



HEALTH CAREERS INSTITUTE 2021 REPORT

 The Future is Bright!



EXECUTIVE DIRECTOR LETTER

After a long year overshadowed by COVID-19, the 2021 Health Careers Institute was a welcome chance to safely come together to re-connect with regional students interested in health careers. I would like to thank everyone who was involved in the Institute; the event was truly a team effort and its success was a result of the many wonderful people who made it happen. Because of concerns about COVID-19, the Institute was smaller this year with 18 incredible students from counties in Southwest Colorado. We followed every precaution to make sure that everyone involved was safe: checking vaccine cards, conducting COVID testing, masking for all indoor activities, practicing social distancing during activities and in the dorms by giving each student a single room, and monitoring for symptoms throughout our four days together. The students involved not only learned about healthcare professions but also developed meaningful relationships and gained knowledge and skills related to health and healthy behaviors. This Institute, part of our larger health careers pipeline activities, was the first step for many students toward their goals of working in healthcare. I was so impressed by the maturity, engagement and curiosity of this group of students.

The enthusiastic participation of our local healthcare professionals was an inspiration for our students and further reinforced their commitment to the healthcare field. I am so grateful for both the skills that they taught and the experiences that they shared. Our volunteers brought healthcare to life and personified the dedication, compassion, and hard work that characterize the profession. Thank you to everyone who participated in demonstrations, presentations, and health career stations! Your impact was immeasurable.

The faculty, food service staff, and Residence Life/Conference staff at Fort Lewis College were also responsible for the success of the Institute. Their professionalism and friendliness enriched everyone's days while on campus. You are all appreciated! A special thank-you to Greg Weiss whose support literally made this event happen.

I also want to thank SWCAHEC's dedicated staff, the incredible TRIO staff from Fort Lewis College and, most importantly, our financial sponsors. Because of you, eighteen high-school students from across Southwest Colorado were introduced to various health career opportunities and are setting their sights on a career in healthcare. The future of healthcare in our Southwestern Colorado communities is bright!

Warm Regards,

Kate Hartzell

EXECUTIVE DIRECTOR OF SWCAHEC

DAY ONE



Intro to Health Careers

Trainings: Introduction Opioid Education and Naloxone Training

Jessica Eady, from the Colorado Consortium for Prescription Drug Abuse Prevention, gave a presentation about opioids, substance use disorder, and overdose risks and recognition. She also trained students in Naloxone administration to save a life during an opioid overdose. Jessica's knowledge of substance abuse prevention and related state programming introduced students to this important topic that has impacted our region.

Public Health Careers and Disease Detectives: A COVID19 Epidemiology Simulation

Students were introduced to infectious disease pathology, epidemiology, and public health careers during this presentation and disease simulation done by SWCAHEC staff. After discussing infectious disease pathogens, methods of disease transmission, and how epidemiology teaches us about the effects of disease on populations, students simulated a disease outbreak and explored how contact tracing could help identify both exposures and protective measures against disease.

Indigenous Food Insecurity: History and Culture in Indigenous Food Systems

Social Determinants of Health impact the health of community members and food insecurity is the most prevalent social need in Southwest Colorado. Chelsie Begoodly, SWCAHEC Community Programs Associate, discussed food insecurity with students, focusing on the impact of food insecurity on members of tribal nations in the region. Chelsie's presentation demonstrated the relationship between current food practices and historical trauma and revealed the positive health effect of traditional diets. This discussion allowed students to experience the relationship between culture and health, including current programming that returns to traditional foods to decrease chronic disease and increase the overall wellness of tribal communities.



DAY TWO

"The EMS presentations were exciting! I think I would be good at the quick thinking needed for emergency services and I am going to try to begin my EMT certification."



EMS Visits: EMTs/Paramedics, Durango Fire and Rescue, Flight for Life

Many of the Institute students were interested in EMS and Sunday was an opportunity to discover the different avenues to work in healthcare roles related to emergency services. EMTs from Durango Fire and Rescue and Paramedics and Nurses from the Durango Flight for Life team came and discussed their jobs, their training, and other unique aspects of their work including lifestyle, working in teams, resources for their mental wellness, and the challenges that they face. The conversations were an honest look into the lives of our local EMS workforce and inspired all of the students to consider these vital community-based occupations.



