

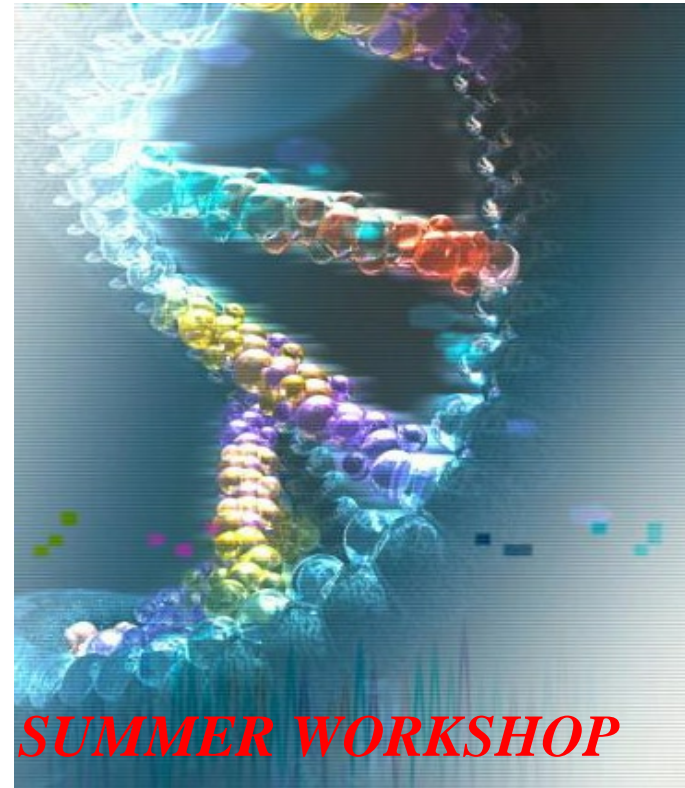
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## Advances in Bioscience Education (ABE)

*integrating technologies with learning experiences  
offering opportunities for  
faculty development and student mentoring*

University of Hawai'i



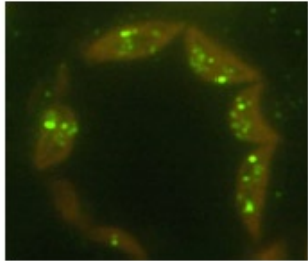
**C/T/A/H/R**  
College of Tropical Agriculture and Human Resources  
University of Hawai'i at Mānoa

University of Hawai'i  
**LEEWARD**  
COMMUNITY COLLEGE

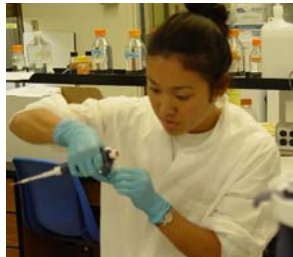
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# Advances in Bioscience Education (ABE)



## About the Project

University of Hawai'i (UH) is engaged in a research project entitled "Functional Genomics of the Protein Disulfide Isomerase Family in Arabidopsis Plants," funded by the National Science Foundation (NSF).

The project uses state-of-the-art genomic, bioinformatic, molecular and cellular techniques, which have become increasingly important for careers in industrial, government and academic laboratories.

Project Director, Dr. David A. Christopher of the UH College of Tropical Agriculture and Human Resources, is assisted by workshop coordinator, Dr. Kabi R Neupane of UH Leeward Community College, and Dr. Andrew Staehelin, of the University of Colorado.

The project provides faculty development and student mentoring opportunities for a four-year period through Summer Education and Outreach Activities. Faculty will participate in the first year and students and faculty will participate in years two through four.

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*A central mission of this project is to integrate and disseminate the developed technologies with learning experiences that will inspire faculty and students from community colleges lacking research programs.*

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## Specific Goals for the Summer Workshop:

- Partner with life science teachers from small colleges, who will develop curriculum material, exercises, CD-ROM and web-based resources for their biology classes with a focus on biotechnology, genomics, bioinformatics and cell biology.
- Provide summer internships for community college teachers and selected students enabling them to obtain hands-on research experiences in genomics, bioinformatics, and state-of-the art microscopy used in the project's research.
- Post the developed teaching resources and exercises on-line, enabling faculty and students to use these resources in their courses in the future.
- Stimulate interactions between university and community college faculty that enhance course articulation, student learning and career development in the biosciences.

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*To find out how to participate, please see contact information on back panel.*

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- ABE participants will develop a working outline and set of exercises for curriculum enhancement. Faculty and students participants will
- (a) experience one-on-one interaction and collaborative scientific problem-solving with faculty in a welcoming laboratory setting.
  - (b) receive stipend or summer overload for faculty and students.
  - (c) receive airline tickets from neighboring islands.
  - (d) get an opportunity to experience genomics research at its cutting edge.



*Faculty and students of Hawaiian, Asian and Pacific Island ancestry are especially encouraged to participate.*