Sunset Review Report

Presented to Dr. Chandice Covington, Interim Dean

By

Dr. Patricia Allen, Director

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Purpose

In accordance with HSC OP: 01.02, Guidelines for the Establishment and Review of Institutes and Centers, the following documentation is presented for sunset review of the CINE. A brief history of the CINE, summary of CINE activities over the last six years and documentation of the CINE role in meeting the goals for Centers as established by the operating policy will be presented. Finally, income generated by the CINE will be reviewed in this report.

History of the CINE

The Texas Tech University Health Sciences Center School of Nursing created a Center for Innovation in Nursing Education in June 2004 to provide leadership in designing and implementing new and cutting edge nursing education initiatives to improve the delivery and quality of nursing education within the state of Texas and throughout the nation. The CINE’s mission is to provide leadership in uniting efforts across health care, education, and public sectors to address nursing workforce challenges by creating innovative new approaches to education. Texas Tech University Health Sciences Center School of Nursing is dedicated to the utilization of innovative new educational methodologies resulting in evidence based education. The Center for Innovation in Nursing Education (CINE) provides the structural support to achieve this goal. The CINE is specifically designed to build collaborations among educational institutions, employers and the public workforce system, focusing on Central and West Texas. The purpose of the CINE is to support models (prototypes) that operationally demonstrate how innovation in nursing education can more efficiently and effectively meet the needs of our health care system, while effectively assisting individuals to enter the nursing profession and migrate up a career ladder. Premises for the CINE include working together with community partners, respecting expertise, creating unity, and improving the quality of nursing education through evidence based nursing education research.
Just as health care is challenged to create innovative delivery systems, so too are nursing education programs. The CINE utilizes concepts and approaches created by IDEO (Kelly, 2001), a national leader in “the art of innovation”. IDEO developed a framework by which it helps companies and industries innovate to design products, services, environments, and digital experiences. This framework begins with a deep exploration of business, human, and technical factors, followed by observing, brainstorming, prototyping, and repeating.

By utilizing the IDEO framework, the CINE encourages multidisciplinary teams composed of educators and health care providers to consider new methodologies by transcending old assumptions, exploring startling and radical schools of thought, and then unleashing extraordinary solutions to prepare a quality nursing workforce. By rethinking something as complex and tradition-bound as nursing education, the CINE develops educational prototypes that are evaluated and refined via a series of quick iterations. The ultimate goal is to develop and test new teaching methodologies that will be implemented across the state and nation to change the face of nursing education.

According to Ross (2004), several core elements are key to building sustainable commitments to innovation inside companies. Among them are a shared mental model of commitment, the availability of seed money, structures that encourage experimentation and tolerate and learn from failure, and the ability to measure the value of innovation. TTUHSC School of Nursing attempts to identify partners capable of developing a shared team model of commitment, including seeking seed money for start up. Dialogue with the Texas Board of Nursing (TBON) and the Texas Higher Education Coordinating Board (THECB) to support innovative approaches and to develop mechanisms to tolerate failure without placing existing educational programs in jeopardy is ongoing.

**Significant Activities of the CINE**

Following formal launching of the CINE through the Dean’s Office and approval by TTUHSC administration and the approval by THECB, the CINE launched the first initiative in January of 2005 with the beginning of the Second Degree web-based BSN program funded by a Nursing Education Practice and Retention Health Resources and Services Administration grant and a grant from the National Science Foundation (NSF). This NSF grant was also the first innovation grant ever funded for nursing education. Beginning with implementation in Austin/Hill Country and Lubbock, Texas, today this program is no longer
an innovation through the CINE but, rather, a nontraditional track located in five sites in West Texas and the track has over 150 successful BSN graduates serving Texas. Built on a model of clinical teaching using a “coach” (a BSN prepared nurse at the bedside who is the primary clinical educator for one student), this program was at the cutting edge of reinventing clinical education. Today, the Carnegie Report on educating nurses calls for the use of coaching as a clinical teaching approach in nursing education (Benner, Stuphen, Leonard and Day, 2010).

