President’s Welcome

Welcome to the 38th Conference and Annual Meeting of the Texas Society of Allied Health Professions (TSAHP). TSAHP is a multidisciplinary society, and one of the primary organizations in the state of Texas that serves the educators in allied health professions. We are dedicated to enhancing and promoting education, research, and clinical practice of allied health professionals. The title of this year’s conference is “Innovations and Best Practices in Health Profession Education”. We are especially honored to have Dr. David Henzi, Dr. Alan Sakaguchi, and Jessica Pfister speaking on interprofessional education and interprofessional practice in our keynote address.

We extend a special thank you to Dr. David Shelledy and The University of Texas Health Science Center at San Antonio for hosting this year’s conference. As always, thank you for your continued support of our Texas Society of Allied Health Professions. We hope you will enjoy the conference and learn of innovations and best practices that you can implement to advance allied health education and clinical practice.
Dr. James Johnston  
TSAHP President  

Keynote Speaker  

David L. Henzi, Ed.D. is the Associate Dean for Academic and Student Affairs in the School of Health Professions, and an Associate Professor in the Department of Occupational Therapy at The University of Texas Health Science Center at San Antonio. Dr. Henzi has worked in K-12, undergraduate, and graduate education for over 20 years. Dr. Henzi received his Bachelor of Arts degree in Psychology from The University of Texas at San Antonio and his master’s and doctorate degrees in Education from Texas Tech University.

Alan Sakaguchi, Ph.D. is an Associate Professor in the Department of Cellular and Structural Biology at The University of Texas Health Science Center at San Antonio. Dr. Sakaguchi received his bachelor’s degree from the University of California at Los Angeles, his master’s degree from California State University Los Angeles, and his doctorate degree from University of Southern California. During his career, he has been a teacher and mentor in basic science research and gross anatomy. His accomplishments are frequently noted as “firsts”, cutting edge and novel, and have occurred in research (human and mouse somatic cell genetics, oncogenes and molecular biology), curriculum (specialty courses and workshops in basic science and gross anatomy) and teaching innovations (anatomical models and study aids). Future interests are to create additional models by 3D printing to enhance anatomy teaching and learning.

Jessica Pfister, M.S., CCC-SLP received her bachelor’s degree in Communication Disorders and Spanish from Butler University.
in Indianapolis, and attended Texas State University for her master’s degree in Speech Language Pathology. She has been with Baptist Health System since 2011, and is currently the Regional Pool Rehabilitation Supervisor and Lead Speech Pathologist for over 25 speech language pathologists on staff. She has assisted in the development and implementation of standard speech and swallowing protocols and assessments throughout the five hospitals. Jessica is the lead council member for the Baptist Education Academy providing a continuing education course for therapists, nurses, and other ancillary team members. She is the liaison between local universities and the Baptist Health System coordinating placements of speech pathology graduate students within the acute care and rehabilitation settings. She has been a guest lecturer at Texas State University and The University of Texas San Antonio, and is a community speaker on stroke awareness for local organizations. One of her greatest professional enjoyments is leading a community stroke support group each month.
General Information

Location: The conference will be held at The University of Texas Health Science Center at San Antonio at the Greehey Academic and Research Campus located at 8403 Floyd Curl Drive.

Registration: Registration includes all events and sessions. The registration fee includes printed materials, admission to all sessions, refreshment breaks, reception and awards dinner (Thursday evening, September 24), and continental breakfast (Friday morning). All participants, presenters and attendees, must pay the conference registration fee. If attendees wish to bring a guest to the reception and dinner, cost is noted below.

<table>
<thead>
<tr>
<th>Registration Fees</th>
<th>Before 9/1</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member</td>
<td>$ 85</td>
<td>$105</td>
</tr>
<tr>
<td>Non-Member</td>
<td>$120</td>
<td>$140</td>
</tr>
<tr>
<td>Guest—Dinner</td>
<td>$ 30</td>
<td>$ 30</td>
</tr>
</tbody>
</table>

Member Fees
- Individual (annual) $ 35
- Student Membership (annual) $ 5

Travel and Parking Information:

From Interstate 10: Exit at Medical Drive and turn west on Medical. (From I-10 West, this is to the left.) Take Medical for 1.5 miles to Floyd Curl Drive, which is the second stop light past Fredericksburg Road. Turn left onto Floyd Curl. The main entrance is near Medical Drive. Ask at the gate for directions and parking.

From Interstate 410: Exit at Fredericksburg Road and turn north on Fredericksburg.
Continue on Fredericksburg to Medical Drive. Turn left onto Medical. Turn left again onto Floyd Curl Drive, which is the second stop light on Medical. The main entrance is on the right. Ask at the gate for directions and parking.

**Parking:**
If parking, turn right into the UT Medicine Medical Arts and Research Center parking garage at 8400 Floyd Curl Drive. The cost for parking is approximately $7 per day. After you have parked, proceed across Floyd Curl and under the research building. The Greehey Children’s Cancer Research Institute building will be the next building on the left.

**UTHSCSA Parking Map:**
http://uthscsa.edu/hr/documents/MARCParkingMap.pdf

**What to Wear:** Business casual attire is appropriate for conference sessions, as well as the reception and awards dinner.

**Special Accommodations and/or Dietary Needs:** If you require special accommodations or have special dietary needs, please contact Shirley McGraw, (409) 772-9565.

**Lodging:** TSAHP does not block rooms for the conference; however, the Courtyard Marriott Medical Center (8585 Marriott Drive) and the Omni (9821 Colonnade), nearby the university. A list of San Antonio hotels are found at the following link:
http://portal.cpa.state.tx.us/hotel/hotel_directory/showcity.cfm?city=SAN%20ANTONIO&st=TX&stname=Texas&fy=2015&ltr=S&map=n

**Abstracts:** Abstracts from this meeting’s poster and platform presentations will be posted on the TSAHP website, www.tsahp.org, after the conference.
Sponsoring Deans and Institutional Member

TSAHP thanks the following institutional and state association members for their continued support.

- **Jon Williamson, Ph.D.**, Interim Dean, The University of Texas Southwestern School of Health Professions, Dallas

- **Kathleen A. Curtis, Ph.D.**, Dean, College of Health Sciences, The University of Texas at El Paso, El Paso

- **Sondra A. Flemming, M.S.**, Vice President, Health and Economic Development, El Centro College, Dallas

- **Caroline Goulet, Ph.D.**, Dean, School of Physical Therapy, University of Incarnate Word, San Antonio

- **Robert J. McLaughlin, Ph.D.**, Interim Dean, School of Allied Health Sciences, School of Allied Health Sciences, Baylor College of Medicine, Houston

- **Ronald D. Hovis.**, Interim Dean, College of Health Sciences, Texas Woman’s University, Denton

- **James Johnston, Ph.D.**, Dean, College of Health Sciences and Human Services, Midwestern State University, Wichita Falls

- **Michael Lacourse, Ph.D.**, Dean, College of Health Sciences, Sam Houston State University, Huntsville

- **Michael Lehker, Ph.D.**, Interim Dean, College of Health Affairs, The University of Texas Rio Grande Valley, Brownsville

• **Alexander Okwonna, Pharm.D.,** Natural Sciences and Health Sciences, San Jacinto College, Houston

• **Elizabeth J. Protas, Ph.D.,** Vice President and Dean, School of Health Professions, The University of Texas Medical Branch, Galveston

• **Shirley Richmond, Ed.D.,** Dean, School of Health Professions, The University of Texas M.D. Anderson Cancer Center, Houston

• **John Ronnau, Ph.D.,** Dean, College of Health Sciences and Human Services, The University of Texas - Pan American, Edinburg

• **Hal S. Larsen, Ph.D.,** Interim Dean, School of Allied Health Sciences, Texas Tech University Health Sciences Center, Lubbock

• **David Shelledy, Ph.D.,** Dean, School of Health Professions, The University of Texas Health Science Center at San Antonio, San Antonio

• **Jayson Valerio, MSN,** Interim Dean, Nursing and Allied Campus, South Texas College, McAllen

• **Ruth B. Welborn, Ph.D.,** Dean, College of Health Professions, Texas State University, San Marcos

• **LeeAnn Winker, R.D.H.,** President, Texas Dental Hygienists’ Association, Austin
Conference Program: Thursday, September 24, 2015

**Location:** All Thursday sessions are located in the Greehey Children’s Cancer Research Institute (GCCRI) Building.

11:00 a.m. **Registration**
GCCRI Foyer

11:30 a.m. – 1:00 p.m. **Deans’ Meeting and Luncheon**
GCCRI 2.150

Conference Opening Session GCCRI Auditorium (2.160)

1:00 p.m. **Welcome**

1:15 p.m. **Keynote Address:**
*Interprofessional Education/Interprofessional Practice*
D. Henzi, A. Sakaguichi; UT Health Science Center San Antonio; J. Pfister, Baptist Health System, San Antonio

Research Award Presentations – GCCRI Auditorium (2.160)

2:15 – 2:45 p.m. **TSAHP Research Award (2014) Presentation:** *The Validity and Reliability of the Jefferson Scale of Physical Therapist Lifelong Learning*
J. DeVahl, P. Blau, E. Mulligan, S. Simpkins; UT Southwestern School of Health Professions

2:45 – 3:15 p.m.  Outcomes for Incorporating Spanish Language Skills in a Physical Therapist Curriculum
S. Okere; Texas State University

3:15 – 3:30 p.m.  Break

Concurrent Session A  GCCRI Auditorium (2.160)

3:30 – 4:00 p.m.  Admission Criteria as Predictors of Academic and Clinical Success: A Systematic Review
M. Simmonds, A. Patel; UT Health Science Center San Antonio

4:00 – 4:30 p.m.  Analysis of Sex and Gender Content in Allied Health Professions’ Curricula
L. Stickley, Texas State University; D Sechrist, L. Taylor; Texas Tech University Health Sciences Center

4:30 – 5:00 p.m.  Breaking Barriers: A Case Study Approach to Interdisciplinary Education
Concurrent Session B  
GCCRI Room 2.150

3:30 – 4:00 p.m.  
**Career Research Productivity Across a School of Health Professions**  
J. Hill, D. Shelledy; UT Health Science Center San Antonio

4:00 – 4:30 p.m.  
**Flipping the Flipped: Why do it?**  
B. Boucher, P. Kroon; Texas State University

4:30 – 5:00 p.m.  
**Course Designs to Enhance Clinical Decision Making**  
L. Stickley, D. Baylor; Texas State University

General Meeting  
GCCRI Auditorium (2.160)

5:00 – 5:30 p.m.  
**TSAHP Annual Meeting**

Reception and Poster Presentation – GCCRI Foyer

5:30 – 6:30 p.m.  
Reception and Poster Presentations

Awards Dinner – GCCRI Dining Area
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30 p.m.</td>
<td>Awards Dinner</td>
</tr>
</tbody>
</table>
Conference Program: Friday, September 25, 2015

**Location:** Friday sessions are located in the Greehey Children’s Cancer Research Institute Building (GCCRI) or the Research Administration Building (RAB).

<table>
<thead>
<tr>
<th>Continental Breakfast</th>
<th>GCCRI Dining Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 – 8:30 a.m.</td>
<td>Continental Breakfast GCCRI Dining Area</td>
</tr>
</tbody>
</table>

**Concurrent Session A**  
**GCCRI Auditorium (2.160)**

| 8:30 – 9:00 a.m. | **Academic Advising**  
| J. Killion; Midwestern State University |

| 9:00 – 9:30 a.m. | **Implementing a Centralized Application Service to Facilitate a More Efficient and Effective Recruitment, Admissions and Enrollment Process**  
| H. Abreu, Liaison International; J. Priddy, J. Anderson, B Quillin, G. Ernst, D. Henzi; UT Health Science Center at San Antonio |

| 9:30 – 10:00 a.m. | **Classroom Learning, Speed Research and Complex Simplicity**  
| D. Carlson, M. Hernandez; UT Rio Grande Valley |
10:00 – 10:30 a.m. **Community Service Learning: A Student Led Maternal Wellness Program for Teen Mothers**
P. Recto, L. Sisk, M. Aguilar; UT Health Science Center San Antonio

10:30 – 11:00 a.m. **Creating Awareness of How Biases Contribute to Clinical Decision Errors**
D. Klocko; UT Southwestern School of Health Professions

11:00 – 11:30 a.m. **Creating an Exemplary Online Course**
B. Veale; Midwestern State University

11:30 – 12:00 noon **What Would You Do: Using Technology to Integrate Enhanced Ethical Decision Making into an Allied Health Educational Curriculum**
M. Dehghanpour, J. Baker; UT MD Anderson

12:00 – 12:30 Lunch (On your own)

12:30 – 1:00 p.m. **Health Professions Faculty Development for Educational Technologies: the pedi.edtech Experience**
B. Niebuhr, M. Urbani, M Wolffarth, A Rudnicki, P Beach, V Niebuhr; UT Medical Branch Galveston
1:00 – 1:30 p.m.  Increasing Physician Assistant Faculty through a HRSA grant – Lessons Learned
B. Shriver, B. Quillin, T. Burgin, D. Henzi; UT Health Science Center San Antonio

1:30 – 2:00 p.m.  Recruiting and Retaining Minority Students into Health Professional Programs: Why What We are Doing May Not be Working
A. Scarbrough, Sam Houston State; S. Shelton, UT Medical Branch Galveston

2:00 – 2:30 p.m.  Predicting Academic Success by Leveraging Centralized Application Data
H. Abreu, Liaison International; B. Finck, UT Health Science Center San Antonio

2:30 – 3:00 p.m.  Implementation and Evaluation of an Interprofessional Allied Health Faculty Incentive Plan (FIP)
D. Shelledy; UT Health Science Center San Antonio

Concurrent Session B  RAB (Research Administration Building) 1.202
8:30 – 9:00am  

Cyberbullying in Higher Education – The Results  
J. Wagner; Midwestern State University
9:00 – 9:30 a.m.  
**A Successful Spring into CANVAS via Quality PEOPLE, PRODUCT and PROCESS**  
D. Gardner, V. Kodosky, D. English, A. Manwell-Jackson; UT Health Science San Antonio

9:30 – 10:00 a.m.  
**Development of a Quality Improvement Curriculum in Physician Assistant Studies**  
D. Klocko, T. Kindratt, V. Orcutt, J. Williams; UT Southwestern School of Health Professions

10:00 – 10:30 a.m.  
**Evaluation of Institutional Research Support Factors and Barriers Influencing Faculty Research Productivity across a School of Allied Health Professions**  
J. Hill, R. Joseph, D. Shelledy; UT Health Science Center San Antonio

10:30 – 11:00 a.m.  
**Enhancing Competence through an Integrated Diabetes Management Curriculum**  
L. Dekat, V. Orcutt, T. Kindratt; UT Southwestern School of Health Professions

11:00 – 11:30 a.m.  
**The Student-Centered Learning Environment: Classroom Flip, or Classroom Flop?**
BShriver, B. Quillin, D.Henzi; UT Health Science Center San Antonio

11:30 – 12:00 noon

**Developing an Evidence-Based Interprofessional Communication Course**

V. Mason; Texas Woman’s University

12:00 – 12:30 Lunch

(On your own)

12:30 – 1:00 p.m.

