# **Center for Individualized Medicine Online Learning**

## **Activity Description**

Individualized or precision medicine is rapidly making an impact on healthcare delivery, being propelled forward by the advances in genomic medicine. The Center for Individualized Medicine online modules offer the opportunity to learn from experts about topics in genomics that are sure to have applications in almost every medical field and specialty. Learn how you can enhance your practice and expand your understanding of how genomics in making a difference in patient care.

### **Target Audience**

This activity is appropriate for physicians, nurse practitioners, pharmacists, physician assistants, nurses, resident/fellows and other health care team members.

## **Learning Objectives**

Upon conclusion of this activity, participants should be able to:

- Demonstrate the clinical impact of individualized medicine
- Describe the emerging science of individualize medicine
- Identify considerations for the use of genetic testing in clinical practice

Attendance at this Mayo Clinic course does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course.

### **Accreditation Statement**



In support of improving patient care, Mayo Clinic College of Medicine and Science is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.

### Credit Statement(s)

#### **AMA**

The Mayo Clinic College of Medicine and Science designates this enduring material for a maximum of 1 *AMA PRA Category 1 Credit(s)* $^{TM}$ . Physicians should claim only the credit commensurate with the extent of their participation in the activity.

## **ANCC**

Mayo Clinic College of Medicine and Science designates this live activity for a maximum of 1 ANCC nursing contact hours. Nurses should claim only the credit commensurate with the extent of their participation in the activity.

## **Course Director**

Timothy B. Curry, M.D., Ph.D.

## **Online Learning Modules**

## **Genomics and Oncology: Nursing Practice**

60 minutes = 1 credit

Kelliann C. Fee-Schroeder RN, OCN

Genomic medicine is having a great impact, not only in primary care, but also in the field of oncology, including the early detection and treatment of cancer. Physicians, nurses, and healthcare professionals in any field will benefit from understanding key genomic concepts and how they relate to oncology. This module provides nurses and other members of the health care team an overview of genomics, applications to cancer, and valuable resources.

## Genomics and Oncology: BRCA1 & BRCA2 – We All Have Them

15 minutes = .25 credit

Teresa M. Kruisselbrink, MS, CGCC, LGC

Patients, both male and female, who have a mutation in BRCA 1 or 2 genes have an increased risk of various forms of cancer, most particularly, breast cancer. These patients face difficult decisions regarding their options for reducing risks or choosing treatments. Explore the implications for patients who will rely on the guidance of healthcare providers as they navigate these challenges.

## **Genomics in Clinical Practice: Patient Perspective**

15 minutes = .25 credit

Teresa M. Kruisselbrink, MS, CGCC, LGC

The evolving advances in the genetics field has brought with it concerns regarding patients' genetic information. What protection and assurances do patients have that their information will not be used to discriminate against them regarding employment or insurance coverage? As medical institutions are in possession of patient information, it is important to build trust and bring awareness of protection provided by GINA, the Genetic Information Nondiscrimination Act. Learn how you can better serve your patients in this informative online module.

## Genomics in Clinical Practice: Consumer Initiated Testing - What Clinicians Need to Know

15 minutes = .25 credit

Matthew J. Ferber, Ph.D.

The increasing use of consumer-initiated, or direct-to-consumer genetic testing (DTC-GT), has empowered individuals to investigate their own genetic risk factors. However, studies show that patients are less likely to follow up on medically actionable findings, unless they consult healthcare providers. Be prepared to discuss with your patient their DTC-GT results, helping them to receive appropriate follow-up medical care.

#### **Genomics in Clinical Practice: COVID-19**

15 minutes = .25 credit

SME to be determined

In the midst of the COVID-19 pandemic, understanding the genomics, hosts, modes of transmission and epidemiological links of the virus are more important and urgent than ever. Find out how genomics is helping to answer the questions that could lead to solutions for this worldwide concern.

### Genomics in Clinical Practice: Pharmacogenomics in Neurology

15 minutes = .25 credits

W. David Freeman, M.D.

As medicine moves away from a one-size-fits-all approach and toward a path of personalized medicine, pharmacogenomics is emerging as one of the key elements to this new model of caring for patients. Pharmacogenomics, the study of how genes affect a person's response to drugs, is relevant whenever prescriptions are part of the treatment plan. This applies to neurology, oncology, family medicine, and beyond. Hear how pharmacogenomics is making a difference in healthcare delivery, and how it can help healthcare providers make a difference, one patient at a time.

### **Disclosure Summary**

As a provider accredited by Joint Accreditation Interprofessional Continuing Education, Mayo Clinic College of Medicine and Science must ensure balance, independence, objectivity and scientific rigor in its educational activities. Course Director(s), Planning Committee Members, Faculty, and all others who are in a position to control the content of this educational activity are required to disclose all relevant financial relationships with any commercial interest related to the subject matter of the educational activity. Safeguards against commercial bias have been put in place. Faculty also will disclose any off label and/or investigational use of pharmaceuticals or instruments discussed in their presentation. Disclosure of these relevant financial relationships will be published in activity materials so those participants in the activity may formulate their own judgments regarding the presentation.

Financial relationship(s):

Timothy B. Curry, M.D., Ph.D. Consultant Geneticure

Matthew J. Ferber, Ph.D. Full Time Employee Mayo Clinic GeneGuide<sup>™</sup>

No Financial relationship(s):

Judy L. Boyum, M.S.
Kelliann C. Fee-Schroeder, RN, OCN
Stacy A. Johnson, M.A.
Teresa M. Kruisselbrink, M.S., CGC, LCGC
Kara Mangold, DNP, RN, NPD-BC, CCTN, CNE, EBP-C
Ane Muskaj
Nichole R. Nicholas, M.A.
Carolyn Rohrer Vitek, Ed.D., M.S.

Reference to off-label usage(s) of pharmaceuticals or instruments in their presentation: None

For disclosure information regarding Mayo Clinic School of Continuous Professional Development accreditation review committee member(s) and staff, please go here to **review disclosures**.

### Mayo Disclaimer

Participation in this Mayo Clinic educational activity does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course. You should be aware that substantive developments in the medical field covered by this recording may have occurred since the date of original release.

#### **Prerequisites for Participation**

There are no prerequisites needed prior to participating in this education activity.

### **How to Obtain Credit**

To obtain credit, complete the post-test, evaluation and submit.

#### **Method of Participation**

Participation in this activity consists of reviewing the internet-based content and completing the post-test and evaluation.

#### Release and Expiration Dates\*

Release Date: June 17, 2020

Expiration Date: July 20, 2023

## **Acknowledgement of Commercial Support**

No commercial support was received in the production of this activity.

#### Copyright

Mayo Foundation for Medical Education and Research. All rights reserved. Copyright 2020