PROGRAM
CPLC SUMMER SCHOOL 2010

Sunday July 18 – ARRIVAL

Monday July 19 – Basic Training Day 1

8:00 – 9:00 pm  Registration and Continental Breakfast  (Hallway outside Loomis 144)
9:00 – 9:20 am  Welcome – Jaya Yodh, Director of Education and Outreach  (Loomis 144)
9:20 – 11:00 am  Taekjip Ha
Lecture 1: Introduction to the CPLC & smFRET, FIONA and Super Resolution Fluorescence Microscopy  (Loomis 144)
11:00 am - 12:00 pm  Klaus Schulten
Lecture 2: Molecular Dynamics Simulations of Molecular Motors  (Loomis 144)
12:00 – 1:30 pm  Lunch (provided)  (Hallway Outside Loomis 144)
1:30 – 6:30 pm  Mini-Courses
(refer to individual schedules – courses are taught in 2.5 hour blocks from 1:30 - 4:00 pm and 4:00 – 6:30 pm)
I. Optics
(Station 1 – Ha Lab Loomis 108B & Station 2 – Selvin Lab Loomis 363)
II. Software (Matlab & Labview)  (Loomis 257)
III. VMD
(Beckman 3rd Floor - Schulten Innovation Courtyard II)

Tuesday July 20 – Basic Training Day 2

8:30 – 9:30 am  Ido Golding
Lecture 3: Decision making in living cells: Lessons from a simple system  (Loomis 144)
9:30 – 10:00 am  Coffee Break  (Hallway Outside Loomis 144)
10:00 - 11:00 am  Yann Chemla
Lecture 4: Single Molecule Force – Optical Traps  (Loomis 144)
11:00 am - 12:00 pm  Anna Sokac
Lecture 5: Tracking cell surface growth in living fruit fly embryos  (Loomis 144)
12:00 – 12:30 pm  Photo Shoot  (Outside Loomis Courtyard)
12:30 – 1:30 pm  Lunch (provided)  (Hallway Outside Loomis 144)
1:30 – 6:30 pm  Mini-Courses
(refer to individual schedules – courses are taught in 2.5 hour blocks from 1:30 - 4:00 pm and 4:00 – 6:30 pm)

IV. Optics
(Station 1 – Ha Lab Loomis 108B & Station 2 – Selvin Lab Loomis 363)

V. Software (Matlab & Labview)
(Loomis 257)

VI. VMD
(Selection 3rd Floor - Schulten Innovation Courtyard II)

Wednesday July 21 – Advanced Module Day 1

8:00 am- Evening  Advanced Modules in Assigned Labs (refer to individual module handouts)
A. (Ha) smFRET (Loomis 108)
B. (Selvin) smFIONA (Loomis 364)
C. (Chemla) sm Force: Optical Traps (Loomis 128)
D. (Ha) Super-resolution fluorescence microscopy (Loomis 106J)
E1. (Golding) Single-Event Detection in Living Cells- Bacterial Swimming (Loomis 393)
E2. (Golding) Single-Event Detection in Living Cells- Phage Infection (Loomis 393)
F. (Sokac) Tracking Cell Surface Growth in Fly Embryos (IGB 121)
G. (Gruebele) FRel: protein folding dynamics in living cells (CLSL A223)
H. (Schulten) Molecular Dynamics Simulations of Molecular Motors (Beckman 3rd Floor - Schulten Innovation Courtyard II)
I. (Luthey-Schulten) Dynamical Networks in Protein:RNA Assemblies (CLSL A552)
J. (Aksimentiev) Observing Biomolecular Interactions with Atomic Resolution (Loomis 261)

11:00 am – 12:00 pm  Zan Luthey-Schulten
Lecture 6: Dynamical Networks in Protein:RNA Assemblies (Loomis 141)

4:00 – 5:00 pm  Nigel Goldenfeld
Lecture 7: Biocomplexity (Beckman 1005)

5:00 – 6:30 pm  CPLC POSTER SESSION
(with refreshments) (Beckman East Atrium Lobby)

Thursday July 22 – Advanced Module Day 2

8:00 am - Evening  Advanced Modules in Assigned Labs (refer to individual module handouts)

11:00 am – 12:00 pm  Martin Gruebele
Lecture 8: FRel: Protein folding dynamics in living cells (Loomis 144)
Friday July 23 – Advanced Module Day 3

8:00 am - Evening  Advanced Modules in Assigned Labs *(refer to individual module handouts)*

11:00 am - 12:00 pm  Alek Aksimentiev  
Lecture 9: Observing Biomolecular Interactions with Atomic Resolution  *(Loomis 144)*

Saturday July 24 – Advanced Module Day 4

8:00 am – 12:00 pm  Advanced Modules in Assigned Labs *(refer to individual module handouts)*

12:00 – 1:00 pm  Lunch (provided)  *(Hallway Outside Loomis 144)*

1:00 – 3:00 pm  Student Presentations *(refer to separate schedule)*  
& fill out student evaluations  *(Loomis 144)*

3:00 – 3:30 pm  Coffee Break  *(Hallway Outside Loomis 144)*

3:30 –5:30 pm  Student Presentations (continued)  *(Loomis 144)*

7:00 pm  DINNER PARTY AT HOME OF TAEKJIP HA  
1703 Byrnebruk Dr. Champaign, IL 61822

Sunday July 25 – DEPARTURE