NIMBioS Tutorial
Developing Multi-Scale,Multi-Cell Developmental and Biomedical Simulations with CompuCell3D

May 18th-21st 2011
University of Tennessee, Knoxville
Lecturers: Maciej Swat, Randy Heiland, James Glazier,
Dimitrij Hmeljak, Julio Belmonte

The following materials will be provided to Participants of for the Course:
1. CompuCell3D Manuals and Workshop Power Point Presentations
2. Tutorial Materials.
3. Model Files available from the course web site.

Wednesday, May18th 9th 1pm-7pm
1.00- 1.15 James Glazier
Welcoming Remarks
1.15-2.45 James Glazier
Introduction to Modeling using Glazier Graner Hogeweg Model (aka Extended Potts Model)
2.45-3.00
Break
3-3.30 Maciej Swat
CompuCell3D 101 – Introduction
3.30-5.00 Maciej Swat
Tutorials with basic CompuCell3D Simulations
5-5.15
Break
5.15-7.00 Randy Heiland
Introduction to Python programming

Thursday, May19th 9am-6pm
9.00-10.30 Randy Heiland
Python programming - tutorials
10.30-10.45
Break
10.45-11.15 Maciej Swat
Building Python-based CC3D simulations – replacing XML
11.15-12.30 Maciej Swat
Overview of CompuCell3D's Features/Modules Part I
12.30-1.30
Lunch

1.30-2.30 Dimitrij Hmeljak
Initial Conditions in CompuCell3D – PIF files and PIF Generator
2.30-3.30 Maciej Swat
Overview of CompuCell3D's Features/Modules Part II
3.30-3.45
Break
3.45-6.00 Maciej Swat
Tutorials – building advanced CompuCell3D simulations

Friday, May20th 9am-6pm
        9.00-10.30 James Glazier
        Model Parameters in CompuCell3D – Rules, Recipes and Disasters
        10.30-10.45
        Break
        10.45-12.30 Maciej Swat
        Introduction to Python programming in CompuCell3D part I
        12.30-1.30
        Lunch
        1.30-2.30 Julio Belmonte
        Introduction to sub-cellular modeling in Jarnac/SBML
        2.30-3.30 Maciej Swat
        Introduction to Python programming in CompuCell3D part II
        3.30-3.45
        Break
        3.45-6.00 Maciej Swat
        Advanced CompuCell3D Python Programming Tutorials part I

Saturday, May21st 9am-6pm
        9.00-10.30 Maciej Swat
        Advanced Python Scripting in CompuCell3D and Tutorial part II
        10.30-10.45
        Break
        10.45-12.15 Julio Belmonte
        Merging CompuCell3D and SBML – Running Reaction Kinetics Models in CompuCell3D
        12.15 – 1.15
        Lunch?