



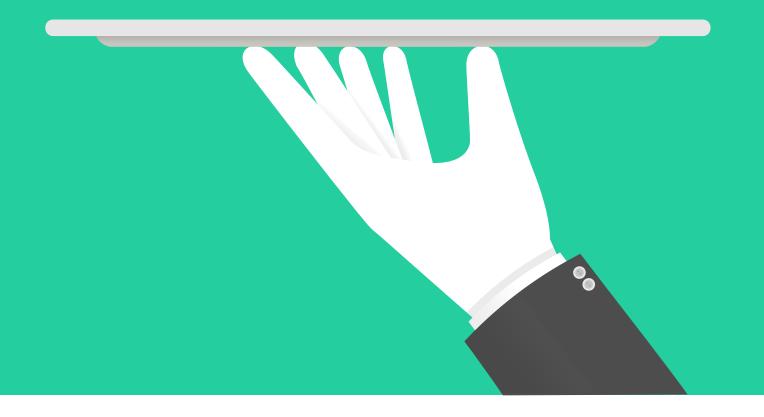
35th Annual Education Conference

PROGRAM BOOK

SEPTEMBER 28 - OCTOBER 1, 2016

WASHINGTON STATE CONVENTION CENTER • SEATTLE, WA

# white glove service for every specimen.



At Insight, we believe in a personalized approach to genetic testing.

Direct access to our licensed and board-certified genetic counselors, rare disease testing panels, custom gene sequencing and chromosome analyses are just some of the ways we can bring you...well, insight.

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### WELCOME TO SEATTLE

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

NSGC is celebrating this landmark time in genomics and the 35th anniversary of our AEC with education and networking designed to support your continued professional growth. Educational sessions will cover a variety of topics at the forefront of genomics such as somatic tumor testing, prenatal cell-free DNA screening and bioinformatics for genetic counselors. Educational highlights you do not want to miss include the pre-conference symposium, The Genetic Testing Laboratory: Insider View for Genetic Counselors (page 14) and our opening plenary sessions, Population Based Screening for Inherited Predisposition to Breast and Ovarian Cancer and Gene to Community and Community to Action: The Power of Social Media (page 14). Reference pages 14-21 for sessions submitted/sponsored by your NSGC Special Interest Group (SIG). Maximize your AEC experience by building your schedule around education sessions specific to your professional interests.

Invaluable experiences await you outside of the lecture room walls as well. Take advantage of the Welcome Reception, SIG meetings and the AEConnect area to network with more than 2,000 of your peers. Visit the Exhibitor Suite to see the latest product offerings and services within our profession. Catch up with friends and make new connections during this year's special 35th Anniversary Reception, program reunions and daily breaks. Attend the State of the Society Address and the SIG Fair to learn more about the latest efforts of your professional organization. Experience all of the incredible activities this week has to offer!

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



Jaron Hay





**Jason Flanagan, MS, CGC** 2016 AEC Subcommittee Chair

Renee Chard, MS, CGC 2016 AEC Subcommittee Vice-Chair



# Download the Official AEC Mobile App

NSGC delivers everything AEC directly to your fingertips via the 2016 NSGC AEC mobile app. View conference session descriptions, speakers and scheduling information. Use the interactive maps to navigate the Exhibitor Suite with ease, search the exhibitor directory and stay in the know with conference alerts. On your smartphone or tablet, search for "NSGC 2016 AEC" in your app store or direct your mobile browser to www.nsgc.org/mobileapp. Follow what others are saying or post your own insights on Twitter during the AEC using #NSGC16.

#### **ABOUT THE 35TH ANNUAL EDUCATION CONFERENCE**

#### Statement of Purpose

The 35th Annual Education Conference (AEC) focuses specifically on the educational needs of genetic counselors. The AEC addresses a wide variety of genetic counseling practice areas and provides the latest information for the genetic counseling profession. Attendees will gain important information to support and enhance their current practice by attending sessions such as: Patient Safety in the Era of Genomic Medicine and Billing Integrity and Compliance and Legal Liability for the Genetic Counselor. The Exhibitor Suite will provide current information and the opportunity to talk with exhibitors about new developments in genetics. The pre-conference symposia will provide in-depth information on specific topics relevant to the field of genetic counseling.

#### **Continuing Education**

NSGC has been approved to offer up to 32.25 Contact Hours at the AEC. CEUs earned through these activities will be accepted by the American Board of Genetic Counseling (ABGC) as Category 1 CEUs for purposes of certification and recertification. Individuals must be certified at the time of participation in the activity in order for it to count towards recertification.

Total	Earn up to:	32.25	Contact Hours
Sponsored Meal Sessions	Earn up to:	5.50	Contact Hours
AEC General Sessions	Earn up to:	21.75	Contact Hours
Pre-conference Symposia	Earn up to:	5.00	Contact Hours

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

#### **Evaluation Process/Claiming CEUs**

Individuals claiming CEUs MUST complete evaluations, however NSGC greatly appreciates feedback from all attendees. An attendance verification code will be provided in each session. See page 56 for a grid to assist you in tracking verification codes for the sessions that you have attended.

#### To complete your evaluations, follow these steps:

- 1 Log in to the NSGC website, and go to www.nsgc.org/aecevaluations.
- 2 Click on the Evaluation link to be directed to the evaluation website.
- 3. For each session, add the attendance verification code (AVC) that you received in the lecture room and then evaluate the session.
- 4 **Save each session as you go**, as the website will log you out after 10 minutes of inactivity. (If this happens, you must go back to the NSGC website and repeat steps 1 and 2 to log back in and re-enter any unsaved information.)
  - **PLEASE NOTE:** Although your responses to the individual session evaluation questions will save each time you click "Save and Continue" the AVC will need to be re-entered if you re-enter that session to edit your responses.
- 5. Once you have completed evaluations for all sessions attended, you will be able to evaluate the overall conference by selecting "Return to Registered Events."
- 6 Review your evaluation to make sure you claimed credit for each session you attended. Print and email your final certificate of credit earned for your records. Once you have printed your certificate, you will NOT be able to go back and edit any more sessions.

The deadline to complete your evaluations is December 1, 2016. Please contact the NSGC Executive Office at nsgc@nsgc.org if you need assistance.

NSGC will not be able to issue continuing education certificates if an evaluation is not completed by December 1, 2016. No exceptions will be made.

#### 2016 AEC Session Recordings

Maximize your AEC experience: View sessions you missed in Seattle, earn additional CEUs and review the valuable information you gathered during the conference by purchasing online session recordings. The AEC recordings package will feature all pre-conference symposia, plenary and educational breakout sessions.\* The online recordings will contain synced audio and PowerPoint presentations for each recorded session.

The full session recordings package, including both the pre-conference symposia and the AEC recordings, is available for a reduced price of \$149 for all conference attendees.\*\* Registered attendees will be able to order the AEC recordings through October 1, 2016, at the discounted rate, or following the conference at an increased rate. The AEC recordings package will be available to view in January 2017.

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

Visit www.nsgc.org/2016aec or stop by the registration desk to add session recordings to your registration.

- \* With speaker approval
- \*\* Discounted package rates only available when purchased with a conference registration.

#### Overall Conference Evaluation

To complete an evaluation of the overall conference, please follow the steps listed below:

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

#### GENERAL INFORMATION

#### **Registration Hours**

Washington State Convention Center – Atrium Lobby

Tuesday, September 27 5:00 PM – 8:00 PM

Wednesday, September 28 7:00 AM – 7:00 PM

**Thursday, September 29** 6:30 AM – 7:00 PM

Friday, September 30 7:00 AM – 7:00 PM

Saturday, October 1 7:30 AM – 1:00 PM

#### **Exhibitor Suite Hours**

Washington State Convention Center – Exhibit Hall 4AB

Wednesday, September 28 6:00 PM – 8:30 PM

**Thursday, September 29** 7:00 AM – 8:00 AM 5:00 PM – 7:45 PM

Friday, September 30 7:00 AM – 8:00 AM 11:15 AM – 3:00 PM 2:45 PM Passport to Prizes Drawing

#### Job Boards

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

#### Attendee List Information

Attendee lists were posted on the NSGC website prior to the conference and an updated list will be posted following the conference. Lists are available at the registration desk and are available for reproduction at the attendee's expense at the FedEx Office Print and Ship Center on Level 1 of the Washington State Convention Center. Attendee lists are provided solely for networking and may not be used for solicitation purposes. NSGC is not responsible for errors and/or omissions.

#### Handouts and Presentations

NSGC offers electronic versions of AEC session handouts when provided in advance by AEC speakers. A copy of the handouts will be available for reproduction at the attendee's expense at the FedEx Office Print and Ship Center on Level 1 of the Washington State Convention Center. All session handouts (if provided by the speaker) are posted on the NSGC website and will be available until March 1, 2017. To download handouts go to

www.nsgc.org/2016AECHandouts.

To download pre-conference symposia handouts go to www.nsgc.org/2016AECPCSHandouts.

#### **Business Center Hours**

The FedEx Office Print and Ship Center is located on Level 1 of the Washington State Convention Center and is open during the following hours:

Monday – Thursday 7:00 AM – 10:00 PM

**Friday** 7:00 AM – 9:00 PM

Saturday – Sunday 9:00 AM – 6:00 PM

#### Internet Access

NSGC attendees will have wireless Internet available in all meeting spaces and common areas at the Washington State Convention Center. Internet at the Convention Center can be accessed by using the network NSGC2016. The password is celebrate35.

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

#### sequenom

The Sheraton Seattle has provided complimentary wireless Internet in your guest rooms. Please request login information at the front desk.

#### Conflict of Interest Disclosures

All presenters at the AEC are required to disclose any conflicts of interest (COI) related to their presentation. To view these disclosures, visit www.nsgc.org/2016disclosures.

#### **Sponsored Sessions**

Sponsored meal sessions are available for pre-registration. If you pre-registered to attend a session, a ticket was printed with your badge. In order to be admitted to each session, please bring your conference badge and the ticket that pertains to that session. We encourage you to arrive early for each session to allow all attendees time to be seated. If you did not pre-register for a session but are still interested in attending, please stop by registration to check availability for each session.

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

#### **Executive Office Information**

**NSGC Executive Office** 

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

Executive Director Meghan Carey mcarey@nsgc.org



# **SCHEDULE-AT-A-GLANCE**

KEY:		
	Registration and Breaks	Concurrent Papers/Poster Presentation
	Pre-Conference Symposia	Educational Break Out Sessions
	Plenary Sessions	Sponsored Sessions
	NSGC Commitee, SIG and Leadership Activities	Program Reunions
	Exhibitor Suite	

### Wednesday, September 28

7:00 AM – 7:00 PM	Registration Open — Atrium Lobby							
7:00 AM – 8:00 AM	Pre-Conference Breakfast — Ballroom 6ABC Lobby							
8:00 AM – 2:00 PM	CEU Pre-Conference	Symposia						
	Dipping: (C Education (C Research in E Diverse Settings (C)	A02 Integrating Oncology and Genomics for Patient Care and Management Room 4C-3-4	A03 Oh th You'll Go! Counselin a Fast Pas Personal a Profession Growth Room 604	Genetic og as s to and nal	A04 Opening the cfDNA National Invasive Presentation of Expansion in the General Population and Impact on In Counselors, Clinical Provand Policy National Information Informat	Non- natal dgates: nto and Its dustry iders lakers	A05 Religion and Spirituality in Genetic Counseling Room 608 - 609	A06 The Genetic Testing Laboratory: Insider View for Genetic Counselors Room 606 - 607
10:15 AM – 10:30 AM	Pre-Conference Break	с — Ballroom 6ABC	Lobby					
2:00 PM – 2:30 PM	NSGC SIG Fair — Roc	om 615 - 617						
2:00 PM – 3:15 PM	AEC 101: Welcome to	the Emerald City –	— Room 618	- 620				
3:30 PM – 3:45 PM	AEC Opening Remark	cs — Ballroom 6AB0	C					
3:45 PM – 4:45 PM	CEU A07 Population	Based Screening fo	or Inherited	Predispos	ition to Breas	t and O	varian Cancer — l	Ballroom 6ABC
4:45 PM – 5:45 PM	CEU A08 Gene to Co	mmunity, Commun	nity to Actio	n: The Pov	ver of Social N	Media in	Genomics — Bal	Iroom 6ABC
5:45 PM – 6:15 PM	SIG Meetings							
	ART/Infertility SIG Room 307	Cardiovascular Room 303		ystic Fibro oom 310	osis SIG	Neurog Room	genetics SIG 602	Student/New Member SIG Room 603
6:00 PM – 8:30 PM	Welcome Reception in	Welcome Reception in the Exhibitor Suite — Exhibit Hall 4AB						
6:15 PM – 7:30 PM	CEU A09 Posters with Authors, Group A — Exhibit Hall 4AB							
8:00 PM	Various Program Reur	nions — see page 1	2 for more i	nformatio	n			

### Thursday, September 29

6:30 AM – 7:00 PM	Registration Open — Atrium Lobby				
7:00 AM – 7:45 AM	B01 Reproductive Genetics and Hereditary Cancer Screening: A Legal Perspective  Sponsored by Integrated Genetics — Ballroom 6E				
7:00 AM - 7:45 AM	SIG Meetings				
Leadership and Management SIG Meeting — Room 303 Psychiatric SIG Meeting — Room 602					
7:00 AM – 8:00 AM	Exhibitor Suite Open — Exhibit Hall 4AB				
7:00 AM – 8:00 AM	AEC Breakfast — Exhibit Hall 4AB				
7:00 AM – 7:45 AM	NSGC 2017 Board and Committee Leadership Orientation —	Room 307			
8:00 AM – 8:30 AM	<b>CEU B02</b> Janus Series I: The <i>BAP1</i> Tumor Predisposition Synd	rome — Ballroom 6ABC			
8:30 AM – 9:00 AM	Natalie Weissberger Paul National Achievement Award — Bal	Iroom 6ABC			
8:30 AM – 4:00 PM	AEC Outreach Program — Room 303				
9:00 AM – 9:15 AM	CEU B03 Beth Fine Kaplan Best Student Abstract Award — Ballroom 6ABC				
9:15 AM – 9:30 AM	CEU B04 Best Full Member Abstract Award — Ballroom 6ABC				

9:30 AM – 10:15 AM	<b>CEU B05</b> NSGC State of the Society Address — Ballroom 6ABC								
10:15 AM – 10:30 AM	AEC Break — Ballroom 6ABC Lobby								
10:30 AM – 12:00 PM	CEU Educational Breakout Sessions								
	B06 Diagnosis and Treatment of Cystic Fibrosis: A (Not So) Simple Recessive Condition Room 608 - 609	B07 Genetic Sc and Risk Assess for Gamete Do The Need for Consensus Gui for Donor Eligil Room 606 - 607	sments nors: delines oility	Perspective of Hereditary Colon Cancer: A Personal		B09 Next Gen Teaching: The Lecture As We Know It Is Dead Room 615 - 617			B10 The Results are In! Clinicians' Experience in Returning Results for Genomic Sequencing Room 611 - 614
12:00 PM – 1:00 PM	NSGC Committee Meeti	ings							
	Access and Service Deliv Room 306	very Committee	AEC Su Room	310 Room 30		Room 307	ship Committee * 7 M – 1:30 PM)		
12:30 PM – 1:30 PM	NSGC Committee Meeti	ings							
	Education Committee Room 308	Practice Commit Room 30		es	Marketing and Communications Workgroup Room 602		Publi Roon	c Policy Committee n 604	
12:00 PM – 1:15 PM	Re-analysis and Continue Sponsored by: Baylor M	ed Research: —	Room 6E		mpact of Sho	orter Tur	naround Tir	me, At	ypical Findings,
1:30 PM – 3:00 PM	CEU Educational Break	out Sessions							
	B12 Assessment of Copy Number Variation Using Next Generation Sequencing Data Room 615 - 617	B13 Patient Safety in the Era of Genomic Medicine: Implications for Genetic Counselors G		B14 Prenata Diagnostic Sequencing Genomics f Generation Room 611 -	tic Exome ing: Applications: Implementing Case for the Next on Genomics via Pu		ations: nenting Car nics via Pub Programs	ncer	B16 When Hoof Beats Mean Horses: New Insights into the Science and Personal Impact of Diagnosing and Treating Alzheimer's Disease Room 606 - 607
3:00 PM – 3:15 PM	AEC Break — Ballroom	6ABC Lobby							
3:15 PM – 4:15 PM	CEU B17 Dr. Beverly Ro Conversations — Ballroo		Lecture:	So Much Yes:	Creating Au	ıthentic l	Human Cor	nectio	on in Difficult
4:15 PM – 5:00 PM	NSGC Leadership Award	ds — Ballroom 6	ABC						
5:00 PM – 5:30 PM	Genome Magazine Code Presented by: Genome								
5:00 PM – 7:45 PM	Exhibitor Suite Open —	Exhibit Hall 4AE	3						
5:30 PM – 7:45 PM	AEC 35th Anniversary Reception — Exhibit Hall 4AB Sponsored by: MNG Laboratories and Myriad Corporation								
5:45 PM – 7:00 PM	CEU B18 Posters with Au	CEU B18 Posters with Authors, Group B Posters — Exhibit Hall 4AB							
7:00 PM – 8:15 PM	B19 Termination of Pregnancy for Indications of Genetic Disorder in Advanced Gestations — Ballroom 6E Sponsored by: Boulder Abortion Clinic								
7:00 PM	Various Program Reunion	ns, see page 12	for more	information					
7:30 PM – 8:30 PM	International SIG Meetin	g — Room 310							

### Friday, September 30

7:00 AM – 7:00 PM	Registration Open — Atrium Lobby				
7:00 AM – 8:00 AM	AEC Breakfast — Exhibit Hall 4AB				
7:00 AM – 7:45 AM	CEU C01 Key Challenges Associated with NGS-Based Tumor Profiling: Lab, Clinic and Patient Perspectives — Ballroom 6E Sponsored by: Personalis, Inc.				
7:00 AM – 7:45 AM	SIG Meetings				
	Education SIG — Room 308	Pediatric & Clinical SIG — Room 307	Research SIG — Room 602		
7:00 AM - 7:45 AM	NSGC Past Board Member Breakfast — Room 303				
7:00 AM – 8:00 AM	Exhibitor Suite Open — Exhibit Hall 4AB				

