2003 (#44, 45, 23-2)

Spring 2003
Cell and Developmental Biology Annual Symposium
University of Warwick, 8th-11th April 2003

The title of this meeting reflects a new format, decided by a clear majority at a recent BSDB Annual General Meeting. Instead of devoting the entire meeting to one theme, as has been the practice in recent years, the Annual Symposium will consist instead of a number of half-day themes. We hope that this will encourage a broader range of researchers to attend, and that it will facilitate the exchange of ideas between fields. Each session will be organized by its own Chairman, who will begin the session by giving an introduction to the topic, and first-class speakers will then present research talks in the usual way. In the 2003 Annual Symposium, the topics will be:

1) Induction
2) Cell Fate and Differentiation
3) Organogenesis
4) Disease
5) Genomic Reprogramming

Further details will be presented in the next Newsletter.

Spring 2003
Cell and Developmental Biology Annual Symposium
University of Warwick, 8th-11th April 2003
Meeting Organisers: Paul Scotting & Robert Kelsh.

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1) Induction	**(chair: Judith Kimble)**
2) Cell Fate and Differentiation	**(chair: Ryoichiro Kageyama)**
3) Organogenesis	**(chair: Jonathan Slack)**
4) Disease	**(chair: Nick Hastie)**
5) Genomic Reprogramming	**(chair: Azim Surani).**

Other speakers include (in a few cases, still subject to comfirmation) Konrad Basler, Helen Blau, Peter Currie, Caroline Dean, Helena Edlund, John Gurdon, Andy Jarman, Liz Robertson, Cynthia Kenyon, Roger Patient, Drusilla Roberts, Alex Shier, Benny Shilo, Rob Scott, Austin Smith, Andrew Wilkie, Jeff Williams, Ken Zaret.

BSDB Spring Meeting 2003

Development

Warwick, 8th – 11th April

See pages 6 & 7 for details of registration and abstract submission

Registration and Abstract Deadline

31st January, 2003

BSDB/BSCB Spring Meeting 2003
Cell & Developmental Biology
Annual Symposium
University of Warwick, 8th-11th April

BSDB Scientific Organizers: **Robert Kelsh & Paul Scotting**

The title of this meeting reflects a new format, decided by a clear majority at a recent BSDB Annual General Meeting. Instead of devoting the entire meeting to one theme, as has been the practice in recent years, the Annual Symposium will consist instead of a number of half-day themes. We hope that this will encourage a broader range of researchers to attend, and that it will facilitate the exchange of ideas between fields. Each BSDB session has been organized by its own Chair (underlined), who will begin the session by giving an introduction to the topic. *Please note* that there will be as many as 10 poster abstracts selected to be presented as short talks, so we would like to encourage all members to participate by contributing to the general poster session. Full details of the programme and registration are on the BSDB and BSCB websites.

Tuesday 8th April 2003 - Registration

www.BSDB.org or www.bscb.org

Wednesday 9th April

BSDB Session

Induction

- **Judith Kimble**, University of Wisconsin, USA
  Induction of germline stem cells in C. Elegans
- **Liz Robertson**, Harvard University, USA
  To be advised
- **Konrad Basler**, University of Zurich, Switzerland
  To be advised
- **Caroline Dean**, John Innes Centre, UK
  Molecular basis for the cold-induced acceleration of flowering
- **Alex Schier**, New York University, USA
  Nodal signalling: From morphogens to morphogenesis

Cell fate and differentiation

- **Ryoichiro Kageyama**, Kyoto University, Japan
  Regulation of cell differentiation by the bHLH oscillator Hes1
- **Cynthia Kenyon**, UC San Franciso, USA
  Genes and cells that regulate the aging of C. elegans
- **Jeff Williams**, University of Dundee, UK
  The origins of SH2 domain:phosphotyrosine signalling: multiple STAT signalling pathways that regulate the growth and development of Dictyostelium
- **Roger Patient**, University of Nottingham, UK
  Origins and programming of blood and the cardiovascular system in Xenopus and zebrafish
- **Andrew Jarman**, University of Edinburgh, UK
  Control of cell fate determination in the developing Drosophila peripheral nervous system

