



**Clinical Research Institute
TTUHSC**

**Annual Report
FY2020**

Promoting Patient-Oriented Research and Training

SUMMARY:

Fiscal Year (FY) 2020 was a year full of change for the Clinical Research Institute (CRI). It began with the appointment of our new Executive Director, Dr. John Griswold, involved updating the CRI Mission statement (Appendix A) to be more inclusive of clinical research other than investigator-initiated projects, and ended with the renovation of new space for the CRI on the east part of the 4th floor of the TTUHSC in Lubbock, and the clinic building, room 1202, for the Permian Basin. Unfortunately, FY20 was also a sad year for the CRI, as our founding Executive Director, Lorenz O. Lutherer, MD, PhD, passed away. See page 9 for a tribute to this wonderful man.

In FY20 University Medical Center approached the CRI regarding the possibility of the CRI taking over the administration of clinical research conducted by TTUHSC faculty in their Cancer Center. By the end of the FY, contract negotiations were occurring to bring this to fruition; although the CRI had already begun the transition of some studies in June. This collaboration will fund four new positions within the CRI, one regulatory specialist for IRB work, and three research coordinators to help conduct clinical research trials.

The TTUHSC Department of Psychiatry approached the CRI in the Spring to begin discussions on CRI involvement in studies conducted by the TCMHCC-Texas Child Mental Health Care Consortium (101351-CPAN, 101353-TCHATT, 101352-CPWE, and 101350-CAP Fellowship). This consortium is funded under Senate Bill-11, Dr. Sarah Wakefield, the Chair of the Psychiatry Department, is Co-Chair of the consortium. This collaboration will fund two research coordinator positions within the CRI.

This year the number of work orders was 15.56% higher than last fiscal year. As has been seen previously, the majority of work orders originate from the School of Medicine (SOM) in Lubbock. The number of work orders received from the Permian Basin campus were similar to last year, and the number of work orders from the Abilene campus more than doubled for FY20. An important service provided by the CRI involves Institutional Review Board (IRB) study preparation and submission work. On average, in FY20, the number of days from receipt of the work order by the CRI to the study being submitted to the IRB is 46.8 days. Additionally, 57.4% of studies submitted to the IRB were approved the first time. In an effort to demonstrate the involvement of TTUHSC faculty in study recruitment activities, participant referrals by Principal Investigators are tracked by the CRI research coordinators. Like last year, this year saw a dramatic increase (41.7%) in those referrals. Finally, the amount of work done by the CRI statistical section has grown exponentially; see graphs on pages 4 and 5.

The COVID-19 pandemic adversely affected FY20 in many ways. While TTUHSC faculty and trainees used time made available by shut-downs to work with the CRI to develop their research ideas, finalize analyses, and complete publications, our overall productivity was down from previous years. However, in spite of the COVID-19 shut downs, the CRI coordinators were able to recruit 2019 study participants, an increase over FY19 of 13%. The CRI demonstrated that with persistence and careful planning, quality clinical research can still be done!

ACHIEVED GOALS & OBJECTIVES:

The CRI continues to meet its goals and objectives for facilitating and growing clinical research activities at TTUHSC. The activities of the CRI during FY20 as compared to FY19 are summarized in the following tables/graphs:

Table 1: Summary

	2019	2020	% Change
Number of New Clinical Research Studies to the IRB	90	129	43.33
Number of Novice Investigators	35	33	-5.71
Number of Participating Subjects	1786	2019	13.05
Protocol reviews	482	473	-1.86
Statistical Analysis & Reporting	119	308	158.82
*Abstracts Presented	11	10	-9.09
* Research Presentations	77	69	-10.38
* Published Manuscripts	68	19	-72.05
Educational Presentations by CRI	34	10	-70.59
Total studies closed/cancelled	11	1	-90.91
Total studies completed/inactivated	28	31	10.71

*Number is dependent upon the CRI being notified of the abstract, presentation, and publication

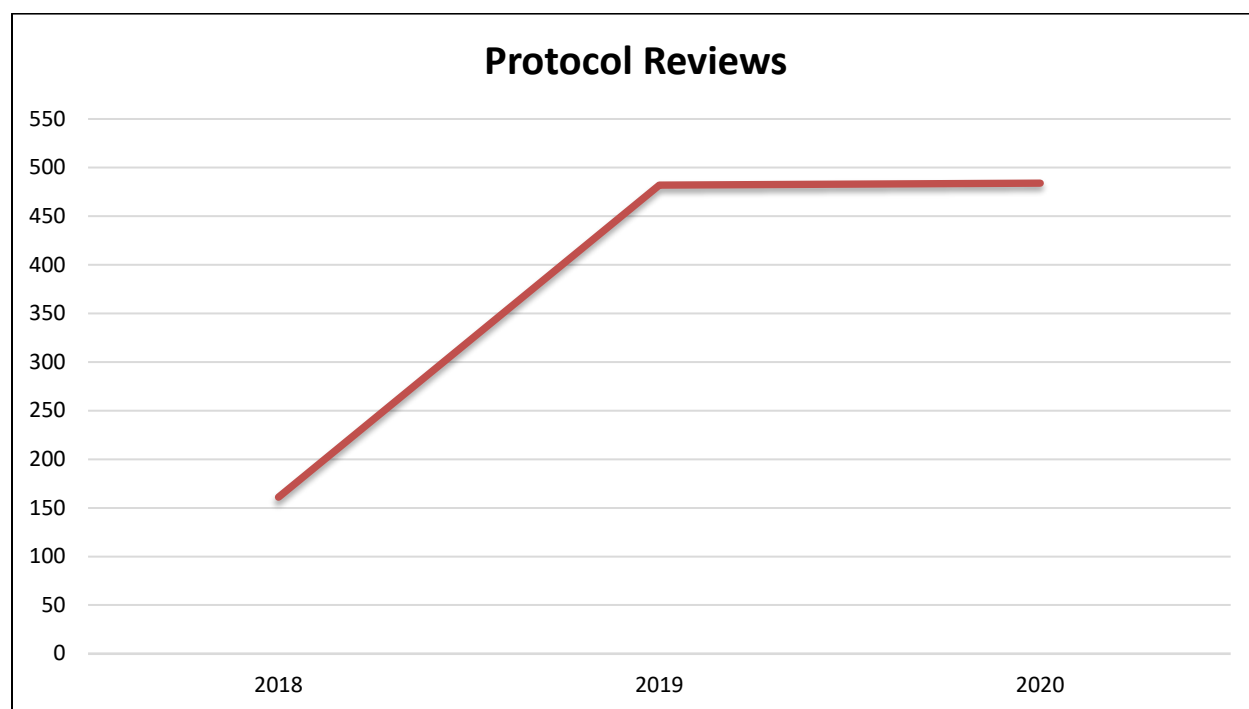
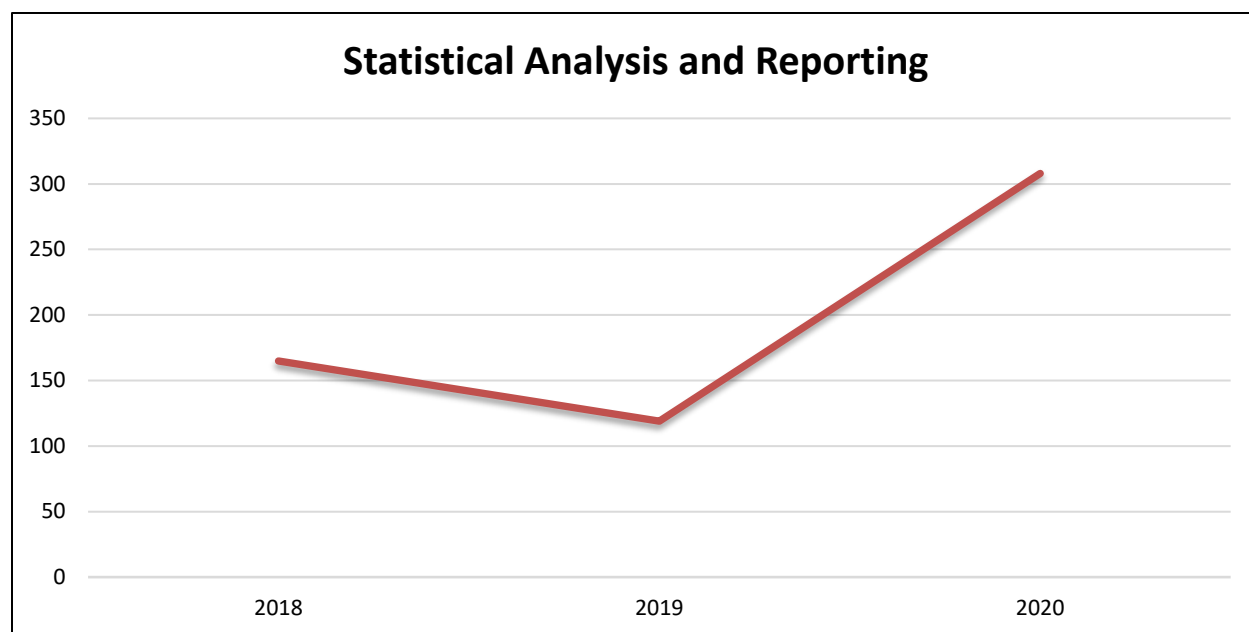
Table 2: FY20 Approved Work Orders (WO) by School and Campus