**Innovations in an Online Second Degree Clinical Laboratory Science Program**

L. Rice-Spearman, W. Redman; Texas Tech University Health Sciences Center

1:00 – 1:30 p.m.

**Jigsaw Instructional Strategy**

K. Clark; Midwestern State University

1:30 – 2:00 p.m.

**Students’ Perceptions of the Use of Simulated Patients to Support the Development of Clinical Evaluation Tools**

A.Clegg, B. Piernik-Yoder, K. Grice; UT Health Science Center San Antonio
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 2:00 – 2:30 p.m. | **Leading Your Learning – A Framework to Guide Development of Students’ Professional Practice Education Objectives**  
C.Jackson, J. Gonzalez; University of Incarnate Word |
| 2:30 – 3:00 p.m. | **Practice to Perform: An Active Learning Approach to Teach Clinical Reasoning and Skills Performance**  
C. Boucher, P Kroon; Texas State University |
| Closing Session and Adjournment – GCCRI Auditorium 2.160 | 3:00 – 3:30 p.m. Closing session and adjournment |
| 3:30 – 5:00 p.m. | **TSAHP Board meeting – GCCRI Dining Area** |
Title: Academic Advising
Author: Jeff Killion PhD, RT (R) (QM); Midwestern State University

Summary of the purpose:
This presentation will explore the importance of academic advising in education. Most often student advising is not a priority for educational programs and students suffer the consequence. As educators and administrators it is important to understand the influence advising has on retaining students.

Objectives:
Upon completion of this presentation, participants will be able to:

- Define academic advising
- Identify the role of advisors
- Examine effective advising

Procedures:
I. Academic Advising
   a. Definition
   b. History
II. Roles of Advisors
   a. Knowledge of curriculum
   b. Counsels
   c. Guides
   d. Mentor
   e. Teach
   f. Nurture student growth
   g. Adapt advising role to accommodate a variety of cultural and ethical backgrounds
III. Effective Advising
   a. Advising styles
   b. Student achievement
   c. Student satisfaction
d. Student retention
2.

**Title:** Admission criteria as predictors of academic and clinical success: A systematic review

**Authors:** Maureen Simmonds, PhD, PT & Avani Patel, SP; The University of Texas Health Science Center San Antonio

**Background:** The nature of health-care disciplines is constantly evolving; therefore it is crucial to select candidates suitable for success in a dynamic environment. Both academic and non-academic factors are used to predict student’s success, however they remain controversial, not least because the criteria for success is usually limited to easily measured academic criteria such as GPA or success on the licensure exam and does not include arguably more important outcomes such as the ‘patient voice’ or patient centered outcomes. The purpose of this systematic review is to examine the extent to which admission criteria are predictive of different aspects of success across health care programs.

**Methods:** A search strategy was put together with a variety of key terms that were entered into several databases using their specific descriptors. Published papers included in the analysis were critically reviewed and assessed for bias using the PEDro scale.

**Results:** Forty-five studies were included in the review. Standardized exams and GPA, have a moderate to strong positive association with licensing exam scores and final GPA. Interviews and non-cognitive factors have conflicting results for predicting academic and clinical performance and remain institution or program specific. No studies incorporated the patient perspective or used patient-centered outcomes as a component of success.

**Conclusions:** The literature does not provide convincing evidence to establish that academic and non-academic factors are in fact, predictive of success across health professional education programs. Further research is needed based on an expanded conceptual model whereby ‘success’ includes “the
patient voice” and patient improvement and includes validated patient centered outcomes.

**Keywords:** GRE; MCAT; DAT; GPA; interview(s); admission(s).

3.

**Title:** Analysis of Sex and Gender Content in Allied Health Professions’ Curricula

**Authors:** Lois Stickley, PT, PhD, Texas State University; Dawndra Sechrist, OTR, PhD & LesLee Taylor, PhD, LAT, ATC; Texas Tech University Health Sciences Center

**Introduction:** Sex- and gender-differences in rehabilitation and patient management are important clinically because more than half of the patients seen by allied health professionals are female. Currently, many health care professions may not substantially include sex- and gender-differences in their curricula. The Office of Women’s Health made recommendations to enhance interprofessional education in women’s health by auditing current sex- and gender-specific women’s health curriculum (2013). Our research question was: What is the extent of information about sex- and gender-differences that is included in selected health professions curricula?

**Methods:** The didactic curricula of a physical therapy (DPT), athletic training (MAT), and occupational therapy (MOT) program was audited and analyzed for references to sex- and gender-differences. Student scholars audited their courses in real time. The primary investigator coded audit content into categories and this was validated by the co-investigators.

**Results:** Entries were analyzed according to the amount of emphasis placed on the material resulting in 667 separate entries. The emphasis of instruction was primarily statements of facts for the DPT (72.67%) and MOT (65.63%) programs. In the MAT program 89.54% of content was covered by brief
discussions resulting in a significant difference among the categories of emphasis for the DPT, MAT, and MOT programs ($\chi^2 = 391.23$, $\alpha=0.05$). Entries also were analyzed according to content categories that resulted in 1420 entries. The combined disciplines had the majority of content focused on body systems (26.97%), health statistics (22.82%), and health conditions (20.99%). The individual disciplines identified the majority of content in the same rank order: body systems (DPT 26.74%, MAT 31.86%, and MOT 26.97%), health statistics (DPT 22.90%, MAT 24.51%, and MOT 22.82%), and health conditions (DPT 20.77% and MAT 24.51%). There were significant differences in the content areas related to sex- and gender-differences among the three disciplines ($\chi^2 = 70.67; \alpha=0.05$).

**Conclusion:** This study provided the first content analysis of sex- and gender-differences in selected health professions. The majority of information was shared through single-statements of facts or brief discussions. The content tended to focus on health statistics such as incidence and on body systems, especially the musculoskeletal and neuromuscular systems. This study did not attempt to explain any inferences in the text, but to report on the topics discussed and the extent of the sharing of information.

4.

**Title:** Breaking Barriers: A Case Study Approach to Interdisciplinary Education

**Authors:** Jennifer Anderson, EdD, RRT-NPS, Randy Case, MA, RRT, Lynette Watts, PhD, RT(R), & Lauren Jansen, PhD, RN; Midwestern State University

This collective case study investigated the interactions, communication skills, and perception of 66 health science students involved in an interdisciplinary lab exercise at Midwestern State University in Wichita Falls, Texas. The goal of the study was to determine if an interdisciplinary scenario enhances effective interactions, communication skills, and perception of other disciplines during a neonatal resuscitation
scenario. The overall objective of the study was to help students recognize that team concepts and effective communication improves quality patient-centered care. Students enrolled in radiology, respiratory and nursing courses completed pre and post opened ended surveys pertaining to student satisfaction with the interdisciplinary scenario. Direct observation was also used to collect data on the interdisciplinary group of students. From this study, faculty and administrators may better understand the need for more interdisciplinary scenarios and exercises. The majority of students felt the exercise was beneficial and they were better prepared for the work environment. Students overwhelmingly concluded that the scenario enhanced their knowledge and communication with other disciplines.

5. 

Title: Career Research Productivity across a School of Health Professions

Authors: Jason H. Hill, MS, Ricky Joseph, PhD, OTR, & David C. Shelledy, PhD, RRT; The University of Texas Health Science Center at San Antonio

Purpose: Researchers in this study asked faculty in a School of Health Professions to rate a series of items centering on their career research experience. The survey was conducted across six allied health professional departments including: Clinical Laboratory Sciences (CLS), Emergency Health Sciences (EHS), Occupational Therapy (OT), Physician Assistant Studies (PA), Physical Therapy (PT) and Respiratory Care (RT), to further understand career research productivity across faculty careers and across the school.

Method: Faculty across six allied health professional departments were e-mailed a link requesting 15 minutes of volunteer participation to complete a large survey titled: Faculty Research Development Survey. One measure comprising the survey requested faculty, to respond to, 24
items on their research training, background and career research experiences.

**Results:** Approximately 38 faculty responded to the survey for a 43% overall response rate. Faculty reported submitting a high amount of peer reviewed abstracts (M=17, SD=22.47), publications (M=11.56, SD=24.46), research posters (M=14.85, SD=21.67), and research presentations (M=16.91, SD=26.75) throughout their career. Faculty across the School of Health Professions reported implementing a number of research grants (M=3.50, SD=5.71), writing research grants (M=6.24, SD=8.56), and completing work on a number of funded research grants (M=6.35, SD=10.52) during their careers. With respect to time conducting research, faculty reported spending a moderate amount of time conducting research each month (M=14.13hrs, SD=20.85).

**Conclusion:** Our findings reveal that School of Health Professions faculty have been productive throughout their careers across a broad array of research domains as operationalized by research abstracts, publications and grants. Our findings indicate that the school has a high amount of aggregate expertise. However, the survey also revealed large variation, across the board, suggesting large career productivity differences between faculty members. Such differences in variance may be attributed to age, experience levels and teaching loads.

6.

**Title:** Classroom Learning, Speed Research and Complex Simplicity

**Authors:** Don Carlson, MD, MS & Michael Hernandez, OTS, MA, BS, BA; The University of Texas Rio Grande Valley

Allied health educators are tasked with teaching and promoting research as part of their programs. Students coming into these programs often have little experience in carrying out research. Many programs have a short duration as compared to a four
year BS degree. Combine this with the complexity of research in the field of health care and the prospect of teaching, and of learning, can be daunting in this situation. A specific method and example will be discussed to illustrate a way to speed up the process of doing research and taking measures to ensure some level of success. A student perspective will be presented for the specific example. The example can be adapted to any discipline with minimal modifications.

7.
Title: Community-Service Learning: A Student Led Maternal Wellness Program for Teen Mothers
Authors: Pamela Recto MSN, RN, Laura Sisk MSN, RN, & Melissa Aguilar, Nursing Student; The University of Texas Health Science Center at San Antonio

Purpose: The purpose of the project is to determine how service learning can enhance the clinical experience of nursing students outside of acute care settings. The value of service learning for nursing students includes an understanding of the community’s needs, cultural awareness of diverse populations, and development of skills in the areas of leadership, communication, and collaboration.

Background: Texas is ranked among the ten highest states for teen pregnancy. Teen-aged mothers are less likely to receive prenatal care and are more likely to have low-birth-weight infants. Therefore, community-service projects may improve outcomes for teenaged mothers. A partnership between the Healy Murphy Center, an alternative high school for pregnant and parenting teens, and the University of Texas Health Science Center at San Antonio (UTHSCSA) integrates the mission and purpose of both facilities in serving the needs of the community.
**Methods:** A pre-survey questionnaire was given to the teens prior to beginning the wellness program. The 8 participants were surveyed on their topics of interest. A total of 32 second semester undergraduate baccalaureate nursing students participated in implementing the wellness program at the Healy Murphy Center. Each week a small group of students prepared interactive games and creative lessons to engage teen mothers in health promotion. A different group of nursing students rotated every week to present new topics related to maternal-child health, exercise, and nutrition. The community-service project was incorporated during the students’ obstetrics rotation.

**Results:** Nursing students gained an appreciation of the day to day challenges of teen mothers, and acquired a broader understanding of their health care needs. 62% of the participants were present to take a post-survey questionnaire. The teens verbalized positive feedback regarding the experience and expressed interest in obtaining more information on nutrition and fitness.

**Conclusions and Implications:** This was a pilot project. Collaboration between UTHSCSA and the Healy Murphy Center was limited by time and resources. However, the UTHSCSA School of Nursing will continue to partner with the Healy Murphy Center to develop and teach the wellness program, as well as obtain ongoing assessments and a formal evaluation from the teen mothers and nursing students.
8.  
**Title:** Course Designs to Enhance Clinical Decision Making  

**Authors:** Lois Stickley, PT, PhD & Debbie Baylor, PT, Med; Texas State University, Department of Physical Therapy  

**Summary of Purposes:** A four-course sequence of clinical decision making (CDM) was redesigned to enhance the learning experiences and CDM skills of doctor of physical therapy students.  

**Objectives or Aims:**  
1) Identify goals and objectives for the sequence and for each course  
2) Identify appropriate methods to evaluate student achievement of the goals and objectives  
3) Design learning experiences to facilitate the achievement of the goals and objectives.  

**Methodology or Procedures:** Initial Design Phase: 1) identify situational factors, 2) design learning goals, 3) design methods for assessment and feedback, 4) design teaching and learning activities, and 5) integrate the primary components of initial design phase. Intermediate Design Phase: 6) create a thematic structure for the courses, 7) create an instructional strategy, and 8) create an overall scheme of learning activities. Final Design Phase: 9) develop a grading system, 10) anticipate and prevent potential problems, 11) write the course syllabus, and 12) plan an evaluation of the course and teaching (Fink, 2003).  

