

## In This Issue...

The TTURCs share several lessons they have learned while recruiting and retaining subjects for their TTURC studies, training the next generation of transdisciplinary scientists, and the joys and tribulations of working in a transdisciplinary environment.

## The Art -- and Science -- of Advertising: Lessons Learned about Recruiting Study Participants

By Gloria Meyer

As smoking demographic patterns have changed, soliciting smokers for research studies has become more challenging. In the past, advertising in local newspapers was often sufficient. Now, general newspaper readership has declined, and smokers may be less likely to be consistent newspaper readers. At the same time, the cost of newspaper advertising has increased. In addition, human subjects review committees are more involved in approving advertising content and appearance. These factors have resulted in the need for a more planned approach to participant recruitment.

In light of these factors, our approach at the University of Wisconsin, Madison is now characterized by three steps.

1. A plan is prepared for the Human Subjects Committee which includes all media that could possibly be used to recruit subjects, including copy for print, radio and television ads as well as press releases, fact sheets and posters. Approval for the plan and all components is requested at one time. This process provides flexibility. If advertising in one medium does not produce the desired number of participants, researchers can switch to another without returning to the committee for additional approvals.
2. An analysis of the demographics of the participants, the target audiences of the various media and the associated costs is made. Contrary to popular opinion, television advertising can be very cost effective. Choosing stations, programming and time slots targeted at smokers can be less expensive than using newspaper or radio. Daytime television—soaps, court shows and talk shows—are relatively inexpensive and draw good response. Late night and overnight television slots are similar.

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### Lessons Learned

- 1) Prepare all possible recruitment venues ahead of time for Human Subjects approval.
- 2) Go beyond written media to TV and radio.
- 3) Know the demographics and media habits of your target audience.

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# Recruiting and Retaining Your Subjects



Dorothy Hatsukami, Ph.D.

By Sheran McNiff

Over the last few years, methods for recruiting and retaining subjects at the University of Minnesota TTURC have changed, evolved, and improved. Here are some examples of how our study methods changed in response to recruitment and retention difficulties.

## Best for Baby Project

“Recruitment had been a major challenge for the Best for Baby Study,” said Deborah Hennrikus Ph.D., P.I. for the study. Hennrikus added, “We learned from experience what doesn’t work and we made a number of changes during the three years of active recruitment.”

For this study, mothers who were 18 years or older, had a baby less than one year old, were not breastfeeding, and were a current smoker were recruited. The first recruitment location was a large managed care organization (MCO) in the Twin Cities area. During recruitment, researchers found that only 4% of those screened in the MCO’s waiting room were eligible for the study. Of those eligible, only 15% of these were recruited. Further data analyses revealed that a large number of the eligible mothers were on Medicaid. With this realization, the recruitment activities were shifted from a general MCO population to a low-income population.

Additional recruitment attempts were made in wait-

ing rooms of Women, Infant and Children (WIC) clinic locations in three, large, Minnesota counties. This produced good results (13.7% screened were eligible and 35.2% were recruited), but was labor intensive and slow. It became clear that an additional recruitment source was needed.

The next step was to examine MCO organizations in the Twin Cities area to determine which one had a large Medicaid population. One was found, and they agreed to participate. This time, screening surveys were mailed only to families insured by Medicaid or MinnesotaCare (a state sponsored insurance organization). The eligibility and recruitment rates were similar to those in the WIC population, and it was possible to reach more families.

## Tobacco Strategies for Patients with Cardiac Disease Study (ROSCAP)

The ROSCAP study also encountered its share of challenges. For this project, we were recruiting documented coronary artery disease patients who did not plan to quit smoking within the next three months. These inclusion criteria proved to be too narrow, with only 17 participants recruited in the first year. As a result, the project directors changed their criteria to include those who did not have a quit smoking date within 30 days. Also, we broadened the definition of cardiovascular disease to include peripheral arterial dis-

## Lessons Learned

- 1) Know your population and where to recruit them.
- 2) Be willing to change your inclusion criteria to optimize your recruitment.
- 3) Provide incentives to research subjects throughout the project, as well as at the conclusion of the study.

ease and cerebrovascular disease, cardiac arrhythmias, and congestive heart failure. Forty-three more participants were recruited the next year, and throughout the course of the study a total of 151 participants were enrolled.