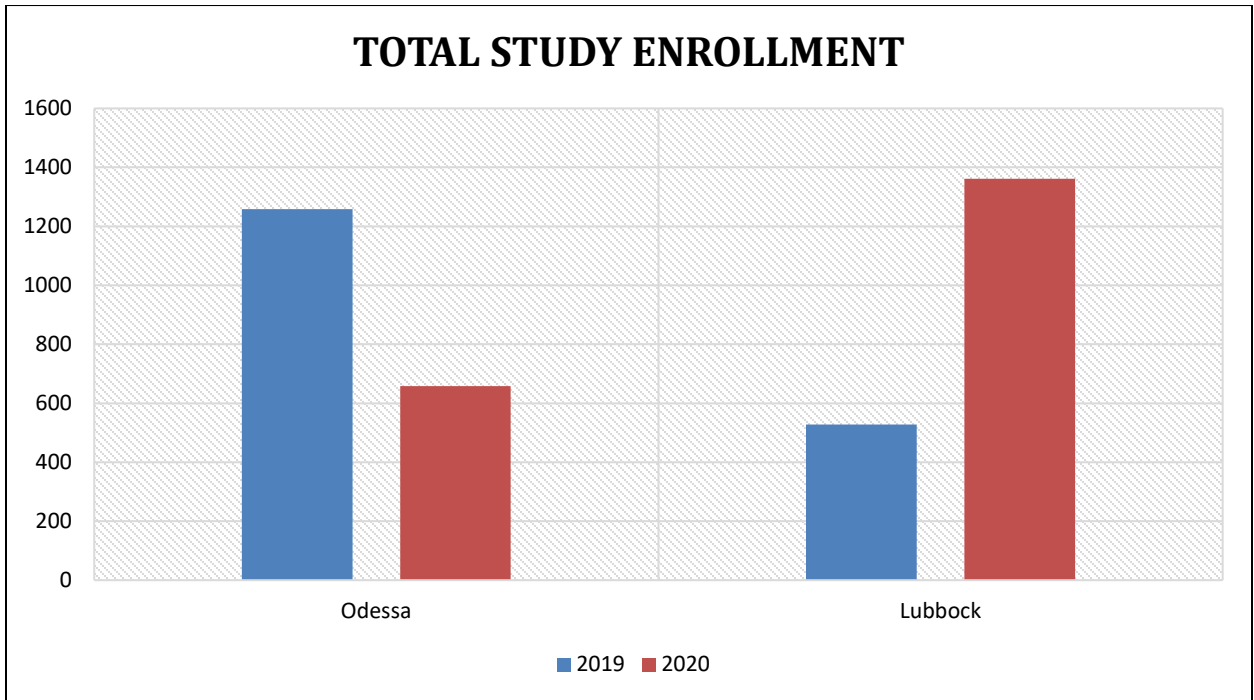
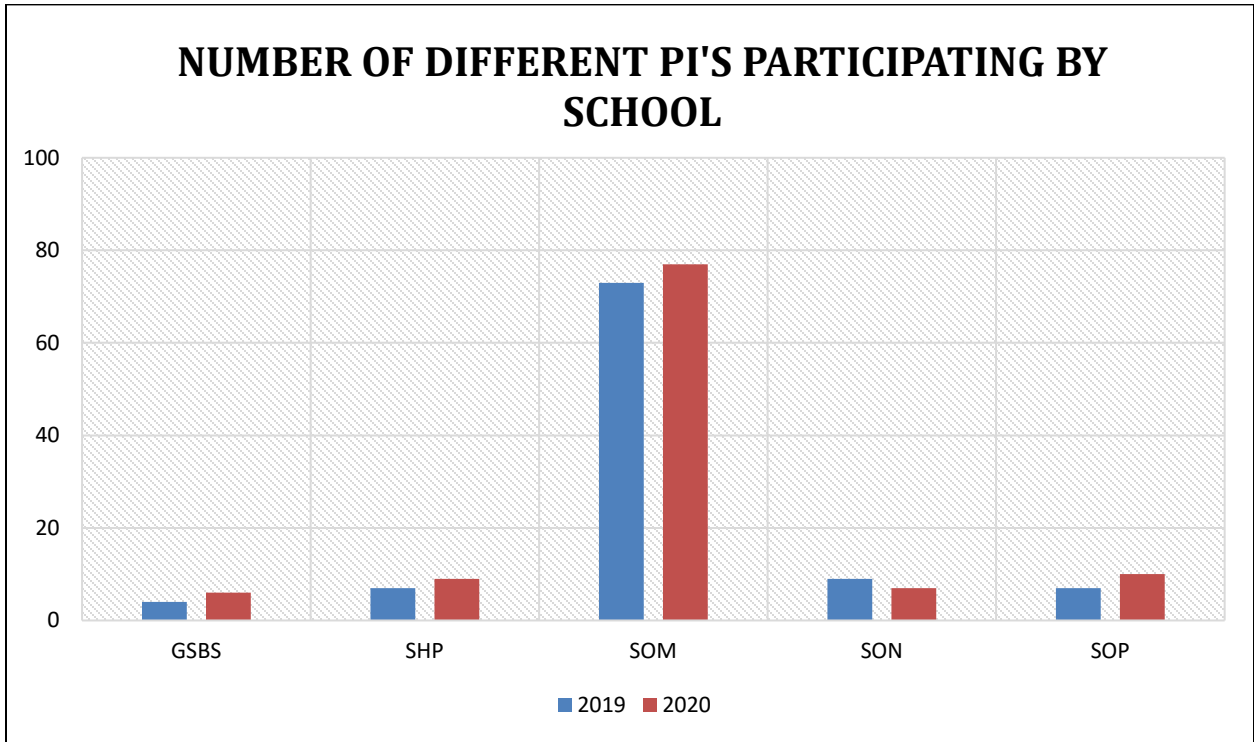
School	Lubbock	Odessa	Amarillo	Dallas	Abilene	Total # of WO by School	% of Total WO for each School
SOM	127	11	5	N/A	N/A	143	74.10
SON	7	0	0	N/A	1	8	4.15
SOHP	22	2	N/A	N/A	N/A	24	12.43
SOP	2	N/A	3	1	5	11	5.69
GSBS/PH	6	N/A	N/A	N/A	1	7	3.63
TOTAL WO by Campus	164	13	8	1	7	193	100%

