

**FINAL REPORT – CSU ITL GRANT  
DNA MICROARRAY ANALYSIS WORKSHOP  
JUNE 21-22, 2003**

The DNA Microarray Analysis workshop was held at CSU Sacramento on June 21-22. Attendance at the workshop included faculty from 13 CSU campuses, one faculty member from Pomona College, and a Public Health Epidemiologist from Kern County Department of Public Health. There were a total of 22 attendees at the workshop. A breakdown of the campuses represented and a list of the disciplines represented by the attendees at the workshop are provided below

List of Workshop Participants

Carina Anttila, CSU San Francisco –Biology  
Steve Benson, CSU Hayward – Biology  
Dave Bieber, CSU San Jose – Biology  
Chris Brinegar, CSU San Jose – Biology  
Lily Chen, CSU San Francisco – CBLIS/Biology  
James Christmann, CSU Sonoma- Biology  
Jonathan Geller, Moss Landing Marine Laboratories  
Shirley Kovacs, CSU Fresno – Biology  
Robert Horton, CSU Sacramento – Computer Science  
Charles Lee, CSU Fullerton – Math  
Lorena Ortiz, CSU Fullerton – Math  
David Peterson, CSU Fullerton, Math  
Bijay Pal, CSU Pomona – Biology  
Bassam Salameh, CSU Bakersfield-Biology  
Jacob Varkey, CSU Humboldt – Biology  
John Walker, CSU San Luis Obispo, Statistics  
James Youngblom, CSU Stanislaus, Biology  
Edward Walton, CSU Pomona, Chemistry  
Janey Youngblom, CSU Stanislaus – Biology  
Lenore Yousef, CSU Fresno – Biology  
Wendy Dixon, CSU Pomona- Biology  
Nick Ewing, CSU Sacramento – Biology  
Laura Hoopes, Pomona College – Biology  
Yasmin Gamal, Kern County Department of Public Health – Epidemiologist

List of Campuses Represented

CSU San Francisco – 2 participants

CSU Hayward – 1  
CSU San Jose – 2  
Moss Landing Marine Labs – 1  
CSU Pomona – 1  
CSU Stanislaus – 2  
CSU Sacramento – 2  
CSU Bakersfield – 1  
CSU Humboldt – 1  
CSU San Louis Obispo – 1  
CSU Sonoma -1  
CSU Fullerton – 3  
CSU Fresno – 2  
Pomona College – 1  
Kern County Department of Public Health – 1

### List of Disciplines Represented

Biology = 15  
Chemistry = 1  
Math = 4  
Computer Science = 1  
Epidemiology = 1

A binder was provided for each participant, and its contents are provided as three separate attachments with this report: 1) workshop schedule, 2) User Manual for the MAGIC Tools computer software program for DNA Microarray analysis, and 3) Laboratory Manual for conducting the wet lab component of DNA Microarrays using yeast DNA chips.

An evening session was held from 7-10 on Saturday, June 21 to discuss strategies for integrating DNA microarray technology into the classroom. Each of the participants were provided with 1-3 DNA yeast “teaching chips” to take back to their home campuses for use in their classroom.

A link on the Genome Center for Active Teaching (GCAT) website developed by Dr. Malcolm Campbell of Davidson College, one of the key presenters at the workshop, will have all the powerpoint material presented at the workshop available for future reference and use in classroom presentations. Access to the free DNA microarray analysis software program introduced at the workshop will also be available at this web site.

All of the attendees expressed very favorable comments about the workshop and hope that a follow-up workshop can be provided in the future. A significant outcome of the workshop is that faculty members from four different campuses have expressed a strong interest in scheduling future meetings to collaborate on submitting a federal grant proposal to establish regional DNA microarray centers in the CSU system. They will seek funding to acquire the equipment and technical assistance to support the active integration of DNA microarray technology into various courses and faculty-student research projects within the CSU system. The possibility of a future

meeting to discuss details of a grant submission will be discussed with the Director of the California State University Program for Education and Research in Biotechnology (CSUPERB).

The budget was expended as detailed in the original proposal, with the exception that the stipend allocation for the workshop participants was changed to per diem payment. This budgetary change was approved by Dr. Mary Allen. The rest of the budget was spent on stipends for the presenters and organizers, and lodging and transportation reimbursement for all attending the workshop. The cost of the workshop stayed within budget, and all funds will be expended by June 30, 2003.

We greatly appreciate the funding provided by ITL that made this workshop possible. It allowed the opportunity for introducing a leading edge technology into the CSU curriculum, and provided a rare opportunity for faculty across multiple disciplines to actively dialogue together in a meaningful way. If any further information is required for this final report, please do not hesitate to contact me.

Sincerely,

Janey Youngblom, Ph.D.  
Professor of Biology  
CSU Stanislaus  
Biology Department