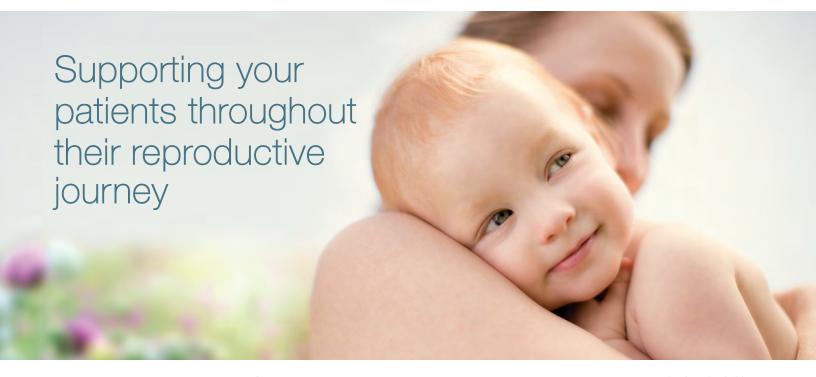
# **SCHEDULE-AT-A-GLANCE**

8:00 AM – 8:30 AM	CEU CO2 Janus Series II:	CEU CO2 Janus Series II: Barth Syndrome: So Much More than Cardiomyopathy — Ballroom 6ABC						
8:30 AM – 9:30 AM	CEU CO3 Professional Iss	CEU CO3 Professional Issues Panel — Ballroom 6ABC						
9:30 AM – 9:45 AM	AEC Break — Ballroom 6	ABC I	Lobby					
9:45 AM – 11:15 AM	CEU Concurrent Papers							
	<b>C04</b> Access and Service Delivery Room 606 - 607		C05 Genetic/Gen Testing I Room 611 - 614 Sponsored by: Inv Corporation		C06 Ethica Issues Room 615 -	l, Legal and Social 617	Pedia	Counseling: Prenatal to atrics n 608 - 609
11:15 AM – 3:00 PM	Exhibitor Suite Open —	Exhib	it Hall 4AB					
11:30 AM – 12:45 PM	CEU C08 Posters with Au	uthors	, Group C Posters -	— Exhibit Ha	II 4AB			
11:30 AM – 12:00 PM	NSGC SIG Chair Mixer —	– Rooi	m 307					
11:30 AM – 1:00 PM	Cancer SIG Meeting — F	Room	604					
12:45 PM – 2:00 PM	CEU C09 Sequence in Se Sponsored by: GeneDx	CO9 Sequence in Seattle: Updates on Variant Classification and Prenatal WES — Ballroom 6E Sponsored by: GeneDx						
1:45 PM – 2:15 PM	American Board of Gene	American Board of Genetic Counseling (ABGC) Business Meeting — Ballroom 6ABC						
2:15 PM - 2:45 PM	Accreditation Council fo	Accreditation Council for Genetic Counseling (ACGC) Presentation — Ballroom 6ABC						
2:45 PM	Passport to Prizes Drawii	ng —	Exhibit Hall 4AB					
3:15 PM – 4:45 PM	CEU Educational Breako	ut Ses	ssions					
	C10 Black & Whiteor Grey? Billing Integrity, Compliance and Legal Liability for the Genetic Counselor Room 611 - 614	Thera Disor Drug and t Gene our P	Novel Precision apies for Genetic ders: Clinical Trials, Development he Perspectives of tic Counselors and atients n 606-607	Affecting B Change to Clinical Our Genetic Tes Room 615 -	Behavior Molecular Therape o Improve for Duchenne and lutcomes in Becker Muscular Testing Dystrophy and the		eutics d e	C14 The Negative Genome Conundrum: What to Do When the Most Comprehensive Test is Negative Ballroom 6ABC
4:45 PM – 5:00 PM	AEC Break — Ballroom 6	ABC I	Lobby					
5:00 PM – 5:45 PM	CEU C15 – Genetic Cour	nselor	s in Emerging Roles	s — Ballroom	6ABC			
5:45 PM – 6:00 PM	Audrey Heimler Special I	Projec	t Award Presentation	on —Ballrooi	m 6ABC			
6:00 PM – 6:30 PM	CEU C16 – Jane Engelberg Memorial Fellowship Presentation — Ballroom 6ABC							
6:30 PM – 7:30 PM	SIG Meetings							
	Genomic Technologies S Room 307	SIG	Industry SIG Room 602		Personalize Room 303	d Medicine SIG		ic Health SIG n 308
6:45 PM – 8:00 PM		C17 Getting Down and Dirty with Ambry: The Truth About NGS — Ballroom 6E Sponsored by Ambry Genetics						
7:00 PM	Various Program Reunion	ns, see	e page 12 for more	information				

### Saturday, October 1

7:00 AM – 8:00 AM	AEC Breakfast — Ballroom 6ABC Lobby
7:00 AM – 7:45 AM	D01 Genome-Wide cfDNA Testing: Has the Time Come? — Ballroom 6E  Sponsored by: Sequenom
7:30 AM – 1:00 PM	Registration Open — Atrium Lobby
8:00 AM – 8:30 AM	D02 – Janus Series III: CHARGE: A Syndrome of Sensory Deficits and the Psychosocial Implications for Children and Families — Ballroom 6ABC
8:30 AM – 9:30 AM	D03 – Late-Breaking Plenary Session: The National Cancer Moonshot Initiative: A Significant Opportunity for Genetic Counselors — Ballroom 6ABC
9:30 AM – 10:00 AM	Incoming Presidential Address — Ballroom 6ABC
10:00 AM – 10:15 AM	AEC Break — Ballroom 6ABC Lobby

10:15 AM – 11:45 AM	CEU Educational Break	CEU Educational Breakout Sessions							
	<b>D04</b> Bioinformatics for Genetic Counselors 2.0: (More) Knowledge Room 615 - 617	D05 Challenges of Prenatal Cell-free DNA Screening from the Patient Advocacy Perspective Room 608 - 609	D06 Genetics and Primary Care: Preparing Primary Care Physicians for the Future of Genomic Medicine Room 606 - 607	D07 It's Not You, It's Your Tumor: Navigating the Journey from Som Tumor Testing to t Genetics Clinic Room 611 - 614					
11:45 AM – 1:00 PM	Metabolism/LSD SIG Me	eeting — Room 602							
11:45 AM – 1:00 PM		CEU D09 Hereditary Cancer Testing: Current and Future Challenges — Ballroom 6E Sponosored by: Invitae Corporation							
1:00 PM – 2:30 PM	CEU Concurrent Papers								
	<b>D10</b> Building the Genet Counseling Workforce Room 615 - 617	ic <b>D11</b> Genetic/Ger Testing II Room 611 - 614	Room 608		<b>D13</b> Counseling/ Psychological Issues Room 606 - 607				



Genetic carrier screening, preimplantation genetic testing (PGD/PGS), non-invasive prenatal testing (NIPT), and miscarriage testing. **Stop by the Natera booth to find out more.** 











# Who will be named Genome's Code Talker of the Year?

Genome Readers Honor Genetic Counselors Who Interpret Complexity With Compassion

Last April, *Genome* magazine kicked off an essay contest where patients and their families could pay tribute to a genetic counselor by nominating him or her for the **Code Talker Award**.

Come celebrate your profession by hearing stories written by people who've been touched by the skill and compassion of these three finalists! A book of essays will be made available at Invitae's reception later that evening. Don't miss it!



Amie Blanco, MS, LCGC Nominated by Selena Martinez



Allison Goetsch, MS, CGC
Nominated by Melissa Bruebach



**Anna Victorine, MS, CGC**Nominated by Brooke Johns

September 29th, 5:00 p.m. immediately following the NSGC's Leadership Awards

Sponsored by



Supported by





# **NSGC INVITES YOU...**

To celebrate all that we have accomplished as genetic counselors and as an organization over the past 35 years!

Join us at the **35th Anniversary Reception** on **Thursday, September 29** at 5:30 PM for drinks in the Exhibitor Suite (Two drink tickets will be provided per attendee)





Reception sponsored by:

ING LABORATORIES



# BOULDER ABORTION CLINIC

Specializing in Late Abortion for Fetal Disorders Quality Care for Women Since 1973

Warren M. Hern, MD, MPH, PhD

#### Director

American Board of Preventive Medicine Fellow, American College of Preventive Medicine Associate Clinical Professor, Department of Obstetrics & Gynecology University of Colorado Health Sciences Center

#### **Author**

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

- Outpatient abortion over 30 menstrual weeks for selected patients with documented fetal anomaly, fetal demise, or medical indications
- Routine preoperative ultrasound evaluation for all patients
- Routine preoperative use of laminaria for maximum safety
- Individual counseling and support
- Highly experienced and dedicated professional staff
- Tradition of research and teaching in abortion services
- Founding institutional member, National Abortion Federation
- Bilingual staff and physician: fluent in Spanish, Portuguese, and Italian
- Recent research publications on request
- Consultations on request

1130 Alpine Avenue, Boulder, CO 80304 Tel: (303) 447-1361 • (800) 535-1287 • Fax: (303) 447-0020 www.drhern.com

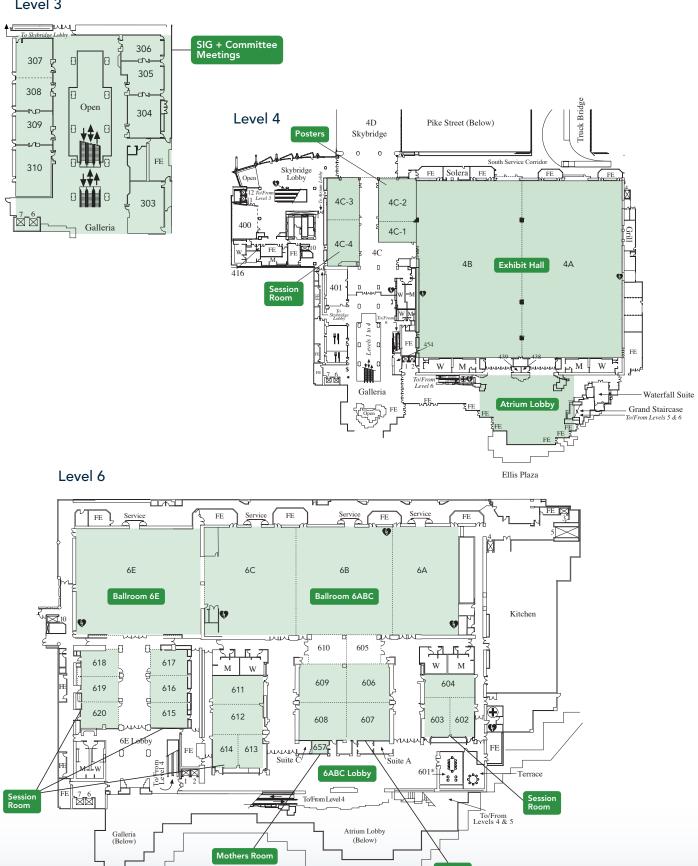
# **REUNION INFORMATION**

Please visit the NSGC AEC mobile app for updated reunion information

Time	Reunion Name	Location	Phone Number				
Wednes	day, September 28						
6:45 PM	University of Oklahoma Health Sciences Center	Tap House Grill 1506 Sixth Ave	206.816.3314				
7:30 PM	University of Maryland - MGC Program	Tap House Grill 1506 Sixth Ave	206.816.3314				
8:00 PM	Stanford University MS in Human Genetics and Genetic Counseling	Mr. West Cafe Bar 720 Olive Way	206.900.9378				
8:00 PM	University of Cincinnati Genetic Counseling Program	Palomino Restaurant and Bar 1420 5th Ave	206.623.1300				
8:00 PM	University of Texas at Houston	Local 360 Cafe & Bar 2234 1st Ave (at Bell St)	206.441.9360				
8:00 PM	Wayne State University	Daily Grill, Pike Place Lobby 629 Pike Street	206.624.8400				
8:30 PM	Canadian Genetic Counselling Programs: McGill University, University of British Columbia and University of Toronto	Tap House Grill 1506 Sixth Ave	206.816.3314				
Thursday	y, September 29						
6:30 PM	University of Utah	TBD					
7:00 PM	Arcadia University Genetic Counseling Program	Orfeo 2107 3rd Ave	206.443.1972				
7:00 PM	Case Western Reserve University	Elephant and Castle Pub 1415 5th Ave	206.624.9977				
7:00 PM	Mount Sinai	Frolik Kitchen + Cocktails 1415 5th Ave	206.971.8015				
7:00 PM	University of Alabama at Birmingham (UAB)	Blueacre Seafood 1700 7th Ave	206.659.0737				
7:00 PM	The Joan H. Marks Graduate Program in Human Genetics, Sarah Lawrence College	The Triple Door 216 Union Street	206.838.4315				
7:00 PM	University of Pittsburgh Genetic Counseling Training Program	Blueacre Seafood 1700 7th Ave	206.659.0737				
7:00 PM	University of Wisconsin - Madison	TBD					
7:30 PM	JHU/NHGRI Counseling Program	Mayflower Park Hotel 405 Olive Way	206.623.8700				
8:30 PM	California State University - Stanislaus and University of California Berkeley	TBD					
8:30 PM	University of Michigan	The Pike Brewing Company 1415 1st Ave	206.622.6044				
8:30 PM	University of Minnesota Genetic Counseling Program	Tap House Grill 1506 Sixth Ave	206.816.3314				
Friday, September 30							
7:00 PM	Northwestern University Graduate Program in Genetic Counseling	Tulio Ristorante Hotel Vintage-Seattle 1100 Fifth Ave	206.642.5500				
8:00 PM	University of California, Irvine	TBD					
9:00 PM	Brandeis University	Blue Acre Seafood 1700 7th Ave	206.659.0737				

### **CONVENTION CENTER FLOOR PLAN**

#### Level 3



#### WEDNESDAY, SEPTEMBER 28

#### **Pre-Conference Symposia**

8:00 AM - 2:00 PM

## A01 Double Dipping: Education Research in Diverse Settings

5.00 Contact Hours

1: Alix Darden, PhD, University of Oklahoma Health Sciences Center; 2: Carrie Guy, MS, CGC, Quest Diagnostics; 3: Claire Davis, MS, CGC, Sarah Lawrence College; 4: Erica Nelson, BS, 23andMe; 5: Emily Morris, MSc, CCGC, University of British Columbia

- Describe the principles and value of education research methodologies.
- Compare education research approaches and methods by example.
- Create education research questions through hands-on experience with mentors.
- Apply education research methodologies to designed research questions.

Submitted by: NSGC Education SIG and NSGC Research SIG

# A02 Integrating Oncology and Genomics for Patient Care and Management

5.00 Contact Hours

1: Victoria Raymond, MS, LCGC, CCRP, Trovagene, Inc; 2: Mark Robson, MD, Memorial Sloan Kettering Cancer Center; 3: Joy Larsen Haidle, MS, CGC, Humphrey Cancer Center; 4: Stephen B. Gruber, MD, PhD, MPH, USC Norris Comprehensive Cancer Center; 5: Thomas Slavin, MD, FACMG, DABMD, City of Hope Cancer Center; 6: Sara Pirzadeh Miller, MS, CGC, UT Southwestern Medical Center; 7: Tom Walsh, PhD, University of Washington

- Discuss somatic tumor testing clinical decision making.
- Describe how the information we provide to oncologists is utilized.
- Recognize the next frontier of genomic research.

Submitted and Sponsored by: NSGC Familial Cancer SIG

#### A03 Oh the Places You'll Go! Genetic Counseling as a Fast Pass to Personal and Professional Growth

5 00 Contact Hours

1: Kimberly Banks, MS, CGC, MBA, Guardant Health; 2: Elizabeth Butler, MS, CGC, GeneDx; 3: Melissa Maisenbacher, MS, CGC, Natera; 4: Donna McDonald-McGinn, MS, LCGC, The Perelman School of Medicine of the University of Pennsylvania, The Children's Hospital of Philadelphia; 5: Matt Tschirgi, MS, LCGC, Progenity; 6: Kathleen Valverde, MS, CGC, Arcadia University; 7: Leah Williams, MS, CGC, GeneDx

- Distinguish professional development from career advancement.
- Describe various strategies and paths of professional development as a genetic counselor.
- Generate a set of professional skills to place a genetic counselor on a path of career advancement.
- Examine characteristics of CVs and cover letters of genetic counseling applicants in a critical manner.

# A04 Opening the cfDNA Non-invasive Prenatal Screen Floodgates: Expansion into the General Population and Its Impact on Industry Counselors, Clinical Providers and Policy Makers

5.00 Contact Hours

1: Mary Norton, MD, University of California, San Francisco; 2: Erica Sturm, MS, CGC, Perinatal Quality Foundation; 3: Megan Maxwell, MS, LGC, Quest Diagnostics; 4: Lisa Demers, MS, CGC, Roche Diagnostics; 5: Colleen Wu, MS, CGC, Evicore Healthcare; 6: Kelly Chen, MS, CGC, LGC, Personalis, Inc.; 7: Danielle LaGrave, MS, LCGC, ARUP Laboratories; 8: Edye Conway, MS, CGC, Saint Alphonsus Maternal Fetal Medicine; 9: Shannon Mulligan, MS, CGC, Baylor College of Medicine, Texas Children's Fetal Center; 10: Kelly L. Adams, MS, LCGC, Kaiser Permanente

- Assess the unique factors in cfDNA noninvasive prenatal screening that impact pre- and post-test patient counseling for the general population.
- Identify challenges and strategies related to expanding pre-test education for cfDNA non-invasive prenatal screening to any woman in pregnancy.
- Describe factors that impact insurance coverage and reimbursement for cfDNA non-invasive prenatal screening, including analytical validity, clinical validity and clinical utility.
- Explore complex cases from both laboratory and clinical perspectives.

Submitted and Sponsored by: NSGC Prenatal SIG

## A05 Religion and Spirituality in Genetic Counseling

5.00 Contact Hours

1: Kate Wilson, MS, CGC, Quest Diagnostics; 2: Katelynn Sagaser, MS, CGC, Johns Hopkins Hospital, Prenatal Diagnosis and Treatment Center; 3: Jennifer Lemons, CGC, UT Health Science Center at Houston; 4: Brent Peery, DMin, BCC, Memorial Hermann-Texas Medical Center

- Define religiosity and spirituality (R/S) as well as several different belief systems.
- Illustrate possible R/S complexities that may arise in healthcare, specifically in regard to genetic counseling.
- Evaluate when R/S exploration would be beneficial in a genetic counseling session.
- Identify considerations and perceived challenges of genetic counselors related to performing R/S assessment.

### Submitted by: NSGC Membership Committee

# A06 The Genetic Testing Laboratory: Insider View for Genetic Counselors

5.00 Contact Hours

1: Katrina Kotzer, MS, CGC, Mayo Clinic; 2: Patricia Winters, MS, CGC, Illumina, Inc.; 3: Mathew Bower, MS, CGC, University of Minnesota Health; 4: W. Andrew Faucett, MS, LGC, Geisinger; 5: Heather MacLeod, MS, CGC, Cardiovascular Genetics Consultant; 6: Danielle LaGrave, MS, LCGC, ARUP Laboratories; 7: Jill Rosenfeld Mokry, MS, CGC, Baylor College of Medicine; 8: Alice Tanner, PhD, MS, CGC, FACMG, Emory University, Emory Genetics Laboratory, LLC; 9: Michelle Dolan, MD, University of Minnesota; 10: Lisa Sniderman King, MSc, CGC, University of Washington

- Describe in-depth specifics of genetic testing terminology and technologies relevant to both clinical practice and the practice of laboratory genetic counseling.
- Analyze largely unknown aspects of the genetic testing laboratory, including the history and importance of regulatory bodies, the test development process, the laboratory infrastructure and laboratory business relationships.
- Evaluate nuances and challenges within the genetic testing laboratory through the evaluation of ethical case examples and contributions to research.

Submitted and Sponsored by: NSGC Industry SIG

#### **Plenary Sessions**

3:45 PM - 4:45 PM

# A07 Population-Based Screening for Inherited Predisposition to Breast and Ovarian Cancer

1.00 Contact Hour

1: Mary-Claire King, PhD, University of Washington; 2: Muin J. Khoury, MD, PhD, Centers for Disease Control and Prevention; 3: Joy Larsen Haidle, MS, CGC, Humphrey Cancer Center; 4: Jean Enersen, King 5 TV

- Describe expert opinions about population screening for Hereditary Breast and Ovarian Cancer Syndrome (HBOC).
- Appraise potential benefits as well as barriers to population-based screening for HBOC.
- Consider critical elements of a proposed screening program including the population served, tests included, variants reported and follow-up care.

#### 4:45 PM - 5:45 PM

# A08 Gene to Community, Community to Action: The Power of Social Media in Genomics

100 Contact Hour

1: Matthew Might, PhD, University of Utah

- Describe non-traditional methods to create and foster connection of patients with rare diseases.
- Explain how genetic counselors can connect with patient-driven efforts to facilitate sharing of research data, patient advocacy and community-building.

# THURSDAY, SEPTEMBER 29

# Sponsored Breakfast Session

7:00 AM - 7:45 AM

B01 Integrated Genetics: Reproductive Genetics and Hereditary Cancer Screening – A Legal Perspective

0.50 Contact Hour

1: Phillip J. Duffy, Esq. Gibbons, P.C

- Describe concepts that participants can utilize to avoid and manage legal risk in their daily practice.
- Explain the legal importance of defining policies and procedures based on professional guidelines, providing informed consent and maintaining documentation.

#### Sponsored by: Integrated Genetics

#### **Janus Series**

8:00 AM - 8:30 AM

### B02 The BAP1 Tumor Predisposition Syndrome

0.50 Contact Hour

1: Robert Pilarski, MS, LGC, MSW, The Ohio State University

- Review the hereditary basis of uveal melanoma and the contribution of BAP1 mutations.
- Summarize the signs of the BAP1 tumor predisposition syndrome (BTPS) and the spectrum of associated cancers, penetrance estimates and management recommendations.
- Discuss the potential role of research studies for patients and families suspected of having BTPS.