N/A indicates the school does not have a presence on that campus.

Statistical Service Data:

	2018	2019	2020
Statistical analysis and reporting	165	119	308
Protocol reviews	161	482	473





FUNDING:

Primary funding for the CRI in FY21 is through the offices of the TTUHSC President and Provost. The Department of Psychiatry, through Senate Bill 11, provides CRI with funding assistance; and CRI residual funds from previous industry sponsored research is also used. Moreover, the Dean of the School of Pharmacy contributes to the CRI overhead, along with a contractual arrangement between the CRI and University Medical Center in Lubbock. In the Permian Basin the School of Medicine Regional Dean's Fund, monies chiefly generated by the CMS uncompensated care program, finance much of the budget support for the Odessa CRI office.

MEMBERSHIP:

All faculty and trainees at TTUHSC are considered members of the CRI. The Clinical Research Institute is governed by an Advisory Committee that met five times during FY20. It is composed of faculty representatives from all schools and campuses, the TTUHSC President and Provost, the Director of the F. Marie Hall *SimLife* Center, and the Executive Leadership Team made up of the three Directors of the CRI: Executive Director John Griswold, MD, Thomas E. Tenner, Jr. PhD, Assistant Director, and Catherine Lovett, MSN, RN, Managing Director. The full list of members is provided in Appendix B.

There are eight study coordinator positions (3 RNs, 3 LVNs, 1 MBA, 1 CRC): five in Lubbock and three on the Permian Basin Campus. There is one regulatory specialist for submissions to the IRB, a study monitor, a section manager, and an administrative assistant. The Lubbock staff will be increasing by one regulatory specialist and five research coordinators to support UMC Cancer Center clinical research done by TTUHSC faculty, and clinical research done by the Department of Psychiatry as part of the TCMHCC-Texas Child Mental Health Care Consortium. All of the current study coordinators, the monitor and the regulatory specialist are certified through their professional organizations: The Association of Clinical Research Professionals or the Society of Clinical Research Associates. FY20 saw growth in our statistical support; we added a part-time/PRN position. Silvia Jakubski, MS joined the CRI on August 1, 2020. We now have three talented individuals in our statistical division. The full list of CRI staff members is provided in Appendix C.

EDUCATION:

The CRI continues to participate in the Student Research Week poster judging. Cathy Lovett, MSN, RN is the West Texas Chapter for the Society of Clinical Research Associates (SoCRA). Ms. Lovett recruits various speakers and topics to have a meaningful seminar series. The topics offered 1.0 Continuing Education Unit (CEU) hours. A list of the SoCRA series is located in the appendix.

The CRI continues individual interactions with investigators and trainees (this year, primarily on zoom). These meetings involve protocol development, study design, conduct of the study, data analysis, presentations, and publications. In FY20, our statisticians had 176 one on one education sessions with students, residents and faculty. Our experienced research coordinators and study monitor are available for clinical studies. The entire CRI team works closely with investigators to assist with study completion with the intent to publish in MEDLINE/PUBMED journals. The

CRI leadership has contributed to the recruitment efforts of the institution by discussing the role of the CRI with potential faculty employees, including School of Medicine department chair candidates.

DIRECT ASSISTANCE WITH THE STUDIES:

CRI personnel work with the investigators and trainees during each phase of a proposed study.

1. Each investigator submits a draft protocol, following the template provided on the CRI website. The protocol includes the research question/s, the background forming the basis for the question, objectives, the hypothesis, the study design, the methodology to be used, the statistics for analysis, and the potential significance of the study results. Members of the CRI team, including the biostatistician, work closely with the investigator's team during this process.
2. Assistance is given in developing documents such as informed consent forms, data collection forms, surveys, the application, and subsequent amendments/reports to the IRB.
3. After IRB approval, the research coordinators consent and enroll subjects, collect samples, data, and essentially conduct the study under the direction of the Principal Investigator.
4. Once study accrual has been completed, the biostatisticians analyze the data, construct tables and figures, and assist in writing the presentation/manuscript. Members of the CRI Executive Leadership are available and often assist the principal investigators in completing or revising the articles prior to submission to the journal of their choice.

Currently, CRI services are provided at no cost to the investigators due to the funding mechanisms in place. This unique system allows investigators to obtain pilot data necessary to support future funding requests. The CRI resources are invaluable to faculty with busy schedules and help to partially offset the lack of protected time for research.

