This presentation will describe Tracer, a new suite of devices and applications for the collection and analysis of travel/activity data over an extended survey period (two weeks or more). Travel data are automatically collected in real-time from a wireless-enabled in-vehicle GPS data collection unit, and the data are used to dynamically generate an activity survey. The survey instrument itself is based upon a dynamic description of interrelated activity and travel pattern dynamics over time and space for each individual. Dr. Marca will first describe Tracer system features, and then turn to preliminary results related to activities, destinations, trips and travel patterns.

James Marca is a postgraduate researcher at the Institute of Transportation Studies, University of California, where he is continuing his dissertation research on advanced techniques for travel and activity analysis. His research interests include activity-based travel demand analysis, agent-based simulation techniques and the application of wireless information technologies to transportation data collection problems. He received his PhD in civil engineering from UCI in 2002 and also holds a master's degree in engineering from UCI (1994) and a bachelor's degree in engineering from Harvey Mudd College (1989). From 1994 to 1997, he worked as a transportation consultant for Charles River Associates in Cambridge, Massachusetts.