#### **Best Abstract Awards**

9:00 AM - 9:30 AM

#### Beth Fine Kaplan Best Student Abstract Award

#### B03 Genetic Counseling Increases Parental Knowledge and Psychological Adaptation to Turner Syndrome Diagnosis

0.25 Contact Hour

1: Caitlin A. Austin

 Describe the effects of genetic counseling on adaptation in parents of children with Turner Syndrome.

#### Best Full Member Abstract Award

#### B04 Adapting Evidence-Based Strategies for Effective Communication in Cancer Genetic Counseling

0.25 Contact Hour

1: Robin Lee, MS, CGC

 Describe evidence-based strategies for effective communication with patients of limited health literacy.

#### **Plenary Session**

9:30 AM - 10:15 AM

### B05 NSGC State of the Society Address

0.75 Contact Hour

1: Jehannine Austin, MSc, PhD, CGC, CCGC, President, National Society of Genetic Counselors

- 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 2016.
- Outline the strategic initiatives in NSGC's 2016 2018 strategic plan.

# **Educational Breakout Sessions**

10:30 AM- 12:00 PM

#### B06 Diagnosis and Treatment of Cystic Fibrosis: A (Not So) Simple Recessive Condition

150 Contact Hours

1: Elinor Langfelder-Schwind, MS, CGC, Mount Sinai Beth Israel; 2: Matthew Pastore, MS, LGC, Nationwide Children's Hospital; 3: Laura Fischer, MS, CGC, Women and Children's Hospital of Buffalo; 4: Lisa Green, MA, Happy Heart Families; 5: Bonnie Watts Ramsey, MD, Seattle Children's Research Institute

- Describe recent developments in the field of cystic fibrosis (CF) research and mutation-specific therapies.
- Explain common CF newborn screening algorithms and their potential diagnostic outcomes.
- Recognize the needs of the family through the diagnostic and treatment journey (family perspective).
- Compare benefits and limitations of various CF testing platforms for risk assessment.

Submitted by: NSGC Cystic Fibrosis SIG

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#### B07 Genetic Screening and Risk Assessments for Gamete Donors: The Need for Consensus Guidelines for Donor Eligibility

1.50 Contact Hours

1: Lauren J. Isley, MS, LCGC, Counsyl, Inc.; 2: Amy Vance, MS, LCGC, Bay Area Genetic Counseling; 3: Peggy Orlin, MS, MFT, Private Practice at Pacific Fertility Center; 4: Lauri Black, MS, LCGC, Pacific Reproductive Genetic Counseling

- Summarize the current regulations and guidelines for gamete donor screening.
- Describe existing gamete donor screening practices, including carrier testing, psychological assessment and family medical history screening.
- Outline the issues behind the lack of uniform donor screening processes between egg and sperm donors and across gamete donor facilities.
- Assess the impact of the lack of uniform processes when performing a risk assessment and providing patient care.
- Review the efforts to establish consensus eligibility guidelines for gamete donors.

Submitted and Sponsored by: NSGC ART/Infertility SIG

# BO8 Historical Perspective of Hereditary Colon Cancer: A Personal and Professional Journey

1.50 Contact Hours

1: Richard Boland, MD; 2: Heather Hampel, MS, LGC, The Ohio State University; 5. Linda Robinson, MS, CGC, UT Southwestern Medical Center

- Describe the transformation of genetic testing for hereditary colon cancer over the last 40 years.
- Discuss the epigenetic factors for hereditary colon cancer and the implication on risk reduction.
- Describe the personal impact of hereditary cancer on a family.
- Discuss the international impact of population-based screening for Lynch syndrome.

#### B09 Next Gen Teaching: The Lecture As We Know It Is Dead

1.50 Contact Hours

1: Beverly M. Yashar, MS, PhD, CGC, University of Michigan; 2: Emily Edelman, MS, CGC, The Jackson Laboratory; 3: Catherine Reiser, MS, CGC, University of Wisconsin–Madison; 4: MaryAnn W. Campion, EdD, MS, CGC, Stanford University School of Medicine; 5: Leslie Cohen, MS, PhD, Case Western Reserve University School of Medicine

- Describe emerging educational and assessment methods.
- Discuss how to adapt these innovative approaches to diverse groups of learners.
- Apply active learning concepts to develop a mock genetic educational program including teaching and assessment methods.

Submitted by: NSGC Education SIG

#### B10 The Results are In! Clinicians' Experience in Returning Results for Genomic Sequencing

1.50 Contact Hours

1: Sarah Scollon, MS, CGC, Baylor College of Medicine, Texas Children's Hospital; 2: Julia Wynn, MS, CGC, New York Presbyterian Columbia; 3: Katie Lewis, ScM, CGC, National Institutes of Health

- Identify how return of results for whole exome sequencing/whole genome sequencing (WES/WGS) differs from single gene or panel genetic testing and how that may alter the return of results process.
- Recognize common challenges faced in the return of results process and methods for addressing these challenges.
- Apply lessons learned from the Clinical Sequencing Exploratory Research clinicians to your own return of results process in order to increase efficiency and improve patient experiences at your home institution.
- Recognize the valuable role of the genetic counselor in various areas of the WES/WGS return of results process.

#### **Sponsored Lunch Session**

12:00 PM - 1:15 PM

# E11 Improving Clinical Whole Exome Sequencing: The Impact of Shorter Turnaround Time, Atypical Findings, Re-analysis and Continued Research

1.00 Contact Hour

1: Alicia Braxton, MS, CGC, Baylor College of Medicine; 2: Yaping Yang, PhD, FACMGG, Baylor College of Medicine; 3: Pengfei Liu, PhD, FACMGG, Baylor College of Medicine; 4: Seema Lalani, MD, Baylor College of Medicine

- Illustrate categories of genetic variation that can be detected through whole exome sequencing (WES) testing.
- Summarize the WES testing process to optimize turnaround time and increase detection rate.
- State how WES re-analysis increases detection rate for initially negative cases.
- Indicate research opportunities available for patients with negative clinical exome.
- Examine clinical phenotypes in relationship to each other as a new disease cohort.

Sponsored by: Baylor Miraca Genetics Laboratories

# **Educational Breakout Sessions**

1:30 PM - 3:00 PM

# B12 Assessment of Copy Number Variation Using Next Generation Sequencing Data

1.50 Contact Hours

1: Kimberly Banks, MS, CGC, MBA, Guardant Health; 2: Kelly D.F. Hagman, MS, CGC, Ambry Genetics; 3: Dale Muzzey, PhD, Counsyl, Inc; 4: Zhongming Zhao, PhD, UT Health Science Center at Houston; 5: Hsiao-Mei Lu, PhD, Ambry Genetics

- Recall data regarding the use of nextgeneration sequencing (NGS) data for copy number variation (CNV) detection.
- Recognize the current use of CNV analysis from NGS in clinical practice.
- Interpret clinical reports describing results from CNV analysis from NGS data.

Submitted and Sponsored by: NSGC Genomic Technologies SIG

# B13 Patient Safety in the Era of Genomic Medicine: Implications for Genetic Counselors

1.50 Contact Hours

1: Wendy R. Uhlmann, MS, CGC, University of Michigan; 2: Thomas H. Gallagher, MD, University of Washington; 3: Stephanie M. Fullerton, DPhil, University of Washington

- Review basic principles of patient safety.
- Identify potential errors that have been reported to arise in the order, analysis, interpretation and follow-up of genetic tests.
- Recognize the implications of genetic testing for patient safety.
- Identify strategies for addressing and enhancing patient safety in your own genetic counseling practice.

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# B14 Prenatal Diagnostic Exome Sequencing: Genomics for the Next Generation

1.50 Contact Hours

1: Christina Alamillo, MS, CGC, LGC, Ambry Genetics; 2: Alicia Braxton, MS, CGC, Baylor Miraca Laboratories, Baylor College of Medicine; 3: Catherine Burson, MS, CGB, Center for Maternal Fetal Health at Rocky Mountain Hospital for Children; 4: Lauren Westerfield, MS, CGC, Baylor College of Medicine, Texas Children's Hospital; 5: Curtis R. Coughlin II, MS, MBe, CGC, University of Colorado School of Medicine

- Discuss the clinical utility of diagnostic exome sequencing in the prenatal population, including use for diagnosis, decision-making, preparation, family planning and pregnancy, and birth management.
- Describe the findings of the published literature regarding prenatal diagnostic exome sequencing.
- Identify ethical, legal and social implications of prenatal diagnostic exome sequencing.

Submitted and Sponsored by: NSGC Prenatal SIG

#### B15 Tier 1 Genomic Applications: Implementing Cancer Genomics via Public Health Programs

1.50 Contact Hours

1: Muin J. Khoury, MD, PhD, Centers for Disease Control and Prevention, CDC; 2: Debra Duquette, MS, CGC, Michigan Department of Community Health; 3: Natasha F. Bonhomme, Genetic Alliance

- Summarize the Centers for Disease Control and Prevention (CDC) Tier 1 Genomic Applications and their relevance to public health practice.
- Describe the Tier 1 implementation methods for public health departments that are outlined in the CDC Tier 1 Genomic Applications Toolkit, including bi-directional cancer registry reporting, educational programs, developing and tracking surveillance indicators, informing policy making and cascade screening.
- Identify successful examples of state public health programs and patient advocacy work involving Tier 1 Genomic Applications.
- Identify patient advocacy work being done to increase awareness of Tier 1 Genomic Applications.

Submitted by: NSGC Public Health SIG

#### B16 When Hoof Beats Mean Horses: New Insights into the Science and Personal Impact of Diagnosing and Treating Alzheimer's Disease

1.50 Contact Hours

1: Zachary Miller, MD, University of California, San Francisco; 2: Jill S. Goldman, MS, MPhil, CGC, Columbia University Medical Center; 3: Jamie Tyrone, RN, B.A.B.E.S. (Beating Alzheimer's by Embracing Science); 4: Susan Hahn, MS, CGC, Quest Diagnostics

- Recognize red flags for familial/ hereditary risk for Alzheimer's disease and other dementia.
- Describe current practices regarding genetic testing, imaging and biomarkers in predicting, diagnosing and treating dementia.
- Discuss the personal, logistical and emotional impact of undergoing comprehensive risk assessment for dementia.
- Explain how current and future drug studies may be beneficial to families with hereditary dementias.

Submitted and Sponsored by: NSGC Neurogenetics SIG

#### Dr. Beverly Rollnick Memorial Lecture

3:15 PM - 4:15 PM

#### B17 So Much Yes: Creating Authentic Human Connection in Difficult Conversations

1.00 Contact Hour

1: Belinda Fu, MD, Mayutica Institute for Communication in Medicine, University of Washington School of Medicine, Swedish Medical Center

- Experience how the act of affirmation can forge sincere connections and minimize misunderstanding.
- Heighten awareness of verbal and non-verbal behaviors that affect communication.
- Explore how improvisational theater skills can improve communication in medicine.

Sponsored by: Dr. Beverly Rollnick Memorial Fund

#### **Sponsored Dinner Session**

7:00 PM - 8:15 PM

# B19 Termination of Pregnancy for Indications of Genetic Disorder in Advanced Gestations

1.00 Contact Hour

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

- Describe the relevance of these services to genetic counseling.
- Identify the purpose, basic principles, and components of clinical practice including grief support.
- Outline the basic operative procedures and clinical results of this care.

Sponsored by: Boulder Abortion Clinic

#### FRIDAY, SEPTEMBER 30

# Sponsored Breakfast Session

7:00 AM - 7:45 AM

# CO1 Key Challenges Associated with NGS-Based Tumor Profiling: Lab, Clinic and Patient Perspectives

0.50 Contact Hour

1: Heather Wetzel, MS, LCGC, Personalis, Inc.; 2: Erin Ayash, MS, LCGC, Personalis Inc.; 3: Luna Okada, MS, CGC, AMITA Health Saint Alexius Medical Center

- Define the conditions and logistical considerations for somatic tumor testing.
- Summarize what the results of somatic tumor testing mean for your patients.
- Examine some of the challenges associated with somatic tumor testing including the significance and ethical considerations regarding pathogenic germline variants.
- Evaluate the experience of tumor profiling from a patient's perspective.

Sponsored by: Personalis, Inc.

#### **Janus Series**

8:00 AM - 8:30 AM

## C02 Barth Syndrome: So Much More than Cardiomyopathy

0.50 Contact Hour

1: Rebecca McClellan, MGC, CGC, Johns Hopkins School of Medicine

- Review the multisystem clinical presentation and discuss what we know about the disorder's connection to cardiolipin remodeling.
- Explore the varied experiences and often conflicting roles of a genetic counselor working with a rare disease support group.
- Outline the challenges faced by X-linked disease carriers.

Submitted by: NSGC Cardiovascular SIG

#### **Plenary Session**

8:30 AM - 9:30 AM

#### C03 Professional Issues Panel

1.00 Contact Hour

1: Jennifer Hoskovec, MS, CGC, University of Texas Medical School at Houston, 2: John Richardson, NSGC, 3: Cathy Wicklund, MS, CGC, Northwestern University Feinberg School of Medicine

- Review current initiatives focused on assessing demand for genetic counselors over the next 10 years.
- Outline strategies being pursued by ABGC, ACGC, AGCPD and NSGC to support expansion of the genetic counselor workforce to meet the future demand for genetic services.
- Review the status of federal legislation to add genetic counselors as authorized providers under Medicare.
- Outline NSGC member involvement in supporting the pending bill.

#### **Sponsored Lunch Session**

12:45 PM - 2:00 PM

# CO9 Sequence in Seattle: Updates on Variant Classification and Prenatal WES

1.00 Contact Hour

1: Elizabeth Butler, MS, CGC, GeneDx; 2: Carin Yates, MS, CGC, GeneDx; 3: Michelle Cahr, MS, CGC; Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine

- Explain variant classification methods and procedures.
- Examine the reasons for variant reclassification and its impact on clinical care.
- Describe the clinical utility of whole exome sequencing (WES) in the prenatal setting.
- Discuss the current knowledge of WES in the reproductive setting.

Sponsored by: GeneDx

# **Educational Breakout Sessions**

3:15 PM - 4:45 PM

#### C10 Black & White...or Grey? Billing Integrity, Compliance and Legal Liability for the Genetic Counselor

1.50 Contact Hours

1: Jodie Vento, MS, CGC, Children's Hospital of Pittsburgh of UPMC; 2: S. Craig Holden, Ober|Kaler; 3: Gillian Hooker, PhD, ScM, CGC, NextGDV

- Describe the federal anti-kickback, Stark, and other billing compliance regulations, and their roles in genetic testing services.
- Discuss the role of the clinical genetic counselor in regards to billing practice compliance and "genesurance" counseling.
- Recognize red flags indicating that billing practices may be out of compliance.

Submitted by: NSGC Access and Service Delivery Committee

#### c11 Novel Precision Therapies for Genetic Disorders: Clinical Trials, Drug Development and the Perspectives of Genetic Counselors and Patients

1.50 Contact Hours

1: Christian Jacobs, The FH Foundation; 2: Julie C. Sapp, ScM, CGC, National Human Genome Research Institute, National Institutes of Health; 3: Leslie Leinwand, PhD, University of Colorado Boulder; 4: Haroon Hashmi, PhD, Alnylam Pharmaceuticals

- Discuss the value of and considerations for patient participation in clinical trials.
- Identify ways that genetic information can drive therapeutic development.
- Explain the pathway for drug development.

Submitted by: NSGC Personalized Medicine SIG, NSGC Research SIG and NSGC Cardiovascular Genetics SIG

Sponsored by: NSGC Cardiovascular Genetics SIG

#### C12 Strategies for Affecting Behavior Change to Improve Clinical Outcomes in Genetic Counseling

1.50 Contact Hours

1: Scott T. Walters, PhD, University of North Texas Health Science Center

- Recall key components and principles of motivational interviewing (MI) in addressing risk behaviors.
- Describe client "change talk" and how it contributes to MI practice.
- Review MI techniques, including responding to client resistance, eliciting and reinforcing "change talk" and consolidating commitment around change.

# C13 The Advent of Molecular Therapeutics for Duchenne and Becker Muscular Dystrophy and the Implications for Genetic Counselors

1.50 Contact Hours

1: Lauren Morgenroth, MS, CGC, Childrens' National Health System; 2: Ann Lucas, MS, CGC, Parent Project Muscular Dystrophy; 3: Ann Martin, MS, CGC, Parent Project Muscular Dystrophy; 4: Laurie Paschal

- Describe the current natural history of Duchenne and Becker muscular dystrophy (DBMD).
- Explain the different therapeutic strategies in the pipeline for DBMD, with an emphasis on molecular therapeutics.
- Discuss the importance of rare disease patient registries such as DuchenneConnect.
- Recognize the benefits and risks that families face when participating in research.

Submitted by: NSGC Neurogenetics SIG

# C14 The Negative Genome Conundrum: What To Do When the Most Comprehensive Genetic Test is Negative

1.50 Contact Hours

1: Michael O. Dorschner, PhD, University of Washington; 2: Allison L. Cirino, MS, CGC, Brigham and Women's Hospital; 3: Laura Amendola, MS, CGC, University of Washington; 4: Sarah Scollon, MS, CGC, Baylor Texas Children's Hospital; 5: Julia Wynn, MS, CGC, Columbia University Medical Center; 6: Sawona Biswas, MS, CGC, Children's Hospital of Philadelphia

- Recognize the technical limitations of whole exome sequencing/genome sequencing (WES/WGS) with a focus on current sequencing methods, interpretation of variants and variant databases.
- Discuss common issues raised in disclosing and managing negative WES/ WGS results.
- Examine approaches to counseling patients about the limitations of WES/ WGS, setting realistic expectations and disclosing negative results.

Submitted and Sponsored by: Genomic Technology SIG

#### **Plenary Sessions**

5:00 PM - 5:45 PM

#### C15 Genetic Counselors in Emerging Roles

0.50 Contact Hour

1: Steven Keiles, MS, LCGC, Quest Diagnostics; 2: Heather L. Shappell, MS, CGC, Beacon Laboratory Benefit Solutions, Inc.; 3: Angela Walter, MS, CGC, Sanofi Genzyme Corporation; 4: Joan Scott, MS, CGC, Maternal and Child Health Bureau, Health Resource and Services Administration

- Highlight three emerging roles for genetic counselors in different aspects of the health system.
- Compare the professional pathways of genetic counselors who have taken unique roles and outline the skills and resources helped them along the way.
- Evaluate the value genetic counselors can bring to emerging roles in healthcare.

Submitted by: NSGC Roles of Genetic Counselors Taskforce

6:00 PM - 6:30 PM

### C16 Jane Engelberg Memorial Fellowship (JEMF) Presentation

0.50 Contact Hour

1. Leslie Evans, MS, CGC, Chair, JEMF Advisory Group; 2. Cynthia A. James, ScM, PhD, CGC, 2015 JEMF Awardee

- Review the history of the JEMF award and provide an update on current initiatives.
- Illustrate the utility of a psychological model for planning a research study and executing data analysis.
- Evaluate evidence of the influence of family history, genetic test results, demographic and clinical factors. on adaptation to living with or at risk for arrhythmogenic right ventricular cardiomyopathy.

#### **Sponsored Dinner Session**

6:45 PM - 8:00 PM

C17 Getting Down and Dirty with Ambry: The Truth About NGS

1: Aaron Elliott, PhD, Ambry Genetics; 2: Laura Panos-Smith, MS, CGC, Ambry Genetics

Sponsored by: Ambry Genetics

#### **SATURDAY, OCTOBER 1**

# Sponsored Breakfast Session

7:00 AM - 7:45 AM

### D01 Genome-wide cfDNA Testing: Has the Time Come?

0.50 Contact Hour

1: Erica Soster, MS, CGC, Sequenom; 2: Tom Westover, MD, Cooper University Hospital

- Summarize initial experiences with genome-wide cfDNA testing in the first year of use from a clinical laboratory perspective.
- Examine the implementation and utility of genome-wide cfDNA testing from a clinician's perspective.

