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The actions of individuals and their effects on productivity have often been examined by behavioral economists. Communications in the workplace draw particular attention as researchers investigate how tinkering with interactions among coworkers affects the mechanics of team creativity, efficiency, and satisfaction with work.

The development of badge technology, which allows researchers to identify who the wearer of the badge has spoken to, for how long, and their tone of voice, among many other speech indicators, has greatly improved how managers perceive team dynamics. Mapping these interactions in Gephi, UNINET, and other computer programs provides clear depictions of "brokers" in the group, or those individuals who act as information bridges to other team members, as well as those members who are isolated from the group. Previous studies by Daniel Olguin, Alex Pentland, and others have shown that badge technology can predict the outcomes of teams without knowing the *content* of what is said among the team.

But while these studies have provided insights into spurring creativity in the business and marketing realms, more research needs to be done on how badges can improve health care outcomes in hospitals. With the implementation of Obamacare and cuts in federal funding for Medicare, the increase in health care clinics outside of hospitals, and rising outpatient care, it is perhaps now more important than ever for hospitals to maximize the efficiency of their internal departments.

As a research assistant to Professor Marissa King, I have examined badge data from twelve hospitals throughout Connecticut. My tasks on this project have been diverse: After learning how to map health practitioner's interactions in Gephi and UNINET, I ran correlations among betweenness centrality, degree centrality, and turn-taking variables among hospital staff. The next step in the project was to run the badge data through Sociometric DataLab, another computer program new to me, in order to create a database with compiled information from all health practitioners across all hospital sites.

I am excited to stay on as a research assistant to Professor Marissa King as we move forward with building the database of all hospitals and running the results across fifty-eight variables of behavior and speech indicators. The SRO program and this project have introduced me not only to the study of network analysis, but also to the tools for visualizing team interactions and interpreting the results. I am confident that these tools, as well as seeing how a research project is constructed, will help me to someday build a research study of my own.