Peter received his Hons. BSc in Biochemistry (heavy emphasis on Organic) from Brock University in St. Catharines, Ontario, Canada in 1998 under the tutelage of the late Prof. H. L. Holland. His Honors thesis is titled: "An Investigation of the Sulfoxidation of *N*-Protected Amino Acids by *Beauvaria bassiana* ATCC 7159". He then received his PhD in 2002 from Wayne State University, Detroit, MI working in the labs of Prof. P. G. Wang. His Dissertation is titled: "Chemoenzymatic Synthesis of Biologically Significant Carbohydrates".

In 2002 he moved to Harvard University in Cambridge, MA to work first as a Post Doctoral Associate and then as an NIH Ruth L. Kirschstein Post Doctoral Fellow for Prof. S. L. Schreiber. In the Schreiber labs he studied the direction of Diversity-Oriented Synthesis (DOS) which included small molecule synthesis and asymmetric catalysis using multicomponent coupling reactions.

In 2005, he returned to his PhD granting institute to begin his independent career as an Assistant Professor and in 2012 relocated with his group to The University of Toledo where he is currently Full Professor. He is both a member of the Department of Chemistry and Biochemistry and School of Green Chemistry and Engineering. The Andreana Group Research interests can be found on his website but in short, the group is interested in carbohydrate-based vaccine development (current directions are cancer and anti-infectious disease), small molecule synthesis (natural and natural product like synthesis) and the development of carbohydrate-based immunotherapeutics. For all existing efforts, the group operates under an NIH R37 AI 106878, a newly minted NIH NIH SCV4 R01 AI177075 both in conjunction with Dr. Ed Ryan of Harvard, and start-up monies from The University of Toledo. In 2010, the Andreana Group was bestowed The David Y. Gin New Investigator ACS Award from the Division of Carbohydrates and in 2023 was awarded the prestigious Melville L. Wolfrom Award from the ACS Division of Chemistry and Glycobiology. Currently Prof. Andreana serves on the United States Advisory Committee for the International Carbohydrate Symposium (USACICS) as treasurer and secretary, the ACS Division of Carbohydrate Chemistry and Glycobiology as treasurer and acts in capacity of the ACS Carbohydrate Division's webmaster. He is the founder of Glycan mAb LLC, a company focusing on carbohydrate specific monoclonal antibodies.