The purpose of this study is to examine the dilemmas faced by CTSA participants in order to understand the strategies they use to manage them, and to monitor the cultural change that results from their successful transition to translational research.

Methods

We conducted a series of semi-structured interviews with CTSA participants (N = 68) at UTMB, one would hear in everyday conversation to operationalize the concept of translational research. Symbolic interaction and evaluation research: the traditional vertical preeminence of the role of the "P.I." vs. innovative horizontal common good of the team. A successful strategy seems to be the establishment of sub-teams that provide esteem and leadership opportunities for all senior scientists.

CTSA participants, scientists in particular, face a range of dilemmas to be resolved in order for their participation in translational research to be successful. Five significant examples are:

- The traditional vertical preeminence of the role of the "P.I." vs. innovative horizontal common good of the team. A successful strategy seems to be the establishment of sub-teams that provide esteem and leadership opportunities for all senior scientists.
- Recently required organizational expertise vs. traditional scientific expertise. The pressure on scientists to increasingly perform bureaucratic tasks is alleviated by the prudent appointment of junior investigators as team managers.
- Commitment to the team vs. time constraints. This dilemma is lessened to the degree scientists integrate their primary research interests into their CTSA membership; the traditional "10% time" rule simply does not work well in translational team research.
- Formal MTT structure vs. emergent team process. The "MTT" (multidisciplinary translational team) and the "team" are not synonymous entities. Increasingly, scientists see the MTT as a home for researchers with common substantive, methodological, disease, or clinical interests. The team therefore is emerging as a practical mechanism for mobilizing MTT members to respond to particular research problems or funding opportunities. As one scientist noted metaphorically, teams are best seen as "multiple SWAT squads" that are fluid in membership, specific in their goals, and in use only when needed.
- "My lab" is a traditional members' concept that serves to establish individual status in the scientific community as well as organize actual scientific work. Interdisciplinary team research and increasingly shared laboratory facilities lead to a redefinition of this concept.

Discussion

Our analysis of dilemmas varies somewhat from the notion of barriers, which are problems from an administrative perspective.

The importance of the significant symbol/self-identity of "scientist" cannot be taken for granted in reshaping the scientific enterprise. The management of scientists should be designed explicitly to acknowledge the essence of curiosity, discovery, intellectualism, and innovation to the scientific vocation.

Notes

1 This study was conducted with the support of the Institute for Translational Sciences at the University of Texas Medical Branch, supported in part by a Clinical and Translational Science Award (UL1 TR000071) from the National Center for Advancing Translational Sciences, National Institutes of Health.

2 Joseph A. Kotarba, Ph.D. is also Professor of Sociology and Director, Center for Social Inquiry at Texas State University-San Marcos (jikot@txstate.edu).


5 CTSA participants, scientists in particular, face a range of dilemmas to be resolved in order for their participation in translational research to be successful. Five significant examples are:

- The traditional vertical preeminence of the role of the "P.I." vs. innovative horizontal common good of the team. A successful strategy seems to be the establishment of sub-teams that provide esteem and leadership opportunities for all senior scientists.
- Recently required organizational expertise vs. traditional scientific expertise. The pressure on scientists to increasingly perform bureaucratic tasks is alleviated by the prudent appointment of junior investigators as team managers.
- Commitment to the team vs. time constraints. This dilemma is lessened to the degree scientists integrate their primary research interests into their CTSA membership; the traditional "10% time" rule simply does not work well in translational team research.
- Formal MTT structure vs. emergent team process. The "MTT" (multidisciplinary translational team) and the "team" are not synonymous entities. Increasingly, scientists see the MTT as a home for researchers with common substantive, methodological, disease, or clinical interests. The team therefore is emerging as a practical mechanism for mobilizing MTT members to respond to particular research problems or funding opportunities. As one scientist noted metaphorically, teams are best seen as "multiple SWAT squads" that are fluid in membership, specific in their goals, and in use only when needed.
- "My lab" is a traditional members' concept that serves to establish individual status in the scientific community as well as organize actual scientific work. Interdisciplinary team research and increasingly shared laboratory facilities lead to a redefinition of this concept.

- The "meeting" is a members' concept used by scientists to summarize their cognitive mapping of the CTSA. The meeting can signify the bureaucratic essence of translational research; a situation where people get to meet each other and interact; a major source of blame for absorbing too much of the scientist's time and energy; a good situation to get subordinates and mentees involved in the CTSA; or a situation that can alter one's self-identity as a scientist or a team member.

"My lab" is a traditional members' concept that serves to establish individual status in the scientific community as well as organize actual scientific work. Interdisciplinary team research and increasingly shared laboratory facilities lead to a redefinition of this concept.

- "The meeting" is a members' concept used by scientists to summarize their cognitive mapping of the CTSA. The meeting can signify the bureaucratic essence of translational research; a situation where people get to meet each other and interact; a major source of blame for absorbing too much of the scientist's time and energy; a good situation to get subordinates and mentees involved in the CTSA; or a situation that can alter one's self-identity as a scientist or a team member.

Significant symbols that are key to traditional scientific work are now problematic and are undergoing redefinition. Two examples are:

- "My lab" is a traditional members' concept that serves to establish individual status in the scientific community as well as organize actual scientific work. Interdisciplinary team research and increasingly shared laboratory facilities lead to a redefinition of this concept.
- "The meeting" is a members' concept used by scientists to summarize their cognitive mapping of the CTSA. The meeting can signify the bureaucratic essence of translational research; a situation where people get to meet each other and interact; a major source of blame for absorbing too much of the scientist's time and energy; a good situation to get subordinates and mentees involved in the CTSA; or a situation that can alter one's self-identity as a scientist or a team member.