



Life Sciences Research Symposium

September 19, 2009

Life Sciences Research Building,
D'Ambra Auditorium
University at Albany, Albany, NY 12222

This symposium is jointly sponsored by the Departments of Biological Sciences, Chemistry, and Psychology as well as the Office of the Dean of the College of Arts and Sciences

Symposium Organizers: Drs. Li Niu, Chemistry, and Melinda Larsen, Biological Sciences

7:50	---	8:20am	Breakfast (outside D'Ambra Auditorium)
8:20	---	8:30am	Welcome and opening remarks — Prof. Albert Millis , Director, Life Sciences Research, and Prof. Edelgard Wulfert , Dean, College of Arts and Sciences
			Section 1: Peptides and Proteins (Chair: Prof. Li Niu)
8:30	---	8:45am	Dr. Sergey Reverdatto (Shekhtman lab) Selection of peptide aptamers against protein targets
8:45	---	9:00am	Vitali Sikirzhytski (Lednev lab) Genetic engineering combined with deep UV resonance Raman spectroscopy for structural characterization of amyloid-like fibrils
9:00	---	9:15am	Ludmila Popova (Lednev lab) Structure of A-beta fibril core characterized by deep UV resonance Raman spectroscopy
9:15	---	9:30am	Swamy Puttamadappa (Shekhtman lab) NMR studies of the novel small molecule fusion inhibitor against HIV-1
9:30	---	9:45am	Priya Ranjan Banerjee (Pande lab) Cataract-linked mutations of human gamma-D crystalline: Mechanisms of cataract formation
9:45	---	10:00am	Dmitry Kurouski (Lednev lab) Amyloid Fibrils are "Alive": Spontaneous refolding from one polymorph to another

10:00 --- 10:15am Coffee break

Section 2: RNA and Aptamers (Chair: Prof. Li Niu)

10:15	---	10:30am	Dr. Zhen Huang (Niu lab) 2D structure modeling of one RNA sequence with 3 structures
10:30	---	10:45am	Dr. Prabhat Mallik (Shi lab) Aptamer-mediated opsonization
10:45	---	11:00am	Shengchun Wang (Shi lab) Converting an inhibitory aptamer into an activator

- 11:00 --- 11:15am **Fei Liu** (Theimer lab)
Conformational equilibrium in the yeast telomerase RNA pseudoknot domain
- 11:15 --- 11:30am **Yan Sun** (Scholes lab)
Spin label studies of the HIV RNA/DNA NCp7 chaperone complex
- 11:30 --- 11:45pm **Daiying Xu** (Shi lab)
Modulating estrogen receptor activity with aptamers

11:45 --- 1:00pm Lunch

Section 3: Cell Biology, Neuronal Development and Behavior (Chair: Prof. Melinda Larsen)

- 1:00 --- 1:15pm **Dr. Sharon Sequeria** (Larsen lab)
A role for Rac GTPase in embryonic salivary gland branching morphogenesis
- 1:15 --- 1:30pm **Yuanyuan Liu** (Szaro lab)
The role of hnRNP K in axon development
- 1:30 --- 1:45pm **Keith Gonzales** (Wagner lab)
Steroid receptor action in developing brain
- 1:45 --- 2:00pm **William Daley** (Larsen lab)
Identification of a mechanochemical checkpoint and negative feedback loop regulating salivary gland branching morphogenesis
- 2:00 --- 2:15pm **Dr. Victoria Cotero** (McNay lab)
Impact of fatty acids on cognitive and neural function
- 2:15 --- 2:30pm **Dr. Vaishali Jahagirdair** (McNay lab)
Impact of recurrent hypoglycemia on mental flexibility

2:30 --- 2:45pm Refreshment break

Section 4: Receptors and channels (Chair: Prof. Melinda Larsen)

- 2:45 --- 3:00pm **Dr. Alicia A. Walf** (Frye lab)
Estrogen to female rats reduces anxiety behavior, but does not increase uterine proliferation or tumorigenesis, via actions at estrogen receptor beta
- 3:00 --- 3:15pm **Tao He** (Lnenicka lab)
The effect of presynaptic parvalbumin expression on synaptic physiology
- 3:15 --- 3:30pm **Yan Han** (Niu lab)
Laser-pulse photolysis study of glutamate ion channels
- 3:30 --- 3:45pm **Sunil Desai** (Lnenicka lab)
Inhibiting postsynaptic PMCA influences synaptic transmission at larval NMJ
- 3:45 --- 3:50pm **Prof. Melinda Larsen** – closing remarks

General Information for the Life Sciences Research Symposium

Thank you for registering to attend the first Life Science Research Symposium. There are 90 faculty, postdoctoral fellows, and graduate students registered to attend this symposium. This is a near capacity audience for the auditorium. Furthermore, we have 22 presentations. Therefore, promptness and consideration for the speakers who have devoted a significant amount of time to the preparation of their presentations is appreciated. The symposium program will start and end on time. Please turn off or mute pagers and cell phones. Because of the limited seating and the meal arrangements, only participants who have pre-registered for the meeting are invited to attend (the registration is closed).

Parking and entrance to the Life Sciences Research Building

The Life Sciences Research Symposium will be held on Saturday, Sept. 19, 2009, in the D'Ambra Auditorium on the second floor of the LS Research Building. Parking on Saturday is free. There is ample parking space around the LS Research Building.

There are two entrances to the building from the basement level of the Biology Building. There is an additional entrance from the green house side, and the main entrance is from the perimeter road. On Sept. 19, all doors will be open at 7:30 am for this event.

Refreshments and meals

Continental breakfast will be available from 7:50 am in the prefunction area of the D'Ambra Auditorium. Lunch will be catered and served in the same area. However, feel free to take your lunch to the courtyard, weather permitting, and to various rooms on the second floor, such as the tea rooms and small conference rooms, and LS1143, (the large conference room) on the first floor if you prefer to sit down for lunch. Coffee and refreshments during the breaks will be also served in the same area. Please be careful not to spill, and dispose of any waste such as plates, bottles, etc, in garbage/recycling bins rather than leaving these items behind.

Speakers and presentations

Because we have a limited amount of time and a long list of speakers, each presenter is asked to adhere to the strict time limit of 13 minutes for the presentation and 2 minutes for questions. Presenters will be asked to step down after 15 minutes. Therefore, each speaker should prepare his or her talk according to a 13-min maximum time allocation.

All speakers for the two morning sessions must load your slides into the computer in the auditorium before 8:20 am. Similarly, all speakers for the two afternoon sessions must load your slides during the lunch break or before 1:15 pm. Do not bring your own computer. Instead, please bring a USB flash drive containing your files to the auditorium.

All speaker presentations must be prepared in a presentation software compatible with Microsoft PowerPoint 2003 version (PC compatible).