



Day 1 - September 22, 2021

Pre-conference Symposium - Live, Virtual Only

9:00 AM - 3:30 PM CDT

A01: A Grant Writing Retreat to Jump Start or Advance Your Proposal

- Identify essential content to include in key sections of a grant proposal.
- Evaluate grant proposal ideas based on discussions with a genetic counselor experienced with grant writing and/or review and other genetic counselors who are developing grant proposals.
- Draft and/or revise specific aims and research plan drafts for a genetic counselor-led grant proposal.
- Develop and submit a complete genetic counselor-led grant proposal within the next year with the mentorship of a genetic counselor experienced with grant writing and/or review.

Pre-conference Symposia - in New Orleans

9:00 AM - 3:30 PM CDT

A02: Collecting Metrics to Improve Quality and Outcomes: Approaches, Resources and Taking the First Steps

- Describe what is meant by quality metrics.
- Describe the difference between quality improvement, quality assurance and research.
- Identify three reasons to collect metrics.
- Demonstrate how genetic counselors are poised to lead efforts in quality efforts.

Held in New Orleans

A03: Create the Change: Grassroots J.E.D.I. Initiatives

- Describe diverse J.E.D.I. initiatives underway at a variety of organizations, including graduate programs, clinical teams, research programs, trainee forums, and lab/industry groups.
- Enact strategies to engage multiple stakeholders and garner buy-in within one's community.
- Define acceptable outcome measures to ensure sustainable change.
- Determine how to evaluate progress in and barriers to specific initiatives.

Held in New Orleans

A04: Enhancing the Therapeutic Relationship to Improve Patient Outcomes

- Delineate evidence-based patient outcomes associated with a counseling model of practice.
- List the common factors of a therapeutic relationship.
- Recognize importance of common factors across diverse populations and clinical settings.
- Evaluate use of common factors as they contribute to the therapeutic relationship.

Held in New Orleans

A05: Somatic Genetic Therapies: Clinical Uses and Genetic Counselors' Roles

- Learning objectives to be announced.

Held in New Orleans

Pre-conference Symposia, Online, On-demand

A06: Oncofertility Genetic Counseling: Ensuring Comprehensive Reproductive Options for Individuals with Hereditary Cancer Syndromes

- Define oncofertility, its emergence as a distinct discipline relevant to the genetic counselor, and how it can be used to maximize reproductive outcomes for individuals with HC.
- Review current challenges faced by reproductive and oncology genetic counselors alike when caring for patients with hereditary cancer syndromes.
- Identify barriers to accessing FP and IVF/PGT-M for adults and children with hereditary cancer syndromes across diverse US populations.
- Discuss strategies for increasing accessibility of HC testing in the obstetrical setting and the role of the genetic counselor in oncofertility for pediatric and young adult cancer patients of all genders.

Opening Plenary Session

4:15 PM - 5:00 PM CDT

A07: Empathy in Action: A Personal Journey of Treacher Collins Syndrome

- Examine the lived experience of an individual with Treacher Collins who is also a diversity/inclusion/equity educator.
- Identify aspects of J.E.D.I. that need improving in the medical community, particularly for patients with rare genetic disorders.
- Summarize the speaker's sentiments regarding genetic counseling and testing (for both diagnostic and reproductive health) in the context of his diagnosis.
- List 2-3 specific actions genetic counselors can take as healthcare providers to improve social-emotional sensitivity, equity and inclusion for all patients, regardless of clinical indication.

**This session will be live-broadcasted from New Orleans to virtual attendees*

Day 2 - September 23, 2021

Sponsored Symposium

8:15 AM - 8:45 AM CDT

Myriad Sponsored Symposium

- Learning objectives to be announced.

Sponsored by: Myriad

Held in New Orleans

What is SMART About Screening for 22q11.2?

- In this session, we will review the results of SMART, the largest prospective NIPT study, which includes significant improvements to the positive predictive value for 22q11.2 deletion screening.