Sponsored by: Sequenom

#### **Janus Series**

8:00 AM - 8:30 AM

#### D02 CHARGE: A Syndrome of Sensory Deficits and the Psychosocial Implications for Children and Families

0.50 Contact Hour

1: Meg Hefner, MS, CGC, Saint Louis University School of Medicine

- Define the diagnostic criteria and testing options for CHARGE syndrome in a clinical setting.
- Recognize how hearing loss, vision loss and other sensory deficits alter typical infant development and affect the clinical and psychosocial needs of patients with CHARGE syndrome and their family members.
- Explain the impact and implications of deaf-blind educational programs for patients diagnosed with CHARGE syndrome.

# Late Breaking Plenary Session

8:30 AM - 9:30 AM

#### D03 The National Cancer Moonshot Initiative: A Significant Opportunity for Genetic Counselors

1.00 Contact Hour

1. L. Michelle Bennett, PhD, National Cancer Institute NIH, DHHS

- Summarize the goals of the National Cancer Moonshot Initiative.
- List the findings and recommendations of the Blue Ribbon Panel (BRP).
- Identify opportunities for genetic counselor involvement in the Cancer Moonshot Initiative in the context of the BRP report.

# **Educational Breakout Sessions**

10:15 AM - 11:45 AM

#### D04 Bioinformatics for Genetic Counselors 2.0: (More) Knowledge is Power

1.50 Contact Hours

1: Michelle Fox, MS, LCGC; 2: Erica Ramos, MS, LCGC, Illumina, Inc.; 3: Eric W. Klee, PhD, Mayo Clinic; 4: Stephen E. Lincoln, Invitae

- Describe bioinformatics tools and databases used in clinical testing, in particular for quality assessment, variant annotation and classification.
- Contrast differing uses of bioinformatics databases and tools by various genetic tests.
- Discuss bioinformatics issues with laboratories, non-genetics clinicians and patients.
- Identify ongoing developments in bioinformatics that will impact clinical practice in the future.

Submitted and Sponsored by: NSGC Industry SIG

#### D05 Challenges of Prenatal Cellfree DNA Screening from the Patient Advocacy Perspective

1.50 Contact Hours

1: Cori Feist, CGC, Oregon Health and Science University; 2: Stephanie Meredith, MA, University of Kentucky Human Development Institute; 3: Megan Allyse, PhD, Mayo Clinic; 4: Victoria Miller, Trisomy 18 Foundation; 5: Myra Byrd, AXYS; 6: Marsha Michie, PhD, University of California San Francisco; 7: Linzee Carroll, 11q Research and Resource Group

- Provide examples of the impact of cfDNA screening on non-profit patient advocacy groups.
- Review evidence-based research identifying the most common challenges for patient advocacy groups.
- Develop strategies for support of these groups by the genetic counseling community.

#### D06 Genetics and Primary Care: Preparing Primary Care Physicians for the Future of Genomic Medicine

1.50 Contact Hours

1: Jason Vassy, MD, MPH, SM, Brigham and Women's Hospital, Harvard Medical School; 2: Carrie Lynn Blout, MS, CGC, LGC, Brigham and Women's Hospital; 3: Michael Dougherty, PhD, American Society of Human Genetics

- Describe the current landscape of primary care physicians and their comfort with genomic medicine.
- Explore outcomes surrounding the integration of whole genome sequencing into primary care and the provision of genetic counseling by primary care physicians.
- Discuss opportunities to facilitate the integration of genomics into primary care practice.

### Submitted by: NSGC Personalized Medicine SIG

#### D07 It's Not You, It's Your Tumor: Navigating the Journey from Somatic Tumor Testing to the Genetics Clinic

1.50 Contact Hours

1: Jennifer Morrissette, PhD, Center for Personalized Diagnostics, University of Pennsylvania; 2: Dana Farengo Clark, MS, CGC, University of Pennsylvania; 3: Daniel Catenacci, MD, University of Chicago; 4: Jacquelyn Powers, MS, LCGC, University of Pennsylvania

- Examine the current landscape of next generation sequencing (NGS) tumor testing to help genetic counselors identify somatic variants that may be more suggestive of a germline finding.
- Review implementation and early outcomes of University of Pennsylvania's patient referral process for somatic findings warranting genetic counseling and/or germline mutation testing.
- Review the University of Chicago's framework in development for preand post-test informed consent and counseling for patients undergoing NGS tumor testing based upon experience gained by retrospective review and stratification of GI clinical cohort.
- Discuss case examples for when to proceed with clinical germline genetic testing for a somatic finding.

# D08 Optimizing Compensation and Professional Advancement: From Negotiating Salary, Signing Bonuses and Benefits to Developing and/or Enhancing a Career Ladder

1.50 Contact Hours

1: Angela Trepanier, MS, CGC, Wayne State University; 2: Steven Keiles, MS, LCGC, Quest Diagnostics; 3: Shannon Morill-Cornelius, MS, LCGC, Western Connecticut Health Network; 4: Catherine Reiser, MS, CGC, University of Wisconsin; 5: Kristen Shannon, MS, LGC, Massachusetts General Hospital; 6: Katherine Wusik Healy, LGC, Cincinnati Children's Hospital Medical Center

- Recognize the opportunity that the current job market presents in terms of negotiating for better compensation and benefits and/or seeking advancement opportunities.
- Summarize strategies for negotiating for increased salary and benefits.
- Describe career ladders as a means of delineating advancement opportunities.
- Recognize the process of implementing and modifying a career ladder.
- Communicate a plan for achieving one's own compensation and/or advancement goals.

#### **Sponsored Lunch Session**

11:45 AM - 1:00 PM

#### D09 Hereditary Cancer Testing: Current and Future Challenges

1.00 Contact Hour

1: Andrea Forman, MS, LCGC, Fox Chase Cancer Center; 2. Steve Lincoln, Invitae Corporation; 3. Julie Cohen, ScM, Kennedy Krieger Institute

- Assess current challenges clinical genetic counselors face in terms of test selection, patient volume and clinical management.
- Discuss appropriate questions to ask when comparing and selecting genetic testing laboratory partners.
- Assess the emerging challenges and opportunities for genetic counselors in clinical practice.

Sponosored by: Invitae Corporation

# **CONCURRENT PAPERS**

# Friday, September 30 1.50 Contact Hours

	C04: Access and Service Delivery  Explore novel approaches to improve genetic counseling service delivery.  Illustrate how to use electronic tools to deliver genetics- focused education.  Discuss varied approaches to providing genetic counseling.	C05: Genetic/Genomic Testing I  Explore unique challenges in providing cancer focused care.  Analyze the impact of cancer genetic/ genomic testing on patients and clinicians.  Develop tools to address variables in cancer genetic/ genomic testing.  Sponsored by:	<ul> <li>C06: Ethical, Legal and Social Issues</li> <li>Identify unique ramifications of genetic testing for prenatal/ pediatric populations.</li> <li>Discuss the clinical uses of social media tools by genetic counselors.</li> <li>Construct perspectives on the use of self-disclosure.</li> </ul>	C07: Counseling: Prenatal to Pediatrics  Explore unique challenges in providing genetic/genomic testing to prenatal and pediatric populations.  Summarize the prenatal counseling milieu.  Identify novel ways of addressing patients' clinical/emotional needs.
		INVITAE		
	Room 606 - 607	Room 611 - 614	Room 615 - 617	Room 608 - 609
9:45 AM - 10:00 AM	Finding the Right Mix: Optimizing the Utilization of the Genetic Counseling Skill Set P. Read	We Can Work It Out: Hereditary Cancer Test Utilization Management in a Large Commercial Laboratory L. Cheng	Ramifications of Excessive Autosomal Homozygosity Detected by Single Nucleotide Polymorphism (SNP) Array: Investigation of Incestuous versus Non- Incestuous Relationships	Comparing Data from POC Testing of First, Second and Third Trimester Pregnancy Losses Highlights Differences and the Need for Genetic Counseling Outside the Box
			J. Chen	K. Howard
10:00 AM - 10:15 AM	A Novel Approach to Lab-based Clinical Genetic Counseling K. Lynch	Does the Mutation Fit the Family? Incidental Findings from Cancer Gene Panel Testing N. Brown	Melanoma Risk Genetic Counseling in Children: Engagement and Emotional Responses M. Plona	Exploring the Influence of Prenatal Aneuploidy Screening on Maternal-Fetal Bonding: Development of a Theoretical Model  C. Hippman
10:15 AM - 10:30 AM	Custom EPIC Work Queue to Improve Insurance Coverage of Genetic Testing  J. Howell	Analysis of Downstream Revenue Generated by a Hereditary Cancer Syndrome Diagnosis J. Huang	Have You Ever Googled a Patient? Social Media Intersects the Practice of Genetic Counseling N. Omaggio	Emerging Issues with NIPT: Genetic Counselors' Experiences and Perspectives with Incidental Findings A. Orta
10:30 AM - 10:45 AM	Clinician Education as a Vehicle for Improving High Risk Women's Path to Genetic Counseling: The Impact of Educational Interventions in Community Health Setting S. Greenberg	BRCA2 Mutation Carriers May Present with Primary Brain Tumors: A Review of a Multigene Panel Testing Cohort M. Jackson	Improving Pre-Test Counselling for NIPT: Women's Enduring Misunderstandings after Pre-test Counseling L. Little	Whole Genome Sequencing for Ostensibly Healthy Individuals: Genetic Counseling Challenges and Early Experiences M. Cochran
10:45 AM - 11:00 AM	Information is Powerful: Experiences from a Population Screening Initiative for Inherited Breast and Ovarian Cancer Risk K. East	Unexpected Findings of Germline CDH1 Mutations: Implications for Counseling Regarding Clinical Management M. Fay Jacobs	Prenatal Exome Sequencing: Issues of Clinical Utility and Beyond B. Castro	Patient Demographics in the Decision to Enroll or Decline Whole Exome Sequencing (WES) in the Pediatric Cancer Setting K. Bergstrom
11:00 AM - 11:15 AM	Establishing a Virtual Telegenetics Clinic for Cancer Genetic Counseling: Challenges and Solutions	How Narrow the Divide: Cross Lab Concordance for Expanded Inherited Cancer Panel Genes in ClinVar M. Judkins	'To Disclose or Not to Disclose': An Investigation of Counselor Self- Disclosure in the Field of Genetic Counseling B. Volz	Adolescent and Parent Perceptions of Disorders of Sex Development: A Brief Insight L. Williams
	N. Keshavan Reddy		D. VOIZ	

# **CONCURRENT PAPERS**

# Saturday, October 1 1.50 Contact Hours

1.50 Contact Hours				
	<ul> <li>D10: Building the Genetic Counseling Workforce</li> <li>Explore the use of social media/online platforms as genetic education tools.</li> <li>Define factors impacting genetic counseling professional growth/development.</li> <li>Identify emerging professional genetic counseling opportunities.</li> </ul>	<ul> <li>D11: Genetic/Genomic Testing II</li> <li>Explore the unique roles of lab-based genetic counselors.</li> <li>Develop tools to address variables impacting effective genetic/genomic testing.</li> <li>Classify emerging genetic/genomic testing methods.</li> </ul>	<ul> <li>D12: Adult Genetics</li> <li>Explore unique challenges in providing genetic counseling to adult patients.</li> <li>Describe how to tailor care to clinical subpopulations.</li> <li>Identify the ways in which genetic counselors can provide expanded care.</li> <li>Sponsored by:</li> </ul> Asuragen*	<ul> <li>D13: Counseling/ Psychological Issues</li> <li>Explore unique challenges in providing genetic/genomic testing.</li> <li>Develop frameworks for expanding and evaluating genetic counseling practice.</li> <li>Identify novel ways of addressing patients' clinical/emotional needs.</li> </ul>
	Room 615 - 617	Room 611 - 614	Room 608 - 609	Room 606 - 607
1:00 PM – 1:15 PM	Movement of Genetic Counselors from Clinical to Non-Clinical Positions: A National Workforce Survey S. Cohen	Is Bigger Always Better? Small Sequencing Panels versus Large Scale Next-Generation Sequencing Panels in Genetic Testing for Arrhythmogenic Right Ventricular Cardiomyopathy  B. Murray	Patients with Amyotrophic Lateral Sclerosis Have High Interest in and Limited Access to Genetic Testing K. Wagner	Patient Expectations for Non-Diagnostic Whole Exome Sequencing R. Hylind
1:15 PM – 1:30 PM	Ask Us Anything! The National Society of Genetic Counselors Expert Media Panel Meets Reddit AMA E. Ramos	Expansion of the Laboratory Genetic Counselors Role: Utilization of Laboratory- Based Genetic Counselors to Build Unique Patient – Specific Phenotype Panels S. Everhart	Low FMR1 CGG Repeat Length in Males is Associated with Family History of BRCA- Associated Cancers H. Adamsheck	A Health Beliefs Model Investigation of Fetal Echocardiography Uptake in Mothers of Children with Congenital Heart Defects S. Fitzgerald-Butt
1:30 PM – 1:45 PM	Flipping the Classroom and the Clinic: Meeting the Needs of the Expanding Genetic Counseling Workforce through Online Branching Case Studies A. Cummings	A Single-center Experience with Clinician Interpretation of Variants in Cardiovascular Genetics Indicates Clinically Impactful Disagreement with Testing Laboratories A. Bland	Exploration of Communication Strategies Used by Support Persons in Facilitating Cognitive and Emotional Processing of Information Within Alzheimer's Disease Risk Disclosure Visits L. Erby	Family History and Clinical Severity Predict Cardiac Anxiety in Patients with Arrhythmogenic Right Ventricular Cardiomyopathy and Their At-risk Family Members C. James
1:45 PM – 2:00 PM	Do Genetic Counseling Programs "Like" Facebook? T. Lepard Tassin	The Current and Future Contributions of Genetic Counselors in the Field of Lifestyle Direct-to- Consumer Genetic Testing: an Exploratory Study H. Green-Morfesi	Clinical Cardiac Screening of Hypertrophic Cardiomyopathy is Less Critical for Family Members of Mutation-Negative Cases C. Ko	Long-Term Impact of Genetic Testing Reporting on Understanding and Prioritization of Risk Information W. Kohlmann
2:00 PM – 2:15 PM	Exploring the Role of Genetic Counselors in Tumor Genomic Sequencing M. Weinberg	Genesurance: The Mysterious Element of Genetic Counseling S. Brown	Genetic Counseling for Alopecia Areata: Recurrence Risks of Alopecia Areata and Other Associated Conditions in First-Degree Relatives K. Agre	Validation and Extension of the Reciprocal-Engagement Model of Genetic Counseling Practice: A Qualitative Investigation of Genetic Counselor Goals, Strategies and Behaviors K. Redlinger-Grosse
2:15 PM – 2:30 PM	Why Do Genetic Counselors Consider Changing Jobs? A National Workforce Study S. Cohen	Personal and Family History in Patients with High Penetrance Germline Findings through Paired Tumor/Normal Sequencing K. Hanson	Creating a Medically Actionable Genetic Screening Panel for Healthy Individuals E. Haverfield	Effect of Photographs of Visible Genetic Conditions on Quality of Life Perceptions C. Falugi

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#### Objectives:

- Recognize varied approaches to building an evidence base to support best practices in genetic counseling.
- Identify opportunities for the genetic counseling community to expand the reach of genetic/genomic-based care.
- Evaluate the varied settings in which genetic counseling expertise is utilized.

**A09** Group A Posters Wednesday, September 28 6:15 PM – 7:30 PM 1.25 Contact Hours

Working Group M. Hallquist **B18** Group B Posters Thursday, September 29 5:45 PM – 7:00 PM 1.25 Contact Hours **C08** Group C Posters Friday, September 30 11:30 AM – 12:45 PM 1.25 Contact Hours

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Acces	ss/Service Delivery		genome sequencing  W. Kelley		value in rare disease diagnosis J. Ruschman
A-1	Working with the Hmong population in a genetics setting: Genetic counselor perspectives  A. Agather	A-31	The establishment of the professional society of genetic counselors in Asia: A report from the genetic counseling	A-58	Diagnostic yield using next generation sequencing techniques in the hearing loss population
A-4	Genetic counselor workflow study: The times are they a-changin'?		pre-conference workshop held at the 11th Asia-Pacific conference on human genetics	A-61	I. Shepard  Weathering the storm: Genetic
	C. Attard		in Hanoi, Vietnam M. Laurino		counselor satisfaction in the age of genomic medicine
A-7	Implementing multiple service delivery models to increase	A-34	Evaluation of an online educational tool for		C. Spaeth
	access to care: Experiences of a community genetics program		carrier screening  J. Lee	A-64	Increasing awareness of genetic counseling: A lesson plan for high school biology teachers
	L. Bucheit	A 27			S. Turner
A-10	The newly redesigned genetics home reference website as a genetic counseling aid  H. Collins	A-37	Scaling genetic counseling: A human-centered approach to creating an electronic GC platform E. Levin	A-67	Adults are not big kids: Adults undergoing whole exome sequencing represent a unique clinical population
A-13	Health care access in Wisconsin Amish and old order Mennonite	A-40	The production of prenatal		R. Willaert
	populations: A comparative study  J. Elliott		genetic testing educational videos for patients	Cance	r
			H. Lindh	A-70	A community mammography
A-16	Experiences of genetic counselors practicing in rural areas	A-43	The changing landscape of genetic counselors licensed in		high risk screening program: A precautionary tale
	M. Emmet		Washington state (2011-2015)		N. Armstrong
A-19	Who orders whole exome		A. Mackison	A-73	"Incidental" germline finding following somatic
	sequencing and why: Review of 181 preauthorization requests	A-46	Supporting young adults with neuromuscular disease with a new transitions tool		molecular profiling L. Bokovitz
	G. Fraley		A. McArthur	A-76	Longitudinal natural history
A-22	"Now what do I do?": A qualitative study of primary care providers and microarray analysis	A-49	Genetic counseling services in a patient centered medical home	,,,,	of dermal neurofibromas in individuals with Neurofibromatosis Type 1
	results of uncertain significance C. Guy		P. Robbins-Furman		A. Cannon
		A-52	A qualitative evaluation of the	A-79	Multigene genetic testing for
A-25	Development of tools to determine communication strategies for actionable genes		Pennsylvania Department of Health Down syndrome fact sheet		hereditary cancer susceptibility in the community setting: Do patients prefer more?
	from ClinGen's CADRe		E. Royer		J. Christiansen
	Working Group				5. 5.modanoon

