1077-97-2875 Carlos W Castillo-Garsow, Carlos Castillo-Chavez* (ccchavez@asu.edu) and Sherry Woodley. The Mathematical and Theoretical Biology Institute Community Learning Model.

MTBI has mentored a large number of US students from underrepresented groups since 1996. This community (over 400) has seen about 13 of its alumni earn PhDs each year (mostly in math biology or related fields) with 8 PhDs awarded to individuals from underrepresented US minority groups, since 2005. Three institutions, Cornell, Iowa and Arizona State, have granted about 70 percent of them. However, the MTBI program was designed for education in research, not for research in education, and the mechanisms of success have therefore never been adequately studied. We describe our efforts to study MTBI from an educational theory perspective through our initial preliminary analysis of the MTBI community model from the perspective of four researchers: Piaget, Vygotsky, Bandura, and the MTBI students themselves. (Received September 22, 2011)