutation database (CentoMD®) is the world's largest for and is pivotal to our high-quality diagnostic reporting and comprehensive medical interpretation.

Clinical Genome Resource

Booth 827

clingen@clinicalgenome.org

www.clinicalgenome.org

The Clinical Genome Resource (ClinGen) is an NIH-funded initiative dedicated to identifying genes and variants of clinical relevance for use in precision medicine and research.

Color

Booth 630

650.743.0657

pam@color.com

www.color.com

Color is a health service that helps you understand your genetic risk for common hereditary cancers and hereditary high cholesterol, and use this knowledge to create a personalized healthcare plan.

Connective Tissue Gene Tests

Booth 703

484.244.2900

inquiries@ctgt.net

www.ctgt.net

Connective Tissue Gene Tests (CTGT) specializes in molecular diagnostic testing for inherited genetic disorders. CTGT offers over 1,000 tests and serves hundreds of leading healthcare providers and institutions from the US and around the world.

Cord Blood Registry

Booth 215

415.517.2404

njaffar@cordblood.com

www.cordblood.com

Cord Blood Registry® (CBR®) is the world's largest and most experienced newborn stem cell company. Since 1992, families have entrusted CBR to store more than 875,000 cord blood and cord tissue samples. As part of their commitment to advancing the clinical applications of newborn stem cells, CBR has helped over 500 families use their cord blood samples for current and investigational treatments.

DNA ALLY, Inc.

Booth 532

408.204.6922

karl.gundal@dnaally.com

www.dnaally.com

We're hiring!!! If you have an extra 5 hours per week and want to increase your income, come visit our booth. DNA ALLY is a national telegenetics company providing on demand genetic counseling services.

EGL Genetics

Booth 310

470.378.2200

eglmarketing@egl-eurofins.com

www.egl-eurofins.com

With over 50 years of experience, EGL Genetics is an established leader in genetic diagnostic testing. EGL is one of the few labs in the country to offer molecular genetics, biochemical, and cytogenetics tests under one roof.

FamHis, Inc.

Booth 428

561.631.9171

info@famhis.net

www.famhis.net

FamHis is the developer of FamGenix, an App built for patients to record their family health histories, share with other family members, and ultimately share with a clinician. It identifies patients who meet referral criteria.

FORCE: Facing Our Risk of Cancer Empowered

Booth 919

866.288.7475

sandrac@facingourrisk.org

www.facingourrisk.org

FORCE improves the lives of individuals and families affected by hereditary cancers by providing support, education, advocacy, awareness and research.

Fulgent Genetics

Booth 825

626.350.0537

info@fulgentgenetics.com

www.fulgentgenetics.com

Fulgent Genetics is a clinical genetic testing laboratory offering an extensive and flexible test menu, with a goal to increase the accessibility and affordability of personalized genomic care for both patients and clinicians.

Geisinger Health Science

Booth 829

717.251.4197

bjhicks@geisinger.edu

www.geisinger.org

Geisinger is a physician-led health system comprised of approximately 30,000 employees, including 1,600 physicians, 13 hospital campuses, two research centers, medical school, and a 583,000-member health plan. Geisinger is nationally recognized for innovative practices and quality care.

Gene42 Inc.

Booth 813

888.682.5252

info@gene42.com

www.gene42.com

Gene42 helps clinicians and researchers diagnose more confidently through better patient phenotyping. Our flagship product, PhenoTips®, is used around the world by leading hospitals and institutions for deep phenotyping, pedigree drawing and phenotype-based genomic analysis.

GeneDx

Booth 501

301.519.2100

zebras@genedx.com

www.genedx.com

GeneDx was founded in 2000 to diagnose patients with rare disorders and assist clinicians responsible for treating these patients. GeneDx has cutting-edge diagnostic testing for a majority of inherited genetic disorders.

GeneMatters

Booth 811

612.314.7482

info@gene-matters.com

www.gene-matters.com

GeneMatters provides telehealth genetic counseling, working alongside your internal team or serving all genetic counseling needs. We provide deep expertise, immediate access, cost-effectiveness and easy, flexible integration through our customized platform.

Genome Medical

Booth 208

877.688.0992

info@genomemedical.com

www.genomemedical.com

Telegenomics technology and services company. Comprehensive clinical genetics services. Telehealth consultations and genomic care delivery platform. Help practices integrate reproductive health genetics – patient education/informed consent, selection/ordering of tests, interpretation of/counseling on results.

