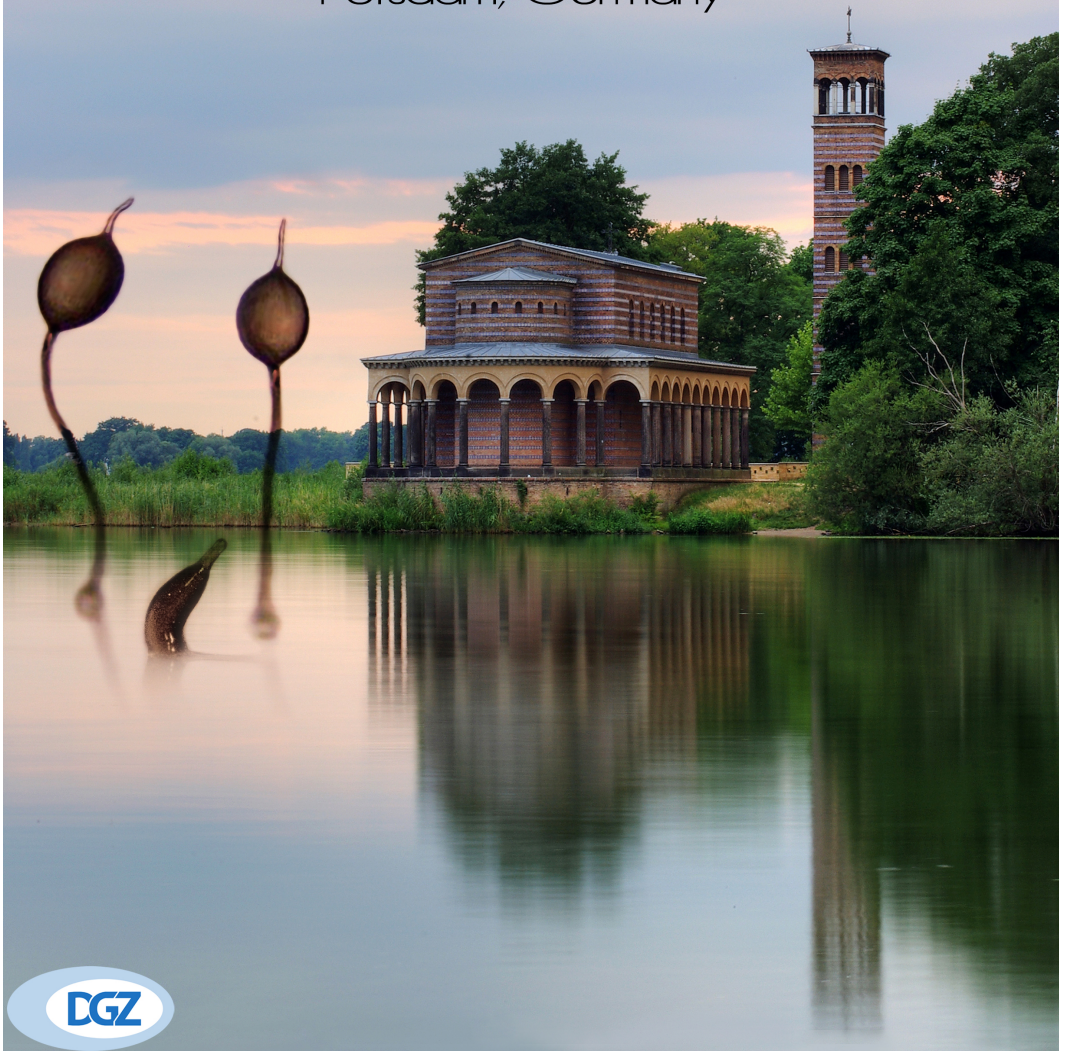


# Dicty 2014

Annual International Dictyostelium Conference

August 3rd - August 7th

Potsdam, Germany



Supported by:



Title picture: Heilandskirche, Sacrow, Potsdam (Ralph Gräf), Dicties (Rupert Mutzel, Sascha Thewes)

# Dicty 2014

Annual International Dictyostelium Conference

August 3 - 7, Potsdam, Germany

Venue:

Seminaris Hotel Potsdam  
An der Pirschheide 40  
14471 Potsdam

Organizing committee:

Ralph Gräf (Universität Potsdam)  
Sascha Thewes (Freie Universität Berlin)  
Carsten Beta (Universität Potsdam)