DAY TWO



Anatomy in Clay, Forearm Anatomy and Pathology and Healthcare Skills Workshop

The Anatomy in Clay program introduces students to the science of anatomy using skeleton models and clay. Students built out anatomical features, allowing them to see muscles and organs in a comprehensive way and illustrating the relationships between form and function. Students built out some of the major muscles and vessels of the forearm, and discussed pathologies including carpal tunnel syndrome and related treatments. We also discussed different health care professionals involved in delivering care like orthopedic surgeons, phlebotomists, and physical therapists.



Culture and Health: Native American Cultural Awareness

SWCAHEC staff explored the role that culture plays in healthcare and how history and culture have impacted the treatment of Native Americans in healthcare settings. Imo Succo, MSW, discussed distinct Navajo cultural beliefs and practices that were important for healthcare providers to understand. She also shared her own experiences with healthcare and suggested ways that providers can and should account for the role that culture plays in understanding overall health.



DAY THREE

The Science of Ophthalmology: Eye Surgery, Eye Care, and a Pathway to Being an MD



John Brach MD, an ophthalmologist from Four Corners Eyecare in Durango, talked about his path to medicine and what he does as an ophthalmologist. His personal story about how he became a doctor included anecdotes that were relatable and he encouraged students to see their journeys to whatever career they choose as meaningful. Dr. Brach also shared a video of eye surgery, highlighting eye anatomy and the technical side of eye care. Students were intrigued by the mechanics of ophthalmology and several students felt that the demonstration illustrated how they could use their interest in physics and engineering to increase health.

Colorado State Extension Office: Modeling a Community Nutrition Presentation and Being an RD

Nicole Clark RD, a Family and Consumer Science Agent with the Colorado State University Extension, modeled a community nutrition demonstration for students. Her presentation revealed how to engage community members to understand the role that nutrition plays in their health and to make decisions that will increase wellness and prevent disease. Nicole discussed the role of the Registered Dietician and highlighted how her decisions about her education led her to her career.



DAY THREE



FLC Lab Experiences: Cancer Lab/Forensics Lab and Stations with FLC Faculty in the Health Sciences Department

Health Careers Institute students spent a morning and afternoon with faculty from the Health Sciences, Biology and Anthropology Departments at Fort Lewis College.

Dr. Shere Byrd, a professor of Biology, discussed health science research as an important contribution to the healthcare field and as a great option for students interested in biology and research who may not necessarily want to work directly with patients. She facilitated a discussion with students about the biologic process of cell division, what happens to cause cancer and other diseases, and the kinds of questions research could help answer. Shere talked about the cancer research she coordinates at her lab that includes experiments of exposing cancer cells to certain cancer treatment drugs. She demonstrated this to students by allowing them to view the cancer cells through a fluorescent microscope before and after exposure to the drug. She also added that a strong understanding of biology is a great foundation for all health professions and research is great experience for your resume and medical school or other graduate school applications.

