

LIFE SCIENCE ACADEMY



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INTRODUCTION TO LSA

The Life Science Academy (LSA) is a high school immersion academy, aimed to introduce students to a wide variety of health care careers and promote a successful future. Through a partnership of Project Lead the Way (PLTW), Owensboro Health, Community Campus, and Owensboro Community and Technical College, the academy is able to jumpstart the education of over 110 regional high school kids. As a rising freshman, students are given the opportunity to apply into the academy and continue through their senior year. All classes are hosted at the OCTC campus and taught by local medical professionals. Life Science Academy provides students advantages in health care education through field trips, guest speakers, and experiments. Students who complete LSA will graduate with 16 college credits from Owensboro Community and Technical College, one step closer to leaving college debt free and entering the workforce.

-Christian Leigh, Carly Kirk, Caleb Rush, Isaac Crabtree, Patrick Edge , Carter Bean

LSA OPENS NEW DOORS

Through the Life Science Academy, students are given many unique opportunities throughout the year and into the summer months. For the past few years, LSA has had many students volunteer in a partnership with Owensboro Health as a VolunTeen. This volunteer opportunity allows



students to spend time learning and serving our local hospital. During the summer of 2017, we had multiple students attend elite summer camps, aimed toward Kentucky's best and brightest students. Of our 2018 graduating class, five (Nia Bard, Naomi Belcher (pictured) Savana Canary, Miranda McCormick (pictured), and Rebekah O'Bryan (pictured)) were selected to attend the Governor's Scholar Program at various college campuses. These students were given the unique opportunity to interact with likeminded students and learn from college professors. We also

had one student (Junior Grace Bush) attend the University of Kentucky AHEC Summer Camp, allowing her the unique opportunity to shadow in the UK hospital. We look forward to seeing what new doors open this year for our LSA students.

-Grace Bush, Miranda McCormick



FOUR YEAR ACADEMY

The Life Science Academy, a four-year program, introduces high school students to the world of medical sciences. This school year, 2017-18, will mark our seventh year. Each class is offered, both morning and afternoon, Monday-Thursday. In addition to the college credit, students also experience an abundance of hands-on learning. Freshman year, Principles of Biomedical Science, introduces students to a fictional murder to learn the basics of biomedical processes through crime investigation. Sophomore year, Human Body Systems, investigates how the different organs work together to help our bodies function properly. Students construct clay organs onto manikins to represent the connections between the body systems. Junior year, Medical Interventions, investigates various interventions such as vaccines and other medications. Students dig into various body systems and treatments of their infections. Senior year, Biomedical Innovation, allows students to use their knowledge obtained throughout LSA to complete personal studies and design innovative solutions for health challenges facing our world.



- Maddi Roberts, Gracie Broughton, Reece Hayden

COLLEGE VISITS

One of the main goals of the Life Science Academy is to prepare students for future careers in the medical or science fields. In order to expose students to the colleges and universities available for their aspiring careers, LSA leaders have planned a variety of college tours exclusively for LSA students. Over the years, we have visited University of Southern Indiana, University of Kentucky, and University of Louisville, among other locations. Each of these experiences have proven to be very informative and helpful for those approaching graduation and life beyond high school. Our sophomores and juniors (pictured) recently visited the University of Southern Indiana (USI). We were able to tour multiple classrooms, tour the campus, and speak with professors and admissions counselors.



-Gracie Cart, Brooklyn Knight, and Keely Shocklee

FAVORITE LABS & EXPERIMENTS

As a part of the hands-on learning experience the Life Science Academy provides, students are exposed to a variety of labs and experiments. Each lab follows the curriculum that classes are currently studying.

For Freshman year, we have done labs that relate to DNA, diabetes, and crime scene evidence. One of our favorite labs is the DNA extraction lab. We had the experience of extracting both DNA from a strawberry and from our saliva, comparing the similarities and differences of each. -Katelynn Huddy, Spencer Sabelhaus and Nolan Cummings



As Sophomores studying the human body systems, we have performed many different labs. This year, the labs that we have enjoyed the most were the dissections of the sheep brain and cow eye. In these labs, we got to study the anatomy of some of the structures responsible for the body's functions.

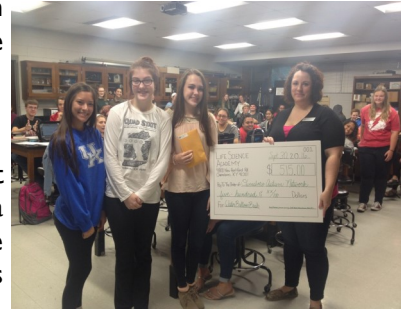
-Danielle Henning, Isabella Henning, Katie Hayden

PROUD TO SERVE OUR COMMUNITY

Community service is an important value of the Life Science Academy. Each year, all students are encouraged to participate in various service opportunities throughout the community.

