

Detailed Programme – European Worm Meeting 2006

Saturday, 29 April 2006

15.00 - 21.00 : *Registration*

19.00 - : *Dinner*

20.00 – 22.00 : Session I: **Cell Biology and Metabolism -I** [Chair: Francesca Palladino]
time allocated: 15 min. including discussion

- T-001 A Novel Exosome-Mediated Apical Secretion Pathway Involving the V0-sector of the V-ATPase in *C. elegans* Epidermal Cells
A. Benedetto, S. Liégeois, J-M. Garnier, Y. Schwab and M. Labouesse
- T-002 The Wnt Pathway Controls Engulfment of Apoptotic Corpses, Spindle Orientation and Migration through CED-10/Rac
J. Cabello, U. Gunesdogan and R. Schnabel
- T-003 Towards A Pathway for Centriole Duplication
M. Delattre and P. Gönczy
- T-004 Identifying Monomethyl Branched Fatty Acids as a Critical Product of *let-767*, A Short Chain Dehydrogenase
E.V. Entchev, D. Schwudke, V. Matyash, B. Abermann, M. Wilsch-Bräuninger, A. Schevchenko and T.V. Kurzchalia
- T-005 Barrier-to-Autointegration Factor Participates Directly in Nuclear Envelope Formation *in vivo* and this Function is Regulated by VRK-1 Protein Kinase
M. Gorjanacz, E. Klerks, P. Askjaer, R. Santarella, V. Galy and I.W. Mattaj
- T-006 Centrosomes Dictate Timing of Mitotic Entry in *C. elegans* Embryos
V. Hachet and P. Gönczy
- T-007 DAB-1 Gives Us New Insights into Trafficking Pathways
A. Holmes and J. Pettitt
- T-008 A Novel Role for Nanos in PAR Protein-Dependent Cell Polarity
J-C. Labbé, A. Pacquelet, E. Zanin, T. Marty and **M. Gotta**

Sunday, 30 April 2006

08.30 – 10.15 : Session II: **Dauer Formation, Ageing and Senescence** [Chair: Florence Solari]
time allocated: 15 min. including discussion

- T-009 The Mitochondrial Prohibitin Complex Modulates Ageing in *C. elegans*
M. Artal-Sanz and N. Tavernarakis
- T-010 The LET-418/Mi-2-interacting Protein BRA-1 Links TGF- β Signaling and Dauer Formation with Chromatin Remodeling
K. Brunschwig, C. Wicky, E. Jaquiéry, C.-O. Marti, M. Passannante and F. Mueller
- T-011 Ribosomal Proteins are New Longevity Determinants in *C. elegans*
M. Hansen and C. Kenyon

- T-012 The Genetics of Natural Variation in the Phenotypic Plasticity of Dauer Larvae Development
S.C. Harvey, A. Shorto and M.E. Viney
- T-013 Dauer Larvae Development and Fitness: Does it All Depend on your Environment?
A. Shorto, S.C. Harvey and M.E. Viney
- T-014 Identification of a Novel Protein Kinase that Acts in the DAF-18/PTEN Pathway and Regulates Lifespan
I. Masse, L. Molin, M. Billaud and F. Solari
- T-015 Long Lived *C. elegans* "Mit" Mutants as a Model for Human Mitochondrial Diseases: Friedreich Ataxia
N. Ventura, S. Rea, R. Testi and T. Johnson

10.15 – 10.45 : *Coffee Break*

10.45 – 12.30 : Session III: **Neurobiology and Behavior –I** [Chair: Stephen Nurrish]
time allocated: 15 min. including discussion

- T-016 Exogenous Stimulation of Muscles and Neurons Via Photoactivation of Channelrhodopsin-2 Triggers Rapid Behavioural Responses
M. Brauner, J. Liewald and A. Gottschalk
- T-017 Regulated Intraflagellar Transport of G α Subunits in *C. elegans* Sensory Cilia
M. Dekkers, J. Burghoorn and G. Jansen
- T-018 Lunapark: A Link between Synaptogenesis and the Ubiquitin Proteasome System?
L. Ghila, P. Latorre, L. Baillon and **M. Gomez**
- T-019 Regulation of RHO-1 by G12 Alpha Controlling Neurotransmitter Release
E. Hiley, R. McMullan and S. Nurrish
- T-020 Novel Role for G Protein and MAP Kinase Signaling in Salt-Chemotaxis
R. Hukema, S. Rademakers and G. Jansen
- T-021 Impaired Processing of FLP and NLP Precursors in *C. elegans* Lacking Active Prohormone Convertase 2 (EGL-3) and Carboxypeptidase E (EGL-21): Mutant Analysis by Mass Spectrometry
S.J. Husson, E. Clynen, G. Baggerman, T. Janssen and L. Schoofs
- T-022 G Proteins and Environmental Cues Regulate the Localization of Ciliary Signalling Molecules
J. Burghoorn, S. Rademakers, E. Efimenko, P. Swoboda and **G. Jansen**