A-82	Development of an iPhone application to support tracking and adherence to recommended guidelines for women with a BRCA mutation  S. Cohen	A-118	Assessing clinician confidence and preferences when incorporating genomics in the pediatric oncology clinic: Insights from an institutional survey  E. Quinn	A-151 A-154	Reportable variants in genes less commonly associated with cardiomyopathies  R. Latimer  De novo variant rate in pediatric
A-85	A needs assessment for the	A-121	CDH1 in the era of multigene		hypertrophic cardiomyopathy E. Miller
	development of a hereditary breast cancer syndrome support group in Greensboro, North Carolina K. Garbarini		panel testing: Discrepancies between the literature and observed phenotypes for missense variant carriers M. Roberts	A-157	Assessing medical examiners' current practices in utilizing genetic testing for autopsynegative sudden unexpected death in the young
A-88	Patient participation in family studies: A collection of semi-structured interviews	A-124	Germline implications of somatic tumor profiling and the evolving role of genetic counselors in	A-160	L. Moissiy  Numeracy and genetic
A-91	L. Garrett  The importance of cascade		oncology: A case series  B. Roscow		knowledge's effect on perceived recurrence risk of congenital heart defects
A-71	screening: Lessons learned from a family with Atypical Multiple	A-127	The psychosocial effects of the Li-Fraumeni education and early		K. Myers
	Endocrine Neoplasia Type 1 K. Guthrie		detection program on individuals with Li-Fraumeni syndrome J. Ross	A-163	Hypertrophic cardiomyopathy genotype prediction models in a pediatric population
A-94	The role of genetic counselors	4 400	5 15 15 15 15 15 15		R. Newman
	in education and communication about cascade testing for hereditary cancer syndromes R. Hagen	A-130	Preliminary baseline data from the scheduling of necessary advised procedures (SNAP) for BRCA iPhone application C. Scherr	A-166	Universal screening for elevated cholesterol in children: Assessment of awareness of and adherence to guidelines
A-97	The genetic counseling assistant:	۸ 122	Casa was aut. Dhanatusia		among Ohio pediatricians
	Dana-Farber's experience in establishing a new role	A-133	Case report: Phenotypic expression related to a germline		A. Onorato
A 100	C. Heydrich		POLD1 mutation in a large expanded pedigree	A-169	Left ventricular noncompaction cardiomyopathy and
A-100	Use of tumor histology to aid the identification of patients with		B. Smith		genetic syndromes  A. Parrott
	Lynch syndrome	A-136	A case report illustrating the		
	C. Mauer		utility of DNA banking, an underutilized genetic	A-172	Compound heterozygous NARS2 mutations identified by whole
A-103	Expanding the phenotype of DICER1 syndrome: Two years		counseling strategy K. Stoll		exome sequencing in two sibs with infantile-onset mitochondrial
	of DICER1 testing in a pediatric cancer genetics clinic	A-139	Incidental or not so incidental		multiorgan failure
	R. McGee		findingthat is the question:		J. Propst
A-106	Improved uptake and efficiency of genetic counseling services via an embedded genetic		Tumor profiling leads to germline FANCA mutation identification in a male breast cancer patient  H. Vig	A-175	Baseline knowledge of lipids and risk perception in patients with probable familial hypercholesterolemia or a
	counselor in a multidisciplinary breast cancer clinic	Cardio	ology		previous diagnosis A. Raper
	R. Noss			A 470	•
A-109	Cascade testing for hereditary cancer syndromes: Beyond Lynch and <i>BRCA</i>	A-142	Inherited cardiomyopathies in the pediatric population: What molecular testing reveals S. Aguilar	A-178	SMAD2 associated with thoracic aortic aneurysms and dissection found on whole exome sequencing for a child with a
	J. Osborne				congenital heart defect
A-112	Genetic counseling for lung cancer	A-145	Clinical cardiovascular genetic counselors take a leading role in team-based variant interpretation	A-181	C. Rigelsky  Prevalence and natural history of
	E. Palen		C. Caleshu	-	aortic root dilation in a longitudinal cohort of patients
A-115	Genetic counselors and physicians play separate but important roles in cancer risk management decision making	A-148	Uptake of presymptomatic genetic testing and cardiac screening for children at risk for an inherited arrhythmia		with Ehlers-Danlos syndrome Hypermobility Type A. Ritter
	A. Puski		or cardiomyopathy		
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A-187	L. Bailey  Where does hope fit in? The	A-220	Genetic counseling for reproductive fitness in	A-259	Family health history communication: Cross-cultural
	relationship between hope, uncertainty and coping efficacy		Fabry disease D. Laney		comparison of knowledge of familial disease history
	in mothers of children with Duchenne/Becker Muscular Dystrophy	A-223	Genetic counseling of hearing loss: Where we've been and	A-262	A. Elrick  "If I saw this, I would feel well-
	M. Bell		where we're going S. Noon	7.101	informed" to "in a word, it was awful": Evaluation of a novel
A-190	Patient perspectives on intimate partner violence discussion during genetic counseling sessions  C. Chen	A-226	The impact of treatment on reproductive decisions in Fabry disease		educational video on pharmacogenetic testing M. Ensinger
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A-199	Attitudes toward genetic counseling and testing in patients with inherited endocrinopathies	A-235	The patient's perspective: Is there a role for religious spiritual assessment in genetic counseling?  L. Rogers	A-271	The impact of patient education on understanding of cfDNA screening among pregnant women in a general risk population:
	T. Gallagher	A-238	The informational and emotional support needs of grandparents		The Rhode Island experience E. Kloza
A-202	Patient and parent experiences of dual genetic diagnoses: Neurofibromatosis Type 1 and an		of children with Pompe disease N. Rudy	A-274	An assessment of genetic provider and parent
	additional genetic disease H. Grandine	A-241	Family impact of 1p36 deletion syndrome		communication patterns in genetic counseling sessions
A-205	Moderating effects of trait		R. Sheikh		N. Lahner
	hope and coping styles on perceived personal control in genetic counseling M. Hackbardt	A-244	Attitudes towards facial transplants among individuals with neurofibromatosis	A-277	Capitalizing on the genetic counselor role in the implementation of a lab utilization management model
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A-208	Shared medical and psychosocial concerns among adolescents and young adults with craniofacial	A-247	Ramifications of neurofibromatosis on self-esteem		for non-genetic providers surrounding genetic test
	microsomia: A qualitative study	4 050	D. Singman		navigation and interpretation  E. Leeth
A-211	K. Hamilton  Alzheimer's disease development	A-250	The impact of hyperphagia and food restriction on siblings of individuals with Prader-	A-280	Factors influencing admission into genetic counseling programs
	in adults with Down syndrome: A caregiver's perspective		Willi syndrome E. Wishnefsky		L. Lipe
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	counseling: A qualitative study of		patients amenable to mutation specific therapies in Duchenne	A-286	Knowledge and confidence of
	URM individuals currently in the profession  A. Kass		Muscular Dystrophy: Knowledge of resources will fuel genetic counselors' impact		genetic counselors with state laws and training for managing the option of abortion in the
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					S. Rhine

A-289	Cystic fibrosis-related infertility: Thoughts and experiences of men in romantic relationships M. Sikes	A-325	Keeping somatic mosaicism in the differential: The diagnosis of Schimmelpenning-Feuerstein- Mims syndrome through skin biopsy L. Kehoe	A-364	Novel finding of complete paternal uniparental isodisomy 4 in a girl with a complex congenital heart defect and bilateral optic nerve hypoplasia
A-292	Low fetal fraction prevents detection of fetal triploidy by cell-free DNA screening  B. Tucker	A-328	MAP3K1 mutations are a common cause of 46, XY gonadal dysgenesis L. Mohnach	A-367	A. Shealy  Parental understanding of whole exome sequencing: A comparison of perceived and
A-295	Storytelling and family communication about Type 2 diabetes in an urban Appalachian community	A-331	Regions of homozygosity: Implications on testing and counseling strategies R. Mostafavi	A-370	actual understanding L. Tolusso Use of next-generation
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A-298	The utility of genomic variant databases in genetic counseling E. Brokamp	A-337	Secondary findings in trio family members of probands undergoing diagnostic	A-373	De novo deletion of GATAD2B putative regulatory region associated with clinical features
A-301	Genotype-phenotype correlation of individuals with chromosome 8p23 duplication or		exome sequencing Z. Powis		consistent with GATAD2B haploinsufficiency K. Wain
A-304	deletion syndromes  C. Burden  15g overgrowth syndrome:	A-340	Continued coverage and reimbursement challenges for diagnostic exome sequencing after 5 years, genetic counselors	A-376	Sequencing the coding exon of <i>GJB2</i> may be a better testing strategy for familial cases of
A-304	A possible new diagnosis with the smallest reported duplication associated with an	A 242	can help to overturn denied cases Z. Powis		autosomal recessive nonsyndromic hearing loss: A case report E. Wakefield
A-307	overgrowth phenotype  J. Diaz  Novel pathogenic variant in	A-343	Navigating neurometabolic disorders: Uncovering a rare X-linked recessive disorder in a heterozygote female	A-379	Test utilization and the role of genetic counseling in pediatric
A 307	HNRNPK identified in a female with Au-Kline syndrome  E. Fanning	A-346	C. Rajakaruna  Diagnostic yield of genetic		hematology at a tertiary care center K. Zajo
A-310	Genetic counselor consent reduces ancestry-related differences in choice to receive secondary findings in a large-	A-349	testing at the Children's Hospital Colorado autism genetics clinic H. Raszka Development of a test quality	A-382	Genetic test utilization management: Trends of decreasing costs of genetic test orders
	scale genomic sequencing study K. Fiallos		assessment tool: A professional resource for genetic counselors  J. Riley	THUI	L. Zetzsche  RSDAY POSTERS
A-313	Experiences of exome sequencing in newborns: A peek into BabySeq C. Genetti	A-352	Facilitating human disease gene discovery through intersection of chromosomal	Access	s/Service Delivery  Utility of a patient-facing family
A-316	Further clinical delineation of <i>PACS1</i> -Related syndrome: A recurrent <i>de novo</i> pathogenic variant	A 255	microarray and whole exome sequencing data  J. Rosenfeld		health history assessment tool to refer patients for genetic evaluation L. Baumgart
A-319	J. Hoffman  Further evidence of a likely pathogenic variant in TWIST1 as causative of Saethre-	A-355	Pediatrician practice regarding the genetic evaluation of children with autism spectrum disorder  A. Rutz	B-5	Genetic testing for hereditary cancer predisposition: When can a targeted discussion with a non-genetics clinician provide
	Chotzen syndrome C. Hollinger	A-358	Association of airway abnormalities with 22q11.2 deletion syndrome	D.C.	adequate consent?  A. Buchanan
A-322	A comparison of self-reported ethnicity and genetic ancestry	۸ 241	R. Sacca	B-8	Attitudes about the use of internet support groups and the impact among parents of children
	K. Kaseniit	A-361	Whole exome sequencing identifies a pathogenic variant in <i>TSC1</i> in a father and son		with Cornelia de Lange syndrome C. Cacioppo
			without typical findings of Tuberous Sclerosis Complex		

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B-11	Video-assisted genetic counseling in patients with ovarian, fallopian and peritoneal cancer  R. Covington	B-44	Prenatal testing in pregnancies established through in vitro fertilization in the era of noninvasive prenatal testing	B-77	Unaffected women's decisions to have prophylactic risk- reducing mastectomies S. Galloway
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B-14	Utilizing contracted telephone genetic counseling services within an established cancer genetic counseling clinic: Benefits and drawbacks	B-47	Use of technology solutions increases efficiency of genetic counseling for hereditary cancer <i>L. Servais</i>	B-80	Single nucleotide polymorphism (SNP) testing in breast cancer risk (BCR) assessment: Patient interest, knowledge and education C. Heydrich
	D. Cox				
B-17	Establishing a multidisciplinary hereditary cancer risk management clinic	B-50	Genetic counseling clinic: Expanding genetic services to the pediatric population K. Siefkas	B-83	Oncologists' awareness, understanding and usage of germline NGS-based multigene panel tests for heritable cancer susceptibility in patients and
	A. Forsha	D F2	NAVI II II II II I		their families
B-20	Client perspectives on the utilization of genetic services	B-53	Who are the cardiologists early to adopt integration of genetic counselors into clinical practice?		C. Kurpad
	in a community-based hereditary cancer screening program		K. Spoonamore	B-86	Pre-test genetic counseling as a requirement for germline
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B-23	Referral of triple negative breast cancer patients to cancer		selected by patients at risk of hereditary breast and ovarian	D 00	G. Lazarin
	genetics services in the community setting		cancer syndrome: A cohort study  J. Szender	B-89	Genetic counseling complexities of CHEK2 positivity: Medical
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B-26	Increasing genetic counseling referral among gyn oncology		from mammography to genetic counseling: Challenges		C. Lewis
	registry patients meeting NCCN guideline criteria: A		and possibilities  E. Watson	B-92	Endometrial cancer risk perception in women diagnosed
	collaborative approach				with Lynch syndrome
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B-29	Why is cancer genetic counseling underutilized by women identified as at risk for hereditary breast cancer? Patient perceptions of barriers following a referral letter	B-62	Racial variation in the frequency and genotype–phenotype correlations of <i>MLH1</i> , <i>MSH2</i> , <i>MSH6</i> , and <i>PMS2</i> gene mutations;	B-95	Patient-reported clinical outcomes and personal perspectives after risk reducing surgery  C. Mauer
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C-72	B. Burnett  Assessing VHL p.Pro81Leu- A low penetrance, pheo-		personal and/or family history of breast cancer. Subsequent gastrectomy confirms the presence of a diffuse gastric tumor	C-147	Diagnosis of Fragile X syndrome: A pre- and post-diagnosis comparison of carrier mothers' emotional and support
	predominant variant?  K. Dilzell		in one of the unaffected probands F. Oh		experiences A. Catchings
C-75	Types and frequencies of Lynch syndrome mutations identified through multigene panel testing C. Espenschied	C-111	Multigene panels in prostate cancer patients with familial risk: Unexpectedly high mutation rates in non-BRCA genes  C. Radford	C-150	Patient preferences for recontact and their monitoring coping style following <i>BRCA</i> mutation testing <i>R. Dahle</i>
C-78	Breast and colorectal cancer risk in monoallelic <i>MUTYH</i> carriers ascertained via multigene panel testing	C-114	Identification of patients for genetic follow-up: Results from tumor gene profiles	C-153	A unique case of Down syndrome caused by nonmosaic Y;21 translocation  J. Foster
C 04	K. Fulk	C-117	B. Reys  Average age of diagnosis of	C-156	The psychosocial impact of
C-81	Evaluation of two risk prediction models for patients with endometrial cancer seen in a hereditary cancer clinic	C-117	ovarian cancer for women with pathogenic variants in BRIP1, RAD51C and RAD51D		diagnosis on caregivers of children with 3q29 deletion syndrome  M. Glassford
	C. Garby Haskins		S. San Roman	C-159	Communication predictors of
C-84	Design and enhanced validation of a 36-gene guideline-compliant inherited cancer panel	C-120	Variant rate by panel type across testing laboratories  A. Schmidt	0.07	patient and companion satisfaction with Alzheimer's disease genetic risk disclosure sessions
C-87	Suspected germline variants	C-123	Ancestry-based cancer risks associated with APC I1307K		Y. Guan
	in snapshot NGS tumor genotyping and genetic counseling implications	C-126	L. Sharma  Fanconi Anemia (FA) type solid tumors in FA heterozygotes	C-162	Nationwide newborn screening program for mucopolysaccharidoses in Taiwan: Confirmatory diagnosis
C-90	K. Gravelin  Lost in translation: How medical		identified via inherited cancer gene testing		and genetic counseling Y. Huang
	interpreters modify the communication of whole exome	C 400	A. Stettner	C-165	A Delphi survey of
	sequencing results during translation for Spanish-	C-129	All in the family: A first look at outcomes when multiple relatives		personal utility J. Kohler
	speaking families		undergo multi-gene panel testing		
	A. Gutierrez		M. Umali		

C-168	Direct and indirect non- disclosure preimplantation genetic diagnosis for Huntington's disease	C-204	Lessons learned from a genome-scale carrier screening study: Implications for research and practice	C-240	Prenatal testing for Noonan syndrome and related disorders: Data review and analysis D. Wilson Mathews
	A. Machaj		M. Gilmore	C 040	B.:
C-171	The needs and expectations of parents of children with rare conditions that are undergoing whole exome sequencing	C-207	How positive is your prediction? Computing confidence intervals on positive predictive value for non-invasive prenatal screening	C-243	Patient perception of residual risk post negative non-invasive prenatal testing  T. Wittman
	J. Malcolmson		I. Haque	C-246	Genetic testing for 46,XY
C-174	Discussing reproductive implications of exome sequencing findings with adolescents and their parents	C-210	What we are learning from studying balanced chromosome rearrangements at the nucleotide level	C-249	disorders of sex development in a prenatal setting A. wray "Ashkenazi Jewish" conditions
	R. Mueller		T. Kammin	C-247	found in non-Jewish individuals
C-177	Unknown consanguinity reveals homozygous <i>CLCN7</i> mutations previously reported with autosomal dominant Osteopetrosis Type II: A case report	C-213	A case of inherited copy number variant as explanation for multiple monosomies detected on NIPT N. Krstic	C-252	S. Yarnall  Clinician views on expanded newborn screening using whole genome sequencing
	R. Nuccio	C-216	Two cases of complete		C. Young
C-180	Paternal adaptation to a child's diagnosis of Down syndrome:		hydatidiform mole with coexisting live fetus identified by SNP-based cfDNA screen	Pediat	trics
	Predictors of personal well-being and family quality of life		N. Krstic	C-255	The association of functional disability and pain catastrophizing with healthcare utilization among
C 102	M. Oliver	C-219	Preimplantation genetic diagnosis for maternally		individuals with Ehlers-Danlos syndrome hypermobility Type
C-183	Understanding the psychological impact of pediatric whole exome sequencing results on parents		derived <i>de novo</i> mutation in the dystrophin gene (D,D) A. Machaj	C 250	K. Barfiwala
	R. Rabin		A. Wachaj	C-258	A complex X chromosome rearrangement in a female with
C-186	The undiagnosed patient and the diagnostic odyssey:	C-222	Partial 3q tetrasomy in an affected male fetus implicates dosage effect with an atypical		tall stature and absent menses  A. Essendrup
	Current genetic counseling practices and perspectives		lower urinary tract obstruction  S. Mulligan	C-261	Hypocalcemia and full scale IQ in 22q11.2 deletion syndrome
	A. Wardyn	C 00F			K. Grand
Genet	ic/Genomic Testing	C-225	Maximizing accuracy, clinical utility and patient experience of noninvasive prenatal	C-264	CHARGE Syndrome Clinical
C-189	Comparing the clinical yield of carrier screening: Genotyping		screening via dynamic iterative depth optimization		Database Project: ENT findings are common and affect development
	versus exon sequencing		D. Muzzey		M. Hefner
	K. Beauchamp	C-228	1q21.2 microdeletion: An	C-267	CHARGE syndrome: The
C-192	Intermediate FMR1 CGG repeat sizes (35-54) may also contribute to fertility issues in women		underreported cause of Nager syndrome? S. Nassef		importance of inner ear MRI and CDH7 testing for diagnosis as the dysmorphology is not
	with potential premature ovarian insufficiency	C-231	Should professional societies		always obvious  M. Hefner
	T. Carter		reconsider population-based carrier screening for Fragile X	C-270	Disorders for inclusion in
C-195	A clinical perspective of sex chromosome abnormality screening via cell-free DNA		syndrome? A clinical testing laboratory's experience  K. Owens	C-270	newborn screening: Health care providers' preferences H. Peay
	S. Detweiler	C-234	Non-invasive prenatal screening:	C 070	
C-198	Indications associated with a prenatal diagnosis of Beckwith-		Everyone wants it, who's actually getting it?	C-273	Congenital anomalies in infants of diabetic mothers: A silent epidemic
	Wiedemann syndrome J. Ebrahimzadeh		N. Paolino		S. Ramanathan
	J. LDI allillizaGell	C-237	Fetal diagnosis of autosomal		
C-201	NIPT results indicative of		recessive primary microcephaly: A case for continued expansion		
	maternal neoplasms: Genetic counselors' awareness,		of prenatal genetic testing		
	preferences and attitudes		K. Patek		
	14 6:1				

