



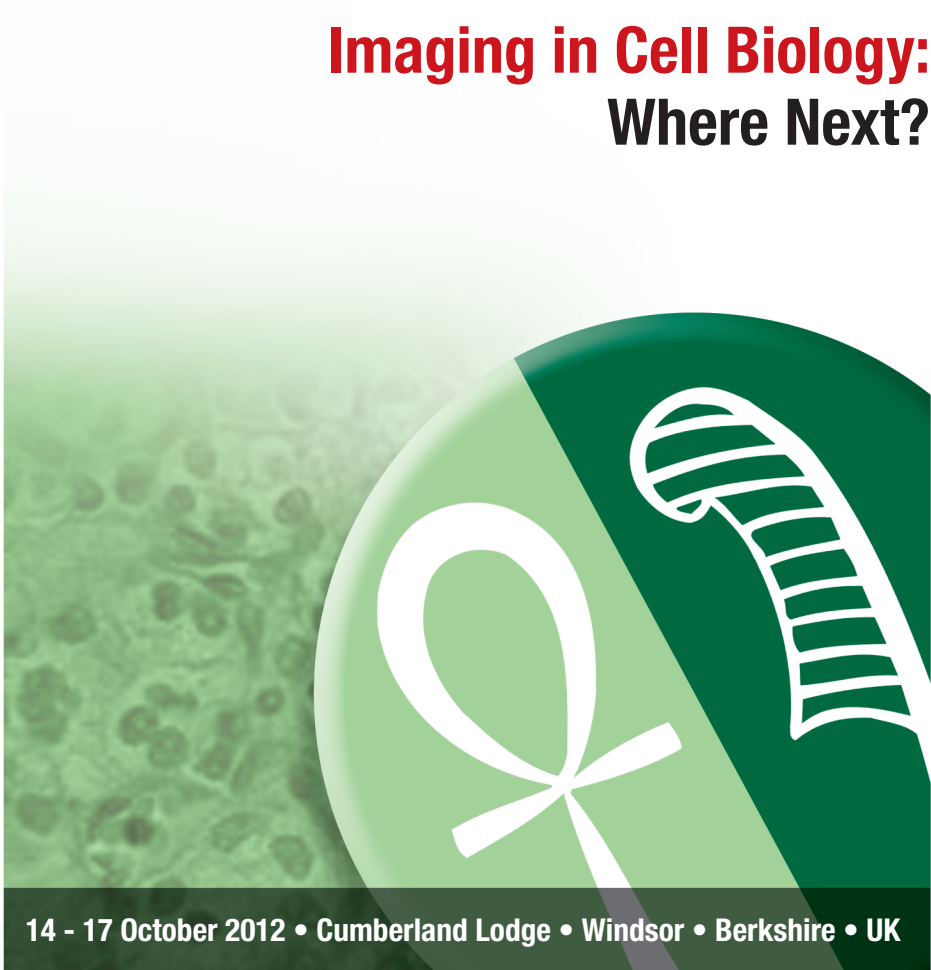
THE COMPANY OF

# Biologists

## WORKSHOPS

Programme

### Imaging in Cell Biology: Where Next?



14 - 17 October 2012 • Cumberland Lodge • Windsor • Berkshire • UK



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Development **DMM** Disease Models & Mechanisms Journal of Cell Science The Journal of Experimental Biology **Bi** BIOLOGY OPEN

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**Imaging in Cell Biology: Where Next?**

Cumberland Lodge • Berkshire 14 - 17 October 2012



Programme

Sunday 14th October 2012

18:00 – 18:45

**Pre-dinner drinks in the Drawing Room**

18:45 – 20:00

**Dinner in the Cumberland Room**

20:00 – 20:15

Introductions in the Cumberland Room

**Claire Moulton** - The Company of Biologists

**Michael Way** - Chairman's remarks

20:15 – 21:00

Slide presentations

21:00 – 22:00

**Opening lecture**

**John Sedat** - Plenary talk

*Live biological imaging: the technological challenge for four-dimensional microscopy*

22:00 – 23:00

**Bar open**

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All sessions in the **Flitcroft Room**

Programme

Monday 25 June 2012

- 08:00 – 08:55 **Breakfast in the Prince Christian Room**
- 08:55 – 09:00 **Session I**
- Chair – Gipi Schiavo** Introduction to session
- 09:00 – 09:40 **Jennifer Lippincott-Schwartz**  
*Emerging fluorescence technology to study the spatial and temporal dynamics of molecules within living cells*
- 09:40 – 10:20 **Gaudenz Danuser**  
*Computer vision in cell biology: where next?*
- 10:20 – 11:00 **Molly Stevens**  
*Using imaging for the development of new biomedical materials*
- 11:00 – 11:40 **Group photograph**  
**Coffee break in the Greening Room**
- 11:40 – 12:20 **Ernst Stelzer**  
*Light sheet-based fluorescence microscopy (LSFM) reduces phototoxic effects, providing new means for modern life sciences*
- 12:20 – 13:00 **Mark Lythgoe**  
*In vivo imaging of cellular function and gene expression: photoacoustic, MRI and nuclear imaging*
- 13:00 – 14:15 **Lunch in the Prince Christian Room**
- 14:25 – 14:30 **Session II**
- Chair – Francis Barr** Introduction to session
- 14:30 – 15:10 **Graham Knott**  
*Correlated light and focussed ion beam scanning electron microscopy*
- 15:10 – 15:50 **Petra Schwille**  
*Assessing molecular dynamics in live cells: how quantitative can we be?*
- 15:50 – 16:30 **Tea break in the Windham Room**
- 16:30 – 19:00 Poster session in the Greening Room
- 19:00 – 20:00 **Pre-dinner drinks in the Drawing Room**  
**History talk on Cumberland Lodge**
- 20:00 – 21:30 **Dinner in the Cumberland Room**
- 21:30 – 23:00 **Bar open**