12.30 – : *Lunch Break*

14.00 – 16.30 : **Poster Session A**

16.30 – 18.15 : Session IV: **Cell Biology and Metabolism –II** [Chair: Monica Gotta]
time allocated: 15 min. including discussion

- T-023 MEL-28, a Novel Nuclear Envelope and Kinetochore Protein Essential for Zygotic Nuclear Envelope Assembly
V. Galy, **P. Askjaer**, C. Franz, C. López-Iglesias and I.W. Mattaj
- T-024 The Establishment of Cortical Polarity in One-Cell Embryos: A Genomics Approach
C. Cowan and T. Hyman

- T-025 Protein O-Fucosylation is Important for Normal Distal Tip Cell Migration
 S. Canevascini, K. Kozma, M. Grob, J. Althaus, D. Klein, R. Chiquet-Ehrismann and **J. Hofsteenge**
- T-026 The Transmembrane Nucleoporin NDC-1 is Required for Nuclear Envelope Assembly *in vivo* and *in vitro*
A. Jaedicke, W. Antonin and I.W. Mattaj
- T-027 MAA-1, A Novel Acyl-CoA Binding Protein Involved in Endosomal Vesicle Transport in *C. elegans*
M.K. Larsen, S. Tuck, N.J. Faergeman and J.K. Knudsen
- T-028 Genes Required for Glycosphingolipid Synthesis are Dispensable in Most *C. elegans* Cells
G.M. Lesa and E. Marza
- T-029 VPS-32 is an Endosomal Protein Essential to Maintain the Integrity of Epithelial Cells during *C. elegans* Development
X. Michelet, L. Benkemoun, N. Roudier, C. Lefebvre and R. Legouis

18.15 – 18.45 : *Coffee Break*

18.45 – 20.30 : Session V: **Signal Transduction and Gene Expression** [Chair: Marc Pilon]
time allocated: 15 min. including discussion

- T-030 Dynamic Expression of Homeobox Genes during *C. elegans* Embryogenesis
 A.M. Abou-Zied, J. Hench, R. Johnsen, D. Baillie, D. Xue, J. Koch, **T.R. Bürglin**
- T-031 Suppressor Genetics Identify Activation Mutations in Effectors of AGE-1/PI3 Kinase Signaling in *C. elegans*
M.S. Gami, K.B. Hanselman and C.A. Wolkow
- T-032 A Conserved Function of the Retromer Complex in Long-Range EGL-20/Wnt Signaling
H.C. Korswagen, M. Betist, G. Roel, O. Destree and D. Coudreuse
- T-033 A Systematic Analysis of Nonsense Mediated mRNA Decay in *C. elegans*
D. Longman, I.L. Johnstone and J.F. Caceres
- T-034 Identification and Characterization of *mtm-1*, A Novel Member and Negative Regulator of the Engulfment Signaling Pathway in *C. elegans*
L.J. Neukomm, J.M. Kinchen and M.O. Hengartner
- T-035 wTF2.0: A Fundamental First Step for Mapping the *Caenorhabditis elegans* Transcription Factor Localizome
J. Reece-Hoyes, B. Deplancke, J. Shingles, C. Grove, D. Dupuy, A.J. M. Walhout, M. Vidal and I. Hope
- T-036 Evolutionary Resistance of Some Transcription Factor Gene Families to Gene Duplication Events
 J.S. Reece-Hoyes, J. Shingles, D. Dupuy, M. Vidal and **I.A. Hope**
- T-094 Subnuclear Positioning Changes upon Activation of Transcription in *C. elegans*
 P. Meister, B. Pike and **S.M. Gasser**