GenPath Women's Health

Booth 611

800.229.5227

eventsmarketing@bioreference.com

www.genpathdiagnostics.com/womens-health

GenPath Women's Health, division of BioReference Laboratories, an OPKO Health Company, offers a full-service test menu including cytology, pathology, infectious disease, prenatal/maternal risk assessment, pregnancy thrombophilia, carrier testing and more.

Glut1 Deficiency Foundation

Booth 118

859.585.2538

info@g1dfoundation.org

www.g1dfoundation.org

The Glut1 Deficiency Foundation is dedicated to improving the lives of those in the G1D community through its mission of increased awareness, improved education, advocacy for patients and families, and support and funding for research.

Greenwood Genetic Center

Booth 704

864.941.8100

labgc@ggc.org

www.ggc.org

The Greenwood Genetic Center is a nonprofit institute organized to provide clinical genetic services, diagnostic laboratory testing, educational programs and resources and research in the field of medical genetics. Our laboratory offers biochemical, cytogenetic and molecular testing.

Igenomix

Booth 124

305.501.4948

marketingusa@igenomix.com

www.igenomix.us

A reproductive genetics company whose experience and research capabilities have placed them among the world leaders in the field, enabling them to provide effective solutions tailored to different infertility problems, with 24 laboratory affiliates worldwide.

Exhibitor Index continued

InformedDNA

Booth 732 & 733

800.975.4819

info@informeddna.com

www.informeddna.com

InformedDNA is the authority on the appropriate use of genetic testing. We leverage the largest staff of board-certified genetics specialists in the U.S. to counsel and advise health systems, payers, pharmaceutical companies, providers and patients.

Integrated Genetics

Booth 322

800.848.4436

www.integratedgenetics.com

With over 1,700 patient service centers, the largest commercial genetic counseling network, and an online cost estimator, Integrated Genetics, a member of the LabCorp Specialty Testing Group, offers one of the most comprehensive genetic testing menus.

Invitae

Booth

800.436.3037

clientservices@invite.com

www.invitae.com

Invitae's mission is to bring comprehensive genetic information into mainstream medical practice to improve the quality of healthcare for billions of people. Our goal is to aggregate most of the world's genetic tests into a single service with higher quality, faster turnaround time and lower prices.

Johns Hopkins Center for Fetal Therapy

Booth 230

410.502.6561

fetaltherapy@jhmi.edu

www.hopkinsmedicine.org/gynecology_obstetrics/specialty_areas/fetal_therapy/index.html

The Johns Hopkins Center for Fetal Therapy provides state-of-the art treatment for complex fetal conditions including twin-twin-transfusion syndrome, spina bifida, congenital diaphragmatic hernia, urinary tract obstruction and fetal tumors. Our multidisciplinary care approach integrates expertise in open and closed fetal interventions, fetoscopic surgery, maternal, neonatology, pediatric, genetic and social services located at one of the leading medical institutions in the nation. Our fetal therapy physician hotline – 1-844-JH-FETAL – provides 24/7 access to care.

Johns Hopkins Genomics

Booth 231

410.614.1075

www.jhgenomics.jhmi.edu

Integrating expertise, enabling data discovery, informing patient care.

JScreen at Emory University

Booth 601

404.778.8640

info@jscreen.org

www.JScreen.org

National, at-home genetic disease screening program offering affordable saliva-based expanded carrier screening and genetic counseling.

Kaiser NCAL Genetics

Booth 206

708.972.3300

jazmine.jung@kp.org

www.genetics.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 meet some of our genetic counselors, learn about employment opportunities and talk to us about our rewarding positions.

Le Bonheur Children's Hospital

Booth 119

901.287.5080

www.lebonheur.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 National Center for Prenatal & Postnatal Resources

Booth 104

770.310.3885

stephanie.meredith@uky.edu

www.lettercase.org

The Lettercase National Center for Prenatal and Postnatal Resources offers patient-friendly, accurate, balanced, and up-to-date resources about multiple genetic conditions, which are reviewed by representatives of the national medical and advocacy organizations.

MNG Laboratories

Booth 225

470.419.5606

alaimod@labcorp.com

www.mnglabs.com

MNG Laboratories, a LabCorp Company, strives to be your global partner in the diagnosis of inherited disease. MNG utilizes complex biochemical testing, next-generation sequencing, and RNA analysis to deliver results that drive patient-centered decisions.

