

NCMI Workshop on Single Particle Reconstruction, Structural Variability and Modeling

October 30 - November 2, 2015

Please note that we are 'going green' for this workshop, and no printed copies of the workshop material will be provided on-site. If you require a printed copy of the tutorial or other material, please bring it with you.

Note that no breakfast is provided on-site, as several of the hotels offer this with the stay. Light snacks will be provided at the coffee breaks.

Friday, October 30

- 8:30 - 9:00 Registration
- 9:00 - 9:10 Welcome
Wah Chiu - NCMI, BCM, Houston
- 9:10 - 9:30 Workshop overview
Steve Ludtke - NCMI, BCM, Houston
- 9:30 - 10:30 Introduction to Electron Microscopes and Imaging Artifacts
Greg McMullan - LMB, MRC, Cambridge
- 10:30 - 10:50 Coffee Break
- 10:50 - 12:00 EMAN2 tutorial, Steps 1-12, or 1-10
Steve Ludtke & teaching assistants
- 12:00 - 13:30 *Lunch on your own. Maps available at registration. Please try to return on time.*
- 13:30 - 14:00 EMAN2 tutorial, Steps 13-16, or 11-12
Steve Ludtke & teaching assistants
- 14:00 - 15:00 Introduction to Image Processing
Pawel Penczek, UTHMS
- 15:00 - 15:20 Coffee Break
- 15:20 - 17:00 EMAN2 tutorial Step 17, or 13-16
(You can try running step 18 or 17 overnight if you have time and energy)
Steve Ludtke & teaching assistants
- 17:30 - 19:00 Dinner at BCM Main Campus
Alkek (N) Building, 3rd floor
- 19:00 - 21:00 Vendor talks
Kleberg Auditorium (near dinner site)

Friday, October 30 - cont'd

19:00 - 21:00 Vendor talks

- 7:15 pm Lengyel Jeffrey, FEI
- 7:45 pm Benjamin Bammes, DirectElectron
- 8:15 pm Break
- 8:30 pm Isamu Ishikawa, JEOL
- 9:00 pm Christopher Booth, Gatan

Saturday, October 31

9:00 - 9:30 Orientations, Symmetry and Rotation
Phil Baldwin, BCM

9:30 - 10:20 Chimera and tutorial wrap-up (Step 19)
Steve Ludtke & teaching assistants

10:20 - 10:50 Coffee Break

10:50 - 11:00 Introduction to multi-software heterogeneity sessions
Steve Ludtke

11:00 - 11:45 Methods for heterogeneity analysis
Sjors Scheres - LMB, MRC, Cambridge

11:45 - 12:45 Lunch (provided on-site)

12:45 - 14:30 Relion Session
Sjors Scheres - LMB, MRC, Cambridge

14:30 - 15:00 Coffee Break

15:00 - 16:00 Relion Session
Sjors Scheres - LMB, MRC, Cambridge

16:00 Early release for Halloween, free evening in Houston
Some ideas for things to do posted on the website

Sunday, November 1

9:00 - 10:30 SPARX Session
Pawel Penczek, UTHMS

10:30 - 10:50 Coffee Break

10:50 - 12:00 SPARX Session
Pawel Penczek, UTHMS

12:00 - 13:00 Lunch (provided on-site)

13:00 - 14:00 EMAN Heterogeneity Session

Steve Ludtke & teaching assistants

Sunday, November 1 - cont'd

14:00 - 14:45 Direct detector technology
Greg McMullan - LMB, MRC, Cambridge

14:45 - 15:15 Coffee Break

15:15 - 17:00 EMAN Heterogeneity Session
Steve Ludtke & teaching assistants

17:30 - 19:00 Dinner at BCM Main Campus
Alkek (N) Building, 3rd floor

19:00 - 21:00 Participant Short Talks
Mike Schmid, NCMI, BCM, Houston (mschmid@bcm.edu)
Contact Mike if you have any questions
Kleburg Auditorium (near dinner site)

Monday, November 2

9:00 - 10:00 Chimera, Segmentation, Probabilistic Modeling
Greg Pintilie, NCMI, BCM, Houston

10:00 - 10:30 Coffee Break

10:30 - 11:30 SSEHunter, Pathwalker, de-novo Modeling
Matt Baker, NCMI, BCM, Houston

11:30 - 13:00 Lunch (on your own)

13:00 - 14:00 SSEHunter, Pathwalker, de-novo Modeling, cont'd
Matt Baker, NCMI, BCM, Houston

14:00 - 15:00 Model Optimization
Corey Hyrc, NCMI, BCM, Houston

15:00 - 15:30 Coffee Break

15:30 - 16:00 Map/Model Challenge

16:00 - 17:00 Validation, Deposition
Corey Hyrc, NCMI, BCM, Houston

18:00 - Workshop Banquet
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