Infectious, inherited, complex diseases and cancer have a genetic component. The purpose of personalized medicine is to increase our understanding of genetics and how they impact health, disease and drug responsiveness. Treatments can focus on the genetic variation that causes one person’s condition rather than treating a condition the same way for every individual.

"Let’s Talk" is an educational series that focuses on women’s health. The content is uniquely created and presented by a panel of nationally renowned experts, physicians and researchers focused on women’s health.

The Colorado Center for Personalized Medicine includes researchers, molecular diagnostic labs, a biobank (Rocky Mountain Biorepository), an advanced data warehouse (Health Data COMPASS) and analytical tools (Translational Informatics & Computational Resource-TICR).

Who: Women and men interested in the topic
Date: Wednesday, April 19, 2017
Time: 6–8 p.m. Lecture and Q & A
Where: Anschutz Inpatient Pavilion 2 Conference Center Auditorium
12605 East 16th Ave., Aurora, CO 80045
Cost: $10 per person (includes light dinner)
Parking: Free valet parking will be available. Information will be emailed to you closer to the date.
RSVP: Space is limited. RSVP by April 10 at www.uchealth.org/events or contact Chiara Del Monaco at 720.848.4023.

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Speakers

Kathleen Barnes, PhD
Professor of Medicine
Director, Center for Personalized Medicine

*It’s personal: Precision Medicine—precisely how are we going to do this?*
Kathleen Barnes, PhD joined the Department of Medicine in late 2015 as the head of our newest division, bioinformatics and personalized medicine, and the director of the CU Center for Personalized Medicine. Dr. Barnes spent the previous 23 years at Johns Hopkins, where her lab studied the genetics of complex diseases.

Since taking the reins of CU’s personalized medicine initiatives, Dr. Barnes has worked with architects and designers to create a state-of-the-art facility to allow highly efficient biobanking to create genetic data, and has built out CU’s Translational Informatics and Computational Resource (TICR). She has also made a steady series of recruitments to the division, adding faculty with expertise in population genetics, pharmacogenetics, genetic epidemiology and clinical genetics.

In this talk, Dr. Barnes will give an overview of the revolutionary work being done right here at the Center for Personalized Medicine.

Dave Kao, MD
Assistant Professor of Medicine, Cardiology
University of Colorado School of Medicine
Researcher, Center for Women’s Health Research

*Precision medicine in clinical practice: Where are we and where are we going?*
Dave Kao studied biomedical engineering and attended medical school at the Johns Hopkins University. During that time, he spent a year as a molecular biologist at the National Institutes of Allergy and Infectious Disease in Hamilton, Montana and spent a summer working at an orphanage in Maputo, Mozambique. He completed his internal medicine residency, and chief residency at Stanford Hospital and Clinics in Palo Alto, California before completing a post-doctoral fellowship with Stanford’s Division of biomedical informatics research. He completed his general cardiology fellowship at the University of Colorado School of Medicine and is now on the clinical faculty in the division of cardiology.

His primary research interests are gender differences in cardiovascular disease, heart failure (including heart failure with preserved ejection fraction), personalized medicine, and applied biomedical informatics. He continues to be active in international health and is collaborating with the University of Zimbabwe College of Health Sciences to train a new generation of academic cardiologists in Zimbabwe.

In this talk, Dr. Kao will explain what “big data” means and why it is so important to our health. Even though it might not be obvious to you during a visit to your doctor, he will explain how complex analysis of big data sets are already beginning to benefit your health care.

Matthew Rioth, MD, MS
Assistant Professor of Medicine
Director, Clinical Cancer Informatics
Division of Bioinformatics and Personalized Medicine
Division of Medical Oncology

*How precision medicine is revolutionizing cancer care*
A third-generation Colorado native, Dr. Rioth received his undergraduate degree from Harvard University and subsequently completed medical school, residency and oncology fellowship at Vanderbilt University as well as a graduate degree in biomedical informatics. He was awarded an American Society of Clinical Oncology 2016 Young Investigator Award, and joined the faculty of the University of Colorado in 2016. Working with scientists in both biomedical informatics and oncology, Dr. Rioth’s research focuses on the identification of new cancer biomarkers and accelerating the translation of these scientific advances into the clinic.

In this talk, Dr. Rioth will discuss the science and practice of using genetic information to inform the treatment of cancer. He will highlight recent successes in cancer that are bending the curve on cancer outcomes and describe current research efforts to further improve outcomes for cancer patients.

Christina Aquilante, PharmD, FCCP
Associate Professor
Department of Pharmaceutical Sciences
Skaggs School of Pharmacy and Pharmaceutical Sciences

*This drug’s for you: How your genes can affect response to medications*
Dr. Aquilante received her doctor of pharmacy from the University of North Carolina at Chapel Hill and completed a pharmacy practice residency at Shands Hospital at the University of Florida. Following residency she completed a post-doctoral fellowship in cardiovascular pharmacogenomics at the University of Florida College of Pharmacy. Dr. Aquilante’s clinical research program is focused on identifying genetic factors that influence medication response in patients with cardiovascular and metabolic diseases. Dr. Aquilante is the chair-elect of the Pharmacogenomics Special Interest Group of the American Association of Colleges of Pharmacy and a member of the National Institutes of Health Inter-Society Coordinating Committee for Practitioner Education in Genetics and Genomics. She is also the co-chair of the Pharmacogenomics Implementation Committee Colorado (PICColo), a system-wide clinical pharmacogenomics implementation initiative at UCHealth.

In this talk, Dr. Aquilante will discuss how a person’s genetic make-up (DNA) affects response to medications (also known as pharmacogenomics). She will discuss this topic in the context of medications used to treat common conditions such as depression, anxiety, and pain.