TSM SPOTLIGHT

Tim Todd

Dr. Tim Todd is not a new face to Murray State, although he did only recently join the TSM family when he was chosen as the interim dean for the college of business and public affairs in 2006. Todd has a long list of achievements and experience in at the university level, starting at a B.A. in corporate and organizational communication and master's in organizational communication at Western Kentucky and leading up to a Doctorate of Education at North Carolina State University specializing in organizational training and development for adult education. Todd also received a certificate from Williamsburg Development Institute, a certificate from Harvard University, and was a lead facilitator for the Oxford University Roundtable for two different sessions concerning Leadership in Education. As for educational related activities, Todd is on the MSU American Humanic Board of Advisors and the MSU Career Services Board of Advisors.

Todd was born in Madisonville, Ky., but considers Dawson Springs to be his home town. He left Kentucky in 1991 and headed for North Carolina with the intentions of returning to the commonwealth to make a difference. That opportunity came along in 1995 when he was offered a faculty job at MSU. While a faculty member at MSU, his favorite subject was advanced organizational communication along with organizational training and development.

Outside of the university, Todd stays busy working on a fix-up home at Kentucky Lake and enjoys water recreation there. Todd's wife, Shelley, and 11-year-old lab, Maggie, are first priority to him but he also enjoys spending time with family and reconnecting with friends. Although, on a day off, he also likes to just relax. Todd lives by a quote once taught to him by his former pastor, Dr. Bo Prosser of Atlanta, Ga.: "People go where they know they are prepared for and cared for." Todd strives to live his professional and personal life with that in mind.

Wes Spencer

During the fall semester of 2006, the TSM program had the opportunity to gain another important member of the team. Wes Spencer, a recent graduate of the TSM program, has now taken on several new roles at Murray State. Currently his responsibilities include network technician for the IET department and a lecturer of a few security classes in the TSM program. Spencer received his bachelor's degree in TSM in 2004 and has already started his master's degree in TSM. After finishing the master's, he will pursue a Ph.D.

Spencer is originally from Gainesville, Fla., where his parents still reside. He started work at MSU in 2006 after working in network operations for Rudolph's Inc. for two years. Recently, he has been researching phishing along with intrusion detection and prevention. During this research, Spencer is developing material for a new course in the TSM security option called "Intrusion Detection and Prevention." Outside of the university, he is the owner of WebStorm Studios, which is a design consultancy and photography studio located in Murray.

Spencer was excited about having the chance to teach at Murray State in the TSM Program because he loved the program so much as a student. He explains that after working in the industry for a while, he knew he wanted to go back to education: "MSU has one of the best telecommunications degrees in the country and it is an honor to be teaching and working with my fellow faculty." Of his classes, the one he enjoys teaching the most is TSM 353, Network Security.

Spencer and his wife, Laura, live in Murray. When he is not working he likes to read or enjoy the outdoors. His hobbies include Alpine skiing, photography, soccer and writing.

Mark your calendars

- March 23-24, 2007
  ITERA Conference, Louisville, KY
- April 19, 2007
  Patterns of Distinction-Global Telecom
- April 19, 2007
  TSM Awards Luncheon
- April 2007
  Start of NBS Centennial Celebration

Freeze Frame

Students gather outside for homemade ice-cream at the ATSM Picnic sponsored by the CTSM.

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The Director's Chair

When we published the last issue of *Convergence* at the end of the spring semester we thought we were pretty busy. As you can see with the articles in this issue things have gotten even busier. We have continued most of our programs and added several new things.

Golf! Women in Telecom like to have fun and our Golf Day held last fall was a great opportunity for that. Our first golf event was strongly supported by the corporate community. BellSouth Kentucky (now AT&T Kentucky) was the corporate sponsor for the day, but other companies including Verizon, CSI and TriAegis provided prizes for the participants. Friendships were made and renewed. The lasting benefit of the day was the creation of the Women in Telecom TSM Scholarship. This scholarship will help more women enter the TSM field as a career.