Myriad Genetics

Booth 711

800.469.7423

cscomments@myriad.com

www.myriad.com

Myriad Genetics Inc., a leading personalized medicine company dedicated to being a trusted advisor is transforming patient lives worldwide with pioneering molecular diagnostics.

Natera, Inc.

Booth 429

650.249.9090

lhuynh@natera.com

www.natera.com

Natera is a global leader in cell-free DNA testing. The company is driven to harness the power of DNA from a single blood sample to improve the management of reproductive health, oncology, and organ transplantation.

National Coordinating Center for the Regional Genetics Networks (NCC)

Booth 103

301.718.9603

ncc@nccrcg.org

www.nccrcg.org

The mission of the seven HRSA Regional Genetics Networks (RGNs), their National Coordinating Center (NCC), and the National Genetics Education and Family Support Center (NGEFSC) is to improve access to quality genetic services for medically underserved populations. The NCC is funded by a cooperative agreement to ACMG from the Health Resources and Services Administration, Maternal and Child Health Bureau, Genetic Services Branch (HRSA/MCHB/GSB).

National Down Syndrome Congress

Booth 925

770.604.9500

tamara@ndsccenter.org

www.ndsccenter.org

The NDSC promotes the interests of people with Down syndrome and their families through advocacy, public awareness, and information. We reshape the way people understand and experience Down syndrome. We educate, advocate, empower and inspire.

Nationwide Children's Hospital

Booth 924

talent@nationwidechildrens.org

www.nationwidechildrens.org

Nationwide Children's Hospital is a destination academic pediatric medical center designed to manage the most complex of diseases. We treat the sickest of patients from across the country and around the world. We build research programs to assure tomorrow's breakthroughs help children everywhere. And we train the next generation of physicians, scientists and healthcare professionals. Beyond our walls, we invest in building social equity in our communities, address the social determinants of health, and develop payment models to better serve unique populations of children. Our unparalleled investment in Behavioral Health services and research further cements our role as an ambitious champion for the well-being of children everywhere.

NIH Genetic Testing Registry/ MedGen/ClinVar

Booth 817

The National Center for Biotechnology Information (NCBI, https://www.ncbi.nlm.nih.gov/variation/) at NIH advances science and health by providing access to biomedical and genomic information. NCBI will highlight resources for clinical genetics including GeneReviews®, MedGen, NIH Genetic Testing Registry (GTR®), ClinVar and the Medical Genetics Summaries, as well as important human variation tools and resources such as dbSNP, dbGaP, OSIRIS and SPDI.

Northside Hospital

Booth 433

404.851.8696

jennifer.gilbert@northside.com

www.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 806

312.357.4718

jewishgenetics@juf.org

www.jewishgenetics.org

For more than a century, the residents of Kentucky and Southern Indiana have trusted the Norton Healthcare name for dedicated and compassionate care. With a network of five hospitals in Louisville, Norton Healthcare is a leader in serving adult and pediatric patients.

Exhibitor Index continued

Norton Genetic Specialists

Booth 102

502.550.9625

amanda.keller@nortonhealthcare.org

www.nortonhealthcare.com

Norton Healthcare is a leader in serving adult and pediatric patients in Louisville, Kentucky. Five hospitals provide inpatient and outpatient general care as well as specialty care.

Now I Lay Me Down to Sleep (NILMDTS)

Booth 126

720.583.3339

headquarters@nilmdts.org

www.nowilaymedowntosleep.org

NILMDTS offers the gift of healing, hope and honor to parents experiencing the death of a baby through the overwhelming power of remembrance portraits.

NTD Eurofins

Booth 209

888.683.5227

stephaniezichi@eurofins.com

www.ntd-eurofins.com

For more than 30 years, NTD Eurofins has pioneered the research and development of prenatal screening protocols for open neural tube defects, Down syndrome, Trisomy 18/13 and early onset preeclampsia. Our laboratory network focuses on responding to your needs while enabling earlier, more accurate results, and our quality screening tests and services provide numerous benefits to healthcare providers and patients.

NxGen MDx

Booth 830

855.776.9436

info@nxgenmdx.com

www.nxgenmdx.com

NxGen MDx is a women's health care company providing precise genetic testing combined with best-in-class science, unrivaled accuracy, and personal genetic counselors to help you make informed decisions about your health and reproductive journey.