BSCB Session

Signalling and growth control

- **Giulio Superti-Furga**, Heidelberg, Germany
  Towards a proteomic charting of biological processes
- **Garret Hampton**, San Diego, USA
  Genomic analysis of molecular pathway defects in ovarian carcinomas
- **Hartmut Beug**, Vienna, Austria
  Integration of receptor serine and tyrosine kinase signals in epithelial plasticity and metastasis
- **Julian Downward**, London, UK
  The use of transcriptional profiling to uncover novel signaling mechanisms acting downstream

Cytoskeleton & cell division

- **Buzz Baum**, University College London, UK
  From genotype to phenotype – using information to generate form
- **Ahna Skop**, UC Berkeley, USA
  How do cells divide? : Using proteomics and genomics to study cytokines
- **Aaron Straight**, Boston, USA
  Small molecule approaches to the study of mitosis
- **Julie Ahringer**, Wellcome/CRUK, Cambridge, UK
  Using genome wide RNAi screening to study cell polarity in C.elegans

BSCB Hooke Medal Lecture

N.B. BSCB programme also includes parallel workshops that are not listed. See www.BSCB.org for details

Thursday 10th April

Plenary Session

(Chair: Fiona Watt)

Lord Sainsbury of Turville, UK Government Minister for Science and Innovation

"Government support for world class bioscience in the UK"

Thursday 10th April *cont'd*

BSDB Session

Organogenesis

- **Jonathan Slack**, University of Bath, UK
  Organogenesis and the stability of organ identity
- **Drusilla Roberts**, MGH, Boston, USA
  Roles of the Bmp signalling pathway in gut endoderm, mesoderm and neural development
- **Benny Shilo**, Weizman Institute of Science, Israel
  Regulation of epithelial polarity by the Drosphila VEGF/PDGF receptor
- **Ken Zaret**, Fox Chase CC, Philadelphia, USA
  Patterning the liver and pancreas in the endoderm
- **Gerald Cunha**, UC San Francisco, USA
  Title to be advised

Genomic reprogramming

- **Azim Surani**, University of Cambridge, UK
  Epigenetic reprogramming and control of genome functions
- **John Gurdon**, University of Cambridge, UK
  Nuclear reprogramming in Xenopus
- **Rod Scott**, University of Bath, UK
  The epigenetic basis of gametic gender in mammals and flowering plants
- **Helen Blau**, Stanford University, USA
  Adult bone marrow derived 'stem' cells: Repair of brain and brawn
- **Austin Smith**, University of Edinburgh, UK
  Pluripotency and lineage restriction of ES cells

BSDB Waddington Medal Lecture

Followed by **BSDB AGM**

BSCB Session

Special Plenary Session – Borden Lecture

Henry Sun, New York, USA
"Why you shouldn't trust your PhD supervisor"

Transcription & Replication

- **Paul Harkin,** Queen's University of Belfast, UK
  Uncovering BRCA1 regulated signaling pathways by microarray-based expression profiling
- **Peggy Farnham,** Madison, USA
  Genomic approaches toward the identification of target genes of human transcription factors
- **Oscar Aparicio,** Los Angeles, USA
  Mapping and characterization of replication origins throughout the Saccharomyces cerevisiae genome
- **Julian Blow,** University of Dundee, UK
  Proteomic identification of cell cycle-regulated chromosome proteins

Cell adhesion & extracellular matrix

- **Chris Buckley,** Birmingham, UK
  Not all fibroblasts are the same: Selective gene expression using microarrays
- **Hans Clevers,** Utrecht, The Netherlands
  Wnt signaling and colon cancer
- **Victor Koteliansky,** Biogen Inc, Cambridge, USA
  Regulation of gene expression by extracellular matrix
- **Paul Crocker,** School of Life Sciences, Dundee, UK
  Sialic acid binding lectins (siglecs) in the innate immune system