## Dicty 2014 - Programme

Sun 3rd	Mon 4th	Tue 5th	Wed 6th	Thu 7th
	9:00 - 10:40 1st morning session <b>Development</b>	9:00 - 10:40 1st morning session <b>Chemotaxis and cell migration</b>	9:00 - 10:40 1st morning session <b>Phagocytosis</b>	9:00 - 10:40 1st morning session <b>Evolution</b>
	coffee break	coffee break	coffee break	coffee break
	11:10 - 12:50 2nd morning session <b>Signaling</b>	11:10 - 12:50 2nd morning session <b>Biophysics of cell migration</b>	11:10 - 12:50 2nd morning session <b>Pathogen interactions I (4)</b>	11:10 - 12:50 2nd morning session <b>Cell Biology</b>
	13:00 - 14:30 lunch break	13:00 - 14:30 lunch break	12:50 - 13:30 luxury coffee break	13:00 - 14:30 lunch
	14:30 - 16:10 1st afternoon session <b>Signaling II/Membrane- associated proteins</b>	14:30 - 16:10 1st afternoon session <b>Nucleus and chromatin</b>	13:30 - 14:20 short afternoon session <b>Pathogen interactions II (2)</b>	Departure
	coffee break	coffee break		
16:00 Registration	16:40 - 18:20 2nd afternoon session <b>Disease models</b>	16:40 - 18:20 2nd afternoon session <b>Gene expression and genomics</b>	Tour to Sanssouci castle and park (busses leave at 14:30 pm)	
18:30 Keynote lecture/Dicty Race				
20:00 Welcome Dinner	18:30 - 20:00 Dinner	18:30 - 20:00 Dinner	19:30 pm Conference Dinner at the Sanssouci castle	
	20:00 Poster Session I	20:00 Poster Session II		

Sunday, August 3

- 16:00            Registration
- 18:30 1        Keynote lecture by **Günther Gerisch**
- 19:30 2        The Dicty World Race  
**Daniel Irimia**
- 20:00            Welcome Dinner

Monday, August 4

*1st morning session: Development; Chair: Tian Jin*

- 9:00 3 Cell signaling during development of Dictyostelium  
**William F. Loomis**
- 9:25 4 Allorecognition mediates the transition from unicellularity to multicellularity in D. discoideum **Adam Kuspa**
- 9:50 5 Genetic analysis of Dictyostelium cell death control  
**Pierre Golstein**
- 10:15 6 Investigating 'rheomboid' membrane proteases' roles in development and signalling in Dictyostelium **Mehak Rafiq**

10:40 - 11:10 Coffee break

*2nd morning session: Signaling I; Chair: Bill Loomis*

- 11:10 7 The Actions of Chemoattractants Folate and cAMP during Adaptive and Non-Adaptive Signaling Response **Netra Pal Meena**
- 11:35 8 A GPCR-controlled imperfectly adaptive Ras signaling guides directional responses to a chemoattractant gradient **Tian Jin**
- 12:00 9 Essential roles for small G-proteins in the regulation of directional cell movement  
**Rama Kataria**
- 12:25 10 A novel heterotrimeric G-protein interacting protein (Gip1) and its function in chemotaxis  
**Yoichiro Kamimura**

13:00 - 14:30 Lunch break

*1st afternoon session: Signaling II / Membrane-associated proteins; Chair: Ludwig Eichinger*

- 14:30 11 A putative protein kinase C-like protein affects signaling, cell adhesion, mound morphogenesis and cell type differentiation in Dictyostelium **Wasima Mohamed**
- 14:55 12 The Dictyostelium discoideum RACK1 orthologue has roles in growth and development  
**Napoleon N. Omosigho**
- 15:20 13 The inverse BAR-domain protein IBARA drives membrane remodelling to control osmoregulation, phagocytosis and cytokinesis **Jan Faix**
- 15:45 14 Of lean and fat Dictyostelium cells: Going through a genetically forced yo-yo diet  
**Markus Maniak**

16:10 - 16:40 Coffee break

*2nd afternoon session: Disease models; Chair: Annette Müller-Taubenberger*

- 16:40 15 Dictyostelium a model system to study LRRK2-mediated Parkinson's disease  
**Arjan Kortholt**
- 17:05 16 The Role of Mitochondrial Dysfunction in Dictyostelium Parkinson's Disease Models  
**Paul R. Fisher**
- 17:30 17 Tip genes, autophagy and human diseases  
**Ricardo Escalante**
- 17:55 18 Dissecting the primordial function of the gamma-secretase complex  
**Robin S.B. Williams**

18:30 - 20:00 Dinner

20:00 - 22:00 Poster Session I

Tuesday, August 5

*1st morning session: Chemotaxis and cell migration; Peter van Haastert*

- 9:00 19 A master protein kinase regulating Dictyostelium chemotaxis  
**Rob Kay**
- 9:25 20 Structure function relationships of membrane proteins involved in cell migration  
**Julia von Bülow**
- 9:50 21 Ate1-mediated posttranslational arginylation in Dictyostelium discoideum  
**Annette Müller-Taubenberger**
- 10:15 22 SILAC-based proteomic quantification of chemoattractant-induced cytoskeleton dynamics  
**Grzegorz J. Sobczyk**

10:40 - 11:10 Coffee break

*2nd morning session: Biophysics of cell migration; Chair: Carsten Beta*

- 11:10 23 Cellular memory in eukaryotic chemotaxis  
**Wouter-Jan Rappel**
- 11:35 24 Sorting of Dictyostelium cells in vertically constrained aggregates  
**Albert Bae**
- 12:00 25 Dynamics of wave patterns in giant Dictyostelium cells  
**Matthias Gerhardt**
- 12:25 26 Three-dimensional organization of actin filaments in propagating waves  
**Marion Jasnin**