## Subject Retention

“Retaining subjects is also an issue,” said Dorothy Hatsukami, Ph.D., director of the UMN TTURC. “One of the helpful techniques we have found is that instead of paying research subjects at the end of the study, we need to pay them at each visit with a small bonus at the end to minimize dropout.”

Deborah Hennrikus, Ph.D., of the Best for Baby Project also stated that, “Retention of enrolled subjects for the 12 months of the study has been a challenge.” Some of the retention strategies used in this study included: Locator forms filled out by subjects to collect contact data; friendly contact mailings including Christmas and baby birthday cards; monetary incentives and thank you letters; home interviews at subject’s convenience; cards with information about how to reach interviewers; and, perhaps the most important, persistence.

The research at the UMN

# Training the Next Generation of Transdisciplinary Scientists



TTURC: NEFS post-doctoral fellows, Brian Hitsman, Ph.D., and Stephen Gilman, Sc.D.

By Suzanne Moriarty

Formal transdisciplinary training requires a break from traditional academic models. Justin Nash, Ph.D., Director of Training and Education Programs at the Centers for Behavioral and Preventive Medicine, has overseen along with the Training Committee, the professional development of trainees within TTURC: NEFS. “From our experience of overseeing four postdoctoral fellows and two R25 faculty trainees, who have contributed to TTURC: NEFS, we have gleaned a few key lessons,” states Nash, “some pertain to what the trainee brings to the training environment, others focus more on how the training program operates and what it offers the trainee.”

## Selecting the right trainee

Hiring criteria for transdisciplinary trainees are broader and more critical than usual. In addition to a solid scientific base and strong conceptual and methodological skills, transdisciplinary trainees need to have strong interpersonal and communication skills in order to be able to form effective working relationships across disciplinary boundaries. “Stephen Gilman has exceptional communication skills that allow him to ask insightful questions and to share comments from his perspective that are easily grasped by those from different disciplines. Among his other qualities, he has a neu-

tral tone, a thoughtful approach and he avoids disciplinary jargon,” notes Nash.

The trainee needs to be invested in the process and demonstrate an ability to accept and respect different disciplinary boundaries even under challenging conditions. “Brian Hitsman is open to input from different perspectives because he knows that this will move his research to the cutting edge.” Nash continues, “Brian’s interdisciplinary graduate work in health psychology, neuropsychology and psychopharmacology cultivated a sense of maturity and security about his research which fosters his flexible rather than rigid approach.”

## Providing the right training environment.

The training program needs to create regular opportunities for formal and informal interactions such as training sessions, workshops and meetings where trainees can share ideas and develop relationships with other scientists from diverse backgrounds. The program needs to cultivate a collegial climate that breeds collaboration.

Judith DePue, Ed.D., MPH, was Series Coordinator for the Centers for Behavioral and Preventive Medicine, 2002-2003 Transdisciplinary Fellows Seminar Series. The monthly seminars were offered to all 17 trainees within the Centers. “Trainees reported an increase in collab-

## Lessons Learned

- 1) Trainee should have strong interpersonal and communication skills.
- 2) The trainee should be open to receiving input from the different disciplines.
- 3) It is important to provide an environment for formal and informal interactions.

orations with other disciplines, from 46% at the beginning of the year to 64% at the end of the year, indicating most of their work involved collaborations.” DePue continued, “By the end of the year all trainees reported at least one collaboration.”

Because transdisciplinary research in the field of tobacco research is in its infancy, few truly transdisciplinary mentors are available. The system needs to allow for mentorship from two or more distinct mentors, representing the disciplines that are merging. “I see my current research as interdisciplinary, combining several distinct fields,” explains Brian Hitsman, PhD, TTURC: NEFS Fellow. “Each of my mentors guides me on theories, concepts, and methods - from his or her own field. I am hopeful that later iterations of my work will evolve into true transdisciplinary research.”