Conference dinner and Ceilidh in Panorama Suite

Friday 11th April

BSDB Session

Disease

- **Nick Hastie**, WGH, Edinburgh, UK
  The Wilms' tumour suppressor, WTI – a multifunctional regulator of genitourinary development
- **Peter Currie**, Sydney, Australia
  Genetic control of muscle cell specification and maintenance within the zebrafish embryo
- **Andrew Wilkie**, John Radcliffe, Oxford, UK
  Apert syndrome: A tale of two nucleotides
- **Riccardo Fodde**, Leiden, The Netherlands
  Colorectal cancer – it takes two to tango.
- **Helena Edlund**, Umeå University, Sweden
  Factors controlling pancreatic beta cell differentiation and function

BSCB Session

Development *(sic)* and tissue assembly

- **Marc Vidal**, Boston, USA
  Mapping the C.elegans proteome
- **Steve Kay**, Scripps, San Diego, USA
  Genetics and genomics approaches to understanding circadian clocks
- **Andrea Brand**, Cambridge, UK
  Genomics approaches to Drosophila neurogenesis
- **Rick Livesey**, Cambridge, UK
  Studying forebrain development with single cell expression profiling

Registration and Abstract Submission

Deadline for early registration and abstract submission: 31st January, 2003
Online registration via www.bsdb.org

For further information contact:
Vicky Milner: 01423 564488

Costs:
Full residential £280 before deadline (£305 thereafter), plus £20 for conference dinner and Ceilidh.
Non-residential is £150 (£175 after Jan 31st) plus £30 for dinner and Ceilidh.

Autumn 2003

Special joint meeting with French Society of Developmental Biology To take place in Nice, France in September 2003

Organiser: Alfonso Martinez Arias

As a prelude to more European integration, we have reached an agreement with our sister society in France to hold a joint meeting in 2003. This will take the place of our usual Autumn meeting and is scheduled to be held in Nice. Given that the cost of travelling to Nice from Luton and Liverpool is nowadays significantly less than the average rail fare between any two cities in the U.K., this rather more exotic venue should not prohibit attendance at what promises to be a very stimulating and productive meeting.
Further details will be presented in the next Newsletter.

Autumn 2003

Special joint meeting with French Society of Developmental Biology

Nice, France in September 2003

Organisers: S. Noselli, P. Therond, P. Leopold and A. Martinez Arias

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Topics will include periodic processes, embryonic patterning, morphogenesis, cell shape and migration, trafficking, cellular symmetris, tissue growth and global approaches to developmental biology (genomics and proteomics). Further details will follow in the next Newsletter.

BSDB Autumn Meeting 2003

Biology at the Beach

Nice, France, 13th – 16th September

For further details see page 8 and

www.unice.fr/nice2003/

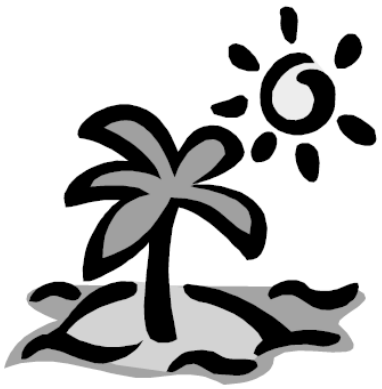
Registration and Abstract Deadline

30th June, 2003

Limited space so hurry

BSDB 'Autumn' Meeting 2003

First Joint Meeting of the
British & French Societies
for Developmental Biology
'Biology at the Beach'



Nice, France
September 13th – 16th 2003

Organizers:
Alfonso Martinez Arias , (UK)
Pierre Leopold, Stephane Noselli, Pascal Therond, (France)

Despite the 'entente *in*cordiale' elsewhere, the British and French Societies for Developmental Biology have managed to work together to stage their first joint meeting. This will take the place of our usual Autumn meeting and will be held in Nice. Bearing in mind that the cost of travelling to Nice from Luton or Liverpool is less than the average rail fare between any two cities in the U.K., we hope to see as many of you as possible for a late summer refresher on beach etiquette. The meeting will be quite general but centres on the cellular mechanisms that underlie developmental processes.