Launching a successful new curriculum for Texans was the focus of the CINE for more than two years. During this time, essential groundwork was implemented to begin to understand the role of competency testing in nursing education. Competency testing involves both a performance and cognitive testing component to assess knowledge and skills needed for clinical performance. This was accomplished through the establishment of the Texas Nursing Competency Consortium (TNCC) with a vision to provide “Safe patient care through competent nursing practice for all Texans” (http://www.nursing.ttuhsc.edu/competency/). The TNCC through collaboration with the CINE, hosted two invitational conferences for over forty members of this consortium comprised of members from the Texas Board of Nursing, THECB, Cerner Corporation, Texas, Nurses Association, the Alliance for Innovation in Nursing Education (an alliance serving West and Central Texas nurse labor market needs), members of the North Texas Consortium of Schools of Nursing, North Texas Hospital Partners and the South Plains Nursing Coalition (Nursing schools, hospital partners and interested business entities such as the Workforce board and American State Bank). More than 12 publications by TNCC members were produced following these invitational conferences where a framework for competency development and evaluation was explored.

The CINE has established a website through the TTUHSC homepage (http://www.ttuhsc.edu/son/cine/). The CINE website provides information about CINE members, publications, funding and current projects such as the seed grant funding recently provided for School of Nursing Faculty members through the CINE. A newsletter is produced and distributed by the CINE each semester and links to all newsletters can be found on the website.

Advisory and Consortium
An Advisory Committee meets three times per year for review of CINE activities and advisement in new directions for the CINE was established in 2007. It is comprised of members of the faculty with an interest in the mission and activities of the center.

The center has worked on aiding in the establishment of the West Texas Nursing Education Consortium. The WTNEC is comprised of 12 schools of nursing in West Texas interested in meeting the capacity for the need for nurses for West Texas. This consortium meets annually and works on issues specific to West Texas. In 2008, the WTNEC was awarded a grant from the THECB to establish a portal for a centralized application system (CAS) for WTNEC schools. This project was led by the CINE with an ultimate outcome of the CAS moving to the national level in 2009 where it is now hosted by the American Association of Colleges of Nursing for all nursing schools in the U.S. interested in participating invited to do so. Members of the WTNEC grant have participated as consultants on this national CAS project with AACN.

Not all activities developed with the IDEO framework have been successful. Lessons learned through unsuccessful rapid prototyping of a new educational methodology have occurred through the work of the CINE. The Returning Enlisted Veterans – Upward (to) Professional Nursing curriculum developed by the center and funded for implementation by the Wagner Peyser Fund was not implemented. After extensive recruitment efforts and transcript evaluation as well as consultation with the military and another in-state program with the LVN to ADN track, the funds were returned. The Texas Board of Nursing approved curriculum was sound, but the pool of applicants to warrant the establishment of this LVN to BSN track designed for previous army personnel was not available. The project directors recognized time in establishing a pool of applicants with the needed pre-requisites was needed. Funds were not accepted for this award.

Today, the CINE is a recipient of a Texas WorkSource Commission, ARRA funded grant for $1 million to increase nursing education capacity in Texas. Led by Dr. Alexia Green, the project director, the CINE Director also serves as a co-project director. The project directors are providing leadership and evaluation for this project which involves the Texas Team and 44 schools of nursing in Texas. This one year grant is exploring a variety of mechanisms for capacity enhancement including simulation training for
faculty regionally, clinical capacity software to be used regionally, development of shared simulation scenarios, and regional website development for faculty recruitment and sharing.

Other projects of interest pursued by the CINE, which can be viewed on the website (http://www.ttuhsc.edu/son/cine/) are international research with physicians and nurses in Mexico to assess safety and competency in practice through high fidelity simulation and the assessment of senior nursing student from TTUHSC assessment of safety competency in practice through high fidelity simulation. The CINE sponsors a variety of internal projects related to faculty interest such as Cinco De Mayo Day, deep dives (IDEO structured brainstorming sessions) on curriculum issues of concern, faculty development through conference attendance, a six session grant writing workshop sponsored internally, and faculty development workshop with a nursing faculty nationally recognized in psychometrics, Dr. Mary McDonald, who worked with faculty on test item development and test item analysis. Many other activities have occurred over the last six years and some are well documented on the website.