Tent City! MSU Homecoming 2006 was another new activity for TSM students and faculty. Plenty of homemade chocolate ice cream and lots of interaction with alumni, students and friends of TSM made for a fun day. Corporate support for the TSM program was evident by the six companies taking part in our activities.

Gifts! The fall of 2006 produced four major gifts for the TSM program. Dick Anderson provided the largest one-time cash gift to the TSM program. Dick is a graduate of MSU, a member of the TSM National Advisory Board, and was the vice chairman of the board of BellSouth. He is now the group president of AT&T Global Business Services. His contribution will allow the MS in TSM to be truly online from anywhere while still allowing interaction between faculty and students. A new facility is being completed in the business building that will provide video interaction at a new level of sophistication. This facility will be dedicated on April 19. Dr. Gene Wells Ray announced during the late summer that he was providing the TSM program with the largest cash contribution to our program. Over the next 10 years Dr. Ray and his family foundation will provide money to endow our outreach activities and provide support to current efforts. The third gift is coming to us from Adtran in the form of new equipment for our labs. Adtran is now one of the largest employers of MSU TSM graduates and is a leader in the manufacturing of network equipment. The addition of the Adtran equipment to our laboratories will better prepare our students for the real world. The last gift came from OPNET Technology, Inc. OPNET is a leader in software used for network management, simulation, optimization and end to end quality services studies. OPNET software can now be integrated into classes and used to support faculty and student research.

Scholarships! The TSM program now has four scholarships for new and returning students. In addition to the Women in Telecom Scholarship the West Kentucky Rural Telephone Cooperative (WKRTC) has funded three new $1500 per year scholarships. Under the leadership of Trevor Bonnsetter, president of WKRTC, the scholarships will be available for fall 2007. We are in discussions with other corporations and foundations that could result in the formation of two additional TSM scholarships.

Celebration! As we go to press with this issue of *Convergence* we have received approval to plan a Centennial Celebration of the filing and issuing of a patent for the wireless telephone. Murray resident Nathan B. Stubblefield received patent number 887,357 on May 12, 1908, for the wireless telephone. He filed the patent application on April 5, 1907. Watch our website for updates on activities and special events over the next year.

Patterns of Distinction! Mark the date of April 19 for the second Patterns of Distinction. This year the theme will be Global Telecom. At this time the program is still being developed, but it will include distinguished speakers, MSU faculty and the Kentucky business community. This free event is expected to bring together over 200 students, faculty, government and industry representatives.

Jim Gantt

Murray
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Convergence

News from
The Center for Telecommunications Systems Management
Fall 2006

Women in telecom can play golf too!

The Program of Distinction in TSM hosted the first-ever BellSouth Women In Telecom Golf Day this fall at the MSU Miller Golf Course. The Golf Day was the first event in the region specifically created for women in the telecom field. Thirty one females attended the event including employees representing 21 organizations and companies. Female students and faculty from the TSM program were also invited to attend and were sponsored by BellSouth. The variety of experience among the attendees created a very unique group of women for the activities which included basic golf instruction, lunch with special guest speakers, golf contests and a round of golf.

Miller Golf Course Manager Will Snodgrass and Women's Golf Coach Velvet Milkman led the group in instruction. The ladies split into groups to rotate throughout the golf course for putting, pitching and driving. All golf balls and golf clubs were provided throughout the day for participants.

Lunch was also provided by BellSouth in the recently remodeled Miller Golf Course banquet room. While munching on sandwiches and homemade ice-cream provided by Verizon Wireless, the women listened and interacted with three very special guest speakers. Lana Porter, former executive VP of Ameritech; Allison Willoughby, director of Brandenburg Telephone and president of the Kentucky Telephone Association; and Joan Coleman, VP of external and public affairs at BellSouth at the time of the Golf Day but currently president of BellSouth Kentucky; gave detailed descriptions of their experiences as women in the telecom field. They expressed the importance of family during their careers and talked about the changes in roles for females in a male dominated industry.