Water Balloon Bash– Owensboro Autism Network

Our largest service opportunity is a LSA sponsored, Community Benefit project. Students from each grade are paired into groups to create a service project that benefits a need in the Daviess County area, with one group chosen to execute their projects. Past Community Benefit projects include: Wendell Foster Advocates and Hearts at Play for local students. For the 2016-17 year, the Water Balloon Bash benefiting the Owensboro Autism Network was chosen. While inclement weather caused the cancellation of the bash, the Life Science Academy and supporters, were able to raise \$515 for the Owensboro Autism Network and spread awareness to over 1,000 people through social media. -Natalie Ewing, Lynzy Swartz, Lauren Wilkerson



Pictured: Emily Haimes, Mallory Richards Savana Canary, and Desiree Cecil (VP of OAN)
Not Pictured: Grace Bush and Faith Porter



Daniel Pitino Christmas Project

Each year, the Life Science Academy students and staff adopt over a kids from the Angel Tree program at the Daniel Pitino Shelter. Students then work together to provide Christmas gifts for the kids. In December, the students deliver the presents to the Pitino Shelter. -Isaac Crabtree Patrick Edge Caleb Rush, Carter Bean



Audubon Elementary School Fall Festival

A group of Life Science students were invited to volunteer at the Audubon Elementary School family fall festival. The students were asked to prepare experiments to introduce AES students and families to explore. Local families were given the opportunity to learn about a variety of experiments including: elephant toothpaste, DNA extraction, bitter taste test, and a heart dissection. It was an honor to be asked by the school and have the opportunity to give back to our community through science. -Keya Patel, Erin Martin, Brianna Zoglmann, Ashton Payne

EXTRACURRICULAR ACTIVITIES

LSA students are involved in many community activities outside of the classroom including: Beta Club, National Honor Society, Early College, Future Business Leaders of America, church youth groups, Statesmanship Academy, Dance Blue, Spirit Club, Fellowship of Christian Athletes, Academy for Young Leaders, various sport teams, and Early College. Early College is a new program that LSA is proud to be a part of, allowing students to take all OCTC classes and graduate with an associate's degree. We are beyond proud of all that our students do inside and outside of the classroom.

-Parker Bates, David Gerkin, Mallory Richards, Jane Wedding, and Erik Whited



Introducing Mr. Steve Hahus!



Mr. Steve Hahus is the newest addition to the Life Science Academy faculty, beginning the second semester of the 2016-2017 school year. Mr. Hahus retired from Apollo High School where he taught AP biology, microbiology, zoology, human anatomy and physiology, as well as an outdoor education class. He attended Brescia University as well as the University of Arkansas. His background in biology has made him a great fit for the freshman class, Principles of Biomedical Science. We are so glad to have him!



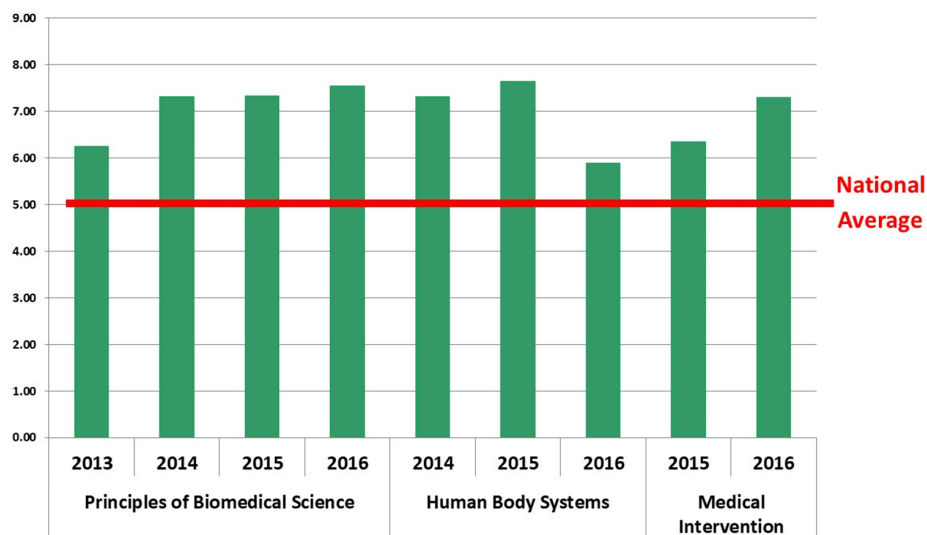
THANK YOU to our Life Science Academy faculty, Community Campus coordinator, Amanda Jerome, high school administration, and all supporters of the academy!

COMMUNITY CAMPUS DIRECTOR, AMANDA JEROME

As Director of Community Campus, I am often asked what Community Campus is, the benefits of joining our programs, and what the requirements are to join. Our programs are rigorous dual credit programs that we offer in partnership with Owensboro Community and Technical College. Our classes are unique hands-on experiences and are designed to help our students begin preparing for their career while in high school. LSA is a Biomedical Science program designed to train the next generation of healthcare professionals. Nearly all of our 110 students, who are currently enrolled in LSA, have aspirations to become physicians, surgeons, dentists, physical therapists, nurses, and so forth. Many of our students will spend several years in college as they prepare for their career and we pride ourselves in knowing that we have a hand in preparing them to do great things in the field of medicine.



END OF COURSE RESULTS



Each year we exceed national assessment scores with consistent scores in the top 20% nationally.

HOW CAN YOU JOIN US?

More information on how to apply can be found at the LSA website, <http://www.lifescienceacademy.net/apply.html> or by contacting your school counselor!

The requirements to be a part of this outstanding program include: a qualifying ACT score (20 composite), completed online LSA application, (open Jan. 15-July 1) and completed OCTC application. Note that you will be required to submit your GPA as a part of the application, so keep your grades up!

-Mason Ebelhar, Claire Fischer, Cassidy Poynter, Emmylou Tidwell