EXECUTIVE DIRECTOR'S STRATEGIC PLAN:

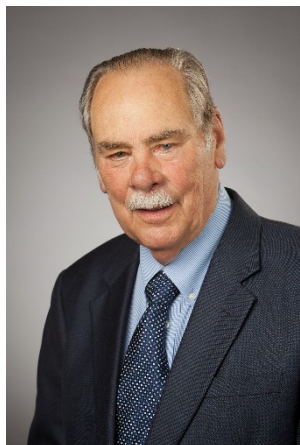
The goal of the CRI is to support and develop research interests of every faculty and student within the TTUHSC. This will be done by increasing awareness of the CRI, its services, and capabilities to all faculty and students, no matter the level of research experience. CRI will provide specific education on the basics of high-quality clinical research and increase investigator-initiated efforts, bringing ideas for improvement in patient care to practical research efforts. These projects must be guided to completion with opportunities for presentation and publication. The CRI will nurture the clinical scientists of tomorrow by connecting aggressively with our students in all schools of the HSC to demonstrate the value of participation in research, provide education for development of research activities with training on scientific design and good clinic research practices. This includes helping the students participate and manage their time in order to see research as an important part of their clinical activity. We will work with stakeholders to construct a format for increasing industry-sponsored research that provides for successful collaboration between industry, HSC, and CRI. That success will be measured by the highest quality human subject oversight, meticulous protocol adherence, successful recruitment, and presentation/publication whenever possible.

Here are a few highlights for FY20: In our statistical division, Dr. Mhd Hasan Almekdash was promoted to an assistant professor in the Department of Surgery; Dr. Rohali Keesari was promoted to an instructor in the same department. MS3-4 Students Kelly Little and Chloe Cooper received the Dr. Lorenz O. Lutherer Award during the 2020 Student Research Week, held March 10-13, 2020 for their work on “The Association Between Insurance Type and Patient Satisfaction Scores”. Rene Resendez and Ami Knox received their TTUHSC 5-year service pin, Amanda West Romero received her TTUHSC 10-year service pin, Cathy Lovett and Josie Martinez both received their TTUHSC 20-year service pin.

Ami Knox, MBA took her Association of Clinical Research Professionals certification exam and is now a certified clinical research coordinator. Sarah Wood, LVN took her Association of Clinical Research Professionals certification exam and is now a certified clinical research coordinator. Sarah was also the recipient of the TTUHSC 2020 Distinguished Staff Award. The CRI welcomed Nancy Swinford, RT (R), ARRT, CCRC in August. Nancy is an experienced research coordinator who previously worked in the TTUHSC Department of Orthopedics. She is certified through the Association of Clinical Research Professionals as well. Catherine Lovett continues to Chair the Society of Clinical Research Associates (SoCRA) West Texas Chapter. This chapter hosts educational meetings at which diverse topics related to clinical research are presented and discussed. Lastly, with the growth in statistical work, the CRI added a part-time statistician, Silvia Jakubski, MS to our statistical service team.

The CRI has experienced considerable growth over the last few years and continued expansion is expected if additional funding support is provided for the necessary resources. This report denotes our success, but also highlights opportunities. The CRI is committed to providing clinical research guidance and in a collaborative, supportive environment. We look forward to another year of exciting research activity at TTUHSC.

In memory of Lorenz O. Lutherer, MD, PhD



Dr. Lorenz O. Lutherer graduated from Haverford College (BA '58), the University of Iowa (MS '64) and the University of Florida (PhD '69) prior to accepting a faculty position in 1972 in the newly formed medical school of Texas Tech University.

While on faculty, Dr. Lutherer became a medical student, earning his medical degree in 1977. During his tenure at the institution, he served with distinction in many roles for both the departments of Physiology and Internal Medicine. He was a tenured professor, researcher and administrator for over 40 years. In these roles, he received several teaching awards, published many outstanding research papers and was very involved with the establishment of the original institutional policies and guidelines, which contributed to the development of the medical school in its formation of teaching, research and administration missions.

Throughout his long career at the medical school and, later through the entire existence of the Texas Tech University Health Science Center, Dr. Lutherer was dedicated to due process in all of its dimensions. As a champion for the rights of faculty, students, staff and patients, he was fearless in advocating that all members of the medical school community were empowered to contribute to the life of the institution. His pioneering efforts led to the establishment of the Faculty Council Executive Committee at the medical school and subsequently to the formation of the university's Faculty Senate. He was also supportive of the Staff Senate formation and a tireless champion of animal welfare within biomedical research.

In 2010, Dr. Lutherer began another career at TTUHSC as the founding executive director of the Clinical Research Institute. In this role, he provided guidance to clinical research faculty, investigators and trainees through each phase of the research process until his retirement in 2017. In his free time, Dr. Lutherer was a passionate participant and fan of a variety of sports. He played soccer with gusto into his late 40s and was a die-hard Red Raider fan. Together with his wife, Margaret, he was deeply involved with the culture and civic life of Lubbock as a lifelong supporter of Texas Tech Public Radio and the Lubbock Symphony Orchestra.

Dr. Lutherer died February 5, 2020. Gone, never forgotten, and forever in our hearts.

Appendix

A. Mission and Vision Statement for the Clinical Research Institute



Promoting Patient-Oriented Research and Training

MISSION

The mission of the CRI is to promote and facilitate the conduct of clinical research for faculty and trainees while upholding the highest standards of excellence by assuring human subject investigation be performed ethically, responsibly, and professionally to contribute to the health sciences' body of knowledge.

VISION

To improve the quality of healthcare in Texas and beyond through clinical research activities.

B. CRI Advisory Committee Members

Alyce Ashcraft, PhD, RN, CNE, FNGNA, ANEF, School of Nursing

Carol Boswell, EdD, RN, CNE, ANEF, FAAN, School of Nursing, Permian Basin Campus

Sharon Decker, RN, PhD, ANEF, FAAN, F Marie Hall *SimLife* Center

Leslie Shen, PhD, School of Medicine

Ron Hall II, PharmD, MSCS, School of Pharmacy, Dallas Campus

Catherine Lovett, MSN, RN, Managing Director, CRI

Lori Rice-Spearman, PhD, President

John Griswold, MD, Executive Director, CRI

Lavi Oud, MD, School of Medicine, Permian Basin Campus

Phil Sizer, Jr. PT, PhD, School of Health Professions

Thomas E. Tenner, Jr. PhD, Assistant Director, CRI

C. Clinical Research Institute Team

Lubbock:

Mhd Hasan Almekdash, MA, MS, PhD, Director of Biostatistical Services/Senior Biostatistician