13:00 - 14:30 Lunch break

*1st afternoon session: Nucleus and chromatin; Chair: Christian Hammann*

- 14:30 27 Knockout zaps are done on Friday mornings  
**Douwe M. Veltman**
- 14:55 28 Developmental Regulation of Nucleosome Positioning and Gene Expression by a CHD Type III Chromatin Remodeling Protein  
**Alan R. Kimmel**
- 15:20 29 A compendium of chromatin remodelling complex mutants in Dictyostelium discoideum and the nucleosome positioning roles of the CHD family  
**Mark E. Robinson**
- 15:45 30 Nuclear envelope-associated Proteins of Dictyostelium  
**Petros Batsios**

16:10 - 16:40 Coffee break

*2nd afternoon session: gene expression and genomics; Chair: Thomas Winckler*

- 16:40 31 Dissecting transcriptional mechanism using live cell imaging  
**Jonathan R. Chubb**
- 17:05 32 RNA mediated RNA regulation by Argonautes and dsRBD proteins  
**Wolfgang Nellen**
- 17:30 33 Dicer-like proteins in Dictyostelium  
**Christian Hammann**
- 17:55 34 Evolutionary conservation of a small set of developmentally expressed genes in social amoebae  
**Gernot Glöckner**

18:30 - 20:00 Dinner

20:00 - 22:00 Poster Session II

Wednesday, August 6

*1st morning session: Phagocytosis; Chair: Markus Maniak*

- 9:00 35 Dictyostelium WASP: roles in endocytosis and cell polarity, but not in pseudopod formation (plus a note about the evolution of phagocytosis) **Robert Insall**
- 9:25 36 Biochemical and biological properties of cortexillin III, a component of Dictyostelium DGAP1-cortexillin complexes **Shi Shu**
- 9:50 37 The identification of axeB, the master regulator of macropinocytosis and phagocytosis **Gareth Bloomfield**
- 10:15 38 Multiple phases and functions of WASH in the phagocytic cycle **Jason S. King**

10:40 - 11:10 Coffee break

*2nd morning session: Pathogen interactions I; Chair: Netra Meena*

- 11:10 39 Impact of Lipid Metabolism on the Infection of Dictyostelium with Mycobacterium marinum **Thierry Soldati**
- 11:35 40. Take the bitter with the sweet: Discoidins and mycobacterial infection **Ana T. López-Jiménez**
- 12:00 41 The autophagic machinery ensures non-lytic ejection of mycobacteria and efficient cell-to-cell transmission **Rachel Pilla**
- 12:25 42 Dictyostelium discoideum as a host model to study the interaction with pathogenic and apathogenic yeast **Sascha Thewes**

12:50 - 13:30 Luxury coffee break

*1st afternoon session: Pathogen interactions II; Chair: Netra Meena*

- 13:30 43 Autophagy 16 and 9 mutants have similar endocytosis defects but deficiencies in development and proteasomal activity are much more severe in the double mutant **Qihong Xiong**
- 13:55 44 Functional characterization of Dictyostelium iron transporters Nramp1 and Nramp2, involved in resistance to bacterial infection and in iron homeostasis: an update **Salvatore Bozzaro**

14:30 Bus call for **Sanssouci Tour**

- 15:00 Tour through the castle and park Sanssouci
- 17:00 Free time to visit the park and downtown area

19:30 **Conference Dinner** at the Mövenpick Restaurant "Zur historischen Mühle" at the historic wind mill.

22:45 Bus call for transfer to the Seminaris hotel

Thursday, August 7

*1st morning session: Evolution; Chair: Pauline Schaap*

9:00 45 Eastern Japanese Dictyostelia species adapt while populations exhibit neutrality  
**Shun Adachi**

9:25 46 Functional evolution of adenylate cyclase R and adenylate G in Dictyostelia  
**Yoshinori Kawabe**

9:50 47 Trade-offs and the illusion of social success in Dictyostelium discoideum  
**Christopher R.L. Thompson**

10:15 48 Divide and conquer: vegetative conflict in D. discoideum  
**Balint Stewart**

10:40 - 11:10 Coffee break

*2nd morning session: Cell biology / Organelle function; Chairs: Ralph Gräf/Sascha Thewes*

11:10 49 CP161, a new component of the centrosome  
**Salil K. Sukumaran**

11:35 50 Characterization of four novel core components of the Dictyostelium centrosome  
**Irene Meyer**

12:00 51 Adaptations in the proteostasis network of the social amoebae Dictyostelium discoideum cause an unusual resilience to protein aggregation  
**Liliana Malinovska**

12:25 52 Peptidyl prolyl cis-trans isomerases (PPIases): a study in Dictyostelium discoideum  
**Aruna Naorem**

13:00 Lunch

14:30 Departure