20.30 - : *Dinner*

Monday, 1 May 2006

08.30 – 10.15 : Session VI: **Cell Biology and Metabolism -II** [Chair: Thorsten Hoppe]
time allocated: 15 min. including discussion

- T-037 Self-Assembly of Centralspindlin, a Conserved Complex of Mitotic Kinesin and RhoGAP, Critical for Cytokinesis
M. Mishima and M. Glotzer
- T-038 A Conserved Role of *C. elegans* CDC-48 in ER-Associated Protein Degradation
J. Mouyssset, C. Kähler and T. Hoppe
- T-039 *C. elegans* NUM-1 Modulates Endocytosis by Targeting the TAT-1 Phospholipid Flippase
L. Nilsson and S. Tuck
- T-040 Mechanical Oscillations during Asymmetric Spindle Positioning Require a Threshold Number of Active Cortical Force Generators
J. Pecreaux, J-C. Röper, K. Kruse, F. Julicher, A.A. Hyman, S.W. Grill and J. Howard
- T-041 Mechanisms and Functions of Homotypic Cell Fusion
B. Podbilewicz, E. Leikina, A. Sapir, T. Gattegno, A. Mittal, C. Valansi, M. Suissa, G. Shemer, L.V. Chernomordik
- T-042 Autophagy Contributes to Necrotic Cell Death in *C. elegans*
C. Samara, P. Syntichaki and N. Tavernarakis
- T-043 Expression of Mammalian GPCRs in *C. elegans* Generates Novel Behavioural Responses to Human Ligands
M.S. Teng, M.P.J. Dekkers, B.L. Ng, S. Rademakers, G. Jansen, A.G. Fraser and J. McCafferty

10.15 – 10.45 : *Coffee Break*

10.45 – 12.30 : Session VII: **Neurobiology and Behavior -II** [Chair: Peter Swoboda]
time allocated: 15 min. including discussion

- T-044 Neuropeptide Y-like Receptors NPR-2 and NPR-1 Act Antagonistically to Control Movement
N. Krieg, A. Cook, N.A. Hopper and L. Holden-Dye
- T-045 Evolutionary Conservation of Synaptic Tetraspan Vesicle Membrane Proteins but Lack of Defects in Mutant *C. elegans* Strains
C. Abraham, L. Bai, H. Hutter, M. Palfreyman, G. Spatkowski, R. Weimer, R. Windoffer, E. Jorgensen and **R.E. Leube**
- T-046 The Role of Polyunsaturated Fatty Acids in Neurotransmitter Release
E. Marza, T. Long, D.H. Hall and G.M. Lesa
- T-047 Rho is a Pre-Synaptic Activator of Neurotransmitter Release at Pre-Existing Synapses in *C. elegans*
R. McMullan, E. Hiley, P. Morrison and S.J. Nurrish
- T-048 Early Embryonic Programming of Postmitotic Laterality of Chemosensory Neurons in *C. elegans*
R.J. Poole, R.J. Johnston Jr., O. Hobert
- T-049 *C. elegans* Intersectin: A Synaptic Adaptor Protein Coupling Endocytic Membrane Traffic to Exocytosis
A.E. Salcini, S. Rose, M.G. Malabarba, P.P. Di Fiore

- T-050 *C. elegans* ASIC-1 is Required for Associative Learning and Memory in *C. elegans*
G. Voglis and N. Tavernarakis

12.30 – : *Lunch Break*

14.00 – 16.30 : **Poster Session B**

16.30 – 18.15 : Session VIII: **Development –I** [Chair: Neil Hopper]
time allocated: 15 min. including discussion

- T-051 Giving Worms the Hump: Genome-Wide Screen for Novel Molecules that Regulate the Cadherin-Catenin Complex in *C. elegans*
A. Couthier, T. Grana, A. Flett, J. Hardin and J. Pettitt
- T-052 Phosphorylcholine-Modified Proteins of *Caenorhabditis elegans* are Specific to Developmental Stages
J. Grabitzki, M. Ahrend, R. Geyer and G. Lochnit
- T-053 *hedgehog*-Related Genes Have Essential Functions in the Extracellular Matrix
L. Hao, G. Lauter, K. Mukherjee, S. Liegeois, D. Baillie, M. Labouesse, S. Shaham, T.R. Bürglin
- T-054 The Planar Cell Polarity Protein VANG-1 Interferes with Intercalation Events During Epithelial Morphogenesis in *C. elegans*
M. Hoffmann, C. Segbert, G. Helbig and **O. Bossinger**
- T-055 The ATPase ASNA-1 Positively Regulates Insulin Secretion in *C. elegans* and Mammals and Promotes Growth Non-Autonomously
G. Kao, C. Nordensson, M. Still, A. Rönnlund, P. Naredi and S. Tuck
- T-056 Developmental Regulation of UNC-45 Mediated Myosin Assembly
J. Kim, C. Janiesch and T. Hoppe
- T-057 Role of Runx and CBFbeta Homologues in the Control of Cell Proliferation in *C. elegans*
R. Nimmo, H. Kagoshima and A. Woppard