Staci Brown, Administrative Assistant

Deborah Conn, BSN, RN, CCRC, CCRA, Monitor

John Griswold, MD, Executive Director

Silvia Jakubski, MS, Biostatistician

Rohali Keesari, MPH, PharmD, Biostatistician

Ami Knox, MBA, CCRC, Clinical Research Coordinator

Catherine J. Lovett, MSN, RN, CCRC, CCRP, Managing Director

Josie Martinez, BSOE, Section Manager

Rene Resendez, MA, CCRP, Regulatory Specialist

Amanda Romero, MS, RN, CCRC, Clinical Research Coordinator

Chris Scott Johnson, MSN, RNC, CCRC, CA/CP, SANE, Clinical Research Coordinator

Nancy Swinford, RT (R), CCRC, Clinical Research Coordinator

Thomas E. Tenner, Jr. PhD, Assistant Director

Sarah Wood, LVN, CCRC, Clinical Research Coordinator

Permian Basin

Jammie Holland, LVN, CCRC, Clinical Research Coordinator

Ailena Mulkey, RN, CCRC, Clinical Research Coordinator

Evangelina Santiago, LVN, CCRC, Clinical Research Coordinator

D. Society of Clinical Research Associates (SoCRA) Meetings

Date	Speaker	Title
January 17, 2020	Chad Copeland, MPA, ME	Clinicaltrials.gov.....
February 28, 2020	Mhd Hasan Almekdash, MA, MS, PhD	Conducting and Interpreting Frequently Used Basic Statistical Tests in Clinical and Translational Research
July 17, 2020	Ann Purdom, MSN, RN, OCN	Anatomy of an Oncology Research Protocol: Timely Tips for the CRC
August 13, 2020	Rene Resendez Fisher, MA, CCRP	COVID- 19 Ethical Research Concerns, a Frank Discussion

E. Dissemination of Information

Abstracts (10) (*PubMed)

Al-Mekdash M, February, 2020, Spatial Boolean Modeling for institutional evaluation and assessment: A robust analytical and visualization tool for policy analysis and decision making, American Association of the Behavioral and Social Sciences, Conference on Academic Research in Education, Las Vegas, NV

Eldem I, Al Madni O, Levent F, Al-Mekdash M, Keesari R, Al-Rahawan M, July 12, 2019, Red blood cell Distribution Width (RDW) in pediatric osteomyelitis: New inflammatory marker? The American Society of Pediatric Hematology/Oncology, 2020 Meeting, Dallas, TX

Phy J, Zhang Y, Orlando J, Prien SD, Penrose L, Garos S, Huang JC, October, 2019, IVF pregnancy rates in women undergoing acupuncture vs. controls, American Society for Reproductive Medicine, Philadelphia, PA

Richmond R, Estrada M, Santos A, Saleh A , Ronaghan C, October, 2019, Surgeons report that 12-hour shifts improve patient outcomes, lower cost: Shorter hospital stays, lower infection rates observed in patients when a hospital uses an acute care model, ScienceDaily
www.sciencedaily.com/releases/2019/10/191030151510.htm

Santos A, Dissanaik S, Richmond RE, Ronaghan C, October, 2019, Improved patient outcomes and reduced cost in treating acute appendicitis with a shift-based acute care surgery model compared to traditional general surgery call, American College of Surgeon; 2019 Congress, American College of Surgeon, San Francisco, CA

Schrader K, Demke J, Varman R, Fort C, Al-Mekdash M, Daniel H, July 12, 2019, Ability to identify external ear deformities based on year and specialty of medical training, Triological Society 2020 Meeting, Coronado, CA

Suryavanshi JR, Douthit C, Cox A, Maveddat D, McKee C, MacKay B, January 10-12, 2020, Avive soft tissue membrane improves outcomes after revision upper-extremity nerve decompression surgery, 2020 ASPN Annual Meeting, Ft Lauderdale, FL

Sydney L, Beck N, Al-Mekdash M, Keesari R, Al-Rahawan M, July 12, 2019, Exploring the effects of hematological variables on hemoglobin A1C in diabetic children, Pediatric Academic Societies (PAS) 2020 Meeting, Philadelphia, PA

Van Spronsen N, Sorenson G, Frost J, Howell J, Ayala D, Al-Mekdash M, Keesari R, Kesey J, Griswold J, July 12, 2019, Retrospective Pilot Study to examine potential predictors of a

standardized scoring system for smoke inhalation injury, American Burn Association (ABA) 2020 meeting, Orlando, FL

*Zhao-Fleming H, Al-Mekdash M, Cook E, Northcut A, Mitchell D, Rumbaugh K, Dissanaika S, April 22, 2020, Obesity is not an independent predictor of necrotizing soft tissue infection outcomes, *Surgical Infections*, <https://doi.org/10.1089/sur.2019.283> PMID: 32320347

Journal Articles (19) (*PubMed)

Ahnood E, Bradley B, Kesey J, Larumbe E, Griswold J. A superior background pain regimen for burn patients. *Journal of Burn Care and Research*. (*Submitted manuscript*)

* Al-Mekdash M, Dissanaika S, Alhaj-Saleh A, Esquivel E, Lung J, Eaton B, Bruns B, Barmparas G, Margulies D, Raines A, Bryant C, Crane C, Scherer L, Schroepel T, Moskowitz E, Regner J, Frazee R, Campion E, Bartley M, Ward J, Mortus J, Laparoscopic omental patch for perforated peptic ulcer disease reduces length of stay and complications, compared to open surgery: A SWSC multicenter study. *American Journal of Surgery* DOI: 10.1016/j.amjsurg.2019.09.002 PMID: 31537324

Al-Mekdash M, Keesari R, Alderazil Y, Jin D, Thalkolwiboon S, Duarte-Celada W, Gomez J, 2019, Prediction model of ICU admission for acute ischemic stroke patients, (*Submitted Manuscript*)

Attaluri P, He E, Henderson J, Tan M, Kesey J, Puckett Y, Griswold J. Shock to the system: using Myoglobin as serum marker in administering Renal Protective Therapy in electrical burn patients. *Journal of Trauma and Acute Care Surgery*. (*Submitted manuscript*)

Attaluri P, He E, Henderson J, Tan M, Kesey J, Puckett Y, Larumbe E, Frost J, Griswold J. Shock to the system: Using Myoglobin as serum marker in administering Renal Protective Therapy in electrical burn patients. *Journal of Burn Care and Research*. (*Submitted manuscript*)

Chauncey KB, DeCanio B, Larumbe E, Reed D, The effect of an intervention to increase fruit and vegetable intake on skin carotenoid scores: A controlled trial, *Topics in Clinical Nutrition*, December, 2019, 34(3), 233-243

