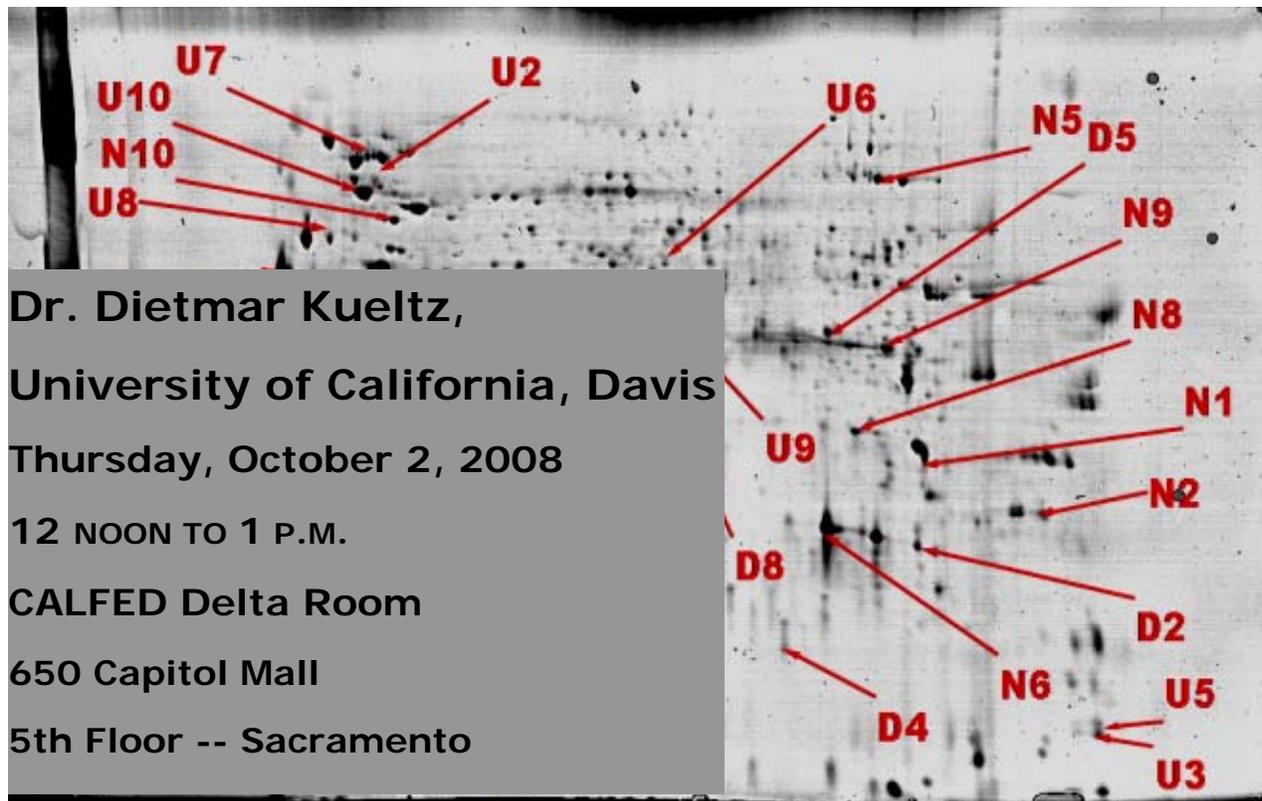


# CALFED Science Program Brown Bag Series Presents

## Biomarkers and Life History Indicators in Green and White Sturgeon: Essential Tools for Understanding Environmental Effects on Bay-Delta Sturgeon Populations



Dr. Dietmar Kueltz,  
University of California, Davis  
Thursday, October 2, 2008  
12 NOON TO 1 P.M.  
CALFED Delta Room  
650 Capitol Mall  
5th Floor -- Sacramento

Photo: two-dimensional protein gel of white sturgeon gill.

Dr. Kueltz will discuss his project that is investigating effects of environmental stressors such as selenium, mercury, salinity and temperature for two native species of sturgeon. The project objective is to better understand why green sturgeon populations are declining faster than white sturgeon populations. Study findings will inform population-level models and contribute to better water management decisions. For example, the researchers have discovered that green sturgeon are much more sensitive to levels of selenium than white sturgeon. By comparing effects in green and white sturgeon, the researchers hope to unravel the mechanistic molecular basis for the different level of sensitivity to selenium. Other study results, including effects of methylmercury, simulation of tidal cycle/climate change scenarios (temperature + salinity change), and the current status of identification of novel molecular biomarkers of stress will also be discussed.

Please allow **extra time** for parking and security screening procedures at 650 Capitol Mall. Current photo identification is required. Cameras and cell phones with camera capability are prohibited without prior written review and approval from CBDA, Federal Protective Service and GSA Property Management for the 650 Capitol Mall building. Please contact Terry Smith at the California Bay-Delta Program at (916) 445-5345 or [tsmith@calwater.ca.gov](mailto:tsmith@calwater.ca.gov) for building access information.