M. Giles

C-276	Reflections on the current state of healthcare transition for young adult women with Turner syndrome: Strategies for facilitating autonomy and	C-306	Maternal sickle cell disease may increase risk for cell free DNA based aneuploidy screening failure K. Levandoski	C-342	High frequency of mosaicism in genes associated with epilepsy and neurodevelopmental disorders  E. Butler
C 270	self-management M. Snyder	C-309	Stress, anxiety and adaptation to genetic information: Parental experiences receiving a prenatal	C-345	Referrals to mental health services: Exploring the referral process in genetic counseling
C-279	No difference in health related quality of life between therapeutic options for Type 1		diagnosis of Klinefelter syndrome K. Lewis Widmeyer	6 240	M. Cunningham
	Gaucher disease  V. Wagner	C-312	Discordant prenatal cell-free DNA screening results: A	C-348	Establishing a combined clinical and laboratory genetic counseling student rotation-
C-282	Using the Sanfilippo syndrome		consideration of maternal and fetal incidental findings		The Seattle Children's Hospital experience
	registry to find the patients for natural history studies and clinical trials	0.045	M. Maxwell	0.054	K. Golden-Grant
	J. Wood	C-315	Obstetric providers' experience with, interpretation of, and communication of NIPS test results	C-351	Adaptation of the G.I.F.T. technique as a tool for qualitative program evaluation
C-285	Expanding the phenotype of Oculofaciocardiodental		P. Sawla		C. Guy
	syndrome: Report of two patients with novel retinal findings	C-318	The value of genetic counseling evaluation of prospective egg donors	C-354	The contribution of the rs55705857 G allele to familial cancer risk using the Utah
	K. Zegar		E. Schlenker		population database S. Hummel
Pre- aı C-288	nd Perinatal  Maternal folate levels in	C-321	The Kate Cares Stillbirth Assessment Program: A reevaluation utilizing SCRN	C-357	Impact of an educational intervention on undergraduate
C-200	pregnancies preceded by short interpregnancy intervals and risk		assessment guidelines H. Schuster		students' interest in pursuing a career in genetic counseling
	for infants born small for gestational age: Information to	C-324	Genetic counselors' knowledge	6 2/0	R. LeShay
	guide genetic counseling practice  P. Carrion		of and assessment for eating disorders in a prenatal setting  K. Sesock	C-360	To be a clinical or non-clinical genetic counselor, that is the question
C-291	Certified nurse midwives'				S. Liberman
	experiences with prenatal genetic screening S. Dettwyler	C-327	The changing landscape of prenatal testing: Certified nurse midwives' integration of NIPT into practice	C-363	The prevalence of asymptomatic focal cortical dysplasia and predictors of epilepsy severity in
C-294	Genetic counseling for preimplantation genetic screening		L. Weingarten		a pediatric cohort  L. Maynard
	L. Dobson	C-330	An assessment of expansion in Fragile X syndrome	C-366	Application of genetic counseling
C-297	Prenatal carrier screening acceptance rates in adopted individuals  K. Fissell		premutation carriers undergoing preimplantation genetic diagnosis and an exploration of psychosocial implications		graduate training to job responsibilities for entry-level, non-clinical genetic counselors S. Nalbandian
C-300	"What's in a name?" An		N. Williams	C-369	X-linked Mohr-Tranebjaerg
C-300	assessment of knowledge about reproductive technology among	Profes	sional Issues	0 007	syndrome: Variable phenotype in females
	young adults at risk for Huntington's disease	C-333	Characterizing pediatric narcolepsy: Family history and	C-372	H. Newman
C-303	L. Hogan  Should genetic counselors have		familial autoimmunity H. Balka	C-372	What is a laboratory genetic counselor? The GeneDx experience
C-303	a well-defined role on a multidisciplinary perinatal palliative care team? Literature review and discussion of an opportunity to capitalize on a unique area of advancement for	C-336	Facing the challenge of genetic counselors' need for education about genomic technologies: Opportunities for improvement in training for genetic counselors	C-375	J. Nieto  A recurrent GABRG2 variant associated with early-onset seizures, intellectual disability, motor and speech delays, and hypotonia
	the field of genetic counseling		K. Banks		L. Schmidt
	M. Jones	C-339	Connecting on Twitter to expand our reach: An analysis	C-378	A case of presumed RYR1
			of the genetic counseling hashtag, #GCchat	0 070	myopathy in a neonate and subsequent genetic counseling
			L. Bucheit		C. Siskind

#### **VENDOR-SPONSORED PRESENTATIONS**

Vendor-sponsored presentations are 30-minute presentations given by select vendors in the Vendor Theater located in the AEConnect area of the Exhibitor Suite. These presentations are a great way to learn more about new products and services. Make the most of your time in the Exhibitor Suite by attending one of the following presentations:

### Wednesday, September 28

6:15 PM - 6:45 PM



## Three Ways to Improve your Clinical Impact Through Technology

Andrea Downing, Business Development, CancerlQ

Technology today cannot only enable clinical teams to preempt and predict an individual's risk of developing cancer, but also actively engage with patients at every stage of the process to actually promote preventative care. With all the new tools available to automate cancer risk assessment, how can technology help genetic counselors to deliver a better clinical impact? Join moderator Andrea Downing and our panel of genetic counselors who are changing the way preventative cancer care is being delivered using CancerlQ. The panelists will discuss three practical ways to improve the impact of genetic counseling using technology.

7:00 PM - 7:30 PM



DISEASE PREVENTION THROUGH GENETIC TESTING

# Difficult Discussions Surrounding DNA Banking

Christina Zaleski, MS, CGC

By combining clinical counseling experiences with patient feedback, we've developed some tips and conversational tools to enhance genetic counseling discussions on DNA banking, which often occur in difficult situations. Our hope is that this session will empower and motivate attendees to routinely discuss DNA banking with patients.

7:45 PM - 8:15 PM



#### The Evolving Role of the Genetic Counselor in the Multidisciplinary Approach to Lysosomal Storage Disease (LSD) Care

Abigail Hata, MS, CGC, Oregon Health and Science University

This session will focus on the multidisciplinary approach to LSD care from the perspective of the genetic counselor. The evolution of the genetic counselor's role and perspectives on needs along the patient journey will be highlighted, along with a discussion on earlier diagnosis and screening of Gaucher disease and other LSDs.

### Thursday, September 29

5:15 PM - 5:45 PM



PLUGS\*
Pediatric Laboratory Utilization
Guidance Services

### Genetic Counselors and UM: Having the Courage to Do the Right Thing

Michael Astion, MD, PhD, Medical Director, Department of Laboratories, Seattle Children's Hospital and Pediatric Laboratory Utilization Guidance Services (PLUGS); Jessie Conta, MS, LCGC, Laboratory Genetic Counselor, Supervisor, Department of Laboratories, Seattle Children's Hospital and Pediatric Laboratory Utilization Guidance Services (PLUGS)

Utilization management (UM) interventions increase the value of testing, while reducing financial liability for patients, institutions and payers. Genetic counselors are courageous UM leaders, serving as detectives, educators, negotiators and advocates. Learn about efforts to harmonize medical necessity and optimize insurance coverage in the spirit of genetic stewardship.

6:00 PM - 6:30 PM



#### New Standard of Cancer Testing Offered by Fulgent Diagnostics

Patricia Page, MS, CGC

Two sizes, infinite possibilities. Fulgent Diagnostics offers focused and comprehensive cancer panels with 99.99% coverage of coding and flanking intronic regions at minimum 50x depth. Start with one panel and customize it around the needs of your patient. Request results for any combination at no extra cost. This is the new standard of cancer testing.

6:45 PM - 7:15 PM



#### Learning to Trust Again: Common Issues Clinical Trial Participants Face When Transitioning Back to Routine Clinical Care

Laurie Bailey, MS, Coordinator, Clinical Research Program for the Division of Human Genetics, Cincinnati Children's Hospital

As patients transition from clinical research to routine clinical care, the role of the genetic counselor has evolved to include the coordination and continuity of health care. This session will highlight the needed education for the patient and family, and coordination among the health professionals involved in this transition.

#### **VENDOR-SPONSORED PRESENTATIONS**

#### Friday, September 30

11:45 AM - 12:15 PM



BOULDER ABORTION CLINIC

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

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

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

12:30 PM - 1:00 PM



#### 22q: Prenatal Clues and Commercial Data Review

Donna M. McDonald-McGinn, MS, LCGC, Chief, Section of Genetic Counseling, Director, 22q and You Center, Associate Director, Clinical Genetics Center, The Children's Hospital of Philadelphia; Libby Valenti, MS, CGC, Medical Science Liaison Manager, Natera

22q11.2 deletion syndrome has become a part of routine prenatal screening for many women through Non-Invasive Prenatal Testing (NIPT). This presentation will review prenatal clues such as ultrasound findings associated with 22q. Natera will also present the commercial experience with NIPT for 22q, including recent data.

1:15 PM - 1:45 PM



#### FACE2GENE: Smart Phenotyping. Better Genetics. Best Practices from Clinic to Lab.

Alyssa Blesson, MCG, LGC, Nemours/ Alfred I. duPont Hospital for Children Sarah Savage, MS, CGC

FDNA invites you to join us to learn more about the FACE2GENE Suite. See a real case review to discover how smart phenotyping facilitates comprehensive and precise genetic evaluations.

# Located in the Exhibitor Suite, Exhibit Hall 4AB Open Wednesday – Friday during Exhibitor Suite hours AEConnect is designed to help you network with your professional community. While in the Exhibitor Suite, stop by to view available job postings, learn more about our social media efforts, engage with NSGC's Special Interest Groups, take in a sponsored presentation in the Vendor Theater, and meet up with colleagues and friends. ALAIDMARK ORENTAL THEALTHCARE OUR VALUE IN HEALTHCARE OUR VALUE IN HEALTHCARE 35th Annual Education Conference

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# **NEW PATIENT RESOURCE WEBSITE**



What is a

**Genetic Counselor?** 





How Can a Genetic Counselor Help Me?

# **What Should I Expect**

when Seeing a Genetic Counselor?





How Do I Find a Genetic Counselor?

Help your patients find the answers to these questions and more on the new www.aboutgeneticcounselors.com



#### **NSGC AWARDS AND FELLOWSHIPS**

# Jane Engelberg Memorial Fellowship (JEMF)

Outcomes of Genetic Counseling for Arrhythmogenic Cardiomyopathy: A Comparison of Face-to-Face and Tele-Genetic Counseling

Brittney Murray, MS, CGC

#### Audrey Heimler Special Project Award (AHSPA)

Development of Spanish Genetic Counseling Lexicon

Priscila D. Hodges, MS, CGC

#### **NSGC Leadership Awards**

Natalie Weissberger Paul National Achievement Award

Beth B. Crawford, MS, LCGC

Strategic Leader

Quinn Stein, MS, CGC

Strategic Leader

Jennifer M. Hoskovec, MS, CGC

Outstanding Volunteer

Colleen Caleshu, MS, LCGC

International Leader

Mercy Ygoña Laurino, MS, CGC, PhD

New Leader Award

Misha DS Rashkin, MS, CGC

#### **Best Abstract Awards**

#### Best Full Member Abstract Award

Adapting Evidenced Based Strategies for Effective Communication in Cancer Genetic Counseling

Robin Lee, MS, CGC

#### Beth Fine Kaplan Student Abstract Award

Genetic Counseling Increases Parental Knowledge and Psychological Adaptation to Turner Syndrome Diagnosis

Caitlin A. Austin

#### Cultural Competency Scholarship

Mike Darren Suguitan Rebecca Wang

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NSGC expresses its gratitude to these volunteers for their hard work and dedication:

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#### **NETWORKING ACTIVITIES AND BUSINESS MEETINGS**

# NSGC Special Interest Group (SIG) Fair

Wednesday, September 28 2:00 PM – 2:30 PM Room 615 - 617

All AEC attendees are invited to the NSGC SIG Fair to meet with SIG leaders and to learn more about current SIG projects and how you can become involved.

#### First Time Attendees

AEC 101: Welcome to the Emerald City Wednesday, September 28 2:00 PM – 3:15 PM Room 618 - 620

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

#### Welcome Reception

Wednesday, September 28 6:00 PM – 8:30 PM Exhibit Hall 4AB

Make new contacts and greet your friends as you preview the vendors and their services in the Exhibitor Suite. Join your colleagues for this special kickoff to the AEC. Light hors d'oeuvres and a cash bar will be available.

#### State of the Society Address

Thursday, September 29 9:30 AM – 10:15 AM Ballroom 6ABC

Join President Jehannine Austin, MSc, PhD, CGC, CCGC, as she provides an overview of NSGC activities and accomplishments over the past year, reviews NSGC's advocacy efforts and strategic initiatives and shares highlights from 2016.

#### Genome Magazine's Code Talker Award

Thursday, September 29

5:00 PM - 5:30 PM

Room 6ABC

Join Genome Magazine as we honor genetic counselors and announce the first winner of the Code Talker Award essay contest. Three finalists will be honored by the essayists who nominated them–sharing their emotional stories of what great care looks like from the lens of the patient. Bring your tissues!

Presented by:

#### Genome

Sponsored by:



#### **AEC 35th Anniversary Reception**

Thursday, September 29 5:30 PM – 7:45 PM Exhibit Hall 4AB

Head to the Exhibitor Suite to celebrate the 35th Anniversary of the AEC! Join NSGC for this very special reception as we honor and demonstrate our appreciation for all genetic counselors and celebrate the history and future of the AEC and the genetic counseling profession. A hosted bar (two drink tickets per attendee) will be available.

Sponsored by:

#### MNG LABORATORIES



#### ABGC Annual Business Meeting

Friday, September 30 1:45 PM – 2:15 PM Ballroom 6ABC

#### **ACGC Presentation**

Friday, September 30 2:15 PM – 2:45 PM Ballroom 6ABC

#### **Incoming Presidential Address**

Saturday, October 1 9:30 AM – 10:00 AM Ballroom 6ABC

Welcome NSGC President-Elect Mary Freivogel, MS, CGC, as she introduces herself to NSGC members and outlines her vision for NSGC and the genetic counseling profession in 2017.

#### Meals and Refreshments

Continental breakfast will be served on Wednesday in the Lobby of Ballroom 6ABC from 7:00 AM - 8:00 AM and on Thursday and Friday in the Exhibitor Suite, Exhibit Hall 4AB, from 7:00 AM - 8:00 AM and on Saturday in the lobby of Ballroom 6ABC from 7:00 AM - 8:00 AM.

#### Refreshment Breaks

**Thursday, September 29** 10:15 AM – 10:30 AM 3:00 PM – 3:15 PM

Friday, September 30 9:30 AM – 9:45 AM 3:00 PM – 3:15 PM

Saturday, October 1 10:00 AM – 10:15 AM

# Join Us at the Booths Below for a Special Treat

Wednesday, September 28

6:00 PM - 8:30 PM Myriad – Booth 601 Invitae – Booth 101

GenPath Women's Health - Booth 903

Thursday, September 29

7:00 AM - 8:00 AM Invitae – Booth 101 Myriad – Booth 601

Thursday, September 29

5:00 PM - 7:45 PM Myriad – Booth 601 Invitae – Booth 101 GeneDx – Booth 803

Friday, September 30

7:00 AM - 8:00 AM Invitae – Booth 101 Myriad – Booth 601

Friday, September 30 11:15 AM - 3:00 PM Myriad – Booth 601

Invitae - Booth 101

Insight Medical Genetics - Booth 801

#### **NETWORKING ACTIVITIES AND BUSINESS MEETINGS**

#### **NSGC Q&A**

Members of the NSGC leadership will be at specific locations during the conference to talk with members and answer questions. Stop by and share your thoughts!

Thursday, September 29 5:15 PM – 6:15 PM AEConnect area in Exhibitor Suite

Friday, September 30 11:30 AM – 12:00 PM AEConnect area in Exhibitor Suite

Saturday, September 30 7:15 AM – 7:45 AM Registration Desk

#### Mentor Program Meet-Up

Have you ever considered joining the Mentor Program, but wanted to learn more? Are you in the Mentor Program, but haven't found your mentor match? Have you always wanted to meet your mentor match in person? Come join us for this very special Mentor Program Meet-Up event inside the AEConnect on Wednesday, September 28 from 6:30 PM – 7:30 PM.

# SIG Presentations within the AEConnect

Engage with SIG leadership in the AEConnect at the following times:

Thursday, Se	eptember 29
5:00PM - 5:30PM	Prenatal SIG
5:30PM - 6:00PM	Pediatric Clinical SIG
6:00PM - 6:30PM	International SIG
6:30PM - 7:00PM	Neurogenetics SIG
Friday, September 30	
11:30AM - 12:00PM	Psychiatric SIG
12:00PM - 12:30PM	Metabolism/LSD SIG
12:30PM - 1:00PM	Education SIG
1:00PM - 1:30PM	Health IT SIG
1:30PM - 2:00PM	Cardiovascular SIG
2:00PM - 2:30PM	Student/New Member SIG
2:30PM - 3:00PM	Industry SIG

# What does it mean to be a gold standard in genetic testing?

At Invitae, we believe there's a new gold standard, one that includes both high quality testing and a dedication to improving medicine through:

#### **SCIENCE & DATA SHARING**

10 posters, presentations, symposia, and breakout sessions at this year's NSGC AEC—in addition to our ongoing commitment to sharing variants and variant interpretation methods.

#### **EDUCATION**

8 scholarships for genetic counselor members of NSGC to attend this year's meeting—in addition to educational programs like Gene of the Week.

#### **COLLABORATION**

Join us at the Invitae reception celebrating genetic counselors and *Genome* magazine's Code Talkers Award on Thursday, September 29 at 8 pm. Details on the event and how to get your copy of the Code Talker essay nominations book are available at Booth 101!

Join Invitae as we expand access to high-quality, comprehensive genetic testing.





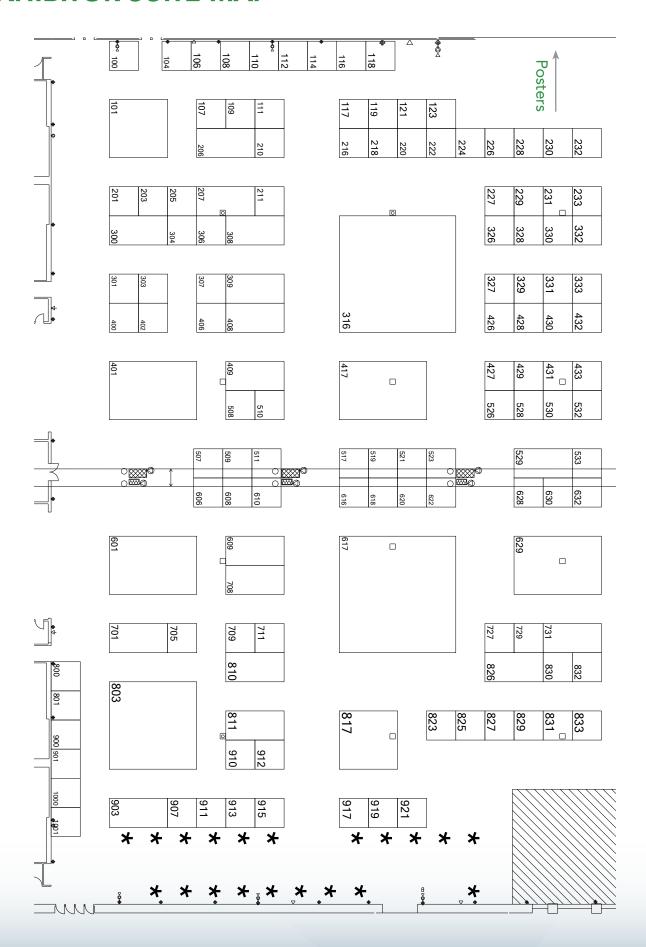
# **EXHIBITOR DIRECTORY BY COMPANY NAME**

(as of September 6, 2016)

23andMe	210
AbortionClinics.org	211
Affymetrix, part of Thermo Fisher Scientific	
Alexion Pharmaceuticals	910
Allele Diagnostics	218
Alpha-1 Foundation	
Ambry Genetics	
American Board of Genetic Counseling	
American Thrombosis & Hemostasis Network (ATHN)	
ARUP Laboratories	
AstraZeneca	
Asuragen	
Baby's First Test	430
Basser Center for BRCA	
Baylor Genetics	401
BioMarin Pharmaceutical Inc.	
Blueprint Genetics	
Boulder Abortion Clinic, PC	
Bright Pink	
CancerGene Connect	
CancerIQ	
CBR, from AMAG Pharmaceuticals, Inc	
CdLS Foundation	
Cedar River Clinics	
Children's National Fetal Medicine Institute	
Clinical Genome Resource (ClinGen)	
Clovis Oncology	
Color Genomics	
CombiMatrix	
Connective Tissue Gene Tests (CTGT)	
Counsyl	
Emory Genetics Laboratory	
FDNA	
FORCE: Facing Our Risk of Cancer Empowered	
Fulgent Diagnostics	
Geisinger Health System	
GeneDx	
Genesis Genetics	
GeneTests.org	
Genetic Support Foundation	
Genome Magazine	
Genomind, Inc	
GenPath Women's Health	
Greenwood Genetic Center	
Harmony Prenatal Test	
Illumina, Inc	
Insight Medical Genetics	
Integrated Genetics	
Invitae	
Kaiser Genetics - Northern California	,
LAL-D Aware made possible by GenoPheno	
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Valley Children's Hospital	

#### **EXHIBITOR SUITE MAP**



#### 23andMe

Booth 210

899 W. Evelyn Avenue Mountain View, CA 94041 Phone: 650.938.6300

23andme.com

Founded in 2006, 23andMe is the first and only genetic service available directly to consumers that offers reports that meet FDA standards for being scientifically and

clinically valid.