Parent Project Muscular Dystrophy/ Decode Duchenne

Booth 923

917.273.5020

jen@parentprojectmd.org

www.parentprojectmd.org

Parent Project Muscular Dystrophy fights every single battle necessary to end Duchenne. Decode Duchenne provides free genetic testing and counseling to people with Duchenne or Becker muscular dystrophy who have been unable to access genetic testing.

Partners Personalized Medicine Laboratory for Molecular Medicine

Booth 107

617.768.8500

lmm@partners.org

www.personalizedmedicine.partners.org/laboratory-for-molecular-medicine/default.aspx

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.

PerkinElmer

Booth 523

800.762.4000

www.perkinelmer.com

Pairing our decades of experience in newborn screening with a state-of-the-art clinical genomics program, PerkinElmer Genomics provides one of the world's most comprehensive programs for detecting clinically significant genomic changes. Our high-quality, fast, affordable results allow clinicians to offer patients the answers they need to determine their path forward.

Pfizer Oncology

Booth 530

800.879.3477

www.pfizer.com

Pfizer is a leading research-based biopharmaceutical company. We apply science and our global resources to deliver innovative therapies that extend and significantly improve lives. For more than 150 years, we have worked to make a difference for all who rely on us.

Phoenix Childrens

Booth 921

602.933.5638

jpilka@phoenixchildrens.com

www.phoenixchildrens.com

With a medical staff of nearly 1,000 specialists, Phoenix Children's is one of the largest pediatric healthcare systems in the country, and the most comprehensive children's care facility in the state. We provide inpatient, outpatient, trauma and emergency care across more than 75 subspecialties.

PLUGS – Seattle Children's Hospital

Booth 329

206.987.5014

plugs@seattlechildrens.org

www.schplugs.org

PLUGS is a non-profit laboratory stewardship collaboration whose mission is to improve test ordering, interpretation, retrieval and reimbursement. Genetic counselors are important advocates for appropriate genetic testing – visit us to learn about our stewardship efforts!

PreventionGenetics LLC

Booth 605

715.387.0484

clinicaldnatesting@preventiongenetics.com

www.preventiongenetics.com

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, including whole exome sequencing, PGxome.

Progenity

Booth 729

events@progenity.com

www.progenity.com

Progenity offers advanced diagnostic tests that include the Preparent® Carrier Test, the Innatal® Prenatal Screen, the Resura™ Prenatal Test for Monogenic Disease and the Riscover® Hereditary Cancer Test.

PTC Therapeutics, Inc.

Booth 920

908.912.9426

www.ptcbio.com

PTC Therapeutics, Inc. is a science-led, global biopharmaceutical company focused on the discovery, development and commercialization of clinically-differentiated medicines that provide benefits to patients with rare disorders. PTC's ability to globally commercialize products is the foundation that drives investment in a robust pipeline of transformative medicines and our mission to provide access to best-in-class treatments for patients who have an unmet medical need. To learn more about PTC, please visit us on www.ptcbio.com and follow us on Facebook, on Twitter at @PTCBio, and on LinkedIn.

PWNHealth

Booth 131

www.pwnhealth.com

PWNHealth is transforming the way diagnostic tests are delivered, understood, and acted upon. We help to connect millions of patients to thousands of sophisticated and clinically-sound diagnostic tests, with individualized oversight and patient care. Our 50-state provider network and robust technology platform support a broad range of healthcare stakeholders.

Quest Diagnostics

Booth 113

973.520.2700

www.questdiagnostics.com

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.

RARE Science, Inc. – RARE Bears

Booth 803

info@rarescience.org

www.rarescience.org

In partnership with RARE Science, Inc., join NSGCares' special RARE Bear Stuff-and-Sew event in booth #803 any time the exhibit suite is open to help us reach our goal of completing 250 RARE Bears during this year's conference. The RARE Bear program, that gifts one-of-a-kind bears to one-of-a-kind kids, brings instant joy and globally unites rare communities seeking biological understanding of rare diseases of children on the way to improve therapies.

Recordati Rare Diseases Inc

Booth 623

908.236.0888

info@recordatirarediseases.com

www.recordatirarediseases.com/us

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

Retrophin, Inc.

Booth 430 & 431

888.969.7879

www.retrophin.com

Retrophin is a biopharmaceutical company dedicated to identifying, developing and delivering life-changing therapies to people living with rare disease.