Because of the corporate sponsorship from BellSouth, attendees were asked to only give donations for participating. The Women in Telecom Scholarship was founded through those donations with $1,500 available for a female entering or currently in the TSM program next fall. Because of the success of the event, the planning for the Women In Telecom Golf Day is already in the works for 2007. The Women In Telecom Scholarship will continue through the annual WIT Golf Day and private donations.

Instructor Will Snodgrass watches as student Andrea Crouch has the only hole-in-one for the day.

The women enjoyed chatting in the Miller Clubhouse during lunch.

Lana Porter, Former VP of Ameritech, spoke to the ladies about her varied experiences in telecom

Sheri Rose from BellSouth won the putting contest award, a new putter provided by Computer Services Inc.

Judy Roth of Purchase Area Communications tries her hand at putting

Joan Coleman, current President of Bell-South Kentucky spoke to the women about balancing family and work.

http://www.murraystate.edu/tsm

TSM participates in Homecoming 2006

For the first time ever, TSM was involved with Murray State Homecoming activities by having a tent at Tent City. Visitors to the tent were greeted by industry representatives, ATSM members, and TSM faculty and staff. They could grab some homemade ice cream, watch the live tapings of the events on High Definition TVs provided by Office Depot, grab some freebies from regional industry, and sign up to win an iPod Shuffle.

MSU President Randy J. Dunn talks with Todd Atchison of Streamernet at the 2006 Homecoming.

During the course of tent city, TSM students and staff worked with a company called StreamerNet to broadcast homecoming events live online, available to anyone worldwide for the first time in homecoming history. StreamerNet's VP of product development, Todd Atchison, and The Center for TSM's Dana Howard interviewed guests to the tent about homecoming activities, food and entertainment while student workers and MSU TV 11's Elizabeth Fields interviewed other tent workers and community visitors around the football stadium. The new MSU president, Dr. Randy Dunn, was one of the interviewees inside the TSM tent and spent some time meeting industry leaders from the area, speaking with TSM students, and eating homemade ice cream sponsored by Verizon Wireless. That interview, the first on campus with President Dunn, was then replayed after homecoming by the Murray Rotary Club at the Annual Rotary Telethon's Murray State Night.

There were several other companies and organizations represented at the TSM tent. Dev-Source in Murray, CSI in Paducah, SlingShot Wireless in Paducah, Verizon Wireless and ConnectKentucky sent employees to hand out freebies and greet university and community guests. They enjoyed networking with the other companies there and meeting new people from the region. This was the first time industry leaders were invited to be involved with Murray State activities.

Tent city was also a chance for TSM alumni to stop by. Several alumni visited with TSM faculty and staff and met new students or networked with the roster of possible employers hosted under the tent. While at the booth, they could fill out their current contact information to be kept up-to-date on TSM events and happenings through mailings and emails.

The Homecoming Tent City 2006 was a big success for Murray State and the TSM Program of Distinction. Next year will be bigger and better so make plans to stop by!

Students work with Streamernet

During Homecoming week, five students had the opportunity to get some real world experience by working directly with StreamerNet. Skylar Julian, David Butler, Forrest Carver, Todd Sanders and Chris Chunn received two weeks of training with the StreamerNet equipment including walking through the process of streaming the Tent City events live online. Throughout the training, they learned how to set up the equipment, work with the campus wireless network and solve real problems as they happened. The students all volunteered to do this work to gain valuable experience for future projects. Since Homecoming, the students have streamed other events like the Murray Rotary Club Telethon and President Dunn's first on-campus press conference. Like the other students, David Butler knows that the experience he gained with the StreamerNet work will help him with future professional jobs. "Through working with StreamerNet, I gained leadership experience but I also learned what it was like to put together a professional production." Hopefully for the students, more opportunities like this will come along in the future.

