

An Enrichment Program for High School Students Interested in Careers in Health Care

# October 17, 2019-May 21, 2020 (Every 3rd Thursday)

5:30 - 8 p.m. (Light dinner provided at each class session)

Southern Regional AHEC 1601 Owen Drive (3rd Floor)



## Fayetteville, NC 28304

## (Across from Cape Fear Valley Medical Center)

## Southern Regional AHEC Health Careers

Through the Model State Supported Grant, Southern Regional AHEC (SR-AHEC) provides programs designed to prepare 8<sup>th</sup> -12<sup>th</sup> grade and undergraduate students for careers in the health field. With an emphasis on students who are historically underrepresented (minorities, economically and/or educationally disadvantaged, etc.), it is the goal of the NC AHEC program to improve the distribution and retention of health care professionals in the state.

## **Program Description**

Teaching Excellence for A Career in Health (TEACH) is a nine-month pre-professional health enrichment program for high school students in grades 8 through 12. The ultimate goal of TEACH is to serve as an integral component in the North Carolina health education pipeline and to make a significant impact on the number of underrepresented students entering health fields in the region.

## **Eligibility Requirements**

In order to be eligible to participate, students must meet the following criteria:

- Reside in: Bladen, Cumberland, Harnett, Hoke, Moore, Richmond, Robeson, Sampson, or Scotland county;
- Be enrolled in grades 8 through 12;
- Maintain at least a 3.0 GPA;
- Receive a referral from an academic teacher or guidance counselor; and have an interest in learning more about health careers.

## Activities

TEACH activities include:

- Health science education workshops consisting of lectures emphasizing human anatomy and physiology, information on diseases that affect minority populations, disease treatment and behavior modifications for disease prevention, and hands-on instructions for monitoring body vital signs;
- Health awareness and professional development seminars featuring health career speakers emphasizing awareness of multiculturalism, health disparities, professional health careers, and education programs, and the financial aid and admissions application process to facilitate entry into college;
- Career field trips to educational institutions offering health education programs in North Carolina; and
- Collaboration with summer pipeline education enrichment programs such as the oneweek summer residential program for high school students in grades 8 through 12.



## Agenda-Activities subject to change, due to specimen availability

September 2	<u>019</u>
Topic:	Cell Membranes
Objectives:	Investigate the structure of the cell membrane
	Identify the role of the cell membrane in osmosis in reference to maintaining a homeostatic conditions for life
Activity(s):	Students will read a horror story about blood cells and osmosis to engage them into the lesson on cell membranes. Students would then use the properties of soap to investigate the characteristics of membranes and their interactions with proteins and carbohydrates. Students will construct a cell membrane using candy in conclusion.
November 20	
Topic:	Heart
Objectives: Activity(s):	Understand and identify the anatomy and physiology of the heart. Students will race their heart in efforts to try and emulate the production of blood that is pumped per minute in the body. Students will then identify the regions of a heart internally and externally via a pig heart dissection.
December 20	
Topic:	Proteins
Objectives:	Understand the functional properties of proteins to specifically include Hemoglobin. Analyze the markers present in blood for identification.
Activity(s):	Students will identify properties of blood utilizing the cup challenge in groups. Students will then perform a forensics based blood typing investigation utilizing artificial blood with known and unknown samples. Students will wrap up the activity with a blood trivia contest via kahoot.
January & Fe	ebruary 2020
Topic:	Animal Behavior & Brain Function/Sheep Brain Kit
Objectives: Activity(s):	Analyze how the body responds to stimuli and how it correlates to brain function Students will examine how an earthworm responds to various stimuli to include light, water, base, & caffeine. Students would then compare its reaction to the human body
Topic:	Brain Function – Left vs. Right
Objectives:	Identify the anatomical regions of the brain. Understand the functions of the left brain vs the right brain
Activity(s):	Students will participate in a large scale left/right brain group line activity to introduce the topic. Students will then perform a sheep brain dissection to examine the brain externally and internally.
<u> March 2020</u>	
Topic:	Bones, Wraps, & Casts
Objectives:	Understand the role of a sports therapist in understanding bones and articulations in efforts to address various sports injuries.
Activity(s):	Students will work in teams to complete a puzzle challenge to learn about the bones and muscles most injured. Students will then practice wrapping wrists, arms, and ankles utilizing ace bandages. Once mastered, students will practice putting on a cast on their partner.