Sponsored by: Natera

Held in New Orleans

Plenary Session

9:00 AM - 9:45 AM CDT

B03: The Devil is in the Details: Race-Based Medicine and Healthcare Disparities in Genetic Counseling

- Examine how race is used inappropriately to guide clinical decisions regarding the ordering and interpretation of genetic tests in three specialty areas of genetics - prenatal carrier screening, polygenic risk scores in cancer, and pharmacogenomics.
- Discuss how race differs from ancestry and ethnicity, the importance of using correct terminology in a clinical or research context, and how these demographics can be ethically utilized in genetic counseling practice.
- Describe opportunities for genetic counselors to play an active role in combating race-based medicine and expanding equal access to genetic services across minority patient population groups.

**This session will be live-broadcasted from New Orleans to virtual attendees*

Educational Breakout Sessions

10:30 AM - 12:00 PM CDT

B04: Debates in Cardiology: Are Inherited Heart Diseases Monogenic?

- Learning objectives to be announced.

Held in New Orleans

B05: Gender-Inclusive Genetic Counseling: What Have We Learned and How Do We Incorporate It into Our Practice?

- Describe the gender affirmation process from psychological, social, and medical perspectives.
- Summarize recent literature and research surrounding genetic counseling for TGNB populations.
- Integrate gender inclusivity into genetic counseling practice.

**This session will be live-broadcasted from New Orleans to virtual attendees*

B06: Health Equity in Prenatal Screening: A Potential Roadmap and Patient Views

- Identify the barriers to accessing non-invasive prenatal screening (NIPS) and expanded carrier screening (ECS) for patients.
- Understand patient views surrounding access to NIPS.
- Discuss strategies that address health equity with respect to the barriers to access and disparities in access to non-invasive prenatal screening and expanded carrier screening.

Held in New Orleans

B07: It's Messy: Navigating Ethical Issues in Clinical Research

- Identify key ethical issues common in clinical research.
- Summarize three ethical frameworks that can be utilized in these scenarios, such as Utilitarianism, Virtue Ethics, and Casuistry.
- Examine how multiple ethical frameworks could be applied to the same problem.
- Apply various frameworks to ethical challenges in clinical research.

Held in New Orleans

B08: To Test or Not to Test Children for Adult-onset Hereditary Cancer Genes? T'is the Question

- Examine the ethical frameworks that inform decisions about whether to test minors for adult-onset cancer syndromes.
- Apply ethical principles in a debate format to cases that involve testing for adult-onset cancer genes in minors.
- Evaluate ethical concepts such as autonomy through a culturally-competent lens.
- Illustrate the lived experience of patients and family members considering or requesting testing for adult-onset cancer syndromes.

Held in New Orleans

Sponsored Symposium

12:45 PM - 1:30 PM CDT

BRCA Mutation and Homologous Recombination Deficiency (HRD) Testing in Advanced Ovarian and Metastatic Breast Cancer

- This program will include an overview of BRCA and the homologous recombination repair (HRR) pathway, the tumor characteristic of homologous recombination deficiency (HRD), and associated biomarkers that help guide clinical decision-making in advanced ovarian and metastatic breast cancer.

Sponsored by: AstraZeneca

Held in New Orleans

Better Together: The Importance of Both Germline Genetic Testing and Somatic Tumor Profiling

- It is important to consider germline genetic testing and somatic tumor profiling as part of the comprehensive workup for cancer patients since both can impact patient management and inform treatment decisions. This session will provide an overview of the utility of each testing type, professional guidelines and clinical implementation approaches.

Sponsored by: Invitae

Held in New Orleans

Lecture Concurrent with Workshops

1:45 PM - 3:45 PM CDT

B11: From Altruism to Obligation: How Research Participation is not as Voluntary as We Envisioned

- Examine examples of how involuntary research participation is framed in clinical settings and how lack of transparency erodes trust in Black communities.
- Analyze current consent forms from surgical procedures, clinical trials and genetic screenings to identify ethical dilemmas.
- Work through ways to reword, reframe, and reform the consenting process with the involvement of patients and other health providers.
- Discuss how limited access to treatment and care may hinder future participant interest in all research.