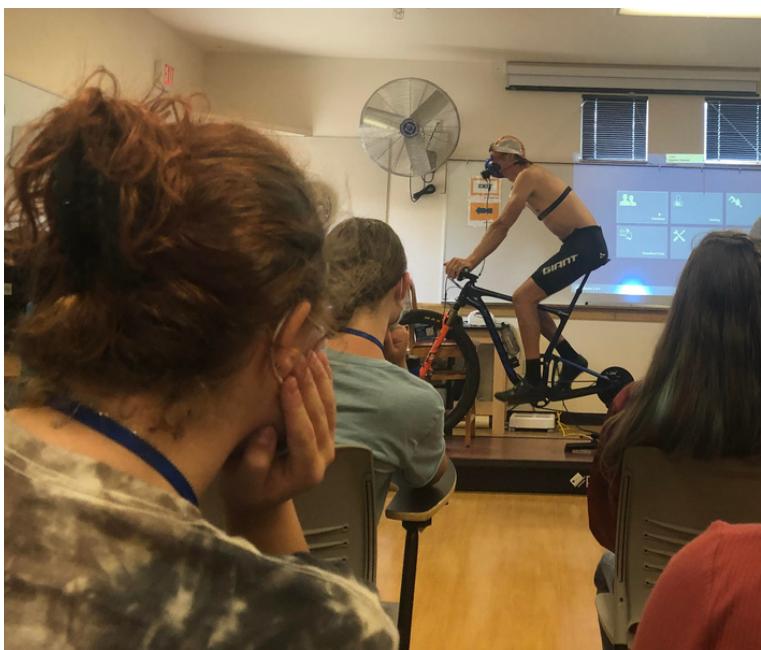
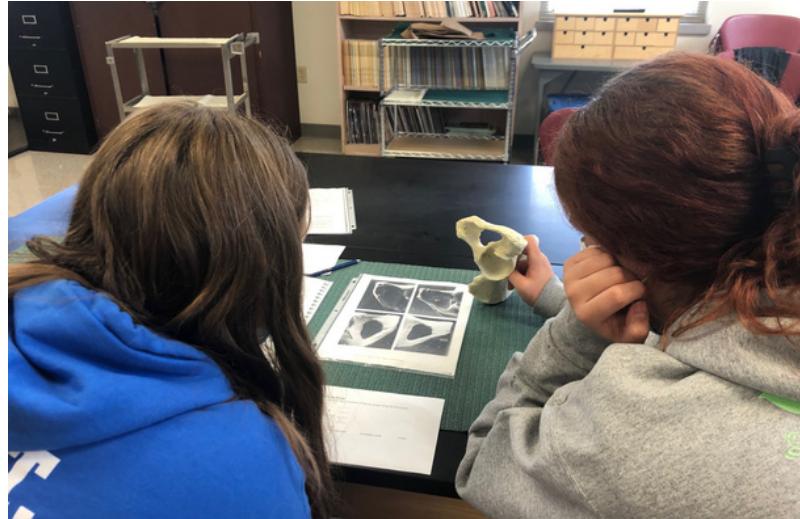
Dr. Dawn Mulhearn led students through a forensics exercise, challenging them to identify the age, gender, and other characteristics of subjects based on models of skeletal remains. Dr. Mulhearn's lesson introduced students to the science of forensics, the scientific process of observation and reasoning, and to the subtleties of human skeletal anatomy. The questions posed by the exercise were difficult, but students were inspired by both the mystery that skeletal remains pose and the process that answers so many questions in criminal investigations.

Students learned about the relationship between exercise physiology, psychology, nutrition and health promotion from the Health Sciences faculty. Students were able to observe a demonstration of VO₂ Max testing and participated in a discussion about both the science of the testing and results as well as the relationship between these concepts and overall wellness. Dr. Melissa Maloney and Rotem Ishay used the combination of technology and science concepts to make the demonstration challenging and engaging for the students. Stephen Davoss, a local accomplished mountain biker, was the test subject whose participation in the testing allowed students to understand the body's response to maximal physical effort.

Dr. Susumu Iwasaki discussed how our psychology can impact our sports performance and our overall health. Using heart rate monitors, Dr. Iwasaki explored how certain experiences can raise our heart rate and lead to stress. He then provided students with breathing techniques that work to lower heart rate and increase performance. Dr. Marnie Clay, professor of Nutrition, led students through a patient case study to introduce them to the role of a registered dietitian and how nutrition interventions can increase health.

DAY THREE ACTIVITIES

"Healthcare professions allow you to help others and also offer options for flexible schedules and a great lifestyle. I would like to begin to explore some trainings that can lead to a career in medicine."



DAY FOUR



Health Career EXPO Stations and Mentor Interviews

Dedicated healthcare professionals shared their technical knowledge, skills, and passion with students during Hands-On Stations. These stations represented a variety of healthcare fields including Nursing, EMT, Dental Hygiene, Physical Therapy, Behavioral Health, and Primary Care. Students learned to suture, give injections, use an AED, clean teeth, and infection control. They also learned about crisis intervention for community mental health incidents, healthy joints and muscles, perioperative care and nursing, fire and rescue, and concepts in behavioral health that can promote mental wellness. The small group interactions allowed students to ask health professionals about their daily job activities, educational training, healthy behaviors, and motivations. These conversations inspired students and provided an opportunity to connect with a mentor in their field of interest.



Institute Reflection and Presentation of Educational Pathways

At the end of the Institute, students were invited to share their reflections on the experience, any revelations about their own journey into a health career, and what they see as first steps after the Institute. Many students were inspired to seek additional opportunities and exposure in their communities that they learned about at the Institute including college credits and trainings at local community colleges, volunteer opportunities, research lab positions, and working with mentors in health-related roles. Students also asked if they could continue with SWCAHEC through school-year programming and at next year's Institute in leadership support roles. Other students volunteered to be SWCAHEC Health Careers Institute ambassadors in their communities to promote the event to future students.