*Elmassry M, Mudaliar N, Colmer-Hamood J, San Francisco M, Griswold J, Dissanaika S, Hamood A. New markers for sepsis cause by *Pseudomonas aeruginosa* during burn infection. *Metabolomics*. March, 2020, 16(3):40. doi: 10.1007/s11306-020-01658-2; PMID: **32170472**

*Fain K, Rojas A, Peiris AN, Hypothyroidism following gastric sleeve surgery resolved by ingesting crushed thyroxine tablets, Texas Tech University Health Sciences Center, Graduate

School of Biomedical Sciences; 32nd Student Research Week, March 9-13, 2020, *and* Baylor University Medical Center Proceedings, doi: 10.1080/08998280.2019.1669412 PMID: 32063762

*Fleming D, Jiang D, Opoku K, Alhaj-Saleh A, Larumbe E, Kesey J, Griswold J, Dissanaik S, Prophylactic probiotics in burn patients: Risk versus reward, *Journal of Burn Care & Research*, December, 2019, 40(6), 953-960 DOI: 10.1093/jbcr/irz132 PMID:31326982

*Gaschen, P, Cordero J, Peiris AN, Recurrent thyrotoxicosis following near-total thyroidectomy, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week, March 9-13, 2020, *and* Baylor University Medical Center, DOI: 10.1080/08998280.2019.1656012 PMID: 32063761

*Gavin M, Manning R, Thilakarathne R, Shippey S, Peiris A, Tijani L, Association of gender with financial relationships between the pharmaceutical industry and physicians, Laura W. Bush Institute for Women's Health. Gender-Specific Medicine & Women's Health Symposium, Texas Tech University Health Sciences Center, Lubbock, TX, *and* JAMA Otolaryngol Head Neck Surg. DOI: 10.1001/Jamaoto.2017.0276 PMID: 28570741

*Gomez J, Shehabeldin M, Al-Mekdash M, Keesari R, Alderazi Y, Angiographic and clinical response of intracranial atherosclerotic disease large vessel occlusion stroke undergoing mechanical thrombectomy. *Journal of Stroke and Cerebrovascular Diseases*; Vol 29, Issue 10, October 2020. <https://doi.org/10.1016/j.jstrokecerebrovasdis.2020.105148> PMID:29786478

Grand R, Ibiligor C, Daneshfar C, deRiese W, Smith C, Impact of retained ureteral stents on long-term renal functions. *AUA Journals*, <https://www.auajournals.org/doi/full/10.1016/j.urpr.2018.05.006>

*Hanson K, Jacob D, Saleh A, Dissanaik S, In Hospital perforation risk in acute appendicitis: Age matters. *The American Journal of Surgery*, <https://doi.org/10.1016/j.amjsurg.2019.05.015> PMID: 31186116

*Ibrahim Y, Singer E, Baronia R, McMahon T, Nelson J, Katz C, Forensic psychiatry evaluation in a U.S. immigration detention center in Southwest Texas. *Journal of Forensic and Legal Medicine*, 66, 113-116, DOI: 10.1016/j.jflm.2019.06.017 PMID: 31277038

*Lenzmeier TD, Mudaliar N, Stanbro J, Watters C, Ahmad A, Simons M, Ventolini G, Zak J, Colmer-Hamood J, Hamood A, Application of Lactobacillus Gasseri 63 AM supernatant to pseudomonas aeruginosa-infected wounds prevents sepsis in murine models of thermal injury and dorsal excision. *Journal of Medical Microbiology*, 68(10), 1560-1572 DOI: 10.1099/jmm.0.001066 PMID: 31460863

Lung J, Tsen A, Evans E, Dennis J A, Financial safety net and subjective happiness in medical students. *College Student Journal*, Vol 54, Number 3, 15 September 2020, pp. 317-326(10)

Shen C, Ho M, September 2019, Effect of dietary tocotrienol on age-related bone health. *The Spectrum* (published by the Healthy Aging dietetic practice group of the Academy of Nutrition and Dietetic)

*Weaver P, Smith LA, de Riese WT, Sharma P, Keesari R, Al-Mekdash M, Quantitative measurement of prostate capsule and gland density and their correlation to prostate size: possible clinical implications in prostate cancer, *International Urology and Nephrology*. DOI: 10.1007/s11255-020-02527-6 PMID: 32506207

Presentations (69)

Ahmed M, Wang J, Alam N, Carder T, Holland J, October 25, 2019, Association of vitamin D deficiency with history of fracture and fracture risk factors among geriatric patients, Laura W. Bush Institute for Women's Health. Gender-Specific Medicine & Women's Health Symposium, Texas Tech University Health Sciences Center, Lubbock, TX

Aickareth G, Natasha D, Dhanasekara S, Griswold J. April 2020 “Do baseline prealbumin, Cu and CRP levels predict the outcome of burn patients with obesity?” Undergraduate Research Conference, Texas Tech University, Lubbock, TX

Ali Z, Selvan V, Hong M, Yang H, October 25, 2019, Safety and efficiency of adjusted body weight daptomycin dosing across a hospitalized obese population, Laura W. Bush Institute for Women's Health. Gender-Specific Medicine & Women's Health Symposium, Texas Tech University Health Sciences Center, Lubbock, TX

Anderson B, Athas V, Saleh A, Bilal Z, Grudzielanek B, Akinola K, Dissanaik S, March 9-13, 2020, Comparing outcomes of two completion methods among general surgery faculty in the laparoscopic management of acute appendicitis, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Arispe R, Gandhi E, Gutierrez P, Gyax S, Ventolini G, March 9-13, 2020, Vaginal lactobacilli and recurrent fungal vaginitis, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Asad U, Larumbe E, Williams V, Aryaie A, Onkendi E, December, 2019, Impact of timing of interval cholecystectomy, following percutaneous cholecystostomy tube for acute cholecystitis,

on operative and patient outcomes, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Bayless S, Gittner L, Dennis J, Flores P, Jones J, Ludwig C, Poch R, vonRoeder N, March 9-13, 2020, Pilot study of PTSD in Lubbock County Detention Center employees using the PCL-5, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Blakely S, Hollands C, March 9-13, 2020, Evaluation of current screening effectiveness in non-accidental trauma cases, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Boswell CA, Ashcraft A, Cannon S, Long J, DiVito-Thomas P, Delaney T, November 16-20, 2019, Strategies for on-line surveys: Overcoming the challenges and obstacles of subject recruitment, Sigma's 30th International Nursing Research Congress, Calgary, Alberta Canada.

