

Chem 395 Bioanalytical Chemistry, Spring 2005. Schedule T
Th 11-12:15 AM T309
J. Rusling and A. Nassar, co-ordinators.

Speaker	Affiliation	Topics	Date
Jim Rusling	Uconn	Discussion of student projects	Jan 18
Jim Rusling	UCONN	Introduction to electrochemical Biosensors	Jan 20
Jim Rusling	UCONN	Modern biosensor design	Jan 25
Jim Stuart	UCONN	Introductory separations	Jan 27
Mike Sinz	Bristol-Myers Squibb	Drug-drug interactions (inhibition and induction)	Feb 3
Tom Sharp	Pfizer	Basic LC-MS	Feb 8
Tim Olah	Bristol-Myers Squibb	LC-MS in drug discovery	Feb 17
Chris Spell	Wyeth	Adverse drug reactions	Feb 22
Chandra Prakash	Pfizer	Metabolite identification and characterization, as well as adverse drug reactions	Feb 24
Ravi Vijayaragahaven	Uconn	Detection of ATP Metabolites using Bioluminescence	Mar 15
Ashwin Bhirde	Uconn	Nanotubes and sensors ???	
Brian Marquez	Pfizer	LC-NMR in drug discovery	Mar 17
Chris Town	Bayer	Pharmacokinetics/ Exposure screening-Pharmacodynamics	Mar 22
Chris Town	Bayer	Pharmacokinetics/ Exposure screening-Pharmacodynamics	Mar 24
Michelle Brideau	Uconn	SPR and SPR Imaging	Mar 31
Vamsi Mudhivarthi	Uconn	SPR #2 ???	
Alexis Ramos	Uconn	Peptides by MALDI Q-TOF MS	April 5
Besnik Bajrami	Uconn	Drug Metabolites by LC-MS	
Daniel Pentek	Perkin-Elmer	Basic LC-MS and MS/MS	April 7
Min So	Uconn	Electrochemiluminescence for DNA hybridization detection	April 12
Joe Gong	Uconn	Point of care diagnostics??	
Carl Davis	Bristol-Myers Squibb	Drug metabolizing enzymes and reaction phenotyping	April 14
Amin Kamel	Pfizer	Introduction of Biotransformation	April 21
Xudong Yao	Uconn	Proteomics by MS	April 19
Xudong Yao	Uconn	Proteomics by MS	April 26

**Class materials can be found at <http://web.uconn.edu/rusling/>
Click on Chem 395 Bioanalytical Chemistry at the bottom of
our home page.**

Class assignment:

One lecture and a 5-8 page paper on the same bioanalytical topic

Grading

- **30% class participation**
- **30% your lecture**
- **40% your paper**
- **optional final exam**

Possible Topics for Student presentations:

(pick one from this list or choose your own topic; Have topic approved by me by before Feb. 3, bring a review article or other lead article on your topic as a basis for discussion. Topics should draw from current literature, e.g. 2000 or later.)

- Optical arrays to analyze DNA hybridization
- New approaches to DNA detection
- Protein Arrays
- Antigen-antibody assays using surface plasmon resonance
- Non-specific binding in antigen-antibody assays
- Approaches to proteomics (choose a specific approach)
- Bioluminescence or Chemiluminescence in Biology
- NMR of proteins
- MS of proteins
- Detection of cancer biomarker proteins
- Point of care clinical analysis of blood or serum