**This session will be live-broadcasted from New Orleans to virtual attendees*

Workshops

1:45 PM - 3:45 PM CDT

B12: "Yes, And": Broadening Genetic Counseling Skills Through Applied Improv

- Utilize improvisation exercises to build skills in effectively and spontaneously reacting to unknown and unpredictable situations and communicating with empathy and clarity.
- Develop tools through applied improv to manage and accept uncertainty and ambiguity in any situation.
- Incorporate applied improv and mindfulness techniques to encourage participants to take risks and step out of their comfort zone.
- Provide challenges and learning opportunities through exercises grounded in principles of spontaneity, adaptability, collaboration, and skilled listening.

Held in New Orleans

B13: Checking Our Blind Spots: A Discussion of Bias and Miscommunication in the Genetic Counseling Session

- Explain how implicit and explicit bias impact our lives and practice, and the different levels at which we are aware of bias.
- Apply strategies for observing, analyzing, and comparing different aspects of culture, specifically in the context of a genetic counseling session.
- Employ strategies for counseling diverse patients in the clinic.
- Enhance the effectiveness of counseling sessions by navigating and accommodating cultural differences.

Held in New Orleans

B14: Building a Framework for Holistic Review

- Define holistic admissions.
- Discuss various frameworks for holistic review of applicants including mission-based and competency-based admissions.
- Summarize the experiences of incorporating holistic admissions for an established program.
- Examine how several genetic counseling programs approach holistic admissions.

Held in New Orleans

B15: Non-Violent Communication: Leading and Participating in Constructive Dialogue about J.E.D.I.

- Define micro- and macro-aggressions generally and in the context of the GC community.
- Discuss the framework of Marshall Rosenberg's Nonviolent Communication.
- Compare bystander to upstander behaviors when witnessing a microaggression.
- Practice promoting a safe, constructive dialogue using Nonviolent Communication.

Held in New Orleans

B16: Forward Momentum: Variant Classification Primer and Collaboration with Genetic Testing Laboratories

- Learning objectives to be announced.

Held in New Orleans

Plenary Session

4:45 PM - 5:30 PM CDT

B17: The Latin American Immigrant Experience in Genetic Counseling: Our Clients, Colleagues & the Communities We Serve

- Discuss and compare the challenges faced by Hispanic/Latinx immigrants from Mexico, Central and South America, and the Caribbean to non-immigrants in the United States healthcare system.
- Identify opportunities to integrate recommendations and guidance on caring for immigrant populations into clinical care, genetic testing workflows, and research initiatives.
- Identify approaches to better understand the experiences of and support students and colleagues who are immigrants.

**This session will be live-broadcasted from New Orleans to virtual attendees*

Day 3 - September 24, 2021

Sponsored Symposium

8:15 AM - 8:45 AM CDT

Ambry Sponsored Symposium

- Learning objectives to be announced.

Sponsored by: Ambry Genetics

Held in New Orleans

Prenatal Testing: When Multiple Technologies Reveal More than Meets the Eye

- Review of complex cases from screening to diagnosis to uncover answers and inform patient management.

Sponsored by Labcorp

Held in New Orleans

Plenary Sessions

9:00 AM - 9:30 AM CDT

C03: 2021 Janus Lecture: Sickle Cell

- Featuring Barbara Harrison, MS, CGC discussing the past, present and future of Sickle Cell Disease.

**This session will be live-broadcasted from New Orleans to virtual attendees*

9:30 AM - 10:00 AM CDT

C04: FORWARD Abstracts

- Learning objectives to be announced.

**This session will be live-broadcasted from New Orleans to virtual attendees*

Educational Breakout Sessions

10:30 AM - 12:00 PM CDT

C05: Cultivating Inclusive Supervision Strategies for an Evolving Profession

- Define the tenets of the reciprocal-engagement model of supervision (REM-S) as it relates to genetic counseling student supervision.
- Explore the ways in which the intersection of the identities and experiences of the supervisor, student, and patient contribute to a supervised genetic counseling session.
- Deconstruct historical standards of professionalism and interpersonal relationships, and who they serve to benefit.
- Integrate strategies for relationship building and providing feedback in a supervisory role based on individual performance.