The center has provided consultation to outside entities on issues of curriculum and compliance with regulatory agencies as well as transition of new graduates to practice through residency programs. The CINE generated income through these activities which has been used for faculty development, conference attendance, technology for the classroom and many other faculty and program enhancement needs. Consultations have been with Western Governor’s University in launching their BSN program in Texas both with THECB and Texas Board of Nursing; University of Texas Brownsville on launching their online RN/BSN track; Lonestar College Kingwood as an outside evaluator for a grant to launch an online 2nd degree to AD nursing program, University of Tennessee Chattanooga for moving the RN/BSN program to an online format; and, most recently, with St. David’s Medical Center to build an effective new graduate residency program.

**Documentation of Meeting the Goals for Centers established in HSC OP: 01.02**

TTUHSC Goals for Centers are as follows:

1) Accomplish a clearly defined mission that supports the major strategic objectives and core academic mission of the School and adds value to the School and to TTUHSC;

2) Increase interdisciplinary activity between School and identified partners; and

3) Enhance quality and productivity of School faculties.

Goal 1. Accomplish a clearly defined mission that supports the major strategic objectives and
core academic mission of the School and adds value to the School and to TTUHSC. The CINE Director reports to Dean of the School of Nursing (SON) and the Director is a member of the Leadership Council who meets monthly with the leadership team and reports on current activities of the CINE quarterly. All SON centers meet monthly to discuss current initiatives and activities which centers are charged with through the SON strategic plan. At the HSC level CINE activities support the institutional G-V goal of providing leadership in the development of partnerships and collaborations to improve community health. The overarching SON strategic goal the CINE supports is continuous work relating to strategies to address the nursing shortage. The CINE has developed and implemented innovative strategies to address the nursing shortage as noted in previous activities described in this document such as the creation of the online second degree program, the CAS system, and participation in the TWC grant which is a statewide endeavor.

Goal 2. Increase interdisciplinary activity between the School and identified partners. The CINE has supported this goal through a variety of activities over the last six years. Business entities working with the CINE to find solutions to the nursing shortage have been Cerner Corporation and HealthStream. Both the work with Cerner Corporation and HealthStream provided the center an opportunity to collaborate with the disciplines of business and information technology. The experts from each of these corporations worked with the center to understand core concepts of nursing practice for building a database for tracking nursing student competencies. At the same time members of the CINE developed skills in understanding the use of technology for enhancing educational activities, intellectual property rights and the interesting dynamics occurring when working together with a business and an academic institution. The CINE worked with Decision Critical (a business partner who develops electronic portfolios) who briefly served as the business partner on the National Science Foundation Partnerships for Innovation grant.¹

Federal agencies working with the center through external funding have included the National Science Foundation (NSF) the first NSF grant ever awarded to TTUHSC, Health and Human Resources Agency (HRSA) Nursing Education, Retention and Practice program, Texas Higher Education

¹ NSF PIN grant provided funding to launch the second degree BSN program online and the 360 tracking system to have real time access to student progress and faculty and coach feedback to the student anywhere, anytime.
Coordinating Board, Texas Workforce Commission, Workforce of South Plains and Capital Area Workforce. A complete listing of funding provided to the center can be found in Attachment A.

RGK Foundation, a private foundation partner, has provided dollars for faculty support for program startup for the Second Degree web-based BSN program. Located in Austin, RGK Foundation endeavors to be a catalyst for progressive change in humanitarian concerns. Guiding the Foundation is a deep reverence for democracy and a civil society together with the founders' values of foresight, imagination and discovery. By seeking innovative projects in the area of health, education, human services and community affairs, the Foundation strives to advance knowledge, improve society and help realize human potential.

Further interdisciplinary work between the center and identified partners has occurred through statewide work with the Alliance for Innovation in Nursing Education (Attachment B), Texas Nursing Competency Consortium (http://www.nursing.ttuhsce.edu/competency), South Plains Nursing Education Coalition, and the West Texas Nursing Education Consortium (http://nursing.ttuhsce.edu/wtnepp). In all of the consortium interactions, the CINE has played a role in creating collaboration and synergy for all entities to identify and work toward solutions for the nursing shortage either locally through the South Plains Nursing Education Coalition, regionally through WTNEC, or statewide through the TNCC. The most current partnership is the center work with the Texas Team Addressing Nursing Education Capacity. Information about the work of the Texas Team which was appointed by the Governor’s office can be found at: http://www.dshs.state.tx.us/chs/cnws/TexasTeam/TexasStrategy.pdf

