

DNA Technologies Core Campus Advisory Committee Meeting Minutes

Date: 8/8/06

Attending: C. Nicolet, R. Michelmore, L. Comai, D. Neale

Discussion Items:

Minutes to be posted publicly on web site, assures transparency of facility operations and helps communication with campus faculty.

Discussion of intra-campus seed grant proposal, committee members agreed with wording of flier for program and those present agreed to participate in the review process.

Dr. Nicolet reviewed last year's projects. Mainly Illumina for pine and human lung cancer study, which were completed. Ongoing projects on Illumina include mouse genotyping and wheat SNP/ploidy study.

Dr. Nicolet reviewed upcoming Illumina projects including human cancer study, lettuce, peanut, and more pine genotyping, with potential for two big projects in humans (women's health initiative and diabetes) dependent on funding outcomes.

Committee recommended that workload be closely monitored so that technical help can be in place in anticipation of heavier demand. Should consider initiating the process of hiring another tech.

Committee recommended holding a workshop featuring the Illumina technology, with presentations from company reps as well as UCD scientists who have used the technology; participation of Sacramento Med Center researchers is important.

Mention of other technologies operating in the lab but still somewhat in search of projects—Luminex, SSCP, heteroduplex analysis.

Discussion of limiting technologies/scientific bottlenecks: Two areas were considered important to develop over the next year.

- SNP discovery. This may be more limiting than SNP analysis. Should work with PIs to develop SNPs that can be run subsequently in high throughput mode. This needs to be a methods development component for the core.
- High throughput, inexpensive DNA isolation. In particular, evaluation of DNA purification platforms urged.

Discussion of budget: initial version incomplete, updated version to be distributed to committee electronically. Budget seems to be on target for breaking even.

Discussion of possible additional technologies, all in 55-75K range: Infineum upgrade for existing Illumina platform, BioTrove taqman based high throughput platform, CyVera bead sorting platform marketed by Illumina, DNA purification station. Decision on what to get should be made in next 6 months-year in response to demand for such platforms.