Held in New Orleans

C06: Advancing Liquid Biopsy in Early Detection, Management and Monitoring of Cancer

- Discuss emerging applications of liquid biopsy for early detection.
- Identify benefits of liquid biopsy for treatment decisions and monitoring minimal residual disease.
- Explore the role of the genetic counselor in assessing liquid biopsies for cancer risk assessment, detection and management.

Held in New Orleans

C07: Time for reinforcements? A Discussion on Outsourcing Genetic Counseling Services

- Learning objectives to be announced.

**This session will be live-broadcasted from New Orleans to virtual attendees*

C08: Stretching Resources: What to do When Your Clinic is Hyper-inundated with Hypermobility

- Evaluate the role of genetic counselors in health counseling for patients with hypermobility Ehlers Danlos syndrome.
- Compare different triage and clinical care models for patients referred for hypermobility.
- Understand institutional motivations for development of triage models for patients with hypermobility.
- Explore the motivations, goals, and experience of hypermobility EDS patients and how this contributes to their perception within the medical field.

Held in New Orleans

Sponsored Symposium

12:45 PM - 1:30 PM CDT

When Bigger Isn't Always "VOUSier"

- The session will discuss the use of phenotype-driven analysis for large scale sequencing tests like whole exome and whole genome sequencing. The presentation will include an overview of the concept of phenotype-driven analysis while also exploring the potential benefits for health care providers and their patients.

Sponsored by: PerkinElmer

Held in New Orleans

PreventionGenetics Sponsored Symposium

- Learning objectives to be announced.

Sponsored by: PreventionGenetics

Held in New Orleans

Plenary

1:45 PM - 2:45 PM CDT

C11: NSGC State of the Society Address

- Learning objectives to be announced.

**This session will be live-broadcasted from New Orleans to virtual attendees*

2:45 PM - 3:15 PM CDT

Incoming Presidential Address

- Welcome NSGC President-elect Heather Zierhut, as he introduces herself to NSGC members and outlines her vision for NSGC and the genetic counseling profession in 2022.

**This session will be live-broadcasted from New Orleans to virtual attendees*

4:15 PM - 5:15 PM CDT

C12: NSGC Professional Issues Panel

- Learning objectives to be announced.

**This session will be live-broadcasted from New Orleans to virtual attendees*

Day 4 - September 25, 2021

Sponsored Symposium

8:15 AM - 8:45 AM CDT

Centogene Sponsored Symposium

- Learning objectives to be announced.

Sponsored by: Centogene

Held in New Orleans

The Routine Incorporation of Molecular Ancestry into Carrier Screening: Sema4's Clinical Experience

- In this session, Sema4 will present the initial clinical experience of the laboratory and healthcare providers with the routine incorporation of molecular ancestry into carrier screening to provide

personalized residual risks. This session will address limitations of self-reported ancestry and the importance of pan-ethnic panels in an ethnically diverse population.

Sponsored by: Sema4

Held in New Orleans

Plenary Session

9:00 AM - 10:00 AM CDT

D03: Beverly Rollnick Lecture

- Session and learning objectives to be announced.

**This session will be live-broadcasted from New Orleans to virtual attendees*

Sponsored Symposium

12:45 PM - 1:30 PM CDT

Agent of Equity: Carrier Screen with Reflex Single-gene NIPT for Fetal Risk Assessment

- Learn about cfDNA technology that provides accurate fetal risk assessment for ACOG recommended autosomal recessive conditions. Single-gene NIPT is incorporated as a reflex to carrier screening and streamlines workflow by eliminating the need for partner testing. This session will review technology, existing data, and describe clinical utility through case examples.

Sponsored by: BillionToOne, Inc. (Unityscreen)

Held in New Orleans

Biogen Sponsored Symposium

- Learning objectives to be announced.

Sponsored by: Biogen

Held in New Orleans

Plenary Sessions

1:45 PM - 2:15 PM CDT

D11: Audrey Heimler Special Projects Award Presentation

- Learning objectives to be announced.