Goal 3. Enhance quality and productivity of School faculties. This goal has been accomplished through the internal involvement of six faculty who initially participated in the research occurring through the NSF Partnerships for Innovation grant which was led by the Dean, Dr. Alexia Green as PI and Co-PI, Dr. Patricia Allen, CINE Director. The findings of this grant have been published and all publications by the center can be found in Attachment C. Faculty quality and productivity has been further enhanced by the center sponsoring a grant writing workshop, test item/test analysis workshop, deep dives for the purpose of exploring innovative solutions to new and existing curricula, a statewide conference funded by the THECB through the CINE for all nursing faculty, “We Can Do It Together, A Mosaic of Partnerships” (http://www.nursing.ttuhsce.edu/mosaic). With over 150 attendees from nursing education and practice as
well as state regulatory agencies, this conference examined successful academic and health care partnerships and explored strategies to design innovative partnerships as an investment in the future of nursing.

Publications, state and national presentations as well as invited keynotes have been several mechanisms for faculty to increase quality and productivity. A list of some of these presentations is found in Attachment C following the list of publications. Multiple SON faculty volunteer to serve on the CINE Advisory Committee. The advisory committee membership as well as all faculty involved in the center can be found on the center website at: http://www.ttuhsc.edu/son/cine/faculty.aspx The advisory committee has served as reviewers for a call for seed grant funding for faculty to conduct small project pilots in new methodologies of nursing education. In the fall of 2009, four seed projects were funded with income generated through previous CINE consultations. These projects can be viewed at the website and the pilots are currently under investigation by the research teams.

The criteria of Goal 3 have been met by faculty development and submission of grants written through the CINE. Documentations of grant work by faculty of the SON for the center is found in Attachment A. To date over 20 faculty have participated in writing grants through the center or assisting in the implementation of awarded grants through research or launching training grants.

**Income Generated By the CINE**

The CINE has an annual operating budget of $20,000 dollars provided through the Dean’s Office. All other income has been generated through consultations by the Director, immediate past Dean and several faculty members. Since the inception of the center over $ 40,000.00 been generated by faculty consultations. Over $30,000 has been generated by the center in AY 2009 and AY 2010. With greater awareness of the center’s services many more opportunities for revenue generation are occurring for faculty consultation.

All grants awarded through the center have varying increments of faculty salary support, administrative support and IT support. The unique feature of many of the grants received by the center is the ability to expand and increase enrollments by funding faculty salary start-up salaries to generate additional numbers of graduates. These increased graduates then increase formula funding dollars returned to the SON. To date the Center has been awarded $ 4,793,847. Major awards were achieved
through the work of Drs. Armstrong, Green, Allen and Billings as well as many center faculty who participated at varying levels of grant writing and implementation. Please see attachment A for specific grants awarded to the CINE.

The original investment for the center was $20,000 per year for six years for a total of $120,000. The generated income for six years with grants received and consultation fees totals $4,813,847. Therefore, the return on investment (ROI) is $4,813,847 minus $120,000 which equals $4,693,847 divided by $120,000 equals a ROI of $39.12 for every dollar invested. This is a brief scan of ROI for the CINE. Note the Center Director devotes 20% of time to the center and each year the director’s 20% effort has been covered by grant funding.

**Summary of Justification for Continuation of the Center for Innovation in Nursing Education**

The CINE has accomplished a clearly defined mission supporting the major strategic objectives and core academic mission of the School. The center continues to add value to the School and to TTUHSC; increases interdisciplinary activity between School and identified partners; and enhances quality and productivity of School faculties. The last six years have been an exciting time for the center as solutions to the nursing shortage (the mission of the center) has been at the forefront of nursing concerns both in Texas and in the nation. Launching the center in this climate of need has produced many avenues for collaboration, partnership and small steps towards solutions. The center was able to effect policy in Texas in a very small way by suggesting the concept for a bill which provided nursing student preceptors dollars toward tuition reimbursement for themselves or their children. This became a legislative initiative which encouraged preceptors to volunteer for clinical teaching thus expanding the pool of clinical educators for nursing students in Texas.

