Despite decades of psycholinguistic research, many aspects of skilled reading are not clearly understood. Furthering our understanding is an essential step toward developing more useful cognitive models of reading and better methods of instruction in literacy. Much of Dr. Plummer’s work focuses on how readers coordinate the cognitive processes that underlie word identification and sentence comprehension with the constraints imposed by visual acuity and the requirements of fine oculomotor control. His talk will present work designed to investigate the influence of linguistic context on word recognition during reading using high temporal resolution eye-tracking methodologies. He will present one set of experiments that examined the influence of corpus-based lexical characteristics on word recognition difficulty and eye-movement control during sentence comprehension. A second set of experiments examined the effects of prior sentence context on the extraction of orthographic (letter) and phonological (sound) information at the earliest stages of word identification. The results of these studies suggest that context is a crucial factor in the moment-to-moment processing of words at various levels of representation. These findings have important implications on theoretical accounts of how high-level comprehension influences word recognition as well as the encoding of word form and meaning in long-term memory.

Dr. Patrick Plummer is currently a UC President’s Postdoctoral Fellow at UCLA working with Dr. Keith Holyoak in the Department of Psychology. He completed his undergraduate degree at the University of North Carolina at Chapel Hill and his Ph.D. at the University of California, San Diego. His research focuses on the nature of semantic representations within the cognitive system and how context influences high-level, coordinated cognitive processes such as reading comprehension or numerical reasoning.