Within the past three decades, mindfulness and other meditative practices have attracted increasing interest by researchers, clinical practitioners, and the general public. With the growing popularity of mindfulness-based and other contemplative practices in Euro-American contexts, empirical research examining how and for whom they work is critically needed. Despite widespread scholarly interest, natural science research has so far lacked humanistic perspectives to help unravel the distinctive cultural and social factors shaping Western experiences and interpretations of meditation and breath-control practices. In this interdisciplinary study using pluralistic institutional methods, we ask: What are the sociodemographic, personality, and implicit cultural assumptions affecting conceptions of, attitudes toward, and motivations for meditation and/or mindfulness practice? Given the expanding critical literature on the secularized, upper-middle class, white, and neoliberal therapeutic orientation of meditation, yoga, and other forms of contemporary Euro-American wellness culture, we ask: How and to what degree do these cultural assumptions, personality traits, and sociodemographics (e.g., race, ethnicity, class, age) affect neurophysiological and cognitive responses to, and the experience and outcomes of contemplative practice? In addition, we seek to explore if and how secular forms of meditation and breath-control differ in outcomes from contemplative practices that are explicitly framed and motivated by the conceptions of specific religious traditions. Combining humanistic approaches with social and natural scientific advances, this project seeks to understand the cultural and social forces affecting contemplative practices today and the differences between secular and religious conceptualizations of contemplation in order to elucidate the most effective means of obtaining psychological, cognitive, and emotional benefits from these practices.