Transdisciplinary research offers tremendous potential to move the field forward. The next generation of tobacco researchers has the potential to make novel discoveries that will impact and improve

## UCI Investigators Share Lessons Learned



**Larry Jamner, Ph.D.** - “The interactions with other TTURC investigators provided me with critical perspectives that I might have not considered and otherwise overlooked. There is significant value in collaboration as it will facilitate novel scientific advances and ultimately lead to societal benefits. The time and effort invested, however inconvenient at the beginning, was well worth the cost.”



**Frances Leslie, Ph.D.** - “Over the course of five years, I have gained incredible insight to the sweat equity involved in being part of a transdisciplinary team as well as leading a group of well-respected investigators from different disciplines. Yet it has been extremely rewarding. Through this endeavor, my perspective has broadened and my science enhanced. From an administrator’s viewpoint, formalizing processes and protocols, documenting progress, and evaluating efforts are key to a successful TTURC.”



**Steven Potkin, M.D.** - “Understanding, accepting, and respecting the different disciplines and perspectives are critical to successfully working together. Once these elements became part of the center’s core principals, we were able to trust each other and share data more readily. We now look forward to having transdisciplinary input into our data interpretation and manuscript preparation.”



**Daniel Stokols, Ph.D.** - “Greater understanding of Transdisciplinary (TD) Science requires a systematic evaluation of the scientific processes and outcomes associated with TD research. Flexibility and openness to various approaches for evaluating collaborative products and successes enabled us to design our surveys and interviews to more accurately reflect TTURC progress. It has been a pleasure for me to participate in the TTURC initiative and to be a part of a landmark study of transdisciplinary scientific collaboration.”



**Tammy Tengs, Ph.D.** - “For me, improving public health is the goal. Good science, transdisciplinary or otherwise, is simply one means to an end in itself. I have found that transdisciplinary science is not a panacea. The extent to which it yields scientific insights that lead to the reduction of disease and premature death, depends on the same factors that make all productive teams and great businesses thrive: good leadership, shared values, and trust.”

## Best Practices at the UCI TTURC

**Graduate Program:** The key component to building a successful and rewarding graduate program was planning upfront the goals, outcomes, and activities. We required graduate trainees to attend key seminars, participate in journal clubs, and meet with guest speakers.

**Tobacco Research Network (TRN):** We established the TRN to further the goals of our Center by promoting transdisciplinary sharing of ideas and data. This research network provided the scientists working at the postdoctoral and junior faculty level with a regular opportunity to interact.

**Seminar Series:** Seminars provided an additional forum for interaction between senior faculty members. We are a diverse and widely distributed group who did not work together prior to the TTURC initiative. We did not take face-to-face communications for granted.

**Retreats:** The most popular senior faculty meeting have been retreats. Quarterly retreats allowed us the opportunity to interact and utilize face-to-face communications—a critical component for establishing trust. Retreats also were used to showcase pilot and graduate work products.

**Workgroups/Brainstorming:** We established two workgroups to facilitate interactive studies and to develop an integrative conceptual model. The workgroups were combined during the summer of 2003, thus forming the Brainstorming group. The Brainstorming meetings have evolved also to provide a forum for mid-level and senior level investigator interactions and mentoring opportunities. These meetings are well attended, and occur every two to four weeks.

### **Administrative Memorandum of**

**Understanding:** Having structured agreements and a common framework afforded us the opportunity to continually move forward.

**Independent Status:** Developing an independent administrative status reduced disputes related to credit and control of the schools.

**Strategic Planning:** Destiny by design. Allows an organization’s leadership to think through what they need to do to achieve their goals and develop a timeframe in which to accomplish them. It stops us from living in the moment and makes us look at the long term.