The summary could not be complete without discussing future directions for the CINE. Immediate plans for the center include completing the TWC grant work as evaluator and the center director role as co-project director. The grant will additionally sponsor a forum on clinical capacity with leaders from all regions of nursing education throughout the state. Clinical capacity is key to increasing enrollments and maximizing resources for future capacity in nursing education.

An additional immediate direction for the center will be a new consortium project in planning with the WTNEC which will be either a consortium grant to pilot the “Oregon Project” in West Texas between
associate degree and baccalaureate programs in the region and/or piloting a residency program for new graduates and acute care employers. Discussion is underway for these and other options for next directions for the WTNEC.

Within the SON, the center will like to sponsor “brown bags” in the Fall 2010 on upcoming grant opportunities for all interested faculty. Planning for grants would facilitate broader faculty involvement in the center and further support goal 3 for all centers. Additionally, “brown bags” sharing educational innovations have occurred with interested faculty in the past and will be planned for Fall 2010. With anticipated health care reform changes, the CINE leadership envisions many new and exciting opportunities for enhancing and reinventing graduate education in the near future.

The center will continue to pursue all options at the local, regional and state level to continue to partner to meet the needs for Texas for the nursing shortage and other health care provider shortages. These actions will occur through partnerships, grant writing activities, faculty development, and innovating new methods of nursing education delivery in both graduate and undergraduate education. The center’s work is not done, a nursing shortage in West Texas and beyond remains and this report justifies the center’s work to date, but solutions are still needed to the shortage especially in border regions where the shortage of nurses can reach up to 20% vacancies in some areas.
References


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<thead>
<tr>
<th>Year</th>
<th>Project Title</th>
<th>Grant Information</th>
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<tbody>
<tr>
<td>2010-12</td>
<td>Hospital Based Partnership Funding, Texas Higher Education Coordinating Board, Co-Project Director Dr. Allen</td>
<td>Funded: $631,000.</td>
</tr>
<tr>
<td>2010-11</td>
<td>Nursing Capacity Building, Texas Workforce Commission, Co Principle Investigator with Dr. Alexia Green</td>
<td>Funded: $1,000,000.</td>
</tr>
<tr>
<td>2009-11</td>
<td>Returning Enlisted Veterans – Upward (to) Professional Nursing. Wagner Peyser Fund, Governor’s Office, Co-Principal Investigator with Dr. Myrna Armstrong</td>
<td>Funding approved: $300,000.00 but funding not accepted due to lack of student pool.</td>
</tr>
<tr>
<td>2009</td>
<td>Competency Transcript Innovative Technology Training. Principle Investigator.</td>
<td>Funded: $15,000 from Texas Tech University Health Sciences Center Seed Grant.</td>
</tr>
<tr>
<td>2008</td>
<td>A Mosaic of Partnerships Conference. Texas Higher Education Coordinating Board. Austin Texas.</td>
<td>Co-Principal Investigator with Dr. Mary Anne Hanley. Funded: $90,000.00.</td>
</tr>
<tr>
<td>2007</td>
<td>Competency Assessment Through Simulation in a Practice Based Learning Environment from the Targeted Funds Internal Grant Competition. Texas Tech University Health Sciences Center.</td>
<td>Principle Investigator. Funded: $15,000.00.</td>
</tr>
<tr>
<td>2006</td>
<td>Competency Assessment Through Simulation in a Practice Based Learning Environment from the Targeted Funds Internal Grant Competition. Texas Tech University Health Sciences Center.</td>
<td>Principal Investigator. Funded: $16,400.00.</td>
</tr>
<tr>
<td>2005-07</td>
<td>Second Degree Web Based BSN Program Faculty Funding. RGK Foundation. Austin, Texas.</td>
<td>Project Director: Dr. Patricia Allen. Funded: $162,510.</td>
</tr>
<tr>
<td>2005-07</td>
<td>Alliance for Innovation in Nursing Education. Partnerships for Innovation Grant from the National Science Foundation. The Use of Technology and a Coaching Model in a 2nd Degree Web-based BSN Program.</td>
<td>Co-Investigator. Funded: $600,000.</td>
</tr>
<tr>
<td>2004-07</td>
<td>Web BSN Accelerated Student Academic Program (wBSNasap).</td>
<td>PI, Dr Myrna Armstrong Project Director, Dr. Patricia Allen for HRSA NEPR Grant. Funded: $2,100,000.</td>
</tr>
</tbody>
</table>
2004-05  Worksource of the South Plains start-up faculty funding for Second Degree Web-based BSN Program. Project Director. Funded: $75,000.