#### AbortionClinics.org/AAF, Inc.

Booth 211

1002 West Mission Ave Bellevue, NE 68005 Phone: 402.291.4797 Fax: 402.291.4643

acconebraska@gmail.com abortionclinics.org

We have been providing abortion services for more than 30 years. We specialize in 3rd trimester terminations for fetal anomalies.

#### Affymetrix, part of Thermo Fisher Scientific

Booth 303

3420 Central Expressway Santa Clara, CA 95051 Phone: 408.731.5000 Fax: 408.731.5646

sales@affymetrix.com affymetrix.com

Affymetrix, part of Thermo Fisher Scientific, is your partner for pediatric genetics. We offer the only FDA-cleared whole-genome diagnostic test, CytoScan® Dx Assay, proven to aid in the diagnosis of developmental delay and intellectual disabilities.

#### **Alexion Pharmaceuticals**

Booth 910

100 College Street New Haven, CT Phone: 203.272.2596 (ALXN) Fax: 203.271.8198

alexion.com

Alexion is a global biopharmaceutical company focused on developing lifetransforming therapies for patients with rare disorders. Alexion developed the first and only approved complement inhibitor to treat patients with PNH and aHUS. Alexion's metabolic franchise includes two enzyme replacement therapies for patients with

ultra-rare disorders, HPP and LAL-D.

#### Allele Diagnostics

Booth 218

44 W 6th Avenue, Suite 202 Spokane, WA 99204 Phone: 844.255.3532 Fax: 509.232.5779

info@allelediagnostics.com allelediagnostics.com

Allele Diagnostics is a genetic company focused on providing high-quality testing and reporting services. Our specialty is rapid microarray, but we offer a unique test menu that is focused on pediatric and prenatal patients.

#### Alpha-1 Foundation

Booth 224

3300 Ponce de Leon Boulevard Coral Gables, FL 33134 Phone: 877.228.7321 info@alphaone.org

www.alpha1.org

The Alpha-1 Foundation is committed to finding a cure for Alpha-1 Antitrypsin Deficiency and to improving the lives of people affected by Alpha-1 worldwide.

#### **Ambry Genetics**

Booth 316

15 Argonaut Aliso Viejo, CA 92656 Phone: 949.900.5500 Fax: 949.900.5501 info@ambrygen.com ambrygen.com

Ambry is a genetics-based healthcare company that is dedicated to open scientific exchange so we can work together to understand all human disease faster and save millions of lives

#### **American Board of Genetic Counseling**

Booth 618

PO Box 14216 Lenexa, KS 66285 Phone: 913.222.8661 Fax: 913.222.8606 info@abqc.net abgc.net

The American Board of Genetic Counseling (ABGC) is the credentialing organization for the genetic counseling profession in the U.S. and Canada. ABGC certifies and recertifies qualified genetic counseling professionals and promotes growth and development of the profession.

#### **American Thrombosis & Hemostasis Network** (ATHN)

Booth 205

athn.org

72 Treasure Lane Riverwoods, IL 60015 Phone: 800.360.2846 Fax: 847.572.0967 info@athn.org

The American Thrombosis and Hemostasis Network (ATHN) is a non-profit organization committed to advancing and improving care for individuals affected by bleeding and thrombotic disorders. ATHN manages a national database of patient health data that can be used to improve care and support vital research.

#### **ARUP Laboratories**

Booth 201

500 Chipeta Way Salt Lake City, UT 84108 Phone: 801.583.2787 Fax: 801.584.5209

alyson.willerton@aruplab.com aruplab.com

ARUP, a nonprofit enterprise of the University of Utah, has a full-service genetics laboratory offering testing in maternal serum screening and molecular, cyto, and biochemical genetics, with experience in sequencing, MLPA, FISH, microarray, and biochemical assays.

#### **AstraZeneca**

Booth 523

101 Orchard Ridge Drive Gaitherburgh, MD 20878 Phone: 301.398.0000 joe.conyer@astrazeneca.com

astrazeneca-us.com

AstraZeneca is a global, scienceled biopharmaceutical company that focuses on the discovery, development and commercialization of prescription medicines, primarily for the treatment of diseases in three therapy areas respiratory and autoimmunity, cardiovascular and metabolic diseases, and oncology. The company is also active in inflammation, infection and neuroscience through numerous collaborations. AstraZeneca operates in over 100 countries and its innovative medicines are used by millions of patients worldwide.

#### **Asuragen**

#### Booth 705

2150 Woodward Street, Suite 100 Austin, TX 78744 Phone: 512.681.5200

Fax: 512.681.5201 asuragen@asuragen.com asuragen.com

The Asuragen Genetics portfolio delivers innovative solutions that are designed to solve unmet testing needs and empower researchers to advance the understanding of inherited disorders, from ALS to Fragile X syndrome.

#### **Baby's First Test**

Booth 430

4301 Connecticut Avenue NW, Suite 404 Washington, DC 20008 Phone: 202.966.5557

info@babysfirsttest.org babysfirsttest.org

Baby's First Test houses the nation's newborn screening clearinghouse. As the clearinghouse, Baby's First Test connects parents and healthcare providers with information and resources on newborn screening at the local, state, and national levels.

#### **Basser Center for BRCA**

Booth 608

3400 Civic Center Boulevard 3 West Pavilion Philadelphia, PA 19104

Phone: 215.662.2748 Fax: 215.349.5314

basserinfo@uphs.upenn.edu basser.org

The Basser Center for BRCA at Penn Medicine's Abramson Cancer Center is the first comprehensive center solely devoted to funding research, educating providers and patients, and advancing care for individuals with BRCA gene mutations.

#### **Baylor Genetics**

#### Booth 401

2450 Holcombe Boulevard, Suite O-100 Houston, Texas 77021 Phone: 713.798.6555

genetictest@bmgl.com bmgl.com

Baylor Genetics Laboratories offer a broad range of diagnostic genetics tests. We provide state of the art testing including, DNA diagnostics, prenatal testing, chromosomal microarray analysis, whole exome sequencing, biochemical genetics, Mitochondrial disease panels and metabolic testing as well as cancer testing.

#### **BioMarin Pharmaceutical Inc.**

#### Booth 426

105 Digital Drive Novato, CA 94949 Phone: 415.506.6700 Fax: 415.382.7889

biomarin.com

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

#### **Blueprint Genetics**

Booth 429

953 Indiana Street San Francisco, CA 94107 Phone: 650.452.9340

jessica.kim@blueprintgenetics.com blueprintgenetics.com

Blueprint Genetics is changing diagnostics by providing accessible and actionable genetic knowledge. Our mission is to support healthcare professionals in providing the best care for patients with rare inherited diseases. We provide fast, affordable and comprehensive genetic diagnostics.

#### **Boulder Abortion Clinic, PC**

#### Booth 510

1130 Alpine Avenue Boulder, CO 80304 Phone: 303.447.1361 Fax: 303.447.0020

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.

#### **Bright Pink**

Booth 729

670 N. Clark Street Chicago, IL 60610 Phone: 312.787.4412 brightnink@brightnink.c

brightpink@brightpink.org brightpink.org

Bright Pink is a national non-profit on a mission to prevent breast and ovarian cancer by inspiring proactive behavior change among young women and their healthcare providers.

#### CancerGene Connect

#### Booth 307

1701 N. Market Street, Suite 435 Dallas, TX 75202 Phone: 214.862.1957

Fax: 972.455.8638 info@cagene.com cagene.com

CancerGene Connect© is a cloud-based genetic risk assessment and pedigree tool originally developed by UT Southwestern. It remotely gathers patient history, runs risk assessment models, draws pedigrees, generates patient reports, and creates a comprehensive database.

#### **CancerIQ**

Booth 628

222 W Merchandise Mart Plaza #1230 Chicago IL 60654 Phone: 888.802.2623

adowning@canceriq.com cancerig.com

CancerlQ makes it easy for practices to offer genetic cancer risk assessment programming to every patient that walks through the door. Our solutions help genetic counselors to save time, enrich the face-to-face counseling experience, and improve patient outcomes over time. We enable any busy healthcare system to start, run, and grow a highly impactful cancer genetics program at lower costs.

#### CBR, from AMAG Pharmaceuticals Inc.

#### Booth 301

1100 Winter Street Waltham, MA 02451 Phone: 617.498.3300 Fax: 617.649.1632

contactus@amagpharma.com www.amagpharma.com

At CBR, our mission is to enable more breakthrough medical treatments for more families. We do that by significantly advancing the real-life clinical applications of newborn stem cells; searching to uncover potential through clinical trials; and aspiring to perfection in collection, processing and storage of stem cells.

#### **Cedar River Clinics**

Booth 112

263 Rainier Ave S Renton, WA 98057 Phone: 800.572.4223 Fax: 425.255.0262

friends@CedarRiverClinics.org www.CedarRiverClinics.org

Cedar River Clinics offers compassionate abortion care to 26 weeks with special fetal indication services. We are happy to assist clients and their families with transportation, local lodging and funding resources.

#### **CdLS Foundation**

**Booth 1000** 

302 West Main Street #100 Avon, CT 06001 Phone: 800.753.2357 Fax: 860.676.8337 info@CdLSusa.org cdlsusa.org

The CdLS Foundation is a family support organization that exists to ensure early and accurate diagnosis, promote research into causes and manifestations of the syndrome, and help people with CdLS make informed decisions.

#### Children's National Fetal **Medicine Institute**

Booth 921

111 Michigan Avenue NW Washington, DC 20010 Phone: 202.476.7409

fetalmedicine@childrensnational.org ChildrensNational.org/Fetal

The Children's National Fetal Medicine Institute provides advanced and comprehensive care for unborn babies with known or suspected medical conditions in a compassionate and supportive environment, offering pregnant families advanced fetal diagnostics and treatment.

#### Clinical Genome Resource (ClinGen)

Booth 900

120 Hamm Drive Lewisburg, PA 17837 clingen@clinicalgenome.org clinicalgenome.org

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

#### **Clovis Oncology**

Booth 511

We are a biopharmaceutical company focused on acquiring, developing and commercializing cancer treatments in the United States, Europe and other international markets.

#### **Color Genomics**

Booth 207

1801 Murchison Drive #128 Burlingame, CA 94010 Phone: 844.362.6567 providers@getcolor.com aetcolor.com

Color Genomics' mission is to democratize access to genetic information. For \$249, Color provides a clinical-grade physician ordered test that analyzes 30-genes to help women and men learn their risk for the most common hereditary cancers.

#### **AbortionClinics.Org**

Elective, Fetal and Maternal Indication Abortions

Caring for women with KINDNESS, COURTESY, LOVE, JUSTICE & RESPECT

for over twenty four years.

LeRoy H. Carhart, M.D. Medical Director

Toll free: (800) 737-3845 Fax: (402) 291-4643 Lee@AbortionClinics.Org www.AbortionClinics.Org

#### **Abortion Access Fund, Inc.**

**AAF** is a small clinic based fund with the mission to increase access to safe and legal abortion care in the Midwest. Providing financial assistance and trusting women for over fifteen years.

Chelsea Souder, MPH

Director

Toll free: (800) 737-3845 Clinic: (402) 292-4164 Chelsea@AbortionAccessFund.org www.AbortionAccessFund.Org

#### **CombiMatrix**

Booth 517

300 Goddard, Suite 100 Irvine, CA 92618 Phone: 949.753.0624

marketing@combimatrix.com combimatrix.com

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

#### **Connective Tissue Gene** Tests (CTGT)

Booth 309

6575 Snowdrift Road, Suite 106 Allentown, PA 180106 Phone: 484.244.2900 Fax: 484.244.2904

inquiries@ctgt.net ctqt.net

CTGT specializes in prenatal and postnatal molecular diagnostics for a variety of inherited genetic disorders offering over 1,500 NGS, Sanger and Deletion/Duplication tests. CTGT provides high test sensitivity, rapid turnaround times and superior customer service.

#### Counsyl

Booth 629

180 Kimball Way South San Francisco, CA 94080 Phone: 888.268.6795

info@counsyl.com counsyl.com

Counsyl is a DNA testing and genetic counseling service. We strive to put patients first, put clinicians in control, and put costs in their place. Counsyl has screened more than 600,000 patients and served more than 10,000 health care professionals.

#### **Emory Genetics Laboratory**

Booth 408

2165 North Decatur Road Decatur, GA 30033 Phone: 404.778.8499 Fax: 404.778.8559

egl.marketing@emory.edu geneticslab.emory.edu

Emory Genetics Laboratory offers a combined 1,100 molecular, biochemical, and cytogenetic tests under one roof and custom testing for all medically relevant genes, for domestic and international clients.

#### **FDNA**

Booth 427

745 Atlantic Avenue 8th Floor Boston, MA 02111 Phone: 617.412.7000 ieff@fdna.com Face2Gene.com

FDNA is maker of Face2Gene, a suite of phenotyping apps that facilitates comprehensive and precise genetic evaluations.

#### **FORCE: Facing Our Risk of Cancer Empowered**

Booth 620

16057 Tampa Palms Boulevard W, #373

Tampa, FL

Phone: 866.288.7475 (RISK)

Fax: 954.827.2200 info@facingourrisk.org facingourrisk.org

FORCE is a national nonprofit organization dedicated to people affected by hereditary breast, ovarian and related cancers. Our programs provide support, education, advocacy and research to help those facing hereditary cancers make informed decisions.



#### Novel automated questionnaire-based pedigree-chart creation software

- f-tree is a software application that automatically creates a medical pedigree chart for a family by simply using the family's medical history information, which is provided in the questionnaires.
- No specialized knowledge of clinical genetics is required to use f-tree.
- f-tree is compliant with international recommendations for standardized human pedigree nomenclature
- At present, f-tree is the foremost tool, capable of creating pedigree charts for genetic counseling.

Free Download

http://iwate-megabank.org/en/genetic/

User-Friendly Guide available on YouTube (search using the keyword "f-tree")

f-tree@holonic-systems.com Contact



Holonic Systems, Ltd. \*\* http://www.holonic-systems.com

#### **Fulgent Diagnostics**

Booth 206

4978 Santa Anita Avenue, Suite 205 Temple City, CA 91780 Phone: 626.350.0537 Fax: 626.454.1667

info@fulgentdiagnostics.com fulgentdiagnostics.com

Fulgent Diagnostics has a broad and unique portfolio of genetic tests, including over 18,000 single gene tests, over 190 preset panels, rearrangement testing, clinical exome/trios, whole exome/trios, whole genome and our All-in-One reflex test.

#### **Geisinger Health System**

**Booth 1001** 

100 N. Academy Avenue Danville, PA 17821 Phone: 570.214.6918

gbmccluskey@geisinger.edu geisinger.org

Geisinger is one of the nation's largest health service organizations, serving 3 million residents in Pennsylvania and New Jersey. We are comprised of 1,600 employed physicians, 12 hospitals, two research centers and a 510,000-member health plan.

#### GeneDx

Booth 803

207 Perry Parkway Gaithersburg, MD 20877 Phone: 301.519.2100 GeneDx@GeneDx.com www.GeneDx.com

GeneDx, an OPKO Health Company, offers sequencing and deletion/duplication testing for inherited cardiac disorders, mitochondrial disorders, neurological disorders, cancer disorders, and other rare genetic disorders. Whole exome sequencing, microarray-based testing, targeted variant testing, and prenatal diagnostic services are also available.

#### **Genesis Genetics**

Booth 825

705 S. Main Street Plymouth, MI 48170 Phone: 313.579.9650 Fax: 313.544.4006

info@genesisgenetics.org genesisgenetics.org

At Genesis Genetics, we are invested in reproductive genetic health. We develop new technologies to harness that power of the genome and to help build healthy families.

#### **GeneTests.org**

Booth 907

481 Edward H Ross Drive Elmwood Park, NJ 07407 Phone: 208.729.1204 genetests@genetests.org

GeneTests.org

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

#### **Genetic Support Foundation**

Booth 829

1800 Cooper Point Road SW #14 Olympia, WA 98502 Phone: 844.743.6384

contact@geneticsupportfoundation.org geneticsupportfoundation.org

We are a nonprofit whose mission involves improving healthcare by providing objective genetic information to patients, providers, and healthcare organizations, supporting those in need of genetic services and facilitating the adoption of best genetic practices.

#### **Genome Magazine**

Booth 913

6900 Dallas Parkway Suite 200 Plano, TX 75024 Phone: 972.905.2920

tstammen@genomemag.com genomemag.com

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

#### Genomind, Inc.

Booth 801

2200 Renaissance Boulevard, Suite 100 King of Prussia, PA 19406 Phone: 877.895.8658

Fax: 844.364.5850

customerservice@genomind.com genomind.com

Genomind is a personalized medicine company bringing innovation to mental healthcare through genetic testing. Genomind is comprised of pioneering researchers and thought leaders in psychiatry and neurology who specialize in pharmacogenetic laboratory testing for psychiatry.

#### **GenPath Women's Health**

Booth 903

481 Edward H. Ross Drive Elmwood Park, NJ 07407 Phone: 800.633.4522 info@GenPath.com www.GenPath.com

GenPath Women's Health, a division of BioReference Laboratories, an OPKO Company, specializes in the diagnostic needs of MFM and Ob-Gyn, including prenatal/maternal risk assessment, carrier testing, prenatal diagnosis, pregnancy thrombophilia and infectious diseases. GenPath Women's Health is a sister division of GeneDx, an established leader in genetic testing for rare inherited diseases.

#### **Greenwood Genetic Center**

Booth 616

106 Gregor Mendel Circle Greenwood, SC 29646 Phone: 800.473.9411 Fax: 864.941.8141

GGC.org

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

#### **Harmony Prenatal Test**

Booth 826

9115 Hague Road Indianapolis, IN 46250 Phone: 317.521.7615 Fax: 317.565.4089 lisa.glavan@roche.com harmonytestusa.com

Harmony is a non-invasive prenatal test evaluating the risk of Trisomy 21, 18 and 13 as early as 10 weeks in pregnant women of any age or risk category. The Harmony test is developed by Ariosa Diagnostics. Ariosa Diagnostics is a laboratory certified under the Clinical Laboratory Improvement Amendments (CLIA).

#### Illumina, Inc.

Booth 609

5200 Illumina Way San Diego, CA 92122 Phone: 858.202.4500 Fax: 858.202.4766 info@illumina.com illumina.com

Illumina is improving human health by unlocking the power of the genome. Our genomic solutions are used for applications in oncology, reproductive health, and genetic disease research.

#### **Insight Medical Genetics**

Booth 810

680 N Lake Shore Drive, Suite 1230 Chicago, IL 60611

Phone: 312.981.4400 Fax: 312.981.4404

IMGLab@insightmedicalgenetics.com insightmedicalgenetics.com

As an integrated clinical and laboratory genetics company, Insight Medical Genetics offers a spectrum of pre and postnatal counseling and lab services to providers across the country including results interpretation by licensed board-certified genetic counselors.

#### **Integrated Genetics**

Booth 300

3400 Computer Drive Westborough, MA 01581 Phone: 800.848.4436

integratedgenetics.com

Integrated Genetics is a leading provider of reproductive genetic testing services driven by its commitment to physicians and their patients. With years of testing expertise utilizing sophisticated technologies, Integrated Genetics spans the continuum of care, ranging from maternal serum screening and prenatal diagnostics to carrier screening and postnatal testing services.

#### Invitae

Booth 100

458 Brannan Street San Francisco, CA 94107 Phone: 213.300.5464 leslie.spillman@invitae.com

invitae.com

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

# Kaiser Genetics - Northern California

Booth 606

Jazmine.Jung@kp.org 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.

# LAL-D Aware made possible by GenoPheno

Booth 827

LAL-D Aware is a patient support resource for families impacted by lysosomal acid lipase deficiency. Previously LAL Solace, we changed our name to LAL-D Aware because disease intervention advances give cause for optimism and hope.