Sessions :

Periodic processes
Cell and tissue patterning
Morphogenesis
Cell shape and migration
Tissue growth
Signalling and traffick
Cellular asymmetries
Global approaches to
cell and developmental biology

Deadline for Registration:
30th June, 2003
Space is limited, so don't wait 'til the last minute!!

Speakers:

Kathryn Anderson (USA)
Frederic Berger (France)
James Briscoe (UK)
Margaret Buckingham (France)
Francois Fagotto (Canada)
Matthew Freeman (UK)
Eileen Furlong (Germany)
John Gurdon (UK)
Ernest Hafen (Switzerland)
Carl-Phillip Heisenberg (Germany)
Jules Hoffman (France)
Patricia Kuwabara (UK)
Michel Labouesse (France)
Sally Leevers (UK)
Christian Lehner (Germany)
Rick Livesey (UK)
Andrew Loudon (UK)
Francois Payre (France)
Norbert Perrimon (France)
Marysia Placzek (UK)
Olivier Pourquie (USA)
Pernille Rorth (Germany)
Frederic Rosa (France)
Paolo Sassone-Corsi (France)
Francois Schweisguth (France)
Derek Stemple (UK)
Alain Vincent (France)
Cornelis Weijer (UK)
Lewis Wolpert (UK).

Information and registration:
http://www.unice.fr/nice2003/
or e-mail: nice2003@unice.fr

£50 to Post-docs or PhDs willing to review the meeting.. Contact Andy Furley....

Entente Cordiale – Views from the Beach

'Joined at the hip, or is it the hinge?'

The 1st Joint meeting of the British and French Societies for Developmental Biology, Nice 2003.

The recent explosion of large genetic screens used to identify new genes and genetic pathways that control development dominated the joint meeting of the British and French Societies for Developmental Biology held in Nice. In particular, the fly Drosophila, proved to be the pièce de résistance, in demonstrating the power of this approach.

The last few years has seen remarkable progress in establishing pathways that address how cells organise themselves and form correct arrangements. It was however clear from this meeting that a lot of energy is now being channelled towards understanding the molecular details of these pathways. The programme of this meeting was arranged to focus initially on more 'universal' problems associated with early development such as cell migration and morphogenesis, tissue growth and proliferation, signalling and trafficking, and moved on to consider the more specific problems of patterning and transcriptional regulation. The link between these two major aspects was facilitated by a session entitled 'global approaches' that straddled both spectrums.

The molecular mechanisms that govern cell migration and morphogenesis are one of the most important issues in current developmental biology. In the first session, the success of clonal screens in Drosophila has allowed **Pernille Rorth** (Germany) to address the regulation of cell migration, in particular that of border cells during Drosophila oogenesis. His laboratory used mutants who showed defects in border cell migration such as pvr, cb1 and Hrs, and was able to identify Sprint, a protein likely to be a receptor tyrosine kinase (RTK) involved in endocytosis. They reported that the first step of endocytosis is critical to limit signal spread and so maintain localized signalling important for guidance. An alternative way to look at movement and a contrast to these large screening methods came from the work of **Cornelis Weijer** (UK). His approach was to visualize cell movements using time-lapse microscopy in the slime mould Dictyostelium, where he investigated the role of cAMP signaling in chemotaxis. He also explored the role of chemotaxis in cell movement in vertebrates using an innovative combination of grafting experiments and video microscopy in early chick embryos. Weijer concluded that chemotaxis might indeed have a crucial role in all cell movement. The diversity of this session also introduced the audience to the zebrafish embryo (**Carl-Philip Heisenberg,** Germany) and the use of morpholinos as an alternative antisense technology (**Marina Mione**, UK). In particular, Mione was able to show morpholinos to Disabled 1 (Dab1) a cytoplasmic adaptor protein that functions downstream of Reelin expressed in migrating neurons, affect neurite outgrowth and migration to the hypothalamus in zebrafish.