18.15 – 18.45 : *Coffee Break*

18.45 – 20.30 : Session IX: **Environment, Stress and Disease –I** [Chair: Nathalie Pujol]
time allocated: 15 min. including discussion

- T-058 Defects in *C. elegans* Nucleotide Excision Repair Lead to Hypermutability, Growth Arrest and Degradation of RNA Pol II
J.W. Astin, N.J. O' Neil and P.E. Kuwabara
- T-059 Using *C. elegans* Chromosome Substitution Strains to Map Innate Immunity Loci
W.C. Chen, S.S. Slutz and M-W. Tan
- T-060 The Acyltransferase BUS-1 Acts in the Rectal Epithelium to Mediate Sensitivity of *C. elegans* to the Bacterial Pathogen *Microbacterium nematophilum*
M.J. Gravato-Nobre and J. Hodgkin
- T-061 Novel Genes Specifically Affecting DNA Damage Induced Apoptosis Define Pathways Acting Upstream and Downstream of *cep-1/p53*
S. Greiss, A. Bailly, J. Boerckel, S. Ahmed, A. Gartner
- T-062 PMK-1 MAP Kinase Pathway in Response and Defense to Pore-Forming Toxins
D.L. Huffman, M. Hsieh and R.V. Aroian

- T-063 SNPping the *nipi*'s
N. Pujol, **C.L. Kurz**, K. Ziegler and J. Ewbank
- T-064 Identification of Evolutionarily Conserved DNA Damage Response and Radiation Protection Pathways by Genome-Wide RNAi
G. van Haaften, R. Romeijn, J. Pothof, W. Koole, L.H.F. Mullenders, A. Pastink, R.H.A. Plasterk and M. Tijsterman

20.30 - : *Gala Dinner*

Tuesday, 2 May 2006

Free time or optional excursion till 13:00

13.00 – 14.00 : *Lunch*

14.00 – 16.30 : **Poster Session C**

16.30 – 18.15 : Session X: **Development –II** [Chair: Olaf Bossinger]
time allocated: 15 min. including discussion

- T-065 The *lin35*/Rb and PTGS/RNAi Pathway Cooperate to Regulate the Onset of Endocycles in *C. elegans*
J. Ouellet and R. Roy
- T-066 Distinct and Redundant Functions for *C. elegans* HP1 Proteins in Post-Embryonic Development
F. Palladino, S. Schott, T. Simonet, V. Coustham, C. Bedet, M. Karali
- T-067 The Glycosyltransferase BUS-8 is Essential for Epidermal Morphogenesis
F.A. Partridge, A.W. Tearle, M.J. Gravato-Nobre, W.R. Schafer and J. Hodgkin
- T-068 The Transcription Factor EGL-43 is Necessary for Anchor Cell Invasion during Vulval Development
I. Rimannan and A. Hajnal
- T-069 Interaction between Nicotinic and Insulin Pathways during Post-Embryonic Development
A-F. Ruaud and J-L. Bessereau
- T-070 An Ancestral Module Patterns a Derived Nematode Vulva Equivalence Group
B. Schlager and R. Sommer

18.15 – 18.45 : *Coffee Break*

18.45 – 20.30 : Session XI: **Germline and Reproduction** [Chair: Christian Eckmann]
time allocated: 15 min. including discussion

- T-071 Interplay Between the Nuclear Receptor NHR-25 and β-Catenin Signaling during Cell Fate Decision in the Gonad of *C. elegans*
M. Asahina, T. Valenta, M. Silhankova, V. Korinek and M. Jindra
- T-072 COQ Genes: Ubiquinone Biosynthesis, Gonad Development and Fertility Establishment
C. Asencio, J.C. Rodríguez-Aguilera, A. Gavilán, R. Vázquez-Manrique, H.A. Baylis, J. Cabello, R. Schnabel, P. Navas