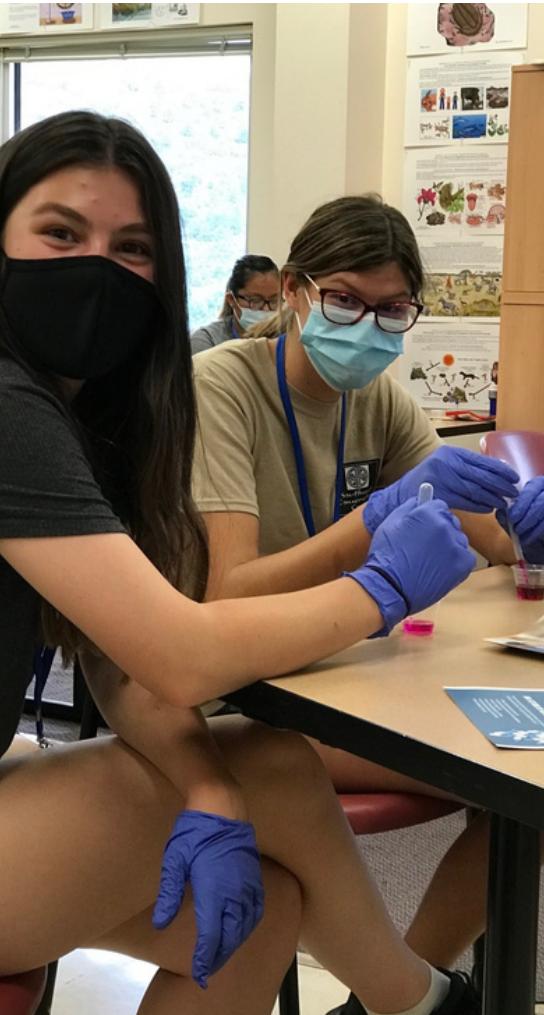
HANDS ON LEARNING



Health Career EXPO Stations and Mentor Interviews:

- *Suturing
- *Injections
- *Mixing
- *CPR
- *Vital Signs
- *Diagnosing
- *Infectious Disease Hygiene
- *Physical Therapy
- *Mental Health / Crisis Team

Healthcare Professionals Mentor Interviews



STUDENT RESILIENCE

SWCAHEC Health Careers Institute 2021 contributes to youth resilience both through student engagement with career preparation and through skill building in community engagement.

As a result of the SWCAHEC Health Careers Institute:

- 80% of students feel a stronger connection to their community
- 90% of students feel like they have choices about their futures
- 90% of students felt that they connected with an adult who believes that they will be a success
- 100% of students felt that they have a purpose in life and goals and objectives for the future

HEALTHY BEHAVIORS

The SWCAHEC Health Careers Institute 2021 reinforced health behaviors both through the example of healthcare providers and through explicit instruction on diet, exercise, and stress reduction.

As a result of the learning at the Institute:

- 75% of students are going to try to eat healthier foods and avoid sweetened drinks
- 70% of students will exercise up to 4 times a week
- 80% of students will try to sleep up to 8 hours a day

HOW MANY HEALTH CAREERS CAN YOU LIST?

Students were asked at the beginning and at the end of camp to list the names of the health careers that they knew. Many campers had some idea about possible health careers but the number that they were able to list was larger after camp. Exposure to the different types of healthcare jobs as well as a deeper understanding of the roles and responsibilities of different jobs led to increased awareness of possible careers in healthcare.

	1-3	5-8	10+	20+
PRE-CAMP	0	4	10	4
POST-CAMP	0	0	2	15

WHAT THE TEENS SAID ABOUT THE HCI CAMP....

"My personal health history has made me interested in a healthcare career. Now I am thinking of being a nutritionist."

