Pharmaceutical science programs have incorporated pharmacogenomics (PGx) into research well before the Human Genome Project (HGP) was completed in 2003. The completion of the HGP not only enhanced PGx knowledge, but it was the start of incorporating precision medicine into healthcare. The 2016 ACPE standards require all pharmacy schools to implement PGx into the curriculum. Therefore, it can be assumed that all future pharmacists will not only be the drug-drug interaction experts, but also the drug-gene interaction experts.

To integrate PGx into pharmacy, several enhancements to the curriculum can be implemented. For example, purposeful design and assessment of integrated pharmacotherapy (IPT) courses can offer unique opportunities to maximize the impact of PGx on student learning. Mock patient cases involving polypharmacy, and complex pharmacogenomic interactions can be presented. These PGx-informed patient cases can then be leveraged to incorporate advanced precision medicine concepts into interprofessional education events. PGx holds great promise for providing students with the framework to succeed in an interprofessional setting.

Another avenue to integrate PGx into Pharmacy is through a lab-based elective. Through the lab-based elective, pharmacy students are offered the ability to generate PGx panel reports on themselves, which reinforces learning. One final implementation is to provide a dual degree program in which Pharmacy students can master the PGx curriculum. By offering this exclusive opportunity, future pharmacists will lead the healthcare field in precision medicine.