The Tissue Growth and Proliferation session returned us swiftly back to the fly providing ample evidence of the power of genetics screens to identify genes involved in these biological processes. The big question of 'What directs growth?' initiated by **Hugo Stocker** (Switzerland) showed us a convincing example of what can be achieved by such screens. He identified novel mutations in the highly conserved insulin-signaling pathway that is dedicated to the control of growth. Loss of function mutations in the Drosophila Rheb gene are growth-inhibitors, whereas overexpression of Rheb promotes cell

growth. It will be interesting to see now what Rheb does in hypomorphic mutations. The power of the Drosophila genetic system was also exploited by **Sally Leevers** (UK) to identify new players in growth regulation. They were looking for an alternative to the insulin pathway that affects size and cell number. By conducting a sensitised genetic interaction screen they identified pixie, an enhancer gene required for cell proliferation but not survival. Interestingly, certain pixie mutant combinations result in flies of small size that nevertheless contain normal sized cells as opposed to the flies generated by mutation of insulin/PI3K pathway components that show both reduced cell size and body size. The question that remains is 'what are the differences between Minute, another well defined class of mutation effecting growth, and pixie?' They could perhaps discover that pixie is a recessive Minute mutation.

Molecular pathways and the use of mutant screens was also the focus in other developmental systems. In the mouse, **Katherine Anderson** (USA) described new data from her ENU mutagenesis screen designed to identify mutations that affect dorsoventral patterning in the mouse neural tube. Interestingly their analysis of the mouse Hedgehog signalling pathway and the mutants wimple and flexor, that affected left-right asymmetry, was nicely linked to the role of cilia in transporting signals, in that cilia are required to interpret the Hh signal. This is indeed is a hot topic in Development Biology as discussed by **Lewis Wolpert** (UK) in his talk on left-right asymmetry.

Recently a lot of attention has focussed on global approaches to understand developmental biology. **Norbert Perrimon** (USA) discussed the power of RNA-mediated inhibition (RNAi) screening able to extract biological information from loss of function approaches. Perrimon's approach has far reaching applications in that this technology can be used; to identify new components in cell signal transduction pathways; to establish a RNAi signature database; and to develop data analysis tools to integrate the information generated. An alternative approach used to study global developmental problems, but with the same dramatic outcome was discussed by **Eileen Furlong** (Germany). The approach here consisted in combining mutant embryo analysis with DNA microarrays to identify Drosophila genes involved in mesoderm formation. This ambitious project aims to map out the transcriptional networks governing muscle development in the fly and then characterise these pathways in other systems. Microarray technology was used by **Rick Livesey** (UK) as a means of testing the hypothesis that the mouse neocortex is pre-patterned as the protocortex. Using differential displays he identified over two hundred genes that were differentially expressed in the rostral and caudal elements of the neocortex before and after axon entry.

The theme of patterning and transcriptional regulation constituted most of the second half of the meeting. Techniques such as using mutant fly lines (**Alain Vincent**, France), gene-targeting (**Shahregim Tajbakhsh**, France) combined with gene-expression analysis have really made an impact into piecing together molecular interactions within genetic pathways. An innovative in vivo assay, which consists of injecting fluorescent labelled RNAs, and then imaging their movement was used by **Ilan Davis** (UK). In the Drosophila embryo RNA localisation and translational control play a key role in axis formation. Interestingly he found that RNA retention seems to be dependent on the presence of microtubules presumably due to anchoring. His group also mapped the RNA localisation signal for gurken (a TGFalpha homologue) to a 64 nucleotide predicted stem loop structure that is also conserved in other fly species. In this half of the meeting we also saw the emergence of the flowering plant, Arabidopsis (**Berger**, France). Berger showed that Fis proteinase, the plant homologue of the Polycomb gene controls developmental timing of endosperm at the transcriptional level.