**This session will be live-broadcasted from New Orleans to virtual attendees*

2:15 PM - 3:00 PM CDT

D12: "Directiveness" in Modern Genetic Counseling: Navigating Our Shared Future with Values, Evidence, and Versatility

- Learning objectives to be announced.

**This session will be live-broadcasted from New Orleans to virtual attendees*

3:30 PM - 4:00 PM CDT

D13: Jane Engelberg Memorial Fellowship Award Presentation

- Learning objectives to be announced.

**This session will be live-broadcasted from New Orleans to virtual attendees*

4:00 PM - 4:45 PM CDT

D14: Late-breaking Plenary

- Session and learning objectives to be announced.

**This session will be live-broadcasted from New Orleans to virtual attendees*

Day 5 - September 26, 2021

Sponsored Symposium

8:15 AM - 8:45 AM CDT

Niemann-Pick Disease Type C: Understanding a Complex Genetic Disorder

- Niemann-Pick disease type C (NPC), a rare, progressive genetic disorder, leads to neurodegeneration and can be fatal. NPC manifests with a wide array of symptoms and with varied age of symptom onset, making it a challenge to diagnose. Understanding NPC and its management could ultimately lead to improved patient outcomes.

Sponsored by: Orphazyme

Held in New Orleans

Scratching the Surface: Exploring the Importance of Genetic Testing in Cerebral Palsy

- This symposium will review genetic causes of cerebral palsy (CP), examine the importance of genetic testing in this disorder, and explore how genetic counselors can facilitate genetic testing for patients with CP. The symposium will also summarize the preliminary results of a no-cost CP Spectrum genetic testing program.

Sponsored by: PTC Therapeutics

Held in New Orleans

Educational Breakout Sessions

9:00 AM - 10:30 AM CDT

E03: Giving Out Raw Data to Patients or Consumers: is It a Good Thing or a Raw Deal? Legal, Ethical and Practical Considerations for Genetic Counselors, Researchers and Genetic Testing Companies

- Identify the potential risks and benefits posed by giving patients, customers and research participants access to the raw data generated by multiple forms of genetic testing.
- Identify potential public and private options that could provide regulation and oversight for the release and use of raw data from genetic testing.

- Assess the role that genetic counselors can play in guiding patients on the use of raw data and best practices in genetic counseling for patients presenting with results based on third-party analysis of raw data.

Held in New Orleans

E04: Leave No Histone Unturned: Recognizing the Phenotypic, Testing and Therapeutic Gems of Epigenetic Conditions

- Define Mendelian Disorders of the Epigenetic Machinery (MDEMs).
- Name three common phenotypic presentations of epigenetic conditions.
- Recognize clinical scenarios for which genome wide methylation analysis may be clinically useful.
- Describe two therapeutic approaches to epigenetic conditions.

Held in New Orleans

E05: Practicing What We Preach: Acceptance and Advocacy for Genetic Counselors with Disabilities and Chronic Conditions

- Define disability and related terms and describe the prevalence and types of disabilities and chronic conditions within the genetic counseling workforce.
- Summarize examples of discrimination based on disabilities and/or chronic conditions within the genetic counseling field.
- Examine ways in which the field of genetic counseling can be more inclusive toward, advocate for, and benefit from those genetic counselors and genetic counseling students who identify as having a disability or chronic condition.
- Review the legal rights that individuals with disabilities and chronic conditions have regarding disclosure and reasonable accommodations in the workplace and educational settings.

**This session will be live-broadcasted from New Orleans to virtual attendees*

Plenary Sessions

10:30 AM - 11:00 AM CDT

E06: Plenary Session To Be Announced

**This session will be live-broadcasted from New Orleans to virtual attendees*

11:00 AM - 11:15 AM CDT

E07: Beth Fine Kaplan Best Student Abstract Award

- Winner and talk to be announced.

**This session will be live-broadcasted from New Orleans to virtual attendees*

11:15 AM - 11:30 AM CDT

E08: Best Full Member Abstract Award

- Winner and talk to be announced.