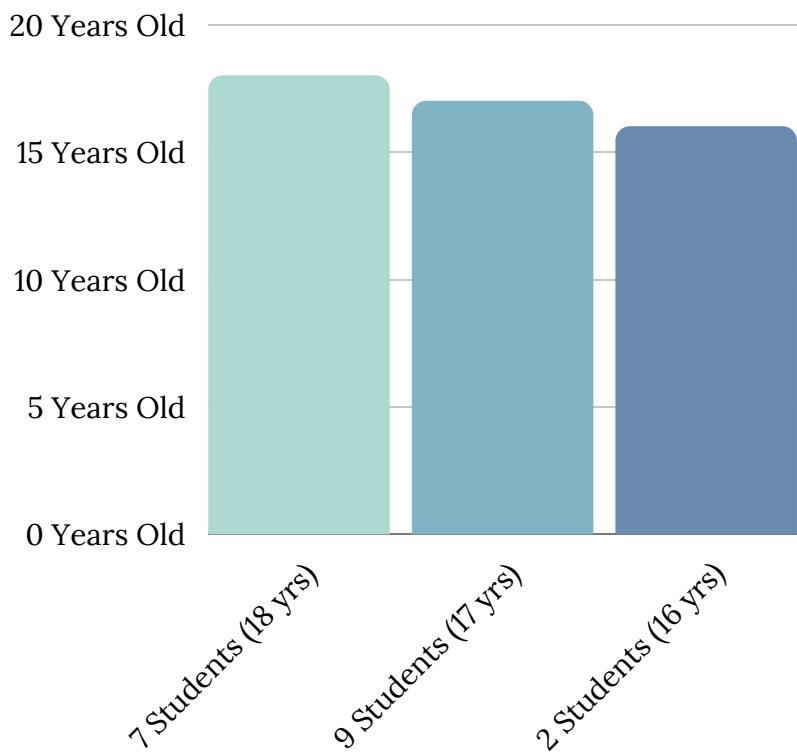
"The COVID-19 pandemic increased my interest in a healthcare career. Now I really want to be a nurse!"

"I thought the presenters at the Institute were really great- even though they all had different jobs- they were all people I look up to!"