Patterns of Distinction
Global Telecommunications

TSM AWARDS LUNCHEON

- Dr. Gene Wells Ray Lifetime Achievement Award
- Dick Anderson Leadership Award
- John Williams Entrepreneurship Award

April 19, 2007
Murray State University

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For registration or to submit an award nomination:
www.murraystate.edu/tsm/ctsm

SPECIAL EVENTS

Quake at the Lake

The Man Portable Interoperable Tactical Operations Center, also known as the MITOC, was used in a day-long presentation called "Quake at the Lake" this fall at West Kentucky Community and Technical College (WKCTC) in Paducah. The MITOC is a research project funded by The U.S. Department of Homeland Security (DHS) and conducted by Murray State, University of Louisville, and the Kentucky Community and Technical Colleges (KCTCS). Over 75 people attended Quake at the Lake which created a very realistic earthquake scenario based in downtown Paducah. Quake at the Lake created an opportunity for the partnering schools to demonstrate how MITOC equipment has the ability to help emergency management predict and control damaged areas during a disaster.

Attendees were first invited to sit in on a real-time briefing between staff posing as Purchase Area emergency management and the state Emergency Management Center in Frankfort. Using equipment out of the MITOC, they held a video conference briefing in the auditorium in Crownse Hall at WKCTC. The staff also used a large projected screen to show the crowd the information that was being used during the briefing such as the communications infrastructure, video of bridge inspection and flooding models.

After the briefing, attendees were split into groups to rotate through six stations, each with a different type of technology used in the briefing and emergency response during the earthquake scenario. Each station was operated by MSU, UofL, KCTCS and UK staff to demonstrate and answer questions about the research projects. The stations included technical information about the MITOC, plume modeling, Unmanned Aerial Vehicles, reach back off of the Internet, and Mid America Remote sensing Center (MARC) demonstrations with bridge and roadway models and flooding models.

Mike Matthews from DHS came from Washington, D.C., to observe the demonstration. He was pleased with the progress made in the research and indicated that this type of demonstration should be a model for other research projects.

The partnering schools plan on continuing work with the MITOC including upgrades as new technology becomes available, and manufacturing customized MITOC vehicles and equipment.

CyberCave is a continued success

The TSM program finished another year of CyberCave Academies and fall field trips. The CyberCave Academy and field trips had overwhelming response this year from students in not only Kentucky, but also Tennessee and Illinois.

With three first-year camps and the first-ever Second Year Academy, there were a total of 59 high school attendees. With guidance from TSM faculty members Marcia Combs, John Hart and Wes Spencer alongside TSM student workers Jimmy Copeland, Ben Hocker, Max Konstanty, Tony Jones and Paul Pitt, campers were treated to a week of telecommunications training. Second Year Campers, which were a group of students who had attended CyberCave Academy a first year in 2004 or 2005, got an in-depth look at network security and other topics that are explored in the first-year camps. They also had the chance to speak with special guest Bryan Purcell about the Murray State network and Computer Services Inc. (CSI) employees during a field trip to CSI in Paducah, Ky. CSI is the largest employer of TSM students and has a long standing relationship with Murray State and the TSM program. CyberCave Academy had other special guests stop by like Commissioner Mike Inman from the Commonwealth Office of Technology. Applications for the 2007 CyberCave Academy are online at http://campus.murraystate.edu/tsm/cybercave.

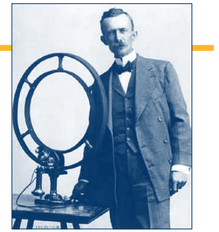
In the fall, MSU had CyberCave visits from 15 different groups with up to 24 students a group. The high schools that sign up for the CyberCave field trip sessions are now allowed to choose two modules or topics they would like their students to learn about. They can choose from network infrastructure, network services, wireless technology, operating systems, telephony, security and network applications. The students then have two hours in the CyberCave where they are given hands-on training from Murray State TSM students and a free lunch provided by the Center for TSM. Other benefits to schools who attend include a travel grant for transportation costs, and a free gift to the classroom. CyberCave field trips start again in February and will run through April.