**This session will be live-broadcasted from New Orleans to virtual attendees*

Post-conference Symposia

1:00 PM - 4:30 PM

E09: Follow the Money: Downstream Revenue and Genetic Counseling

- Recognize use of DSR data for different purposes depending on stakeholders.
- Describe a general framework for how to compile DSR data within one's institution.
- Evaluate and apply data compiled on downstream revenue across institutional settings.
- Identify resources to initiate or expand DSR assessment in any setting where genetic counselors practice.

Held in New Orleans

E10: Soy Consejera/o Genética/o

- Review and summarize the status of our current understand about Spanish language genetic counseling.
- Discuss established linguistic resources and counseling approaches utilized clinically.
- Conduct small group role-playing of clinical scenarios in Spanish among workshop attendees and provide self and group evaluations of activities.
- Create strategies for future genetic counseling interactions in Spanish and discuss ways to disseminate these strategies.

Held in New Orleans

E11: The Genetics Influencer Workshop: Tackling Misinformation and Finding our Professional Voice on the Next Generation of Social Media

- Identify pseudoscience on social media and intervention techniques.
- Evaluate the potential risks and benefits to creating personal science content for social media.
- Formulate a personal strategy for science communication and content creation while staying within the confounds of institutional rules and regulations surrounding social media.
- Compare the newest social media platforms and the benefits and limitations to each of them.

Held in New Orleans

On-Demand Educational Breakout Sessions

OD01: Advocating for Autonomy: Genetic Counselors as Champions for Comprehensive Reproductive Health

- Identify the evolution of reproductive health policy at both the state and federal levels in recent years.
- Appraise the implications of reproductive health policy changes on underinsured persons and marginalized individuals presenting for genetic counseling care in various medical specialties.
- Evaluate models for healthcare providers to normalize conversations about abortion as healthcare.
- Strategize opportunities for genetic counselor action in reproductive justice advocacy.

OD02: Building Knowledge about Parkinson's Disease (for the Non-Specialist Genetic Counselor)

- To review the clinical features of PD, diagnosis, and overlapping conditions.

- To understand PD causation, become familiar with the major PD genetics, and identify educational/referral resources for PD genetics.
- To review current PD genetic testing.
- To explore secondary encounters with PD-associated test results.

OD03: Multidisciplinary Approaches to Hereditary Renal Cancer Identification and Surveillance

- Describe subtypes of RCC and indications for evaluation of hereditary RCC.
- Compare and contrast current guidelines (NCCN, organization-specific guidelines, and expert recommendations) to identify optimal hereditary RCC management.
- Identify strategies to develop multi-disciplinary team to address hereditary RCC management.

OD04: Referral Innovation through Automation: Using Your EHR to Help Providers Recognize and Generate Appropriate Referrals through Clinical Decision Support (CDS)

- Summarize typical EHR referral processes and how automated clinical decision support (CDS) can be leveraged to benefit Genetic Counselors.
- Identify what is needed (the EHR foundations) at a genetic counselor's institution to implement this type of project.
- Examine examples of successes and challenges when implementing EHR automation from the GC perspective.
- Evaluate means of measuring CDS success.

OD05: The Latest in Pharmacogenetics: What Genetic Counselors Need to Know

- Employ strategies for counseling for pharmacogenetics within the genetic counseling scope of practice.
- Compare variable testing technologies utilized for pharmacogenetics including sequencing and genotyping.
- Describe current payer coverage and patient access landscape related to pharmacogenetic testing.
- Recognize the dramatic impact FDA regulation has had on PGx test offerings.

OD06: Update for the generalist: Anticipating the intersection of the DTC market and multimodal biomarker tests for Alzheimer's disease (beyond ApoE4) while centering social justice

OD07: Variant Interpretation in Expanded Carrier Screening: Caveat Emptor!

- Describe the current guidelines in practice for interpretation of variants identified through expanded carrier screening.
- Identify benefits, pitfalls, and limitations of these advancements using a review of the literature and case examples.
- Debate the role and responsibilities of the ordering provider versus the genetic counselor versus the ECS laboratory.