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## Northeast Missouri High School Students Learn About Cardiovascular and Gastrointestinal Systems through NEMO AHEC's Medical Exploration in Science and Anatomy Program

Currently, heart disease accounts for 15,000 deaths in Missouri per year, making it the largest cause of mortality. Meanwhile, there has been enormous progress in cardiovascular care and treatment. However, one reason for high rates of death is that access to care is limited. For example, there are currently about 721 cardiologists (1 per about 8000 Missourians) and 327 primary care HPSA designations (i.e., shortage in healthcare workforce supply by geographic area) in Missouri. Three quarters of primary care HPSAs are in rural areas. To ensure a strong pipeline from Missouri middle and high schools to health professional schools in Missouri, MAHEC provides guided dissection of various specimens focused on different body systems, like the cardiovascular system.

NEMO AHEC organizes Medical Exploration in Science and Anatomy (MESA) dissection opportunities for Northeast Missouri high school students every year. This gives rural high school students the opportunity to get one-on-one learning time to ask questions, learn more in-depth about anatomy topics, and explore! Presentations are given about various body systems, followed by a guided dissection of several specimens focusing on that body system. This year, there have been a large variety of MESAs covering multiple body systems, from cardiovascular systems (i.e., heart dissection) to shark dissections focusing on the gastrointestinal system.



Another large aspect of MESA is discussing rural healthcare careers with students. Many high school students working with MESA have expressed intentions to stay in rural Missouri after pursuing a medical degree. This year, NEMO AHEC held three dissection events for high school students. Educators and parents alike brought students to the event, with some attending from across the state.

The events were very well received by students and were praised by educators and parents in attendance for the hands-on, personal, exploratory nature of the MESA program.

**MAHEC is a partnership of seven locally governed organizations and three university-based health professions education programs working statewide to increase the numbers of Missouri youth entering stable, high-paying jobs as healthcare professionals and the numbers of professionals caring for underserved populations.**

### The MAHEC partners include:

- A.T. Still University Kirksville
- University of Missouri-Columbia
- Saint Louis University
- East Central Missouri ECMO AHEC – St. Louis
- Mid-Missouri AHEC – Rolla
- Northeast Missouri NEMO AHEC – Kirksville
- Northwest Missouri NWMO AHEC – St. Joseph
- Southeastern Missouri SEMO AHEC – Poplar Bluff
- Southwestern Missouri SWMO AHEC - Springfield
- West Central Missouri WCMO AHEC – Kansas City

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