2004-05  Greater Austin Area Workforce start-up faculty funding for Second Degree web based BSN program. Project Director. Funded: $75,000.
Attachment B
Executive Summary

Texas Tech University Health Sciences Center and Austin Community College initiated an Alliance for Innovation in Nursing Education, a strategic effort to improve the response to the national shortage of nurses. The Alliance is specifically designed to build collaborations among educational institutions, employers and the public workforce system, focusing on Central and West Texas. The purpose of the Alliance is to support models (prototypes) that operationally demonstrate how innovation in nursing education can more efficiently and effectively meet the needs of our health care system, while effectively assisting individuals to enter the nursing profession and migrate up a career ladder. Premises for the Alliance include working together with community partners, respecting expertise, creating unity, and improving the quality of nursing education.

Based upon high-growth industry projections, economic development needs, and micro-enterprise efforts, two specific prototypes will be initiated as a first step by the Alliance.

Prototype 1 involves leveraging an innovative web-based RN-BSN program already developed by Texas Tech University Health Sciences Center to serve students in Austin and Hill Country communities. Innovative new strategies to be used in implementing this prototype include: dual admission of students to both the community college and university to promote career progression; and active participation by Austin and Hill Country employers in facilitating students’ educational experiences. Twenty students are anticipated to graduate from this collaborative effort during year one and an additional 40 during year two.

Prototype 2 focuses on educating persons who already have a baccalaureate degree (in any field) to enter the nursing workforce as baccalaureate prepared registered nurses within 12 months. This one-year, accelerated, alternate entry BSN program to be offered via Texas Tech University Health Sciences Center School of Nursing in collaboration with Austin Community College, will be web-based with preceptor and nurse educator oversight in the student’s own community. This innovative program will test new technologies in assessment of clinical competence and web based curriculum delivery, focusing on preparation of highly competent clinicians ready to assume the vigorous demands of today’s high technology health care system upon graduation. A total of 10 students were accepted in the inaugural cohort (8 each from Austin/Hill Country and 2 from Lubbock/West Texas/Permian Basin). During the second year of implementation enrollment was increased with twice yearly admissions (Fall 05 13 students from Lubbock/West Texas) and (spring 06 18 from Austin/Hill Country/San Marcos and 16 students from Lubbock/West Texas, including the Permian Basin). By year two of the Alliance, December 06, 56 2nd degree graduates will be practicing nursing in the targeted Alliance areas.

Expected outcomes of the Alliance include:
- Increased integration of community college and university efforts with business and the public workforce system activities to meet the skills training needs of the high growth health care sector;
- Targeted investment of nursing workforce development resources and support for private and public sector partnerships to ensure the development of a quality nursing workforce;
- Reduce dependence on importation of foreign nurse graduates;
- Development and prototyping of innovative new models of nursing education which provide career enhancing and career ladder opportunities;
- Increased opportunities for employers to actively collaborate in the design and implementation of innovative new models of nursing education;
- Increasing capacity, while recruiting minorities, particularly Hispanics;
- Expanding the range of teaching technologies, particularly those focused on distance education and on-line delivery;
- Creating new methodologies to assess, track and document clinical competence of students;
- Enhancing collaboration between education and practice, with particular emphasis on linking education to practice opportunities in the student’s community of interest; and
- Evaluation and dissemination of new teaching technologies and innovations that can be replicated and sustained throughout the state and nation.
Center for Innovation in Nursing Education

Publications


Center for Innovation in Nursing Education

Presentations

National


Regional

“We Can Do It Together: The Mosaic of Partnerships”. Texas Higher Education Coordinating
Board, Texas State Plan: Addressing Nursing Education Capacity, Lubbock, TX – April 2009.

National Safety Initiatives: Practical Applications For Nurse Educators. Texas Organization for Associate Degree Nursing Annual Conference, Austin, TX – February 2009.

What Is the Center for Innovation in Nursing Education. Thomason Hospital Nursing Staff, El Paso, TX – November 2008.

Coaching 2nd Degree Nursing Students. The University of Texas WINNER Forum, Houston, TX - August 2007.

Invited Presentations


