



DHRHealth
Institute for Research
and Development

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December 2021

THE RESEARCH SPECTATOR

Use of Clinical Research as a Tool to Impact Public Health Crisis in the Valley

A Two-day Research Conference Organized by the DHR Health Institute for Research & Development



DHR Health Institute for Research and Development in partnership with Region One Education Service Center organized a two-day Research Conference entitled: Clinical Research and its Impact on Public Health Crisis. Over 370 selected students, teachers, parents, and administrative staff from GEAR UP College Ready and GEAR UP College Now programs attended this event. The Research Conference was held on November 17-18, 2021, in the Edinburg Conference Center at Renaissance.

“The primary objective of this event was to highlight the burgeoning public health crisis in the region and to underscore the importance of medical research and science education as tools to mitigate the same” said Sohail Rao, MD, MA, DPhil, President & CEO, DHR Health Institute for Research & Development. “Emphasis was also placed on the importance of increasing the involvement of people of Hispanic ethnicity in clinical research.”

In addition to emphasizing the importance of clinical research in South Texas, speakers also discussed the higher than anticipated incidence of diseases in this region which included diabetes, obesity, various types of cancers, liver disorders, COVID-19, and trauma. Physicians, investigators, and researchers who participated in this event were experts in their discipline which fostered an environment of healthy and mutually beneficial discussion between the participants and the presenters.

“The event was extremely insightful for the students, and relevant to the health concerns that they see their family members struggle with daily” said Nicole Saenz, Director GEAR UP College Ready. “The GEAR UP program is excited about the opportunity to partner with DHR Health Institute for Research & Development in developing the next generation of Health Science professionals.”

This was first such event in the Rio Grande Valley where selected high school students in the GEAR UP College Ready and the GEAR UP College Now programs were actively engaged in a conversation about the prevailing public health crisis in the region and the important role, they can play in mitigating the same. For students, this Research Conference was a unique opportunity to be empowered and to learn about the importance of clinical research and the acute need for greater involvement of people of Hispanic ethnicity in managing their own healthcare needs.

Research Opportunity for Investigators

DHR Health Institute for Research and Development Biobank

The DHR Health Institute for Research and Development Biobank was established to create an extensive collection of biospecimens and corresponding clinical data that can be used by investigators to further the science of medicine. Biobank is the collection of bodily fluids and tissue along with clinical data to help scientists improve the understanding of health and disease.



Recent efforts in the fight against diseases such as cancer, autoimmune disorders (e.g arthritis), infectious disease, and heart disease have produced clear evidence that not all diseases behave in the same manner and that patients have individualized responses to the treatments they receive.

Recent advances in understanding the molecular and cellular pathology of many diseases have resulted in direct benefit to today's patients. The translational research studies that have led to these advances relied on an integrated model of clinical and non-clinical laboratory investigations based on the analysis of human biospecimens that lead directly to drug discovery, drug validation, novel diagnostic tests, and prognostic biomarker discovery.

Biomarker is a term often used to refer to a characteristic biological property like a protein or gene that can be detected and measured in parts of the body like the blood or tissue whose concentration reflects the presence or severity of some disease state. More specifically, a biomarker indicates a change in expression or state of a protein that correlates with the risk or progression of a disease, or with the susceptibility of the disease to a given treatment. Identifying molecular parameters or biomarkers will not only guide which type of treatment a patient will receive but also help to define the most important targets for which new medications should be developed for clinical care.

Cont. on pg. 5

AWARENESS CORNER

Handwashing Awareness:

The years 2020 and 2021 have brought special attention to personal hygiene and precautions that can be taken to help prevent the spread of germs. In addition to the COVID-19 pandemic, the start of flu season is an additional motivator that has people washing their hands more than ever.