#### <u>April 2020</u>

Topic: Crime Scene Investigation/ Footwear Identification and casting kit

- Objectives: Students will analyze a crime scene for evidence of the cause of death of a victim. Determine the perpetrator of the crime.
- Activity(s): Students will be provided with tools from an interactive group project, "The mystery of the blood stain"

#### <u>May 2020</u>

Topic: Suturing

Objectives: Identify different types of wounds. Understand how and when to apply a suture.

Activity(s): Students will practice making sutures using a large assimilation board and then they would practice by suturing both fruit and chicken.

#### Doctor for a Day

- Topic: Summary of program
- Objectives: Final class will be comprehensive. Exam given
- Activity(s): Students will take a patient's medical record to discover what disorder or disease they are suffering from. The students will then become the medical professionals that will diagnose and treat the patient. They will present as if they are the actual medical and professional team.

#### TEACH College Enrichment Outings

- Topic: Health Careers on the Hill Day
- Campbell University HUMP Day (Helping students Understand the Medical Profession) Objectives: Two outings per year Fall and Spring. This event is sponsored by the North Carolina Health Careers Access Program.
  - Activity(s):Health Careers Day on the "the Hill" will feature sessions facilitated by Faculty, and<br/>Health Professional Students representing the following Schools/Departments:<br/>NC-HCAP<br/>UNC School of Dentistry<br/>UNC Eshelman School of Pharmacy<br/>UNC Gilling's School of Global Public Health<br/>NursingBio-manufacturing Research<br/>Physician Assistant<br/>Allied Health<br/>Nursing

Additionally, The UNC Office of Undergraduate Admissions will speak about the UNC Undergraduate Admission process and provide campus tours.

#### Fee

\$115 per student; Registration must be received by September 16, 2019. You may submit the fee in two payments of \$57.50. Student will receive souvenir t-shirts and book bags. Students will also be registered for the Passport to Health Care program as well as Youth Health Service Corporation Presidential Award program

### Credit

Participants who attend 100% of the program will receive a certificate upon completion, which is recognized by the University of North Carolina College System.

## **Registration Form**



Phone: (910) 678-7201 Fax: (910) 323-0674 Email: Tonya.Burney@sr-ahec.org (If paying by credit card, you may fax or email your registration)
Mail: SR-AHEC, Attention Health Careers, 1601 Owen Drive, Fayetteville, NC 28304

#### STUDENT:

First Name	Las	st Name		
liddle initial DOB Month/Day/Year//				
Gender: $\Box$ Male $\Box$ Female				
Race/Ethnicity:  American Indian  Alaskan Asian (specify)  Black/				
American 🗆 Hispanic/Lati	no 🗆 Native Hawaiia	an/Pacific Islander 🗆 V	White/Caucasian ⊐Multiracial	
Name of School		Currer	nt Grade	
Expected Grad. Date	Health	Careers Interest(s)		
Home Address		City		
State Zip	Phone	E-mail		
PARENT/GUARDIAN:				
Name		Phone _		
Alt. Phone	E-mail			
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Fee paid by: 
Check Enclosed Payable to SR-AHEC 
VISA 
Mastercard 
Card# \_\_\_\_\_\_ Exp. Date \_\_\_\_/\_\_\_

Name on Card \_\_\_\_\_\_ Signature \_\_\_\_\_

## Substitutes/Refunds/Transfers

Participants who register for the program and are not able to attend, may:

•Send a qualified substitute; or

 $\cdot$  Cancel 48 business hours before the program and receive a voucher for 100% of the registration fee for use at a future SR-AHEC program.

Tonya Burney, SR-AHEC Director of Health Careers (910) 678-7201 / Tonya.Burney@sr-ahec.org