# TTURCs Spotlight Collaborative Science at the World Conference on Tobacco or Health

By Jeff Baskin

The TTURCs made their combined presence felt at a major international forum this past August when they presented a series of workshops at the 12<sup>th</sup> World Conference on Tobacco or Health in Helsinki.

Researchers from four of the seven TTURCs, joined by colleagues at U.S. and Chinese health and academic institutions, explored the merits of collaborating across disciplinary boundaries in the pursuit of scientific research. Broadly divided into three separate sessions, the workshops covered the origins and applications of transdisciplinary research in tobacco use and control; transdisciplinary approaches to etiology, prevention and treatment; and the transition from research to public health practice.

Paula Palmer, Ph.D., associate director of the USC TTURC and one of the workshop presenters, said: "Our audiences included conference attendees from the U.K., Australia, Japan, Thailand, Mainland China, Taiwan, several Middle Eastern countries and, of course, many European countries. They gave us a lot of enthusiastic input and posed thoughtful questions about our work and about transdisciplinarity. The workshops were also productive in that they provided a good venue for TTURC investigators, consultants and representatives from our funding agencies to hold discussions. NCI, NIDA and the Fogarty Center showed a high level of interest in research opportunities not just in China but in all developing countries, and I think that much of what we talked about will play heavily in NIH's plans to extend certain types of research abroad. The workshops were also the first opportunity some of our funders had to meet our Chinese colleagues from Qingdao and Wuhan, where the USC TTURC is already engaged in research."

USC TTURC director C. Anderson Johnson organized and served as chairman of the workshops. NCI's Glen Morgan, overall program director of the TTURCs, was co-chair of the series.

## **TTURC Workshop Series at the 2003 World Conference on Tobacco or Health**

### **Transdisciplinary Research in Tobacco Use and Control: Origins and Applications,**

Discussant - Ellen Gritz

- 1) TTURC Research at the National Institutes of Health - Morgan, G.
- 2) Overview of Research in the NIH-Funded TTURCS- Morgan, G.
- 3) Stepped-Care Model for Efficient Population Level Research, Intervention and Policy - Abrams, D.
- 4) Cultural Transformations and Tobacco Use Among Youth in China and the U.S. - Johnson, C.A., et al.

### **Transdisciplinary Approaches to Etiology, Prevention and Treatment,**

Discussant - William Corrigan

- 1) Genetic and Environmental Influences on Smoking: TTURC Collaborations- Niaura, et al.
- 2) An Analysis of Smoking Relapse from a Transdisciplinary Perspective - Curtin, J., et al.
- 3) Reducing Toxin Exposure - Hatsukami, D.K., et al.
- 4) Social and Non-Social Motivations for Smoking Among College Students in Seven Chinese Cities - Sun, P., et al.

### **From Transdisciplinary and Transnational Research to Public Health Practices,**

Discussant - Tom Glynn

- 1) Biobehavioral Influences on Tobacco Use in Chinese and American Youth: Can One Size Fit All? - Jamner, L.D., et al.
- 2) Implications for Culture and Gender for Tobacco Control - Cruz, T.
- 3) Training Community Personnel for the Translation of Research into Public Health Practice - Pentz, M.A., Baezconde-Garbanati, L.
- 4) Strategies for Tobacco Control in China - Lee, L & Jiang, Y.



## Recruiting Continued...

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3. Ongoing evaluation is vital. Phone screeners must ask, and probe, for information on the medium that prompted the caller to volunteer for the study. Each cohort should be documented in terms of number of callers responding to a specific communications medium. Some media produce a great many calls but the callers fail the phone screens. In addition with changing demographics, more potential participants fail to appear for orientation sessions after having agreed to participate. Thus, we have learned to schedule many more potential participants for orientation than we need and to keep track of passed and failed phone screens and initial visits.

Although this type of recruitment involves more planning, the resultant cohorts are more likely to be representative of the current smoking population. It also is more efficient and may be less expensive. Hopefully, as a result of these efforts, study findings will be more generalizable to the non-study population.

## News and Notes

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**The Networker**

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