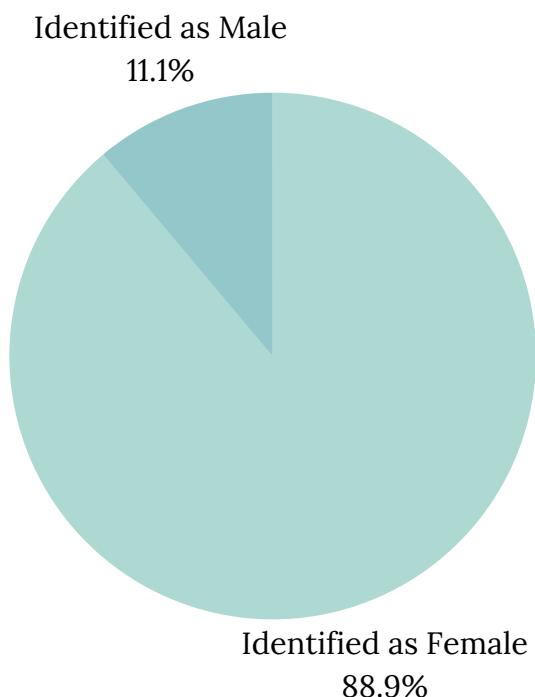
HCI STATS

18 students participated in the Institute

AGE

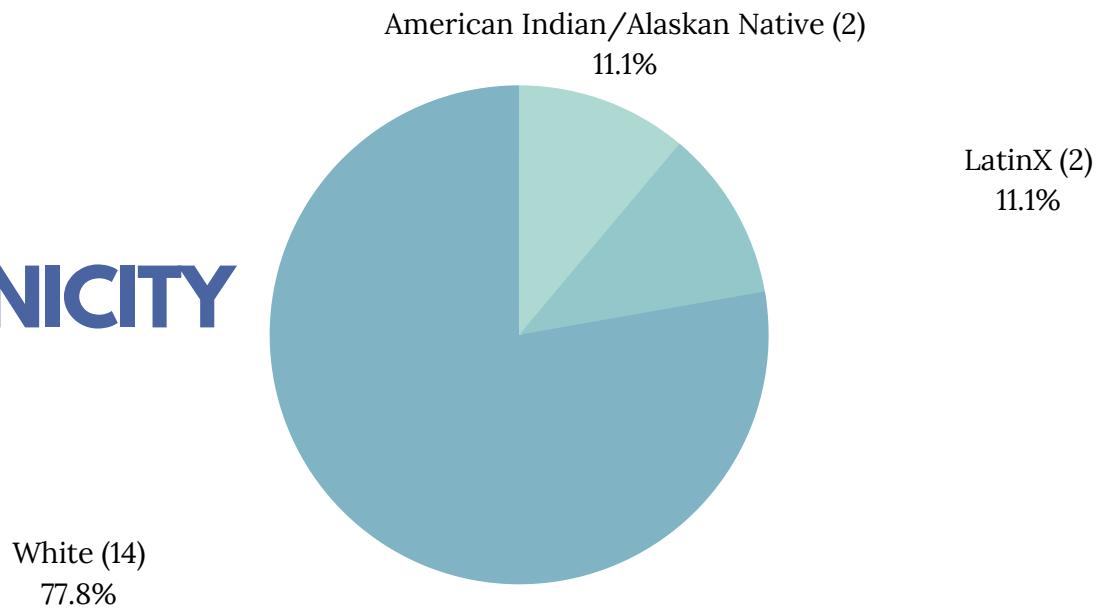


GENDER

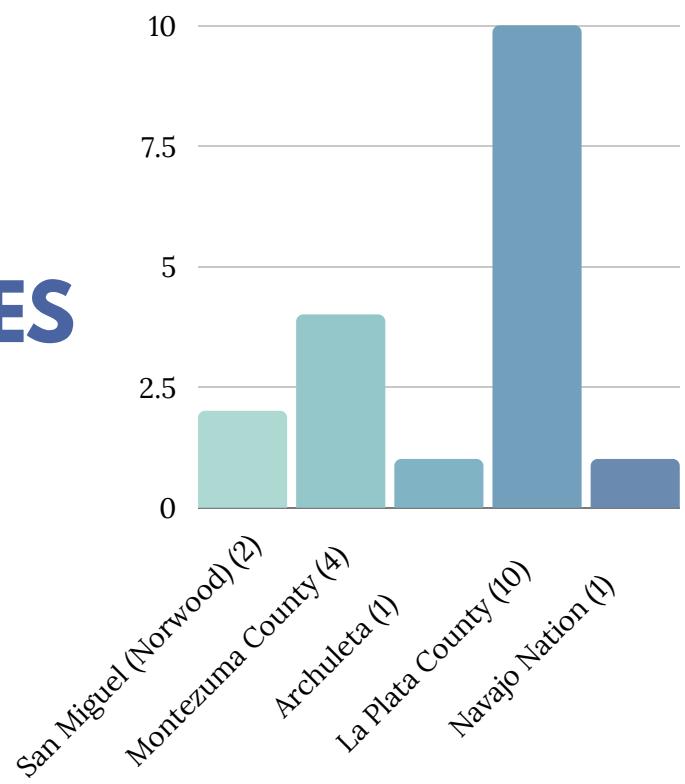


HCI STATS

ETHNICITY



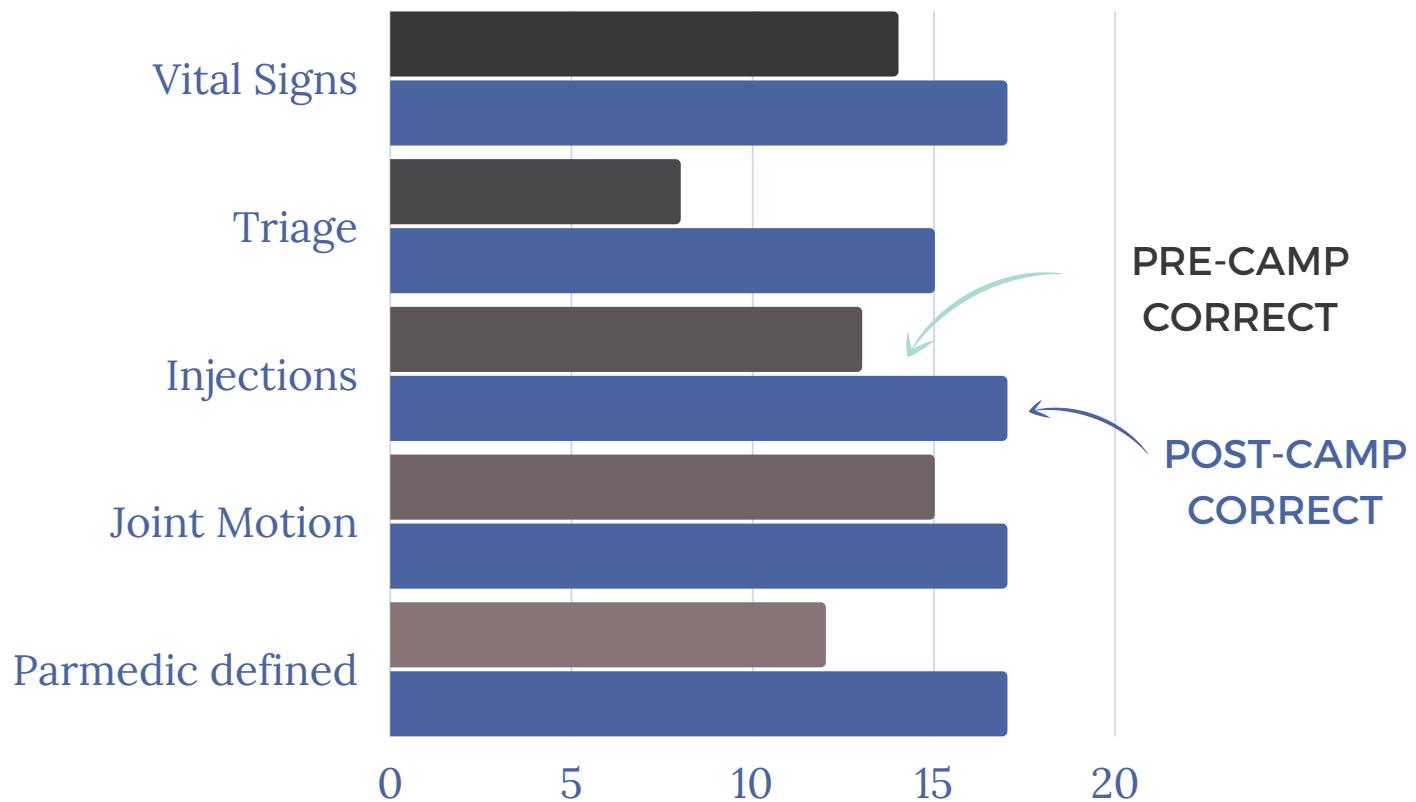
ATTENDEES



18 students were rural, 16 students qualified for free and reduced lunch.

PRE AND POST CAMP MEDICAL QUESTIONNAIRE

By the end of the Institute, 100% of students showed growth in specialized information related to healthcare careers including defining terms like triage, paramedic, and phlebotomy, and listing the steps for both injections and vital signs in a clinical setting.



THANK YOU!

Southwestern Colorado AHEC is committed to creating, enhancing, and maintaining a healthcare workforce uniquely qualified to address the health issues of Southwestern Colorado communities. We could not do this work without the generous support of our sponsors. We are grateful that we are able to partner with innovative and committed organizations and individuals that make an impact everyday by financing and supporting community-based initiatives.

Our success is your success. We deeply appreciate you!



