This proposed supplement builds on and extends our current program project, “Social-Emotional Contexts of Adolescent and Young Adult Smoking Patterns,” to examine, in-depth, the phenomenon of non-cigarette tobacco use among young adults. We will address the FDA research priorities of understanding the diversity of tobacco products and understanding communications about tobacco products, with a focus on nontraditional communication venues. Using EMA methods, we will address the research questions: 1) What are the tobacco use behaviors of individuals using new and emerging tobacco products, including the multiple tobacco use behaviors; and 2) What are the cognitive and affective factors associated with the use of new and emerging tobacco products. To address these questions, we will recruit young adults (N = 230) who regularly use alternative forms of tobacco, and conduct an in-depth EMA study of the objective (with whom, where, under what conditions) and subjective (emotional and attitudinal prompts and responses to alternative tobacco use) factors associated with use. This methodology builds directly on our current program project aims and methods, where we use similar procedures to gain an in-depth understanding of the cigarette patterns and contexts of young adults. We will address whether there are acute mood changes associated with alternative tobacco product use (as we have found with cigarettes), and how mood and contexts interact with use and the subjective experience. We will also address communication questions: 1) What is the impact of image type on messages and communications about tobacco products among young adult non-cigarette users; and 2) how does smartphone application use affect tobacco use and attitudes? To address these questions, we will conduct a series of focus groups comprised of young adults, to understand the use of smartphones in accessing health information and messages; reactions to a variety of images and message delivery vehicles (with a focus on the development of realistic and personalized avatars to deliver messages). Based on these results, we will develop a smartphone app to deliver persuasive messages and test the feasibility and initial responses of young adult non-cigarette tobacco users to the smartphone apps. Unlike many health warnings to date, which are often static and generic, we will focus on developing and testing more personalized, dynamic messaging that is responsive to real-time tobacco use behaviors. This supplement brings together a well-experienced, multidisciplinary team to efficiently and collaboratively address these questions to inform timely policy issues and interventions.