#### **Mayo Medical Laboratories**

Booth 508

3050 Superior Drive NW Rochester, MN 55905 Phone: 800.533.1710 mml@mayo.edu

mml@mayo.edu MayoMedicalLaboratories.com

Mayo Medical Laboratories is a global reference laboratory operating within Mayo Clinic's Department of Laboratory Medicine and Pathology. Our comprehensive test menu includes biochemical and molecular assays for screening, diagnosing, and monitoring lysosomal storage disorders in both children and adults.

#### **MNG Laboratories**

Booth 529

5424 Glenridge Drive NE Atlanta, GA 30342 Phone: 678.225.0222 Fax: 678.225.0212

quickresponse@mnglabs.com mnglabs.com

MNG provides expert diagnostics through biochemical testing, metabolic testing and Next Generation Sequencing. Our panels are cost effective and comprehensive, particularly for cellular energetics, muscular dystrophies and epilepsy.

# MotherToBaby Pregnancy Studies

Booth 304

9500 Gilman Drive, MC 0828 La Jolla, CA 92093 Phone: 877.311.8972 Fax: 858.246.1710

mothertobaby@ucsd.edu mothertobaby.org

MotherToBaby, a non-profit service of the Organization of Teratology Information Specialists (OTIS), is dedicated to providing evidence-based information to mothers, health care professionals, and the general public about medications and other exposures during pregnancy and while breastfeeding. MotherToBaby's research division is conducting an observational research study to evaluate the effects to the fetus from asthma and the safety of medications and vaccinations used during pregnancy.

# Mount Sinai Genetic Testing Laboratory

Booth 111

1428 Madison Avenue, Atran Building 2

New York, NY 10029 Phone: 212.241.7518 Fax: 212.241.0139 dave.dubin@mssm.edu icahn.mssm.edu/genetictesting

Mount Sinai offers high-quality genetic testing and diagnostic, therapeutic and counseling services for patients with hereditary cancer, genetic disorders and birth defects. Our latest carrier screening test accurately screens for 281 genetic diseases.

### **Myriad Genetic Laboratories**Parth 401

Booth 601

320 Wakara Way Salt Lake City, UT 84108 Phone: 801.584.3600 cscomments@myriad.com

myriad.com

Myriad Genetics is a leading molecular and companion diagnostics company dedicated to making a difference in patients' lives through the discovery and commercialization of transformative products that assess a person's risk of developing disease, aid in a timely and accurate diagnosis, determine the risk of disease progression and recurrence and guide personalized treatment decisions.

#### **Natera**

Booth 417

201 Industrial Rd San Carlos, CA 94070 Phone: 650.249.9090 jaliamus@natera.com www.natera.com

Natera® is a rapidly growing genetic testing and diagnostics company with proprietary bioinformatics and molecular technology. Natera's team of PhDs and engineers is dedicated to refining novel molecular genome assays and complex statistical algorithms to determine the likelihood of a wide range of serious genetic conditions with best-in-class accuracy and coverage.

#### **National Library of Medicine** Booth 521

#### **NextGxDx**

Booth 711

810 Crescent Centre Drive Franklin, TN 37067 Phone: 615.861.2641 mhertik@nextgxdx.com nextgxdx.com

NextGxDx improves genetic test ordering for the GC community with two solutions. GeneSource is a comprehensive and easy-to- use tool to search and compare genetic tests. GeneConnect provides advanced ordering/reporting tools to support genetic testing UM efforts.

# NIH Genetic Testing Registry/MedGen/ClinVar

Booth 509

9000 Rockville Pike Bethesda, Maryland 20892 gtr@ncbi.nlm.nih.gov ncbi.nlm.nih.gov/guide/genetics-medicine

12,200 conditions, 4,300 genes, 157,000 variants and 35,000 genetic tests in 100 square feet. See what's new with NCBI's Medical Genetics resources: ClinVar, GTR and MedGen

# Norton & Elaine Sarnoff Center for Jewish Genetics

Booth 630

30 S. Wells, 216-600 Chicago, IL 60606 Phone: 312.357.4988

jewishgenetics@jewishgenetics.org jewishgenetics.org

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

#### **NTD Labs**

Booth 402

80 Ruland Road Melville, NY 11747 Phone: 855.754.5221

ntdlabs.com

NTD Labs, an innovative leader in prenatal screening, provides accurate and timely information to healthcare providers and expectant parents. We achieve this through our unwavering dedication to research, exceptional customer service and continuous improvement. With over four decades of prenatal screening experience in the maternal fetal health industry, NTD Labs was the first to introduce ONTD, Down Syndrome, Early Onset Preeclampsia and first trimester AFP screening.

# Oregon Reproductive Medicine

Booth 915

808 SW 15th Avenue Portland, OR 97205 Phone: 503.290.1537

hello@oregonreproductivemedicine.com OregonReproductiveMedicine.com

Oregon Reproductive Medicine (ORM) is a world-class fertility center that is passionately committed to helping people grow their families. ORM offers individuals and couples the most cutting-edge technology in vitro fertilization (IVF) and genomic medicine available.

#### Partners Personalized Medicine Lab for Molecular Medicine

Booth 519

65 Landsdowne Street Cambridge, MA 02139 Phone: 617.768.8600 Fax: 617.525.4488

Imm@partners.org

partners.org/personalizedmedicine/lmm

The Laboratory for Molecular Medicine (LMM) is a CLIA-certified molecular diagnostic laboratory. We offer comprehensive testing services to support clinical research and clinical practice including single gene, multiple gene panel, exome and genome sequencing.

#### Perinatal Quality Foundation

Booth 917

#### Personalis, Inc.

Booth 409

1330 O'Brien Drive Menlo Park, CA 94025 Phone: 650.752.1300 Fax: 650.752.1301 info@personalis.com

info@personalis.com personalis.com

Personalis, Inc. provides clinicians and researchers advanced genome-scale sequencing and interpretation services for inherited genetic disease and cancer. The company's clinical laboratory is CLIA licensed and CAP accredited.

#### Pfizer

Booth 528

335 E. 42nd Street New York, NY 10017 Phone: 949.482.9925

Teresa.rousseau@pfizer.com

Pfizer Rare Diseases - providing biological therapies for rare and ultra rare diseases.

#### Phenogen Sciences, Inc.

Booth 109

9115 Harris Corners Parkway, Suite 320

Charlotte, NC 28269 Phone: 877.992.7382 Fax: 704.926.5707

customersupport@phgns.com www.brevagenplus.com

BREVAGenplus™ is the first clinically validated, genetic-based risk assessment test for sporadic (non-hereditary) breast cancer. BREVAGenplus™ combines clinical risk factors with genetic markers for a more accurate assessment of a woman's 5-year and lifetime risk.

#### **PreventionGenetics**

Booth 701

3800 South Business Park Avenue Marshfield, WI 54449 Phone: 715.387.0484 Fax: 715.384.3661

clinicaldnatesting@preventiongenetics.com preventiongenetics.com

PreventionGenetics is a leader in providing comprehensive clinical DNA testing testing offering sequencing for over 1,600 genes and deletion/duplication testing for over 1,500 genes. PreventionGenetics is CAP/CLIA accredited.

# Proband - The Children's Hospital of Philadelphia

Booth 823

3535 Market Street, Suite 1024 Philadelphia, PA 19104 Phone: 267.426.7522 Fax: 215.590.5245 vitod@email.chop.edu

vitod@email.chop.edu probandapp.com

Proband is an iPad® app that captures a patient's genetic pedigree during the clinical encounter. Proband Connect synchronizes pedigrees across multiple devices and lets you securely share them with other users, and can integrate with third-party applications.

#### **Progenity**

Booth 811

4330 La Jolla Village Drive, Suite 200 San Diego, CA 92122 Phone: 855.293.2639 Fax: 760.268.0771

client.services@progenity.com progenity.com

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

#### **Progeny Genetics**

Booth 326

#### **Providence Health & Services**

Booth 530

2201 Lind Avenue SW Renton, WA 98057 Phone: 877.5646.747 (JOIN.PHS)

jobs@providence.org providenceiscalling.jobs

Providence Health & Services is the thirdlargest not-for-profit health system in the country, serving five western states. Our vision is to create healthier communities together, with special focus on the poor and vulnerable.

#### **Quest Diagnostics**

Booth 817

3 Giralda Farms Madison, NJ 07940 Phone: 973.520.2793

www.questdiagnostics.com

Quest Diagnostics, the world's leading provider of diagnostic testing, information and services, offers a comprehensive Genetics Testing menu, including Prenatal and Neonatal, Oncology, Neurology and Endocrinology. We empower health with diagnostic insights.

#### Recordati Rare Diseases Inc.

Booth 327

100 Corporate Drive Lebanon NJ 08833 Phone: 908.236.0888 Fax: 908.236.0028

info@recordatirarediseases.com recordatirarediseases.com

Recordati Rare Diseases is a biopharmaceutical company committed to providing therapies to people with rare diseases. Our team works with rare disease communities to increase awareness, improve diagnosis and ensure access to effective treatments.

# **Reprogenetics and Recombine**Booth 308

3 Regent Street, Suite 301 Livingston, NJ 07039 Phone: 973.727.6903

nicole@reprogenetics.com

Recombine and Reprogenetics, CooperSurgical Companies, are your partners in comprehensive and seamless reproductive genetic testing. Dedicated to providing clinically actionable expanded carrier screening, NIPS, PGS, and PGD results, Recombine and Reprogenetics are advancing the field of reproductive genetics and empowering families worldwide.

#### Retrophin

Booth 912

#### Sanofi Genzyme

Booth 400

500 Kendall Street Cambridge, MA 02142 Phone: 617.768.6140

valery.osias@genzyme.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.

# Seattle Children's Hospital, PLUGS Program

Booth 709

4800 Sand Point Way NE Seattle, WA 98105 Phone: 206.987.3361

plugs@seattlechildrens.org seattlechildrenslab.org/plugs

PLUGS (Pediatric Laboratory Utilization Guidance Services) mission is to reduce test ordering errors in the U.S. and decrease the financial burden of unnecessary testing on families. PLUGS began in 2012, and has grown into a national collaboration of 60 institutions.

#### Sequenom, Inc.

#### Booth 708

3595 John Hopkins Court San Diego, CA 92121 Phone: 877.821.7266 info@sequenom.com sequenom.com

Sequenom, Inc. is the trusted source for genetic testing that guides reproductive health matters, providing answers that assist patients and physicians in proactively addressing informed family planning.

#### **Sharsheret**

#### Booth 203

1086 Teaneck Road, Suite 2G Teaneck, NJ 07666 Phone: 866.474.2774 Fax: 201.837.5025 info@sharsheret.org

sharsheret.org

Sharsheret is a national, non-profit organization that supports Jewish women of all backgrounds, facing breast and ovarian cancer—those who are diagnosed and those at high risk.

#### **Shire**

shire.com

Booth 731 300 Shire Way Lexington, MA 02421 Phone: 617.349.0200 drafferty0@shire.com

Shire is the leading global biotechnology company focused on serving people with rare diseases and other highly specialized conditions. We have best-in-class products available in more than 100 countries across core therapeutic areas including hematology, immunology, neuroscience, lysosomal storage disorders, gastrointestinal/internal medicine/endocrine and hereditary angioedema; a growing franchise in oncology; and an emerging,

# Simons VIP Connect Booth 901

innovative pipeline in ophthalmics.

100 N. Academy Avenue; MC: 30-42 Danville, PA 17822

Phone: 855.329.5638 Fax: 570.214.7327

coordinator@simonsvipconnect.org simonsvipconnect.org

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

# SimulConsult Booth 227

27 Crafts Road Chestnut Hill, MA 02467 Phone: 617.879.1670 Fax: 617.849.5993 info@simulconsult.com simulconsult.com

SimulConsult provides 3 tools for genetic counselors: a personalized evidence-based list of most useful genes to test for an individual patient based on their findings; automatically-generated letters of medical necessity; and prognosis tables for all inherited disorders.

# Southwestern Women's Options

Booth 306

522 Lomas Boulevard NE Albuquerque, NM 87102 Phone: 505.242.7512 Fax: 505.242.0540 swoadmin@covad.net southwesternwomens.com

A clinic owned by Curtis Boyd, MD, the Albuquerque office specializes in third trimester abortion care and offers a unique Fetal Indications Program geared to the special needs of the patient and her family.

#### **Special Angels Adoption**

Booth 216 77 Russ Road Jackson, OH 45640 Phone: 256.452.9504 Fax: 740.422.1675

jennifer@specialangelsadoption.org specialangelsadoption.org

We are a fully licensed, 501(c)(3) non-profit, custodial adoption agency handling almost exclusively the adoptions of children with special needs. We are based in Ohio but can work with any family in the United States.

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

Booth 622

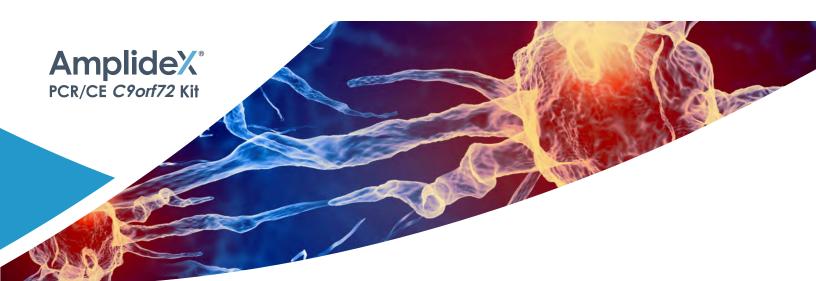
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#### ThinkGenetic, Inc.

Booth 431

328 Old Lancaster Road Sudbury, MA Phone: 866.417.7348 x700

Fax: 978.443.0186 info@thinkgenetic.com thinkgenetic.com

ThinkGenetic.com is a revolutionary, informational genetics website that provides a free, personalized, interactive, patient-focused roadmap for those living with a genetic disease and possible directions for those on a diagnostic odyssey.

# **UAB Medical Genomics Laboratory**

Booth 507

720 20th Street South, Suite 330 Brimingham, AL 35294 Phone: 205.934.5562 Fax: 205.996.2929

medgenomics@uabmc.edu genetics.uab.edu/medgenomics

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

# UCLA Clinical Genomics Center

Booth 800

10833 Le Conte Avenue, AS-370 CHS Los Angeles, CA 90095 Phone: 310.775.5884 Fax: 818.989.6778

scwebb@mednet.ucla.edu pathology.ucla.edu/genomics

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

#### **UCLA Health**

Booth 406

# **UCSF Fetal Treatment Center**

Booth 222

1855 Fourth Street, 2nd Floor, A-2432 San Francisco, CA 94158 Phone: 800.RX.FETUS

Fax: 415.502.0660 fetus@surgery.ucsf.edu fetus.ucsf.edu

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

#### **Ultragenyx Pharmacuetical**

Booth 114

60 Leveroni Court Novato, CA 94949 Phone: 415.483.8800 Fax: 415.483.8810 info@ultragenyx.com ultragenyx.com

Ultragenyx is a clinical-stage biopharmaceutical company committed to bringing to market novel products for the treatment of rare and ultra-rare diseases, with a focus on serious,

#### **Undiagnosed Diseases Network**

debilitating genetic diseases.

Booth 220

10 Shattuck Street Boston, MA 02127 Phone: 844.746.4836 Fax: 617.432.5105

UDN@hms.harvard.edu undiagnosed.hms.harvard.edu

The Undiagnosed Diseases Network, a research project supported by the National Institutes of Health Common Fund, brings together clinical and research experts from across the country to try to solve the most challenging medical mysteries.

#### University of Chicago Genetic Services Laboratories

Booth 526

5841 S Maryland Avenue, MC0077 Chicago, IL 60637 Phone: 773.834.0555 Fax: 773.702.9130

ucgslabs@genetics.uchicago.edu dnatesting.uchicago.edu

UCGSL offers cutting-edge clinical DNA diagnostic services. Our test menu includes exome sequencing, in addition to testing for a wide range of disorders including brain malformations, ataxia, epilepsy, neuromuscular disorders, hereditary cancers and endocrine disorders.

#### **University of Washington**

Booth 911

1959 NE Pacific Avenue Seattle, WA 98195 Phone: 206.598.6429 Fax: 206.598.0304 genelab@uw.edu

depts.washington.edu/labweb/ DivisionsMolDiag/MolDiagGen/index.htm

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 727

985440 Nebraska Medical Center Omaha, NE 68198 Phone: 402.559.5070 Fax: 402.559.7248

humangenetics@unmc.edu unmc.edu/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.

#### **UPMC**

Booth 329

600 Grant Street Pittsburgh, PA 15219 Phone: 412.864.4254

upmc.com

A world-class health care system with over 62,000 employees, Pittsburgh-based UPMC operates more than 20 academic, community, and specialty hospitals (including four awarded MAGNET recognition), plus over 500 doctors' offices, outpatient sites, rehabilitation, retirement, and long-term care facilities. UPMC also insures over 2.9 million people through the UPMC Health Plan.

#### UW Medicine Center for Precision Diagnostics

Booth 428

1959 NE Pacific Street, HSB H-561 Seattle, WA 98195 Phone: 206.543.0459 Fax: 206.616.1899 cpdx@uw.edu uwcpdx.org

The UW Medicine Center for Precision Diagnostics (CPDx) is a CLIA/CAP Accredited clinical genetic testing program comprised of the Collagen Diagnostic Laboratory, Northwest Clinical Genomics Laboratory, Clinical Flow Cytometry Laboratory, and Clinical Cytogenomics Laboratory.

#### Valley Children's Hospital

Booth 610

9300 Valley Children's Place Madera, CA 93636 Phone: 559.353.7058 Fax: 559.353.7070

dyee@valleychildrens.org valleychildrens.org

Valley Children's Hospital is one of the nation's largest pediatric hospitals located in Central California. Our facility includes our Genetics and Maternal Fetal Center.



#### ATTENDANCE VERIFICATION CODES

In place of badge scanners, an attendance verification code (AVC) is provided in each session to verify attendance. Please use this page to record the AVC for each session you attend. You will be required to enter an AVC for each session you attend to complete an evaluation and claim CEUs.

See page 4 for additional instructions for evaluating sessions and claiming CEUs.

**Tip:** Looking for a way to collect these AVCs quickly? Take a picture of the AVC session sign – available at the back of each session room!

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A03	
A04	
A05	
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SESSION	ATTENDANCE VERIFICATION CODE
B12	
B13	
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SESSION	ATTENDANCE VERIFICATION CODE
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> Highlights include: When hoofbeats mean horses: new insights into the science and personal impact of diagnosing and treating alzheimer's disease Susan Hahn, MS, CGC, Neurogenetic Outreach Specialist

> > Thursday, September 29, 1:30-3:00 pm, Room B16

genetic counselors during the NSGC's 2016 Annual Education Conference.

Our advanced genetic testing solutions in neurology, women's health, and oncology help you make accurate diagnoses, guide targeted patient

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See us at the NSGC 2016 Annual Education Conference, Booth 817

#### Genetic counselors in emerging roles Steven Keiles, MS, LCGC, Director, Genetic Counselor Organization Friday, September 30, 5:00-5:45 pm, Room C15

1.866.GENE.INFO (1.866.436.3463)

To see a complete list of Quest Diagnostics speakers at the NSGC, visit QuestDiagnostics.com/2016NSGCPresentations

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# **NOTES**

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2017 Annual Meeting | March 21–25 | www.acmgmeeting.net 2017 Genetics and Genomics Review Course | May 4–7 | www.acmg.net

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- ACMG ACT Sheets Mobile App is available to download on Apple and Android devices, a clinical decision support tool that informs clinicians about genetic conditions.
- ACMG's National Coordinating Center for the Regional Genetic Services
   Collaboratives seeks to improve the availability, accessibility, and quality of
   genetic services for individuals with, or at risk, for genetic conditions and
   their families. Visit nccrcg.org to learn more about the NCC and your
   Regional Collaborative.
- *Genetics in Medicine*, the *ACMG in Action* electronic newsletter and *The ACMG Medical Geneticist* magazine provide members with timely research, industry news, tools, advocacy updates and resources.
- ACMG ICD-10 Pocket Guides and The ACMG Salary Survey provide Genetics professionals with genetic services coding and compensation standards within the field.
- Find a job or list an opening on the ACMG Employment Resource Center at http://careers.acmg.net/.





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