

# Systems 1st QBI-MCN Symposium Neuroscience

28-30 September 2011

Level 7 Auditorium, Queensland Brain Institute, Building 79, Upland Road,  
The University of Queensland, St Lucia Campus, Brisbane QLD 4072

## Scientific Program

### Wednesday 28 September 2011

- 16:15 Opening remarks by:  
Professor Perry Bartlett (Director, QBI) and Professor Paul Greenfield (Vice-Chancellor, UQ)
- 16:30 Professor Perry Bartlett (Director, QBI); "Neuroscience at the Queensland Brain Institute"
- 16:45 Professor Benedikt Grothe (Director, MCN); "The neuroscience landscape in Munich"
- 17:00 **Keynote Lecture** (Chair: Perry Bartlett)  
Professor Mark Hübener (MPIN); "Learning to see: Imaging structural and functional plasticity in the visual cortex"
- 18:00 **Cocktail Reception** **QBI Terrace Level 7**

### Thursday 29 September 2011

- Session 1: Sensory systems** (Chair: Geoff Goodhill)
- 8:30 Justin Marshall (QBI); "Stomatopod vision – why is it so complex?"
- 8:55 Armin Bahl (MPIN); "Visual control of walking speed in *Drosophila melanogaster*"
- 9:20 Allen Cheung (QBI); "Animal spatial navigation: need for a 'cognitive map'?"
- 9:45 Ilona Grunwald Kadow (MPIN); "Formation and function of olfactory neural circuits underpinning innate behavior"
- 10:10 Judith Reinhard (QBI); "Plasticity of olfactory receptors modulated by sensory experience"
- 10:35 **Morning tea** **QBI Terrace Level 7**
- Session 1: Sensory systems cont.** (Chair: Justin Marshall)
- 11:05 Benedikt Grothe (LMU); "Dynamics of binaural hearing"
- 11:30 Christian Leibold (LMU); "Chasing the phase: modelling of binaural coincidence detection"
- 11:55 Lutz Wiegrebe (LMU); "Fast and focussed: spatio-temporal processing in bat sonar"
- 12:20 **Lunch** **QBI Reception Lawn**
- Session 2: Cellular systems** (Chair: Charles Claudianos)
- 13:20 Magdalena Götz (LMU,HCM); "Neurogenic fate acquisition in adult neurogenesis"
- 13:45 Perry Bartlett (QBI); "Stimulation of latent, neurogenic stem cells in the hippocampus"
- 14:10 Silvia Cappello (HCM); "A new mouse model of 'double cortex': the role of RHOA in cortical development"
- 14:35 Helen Cooper (QBI); "Neogenin: a molecular determinant of Radial progenitor polarity and function"
- 15:00 **Afternoon tea** **QBI Terrace Level 7**
- Session 2: Cellular systems cont.** (Chair: Fred Meunier)
- 15:30 Pia Johansson (HCM); "The developing choroid plexuses act as signaling centres capable of influencing the behavior of neuronal progenitor cells"

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### Thursday 29 September 2011 cont.

- |       |   |   |
|-------|---|---|
| 15:55 | Massimo Hilliard (QBI); "Axonal regeneration proceeds through axonal fusion in <i>Caenorhabditis elegans</i> neurons" |   |
| 16:20 | Linda Richards (QBI); "The development of commissural projections from the cingulate cortex"                          |   |
| 16:45 | Geoff Goodhill (QBI); "Mechanisms of axonal gradient detection"   |   |
| 17:10 | <b>Poster session</b><br>Wine & Cheese, Beer Tasting Competition  | <b>L7 seminar room and interaction area</b> |
| 19:00 | <b>Dinner in groups</b>   | <b>Selected restaurants</b>                 |

### Friday 30 September 2011

#### Session 3: Molecular systems

(Chair: Linda Richards)

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| 8:30  | Rüdiger Klein (MPIN); "Molecular mechanisms of repulsive guidance of pathfinding cells and axons"                |  |
| 8:55  | Charles Claudianos (QBI); "The neurexin/neurologin complex in the synapse: a role in mediating sensory response" |  |
| 9:20  | Sonia Paixao (MPIN); "Genetic analysis of EphA4 in cortical and spinal control of locomotion"                    |  |
| 9:45  | Elizabeth Coulson (QBI); "Signalling neuronal death and survival through the neurotrophin receptors"             |  |
| 10:10 | Fred Meunier (QBI); "The role of <i>munc18</i> in neuronal communication"  |  |

10:35 Morning tea

QBI Terrace Level 7

#### Session 4: Cognitive systems

(Chair: Ottmar Lipp)

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|-------|--|--|
| 11:05 | Heiner Deubel (LMU); "Attention for the preparation of saccades, manual reaching, and grasping"  |  |
| 11:30 | Oliver Baumann (QBI); "Distinct neural networks underlie encoding of categorical versus coordinate spatial relations during active navigation" |  |
| 11:55 | Donatas Jonikaitis (LMU); "Remapping of visual attention"  |  |

12:20 Lunch

#### Session 4: Cognitive systems cont.

(Chair: Judith Reinhard)

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|-------|---|--|
| 13:20 | Bruno van Swinderen (QBI); "Visual competition and brain dynamics in the fly and the bee"           |  |
| 13:45 | Pankaj Sah (QBI); "Excitatory GABA-ergic transmission in the amygdala: a role in fear learning"     |  |
| 14:10 | Ottmar Lipp (UQ PSYCH); "The extinction of human fear learning: differences across domains of fear" |  |
| 14:35 | Reinhard Flessner (UQ International); "Collaborative funding opportunities – Germany and Australia" |  |

15:00 Afternoon tea

QBI Terrace Level 7

Queensland Brain Institute & Munich Center for Neurosciences

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## Scientific Program

### Friday 30 September 2011 cont.

- 15:30** Tour of QBI research laboratories (3 parallel tours, 10 people per group)  
Facilities to visit: cellular/molecular laboratories, electrophysiological laboratories, rodent facilities, marine laboratories, insect laboratories, honeybee facility, cognitive laboratories, imaging facilities (PET, fMRI)
- 16:00** Group workshops to discuss future collaborative projects, joint funding options, and student/staff exchange  
L3 meeting room: Sensory function and plasticity focus group  
L4 meeting room: Vision, cognition, navigation focus group  
L5 meeting room: Molecular mechanisms focus group  
L7 seminar room: Neurogenesis focus group  
Other focus groups: L6 reading room and faculty offices  
Please identify likely collaborators and join the relevant focus group.
- 17:30** Closing remarks  
Professor Benedikt Grothe (LMU)  
Professor Perry Bartlett (QBI)
- 19:00** **Dinner at Customs House for invited guests**  
Pre-dinner drinks in the Art Gallery at 7PM  
Dinner in the Lady Thies Room at 7:30PM  
Customs House is situated at 399 Queen Street, Brisbane