**Major Findings:** Initial Design Phase: Situational factors included class sizes of 35-40 graduate students. The courses were not designed to introduce new content but allow the students to synthesize previously learned material in a patient management context. Learning goals for the sequence included: a) use of a clinical decision-making process in patient
case studies, b) use of evidence-based practice, c) develop a sense of professional identity, d) development of professional behaviors, and e) develop the ability to self-assess performance. Methods for assessment included critically appraised topics, documentation of patient management, development of home exercise programs, a reflective paper on characteristics of expert practitioners, and self- and peer-assessment of professional behaviors. Learning activities included observing faculty as expert practitioners evaluating actual patients, using case studies to practice the patient management process from an initial evaluation to development of a home program, and discussion of reading assignments. Integration of the primary components was achieved through the observation of experts treating real patients followed by active problem solving with case studies. Intermediate Design Phase: The thematic structure was the clinical decision making process. The instructional strategy included the use of role models and active practice. The scheme of learning activities followed the same sequence of observation of expert, then using a case to practice examination, evaluation, prognosis, diagnosis, and intervention. Final Design Phase: The grading system emphasized projects that are important clinically such as documentation, development of patient education, evidence-based practice, and professional behaviors. The students were invited to participate in an anonymous mid-term evaluation of the course and teaching. The standard end-of-course evaluation was used as well as student-lead focus groups. Two of the four courses in the CDM sequence have been completed with positive comments from students and involved faculty. Course evaluation scores improved meaningfully.

Conclusions: Careful course design with an emphasis on active, authentic learning experience can enhance clinical decision-making skills.
9. 
Title: Creating an Exemplary Online Course
Author: Beth L. Vealé, PhD, RT(R) (QM); Midwestern State University, Radiologic Sciences

Objectives:
1. Define the term exemplary as it relates to online course development
2. Identify factors within a course that can be improved to move towards an exemplary course
3. Assess course components as to exemplary course status

For at least 20 years, instructors have converted face to face classroom materials to digital offerings, sometimes, losing quality in the translation. What differentiates an “ok” online course offering from an “exemplary” online course? Colleges and Universities, government entities, and corporate entities are currently developing guidelines for establishing quality standards within an online course. These guidelines for quality assessment will be discussed as well as dos and don’ts of high quality online course development.

10. 
Title: Creating Awareness of How Biases Contribute To Clinical Decision Errors
Author: David J. Klocko, MPAS, PA-C; The University of Texas Southwestern Medical Center

Purpose: To identify what types of biases/cognitive dispositions to respond (CDR’s) physician assistant (PA) students develop during clinical rotations. Through this self-reflective activity, near-graduation PA students developed awareness of how cognitive biases affect clinical decision making and patient safety.
Methods: During the end of program summative evaluation activities for UT Southwestern PA Classes of 2012 and 2013 (n=73), students were asked to read the article, “The Importance of Cognitive Errors in Diagnosis and Strategies to Minimize Them” by Pat Croskerry, MD, PhD. They were required to write a 1-page self-reflective essay identifying at least 2 or more biases that they witnessed or developed during their clinical training. Each essay was read by the author and biases and debiasing techniques were tallied. A lively in-class discussion was held for students to reflect on their conscious and unconscious biases. In 2014, a seven question follow-up survey was sent to the same cohort of participants.

Results: The top pre-graduate biases identified were: Availability or search satisfying 13.8%, confirmation bias 13%, posterior probability 9%, diagnosis momentum 8%, and fundamental attribution error 8%. There were 40 post-graduate surveys completed for a 57% return rate. The results revealed that 85% agreed that this activity increased their awareness of the influence on their clinical decision making. 70% agreed that having this awareness has influenced their approach to patient care. More survey results, biases and de-biasing technique definitions will be presented.

Conclusion: With the emphasis in healthcare on quality improvement and patient safety, the author proposes that physician assistant (PA) and other health professions students will benefit from learning about how biases lead to clinical decision errors. This presentation describes a learning activity where students engaged in a reflective exercise to self-identify biases they developed. The post-graduate survey was done on the same cohort of students to assess how the knowledge they learned during this pre-graduation activity affected their development of biases, ability to develop de-biasing techniques and how biases affect their current clinical practice.

11.
Title: Cyberbullying in Higher Education – The Results
Author: Jessyca Wagner, MSRS, RT(R); Midwestern State University

Bullying is a major problem in today’s society and occurs at many different ages and in many different forms. With the increase in the use of technology, cyberbullying has become one of the most prevalent types of bullying over the past several years. There have been many reports of cyberbullying amongst middle and high school students using social media, text messaging, picture messaging, and e-mail. Universities and colleges have implemented more online courses in the past 5 years, so it is of importance to investigate the frequency of cyberbullying in higher education as well. This presentation is a follow-up to last year’s TSAHP conference, and focuses on the results of the research conducted in radiography, respiratory, nursing, criminal justice, social work, athletic training, and health administration programs in Texas, Oklahoma, New Mexico, Arkansas, and Louisiana. A survey was administered to current students inquiring about the occurrence, methods, suspected reasoning, and the students’ reactions to cyberbullying. The research focused on students in higher education to determine the prevalence, student awareness, and possible effects of cyberbullying. Data was analyzed and the results will be disclosed in this presentation, along with relevant information discovered during the literature review for this project.

12.
Title: Developing an evidenced-based interprofessional communication course

Author: Vicki C. Mason MS; Texas Woman’s University, School of Occupational Therapy

Purpose: The purpose of this presentation is to illustrate the steps in developing an evidence-based communication course featuring a hands-on approach to practical skills building.
Objectives: The learner will:

1. Identify the rationale and evidence supporting interprofessional communication course development
2. Critically appraise course design and instructional methods
3. Formulate ideas for potential application within his/her own curriculum

Abstract: Although healthcare guest relations programs gained popularity in the 1980's, Value Based Purchasing (VBP) associated with the Affordable Care Act (ACA) has put a price on good communication with reimbursement tied to the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAPHS) scores. Allied health professionals with more developed communication skills may have an edge in the hiring process and be better positioned for success in the post ACA healthcare workforce. This presentation explores the development and presentation of a 10-week course with modules on assertiveness, conflict resolution, professional and personal boundaries, verbal and non-verbal communication, leadership, professionalism and ethics, professionalization of both individuals and disciplines, and building collaboration in the workplace.

Methodology: The presentation will highlight development of the module on recognizing types of conflict and critical thinking approaches for interprofessional conflict resolution.

Outcome Measurements: Pre and post-course assessments were incorporated to examine students' perceptions of self-efficacy. Students rated themselves as novice, advanced beginner, competent, proficient or expert on different communication skills techniques emphasized in the course.
Background: Few physician assistant (PA) programs have implemented a quality improvement (QI) curriculum to meet the needs of the changing health care landscape and future maintenance of certification requirements.

Purpose: Develop a curriculum to train PA students how to conduct QI projects that meets ARC-PA requirements and can be replicated by other PA and health professions programs.

Objectives:
1) Evaluate PA students’ QI knowledge, attitudes, skills and satisfaction with the existing QI curriculum
2) Develop a QI curriculum to train PA students how to conduct QI projects in underserved settings
3) Track PA student interest and involvement in QI projects.

Methodology: In this cross-sectional study, UT Southwestern PA Students (N=77) from the class of 2015 (n=34) and class of 2016 (n=29) completed an online survey evaluating their knowledge, attitudes and QI skills in Fall 2014. Didactic students (class of 2016) evaluated their satisfaction with current QI training with a paper survey in January 2015. Mean scores of knowledge, attitudes, skills and satisfaction were measured using 5-point Likert scale (1=strongly disagree to 5=strongly agree). A curriculum model was developed for improving student knowledge, attitudes and increasing student participation in QI projects.

Major Findings: Students reported limited knowledge of the life-cycle of a QI project (2.49), plan-do-study-act model (2.47) and QI measures (2.93). Students were not confident in their ability to analyze and report QI results (2.79). Class of 2016 students were significantly more knowledgeable of the life-
cycle of a QI project (p=0.0011) and plan-do-study-act model (p<0.0001). Students were unsatisfied with their current QI training (2.31). Although low levels of satisfaction were reported, 74.3% of students expressed an interest in learning more about QI and 82.9% reported that QI is relevant to their PA career. A curriculum model was developed including QI projects designed to improve pediatric literacy and tobacco screening and cessation at local homeless shelter clinics. Ten students expressed interest in working on a QI project and 7 students are currently involved in QI projects.

**Conclusions:** Our study can be replicated by other PA programs and other health professions programs. It emphasizes the need for improved QI training for PA students. We plan to expand our training longitudinally and develop a distinction for PA students in QI and patient safety. Changes in knowledge, attitudes, skills and satisfaction will be measured after didactic training in August 2015.
14.

**Title:** Enhancing Competence through an Integrated Diabetes Management Curriculum

**Authors:** Laurette Dekat, MD, MPH, Venetia Orcutt, PhD, PA-C, & Tiffany Billmeier Kindratt, MPH; The University of Texas Southwestern Medical Center

**Background:** With the rise in prevalence of diabetes mellitus (DM) and limited supply of DM educators, physician assistants (PAs) need to become more proficient in the medical management of DM and provision of diabetes self-management education.

**Purpose:** The overall goal of the curriculum is that students gain an understanding of the pathophysiology and pharmacologic aspects as well as the psychosocial factors involved in managing diabetes.

**Objectives:**

1) To evaluate changes differences in students’ self-predicted and actual compliance with recommendations outlined in a diabetic simulation scenario for five days;

2) To follow changes in students’ perceptions of competence in the care of DM patients; and

3) To assess the impact of this training from the perspectives of PA students as an indicator of empathy. The authors hypothesized that integration of DM management curriculum with an active learning component would enhance PA students’ competence in understanding and providing DM education.

**Methodology:** Lectures and workshops delivered by interprofessional faculty (Nutrition, Pharmacy, Nursing (Certified Diabetes Educator), MD and PA faculty in 5 separate but concurrent courses were integrated throughout the semester. An innovative active learning component required
students to engage in “living with diabetes” week and experience the compliance struggles with diet, exercise, glucose monitoring, and medications. Students kept journals of the experience, completed two pre-/post-test evaluations using 5-point Likert scales as well as a narrative component evaluating: 1) confidence in their ability to comply with the patient scenario and 2) perceptions of personal competence related to care of patients with DM.

**Major Findings:** Students’ mean predicted and actual compliance scores decreased statistically significant in two areas – taking prescribed medication (0.26 points decrease) and following the exercise program (0.62) (p<.05). Student perceptions of how competent they felt in areas related to the care of patients with DM improved on all survey items (all p’s<.05). Students’ confidence improved most on providing instructions for insulin injections (2.33 points), prescribing medications for type 1 (2.19) and 2 (2.29) DM, and glucometer use (2.00). Qualitative analysis suggested the activity increased students’ understanding of the difficulties faced by patients with DM particularly regarding lifestyle change and disease impact, thereby enhancing empathy and underscoring the importance of ongoing diabetes education and appreciation of the psychosocial aspects of care.

**Conclusions:** The inclusion of an experiential component and in an integrated DM curriculum with interprofessional staff provided students with increased confidence in the management of DM and in the provision of self-management education.

15. **Title:** Evaluation of institutional research support factors and barriers influencing faculty research productivity across a School of Allied Health Professionals.
Authors: Jason H. Hill, MS, Ricky Joseph, PhD, OTR, & David C. Shelledy, PhD, RRT; The University of Texas Health Science Center at San Antonio

Purpose: Researchers in this study asked faculty in a School of Health Professions to rate two measures assessing institutional research support factors and barriers, which they believed are contributors or inhibitors to their research productivity. The survey was conducted across six allied health professional schools including: Clinical Laboratory Sciences (CLS), Emergency Health Sciences (EHS), Occupational Therapy (OT), Physician Assistant Studies (PA), Physical Therapy (PT) and Respiratory Care (RT), to further understand factors, influencing research production among individual faculty and across the school.

Method: Faculty across six allied health professional programs were e-mailed a link requesting 15 minutes of volunteer participation to complete a large survey titled: Faculty Research Development Survey. The anonymous survey requested faculty to rate the level of importance of institutional research support factors on a scale from 1=very unimportant to 5=very important. Moreover, faculty were asked to rate barriers to research productivity on a scale from 1=very unimportant to 5=very important.

Results: Thirty-eight faculty responded to the survey for a 43% total response rate. The highest rated institutional factors for enhancing research productivity included: identifying funding agencies (M= 4.06, SD=1.14), statistical support (M= 4.03, SD= 1.29), grant writing support (M=3.97, SD =.98), peer review process for proposals prior to submission (M = 3.88, SD=1.05), budget development support (M=3.79, SD=.99), and assistance with university research systems (e.g., IACUC, IRB, OCR, OSP) (M=3.76, SD=1.09). The highest rated barriers to faculty research productivity included teaching load (M=4.26, SD=.99), protected time for research (M=4.12, SD=1.20), funding (M=4.03, SD=1.06), lack of research assistants (M=3.62, SD=1.33) and statistical support (M=3.56, SD=1.29).
Conclusion: Our findings revealed a number of areas where institutional support, training and research support could assist faculty with their research programs. The highest barriers to conducting research centered on lack of time, funding and lack of research assistants, and statistical support. Addressing these concerns may enhance research productivity across departments comprising allied health professionals everywhere.

16.
Title: Flipping the Flipped: Why do it?
Authors: Brenda Boucher, PT & Pieter Kroon, PT, DPT; Texas State University

Background: The flipped classroom has garnered interest among health-care educators who struggle to find adequate class time to help students develop important abilities such as clinical decision-making and practice performance skills. The flipped classroom commonly employs a learning strategy that uses digital technology based-resources to deliver lecture content, which students access outside the classroom. Carefully employed, this teaching model can potentiate the learning experience and optimize development of clinical reasoning and psychomotor skills. Consistent and specific assessment of the effectiveness of the flipped curriculum is recommended to identify concerns, which are used to implement changes for improvement.

