

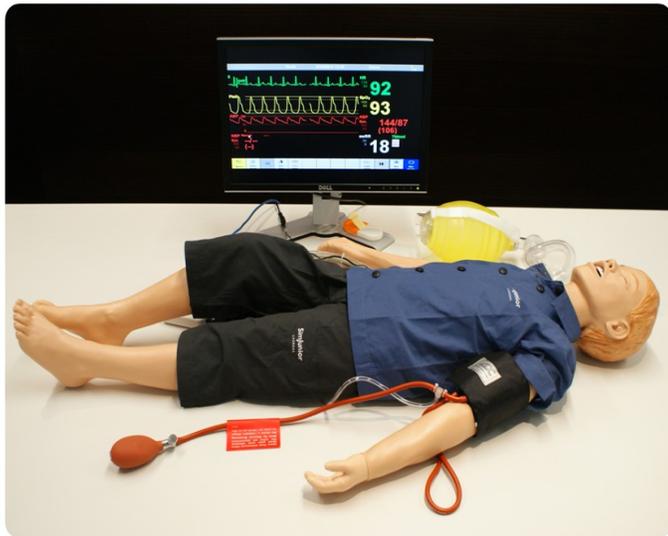
# Seattle Children's Research Institute Science Adventure Lab

*Engaging Families to Enhance Science Learning and Interest  
in STEM careers*

## Summary

The Science Adventure Lab, Seattle Children's mobile science lab has provided authentic hands-on science experiences to more than 20,000 students at 135 schools across Washington state.

The *Engaging Families to Enhance Science Learning and Interest in STEM careers* project is made possible by Science Education Partnership Award (SEPA) funding from the National Institutes of Health (NIH) and includes novel inquiry-based curriculum for students and structured activities for families in the community and at Seattle Children's Research Institute.



**SEPA** SCIENCE EDUCATION  
PARTNERSHIP AWARD  
Supported by the National Institutes of Health



## Project Description

### Activities for Students

- Students in grade four complete two novel, inquiry-based curriculum modules onboard the mobile laboratory.
- Curriculum modules address the cardiovascular system and neuroscience.

**VITAL SIGNS! Monitoring our Body's Systems:** Students learn about how measuring vital signs reveals whether the body is functioning normally. Using the same equipment as scientists and physicians, students measure their heart rate, blood pressure, respiration rate, and temperature.

**SENSE, THINK, MOVE: Exploring Brain Functions:** Students engage in an inquiry-based investigation that promotes understanding of the key role of the brain as the control center in the human body and exposes students to equipment and methodologies used in the field of neuroscience.

### Activities for Families

- Family Science Night at the school. Families complete an activity on the Science Adventure Lab together with their child and receive information about STEM career pathways.
- Family Science Day at Seattle Children's Research Institute includes follow-up, hands-on activities that build on the skills and knowledge developed during Family Science Night, a tour of the facility and the opportunity to interact with scientists and other STEM professionals.



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Science  
Adventure Lab

## Our Mission

Working in partnership with teachers, schools and communities, we will deliver innovative educational experiences that enhance science education, inspire new passions for science and promote better health for all students.

## Project Staff

Amanda L. Jones, PhD  
*Director and Lead Instructor*

Rebecca Howsmon, PhD  
*Senior Mobile Lab Scientist*

John M. Daniel  
*Mobile Lab Scientist*

Billy Roden  
*Mobile Lab Scientist*



## About the Science Adventure Lab

The Science Adventure Lab program was launched by Seattle Children's Research Institute in 2009 to address the need for improved access of students in Washington state to high-quality, hands-on science education and in recognition of the well-established connection between education and health.

The Science Adventure Lab brings authentic, interactive science experiments to students in a custom-built mobile laboratory that was modeled after the lab space at Seattle Children's Research Institute and is fully equipped with authentic, research-grade equipment. Onboard, Research Institute scientists lead students through curriculum modules designed to empower them with the confidence that they can be successful in science, encourage them to pursue careers in science and healthcare, and promote better health. Modules use inquiry-based learning, the scientific method and essential skills such as observation, measurement, prediction and testing.

## Science Adventure Lab Features

- 45-foot, wheelchair-accessible mobile lab
- 6 lab stations for up to 30 students
- Audio-visual system with a DVD player, digital video camera and large-screen LCD monitors
- Authentic, research-grade lab equipment, computers and wireless internet
- High-efficiency diesel engine and generator

Contact us at:  
[adventurelab@seattlechildrens.org](mailto:adventurelab@seattlechildrens.org)

Visit us on Facebook:  
[www.facebook.com/adventurelab](http://www.facebook.com/adventurelab)

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Seattle Children's Research Institute  
Science Adventure Lab  
Science Education Department  
1900 Ninth Ave., M/S C9S-5  
Seattle, WA 98101



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