## SNP Workshop

## Anchorage, Alaska

## First Announcement and Call for Papers

The Genetics Section of the American Fisheries Society is hosting a SNP workshop tentatively scheduled at the ~~Hotel Captain Cook on April 27-28, 2005~~. Dates and agenda will be finalized after confirmation of guest speakers. Applied Biosystems Incorporated will provide two speakers, funds for two additional guest speakers, and a trade show reception. Matrix Technologies will demonstrate liquid handling robots.

Recent literature demonstrates that SNPs have the potential to become the genetic marker of choice in studies of ecology, conservation, and fisheries management. This is especially true for Pacific salmon where the ease of standardization across both laboratories and platforms make SNPs ideal for constructing species-wide data bases.

In fisheries studies in the past, SNP data were collected by sequencing or fragment analysis of mitochondrial DNA, nuclear DNA, neutral genes, and selected genes such as MHC, providing opportunities for extremely high resolution. Despite the great potential for these markers, application was often hampered by slow throughput. Recent developments in DNA chemistry produced rapid-throughput SNP genotyping technologies to capture this high resolution. No technically difficult or expensive standardization is required because resulting SNP data are the actual DNA sequence and are automatically standard from lab to lab.

The most significant limitation of SNP applications in studies of Pacific salmon, until now, has been the slow progress of SNP discovery due to the paucity of DNA sequence data in some species. Breakthroughs using a targeted gene approach now provide dozens of SNPs suitable for stock identification studies; this workshop is designed to build upon the results of existing SNP discovery, promote a synergistic approach to additional SNP discovery, and explore collaborative opportunities for SNP applications.

This will be a two-day meeting to allow laboratories to discuss SNP discovery, applications, liquid handling, and other issues related to the building and coordination of coastwide data bases for Pacific salmon. The first morning will include formal presentations by the four guest speakers from outside the Pacific salmon community. Tony Dodge from ABI will present *Optimizing TaqMan Genotyping* and John Goldsmith from ABI will present *SNPlex Genotyping on Capillary Sequencers*. We have invitations pending for two additional speakers. After lunch, experience papers presented by participating laboratories will set the stage for group discussion of research priorities and opportunities for cooperative baseline building. Although the focus will be on the development of standard data bases for salmon, time for focus groups to discuss gene mapping, species identification, or applications for other non-model organisms will be provided on the second day.

Registration for members of the Genetics Section is $40.00 which includes lunch on day one; non-members pay $55.00 and receive a one-year affiliate membership.

Please contact Jim Seeb (jim_seeb@fishgame.state.ak.us) if you are interested in presenting an experience paper or attending the workshop.