Boswell CA, Ashcraft A, Cannon S, Long J, DiVito-Thomas P, Delaney T, November 19, 2019, How does self-efficacy impact evidence-based nursing practice? Sigma's 45th Biennial Convention, Washington DC

Campbell L, LaFreniere J, Song H, Almekdash MH, Keesari R, Perlmutter D, Shannon K, Euring M, Erwin C, November, 2019, Creating a values-based culture: Evaluating and promoting civility and desirable organizational behaviors, American Public Health Association, 2019 Annual Meeting and Expo, Philadelphia, PA

Chu V, Rahesh J, DeRiese C, Peiris AN, March 9-13, 2020, Management of thyroid dysfunction during pregnancy: A case report highlighting endocrine and OB/GYN collaboration, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Cooper C, Hess A, Hope B, Hope L, Sorensen G, Wagner C, O'Banion S, Kesey J, Griswold J. March 18, 2020 "Tube feeding through surgery, impact on glucose control in burn patients" American Burn Association Annual Meeting, Orlando, FL, (virtual podium)

Cooper C, Little K, Keesari R, Al-Mekdash M, deRiese C, March 9-13, 2020, The association between insurance type and patient satisfaction scores, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Covell J, Griswold J, Sorensen G, Hallier N, Northcut A, March 9-13, 2020, The evolution of snakebite treatment: A retrospective analysis of CroFab use in conjunction with one hospital's

snake bite assessment treatment algorithm, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Deleon S, Baronia R, Jimenez R, Ibrahim Y, March 9-13, 2020, Deportation of a detained asylum seeker with disabling panic attacks, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Delgado B, Mena L, Colmer-Hamood J, Ventolini G, Hamood A, October 25, 2019, Isolation and characterization of *Gardnerella vaginalis* clinical isolates, Laura W. Bush Institute for Women's Health. Gender-Specific Medicine & Women's Health Symposium, Texas Tech University Health Sciences Center, Lubbock, TX

Dennis J, Zhang Y, Zhang F, Mi N, October 25, 2019, Gender differences in mortality and procedure for patients treated for stroke at UMC from 2013-2016, Laura W. Bush Institute for Women's Health. Gender-Specific Medicine & Women's Health Symposium, Texas Tech University Health Sciences Center, Lubbock, TX

Dhanasekara S, Schrader K, Chandahas S, Aickareth G, Dissanaik S, Griswold J. September 28, 2020 “Baseline Copper levels are associated with worse outcome in burn patients with overweight and obesity” American Burn Association Annual Meeting, Chicago, IL, *April 6 – 9, 2021 (oral)*

Egan A, Wagner C, Griswold J. October 28, 2019 “Pirogov’s Triage: A Surgeon’s Adaptation in the Crimean War, 1853-1856” ACS Surgical History Group, San Francisco, CA,

Elmore B, Coelho R, Peiris AN, March 9-13, 2020, Hashimoto's disease and vitamin D deficiency Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Endsley A, Freedle C, Ivos M, Griswold J. January 9, 2020 “Enhancement of medical students knowledge of nutritional intervention” P3 Honors Symposium, Lubbock, TX,

Fa A, Gandhi K, David S, Maher J, Esquivel E, Gudenkauf B, Alpadi K, Shreyder K, Schlabritz-Loutsevitch N, October 25, 2019, Maternal obesity in early pregnancy is associated with the decreased active IGF-I availability, Laura W. Bush Institute for Women's Health. Gender-Specific Medicine & Women's Health Symposium, Texas Tech University Health Sciences Center, Lubbock, TX

Ferruffino C, Griswold J. October 1, 2020 “Evaluating real-world national and regional trends in definitive closure in US burn care: A survey of US Burn Centers” American Burn Association Annual Meeting, Chicago, IL, *April 6 – 9, 2021*

Fisher J, West K, Cox C, March 9-13, 2020, Procalcitonin as an early maker of septic arthritis, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Freedle C, Adams C, Sorensen G, Hong D, O’Banion S, Kesey J, Griswold J. December 3 – 6, 2020 “Cooper Deficiency in Burn Patients” Southern Region Burn Conference, Lubbock, TX, (*virtual*)

Freedle C, Sorensen G, Adams C, Griswold J. September 30, 2020 “Retrospective examination of copper supplementation in burn patients” American Society for Parenteral and Enteral Nutrition, *March 20 – 23, 2021 (virtual)*

Garcia, O, March 9-13, 2020, Pain management in pediatric patients with acute appendicitis, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Gates M, Ahnood E, Griswold J, March 9-13, 2020, Unique aspects of acute colonic pseudo-obstruction in morbidly obese burn patients, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Gray J, Lee S, Corbitt S, Schlabritz-Lutsevich N, Ventolini G, October 25, 2019, Obesity-related vaginal discharge during 3rd trimester of pregnancy: A protein pathway analyses, Laura W. Bush Institute for Women's Health. Gender-Specific Medicine & Women's Health Symposium, Texas Tech University Health Sciences Center, Lubbock, TX

Hall, B. & Whitaker, M, November, 2019, Laps Not Apps: Ways to Actively Engage Toddlers and Their Caregivers. Oral presentation at the American Speech-Language-Hearing Association Annual Convention, Orlando, FL.

Hall B, Whitaker M, October, 2019, An early intervention team model for early learners, parents & future pediatricians, Texas Tech University Health Sciences Center, School of Health Professions Endowed Lecture Series (ELS) Poster Showcase, Lubbock, TX

Hanson F, Appiah D, Schlabritz-Lutsevich N, Wood S, deRiese C, March 9-13, 2020, Assessing high-risk pregnant women's perception of their personal health conditions before and during pregnancy, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Hess A, Cooper C, Hope L, Sorensen G, Wagner C, O'Banion S, Kesey J, Larumbe E, Griswold J. December 7, 2019 "Tube feeding through surgery, impact on glucose control in burn patients" Southern Region Burn Conference, San Antonio, TX (*oral*)

Ivos M, Fort C, Daniel H, Varman R, Nguyen T, March 9-13, 2020 Factors predictive of negative outcomes following parotidectomy, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Jain N, Hope B, Daniel H, Varman R, Nguyen T, Cordero J, March 9-13, 2020, Determining neck lymph node level patterns in different subtypes of head and neck cancer, Texas Tech University Health Sciences, Center Graduate School of Biomedical Sciences, 32nd Student Research Week

John A, Anand R, Frost J, Griswold J. October 1, 2020 "Acute Colonic Pseudo-Obstruction: A critical complication in burn patients" American Burn Association Annual Meeting, Chicago, IL, *April 6 – 9, 2021*

