



Course Title: How Personalized Medicine Will Transform Healthcare

Course Instructor: Dr. Candice Carpenter

Course Description:

According to the CEO of Sanford Burnham Prebys Medical Discovery Institute, Dr. John Reed, "The potential of personalized medicine is enormous. By taking a more targeted and individualized approach to healthcare, we can improve patient outcomes, reduce healthcare costs, and ultimately, improve the health and well-being of people around the world." In the How Personalized Medicine Will Transform Healthcare course, participants will explore the components of this quote in more depth, both investigating and interrogating personalized medicine's ability to deconstruct and reconstruct the delivery of healthcare as we know it. Through this course, students will learn about the principles of personalized medicine – including genomics, proteomics, and other -omics approaches –and how these “omics” are being used to individualize healthcare treatments for patients, regardless of race/ethnicity, gender, age, socioeconomic status, and other factors. We will examine the latest advances in personalized medicine, including precision oncology, pharmacogenomics, and targeted therapies. In conclusion, students will navigate the cost-benefit analyses of the ethical, legal, and social implications of personalized medicine and its role in their lives.