Purpose: The purpose of this presentation is to share a second-generation model of the flipped classroom to teach musculoskeletal content to entry-level physical therapist students. Based on five years of cumulative feedback from students and careful assessment by faculty, the initial flipped classroom model has been modified to improve the efficiency of out-of-class activities, capitalize the expertise of instructor clinical skills during in-class activities, and emphasize active student learning activities throughout the coursework. The philosophy and methodology used to modify the flipped classroom model will be presented. The redesign process,
known as flipping the flipped, represents a strategically focused endeavor to improve the learning experience and practice outcomes of physical therapist students taught musculoskeletal content.

**Procedures:** The first generation flipped classroom was modified to achieve 3 primary goals: 1) reduce time and streamline content required of students outside the classroom, 2) capitalize the expertise of instructor clinical skills during in-class activities, and 3) optimize opportunities to develop student clinical reasoning and skill performance abilities throughout the curriculum.

**Major findings:** Student response to a web-based survey supported the implementation of the modified flipped classroom. Survey responses showed improved satisfaction with the usefulness and effectiveness of the modified flipped approach. Faculty response was positive, and overall class outcomes were improved.

**Conclusion:** Positive student and faculty feedback support changes to a flipped classroom model used to teach musculoskeletal content to entry-level physical therapist students. Flipping the flipped classroom was performed to specifically enhance student learning by streamlining out-of-class requirements, highlighting instructor clinical expertise in the classroom, and enhancing opportunities to develop student clinical reasoning and skill performance abilities throughout course delivery.

17.
**Title:** Health professions faculty development for educational technologies: the pedi.edtech experience.

**Authors:** Bruce R. Niebuhr, PhD, Mary Jo Urbani, MS, Mark Wolffarth, MD, PhD, Anne Rudnicki, EdD, Patricia Beach, MD, & Virginia Niebuhr, PhD; The University of Texas Medical Branch
**Purpose:** Learners expect faculty to use educational technology effectively. Yet, health professions faculty have ever increasing pressures to teach, conduct scholarly activities, and engage in clinical practice. In addition, learners and faculty may be distributed geographically, requiring the use of distance technologies. Thus, faculty need development opportunities in educational technologies which are compatible with their busy schedules. Our response is pedi.edtech, a faculty development program focused on technology for education, for the pediatric faculty at UTMB. The purpose of the presentation to describe the pedi.edtech program and how our experience may be applied to other health professions faculty development needs.

**Objectives:** Areas of focus for the faculty: 1. Instructional Technology: skills for synchronous and asynchronous teaching in distributed environments. 2. Information Searching/Information Management: skills for teaching evidence-based practice, keeping current with information, and sorting, filing, retrieving information. 3. Electronic Health Records: skills for teaching with and about the EHR. 4. Improved Personal Effectiveness and Productivity: tools to add efficiency to daily work. Underlying principles include: (a) individualizing instruction based on self-identified needs, (b) accommodating to constraints when faculty cannot all be in the same place at the same time for faculty development, and (c) providing development activities also for department staff so they might better support their faculty.

**Design/Methods:** A five-person leadership team meets weekly to develop activities and training products. Faculty development strategies include:
- individual consultations using remote screen-sharing, phone, office calls,
- group sessions including demonstrations, workshops, small group discussions,
- web-based instruction (video and documents). A catalog is accessible at [www.utmb.edu/pediedtech](http://www.utmb.edu/pediedtech).

**Results/Outcomes:** Since Oct 2011, 76% (49/64) faculty members have participated in more than 30 pedi.edtech
activities. More than 24 training products have been developed (e.g. workshop curricula and online instructional modules). Program content has included audience-response systems across multiple teaching sites, videoconferencing, YouTube for teaching, e-mail efficiency, file-sharing, enhanced PowerPoint, web resources and mobile apps for teaching, electronic health record efficiency. Faculty report increased use of, and confidence with, a variety of instructional technologies.

**Conclusions:** Through pedi.edtech, Pediatric faculty have become more adventurous and confident about technology applications. We will discuss our lessons learned and how our experience might be applied to other health professions faculty development.

18. 
**Title:** Implementation and Evaluation of an Interprofessional Allied Health Faculty Incentive Plan (FIP) 
**Authors:** David C. Shelledy, PhD, RRT; The University of Texas Health Science Center at San Antonio

**Purpose:** Aligning goals, metrics and incentives are thought to improve faculty performance. We sought to develop and implement a faculty incentive plan (FIP) across 6 allied health professional schools including: Clinical Laboratory Sciences (CLS), Emergency Health Sciences (EHS), Occupational Therapy (OT), Physician Assistant Studies (PA), Physical Therapy (PT) and Respiratory Care (RT), in an effort to, improve individual and college-wide metrics for teaching, research, publications and service. The FIP will be rolled out July 1st 2015.

**Method:** All paid faculty were eligible to receive an incentive of up to 5% of their salary which was weighted, based on achievement of college-wide metrics for research, publications, student satisfaction (up to 2.5% of salary) and individual performance on course evaluations, grant funding, publications, and service activities (up to 2.5%). Fiscal year 2016
results will be compared to fiscal year 2015 to assess for improvement.

**Results:** It is expected that college-wide metrics of faculty performance will improve across all 6 schools of health professions. Metrics include: number of grants submitted, research expenditures, refereed publications and student satisfaction. Based on preliminary data, it is expected that research expenditures may increase by 20% and referred articles by 10%.

**Conclusion:** Research grant submissions and publications should increase college-wide following initiation of the FIP. Individual faculty members may improve their respective course evaluations, publication counts, research funding and/or academic and professional service activities. Our preliminary findings suggest that a FIP applied across all allied health disciplines might improve faculty and school performance. Further evaluation is needed to assess the continuing effectiveness of faculty incentives.

19.

**Title:** Implementing a Centralized Application Service (CASPA, PTCAS, and OTCAS) to Facilitate a More Efficient and Effective Recruitment, Admissions, and Enrollment Process

**Authors:** Hilda Mejia Abreu, PhD, Liaison International; Jessica Priddy, MEd, Janda Anderson, BA, Barbara Quillin, MPAS. PA-C, Greg Ernst, PT, PhD, ECS, SCS, & David L. Henzi, EdD; The University of Texas Health Science Center at San Antonio

This presentation will assist administrators and enrollment managers to identify solutions and processes to meet enrollment targets in a more efficient and effective way. By examining a case study this session will provide:
• How to deliver an exceptional applicant experience with a convenient and efficient process via a single online application
• Methods to implement a centralized application service
• Benefits resulting from adopting a CAS
• Ways to accelerate admissions decisions and make data-based decisions

20.
Title: Increasing Physician Assistant Faculty through a HRSA grant – lessons learned
Authors: Brent Shriver, PhD, Barbara Quillin, MPAS PA-C, Tiffani D. Burgin, MPAS, PA-C, & David L. Henzi, EdD; The University of Texas Health Science Center at San Antonio

The project was designed to meet multiple objectives centered on producing a primary care workforce that will be part of the health care solutions of South Texas, Texas, and the nation. Texas, like the nation, has a shortage of physician assistants (PAs) practicing in primary care (PC) settings, especially those located in medically underserved communities (MUCs) and rural areas. The purposes of the proposed project are to address those shortages.
A HRSA grant was written and funded with the primary goals listed below:
1. Increase primary care experiences in the supervised clinical practice phase of PA training, including the recruitment of new primary care clinical sites.
2. Provide a teaching/faculty development experience for students who may consider a career in educations.
3. Provide faculty development for our faculty through the Association of Physician
Assistant Education (PAEA) programs and other faculty development programs.

4. Create a “faculty development” program for clinical physician assistants who may be interested in a faculty role, but are uninformed about that role.

5. Create an on-line faculty development program for novice PA faculty nationwide that could be adapted for use by any health profession.

This presentation will discuss the outcomes of the goals listed above as well as lessons learned from the project.

21.

**Title:** Innovations in an Online Second Degree Clinical Laboratory Science Program

**Authors:** Lori Rice-Spearman PhD, MT (ASCP) & Wade Redman PhD, MBA, MT (ASCP) DLM; Texas Tech University Health Sciences Center

**Purpose:** The purpose of this presentation is to provide the participants with information related to developing and delivering an online second degree Clinical Laboratory Science program. The Texas Tech University Health Sciences Center School of Allied Health Sciences in 2007 sought to increase enrollment in the Clinical Laboratory Science program by developing an online second degree program for those individuals who held earned Bachelor’s degrees in a science field (biology, chemistry, microbiology, biochemistry, etc.).

**Objectives:** At the conclusion of the presentation the participant will be able to describe the unique challenges associated with developing and delivering an online second degree Clinical Laboratory Science program and assess the resources required for positive student learning outcomes.

**Methodology:** The presenters will outline the process of developing the online second degree clinical laboratory science program to include:
(1) THECB approval process
(2) Curriculum development
   a. Prerequisite courses
   b. CLS curriculum
(3) Analysis of resources
(4) Delivery of lecture content to include best practices based on literature in the field of online education
(5) Delivery of laboratory courses to include a unique approach that ensures competency in the laboratory
(6) Clinical education

Evaluation: The presenters will provide a synopsis of admissions, student feedback, ASCP board certification outcomes, and employer feedback for graduates of the online second degree clinical laboratory science program and provide a brief comparison with the traditional face-to-face clinical laboratory science program.

22.
Title: Jigsaw Instructional Strategy
Author: Kevin R. Clark, EdD, RT(R); Midwestern State University

Objectives:
1. Define and discuss examples of the jigsaw instructional approach in health science courses.
2. Demonstrate the jigsaw approach.
3. Discuss the benefits and opportunities with the jigsaw approach.
4. Review current research on the jigsaw approach and potential future studies.

This interactive presentation will introduce health science educators to the jigsaw instructional approach and discuss current and future research opportunities involving this cooperative learning strategy. The jigsaw instructional strategy
is an efficient way for students to become engaged in their learning, learn a great amount of material quickly, share information with other groups, minimize listening time, and be individually accountable for their learning. The emphasis this strategy places on engagement and cooperation deems it an effective practice in the health sciences.

23. 
**Title:** Leading Your Learning – A Framework to Guide Development of Students’ Professional Practice Education Objectives

**Authors:** C. Jackson & J. González; University of the Incarnate Word, School of Physical Therapy

**Background/Purpose:** Students in the allied health professions are required to participate in professional practice (clinical) educational experiences. Many educators have students write goals or objectives to guide their learning experience. Students are often challenged to write objectives that are appropriate for the experience. Often their objectives are either weak or unattainable. There is a paucity of research data on guidance or benefits of students having a framework to develop learning objectives for professional practice experiences, though there are studies that help instructors develop learning objectives. Additionally, reflection has been shown to be important in the learning and reasoning process for both novice and expert clinicians.

Students who participated in this study were only provided this process for developing objectives in their last (fourth) professional practice experience. The purpose of this study was to develop a process for students to follow that would include reflection and allow them to create more realistic and meaningful objectives for their final experience and to determine if the process was meaningful for the students and if it allowed them to have a deeper learning experience.
Methods: Three weeks prior to the professional practice experience, students were provided with a nine (9) step process – a series of questions – that allowed them to reflect and think about what they wanted to obtain from the experience, what was needed to achieve and how they would assess if they met the objective. As a result they developed objectives that their clinical instructor/preceptor/mentor could view and provide input on along with their faculty advisor. Students finalized the objectives during the second week of the professional practice experience. At the completion of the experience, students were provided with a 6 question survey (3 (5 point) Likert scale and 3 open ended). Survey participation was voluntary and the results were anonymous (delivered through Survey Monkey).

Results: Twenty-six students (53% of the class) completed the survey and 85% found it helpful; 85% agreed that it caused them to reflect at a deeper level than developing objectives for other experiences; 73% agreed that it allowed them to engage in learning opportunities that they may not have had if they had not planned for them. The open ended questions revealed they liked the process as it allowed for more planning, reflection, growth as a student, confidence, assessing progress, and it directed the learning experience. What they didn’t like was centered more on the lack of clarity of the assignment, need for more faculty involvement for guidance, and that the process was time consuming.

Conclusions: Students seem to value a framework with reflection that allows them to develop learning objectives for professional practice experiences that are more meaningful and allow for a richer learning experience than without a framework. Assignment clarity and more faculty feedback is needed to optimize the experience for the student.

Relevance: Since students in the allied health professions are required to participate in professional practice educational experiences, providing them with a process to develop solid objectives should allow a deeper learning experience that optimizes opportunities.
Title: Outcomes for Incorporating Spanish Language Skills in a Physical Therapist Curriculum

Author: Suzanna D Okere; Texas State University

Purpose: Student physical therapists in Texas often treat patients who only speak Spanish. Language barriers between patients and student physical therapists can pose challenges for both the patient and the student physical therapist. This pilot study documents outcomes for incorporating Spanish language skills in two Anatomy courses: Introduction to Anatomy and Spine Anatomy.

Methodology: This study was classified as exempt by the Texas State University Institutional Review Board. An eight question pre-test was administered to student physical therapists at the beginning of the Introduction to Anatomy course, and a ten question pre-test was administered at the beginning of the Spine Anatomy course. Each pre-test included Spanish terms and phrases that correspond to the content of each course. The selected Spanish terms and phrases were chosen because they are commonly used by physical therapists during evaluation and treatment sessions. Upon completion of the pre-test, students were taught the Spanish terms and phrases during each of the two courses, throughout the semester. Post-tests were administered as part of course quizzes and tests, to document the outcome of incorporating Spanish language skills in these courses. It was hypothesized that there would be a significant difference between pre and post test scores for each course. Paired t-tests were used to test these hypotheses.
**Results:** *Introduction to Anatomy course.* Forty-two 1st year physical therapist students participated in this study. There were 20 males and 22 females. The average age was 25.7 y/o (SD: 4.6) and there were 12 (29%) minority participants. There was a significant improvement in post-test scores (M=7.6, SD=.8), when compared to pre-test scores (M=2.9, SD=2.5) for this course ($t_{41} = 12.6, p < .001$). *Spine Anatomy course.* Thirty-seven 1st year physical therapist students participated in this study. There were 14 males and 23 females. The average age was 26.4 y/o (SD: 5.2) and there were 12 (32%) minority participants. There was a significant improvement in post-test scores (M=9.5, SD=.9), when compared to pre-test scores (M=.8, SD=1.8) for this course ($t_{36} = 29.2, p < .001$).