According to the U.S. Centers for Disease Control and Prevention (CDC) handwashing is one of the best ways to prevent the spread of germs as well as stop respiratory and bacterial infections. Germs can spread when you:

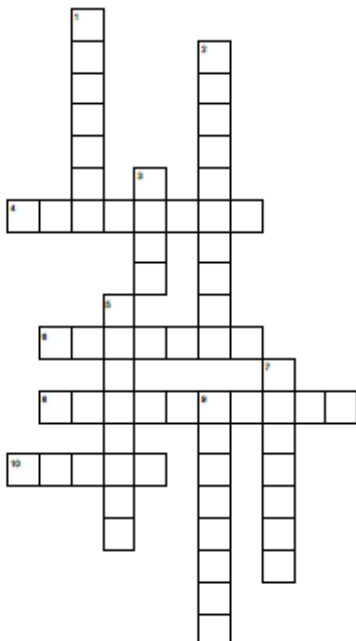
- ◆ Touch your eyes, nose and mouth with unwashed hands.
- ◆ Prepare or consume food and drinks with unwashed hands.
- ◆ Touch contaminated surfaces or objects.
- ◆ Blow your nose, cough or sneeze into your hands then touch other people's hands or belongings.

And many more scenarios! It's recommended that when you wash your hands use soap and clean running water for **at least 20 seconds**. Work up a good lather and clean the back of the hands, between the fingers and under the nails. Dry your hands using a clean towel. When soap and running water are not available, a hand sanitizer with at least 60 percent alcohol can also help in reducing illness and the spread of germs.

It's easy to become lax about washing your hands. But taking the time to stop and wash your hands frequently throughout the day, can help protect yourself and others. Stay safe and remember to wash your hands!



Merry Research



Down:

1. Material such as urine, blood, tissue, cells, DNA, RNA, or protein
2. Process of gathering biospecimens
3. Information collected for reference or analysis
5. The study and treatment of tumors
7. A large collection of biological or medical data and tissue samples, amassed for research purposes
9. The transport of samples

Across:

4. Systematic investigation in order to establish facts and reach new conclusions
6. Communication between a patient and physician results in the patient's authorization or agreement to undergo a specific medical intervention
8. A process done to a sample to prepare it for testing
10. Red sample collected for biobanking

**Crossword Answer
Key on page 6!**

DHRH-IRD GIVES THANKS!!!

DHR Health Institute for Research and Development held their annual Thanksgiving pot-luck luncheon on November 22. The team is thankful to everyone that was able to come out and join us in giving thanks.



Master Research Affiliation Agreement

DHR Health Institute for Research & Development has signed a master research affiliation agreement with the University of Houston. Under this agreement, faculty and students in various colleges and schools at the University of Houston will be able to collaborate with clinical investigators at the DHR Health Institute for Research and Development to participate in translational and clinical research in the areas of cancer, liver diseases, infectious diseases, diabetes, obesity, neurological disorders (including stroke), cardiovascular disorders, trauma and many other disciplines.



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New Additions to the DHR Health Institute for Research and Development Team



Luis Cantu Jr.
*Clinical Research
Coordinator—Infectious
Disease*



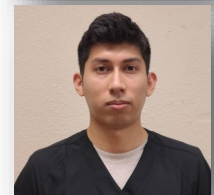
Kayllie A. Lomeli
*Clinical Research
Coordinator—Cardiology*



Lisa M. Reyna
*Clinical Research
Contract Manager*



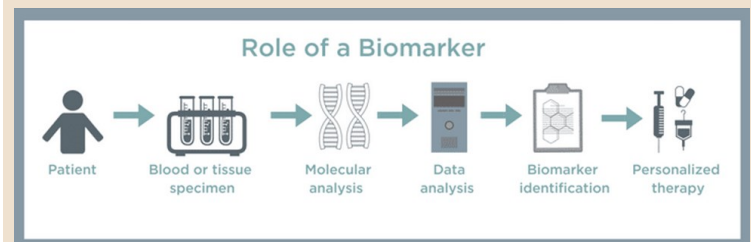
Gregory A. Pequeno
Trauma Data Analyst



Carlos D. Arroyo
*Clinical Research
Intern*

Biobank—Continued from Page 2

For acute and chronic diseases, accurate diagnosis is particularly important, especially when strong side effects are expected from the treatment. In these cases, biomarkers are becoming more and more important, because they can confirm a difficult diagnosis or even make it possible in the first place. They also help to identify high-risk individuals, reliably and in a timely manner, so that they can be treated earlier before the disease advances. The benefits of molecular biomarker research are invaluable in the detection, diagnosis and treatment of disease.



