# **Advancing Care through Genomics: Essentials for Nursing Practice**

## **Activity Description**

Genomic testing and genomic medicine are both rapidly growing fields, and the American Nurses Association recognizes that all nurses have a role in delivering genetics/genomics services to patients and families. Clinical advances have resulted in the introduction of genomics into practices ranging from primary care to oncology to critical care. These courses have been designed to provide nurses and health care staff with broad education in genomics and were specifically developed to translate genomic science into practice.

## Target Audience

This activity is appropriate for nurses, physicians, physician assistant, allied health professionals, resident fellow, and students.

## Learning Objectives\*

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

- Explain fundamental genetic and genomic concepts
- Review a comprehensive family medical history assessment
- Apply genomic concepts, including testing methodologies, into standard practice related to disease risk, diagnosis, and treatment
- Identify implications of genomic testing results
- Describe genomics into patient-focused health teaching and health promotion strategies
- Examine ethical, legal, and social implications (ELSI) surrounding genomics and genetic testing, including privacy and confidentiality of genomic data

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

Mayo Clinic College of Medicine and Science designates this enduring material for a maximum of 6.75 AMA PRA Category 1 Credits™. 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 enduring material for a maximum of 6.75 ANCC contact hours. Nurses should claim only the credit commensurate with the extent of their participation in the activity.

### Other Healthcare Professionals

A record of attendance will be provided to all registrants for requesting credits in accordance with state nursing boards, specialty societies or other professional associations.

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

Available Credit
6.75 AMA PRA Category 1 Credit™
6.75 ANCC
6.75 Attendance

## **Disclosure Summary\***

As a provider accredited by Joint Accreditation for Interprofessional Continuing Education, Mayo Clinic College of Medicine and Science must ensure balance, independence, objectivity and scientific rigor in its educational activities. All who are in a position to control the content are required to disclose all financial relationships with any ineligible company. Faculty will also identify any off-label and/or investigational use of pharmaceuticals or instruments discussed in their content for FDA compliance.

Listed below are individuals with control of the content of this program who have disclosed...

Relevant financial relationship(s) with ineligible companies:

Name	Nature of Relationship		Company
Fimothy Curry, MD, PhD Consultant			Advanced Hemodynamic Monitoring Database (Intellectual Property through Mayo Clinical
Ventures)			
	Consultant		Geneticure
Matthew Ferber, PhD	Consultant		Know-How Related to Improving Clinical Reports Delivering Whole Genome Sequencing Data (Intellectual Property through Mayo Clinical
Ventures)			
	Consultant		Clinical Consultant Desktop for Next Generation Sequencing Testing (Intellectual Property through Mayo Clinical Ventures)
Christopher Grilli, PharmD, RPh, MBA Consultant		Consultant	PGx Companion (Intellectual Property through Mayo Clinical Ventures)
Teresa Kruisselbrunk, MS, CGC CReports		Consultant	Know-How Related to Improving Clinical
			Delivering Whole Genome Sequencing Data (Intellectual Property through Mayo Clinical
Ventures)			
Marina Walther-Antonio, PhD Cor		Consultant	LUCA Biologics, Inc.
Richard Weinshilboum, MI	) Cons	ultant	(see attached disclosure form for list of Intellectual Properties through Mayo Clinical Ventures)
Stock Shareho		nolder	OneOme LLC

### All relevant financial relationships listed for these individuals have been mitigated.

### No relevant financial relationship(s) with ineligible companies:

#### Name

Karen Meagher, PhD Ann Moyer, MD, PhD Sharon Zehe, JD Denise Dupras, MD, PhD Carolyn Vitek, EdD, MS Stacy Johnson, MA Nichole Nicholas, MA Kara Mangold, DNP Christopher Scott, MA Sunnie Confiado Cori Berg, MSN, RN Jeremy Zacher, M.Ed Lisa Schimmenti, MD

# References to off-label and/or investigational 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) please visit: <a href="https://ce.mayo.edu/content/disclosures">https://ce.mayo.edu/content/disclosures</a>.

### **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.

# Method of Participation\*

Participation in this activity consists of reviewing the educational material, completing the learner assessment and evaluation.

### How to Obtain Credit\*

To obtain credit, complete the assessment, evaluation and submit.

## Release and Expiration Dates\*

Release Date: 08/26/2022 Expiration Date: 07/31/2025

## Acknowledgement of Commercial Support\*

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

# **Faculty and Course Director Listing and Credentials**

Course Director(s)
Carolyn (Caer) R. Vitek, Ed.D., M.S.
Timothy Curry, M.D., Ph.D.

Faculty(s)
Matthew Ferber, Ph.D.
Christopher Grilli, Pharm.D., R.Ph., M.B.A.
Teresa Kruisselbrink, M.S., CGC
Karen Meagher, Ph.D.
Ann Moyer, M.D., Ph.D.
Marina Walther-Antonio, Ph.D.
Richard Weinshilboum, M.D.
Sharon Zehe, M.D.
Denise Dupras, M.D., Ph.D

Planning Committee
Timothy Curry, M.D., Ph.D.
Carolyn Vitek, Ed.D., M.S.
Stacy Johnson, M.A.
Nichole Nicholas, M.A.
Kara Mangold, DNP, RN, NPD-BC,
CCTN, CNE
Christopher Scott, M.A.
Sunnie Confiado
Cori Berg, MSN, RN, PHN
Jeremy Zacher, M.Ed
Lisa Schimmenti, M.D.

## Bibliographic Resources\*

## Provide one of the following:

- Whitley KV, Tueller JA, Weber KS. Genomics Education in the Era of Personal Genomics: Academic, Professional, and Public Considerations. Int J Mol Sci. 2020 Jan 24;21(3):768. doi: 10.3390/ijms21030768. PMID: 31991576; PMCID: PMC7037382.
- 2) Calzone KA, Jenkins J, Culp S, Bonham VL Jr, Badzek L. National nursing workforce survey of nursing attitudes, knowledge and practice in genomics. Per Med. 013;10(7):10.2217/pme.13.64. doi:10.2217/pme.13.64.
- 3) Giri J, Curry TB, Formea CM, Nicholson WT, Rohrer Vitek CR. Education and Knowledge in Pharmacogenomics: Still a Challenge? Clin Pharmacol Ther. 2018;103(5):752-5.
- 4) Aiello LB. Genomics Education: Knowledge of Nurses Across the Profession and Integration Into Practice. Clin J Oncol Nurs. 2017;21(6):747-53. doi: 10.1188/17.CJON.747-753. PMID: 29149120.
- 5) Tonkin E, Calzone KA, Badzek L, Benjamin C, Middleton A, Patch C, et al. A Roadmap for Global Acceleration of Genomics Integration Across Nursing. J Nurs Scholarsh. 2020.

## Copyright

Mayo Foundation for Medical Education and Research. All rights reserved. Copyright 2022