Cigarette smoking among US high school students is steadily declining, however, use of conventional smokeless tobacco (ST), which includes moist snuff (dip) and chewing tobacco, is not decreasing. Smokeless tobacco use is much higher among US high school males (14%) than females (3%). ST use is especially high in small towns and rural areas, where use can be as high as 18% to 42% among young male athletes. In 2005, ST manufacturers spent over $250M on marketing, including for ‘new’ types of smokeless tobacco products, such as dissolvable, compressed tobacco and snus. Recently, cigarette companies Reynolds American and Philip Morris/Altria started aggressively promoting new ST products under their flagship Camel and Marlboro cigarette brands, such as Camel Snus and Marlboro Snus. No data exist on the addictive potential or nicotine and carcinogen exposure in adolescents who use new ST products, either alone or in combination with other tobacco products, like cigarettes. We are conducting a five-year study of more than 600 adolescent male athletes at 40 high schools in California. Our goals are to understand what factors make young males more or less likely to use smokeless tobacco and to measure exposure to nicotine and carcinogens from smokeless tobacco use. Specifically, we are studying:

1. Patterns and determinants of conventional and new ST product use;

2. Exposure to tobacco marketing and anti-tobacco messages and how such information influences ST use, perceived risks and benefits of tobacco, and future expectations of tobacco use;

3. Nicotine and carcinogen exposure and how those exposures are related to the rate of nicotine metabolism in tobacco users; and

4. Other factors that predict nicotine and carcinogen exposure, such as product type and social influences that lead to use, such as perceived benefits of tobacco.
Our study is one of five studies conducted by the Tobacco Center of Regulatory Science (TCORS) at UCSF [1]. There are 14 TCORS Centers across the United States.

This work is supported by grant 1P50CA180890 from the National Cancer Institute and Food and Drug Administration Center for Tobacco Products.