New TSM Scholarships

The TSM program is proud to announce that we now have a variety of scholarships available to our students. A big THANK YOU goes out to the wonderful corporate friends, family and alumni to the program, who have always supported us and provided for our students. Students can now apply for:

- The TSM Housing Scholarship—available to any TSM student to go towards housing fees for the year
- The Women In Telecom Scholarship—available to any female TSM student, worth $1500 towards tuition fees for a year
- The West Kentucky Rural Telephone Coop Scholarship—available to any TSM student, worth $1500 towards tuition fees for a year
- Wilson and Virginia Gantt Scholarship—available to any upperclassman in the TSM program

TSM to celebrate Stubblefield



Starting in April, there is a special year coming up for Murray State and the TSM program. The TSM program will be hosting a year-long celebration of Nathan B. Stubblefield's patent for the wireless telephone. Although many other patents were created after Nathan B. Stubblefield for a wireless type of invention, Stubblefield's ideas still exist in applications today, including Near Field Communications and devices used for people with hearing problems. Stubblefield was from Murray, Ky., and his farm was located on land that is now being used for portions of the new MSU science buildings. Stubblefield has deep roots in Western Kentucky, and even though there is controversy over whether or not he invented radio, he is definitely known as a genius that created ideas way ahead of his time. Stubblefield applied for a patent 100 years ago this April. His patent was approved 100 years ago in May of 1908. Therefore, the centennial celebration will kickoff this April at Murray Rotary and will be followed by activities throughout the year. The TSM program is already making plans for one of the bigger parts of the celebration, an extension to the Wrather West Kentucky Museum displays that will be located inside of the IT building. This extension will include exhibits focusing on the history of telecommunications and a Hall of Fame for Kentucky leaders in telecommunications. Stubblefield will be the first inducted into the Hall of Fame. If you would like more information on this celebration please contact the Center for TSM. As the year-long celebration develops, information will be updated on our website at www.murraystate.edu/tsm/ctsm.

Faculty and Student Projects

Faculty members work with ConnectKentucky

In June 2006 two MSU TSM faculty members started developing a very important research project concerning how broadband infrastructure has affected employment, establishments and wages across Kentucky counties and industries. David Shideler and Narine Badasyan are working with ConnectKentucky which commissioned the project in order to understand how their efforts for widespread broadband have affected the economy in the commonwealth. Not only are Shideler and Badasyan creating a broadband availability-adoption index, but they are also estimating the economic impact such as effects on employment and wages. They will also look at the differences in impacts between urban and rural counties and across different industrial classes. Through this information, they will develop models that can predict future broadband deployment and adoption. After plans for this type of project with a former colleague fell through, Shideler approached ConnectKentucky about their interest in doing an economic impact analysis for Kentucky counties and ConnectKentucky agreed that the project would be beneficial for them. Shideler says that this research will provide a methodology for measuring the impact, as well as empirical evidence of the impact that broadband technology can have on local economies which in turn will have a large effect on policymaking at a local and state level. Shideler and Badasyan plan on ending the research in April of 2007.

Students to present at Louisville

This year's ITERA conference is taking on a lot of changes. The biggest change is location, as the conference has been moved from Las Vegas to Louisville, Ky., where the conference originated from. Along with that, ITERA has added on some new features to the conference including a contest for students called "Crisis Florida." Students from both grad and undergrad levels were invited to work as teams for this project. All schools held preliminary rounds individually and winners of the preliminaries will meet up in Louisville for a final presentation and competition. The students work together as a consulting firm to do a preliminary report on what they would need to turn Crisis Florida into a model community in terms of communication, preparing them for upcoming natural disasters such as hurricanes. The graduate level winners from MSU are Carlos Lopez and Valerie Thompson. The undergraduate winners are Todd Sanders, Eric Luellen, Nathan Smith, Noah Southerland and Heath Brown. Thompson and Lopez submitted their paper as part of the TSM 680 class project. They both agree that the project has taught them a lot about the industry. Thompson says, "Through the project, I learned a great deal about how RFID is used in the medical field for tracking patients and equipment." "I learned that even though team work is very important but not always enough to succeed because there is a need to properly coordinate the work and meet deadlines," Lopez explains. The other students feel that this contest has benefited them as well and are excited about presenting in Louisville. Brown says "Our project can win because it is realistic in the fact that we tried to take into account that you can not prevent a disaster such as a hurricane, however you can plan for it." Winners of the contest will receive $1,000 to split among the teammates and $200 to their school.