

SIROCCO

Silencing RNAs: organizers and coordinators of complexity in eukaryotic organisms

JUNE 2008 Newsletter 17

SIROCCO MONTH 18 of 48

Euroscience Open Forum ESOF 2008 Barcelona 18-22 July



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The mission of the Euroscience Open Forum (ESOF) is to provide both the European and the international science and business communities with an open platform for debate and communication. It presents and profiles Europe's leading research trends

in the sciences, humanities and social sciences. It is an opportunity to discuss and influence the future of research and innovation in Europe by involving all main stakeholders: scientists, business executives and policy-makers.

- Discover new trends and directions in research, business, science policy and funding
- Network with leaders of the international science and business community
- Communicate your research and ideas to an international audience
- Participate in the debate, discussion and excitement of European science and technology
- Meet and talk to scientific and business journalists from Europe and around the world

MID-TERM REPORTING FORMS
HAVE BEEN SENT BY EMAIL—TO BE COMPLETED
BY **18TH JULY**
PLEASE PLAN NEW DELIVERABLES FOR THE NEXT
PHASE OF THE PROJECT—TO BE INCLUDED IN
THE NEXT DETAILED IMPLEMENTATION PLAN

RNAi Patent Granted to US Company

Intradigm Corporation has been granted a US patent for methods of enhancing the RNA silencing activity of an RNAi agent in a mammalian or plant cell.

The allowed subject matter is not only focused on claims to siRNAs but also includes specific coverage for micro RNAs (miRNAs), miRNA precursors, primary miRNA transcripts and short hairpin RNA (shRNA). The allowed application, based on research by Philip Zamore is one of several applications disclosing certain efficacy-enhancing structural elements of RNAis that Intradigm licensed from the University of Massachusetts Medical School.

Intradigm is a biotechnology company based in Palo Alto, California that has developed a delivery technology (Nanoplex) that carries active siRNA molecules in its core with a polyethylene glycol layer and a targeting ligand to improve circulation half life.

Source: reuters.com

RNAi Industry Summit 9-11 July London

how to optimise RNAi as a research tool and as a potential therapeutic

1. siRNA library screening programmes to streamline the discovery of new therapeutic targets
2. Insight into the latest RNAi research *in vitro*, *in vivo* and in the clinic
3. Optimisation of delivery mechanisms to improve doses achieved at target sites
4. Exploration of the success and difficulties of RNAi-based therapeutics
5. Examination of the expanding field of microRNAs: Developments in understanding the basic role and mechanism and applying microRNAs for diagnostic and therapeutic purposes

Expert speakers include SIROCCO partner
Gunter Meister

<http://www.iir-events.com/IIR-conf/LifeSciences/EventView.aspx?EventID=1543>



RESEARCH SPOTLIGHT



Lózsa R, Csorba T, Lakatos L, Burgyán J. Inhibition of 3' modification of small RNAs in virus-infected plants require spatial and temporal co-expression of small RNAs and viral silencing-suppressor proteins. *Nucleic Acids Res.* 2008 Jun 6. [Epub ahead of print]

Lehrbach NJ, Miska EA. Functional genomic, computational and proteomic analysis of *C. elegans* microRNAs. *Brief Funct Genomic Proteomic.* 2008 Jun 19. [Epub ahead of print]

Das PP, Bagijn MP, Goldstein LD, Woolford JR, Lehrbach NJ, Sapetschnig A, Buhecha HR, Gilchrist MJ, Howe KL, Stark R, Matthews N, Berezikov E, Ketting RF, Tavaré S, Miska EA. Piwi and piRNAs Act Upstream of an Endogenous siRNA Pathway to Suppress Tc3 Transposon Mobility in the *Caenorhabditis elegans* Germline. *Mol Cell.* 2008 Jun 18. [Epub ahead of print]

Rüdel S, Flatley A, Weinmann L, Kremmer E, Meister G. A multifunctional human Argonaute2-specific monoclonal antibody. *RNA.* 2008 Jun; 14(6):1244-53. Epub 2008 Apr 22.

Voinnet, O. Use, tolerance and avoidance of amplified RNA silencing by plants. *Trends Plant Sci.* 2008 Jun 17. [Epub ahead of print]

Voinnet, O. Post-transcriptional RNA silencing in plant-microbe interactions: a touch of robustness and versatility. *Curr Opin Plant Biol.* 2008 Jun 24. [Epub ahead of print]

Jones AM, Chory J, Dangl JL, Estelle M, Jacobsen SE, Meyerowitz EM, Nordborg M, Weigel D. The impact of Arabidopsis on human health: diversifying our portfolio. *Cell.* 2008 Jun 13; 133(6):939-43.

Laubinger S, Sachsenberg T, Zeller G, Busch W, Lohmann JU, Ratsch G, Weigel D. Dual roles of the nuclear cap-binding complex and SERRATE in pre-mRNA splicing and microRNA processing in *Arabidopsis thaliana*. *Proc Natl Acad Sci U S A.* 2008 Jun 24; 105(25):8795-800. Epub 2008 Jun 12.

Miska EA. MicroRNAs--keeping cells in formation. *Nat Cell Biol.* 2008 May; 10(5):501-2.

NEW CONTACT DETAILS

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SIROCCO 2008 will be held 10-12 December 2008 at the Wellcome Trust Conference Centre in the Wellcome Trust Genome Campus host to the Sanger Institute and the European Bioinformatics Institute

<http://www.wtconference.org/>

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