These biomarkers are obtained from samples of bodily fluid or tissue and are stored in the DHR Health Institute for Research and Development Biobank. Additionally, clinical data such as medical history, disease details, and treatment history are linked to the samples in the biobank so that researchers can identify ways to better treat patients in the Rio Grande Valley.

Biobanks are life-saving institutions that allow researchers and scientists to study and eradicate disease. To date, the samples collected by the DHR Health Biobank Research Team have gone a long way in advancing basic and translational research including cancer drug discovery, recurrent breast cancer detection techniques, COVID-19 diagnostic tests and COVID-19 vaccine discovery.



DHR Proceedings is one of the premier peer-reviewed health sciences journals in general and specialty medicine. It is the first such scientific journal to be published in the Rio Grande Valley. DHR Proceedings is sponsored by DHR Health Institute for Research & Development and invites submission from authors in the region and worldwide.

DHR Proceedings can be accessed at: <https://dhrproceedings.org/index.php/DHRP/index>

DHR Proceedings is currently welcoming submissions for a projected publication date in the spring of 2022.

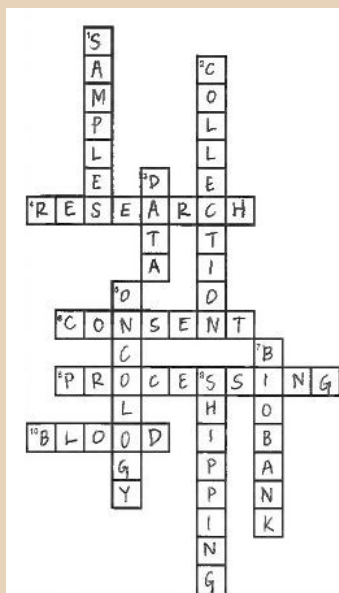
Education Station: Considerations for Records Based Research



In records-based research, commonly known as Retrospective Research, hypotheses can be made and answered by reviewing previously recorded information without interacting with any human subjects. This is often still considered human subjects research and as such there are risks involved that researchers need to be aware of such as possible invasions of privacy and breaches of confidentiality. **Privacy** can be defined as having control over the extent, timing, and circumstances of sharing oneself or information about oneself with others. **Confidentiality** pertains to the actual handling of the personal information once it is obtained. Researchers have an ethical and regulatory responsibility to minimize risks to human subjects. In order to minimize these risks, one approach is to (whenever possible) utilize only de-identified or anonymous information. When developing retrospective research protocols, researchers should keep in mind the need to: obtain all required approvals before conducting research; and balance the possible benefits of answering important research questions vs. the possible risks of using individuals records.

For more information please contact the Office of Human Research Protection Program at 956-362-2379 or amb.ibarra@dhr-rgv.com.

Crossword Answer Key!!!



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Investigator Spotlight: Dr. Lee Drinkard



Lee C. Drinkard, M.D., F.A.C.P. is a Fellow of The American College of Physicians and board-certified by the American Board of Internal Medicine in hematology and medical oncology. Dr. Drinkard treats all cancers including

hematological disorders and benign disease. Dr. Drinkard received his medical degree from West Virginia University School of Medicine in Morgantown, West Virginia. He completed his internship and Internal Medicine residency at George Washington University Medical Center located in Washington, D.C., and his fellowship in Hematology and Medical Oncology at the University of Chicago Medical Center in Chicago, Illinois. Dr. Drinkard has also served as a Biologist at the National Institute of Health located in Bethesda, Maryland. In addition to his medical career, he is a member of several medical societies, has authored numerous publications in medical oncology and actively participates in many national clinical trials involving new cancer drug treatments.

Research Team Spotlight: Odalys Salinas



Meet Odalys Salinas. She serves as a Clinical Coordinator for studies in the Border Biorepository at DHR Health Institute for Research and Development.

Her prior experience includes being a Murchison Research fellow at Trinity University in San Antonio, a Medical Assistant at Texas Oncology, and a Clinical Surgery Coordinator at the Orthopedic Institute at Renaissance. Odalys is bilingual and enjoys camping, hiking, kayaking, and painting in her free time.



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