Rhythm Pharmaceuticals

Booth 633

857.264.4280

info@rhythmtx.com

www.rhythmtx.com

Rhythm is a biopharmaceutical company aimed at developing and commercializing therapies for the treatment of rare genetic disorders of obesity. Not all obesity is the same.

Exhibitor Index continued

Roche Diagnostics Corporation

Booth 202

800.428.5074

www.diagnostics.roche.com/us

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.

Sanford Health

Booth 800

701.234.6510

sarah.julsrud@sanfordhealth.org

www.sanfordhealth.org

Sanford Health, one of the largest health systems in the United States, is dedicated to the integrated delivery of health care, genomic medicine, senior care and services, global clinics, research and affordable insurance. Headquartered in Sioux Falls, South Dakota, the organization includes 44 hospitals, 1,400 physicians and more than 200 Good Samaritan Society senior care locations in 26 states and 9 countries.

Sanford Research – CORDS Registry

Booth 122

605.312.6465

alyssa.mendel@sanfordhealth.org

www.research.sanfordhealth.org/rare-disease-registry

Based at Sanford Research, a not-for-profit research institution, CoRDS is a centralized international patient registry for all rare diseases. We support patient advocacy groups, individuals, and researchers to coordinate the advancement of research into the 7,000 rare diseases.

Sanofi Genzyme

Booth 211

800.745.4447

www.sanofigenzyme.com

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

Booth 628

617.274.4000

info@sarepta.com

www.sarepta.com

Sarepta is at the forefront of precision genetic medicine, having built an impressive and competitive position in Duchenne muscular dystrophy (DMD) and more recently in Limb-girdle muscular dystrophy (LGMD), Charcot-Marie-Tooth (CMT) MPS IIIA, Pompe and other CNS-related disorders, totaling over 20 therapies in various stages of development.

Sema4

Booth 724

www.sema4.com

Sema4 is a patient-focused health intelligence company offering genomic tests, digital tools, and clinical collaborations to deliver insights and drive better health decisions.

Sharsheret

Booth 213

201.833.2341

pcottrell@sharsheret.org

www.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.

Simons Searchlight

Booth 926

855.329.5638

coordinator@simonssearchlight.org

www.simonssearchlight.org

Simons Searchlight is a partnership of leading scientists, doctors, and families on a mission. We are determined to accelerate genetic research related to autism and other neurodevelopmental disorders.

Southwestern Women's Options

Booth 819

505.242.7512

admin@swoptionsnm.com

www.southwesternwomens.com

Southwestern Women's Options offers pregnancy terminations with no gestational limit for patients whose pregnancies have been diagnosed with fetal abnormalities. Our services are designed to meet your patient's needs in an atmosphere of warmth and respect.

Spark Therapeutics

Booth 625

1.855.SPARKTX

www.sparktx.com

Spark Therapeutics, a fully integrated, commercial gene therapy company, strives to challenge the inevitability of genetic disease by working to discover, develop and deliver gene therapies that address inherited retinal diseases.

Special Angels Adoption

Booth 228

740.395.3097

jennifer@specialangelsadoption.org

www.specialangelsadoption.org

Special Angels Adoption handles exclusively special needs adoptions all over the United States. Working with birth and adoptive families in all states allows us to serve our mission of helping all families of children with special needs.

Specialist TeleMed- Genetics

Booth 432

512.402.8155

info@specialisttelemed.com

www.specialisttelemed.com

Specialist TeleMed-Genetics provides board certified genetic counselors & physician Geneticists to augment your current program or providers, or to initiate a full-service program in its absence. We help support or build a genetics program customized to your patient's medical needs, and your system's branding requirements.

Stealth BioTherapeutics

Booth 700

Stealth BioTherapeutics is an innovative biopharmaceutical company developing therapies to treat mitochondrial dysfunction associated with genetic mitochondrial diseases and common diseases of aging. Our team works with patients and advocacy organizations to better understand their journey with mitochondrial disease and raise awareness of the unmet need our programs seek to address.

Texas Children's Pavilion for Women-Fetal Center

Booth 332

832.822.2229

fetal@texaschildrens.org

www.women.texaschildrens.org/fetalcenter

Texas Children's Fetal Center®, located in Houston, TX, is one of the nation's leaders in the diagnosis and treatment of abnormalities in unborn and newborn infants.

