


Pharmacogenomics Certificate Program

Dates	May 6, 2020 – June 30, 2020
Place	Online www.UCDenver.edu/Pharmacy/PGXCertificate
Instructor	Christina Aquilante, Pharm.D., FCCP
Course Format	<p>The program provides pharmacists, nurses, and physicians with an understanding of how genetic factors influence drug disposition, response, and adverse effects. Knowledge gained from this program will enhance a participant’s ability to apply pharmacogenomic information to clinical practice and select the most appropriate therapeutic interventions.</p> <p>Topics covered include:</p> <ul style="list-style-type: none"> • Fundamentals of pharmacogenomics; • Impact of pharmacogenomics on drug clinical pharmacology; • Interpretation of pharmacogenomic test results; • Interpretation of pharmacogenomic literature and use of evidence-based guidelines; • Case-based scenarios of clinically-actionable pharmacogenomic examples in the areas of: <ul style="list-style-type: none"> – Drug-induced hypersensitivity reactions – Pain, neurology, and psychiatry – Cardiology – Oncology • Patient and provider education on pharmacogenomics; • Clinical implementation of pharmacogenomics in different healthcare settings.
Unique Features of this Program	<p><u>Practice-based program</u> - taught by an expert in the field.</p> <p><u>20 hours of continuing education credit for pharmacists, nurses, and physicians.</u> Participants receive a certificate upon successful completion of the course.</p> <p>Online - watch weekly videos and complete exercises at your convenience.</p> <p>Intensive – the 8-week program thoroughly covers clinical pharmacogenomics, yet keeps the needs of the busy professional in mind. No travel required.</p> <p>Interactive – <u>online discussions</u> and <u>live video chats</u> allow you to share ideas with other program participants and interact with the program instructor. The instructor will be accessible to you throughout the 8-week program, including weekly feedback on your work.</p>

Learning Objectives	<p>Program Outcomes, each participant will:</p> <ul style="list-style-type: none"> • Describe basic genetic concepts and nomenclature. • Describe how genetic variation contributes to inter-individual variability in drug pharmacokinetics, response, and adverse effects. • Recommend pharmacogenomic testing, when appropriate, to aid in drug and dose selection. • Evaluate the results of pharmacogenomic tests and apply the results to patient care. • Use evidence-based guidelines and literature to formulate patient-specific medication regimen plans based on pharmacogenomic test results and other patient-specific factors. • Communicate pharmacogenomic-specific medication recommendations to the health care team. • Educate patients and health care professionals about the principles of pharmacogenomics and the indications for, and clinical utility of, pharmacogenomic testing. • Educate patients and health care professionals about the ethical, legal, social, and economic implications of pharmacogenomic testing. • Formulate a clinical pharmacogenomics implementation plan that can be applied at the system level.
Disclosures	<p>Dr. Aquilante has no relevant financial relationships to disclose. The Continuing Education staff at the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences and College of Nursing have no relevant financial relationships to disclose.</p>
Continuing Education	<p>The University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. This activity provides 20.0 contact hours of practice-based continuing pharmacy education (18.0 hours home-study, 2.0 hours live). UAN: 0008-9999-19-121-B01-P.</p>  <p>The University of Colorado College of Nursing is an approved provider of continuing nursing education by the Colorado Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.</p> <p>This educational offering for 20 contact hours (15 pharmacology contact hours) of continuing nursing education is provided by the University of Colorado College of Nursing Office of Continuing Education.</p> <p style="text-align: center;">Continuing medical education (20.0 hours): <i>pending</i></p> <p>This educational public service program (CPE component) offers Continuing Education credits only; it does not offer credit towards any degree program at the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences or College of Nursing. The target audience for this activity is pharmacists, nurses, and physicians.</p>
Technical Requirements	<p>A computer with a high speed internet connection and audio is necessary. A webcam is preferred, but not required.</p>
Cost	<p>The cost of the program is \$695. Discount available for CU faculty, preceptors, and alumni, and UHealth clinicians.</p>
Registration	<p>www.UCDenver.edu/Pharmacy/PGXCertificate</p>

Instructor Biography

Christina Aquilante, Pharm.D., FCCP, is an Associate Professor in the Department of Pharmaceutical Sciences at the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences in Aurora, Colorado, USA. 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 is actively involved in clinical cardiovascular pharmacogenomics research, with over 50 peer-reviewed publications and book chapters.



Dr. Aquilante is the Chair-Elect of the American Association of Colleges of Pharmacy (AACP) Pharmacogenomics Special Interest Group (SIG). Dr. Aquilante represents the American College of Clinical Pharmacy (ACCP) on the National Institutes of Health (NIH/NHGRI) Inter-Society Coordinating Committee for Practitioner Education in Genetics and Genomics (ISCC). Dr. Aquilante is also actively involved with the Colorado Center for Personalized Medicine and is the co-chair of the Pharmacogenomics Implementation Committee Colorado (PICColo), a system-wide clinical pharmacogenomics implementation initiative.

Dr. Aquilante is passionate about education and teaches in many areas of the Pharm.D. and Pharmaceutical Sciences Graduate Program curricula. She developed and has taught a required clinical pharmacogenomics course (30 live didactic hours) for all entry-level Pharm.D. students at the University of Colorado since 2014. She developed and has taught a required clinical pharmacogenomics course (15 online didactic hours) for working pharmacists participating in the University of Colorado North American-Trained Pharm.D. (NTPD) and International-Trained Pharm.D. (ITPD) Programs since 2016. In 2017, she developed and taught an intensive, live, 5-day clinical pharmacogenomics training workshop for health care professionals at the Children's Cancer Hospital Egypt (CCHHE).

Dr. Aquilante has given educational clinical pharmacogenomics lectures or seminars to numerous professional organizations such as: the American Association of Colleges of Pharmacy, American Association of Colleges of Nursing, American Association of Heart Failure Nurses, American Geriatrics Society, American College of Clinical Pharmacology, American Society of Health-System Pharmacists, and International Pharmaceutical Federation.