**Conclusions:** This study documented that student physical therapists can improve their Spanish language skills as part of a physical therapist curriculum. Student physical therapists on their clinical rotations in the State of Texas often treat patients who only speak Spanish. Physical therapist educational programs in regions that include large populations of patients who only speak Spanish may consider including basic Spanish language skills in their curricula to better prepare students for treating patients who only speak Spanish. Future studies are needed to investigate the effect of including Spanish language skills on student physical therapists' clinical experiences.
25.

Title: Physical Therapists’ Perspective on Lifelong Learning: the Validity and Reliability of the Jefferson Scale of Physical Therapist Lifelong Learning

Authors: Julie DeVahl, PT, DPT, OCS, Patricia Blau, PT, PhD, Edward Mulligan, PT, DPT, OCS, SCS, ATC, & Susan Simpkins, PT, EdD; The University of Texas Southwestern Medical Center, Physical Therapy Department

Purpose: Lifelong learning is an attribute promoted by many physical therapist educational institutions in their goals and mission statements, and professional association core documents. Despite the prevalence and emphasis on lifelong learning in education and professional practice, no psychometrically sound instrument has been developed to provide an operational assessment of the concept and its components for the physical therapy profession. The purpose of this study was to determine the psychometric properties of the Jefferson Scale of Physical Therapist Lifelong Learning survey (JSPTLL), adapted from the Jefferson Scale of Physician Lifelong Learning with permission.

Objectives: The JSPTLL will have strong content and construct validity, internal consistency, and test-retest reliability, so it can be used to measure lifelong learning aptitudes and beliefs of licensed physical therapists in a future study planned for summer 2015.

Methods: Licensed physical therapists who work in four facilities on a medical center campus were invited to participate in this research project through information sessions scheduled at their department meetings or through information forwarded by the department supervisor. Emails were sent to 55 physical therapists containing an electronic link. Thirty-nine physical therapists responded to the invitation by providing demographic information and completing the JSPTLL, a 17
item, 4-point Likert scale survey. In addition, subjects rated their commitment to lifelong learning and job satisfaction on a 0-100 slider scale. Subjects also completed a second survey, the Characteristics of Lifelong Learning in the Professions (CLLP), a 36 item, 7-point Likert scale survey with established psychometric properties in the human service professions and pharmacists. Three weeks after completing the first set of surveys, the subjects received an email with a link to repeat the JSPTLL.

**Major findings:** Of the 55 physical therapists invited to participate in the study, 39 (71%) responded and completed the first phase of the study, of which 23 subjects (59%) completed the JSPTLL a second time. There were no significant demographic differences between the subjects who did or did not complete the retest, except in gender and clinical instructor experience. Scores on the JSPTLL indicated good internal consistency both times it was completed (Cronbach’s alpha = 0.85 and 0.89). An individual item-analysis revealed all variables correlated well with the total score, except for one item which correlated well in the retest. The reference gold standard, CLLP, also demonstrated good internal consistency (Cronbach's alpha = 0.82). High test-retest reliability was found in the JSPTLL (r=0.76). Moderate convergent validity was found between the JSPTLL and CLLP (r =0.53 and 0.45).

**Conclusions:** The JSPTLL is a valid and reliable tool to assess physical therapists’ aptitudes and beliefs toward lifelong learning. This tool may be used by educators to measure achievement of their mission statements, educational goals, and adherence to accreditation criteria for promoting lifelong learning in their graduates. Employers may gauge employee commitment to maintaining clinical competency with the advances in science and healthcare. More importantly, it provides a tool for physical therapists to self-evaluate and motivate their commitment to lifelong learning as a reflection of the core value, excellence.

26.
Title: Practice to Perform: An Active Learning Approach to Teach Clinical Reasoning and Skills Performance

Authors: Brenda Boucher, PT, PhD & Pieter Kroon, PT, DPT; Texas State University

Background: Health care educators are challenged to make the best use of classroom time as they transition novice students into competent clinicians who are prepared to perform in a busy and sophisticated health care environment. Physical therapy is an applied profession in which students are expected not only to master the acquisition of theory and knowledge, but they are required to demonstrate proficiency with skills, techniques, and most importantly – clinical reasoning. By graduation, students need to have demonstrated an entry-level comprehension of didactic content, confidence with evaluative and manual skills, fluency in communication, and assuredness in clinical reasoning.

Purpose: The purpose of this presentation is to describe the philosophy and methodology used to develop an instructional approach to prepare physical therapist students for excellent performance in treating patients with musculoskeletal disorders during their full-time clinical internships.

Procedures: A carefully designed curriculum to teach musculoskeletal content to entry-level physical therapist students was implemented over a five-year period of time. The Practice-to-Perform teaching model centered around 8 primary pillars: 1) out-of-class student preparation, 2) focused instructional lectures, 3) faculty-driven demonstrations, 4) instructional workbooks, 5) systematic practice and review sessions, 6) formative, mini lab exams, 7) practice cases, and 8) clinician-graded skills practical examinations. Each pillar was designed to provide a methodical and efficient approach to the acquisition of knowledge and skills for excellent clinical performance. The culmination of student learning was scored and evaluated by a panel of external clinicians, who provided
important assessment feedback to both students and faculty and served as the final pillar of curriculum excellence.

**Major findings:** Student response to the Practice-to-Perform teaching model was strong. Written feedback and web-based survey assessment highlighted the usefulness and effectiveness of the model’s design to prepare students for excellent clinical performance. Focus group discussions with the external clinicians, who served as skills practical examination graders, along with input from a Likert scale format questionnaire, provided critical feedback about the teaching model.

**Conclusion:** Implementation of a Practice-to-Perform teaching model designed to prepare physical therapist students for clinical practice in the area of musculoskeletal care produced positive feedback from both students and external grading clinicians. The model represents a five-year course development to enhance student learning and promote clinical excellence.

27.
**Title:** Predicting Academic Success by Leveraging Centralized Application Data
**Authors:** Hilda Mejia Abreu, PhD, Liaison International; Brandy Fink, Med, MA (ABD), The University of Texas Health Science Center

This presentation will provide details on ways data from a centralized application process can be leveraged for outcome assessments. When admitting prospective students to professional programs, such as physical therapy, occupational therapy and nursing to name a few, are there ways to understand who will excel in your program? This session will look at the use of data from a centralized application service to determine academic and non-academic attributes that correlate to students’ academic performance and success in professional program.

28.
Title: Recruiting and Retaining Minority Students into Health Professional Programs: Why What We are Doing May Not Be Working.

Authors: Amanda W. Scarbrough, Sam Houston State University; Steven R. Shelton, MBA, PA-C, Texas AHEC East Office of the Provost, The University of Texas Medical Branch

Summary: Current enrollment information demonstrates that there have been increases in the number of under-represented minorities (African-Americans, Mexican Americans and Native Americans) entering and pursuing careers in biomedical, behavioral, clinical and social sciences research at institutions of higher education (Sasso, 2008). However, when compared to overall student entry into the field the number of under-represented minorities graduating in STEM fields’ ethnic minorities continue to show discouraging STEM discipline dropout rates” (NSF Science and Engineering Indicators, 2009). Despite the ongoing debate regarding the root causes of under-representation, many researchers agree that early exposure, socialization and achievement experiences of ethnic minorities can have a substantial impact on student’s decision to pursue and persist in STEM careers (Ceci & Williams, 2011; Valla & Williams 2012). Although there has been an increase in the number of interventions designed to increase diversity in STEM careers, there is little evidence that bridges theory and application for educators or administrators seeking a starting point for constructing an evidenced-based culturally and developmentally appropriate STEM-specific intervention program for women and under-represented minorities in grades 9-12 (Valla & Williams, 2012).

Methodology: Texas AHEC East (TAE) studied the effectiveness of multiple interventions with students, especially at-risk, African American and Hispanic students, and their intent to pursue health careers. This multisite two year study was implemented in underserved communities throughout East Texas successfully engaging 681 students. This study was
approved by the University of Texas Medical Branch’s IRB and included high students in grades 9 through 12. Over two years, TAE collected data from attendance sheets in targeted intervention programs. Data was collected from 681 sophomores, juniors and seniors from 71 high schools across 90 Texas counties.

**Major Findings:** Preliminary data from a two year study indicated that when given the option to choose from a menu of health career promotion interventions, Hispanic American high school students were more likely to participate in Community Service while African American high school students were more likely to participate in Job Shadowing.

**Conclusions:** If the goal is to motivate students to complete their degree in a STEM field, not all interventions may “work” for all students. Understanding the mechanism by which students make decisions to participate in a particular intervention is an important element of attracting students to STEM careers choices.

29.

**Title:** The student-centered learning environment: classroom flip, or classroom flop?

**Authors:** Brent J. Shriver, PhD, Barbara J. Quillin, MPAS PA-C, & David L. Henzi, EdD; The University of Texas Health Science Center at San Antonio

**Introduction:** The objectives of this presentation are to discuss the rationale for converting an existing nutrition course for first year physician assistant studies students to a student centered environment, describe the methods used to create the student-centered environment, examine the lessons learned during the process, and describe potential ways to improve the course in future offerings.

**Rational for switching to student-centered learning**

- Stimulate critical thinking.
- Create lifelong learners.
• Change the role of the instructor from authority figure to mentor.
• Energize and empower the students.

**Methods used to create the student-centered environment**
• Content was provided as 14 self-directed learning modules.
• One short lecture was given during the semester instead of 14 two-hour lectures.
• Majority of classroom time was devoted to a series of learning activities.
• Bulk of the learning activities were conducted in a group environment.
• Exams were shortened from 90 to 60 questions that focused on key concepts

**Lessons learned**
• Schedule of activities was overly ambitious.
• More preparation time was required than anticipated.
• Must vary the activities to keep the students engaged.
• Students who are disengaged in a traditional setting are also less engaged in the SCL environment.

**Potential ways to improve the course**
• Administer a quiz at the beginning of each classroom session.
• Implement a student-based assessment tool for evaluating group members.
• Incorporate additional activities such as mini-debates on controversial issues
30.

Title: Students’ perceptions of the use of simulated patients to support the development of clinical evaluation skills

Authors: Autumn Clegg, Bridgett Piernik-Yoder, & Kimatha Grice, The University of Texas Health Science Center San Antonio, Department of Occupational Therapy

Purpose: Although the use of simulated patients is common in many medical and nursing school curriculums, this educational modality is relatively new in occupational therapy curriculums. The purpose of this project is to report the experience of using simulated patients as part of a learning activity to support the development of clinical evaluation skills for 2nd-year occupational therapy students. Data were collected on the students’ perceptions of the simulated patient encounter.

Objectives:

1. Provide an overview of the process of creating the learning activity and training the simulated patients.
2. Report data collected regarding student’s perceptions of the simulated patient encounter.
3. Discuss faculty perspectives of teaching and learning implications discovered through the use of simulated patients.

Methods: A structured learning activity using simulated patients was planned as part of an assessment and intervention skills course conducted in the second-year of the Master of Occupational Therapy (MOT) curriculum. Project participants included 37 MOT students. Faculty members developed a case which was portrayed by three actors who are hired through the university’s clinical simulation center. Students were assigned as pairs to complete an occupational therapy initial evaluation in a 30-minute session. Immediately following the encounter, students completed an assessment on the learning activity.
Results: Thirty-six students rated the extent to which they agreed or disagreed with seven items provided on the assessment form, as well as responded to two open-ended questions about their experience. For all seven assessment items, 92% - 100% students agreed or strongly agreed that the use of simulated patients was a beneficial learning experience; increased their awareness of clinical time management skills; increased their confidence in their initial evaluation skills; increased their confidence in their clinical reasoning skills; increased their confidence about future interactions with patients; provided an appropriate challenge for their skills; and they would recommend the use of simulate patients in the MOT curriculum.

Conclusion: The use of simulated patients provided a beneficial learning experience based on student assessment of the learning activity and faculty perspectives of the process. Implications for teaching and learning using simulated patients will be presented.

31. Title: A Successful Spring into CANVAS via Quality PEOPLE, PRODUCT, and PROCESS

Authors: De De Gardner, Venessa Kodosky, Dana English, & Aggie Manwell-Jackson; The University of Texas Health Science Center at San Antonio

Summary of Presentation: The Health Science Center used the Blackboard (Bb) LMS since 2004 with high ratings in infrastructure and support (>99.9% uptime). However, Bb’s complexity and faculty high teaching loads limited usage to a ubiquitous but mostly “digital repository” status preventing program growth. In early December, 2014 UT System negotiated an attractive, system wide volume price opportunity
with CANVAS by Instructure but with a short decision deadline (Aug. 1st) which threatened feasibility for a quality pilot. Luckily, the Department of Respiratory Care, an early adopter and “heavy” Bb user, sprang“ in feet-first and volunteered to pilot CANVAS for all spring, 2015 courses. The pilot objectives were to measure if use of CANVAS would increase usage, reduce complexity and enhance faculty and student LMS satisfaction. In week 1, two Educational Development Specialists (EDS’s) from Online and Blended Learning (OBL) migrated all course data to Canvas and provided faculty (3 seasoned and 2 ‘novice’) members with orientation and initial training. In week 2, faculty and EDS’s confirmed full migration of course files, html lessons, and online exams with minimal data loss. In weeks 3 and 4, each faculty met with an EDS for 4 – 8 hours to review courses, address training questions, confirm week 1-3 content and activities availability, and enroll students. In week 5 EDS’s provided student orientation and remained on call to support the forty (40) students and 5 faculty who fully participated and rigorously test drove Canvas for four months. Weekly status checks showed transition as seamless and easy with only minor glitches originating from user errors or a difference in testing platform. The 4 mos. pilot generated only 32 ticketed issues (compared to 30 in a single mos. in Bb). Results from early and end of semester surveys of faculty and students was positive towards connectivity and functionality, intuitive interface and overall ease of use. All appreciated the look and feel on smart phones, tablets and computers. Post mid-semester focus groups by an independent evaluator confirmed survey results: student feedback was positive with only one student wishing to return to Bb; Faculty feedback was positive with input and clarifications for future testing requested, but all unanimously voted to stay on CANVAS. The objectives were met: CANVAS increased usage, reduced complexity and enhanced faculty and student LMS satisfaction. The challenge of a five week timeline (with a 2- week winter break) was met and exceeded through excellence in people, product and a sound change
management/adoPTION process. Hence CANVAS will be adopted starting July, 2015

32.

