Semi-Annual Colorado Genetic Counselors Symposium

Date: Friday, September 22nd, 2023
Time: 8:00am – 4:30pm
Location: Virtual Conference via Zoom & In Person
In person: CHCO Conference Center, Mt. Yale
Focus: Oncology/Cancer Genetics

This Colorado Genetic Counselors Symposium aims to provide an educational review and update regarding genetic counseling practices. Presentations are given by practicing genetic counselors and physicians actively involved in the local genetic counseling community.

8:00 – 9:00 Swati Patel, MD
Best Practices and Innovations in Decreasing Colorectal Cancer Risk in Lynch Syndrome
This presentation will review the pathogenesis of colorectal cancer in Lynch Syndrome and genotype specific cancer risks. The presentation will cover current guideline-based recommendations for cancer risk reduction. Finally, we will review emerging innovations in care of patients with Lynch Syndrome.

Learning objectives:

1. Describe the genotype specific risk of colorectal cancer in Lynch Syndrome
2. Review the mechanisms of colorectal cancer development in Lynch Syndrome
3. Apply the guideline-based recommendations for colonoscopy surveillance
4. Summarize emerging innovations in cancer prevention in Lynch Syndrome

9:00 – 9:45 Lisen Axell, MS, CGC
Cancer Prevention in Lynch Syndrome with Aspirin and Starch (CAPP2 Trial)
The presentation will review recent findings of the CAPP2 study, which was a randomized double blind study of 10 year follow up of registry-based 20 year data for cancer prevention in Lynch syndrome. The talk will summarize the findings of the study and possible mechanisms for prevention for both aspirin and resistant starch. Will discuss ongoing next steps in further evaluation of cancer prevention in Lynch syndrome.

Learning objectives:

1. Summarize the findings of these two large studies looking at cancer prevention in Lynch Syndrome
2. Contrast the proposed mechanism for cancer prevention with aspirin to resistant starch.
3. Examine current guideline recommendations and further research into cancer prevention in Lynch Syndrome

9:45 – 10:00 Break

10:00 – 10:45 Jaime Arruda, MD
Update in Gynecological Treatment and Prevention for Hereditary Breast and Ovarian Cancer Patients

This presentation will review the data on the risk of gynecological cancers associated with hereditary breast and ovarian cancer syndromes. We will also review the options for screening, the medical risk reduction treatments for high-risk patients, the surgical risk reduction options, and the treatment of complications following risk reducing surgery.

Learning objectives:

1. Identify patients at high risk for hereditary breast and ovarian cancer syndromes
2. Discuss the role of screening, medical risk reduction, and surgical risk reduction.
3. Review the treatment of complications and lifestyle modifications associated with risk reducing strategies with a focus on fertility preservation and treatment of menopause.

10:45 – 11:30 Sarah Hunt, MS, CGC
Cancer risk assessment in trans and nonbinary AFAB individuals pursuing top surgery
Transgender individuals experience barriers pursuing gender affirming care, including lack of guidelines around when to recommend chest masculinization versus risk-reducing top surgery. We worked with a genetic counseling graduate student to develop a hereditary cancer screening and referral process for transmasculine individuals assigned female at birth (AFAB) pursuing top surgery. This presentation will outline this screening and referral process and recommendations for genetic counseling practice.

Learning objectives:

1. Examine barriers faced by transgender and gender nonconforming individuals seeking gender-affirming care.
2. Identify gaps in knowledge and guidelines that impact transgender/gender nonconforming individuals seeking cancer risk assessment and genetic counseling for hereditary cancer.
3. Review an example of a hereditary cancer screening and referral process for transmasculine individuals seeking top surgery and recommendations for genetic counseling practice.

11:30 – 12:00 LUNCH

12:00 – 1:00 Melissa Bondy, PhD (*Virtual presenter*)

Gliomas and Familial Risk – The Gliogene Study
Brain tumors are rare, and we don't yet fully understand them. Very few appear to be hereditary, yet most brain tumors are associated with changes in an individual's genes. Gliogene is the largest genetic study of glioma in families and aims to learn more about the heritable genes that may contribute to brain tumors.

Learning objectives:

1. Evaluate the risks of glioma
2. Identify the characteristics of inherited versus sporadic gliomas
3. Summarize current knowledge regarding the genetic susceptibility for glioma

1:00 – 1:45 Marie Wood, MD
Multicancer early detection tests, are they ready for prime time?
We will review the limitations of current opportunities for cancer screening and explore new options for testing. The new multicancer early detection tests will be reviewed including a discussion of the risk and benefits of testing. Lastly the learner will hear of the research opportunities in this space including the NCI perspective and planned studies.

Learning objectives:

1. Identify the limitations of current cancer screening.
2. Discuss the available multicancer early detection tests and understand how testing is done
3. Explore the data needed to incorporate MCED testing into usual care

1:45 – 2:00 Break

2:00 – 2:45 Emily Todd, MS, CGC
Experience of return of clinical genetic results through the Colorado Center for Personalized Medicine Biobank
The Biobank at the Colorado Center for Personalized Medicine (CCPM) is a biorepository created in partnership with UCHealth and the University of Colorado Anschutz Medical Campus with the stated goal 'to facilitate research and discoveries in personalized medicine'. In addition to its research goals, the Biobank is providing some clinically verified genetic results to participants. We will discuss the process of results return including the types of results being provided by the CCPM Biobank and the method of return.

Learning objectives:

1. Review the process of CCPM Biobank results return including the types of results being provided and the method of return.
2. Explore how this process impacts health care for Biobank participants including receipt of genetic services.
3. Identify ethical implications of this method of providing genetic results.

2:45 – 3:30 Joshua Keyes, MS, CGC
Autosomal Recessive Implications of Autosomal Dominant Cancer Predisposition Conditions – Prevalence, Clinical Characteristics, and Management
In an adult hereditary cancer clinic, many of the conditions discussed and tested for are adult onset and are inherited in an autosomal dominant manner (HBOC, Lynch syndrome, etc.). A handful of these conditions have autosomal recessive implications too. This talk will aim to review the hereditary cancer predisposition conditions that have autosomal recessive associations as well as discuss their prevalence, cancer risks, non-malignant clinical

characteristics (if applicable), and available surveillance/management guidelines. This information will be helpful in providing accurate and up to date counseling for our patients that are identified to carry a mutation(s) in this subset of genes.

Learning objectives:

1. Identify which conditions tested for within an adult hereditary cancer clinic have autosomal recessive disease associations.
2. Discuss the prevalence, risks, and clinical characteristics associated with these autosomal recessive conditions.
3. Review current guidelines for the management and surveillance of patients with these autosomal recessive conditions.

3:30 – 4:30 Jessica Berman, NP
Your patient has a genetic predisposition to cancer, now what?
An introduction to the Cancer Genetics and Prevention Clinic (CGPC) and insight into what patients will experience after they are referred. We will review who should be referred and how and when to do so. The benefits of being followed by the CGPC as well as challenges for patients in screening and prevention will be discussed.

Learning objectives:

1. Identify who should be referred the Cancer Genetics and Prevention Clinic and how to do so both internally and outside of UCHealth.
2. Discuss what long term surveillance for patients with hereditary cancer syndromes looks like for both those with and without a history of cancer.
3. Review the benefits of being followed by the CGPC as well as the challenges that exist within screening and prevention.