Kishan R, Hanson F, MacLeay K, deRiese C, Keesari R, March 9-13, 2020, Investigating the association between metabolic syndrome and adenomyosis, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Klar J, Pasha N, Yang S, Sarangi A, Baronia R, Ibrahim Y, March 9-13, 2020, Do positive psychological traits predict treatment response in patients with major depressive and/or generalized anxiety disorders, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Kopacz A, Miers H, Dang T, Nagy L, March 9-13, 2020, Effectiveness of imaging markers in computed tomography (CT) in predicting early epidural hematoma growth, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Kumar M, Wakefield S, Sullivan Z, Daren F, Ruiz A, Bayazit H, Baronia R, March 9-13, 2020, A phone survey of no-shows in an urban psychiatric outpatient clinic, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Lee S, Maher J, Moore L, Gray J, Bennion G, Ji G, Scoggin S, Moustaid-Moussa N, Schlabritz-Lutsevich N, October 25, 2019, Adiposomes-placenta interaction in maternal obesity, Laura W. Bush Institute for Women's Health. Gender-Specific Medicine & Women's Health Symposium, Texas Tech University Health Sciences Center, Lubbock, TX

Liu Y, Bae Y, Lee S, Velik K, Beck C, Fox R, March 9-13, 2020, Differences in nasalance and nasality perception between Texas South and Mid-Atlantic dialects, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Loy S, Lin C, Boothe D, Prabhu F, Bennett K, Sturgeon A, Tarbox M, March 9-13, 2020, An overall evaluation and cost-analysis of dermatology nights for uninsured patients at the free clinic, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Moreno T, Dhanasekara S, Van Spronsen N, Chung C, Caroom C, Richmond R, Santos A, March 9-13, 2020, Accuracy of reporting estimated blood loss in open repair of pelvic and acetabular fractures, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Norman BA, Senanayake CD, Griswold JA. December 3 – 6, 2020 “Overtriage of burn patients – More prevalent than assumed?” Southern Region Burn Conference, Lubbock, TX, (*virtual*)

O'Suoji C, Pasha N, Yang S, Klar J, Sarangi A, Baronia R, Giles C, Ibrahim Y, March 9-13, 2020. Do positive psychological traits predict treatment response in patients with major depressive and/or generalized anxiety disorders? Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Patel S, Sorensen G, Griswold J. March 10-13, 2020 “Electrothermal neck burns: Unusual injuries caused by necklaces and phone chargers,” Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Perez-Arnold L, Igbaseimokumo U, Wei B, Jacob R, Belirgen M, Nagy L, March 9-13, 2020, Intracranial hematoma volume and outcome in traumatic brain injury, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Rahesh J, Chu V, Peiris AN, March 9-13, 2020, Hypervitaminosis D without toxicity, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Rojas A, Fain K, Peiris AN, March 9-13, 2020, Resolution of hypercalcemia in primary hyperparathyroidism with vitamin D replacement, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Sanders E, Kroll T, March 9-13, 2020, Comparing caregiver-child dyad language productions during traditional toy and tablet-based play interactions, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Schneider R, Fleming D, Welch G, Hua H, Cueva A, Choate L, Rumbaugh K, March 9-13, 2020, Characterizing the phenotypic transition of pseudomonas aeruginosa from the hospital environment to nosocomial infections, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Shen C, September 27, 2019, Clinical trials of FDA-IND natural bioactive components for bone health, Society of Clinical Research Associates (SoCRA), Orlando, FL

Singh S, Dhanasekara S, Tello N, Southerland P, Saleh A, Kesey J, Dissanaik S, March 9-13, 2020, Can variations in insulin requirements be an early indicator of sepsis in burn patients, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Singh S, Uke N, Sorensen G, Payberah E, Terziyski I, Griswold J. October 9 – November 30, 2020 “The ideal donor site dressing: A Comparison of the Chitosan Dressing Opticell to Traditional Dressings” Plastic Surgery Meeting, San Francisco, CA,

Snitman A, Chow N, Parbhu F, Bennett K, March 9-13, 2020, The analysis of cost savings, barriers to implementation and overall benefits of increasing patient assistance program at a student-run free clinic, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Solis J, Dennis J, March 9-13, 2020, An interdisciplinary and multi-departmental study of patient’s no-shows, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Sorensen G, Hess A, Cooper C, Hope B, Hope L, Wagner C, O'Banion S, Kesey J, Griswold J, March 9-13, 2020, Tube feeding through surgery, impact on glucose control in burn patients, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Stanley R, Erickstad A, deRiese C, March 9-13, 2020, Pilot study: Investigating oral agents for urine staining to facilitate intraoperative observation of ureteral jets, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Swinney S, Hollands C, March 9-13, 2020, Retrospective analysis of open and laparoscopic gastrostomy tube placement outcomes in neonatal intensive care unit, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Uke N, Griswold J, Singh S, Sorensen G, Payberah E, Terziyski I, March 9-13, 2020, The ideal donor site dressing: A comparison of the Chitosan Dressing Opticell to traditional dressings, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Van-Spronsen N, Sorensen G, Frost J, Howell J, Ayala D, Almekdash H, Keesari R, Kesey J, Griswold J. December 6, 2019 “Retrospective Pilot Study to Examine Potential Predictors of a Standardized Scoring System for Smoke Inhalation Injury” Southern Region Burn Conference, San Antonio, TX *and* March 18, 2020, American Burn Association Annual Meeting, Orlando, FL (*virtual*)

Wakil A, Fleming D, Schneider R, Fell C, Cueva A, Choate L, Yates R, Bugarel M, Loneragan G, Rumbaugh K, March 9-13, 2020, Sources and genomic similarity of *Pseudomonas aeruginosa* in the hospital environment, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

Wargo, L., Burris, J., Hall, B. & Whitaker, M, October, 2019 An evaluation of the effects of an early language intervention, Wee Read Club+, on speech and language outcomes among toddlers, with and without autism, and their caregivers. Oral presentation at Burkhart Center at TTU Research Symposium, Lubbock, TX

Weaver A, Kellar K, Miers W, Butler R, Ashcraft A, Woolridge A, Dasaraju A, Chappa J, Ferguson M, Brindley G, Watkins P, Zumwalt M, October 25, 2019, Gender and ethnic differences in seeking healthcare plus time of recovery from procedures for shoulder and knee conditions, Laura W. Bush Institute for Women's Health. Gender-Specific Medicine & Women's Health Symposium, Texas Tech University Health Sciences Center, Lubbock, TX

Weaver P, Smith LA, deRiese WT, March 9-13, 2020, Possible implications of changes in peripheral zone based on prostate size in prostate cancer, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week

West A, Platner E, Flores G, Schlabritz-Lutsevich N, Brown E, October 25, 2019, Measurement of student behavior changes after an abbreviated comprehensive sex education curriculum, Laura W. Bush Institute for Women's Health. Gender-Specific Medicine & Women's Health Symposium, Texas Tech University Health Sciences Center, Lubbock, TX

Wu W, Chandrahas S, Garcia K, Ibrahim Y, Chavez M, March 9-13, 2020, Predictors of USMLE step 1 score, Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences, 32nd Student Research Week