John Brach, MD Four Corners Eye Clinic
Nicole Clark, RD, Colorado State University Extension/La Plata County
Jessica Eaddy, Colorado Consortium for Prescription Drug Abuse Prevention
Travis McGrath, RN and the Mercy Regional Medical Center Flight for Life Team
Tosh Black and Durango Fire and Rescue
Shelley Millsap LCSW and Jodie Miller LCSW Axis Health Systems
Terra Anderson, San Juan Basin Public Health
Christine Richards, DrPT Tomsic Physical Therapy
David M. Greenberg, MD, Northern Navajo Medical Center
Kaylie Smith, Heart Safe La Plata
Susie Tipton, RN MSN Centura Health
Timothy Kitonyi, MPH, Centura Health
Roten Ishtan, Fort Lewis College
Melissa Knight Maloney, PhD, Fort Lewis College
Susumu Iwasaki, PHD, Fort Lewis College
Marnie Clay, PhD, Fort Lewis College, Shere Byrd, PhD, Fort Lewis College
Dawn Mulhearn, PhD, Fort Lewis College
Officer Forrest Kinney and the Durango PD/Axis Health Systems Crisis Team
SWCAHEC Staff: Heather Sorensen, Chelsie Begoodly, Imo Succo, and Kerri Cardin
TRIO Staff: Wendy Allsbrook-Javier, Kelli Brush, and Tilton Dennison
Fort Lewis College Conference and Dining Staff especially Greg Weiss