## **PART A:**

## **Professional Summary**

Child obesity is a serious health concern with 17% of adolescents and children already overweight (Anderson & Butcher 2006). This puts the U.S. under threat from life-threatening diseases – heart disease, stroke, and diabetes (Christakis & Fowler 2007; Huang & Horlick 2007). To curb this threat to public health, the federal government, through NIH, emphasizes that a comprehensive solution to the obesity problem must zero-in on child health, and include research at the genetic, molecular, behavioral, social, and environmental levels (Huang & Horlick 2007).

This project responds to this call by examining how children's daily schedule (activities and time-use patterns) and social relationships (with family, classmates, 'on-line' and 'off-line' friends) influence health status across institutional context. The project answers the questions: What are the differences among 5<sup>th</sup> graders in terms of their eating and sleeping patterns, physical activities; and the timing, frequency, duration, location, and with whom they engage these activities? How do these differences impact body mass? The project will advance knowledge on how social relationships configure activities, time-use patterns, and ultimately health outcomes. It has the potential to refine methods to improve self-reports of diet and activity, which can reduce measurement and sampling error, and ultimately improve assessment.