In the final session **Marysia Placzek** (UK), **Frédéric Rosa** (France) and **James Briscoe** (UK) linked the molecular details of these genetic pathways to specific patterning events in whole vertebrate embryos. In particular, Briscoe used a combination of molecular, cellular and embryological techniques to identify how subclasses of neurons in the dorsoventral axis of the spinal cord are specified. In an elegant series of experiments he demonstrated that Sonic Hedgehog signalling is interpreted as a dorsoventral gradient in the vertebrate spinal cord, and that different levels of Gli transcription are necessary for ventral patterning and subtype identity of neurons.

As a Daphne Jackson Fellow (designed for women who have had career breaks, www.daphnejackson.org) I am amazed at the rapid introduction of new techniques and concepts that have emerged over the last few years I have spent out of the laboratory, which has transformed the way we think and study developmental biology. I also was pleased to notice that there was a significant increase in the number of women key speakers and chairpersons, although a conscious effort may be needed in the future to include more women as meeting organisers, a much needed inspirational marker to senior and junior women scientists. The organisers of this meeting provided an enjoyable and varied programme, which covered the whole spectrum of developmental models and successfully joined together for the first time the animal models of French and British Developmental Biologists! It indeed is an exciting time to be in the age of modern developmental biology.

Autumn Rowan-Hull, Oxford
Dept. of Human Anatomy & Genetics
autumn.rowan@human-anatomy.oxford.ac.uk

And yet more praise…

This year the BSDB made the effort to give up on its cool 15°C Autumn meeting and tried to concentrate at a torrid 28°C in France's Côte d'Azur in the First joint meeting with the French Society of Developmental Biology (SFBD). The French made the effort not only to speak english with the British but also to organise all of the practical stuff, for which we are all very grateful. It sounded like a good relaxing meeting to attend, but in fact it wasn't. The organisers made sure we did not relax too much by coming up with a packed schedule of "I-must-attend" talks and very little time to look at 170 posters. The program was as wide as developmental biology can be, as there was no specific orientation to the meeting, which must have given the organisers a headache to classify in coherent sessions and which for me makes it even harder than I thought to summarise. So, please be indulgent with the result, and by all means this is NOT an exhaustive account of ALL the talks!

The meeting began looking at cell migration that in the era of time lapse

imaging is unravelling fascinating facts. In Drosophila oogenesis, **Pernille Rorth** showed how border cells use long cellular extensions as a substrate to migrate in response to a gradient of PVF1 and demonstrated that endocytosis of the receptors PVR and EGFR was a mechanism to maintain sensibility to the gradient throughout migration. **Carl-Philip Heisenberg** showed evidence that Zebrafish gastrulating mesendodermal cells use the epiblast to move forward, and silberblick/Wnt11 is necessary to regulate the orientation of cellular processes and cell movement. During chick gastrulation, **Cornelis Weijer** described chemotaxis mediated by FGFs as an emerging mechanism for cells to migrate out of the primitive streak.

Another interesting theme was the regulation of cell growth and body size in Drosophila, by **Hugo Stocker** that reported that Rheb, a new small GTPase downstream of Tsc1 and Tsc2 in the TOR signalling pathway controls cell growth. **Sally Leevers** reported that Pixie, an ATP binding protein that regulates translation and is required for imaginal disc growth. **Pierre Fichelson** (Gho lab) showed how Tribbles, a cell cycle regulator, coordinates the speed of cell divisions and the fate of the progenitor cells that give rise to the mechanosensory organs of Drosophila. **Samantha Carruthers** (Papalopulu lab) explained that the cell cycle inhibitor p27Xic1 in Xenopus is required for cells to exit the cell cycle and differentiate in primary neurogenesis. **Matthew Freeman** presented evidence in the Drosophila imaginal eye disc for two intercellular pathways regulating different checkpoints in the cell cycle: EGFR signalling controlling the G2 to M checkpoint and Notch/Delta signalling required for the G1 to S transition.