- T-073 Robustness and Evolution of *Caenorhabditis* Vulva Development
 C. Braendle, J. Milloz, I. Nuez and **M-A. Félix**
- T-074 Computational Modeling and Analysis of *Caenorhabditis elegans* Vulval Development
J. Fisher, N. Piterman, T.A. Henzinger
- T-075 MOG-3 Links Sex Determination to GLP-1/Notch Signaling
P. Kasturi and A. Puoti
- T-076 Changes in Gonad Arm Extension and the Evolution of Gonad Morphology in Nematodes
D. Rudel and R. Sommer
- T-077 The Novel Cytoplasmic Poly(A) Polymerase GLD-4 Regulates Germ Cell Fate Decisions in *C. elegans*
M. Schmid and C. Eckmann

20.30 - : *Dinner*

Wednesday, 3 May 2006

08.30 – 10.15 : Session XII: **Environment, Stress and Disease –II** [Chair: Joy Alcedo]
time allocated: 15 min. including discussion

- T-078 Using *Caenorhabditis elegans* to Study Cellular Response to Endogenous DNA Damage
 M. Dengg, T. Garcia-Muse, S. Boulton and **H. Nilsen**
- T-079 Systematic Mapping of Genetic Interactions in *C. elegans* Suggests a New Paradigm for Human Genetic Disease
B. Lehner, C. Crombie, J. Tischler, A. Fortunato and A.G. Fraser
- T-080 *C. elegans* Models of Protein Misfolding Disease
E. Nollen, T. van Ham and R.H.A. Plasterk
- T-081 Down-Regulation of CHN-1, a Chaperone-Associated E3-Ligase, Suppresses Muscle Degeneration in DMD Model of *C. elegans*
O. Nyamsuren and R. Baumeister
- T-082 Regulation of BRC-1 – Dependent Ubiquitylation at DNA Damage Sites
J. Polanowska, J. Martin, T. Garcia-Muse and S. Boulton
- T-083 Gene Requirements for UV-Induced Apoptosis
L. Stergiou, K. Doukoumetzidis, A. Sendoel and M.O. Hengartner
- T-084 Sex-Dependent Resistance to the Fungal Pathogen *Cryptococcus neoformans*
 M.C.W. van den Berg, J.Z. Woerlee, H. Ma and **R.C. May**

10.15 – 10.45 : *Coffee Break*

10.45 – 12.30 : Session XIII: **Methods and Resources** [Chair: Jérôme Reboul]
time allocated: 12 min. including discussion

- T-085 CB4856 /N2 Mapping Populations: A New Powerful Resource for Fine-Mapping of Complex Traits
A. Doroszuk, E. Fradin, B. Waterbeemd, J. Riksen and J. Kammenga

- T-086 Nematode Gene-Tagging Tools and Resources
J. Gallagher, J-L. Bessereau, J. Ewbank, J. Geysen, P. Kuwabara, L. Segalat and N. Tavernarakis
- T-087 What Can A Bright Worm Tell Us About Its Biology?
C. Lagido, A. Flett, J. Pettitt and L.A. Glover
- T-088 A Mass Spectrometry Method to Detect and Quantitate Low Abundance Proteins in a *C. elegans*
G.E. Merrihew and M.J. MacCoss
- T-089 *MosTIC*: A Novel Tool to Engineer the *C. elegans* Genome by Homologous Recombination
V. Robert, E.M. Jorgensen and **J-L. Bessereau**
- T-090 WormBase: Recent and Future Developments
A. Rogers, The WormBase Consortium
- T-091 Generic Method for *C. elegans* Gene Tagging by *in vivo* Recombineering in *E. coli*
M. Sarov, A. Hyman and F. Stewart
- T-092 Analysing the Redundancy of Duplicated Genes and the Evolutionary Conservation of Genetic Interactions Using Combinatorial RNAi in *C. elegans*
J. Tischler, B. Lehner and A.G. Fraser
- T-093 The Integrative Interaction Map for *Caenorhabditis elegans*
W. Wong and A. Fraser

12.30 – : *Lunch*

End of meeting