**Title:** What Would You Do? Using Technology to Integrate Enhanced Ethical Decision Making into an Allied Health Educational Curriculum

**Authors:** Mahsa Dehghanpour, EdD, MS, CMD & Jamie Baker, MEd, CMD; The University of Texas MD Anderson School of Health Professions, Medical Dosimetry Program

A healthcare practitioner who cannot think ethically to solve problems and cannot communicate respectfully with other medical team members would not be able to provide quality of care to patients. Teaching ethical behavior to students is challenging because many faculty have not been trained on how to relate these skills to their students in an effective and efficient manner. This presentation will share strategies that have been used by the Medical Dosimetry faculty at the University of Texas MD Anderson Cancer Center to improve students’ ethical decision making.

Providing opportunities for students’ engagement motivates them to learn, retain, and transfer knowledge. Technology rescues educators with creative techniques encouraging students to inquire, communicate, discover, and apply knowledge in an interesting and participatory environment. Medical Dosimetry faculty used a student response system to create an active learning platform to demonstrate and teach the crucial subject of ethical decision making in allied health education.

Medical dosimetry faculty used Turning Technologies to create an interactive classroom exercise that challenged healthcare
students with a series of fictional vignettes dealing with clinical ethics, standards of professionalism, and real life situations they encounter in their clinical rotations. The faculty acted as the facilitators as they guided the students through the controversial ethical dilemmas. Students were given time to reflect on the possible clinical decisions available to the healthcare worker or student and then used their student response clickers to vote on the best plan of action. Access to instant analysis of student responses led to additional discussion and collaboration as student groups debated the pros and cons of available options.
Title: Behavior Change Project: A Student Assignment to Reduce Personal Health Risk

Authors: Marty Gibson, RN, PhD, CHES; Spring Hill College; Betty Carlson Bowles, RNC-OB, PhD, Midwestern State University

Purpose: The purpose of this semester-long Behavior Change Project is to allow nursing students to learn behavior change strategies, experience the challenges and obstacles to behavior change, reduce their own health risks, and apply this experience to their future role as health educators.

Objectives: The objectives of this assignment are to: 1) assess personal risk factors; 2) set measurable behavior change goals to reduce those risks; and 3) design, implement and evaluate a plan to accomplish that goal by semester end.

Methods: Students perform a health risk assessment, identify a risky behavior they wish to change, set short- and long-term goals for changing that behavior, and plan, implement and evaluate a behavior change project to meet those goals. The project incorporates behavior change theories, cost-benefit analysis of current and target behaviors, intermediate goals and rewards for achievement of the goals, and analysis of related health education literature. Each student must journal their behaviors, cues to action, barriers, feelings, attitudes, successes and failures related to the behavior change. Finally, they must evaluate what they learned from the assignment both personally and professionally.

Discussion: Students experience firsthand the complexities of behavior change to promote health and prevent disease. In order to be more effective in teaching their future patients/clients about their disease risks and motivating behavior change they need to experience the process. In addition, this assignment helps them to prepare for their professional roles including being good role models.
Conclusions: While experiencing this semester-long Behavior Change Project, students made significant personal life-altering changes for health promotion. However, they stated that they didn’t realize how involved or how difficult the behavior change process would be. After completing this assignment, they expressed improved self-efficacy in changing unhealthy behaviors and in assisting their patients to do so.

2.
Title: Breaking Barriers: Providing Skin Cancer Removal and Education 2014-15
Authors: Jaclyn Altshuler, Luke Wallis, Alexis Tracy, Margaret Brown, Faryal Siddiqui, Michelle Nguyen, John Browning MD; The University of Texas Health Science Center at San Antonio, School of Medicine

Background: About 1 in 5 Americans will develop skin cancer; this statistic is even higher for the homeless and uninsured populations (Wilde et al, 2013). This project provided skin cancer education to the homeless, uninsured, and indigent population of San Antonio. This happened at the student-run Travis Park Dermatology Clinic (TPDC). Previous projects unveiled the need for patient education regarding specific sun protection and Basal Cell Carcinoma (BCC).

Objectives: The goals of the project were to assess the health literacy level in patients at TPDC regarding BCC, sun protection, skin cancer identification, and skin cancer prevention, and to provide education in these areas.

Methods: Patients at TPDC were surveyed to assess demographics, including age, ethnicity, sun protection behavior, sun exposure, occupation, and completed a “Pre-education” quiz to assess their pre-existing knowledge of BCC. Students educated patients on identifying BCC and preventative measures, and supplied them with appropriate sunscreen. Afterwards, patients completed the “Post-education”
quiz, identical to the “Pre-education” quiz for purposes of assessing the efficacy of our educational project.

**Results:** Seventy of the 71 patients included in this study answered the questionnaire. Fifty-seven of these patients (80%) had never heard of BCC. The average time spent outdoors was 2.93 hours per day, however the majority of patients (57%) reported not using any sunscreen. The average pre-education quiz score was 66.62% and the average post-education quiz score was 83.48% showing an increase of 16.86%.

**Conclusion:** The results indicate that the TPDC patient population’s knowledge of BCC and sun protection increased during the course of the project. A minor limitation discovered was the Spanish-English language barrier, which prevented more precise in depth education in some patients. Data indicates a need for the continuation of education regarding BCC and its prevention in the homeless and indigent population of San Antonio.

3.

**Title:** College Students in Health-Related Majors and their Understanding of Wheat and Gluten Sources and the Presumed Effects on the Body

**Authors:** Morgan Martin, MS, Jennifer Motz, MS, Kendall Mitte, MS, & Valencia Browning-Keen, PhD, RD, LD; Sam Houston State University

**Objective:** The objective of this study was to determine the knowledge and beliefs of college students in health-related majors regarding gluten, wheat and grains and to attempt to correct any misconceptions found.

**Rationale:** College students are consuming less than the recommended intake of healthy carbohydrates. Those who are future health professionals need to have accurate information about carbohydrates to pass on to clients in the future.

**Target audience:** Students in the FACS 2362-Nutrition class at Sam Houston State University were selected as the audience for
this study since a variety of health majors are required to take this class. Eighty-eight percent anticipate working in the healthcare field after graduation.

**Description of intervention:** Students took an online cross-sectional survey to determine their level of knowledge about gluten, wheat and grains. After the first survey, students viewed a presentation to correct any misconceptions, then took a short post-test to assess their knowledge.

**Conclusions:** Students have a low level of knowledge about gluten, wheat and grains. Their level of knowledge about gluten was the lowest. Students generally believe that grains and wheat are a positive component of diets and that gluten is a negative component of diets.

**Potential Application of Results:** Students in health-related majors need to receive more education on the health effects of gluten, wheat and grains so they have appropriate information to pass on. Dietetics professionals need to be aware of the level of knowledge of health professionals need to be aware of the level of knowledge of health professionals so they can prepare in-service training and appropriately educate clients with accurate information. Appropriate technology applications need to be developed and identified to use with many clients and patients who are internet savvy and prefer on-line options. These will be shared during the poster session.

4.

**Title:** Course Designs to Enhance Clinical Decision Making

**Authors:** Lois Stickley, PT, PhD &. Debbie Baylor, PT, Med; Texas State University, Department of Physical Therapy.

**Summary of Purposes:** A four-course sequence of clinical decision making (CDM) was redesigned to enhance the learning experiences and CDM skills of doctor of physical therapy students.

**Objectives or Aims:**

69
1) Identify goals and objectives for the sequence and for each course
2) Identify appropriate methods to evaluate student achievement of the goals and objectives
3) Design learning experiences to facilitate the achievement of the goals and objectives.

**Methodology or Procedures:**

**Initial Design Phase:**
1) Identify situational factors, 2) Design learning goals, 3) Design methods for assessment and feedback, 4) Design teaching and learning activities, and 5) Integrate the primary components of initial design phase. **Intermediate Design Phase:**
6) Create a thematic structure for the courses, 7) Create an instructional strategy, and 8) Create an overall scheme of learning activities. **Final Design Phase:**
9) Develop a grading system, 10) Anticipate and prevent potential problems, 11) Write the course syllabus, and 12) Plan an evaluation of the course and teaching (Fink, 2003).

**Major Findings:**

**Initial Design Phase:**
Situational factors included class sizes of 35-40 graduate students. The courses were not designed to introduce new content but allow the students to synthesize previously learned material in a patient management context. Learning goals for the sequence included: a) Use of a clinical decision-making process in patient case studies, b) Use of evidence-based practice, c) Develop a sense of professional identity, d) Development of professional behaviors, and e) Develop the ability to self-assess performance. Methods for assessment included critically appraised topics, documentation of patient management, development of home exercise programs, a reflective paper on characteristics of expert practitioners, and self- and peer-assessment of professional behaviors. Learning activities included observing faculty as expert practitioners evaluating actual patients, using case studies to practice the patient management process from an initial evaluation to development of a home program, and discussion of reading assignments. Integration of the primary components was achieved through the observation of experts treating real patients followed by active problem solving with case studies. **Intermediate Design**
Phase: The thematic structure was the clinical decision making process. The instructional strategy included the use of role models and active practice. The scheme of learning activities followed the same sequence of observation of expert, then using a case to practice examination, evaluation, prognosis, diagnosis, and intervention. Final Design Phase: The grading system emphasized projects that are important clinically such as documentation, development of patient education, evidence-based practice, and professional behaviors. The students were invited to participate in an anonymous mid-term evaluation of the course and teaching. The standard end-of-course evaluation was used as well as student-lead focus groups. Two of the four courses in the CDM sequence have been completed with positive comments from students and involved faculty. Course evaluation scores improved meaningfully.

5.

**Title:** Development of Allied Health Games: A Unique Interprofessional Offering

**Authors:** Janda Anderson, Jessica Priddy, Elliott Starcevich, & Gayle Tabotabo; The University of Texas Health Science Center at San Antonio

**Background:** Summary of purposes, objectives, or aims; methodology or procedures; and major findings, conclusions, or evaluation. Allied health care providers in the United States represent approximately 60% of all health care providers. Working as an allied health professional, you are involved both directly and indirectly with patient health. However, we often forget interprofessional communication is an important aspect in the health care system and that it takes the skills of many allied health professionals working together to get results. With this in mind, we wanted to encourage interprofessional relationships between the different healthcare roles and programs within the University of Texas Health Science Center San Antonio for students to get a better understanding of teamwork as it will carry on throughout their career. The University of Texas Health Science Center San Antonio School of Health Professions’ initial aim with the Allied Health Games was to create community service through the various volunteer opportunities that made the event a success, along with interdisciplinary sportsmanship as the SHP allied health teams competed for 1st place. From this event, the SHP learned that an appropriate future goal would be to address interprofessional needs identified in the community.

**Target Population:** Our target population consists of all programs within the SHP as well as local SHP schools from the surrounding area. The Allied Health Games focuses on this population bringing these allied health profession students together for a fun, interprofessional event.

**Objectives:** The goals of the Allied Health Games are: (1) to educate the community on the importance of interdisciplinary
team work between the allied health professions; (2) to educate health profession students on the importance of interdisciplinary team work between the allied health professions; and (3) to create a fun, interdisciplinary based annual event to increase health care team work.

**Conclusion:** We had a variety of games throughout the event that each program participated in that lead to a very effective way to reach out to the students about interprofessionalism. According to data for the AHG, 88.2% of students said they had a great time at the event and 93.75% of students said that they would participate in the games again. With such a great turn out, the games will continue to be an annual tradition that will further educate and encourage students to work together interprofessionally.

6. **Title:** Does selectivity and number of undergraduate institutions make a difference in first year physical therapy program grade point average?

**Authors:** Greg Ernst, PT, PhD, Michael Geelhoed, PT, DPT, & Maureen Simmonds, PT, PhD; The University of Texas Health Science Center at San Antonio; Nicole Wray, PT, DPT; West Oaks Rehabilitation and Healthcare Center

**Purpose:** The purpose of this study was to determine if the selectivity and the number of undergraduate institutions makes a difference in first year physical therapy school grade point average (GPA). We hypothesized that students who attend selective or more selective undergraduate schools would have better academic performance in their first year of physical therapy school. In addition, we hypothesized that students attending two or fewer undergraduate institutions would perform better in their first year of physical therapy school that those attending multiple undergraduate institutions.
**Methodology:** Pre-admission undergraduate institution and first year physical therapy program GPA data were evaluated from two consecutive physical therapy program classes (80 students total). The Undergraduate institution in which the student had the majority of semester or quarter credit hours was designated as the primary institution. These primary institutions were then ranked in selectivity using the following Carnegie Classifications: more selective, selective, and not selective. Additionally, the number of undergraduate institutions the students attended was tallied for each student.

**ANALYSES:** A one-tailed t-test was performed comparing the first year physical therapy school GPA of those students attending more selective/selective undergraduate institutions to those students attending non-selective institutions. Another one-tailed t-test was performed comparing the first year physical therapy school GPA of those students attending two or fewer undergraduate institutions to those students attending more than two institutions. The alpha level was set at .05.