A number of talks brought us up to date with Nodal signalling in meso/endoderm development. Nodal controls endoderm induction before the onset of gastrulation (**Frederic Rosa**) and controls gastrulation itself in zebrafish via Squint and Cyclops (**Derek Stemple**). In the mouse, graded Nodal signalling governs epiblast cell fate and axial mesendoderm formation (**Stephane Vincent**). And Nodal signalling from prechordal mesoderm in the chick cooperates with Shh to induce anterior floorplate (**Marysia Placzek**).

In somite development, **Olivier Pourquie** presented new insights in somite boundary positioning in the chick demonstrating that the gradient in FGF activity relies on fgf8 transcript maintenance in the presomitic mesoderm as active transcription of fgf8 is limited to the primitive streak. Surprisingly his data implicates the PI3K pathway as the downstream effector of FGF for somite boundary positioning in contrast to previous studies in the zebrafish which implicate FGF signalling through MAPK. **Catarin Freitas** (Palmeirim lab) presented some very elegant experiments that show that the segmentation of the presomitic mesoderm is governed by the medial cells that instruct lateral cells. The medial cells acquire autonomy for segmentation when their precursors are located in the sinus rhomboidalis. In mouse muscle differentiation, **Margaret Buckingham** dissected the role of the multiple Myf5 enhancers that integrate signals of cell type specification and positional information, concluding that this complexity reflects its key role as an upstream regulator of myogenesis. **Shahragim Tajbakhsh (with a leg in a cast!)** gave us an exciting glimpse suggesting a role for Numb and asymmetric cell division in satellite cells for postnatal muscles regeneration.

In neural development, **Claudia Linker** (Stern lab) presented a series of experiments addressing the sufficiency of BMP inhibition for neural induction in both chick and frog. Using Smad6 to block BMP signalling her data suggested that BMP inhibition acts at the neural plate border and is insufficient for neural induction, which may prompt a radical rethinking of vertebrate neural induction. **James Briscoe** presented a model in which opposing gradients of Gli activator and repressor activities regulate the neuronal subtype specification in D/V axis of the spinal cord. **Francoise Helmbacher** (Maina lab) described that Met signalling is necessary for the recruitment of more anterior motor neurons to the initial PEA3 positive motor pool via a relay mechanism. In Zebrafish, **Jovica Ninkovic** (Bally-Cuif lab) reported that Him, a new Hairy/E(spl) transcription factor, and Her5 are both necessary to prevent precocious neurogenesis in the midbrain-hindbrain boundary and **Marina Mione** showed that Reelin and Disabled1 are implicated in neuronal migration from rhombomere 4 to 7.

We enjoyed three plenary lectures (from 9 to 10pm!), in one of them, **John Gurdon** gave a detailed analysis of plasticity of cell fate determination, stressing that at the end of the day in gradient interpretation, what really counts is the amount of signalling in the nucleus.

As room for improvement, unfortunately we had to wrestle our way through the posters; we could really have used more space and time for them. Nevertheless, this First Joint meeting with the French society was a success, the number of participants from Britain and France was very similar (123 and 127) and we did not scare off international participants (60). Apparently, a joint French/German/UK meeting is scheduled for sometime in the future and a joint Spanish/ UK meeting imay also be on the way I suggest that the latter is held in Costa del Sol (*if you like these ideas, let the Committee know, Ed.*)..

Isabel Olivera-Martinez, Dundee
isabel_olivera@yahoo.fr

All of which proves that the French and the British can do some things together, so long as the French are in control (which is fine as long as they keep letting us win the rugby…;-) *ed.*