

Center for Biofilm Engineering

Advanced Biofilm Methods Workshop **July 14, 2008; 8:30am – 5:00pm**

The July 2008 TAC Workshop will be focused entirely on microscopy of biofilms.

The workshop will begin with presentations by guest instructor Diane Gray from Molecular Probes/Invitrogen, and from special guest instructor Dr Thomas Neu, of the Helmholtz Centre for Environmental Research-UFZ, Department of River Ecology in Magdeburg, Germany. Dr Neu is widely recognized as an expert in confocal imaging of biofilms, particularly using fluorescent lectin probes. The morning session will conclude with a group discussion led by our guest instructors during which participants will choose a bacterial biofilm and appropriate fluorescent stain to work with, then prepare samples in the laboratory with assistance from Center research staff.

The afternoon session will consist of hands-on imaging by participants of their stained biofilm samples, and other, previously prepared samples such as wound tissue. Workshop instructors will assist participants in imaging using the following techniques: cryoembedding and cryosectioning, epifluorescence microscopy, stereomicroscopy, and confocal laser scanning microscopy (CSLM). Dr Neu will work with pairs of participants on the confocal microscope, Diane Gray will be available to discuss staining of biofilms for microscopy and flow cytometry, and the CBE's staff expert will demonstrate scanning electron microscopy (SEM) of fully hydrated biofilms. Additional, optional sessions will be available during the afternoon, and will include basic biofilm methods, qualitative and quantitative image analysis, and flow cytometry.

This workshop is available to member companies at no charge. There is an additional fee of \$400 for non-member companies. Attendance at the workshop is limited to 16 persons, so please contact Paul Sturman if you would like to attend.

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