All sessions in the **Flitcroft Room**

Programme

Tuesday 16th October

- 08:00 – 08:55 **Breakfast in the Cumberland Room**
- 08:55 – 09:00 **Session III**
- Chair – Francis Barr** Introduction to session
- 09:00 – 09:40 **Michiyuki Matsuda**  
*Live imaging of signaling molecule activities in transgenic mice expressing FRET biosensors*
- 09:40 – 10:20 **Kay Grünewald**  
*Integrated imaging of virus-host-interactions*
- 10:20 – 11:00 **Markus Sauer**  
*Fluorescence localization microscopy – the transition from concept to biological research tool*
- 11:00 – 11:40 **Coffee break in the Greening Room**
- 11:40 – 12:20 **Ilan Davies**  
*The mechanism of translational regulation in the Drosophila oocyte - superresolution and live cell imaging*
- 12:20 – 13:00 **Pavel Tomancak**  
*Open source bioimage informatics - what is it good for?*
- 13:00 – 14:15 **Lunch in the Prince Christian Room**
- 14:25 – 14:30 **Session IV**
- Chair – Gipi Schiavo** Introduction to session
- 14:30 – 15:10 **Daniel Gerlich**  
*Machine learning and modeling in image-based screening*
- 15:10 – 15:50 **Yuri Korchev**  
*Beyond the optical resolution in living cells: biomedical applications of scanning ion conductance microscopy*
- 15:50 – 16:30 **Tea break in the Greening Room**
- 16:30 – 17:10 **Philippe Bastiaens**  
*Cellular automata in quantitative cell biology*
- 17:10 – 18:00 **Gipi Schiavo, Francis Barr and Michael Way**  
*General discussion and closing remarks*
- 19:00 – 20:00 **Pre-dinner drinks in the Drawing Room**
- 20:00 – 22:00 **Dinner in the Prince Christian Room**
- 22:00 – 23:00 **Bar open**

All sessions in the **Flitcroft Room**

08:00 – 09:00

Breakfast in the Prince Christian Room

Depart

# Grants for Science

## The Company of Biologists Grants

The Company of Biologists finances a range of awards and charitable grants through the publication of its five journals

Development • Journal of Cell Science • The Journal of Experimental Biology  
Disease Models & Mechanisms • Biology Open

These include:  
Scientific Meeting Grants • Travelling Fellowships • Small Meeting Grants

For details of deadlines, or for more information see [biologists.com/grants.html](http://biologists.com/grants.html)  
or email the Charity Administrator - [charity@biologists.com](mailto:charity@biologists.com)

THE COMPANY OF Biologists Development Journal of Cell Science The Journal of Experimental Biology DMM Disease Models & Mechanisms BiO BIOLOGY OPEN

Name	Institute
Sharon Ahmad	Journal of Cell Science, UK
Kurt Anderson	Beatson Institute for Cancer Research, UK
Francis Barr	University of Oxford, UK
David Barry	Cancer Research UK
Philippe Bastiaens	MPI, Germany
Atul Bharde	Ohio State University, USA
Gabriela Bodea	University of Bonn, Germany
Ilan Davis	University of Oxford, UK
Gaudenz Danuser	Harvard Medical School, USA
Maud Dumoux	Birkbeck College/UCL, UK
Daniel Gerlich	IMBA Vienna, Austria
Kay Grünewald	University of Oxford, UK
Callista Harper	Queensland Brain Institute, Australia
Graham Knott	EPFL, Switzerland
Yuri Korchev	Imperial College London, UK
Janos Kriston-Vizi	University College London, UK
David Lando	University of Cambridge, UK
Jennifer Lippincott-Schwartz	NICHD/NIH, USA
Mark Lythgoe	Centre for Advanced Biomedical Imaging, University College London, UK
Michiyuki Matsuda	Kyoto University, Japan
Claire Moulton	The Company of Biologists, UK
Julian Ng	MRC Laboratory of Molecular Biology, UK
Helio Roque	University of Oxford, UK
Markus Sauer	University of Wuerzburg, Germany
Gipi Schiavo	Cancer Research UK
Petra Schwillie	MPI of Biochemistry, Germany
John Sedat	University of California, San Francisco, USA
Ernst Stelzer	Goethe University Frankfurt am Main, Germany
Molly Stevens	Imperial College London, UK
Pavel Tomancak	MPI-CBG, Dresden, Germany
Michael Way	Cancer Research UK





# THE COMPANY OF Biologists

The Company of Biologists is a UK based charity and not-for-profit publisher run by biologists for biologists. Established in 1925, the company's aims are to promote research and study across all branches of biology. The Company publishes three established journals, *Development*, *Journal of Cell Science*, *The Journal of Experimental Biology* and two newer Open Access journals, *Disease Models & Mechanisms* and *Biology Open*.

In addition to publishing, The Company makes an important contribution to the scientific community, providing grants, travelling fellowships and sponsorship to noteworthy scientists, meetings, societies and collaborative projects around the world. The Company also runs a series of transdisciplinary workshops.



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Advances in developmental biology and stem cells

[dev.biologists.org](http://dev.biologists.org)

## Journal of Cell Science

The science of cells

[jcs.biologists.org](http://jcs.biologists.org)

## The Journal of Experimental Biology

At the forefront of comparative physiology and integrative biology

[jeb.biologists.org](http://jeb.biologists.org)

## DMM Disease Models & Mechanisms

Basic research with translational impact

[dmm.biologists.org](http://dmm.biologists.org)

## Bio BIOLOGY OPEN

Facilitating rapid peer review for accessible research. Launched September 2011.

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