UAB Medical Genomics Lab

Booth 627

205.934.5562

medgenomics@uabmc.edu

www.genetics.uab.edu/medgenomics

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

UCLA Health

Booth 218

310.267.3292

www.uclahealthcareers.org

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 Health

Booth 533

415.353.4638

amy.ng@ucsf.edu

www.ucsfhealth.org

UCSF Health is recognized worldwide for its high-quality, innovative patient care, informed by advanced technologies and pioneering research. UCSF Health providers are leaders in virtually all specialties, including cancer, cardiology, children's health, neurology and transplant, and direct more than 1,500 clinical trials each year. UCSF Health exceeds the most widely used patient satisfaction and safety measures in the nation, and holds the highest designation for facilities that treat the most complex and specialized conditions. UCSF Health includes UCSF Medical Center, ranked among the nation's top five hospitals by U.S. News & World Report 2018-19, UCSF Benioff Children's Hospitals, and Langley Porter Psychiatric Hospital and Clinics. The health system also includes affiliations with top-tier hospitals and physician groups throughout the Bay Area to bring specialty care to patients close to home.

Ultragenyx Pharmacuetical Inc

Booth 833

415.483.8800

info@ultragenyx.com

www.ultragenyx.com

Ultragenyx is a biopharmaceutical company committed to bringing patients novel products for the treatment of serious rare and ultra-rare genetic diseases.

Undiagnosed Diseases Network (UDN)

Booth 105

844.746.4836

udn@hms.harvard.edu

www.udnconnect.org

The UDN is a research study funded by the NIH Common Fund. It is made up of clinical and research centers across the country working to improve diagnosis and care of patients with undiagnosed diseases.

Exhibitor Index continued

University of Chicago Genetic Services Laboratories

Booth 309

773.834.2795

mhelgeson@bsd.uchicago.edu

www.dnatesting.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.

University of Washington

Booth 331

800.713.5198

commserv@uw.edu

www.depts.washington.edu/labweb/

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.

UNMC Human Genetics Laboratory

Booth 529

402.559.5070

humangenetics@unmc.edu

www.unmc.edu/mmi/geneticslab

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.

VA Genomic Medicine Service

Booth 917

801.582.1565

christopher.lee2@va.gov

www.saltlakecity.va.gov

Department of Veterans Affairs. VA Genomic Medicine Service. Head office is located in Salt Lake City. VA Genomic provides care nationally. Genetic Counselors function as primary providers for this service.

Valley Children's Hospital

Booth 328

559.353.7058

dyee@valleychildrens.org

www.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

Booth 108

617.209.2090

info@variantyx.com

www.variantyx.com

Variantyx provides Genomic Unity™ whole genome testing services to clinicians for diagnosis of rare inherited disorders. We also enable hospitals and labs to profitably expand their test menu with validated genomic diagnostic solutions using our automated Genomic Intelligence® platform for simplified NGS data analysis, interpretation and clinical reporting.

Women's Care Florida

Booth 128

813.286.0033

rcuti@womenscarefl.com

www.womenscarefl.com

Women's Care Florida (WCF) specializes in several women's specialties including obstetrics and gynecology, gynecologic oncology, urogynecology, gynecologic pathology, breast surgery, genetic counseling, maternal fetal medicine, behavioral health, endocrinology, gastroenterology, primary care and fertility. WCF has nearly 100 locations and more than 360 providers across Central and North Florida.

YourDNA.com

Booth 333

www.yourdna.com

YourDNA is an outreach platform serving patients, practitioners and the public with resources to understand genomic health. Whether health curious, symptom serious or journey specific, we strive to help everyone answer the question.

A NEW ERA OF MEDICINE IS UPON US

Sarepta is at the forefront of precision genetic medicine research, having built an impressive and competitive position in Duchenne muscular dystrophy (DMD) and more recently in 6 Limb-girdle muscular dystrophy diseases (LGMD), Charcot-Marie-Tooth (CMT), MPS IIIA, Pompe and other CNS-related disorders, totaling almost 30 therapies in various stages of development. Sarepta's programs and research focus span several therapeutic modalities, including RNA, gene therapy and gene editing. Sarepta is fueled by an audacious but important mission: to profoundly improve and extend the lives of patients with rare genetic-based diseases.

SAREPTA
THERAPEUTICS

#DragTomorrowIntoToday

RAISING OUR VOICES,
SHOWING OUR STRENGTH

Music City Center ★ Nashville, TN

NSCC 39TH ANNUAL CONFERENCE

NOV 17-20, 2020

National Society of Genetic Counselors