

Poster Session

Alexandre J.S. Ribeiro, Kris Noel Dahl

Nuclear Structure and Mechanics Related to Lamin A/C Expression in Stem Cells and Malignant Cancer Cells

Sasha Bakhru, Stefan Zappe

Functional Polymeric Microcapsules for Neural Stem Cell-Based Therapies

Ryan Kellogg, Amina Chebira, Anupam Goyal, Philip A. Cuadra, Jonathan Minden, Stefan Zappe, Jelena Kovačević

Image Analysis Toolbox for High-throughput Drosophila Embryo RNAi Screens

Zhenzhen Kou, William W. Cohen, Robert F. Murphy

A Stacked Graphical Model for Associating Information from Text and Images in Figures

Matthew Woodling, Chao-Kuei Eric Wang, Alexandre J.S. Ribeiro, Mohammad F. Islam, Kris Noel Dahl

Fluorescent Analysis of Focal Adhesion Complexes in Live and Fixed Cells

Rebecca L. Webb, Jasper S. Weinberg, Meng-Ning Zhou, Brooke M. McCartney

An APC2-Diaphanous Complex Organizes Actin in the Drosophila Syncytial Embryo

Elvira Garcia Osuna, Juchang Hua, Nicholas W. Bateman, Ting Zhao, Peter B. Berget, Robert F. Murphy

Large-Scale Automated Analysis of Location Patterns in Randomly-Tagged 3T3 Cells

David C. Wang, Nikhil B. Amesur, David Weiser, Wilson W.M. Chang, Albert B. Zajko, George D. Stetten

Improving Image Quality of the Sonic Flashlight for Venous Access

Corey Flynn, Justin Crowley

Functional and Proteomic Analysis of V1 Cortical Modules

Ting Zhao, Robert F. Murphy

Automated Learning of Generative Models for Subcellular Location - Building Blocks for Systems Biology

Shann-Ching Chen, Ting Zhao, Geoffrey J. Gordon, Robert F. Murphy

A Novel Graphical Model Approach to Segmenting Cell Images

Yanhua Hu, Jesus Carmona, Scott Nowicki, Robert F. Murphy

Application of Temporal Texture Features to Automated Analysis of Protein Subcellular Locations in Time Series Fluorescence Microscope Images

Juchang Hua, Ting Zhao, Yanhua Hu, Shann-Ching Chen, Amol Shanbhag, Justin Newberg, Elvira Garcia Osuna, Robert F. Murphy

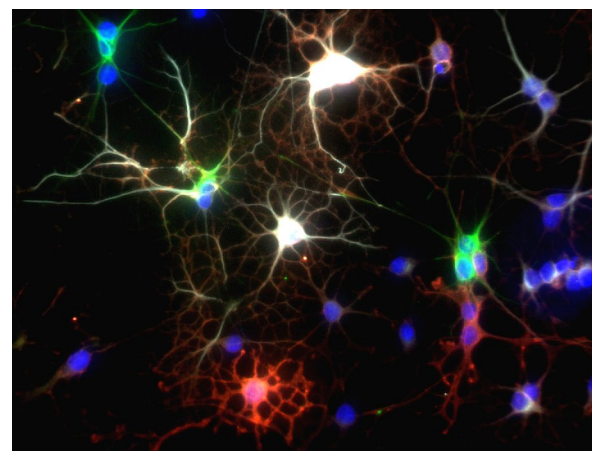
Protein Subcellular Location Image Database for Comprehensive Image Retrieval and Automated Interpretation

Carnegie Mellon

3rd Annual Bioimaging Day

February 21, 2007

Singleton Room, Roberts Engineering Hall



Bioimaging Day is organized by the Center for Bioimage Informatics (CBI) to bring together researchers from across Carnegie Mellon (including the Departments of Biological Sciences, Biomedical Engineering, Computer Science, Electrical Engineering, Machine Learning, and Robotics) who are generating bioimage data in their experimental programs or who are applying cutting-edge methods to extract information from bioimage data.

Morning Session

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| 9:00-9:10 | Stefan Zappe Opening Remarks |
| 9:10-9:35 | Alan Waggoner Fluorescent Reagents for Imaging Networks and Pathways in Living Cells |
| 9:35-10:00 | Simon Watkins Novel Imaging Systems for Cellular Communication in the Immune System |
| 10:00-10:25 | Bob Murphy Location Proteomics and Systems Biology |
| 10:25-10:45 | Coffee Break |
| 10:45-11:10 | Tom Mitchell Modeling fMRI Brain Image Time Series Data Using Hidden Process Models |
| 11:10-11:35 | Chien Ho Tracking Immune Cell Migration in Vivo by Cellular MRI |
| 11:35-12:00 | Marcel Bruchez Seeing Things Change with Quantum Dots: Real-time Analysis of Tissue Remodeling |
| 12:00-1:20 | Poster Session and Lunch Break |
| 1:20-1:30 | Pradeep Khosla Welcome Address |

Afternoon Session

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| 1:30-1:55 | Jelena Kovačević Adaptive Multiresolution Techniques for Classification of Biological and Biometric Images |
| 1:55-2:20 | Gustavo Rohde Biological Shape Characterization Using Diffeomorphic Image Matching |
| 2:20-2:45 | Geoffrey Gordon Graphical Models for Structured Classification |
| 2:45-3:10 | Kerem Pekkan Anatomical Image Database for Computational Fluid Dynamics Analysis and Surgical Planning |
| 3:10-3:30 | Coffee Break |
| 3:30-3:55 | Gary Miller Image Segmentation by Spectral Rounding, Applied to Retinal OCT Scans and Mammograms |
| 3:55-4:20 | Kris Noel Dahl Kinetics of Lamin A/C Expression and Changes in Nuclear Structure |
| 4:20-4:45 | Stefan Zappe Neural Stem Cell Engineering for Therapeutic Applications |
| 4:45-5:00 | Stefan Zappe Concluding Remarks iPod Lottery |