**RESULTS:** The average first year physical therapy school GPA of those students attending more selective/selective undergraduate institutions was 3.55 (±.31) while those attending non-selective institutions was 3.34 (±.42). This was a significant difference (P < .007). The average first year physical therapy school GPA of those students attending two or fewer undergraduate institutions was 3.48 (±.31) while those attending more than two undergraduate institutions was 3.50 (±.38). This was not a significant difference (P > .38).

**Conclusions:** This study suggests that students who attend a more selective or selective institution have better academic success (GPA) in their first year of physical therapy school than those attending non-selective institutions. Additionally, this study found that the number of undergraduate institutions the students attend does not appear to make a difference in first year physical therapy school GPA.
Title: From Classroom to Professional Practice: Promoting the Success of Occupational Therapy Students

Authors: Shirley A. Wells, Angela E. Scoggin, & Jack Ruelas; The University of Texas Rio Grande Valley

Purpose: The purpose of this study is to investigate the relationship between students’ clinical performance and their ability to pass the national certification examination for occupational therapists. As part of its ongoing program evaluation system, the UTRGV Occupational Therapy Program examines student outcomes in order to modify the curriculum, identify students at-risk for failure on the national exam, and provide additional academic support prior to graduation.

Methods: Entry-level Master of Science in Occupational therapy student records for graduation years 2009 to 2013 were reviewed. Investigators determined the relationship among three variables:

1. Clinician-rated scores for the two required Level II Affiliations, based on the American Occupational Therapy Association, Inc. (AOTA) Fieldwork Evaluation for the Occupational Therapy Student. The American Council of Occupational Therapy Educators (ACOTE) requires that each student successfully complete “a minimum of 24 weeks’ full-time Level II Fieldwork.” At UTRGV, this fieldwork is completed following successful completion of the didactic portion of the curriculum and immediately prior to graduation.

2. Score on the National Board for Certification of Occupational Therapists (NBCOT) Practice Exam. The UTRGV Occupational Therapy Program requires students to pass this exam at the end of their Level II Fieldwork and prior to graduation. This requirement was initiated by the program as part of
a larger initiative to promote success in passing the NBCOT Certification Exam.

3. **1st time pass rate on the *NBCOT Certification Exam*. Students take the NBCOT Exam after graduation. A passing score is required in order for the graduate to be credentialed as an Occupational Therapist, Registered and to be eligible for licensure as an Occupational Therapist in Texas.

**Conclusion:** Data analysis is in progress. Preliminary analysis indicates that there is a correlation between students' performance on clinical rotations and ability to pass the practice exam and the national certification exam. Detailed analysis, major findings, and significance for occupational therapy education will be presented on the poster.
Title: Interdependence of Variables Associated with ArcCHECK® QA Failures for Whole Abdomen Radiotherapy (WART) VMAT Treatment Plans

Authors: Leanne Kristek, BS, Belinda Lee, Kelly Triplett, Collin Hagler, Victoria Keechi, AS, Hector Rojas, CMD, Luke Whittlesey, MS, Tina Marie Briere, PhD; The University of Texas MD Anderson Cancer Center

Quality assurance (QA) measurements are used to verify dose distributions of whole abdomen radiotherapy treatments using volumetric modulated arc therapy (VMAT). Current institutional guidelines require 90% of phantom measurements pass gamma analysis at 3%/3mm, which is consistent with national standards. This pass rate confirms that the measured and calculated doses match adequately based on percent difference at a point and distance to agreement. The purpose of this research is to understand deviations in whole abdomen VMAT QA results in a systematic way by analyzing treatment field sizes and noninteger Y jaws. We analyzed whole abdomen treatment plans to understand if jaw size settings have an impact on the QA process using the ArcCHECK® diode array phantom and Pinnacle treatment planning system. Plans with larger Y jaw field sizes and noninteger Y jaws were more likely to have fewer passing points from gamma analysis than smaller fields with integer jaws. Measurements for the smaller field noninteger plans were compared with those in which the jaws were set to an integer but otherwise having the same delivery pattern. Large field plans were converted into two isocenter plans. We also studied the effect of neglecting to incorporate the couchtop in the TPS calculations. The number of passing points in gamma analysis improved by a range of 0.1 – 0.7% when noninteger jaws were avoided. The pass rate increased by as much as 9.9 when the fieldsize was reduced to
less than 30 cm and reoptimized to achieve a dose volume histogram similar to the clinical plan. The number of passing measurements also increased by as much as 4.2% when the calculation did not properly include the couch correction.

In conclusion, fields with the Y jaws set to less than 30 cm show a higher passing rate, suggesting that two isocenters may help cover large abdominal fields, but at the cost of increased treatment time and potential dosimetric uncertainty at the field junction. In order to obtain more realistic gamma values, it is important to properly model the couchtop in calculations.

**Key Words:** VMAT, QA, whole abdomen radiation therapy, ArcCHECK®, Diode Array Phantom, Gamma Analysis

9.

**Title:** Knowledge, Skills and Attitudes towards Research and Quality Improvement Concepts: PA Students and FM Residents

**Authors:** Tiffany Kindratt, MPH, Venetia Orcutt, PhD, PA-C, Patti Pagels, MPAS, PA-C, Nora Gimpel, MD; The University of Texas Southwestern Medical Center

**Background:** The ARC-PA requires that PA students be trained in research methods and quality improvement (QI) to meet the competencies required for the PA profession. Studies have evaluated these concepts among medical students and residents yet to our knowledge, no research has been conducted evaluating PA students’ knowledge, skills and attitudes towards these concepts.

**Purpose:** To fill this gap, the purpose of this study is to conduct a needs assessment of research and QI training needs for curriculum development among PA students and residents.

**Objectives:** Objectives are to:

1) Measure PA students’ knowledge, skills and attitudes towards research and QI concepts and
2) Compare results with FM residents.

**Methodology:** PA students (N=34) and Family Medicine (FM) residents (N=39) at UT Southwestern completed an online survey measuring knowledge, confidence in research and QI skills and attitudes using 5-point Likert scales (1=strongly disagree to 5=strongly agree). Responses were dichotomized into 2 categories and chi-squares used to determine differences between groups.

**Major Findings:** PA students were most knowledgeable on creating oral and poster presentations (88%). PA students were significantly more knowledgeable of the purpose of HIPAA protection and research compliance, steps of the research cycle (both p’s=.03), basic statistics and how to create oral and poster presentations (both p’s=0.02). FM residents were significantly more knowledgeable of the life-cycle of a QI project (p=.02). When evaluating differences in research and QI skills, PA students were more confident in their ability to analyze and interpret data (PA students=74%; FM residents=41%) yet were less confident in their abilities to interpret evidence-based medicine in practice (41%) when compared to FM residents (71%). PA students had significantly more favorable attitudes towards research and QI on all items measured (p<.05). A majority (97%) PA students reported that participation in research is important to their medical career compared to only 72% of FM residents.

**Conclusions:** We found that PA students are as knowledgeable as or more knowledgeable than FM residents on many research concepts yet need improved training on QI knowledge and skills. PA students have highly favorable attitudes towards research and QI activities yet may need improved training in QI. Results of this study will be used to tailor our curriculum to meet PA students’ needs. This study can be replicated in other PA classes and programs for curriculum development.
Title: Measuring the ABC’s of Doctoral Physical Therapy Ambiguity (Tolerance), Beliefs, Curiosity and (Need for) Closure

Authors: Maureen Simmonds, PhD, PT & Michael Geelhoed, DPT; The University of Texas Health Science Center San Antonio

Background: Over the last decade an increasing number of reports from the Institutes of Medicine, research funding agencies, scientific organizations, and health professional groups have questioned whether health professional education has kept up with the needs of increasingly complex patients, and of changing health care systems. Rightfully, many health professional programs purport to foster excellence, critical thinking and decision making, self-directed learning and professionalism in their students. Physical Therapy (PT) programs also embrace the core values of APTA that include the desirability of a PT’s tolerance for ambiguity. However there is little evidence supporting the success of such program goals, in part because it is not clear how these constructs and characteristics are measured nor how the results are used to inform improvements in health professional programs. The purpose of this preliminary project was to use a battery of standardized questionnaires to assess PT students’ tolerance for ambiguity, reactions to uncertainty, curiosity, and the need for closure.

Methods: In a cross-sectional study, a total of 106 students in the first, second or third year of a doctoral physical therapy program completed a battery of standardized measures that assessed tolerance for ambiguity, reactions to uncertainty, curiosity, and the need for closure.

Results: Key results were as follows. Students across the three years were moderately tolerant of uncertainty. Students in the second year were most attracted to ambiguous situations. And third year students were more inclined to develop stress from uncertainty. Finally, first year students were the most curious but also had the highest need for closure.
Conclusions: Health and health care is complex and practitioners must work within this complex environment using best-evidence. This requires tolerance of ambiguity and uncertainty; curiosity in order to develop questions; and an open mind in order to consider alternative explanations, to continually learn new information as well as to ‘unlearn’ or ‘let go’ of old ideas and understandings. The effectiveness of education programs in developing these attributes in health professional students is not known. This study presents preliminary results on the use of standardized measures that will enable program effectiveness to be evaluated and improved.
11.  
Title:  Outcomes of a Health Literacy Project with Adults with Intellectual Disabilities  
Authors: Danielle DeBowsky & Kaley Medsger, The University of Texas Health Science Center San Antonio, Department of Occupational Therapy  

Purpose: Health Education Literacy Project (HELP) for Better Health is an ongoing, interprofessional health promotion project conducted by UTHSCSA students (OT, PT, Medical, Dental, PA, Public Health) with adults with intellectual disabilities who reside at Providence Place. The purpose of this study is to investigate the change in behavior of HELP program participants following completion in the health education sessions.  

Objectives:  
1. Measure change in health literacy by administering pre and post curriculum questionnaires that assess the students’ understanding of nutrition related concepts.  
2. Assess change in behavior and health decision-making by organizing pre and post curriculum opportunities for students to make independent food choices at a local grocery store.  
3. Evaluate whether a formal classroom setting with team-based learning activities encourages positive peer influences on health decision-making.  

Methods: The nutrition curriculum took place twice a week for 30 minutes over 7 weeks. A pretest/posttest was administered to measure improvement in health literacy. Additionally, we led two trips to HEB in which the participants were instructed to select a snack of their choice. We created a measure to determine the health value of the snacks. Nutritional categories included calories, fat, saturated fat, sodium, sugar, fiber, and protein.
Results: Fifteen of twenty-five participants who completed the pretest/posttest improved their knowledge of nutrition material. Eight participants who completed the pretest/posttest also attended both trips to HEB. Five of the eight improved their snack choice in at least one category. Two participants increased their knowledge score and their snack choice. Three participants were observed looking at nutrition labels, one was seen peer teaching, and five commented about snacks being healthy or unhealthy.

Conclusion: Participants’ awareness of nutrition increased as demonstrated by their observed behaviors in HEB. Though snack choices improved slightly, behavior change occurs over time and effects may not be seen immediately. In addition, written measures may not be the most appropriate method of capturing knowledge gain in this population.

Keywords: Professional behaviors, standardized measurement, tolerance of ambiguity

12.
Title: **Physiologic Response to Performance Test Anxiety in Radiologic Sciences**
Authors: Debra Wynne, MSRS, RT(R) & Beth Veale’, PhD, (R ) (QM); Midwestern State University, Radiologic Science

The major goal of any health science educational program is to provide instruction so that students become proficient, competent, and reliable workers. One way to do that is to provide scenarios that mimic real-life clinical experiences as much as possible. In the radiologic sciences, students are tested in a laboratory setting for patient positioning, imaging, and radiation protection skills. Students often become shaky, sweaty, and nervous, exhibiting signs of extreme stress. Students’ vital signs were monitored on non-test days and test days to look at the differences in blood pressure, pulse, and
respiration. It was found that students’ vital signs were elevated on test days but seemed to decrease for each subsequent test. Knowledge that the stress may or may not be manifested physically may lead to specific management techniques for pre-test stress reduction.
Title: PTSD does not discriminate! A Unique Simulation in OB

Author: Jacqueline K Riley-Baker, MSN, RN; The University of Texas Health Science Center at San Antonio

Purpose: Educators play an important role in the development of nurses for tomorrow’s patient. Patients are becoming more complex and have multiple diagnoses. Providing students with a multifaceted simulation provides a forum to integrate and develop new knowledge, refine skills, and perfect team member roles in response to caring for a complex patient.

Objectives: For many students correlating theory to clinical can be difficult; when Pharmacology, Behavioral Health, Obstetrics and Research are added to the mix, student’s thinking process becomes compartmentalized. Integrating content from several courses is a must to set them up for success. This simulation experience allows student to demonstrate their critical reasoning skills when caring for a complex patient.

Methodology: Students participate in unfolding simulation scenarios upon completion of the 2nd semester. The unfolding case consists of: 1) admission procedures for a PTSD patient who has just told her fetus has cleft palate to a behavioral health unit, 2) assessment of the patient in a home health environment, and 3) the patient is admitted for delivery of the infant. Through simulation, principals of therapeutic communication, assessment skills, medication administration and evidence based research are evaluated. Participants are provided the opportunity to reflect on the clinical simulation experiences and debrief. All program content will be shared with the audience during the presentation.

Findings: A total of two hundred fifty three (N=253) students participate simulation that incorporated a complex patient situation enhancing student learning. This Simulation Base Education (SBE) has been used as a teaching strategy to
complement a curriculum and to provide students an opportunity to incorporate understanding of administering patient care to a complex patient. SBE has had positive and lasting results on our nursing students.

**Conclusion:** Feedback and data continues to be collected to evaluate meeting course objectives; preliminary finding indicate the value and merit of using simulation to teach concepts related to complex patients. An unexpected finding of the program is student’s self-confidence and self-esteem has increased. Student feedback and evaluations consistently rated the program 5.0 on a 1-5 Likert Scale. Further data will be collected from subsequent classes.

14. **Title:** Proficiency of Communication among Dietitians  
**Authors:** Laura Haynes, MS, Peggy Smith, MS, & Valencia Browning-Keen, PhD, RD, LD; Sam Houston State University.

