Maui Community College In Partners with the National Institute of Health presents:

Workshop in "Science Building Blocks" and the Applications to Biotechnology

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Eligibility Requirements: 4th – 8th grade Hawaii science teachers.

Cost: Free to admitted applicants

Where: Maui Community College

When: January 2nd,3rd,6th, 8th and 9th 2009

9AM – 3 PM each day

A follow up meeting (one day) will be planned in March 2009 to complete the program.

Benefits of the Program:

- This program is free to public and private 4th – 8th grade teachers in Hawaii.
- It is an excellent learning experience

- It will enhance ones ability to teach the building blocks of science and how to apply

them throughout their science curricula.

- Learn current techniques used in research

and industry

- Make new connections from all over Maui County

- **Receive $500.00 upon successful completion of assigned lab curriculum to be shared with other instructors.**

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Coursework:

Day	Lecture	Labs 4th-5th	Labs 6th-8th
1	**Chemistry**	Identifying a mystery substance: An examination of physical and chemical properties	Heats of combustion and the caloric content of food
2	**Chemistry/Cell Biology**	Yeast fermentation Cell structure/function	Enzyme action Cell structure/function
3	**Cell Biology and Mendelian Genetics**	Osmosis/diffusion Trait identification	Osmosis/diffusion Cell division
4	**Mendelian Genetics and Biotechnology**	Selection Segregation	Selection Segregation
5.	**Biotechnology**	DNA extraction Forensics	DNA Extraction Forensics

Teachers will be lead through a series of lectures and hands on labs in Chemistry, Cell Biology, Mendelian Genetics and Biotechnology.

Learner Outcomes:

- Identify the principle parts of both eukaryotic and prokaryotic cells and their functions
- Understand and be able to implement basic Mendelian principles of genetics.
- Examine several examples of modern molecular (DNA) biology techniques utilized in human and agricultural genetics research
- Demonstrate how measurements are made in chemistry
- Describe the difference between physical and chemical properties of substances
- Demonstrate basic thermodynamics by determining the caloric content of foods.

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808-984-3220

Invitation to Apply

First, Middle, Last Name _____

Your Home Address _____

_____

_____

Your Current Phone Number _____

Name of school where you teach_____

Grade Level _____

Your Email Address _____

Sciences Courses you have taken _____

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Briefly indicate why you would like to attend this program: _____

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1. The college reserves the right to determine admission to the program.

Please email application to: sirwin@hawaii.edu

Or mail to Sally Irwin

310 Kaahumanu Ave

Kahului, HI 96732

By December 15th, 2008