Hawai'i Science Career Inspiration Program (HiSCI): Engaging K-12 Students & Teachers in Biomedical/Clinical Health Sciences

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The HiSCI program at the John A. Burns School of Medicine (JABSOM) enhances science education resources and training for K-12 teachers and students to increase diversity in the biomedical and clinical workforce. For teachers, we provide molecular biology training, classroom resources, host workshops/tours, and our Speakers Bureau participants visit classrooms to give health careers talks. Teachers also collaborate through our online forum. For students, we developed a 138 page book/online resource that explores local health training and career options, posters that highlight Native Hawaiian health professionals, and an aquarium activity on biochemistry. We also host teen health camps and the Hawai'i Pre-Health Career Corps provides mentorship, research, and shadowing opportunities for students.

Increase Student Interest in & Exposure to Health Science Careers

Key Programs:
• Hawai'i Health Career Navigator – 1st Edition
• Teen Health Camps for Middle & High School Students
• Speakers Bureau – Health Professionals Visit Schools
• Hawai'i Pre-Health Career Corps – Shadwowing & Research Experiences, SAT Prep, Networking, and Mentoring
• Native Hawaiian Role Model Posters
• Medical Student Mentoring - Curriculum Development
• Hawai'i DOE Supplemental STEM Curriculum
• Workshops & Tours

Above: High school teachers practice research techniques at the Molecular Biology Professional Development Program. Below: Teachers prepare for a tour of the JABSOM Vivarium.

High school students extract DNA from a strawberry during a tour at JABSOM.

Above: Teen Health Camps for Middle & High School Students.

Key Programs:
• Mini-Grants for Classroom Resources
• Utilizing Existing Resources: Equipment Donations
• Toolkit for Teachers Collaboration: Borrowing System for Classroom Resources

Provide Tools to Increase Students’ Hands-On Science Experiences

Key Programs:
• Molecular Biology Professional Development & Website
• Medical Student Mentoring - Curriculum Development
• Hawai'i DOE Supplemental STEM Curriculum
• Workshops & Tours

Above: A screenshot of the website where teachers can request to borrow an electrophoresis machine through the Toolkit for Teachers Collaboration Program, which can also be borrowed from the Toolkit for Teachers Program.

A JABSOM faculty member uses a teaching scope to share sectional heart slides with workshop participants.

Elementary school students extract DNA from a strawberry during a tour at JABSOM.

Teachers have a conversation about a lesson plan posted on the Hawai'i Teachers Collaboration Forum on Science & Health Education.

Took of the JABSOM Vivarium.

Members of the Hawai'i Pre-Health Career Corps debate the part of the JABSOM Pre-Health Corps.

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Build Science Teacher Community

Key Programs:
• Teacher Listening Groups
• Teacher Workshops
• STEM Intercommunity Portal: Hawai'i Teachers Collaboration Forum on Science & Health Education

Above: A high school teacher observes a teaching scope in a classroom during a tour at JABSOM.

Below: Elementary school students practice using stethoscopes, which can also be borrowed from the Toolkit for Teachers Program.

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