**Purpose:** The purpose of this study was to determine if a correlation between dominant personality types and dietetic professionals exists and if it affects counseling abilities and to determine if the dominant personality type is affected by training in counseling strategies.

**Rationale:** Peer observation has demonstrated that dietetic professionals or soon-to-be professionals are analytical, logical and science-minded. Sometimes we may be too quick to remember what the textbook says that we forget to be empathetic and listen to the patient and his/her needs. We hope to find a trend relating the analytical, logical and decisive traits to dietetic professionals. Many don’t realize technological training, workshops and classes are available to improve their empathy toward clients and patients.

**Target Audience:** Subjects were registered dietitians and dietetic interns in the state of Texas. We reached out to dietetic
associations and local organizations around the state for participation.

**Description of Program Intervention:** To improve patient compliance and dietetic counseling strategies, research is needed regarding current dietetic counseling strategies and belief systems.

**Description of Evaluation:** Conducted using the Personal Style Inventory, a 32 question quiz to assess both dominant personality types among dietetic professionals and dietetic interns. Previous education on Motivational Interviewing (MI) was also documented.

**Conclusions Supported by Evidence Reported:** Forty-two surveys were returned. The data revealed that a number of the responders were either feelers instead of thinkers and intuitive or sensing as well as perceiving or judging. Overall, it was clear that Motivational Interviewing is effective in encouraging counsellors to be more empathetic. Limited quality research is available on dietetic populations and further research is necessary to adequately create an intervention appropriate to improving counseling compliance.

**Potential Application of Results:** Continued analysis and MI education may be necessary to help Registered Dietitians and future dietitians improve counseling sessions and patient compliance. Technological applications or workshops can assist the dietitian’s skill sets.

15.

**Title:** Salud al Pasito: Small Steps Toward Better Health

**Authors:** Daniela Ortiz, Narine Wandrey, Tiffany Chen, Karen Lin, Alexander Constantine, Justin Low, Bradley Kapten, David Garcia, Samuel Butler, & David Henzi, EdD; The University of Texas Health Science Center at San Antonio; Paula Winkler, MEd, South Texas Area Health Education Center
**Background/Purposes:** San Antonio has a high prevalence of chronic diseases, and although the etiology of these diseases such as diabetes and obesity are complex, exercise and nutrition are known ways to combat these health complications. Salud al Pasito is an organization which seeks to motivate the community to pursue healthier lifestyle choices to reduce the burden of these diseases.

**Objectives:** The mission of Salud al Pasito is to create an environment where participants can relay their health concerns to healthcare professionals and students so that they feel empowered to make healthier choices. This is accomplished through assessment of health literacy, education through demonstration of simple exercises, such as walking, and nutrition counseling, so that this new information can be incorporated into participants' lives.

**Methods:** Salud al Pasito hosts free walking events throughout the year which feature a main walking activity, exercise and nutrition counseling, free health screenings, and physical activity stations, where participants are encouraged to interact with volunteers including healthcare professionals. Participants' health knowledge is assessed through pre-walk and post-walk surveys and the “Wall of Issues,” a poster where participants indicate their top three health concerns. Through the surveys, participants are polled on health-related habits such as quantity and intensity of exercise, obstacles faced with initiating habitual exercise, and frequency of healthcare visits, to better understand their priority health concerns.

**Results:** A total of 1,201 responses have been recorded on the “Wall of Issues” from September 2013 to March 2015. Most respondents were aged between 41-64 years (41.63%). For all age groups, top health concerns were diabetes (17.74%) and obesity (17.48%). Within age groups, the top concerns for those aged 0-17 years was smoking/lung disease (16.95%), obesity for 18-40 (23.95%), and diabetes for those 41-64 and over 65 (20.00% and 22.90%, respectively). For frequency of speaking with healthcare professionals, 1% of participants have a frequency greater than 1 time/month, 14% have a frequency of
1 time/month, 7% have a frequency of 6-10 times/year, 25% have a frequency of 3-5 times/year, and 52% have a frequency of 0-2 times/year. For categories of vigorous physical activity, 30% of participants exercise less than 15 minutes/week, 30% exercise 16-30 minutes/week, 20% exercise 31-45 minutes/week, and 20% exercise more than 46 minutes/week.

**Conclusion:** After diabetes, obesity was the second largest health concern for adults, and smoking was most concerning to adolescents. Salud al Pasito will strive to continue motivating the community to become proactive about visiting healthcare providers and to include habitual exercise to attenuate the prevalence of diseases like obesity and diabetes. So that health awareness occurs at earlier ages, the organization will involve local schools to reach out to the youth of San Antonio and their families. Finally, information gathered from our events will be used to educate healthcare professionals and students to be aware of the most pressing health concerns of the San Antonio community.

**16.**

**Title:** Students’ judgments of their professional generic abilities: Do faculty agree?

**Authors:** Catherine Ortega, Maureen J. Simmonds, Yolanda Rangel, & Julie Thompson; The University of Texas Health Science Center San Antonio

**Background:** Professional behavior is a fundamental expectation of health care practitioners. The behavioral attributes that comprise professional behaviors have been described in the profession of physical therapy as generic abilities. These ten generic abilities are commitment to learning, interpersonal skills, professionalism, critical thinking, communication skills, use of constructive feedback, problem solving, effective use of time and resources, stress management. They are measured using the Generic Abilities Based Assessment (ABA), both a self-report and feedback
instrument. Despite the pervasive utilization of the ABA among physical therapy programs, since its initial creation, research to evaluate the psychometric properties of the scale has been limited. Moreover, there is a dearth of research that has evaluated the use of this scale to inform and influence professional attitudes and behaviors. The purpose of this project is to evaluate the concordance between students’ self-assessment of professional behaviors and faculty judgments of professional behaviors in doctoral PT students using the ABA.

Methods: In this cross-sectional study, 77 doctoral physical therapy students completed the ABA self-assessment. The ABA has 10 items each scored on a 0-10 scale with higher scores being a more positive assessment. Of the 77 students, 43 were in the first year of the curriculum (DPT Is) and 34 students in the second year cohort (DPT IIs). In addition, the ABA was completed for each student by core faculty (N=8) in a group format to achieve consensus for student scores. Descriptive statistics were calculated for each of the scale items and agreement between student and faculty scores was assessed using a combination of inferential statistics and a visual analysis of Bland-Altman plots.

Results: Preliminary analyses showed that DPT I students self-scores for each scale item ranged between 5 and 10 with a mean of 7.56 ± 1.2. Faculty scores for DPT Is though lower, were similar for each scale and ranged between 4 and 9 with a mean of 6.8 ± 1.2. The greatest mean discrepancy between faculty and DPT I students judgments were on communication skills (1.4 mean difference), effective use of time and resources (1.6), problem solving (1.2) and professionalism (1.0) and the least mean discrepancy was for stress management (.1). DPT II students’ self-scores for each scale item ranged between 6 and 10 with an average of 8.29 ± 1.0. Faculty scores for DPT IIs ranged from 5.0 to 9.0 with a mean of 7.6 ± 1.1. The greatest mean discrepancy between faculty and DPT II students judgments were interpersonal skills (.9) and critical thinking (.9) and the least mean difference was responsibility (0.0). Further
data analyses with correlations and item analysis will be presented.

**Discussion:** Students used the end-range of the scale (10) indicative of a strong and positive perception of self and it’s unclear whether students used the actual behavioral descriptors. High scores raise the potential problem of a ceiling effect with the scale. In contrast, faculty never scored a student with 10, on any of the abilities. Factors beyond the use of the behavioral descriptors and different comparator cohorts could account for the discrepancy between student and faculty scores. Further work is being done to address these and other questions.

**Conclusions:** Preliminary conclusions demonstrate that though students and faculty may have similar views with regard to assessment of student behaviors, there are differences in how scores are assigned. Perhaps most importantly, the potential problem of a ceiling effect on the measure suggests that the assessment scale will not be useful for students to measure any self-improvement in professional behaviors.

**Keywords:** development, professional behaviors.
17.  
**Title:** Test Your FENO with NIOX MINO: An Extension of the Urban Surge Project  
**Authors:** Krystal Polanco, Joshua Case, Micheal McCarroll, Sofia Ray, David Huggar, Marina Bonacorsi, Sarah Stone, & De De Gardner; The University of Texas Health Science Center at San Antonio

**Background:** Asthma is a chronic disease that can be deadly if not managed correctly. More than 3 thousand people, nationally, died prematurely due to uncontrolled asthma in 2011. Three million people live in Public Health Service Region 8 (PHSR8), which incorporates San Antonio. There are almost 2.6 million people in the PHSR8 with asthma and more than 63 thousand of them are children. Many asthmatics are without insurance or have insurance but are unable to afford their copayments. In order for these patients to best manage their asthma, they must have access to medications and be taught how to use them correctly. These statistics, along with many others, emphasize the need for asthma clinics such as the Urban Surge Free Asthma Clinic, which is the location of our project.

**Objectives:** Patients will demonstrate proper and consistent use of prescribed medications. Patients will have an increased awareness of signs and symptoms relating to an asthma exacerbation.

**Methods:** Asthma knowledge and asthma control surveys will be utilized to gage the patients' disease understanding and medication adherence. Nursing and medical students perform a physical assessment on each patient including vital sign measurements. RT students assess the patients’ FENO by using the NIOX MINO and the patient performs basic spirometry measuring: Peak Expiratory Flow Rate (PEFR), Forced Vital Capacity (FVC) and Forced Exhaled Volume in 1 second (FEV1). Combined these results provide an overview of airway inflammation and obstruction. The physician, medical or PA
student review results, assess the patient and prescribe medications for asthma control and quick relief medication. The pharmacy or RT student provide asthma medication education using the teach-back method while utilizing verbal and visual aids.

**Results:** More than 50% (18/33) of patients were Hispanic, females. 45% (15/33) of those had an education level of a high school diploma or less and did not have insurance. 57% (19/33) of patients had an annual income less than $30,000, only 12% (4/33) of those were utilizing an assistance program. More than 70% (52/73) of patients believed their asthma was not well controlled.

**Conclusion:** The Urban Surge Asthma Clinic fits a niche of patients with asthma in the “gap” of no insurance or with insurance but an inability to pay copayments. A vast majority of patients were very knowledgeable of their disease but had difficulty identifying their own symptom severity. Asthma is a controllable disease; this project demonstrates the importance of personalized asthma education in order to prevent unnecessary repeat emergent hospital visits.

18.

**Title:** That’s a RAP on Heart Health

**Authors:** Kara Shrader, RN, Rebekah Gold BSN, Jacqueline Riley-Baker, MSN, RN;
The University of Texas Health Science Center at San Antonio, School of Nursing

**Purpose:** That’s a RAP on Heart Health (TAROHH) is designed to teach health literacy and healthy lifestyle choices to high school students with the hopes of preventing the development of chronic diseases. The community partner for this project is Medina Valley High School (MVHS) in Medina Valley ISD. MVHS is a 4A high school located in Castroville, Texas. Mrs. G. Butler, Advanced Anatomy and Physiology teacher at MVHS asked about the possibility of having the UTHSCSA students
teach health literacy and lifestyle choices to prevent chronic diseases.

**Objectives:** The program’s main focus was heart health, and the program will culminate with the teaching of the American Heart Association BLS Program and certification for each student who passes the certification exam.

**Methodology:** The target audience was 60 high school juniors and seniors currently taking Advanced Anatomy and Physiology classes. There were 6 program modules, which will help explain disease processes. The goal of each module was for the students to be knowledgeable on the modifiable risk factors for each disease. The classes took place one day a week in two class periods for six weeks. The modules included musical raps by the student leaders about the upcoming content, visual aids and diagrams, and collaborative competitions. CPR instruction was given one day a week to the same group of students for six consecutive weeks.

**Findings:** Progress was measured using pre and post assessments for the learning modules and BLS certification exam for the CPR instruction.

**Conclusion:** Overall this program was a huge success and both the presenters and the students enjoyed the interactions. This program was a learning experience for everyone involved and will continue to be in the coming years. Fifty eight students from MVISD attended TAROHH. The program was successful is providing disease process and disease prevention information to high school seniors in a rural community. The program was met by the students with enthusiasm and willingness to learn and learning did occur and was demonstrated by comparing pre to post assessments. Students were given BLS instruction and completed and passed the certification exam.
TSAHP Board of Directors (2015)

President
James Johnston, Ph.D.
(940) 397-4594
Midwestern State University
james.johnston@mwsu.edu
Wichita Falls, Texas

Past President
Robin Satterwhite, Ed.D.
robin.satterwhite@ttuhsc.edu
South Plains College
Lubbock, Texas

President-Elect
Shirley Richmond, Ph.D.
(713) 745-1205
UT MD Anderson Cancer Center
srichmond@mdanderson.org
Houston Texas

Vice President
John Ronnau, Ph.D.
(956) 665-3189
UT Rio Grande Valley
john.ronnau@utrgv.org

College of Health Affairs
Edinburg, Texas

Secretary
Melba Trevino, M.Ed.
(956) 872-3120
South Texas College
melbat@southteascollege.edu
McAllen, Texas
**Treasurer**
Elizabeth Protas, Ph.D.
(409) 772-3001
UT Medical Branch at Galveston
ejprotas@utmb.edu
Galveston, Texas

**Member at Large – Chair, Awards Committee**
Lori Rice-Spearman, Ph.D.
(806) 743-3252
Texas Tech University Health Sciences Center
lori.ricespearman@ttuhsc.edu
Lubbock, Texas

**Member at Large – Chair, Research Grant Awards Committee**
Martha Acosta, Ph.D.
(210) 567-8753
UT Health Science Center at San Antonio
acostamm@uthscsa.edu
San Antonio, Texas

**Member at Large – Chair, Nominations Committee**
Jeff Killion, Ph.D.
(940) 397-4679
Midwestern State University
jeff.killion@mwsu.edu
Wichita Falls, Texas