

BSDB Newsletter

British Society for Developmental Biology

www.bsdb.org

Summer 2010
Vol. 31, No. 1

**Autumn Meeting
*Development of
Sensory Systems***

Also in this issue:

- The Node
- Letter from ISDB
- Book review: Your Inner Fish



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Editorial

It seems like yesterday that I took over from Andy Furley as Newsletter Editor, but in fact it's been five years now and I've come to the end of my term as BSDB committee member and publications officer. This is my last newsletter and Malcolm Logan is taking over the post in time for the next one. It is rumoured that there will also be a name change to 'Communications Officer', which would reflect the increasingly important role of our website in communicating to the BSDB membership, although I hope the newsletter also has a valued place.

Looking back, it's been a lot of fun being on the committee, but there's only so

many new ideas that any one person can contribute and it is definitely time for someone else to put fresh input into BSDB publications. I know Malcolm has some great ideas about what he'd like to do and I wish him good luck.

A big thanks to all the newsletter contributors over the years. I'm always gratified by the willingness of people to contribute items, sometimes even volunteering to write something out of the blue. It made my life as editor a lot easier

Andrew Jarman, Editor

andrew.jarman@ed.ac.uk

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Help us spread the word

Please print out a copy of this newsletter and leave it in a strategic place, such as your coffee room or staff room.



Cover image

Sensory neurons in Drosophila embryos (somewhat modified in Photoshop). Petra zur Lage.

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From the Chair



The most enjoyable aspect of being Chair is presenting our two Medals. The first is the Beddington Medal, named after our dearly missed friend and colleague Rosa Beddington who sadly died in 2001. Rosa was not only a brilliant embryologist but also an accomplished artist, and her oil painting of Gregor Mendel contemplating his peas made a very fitting background for the meeting poster. The Medal is given for the best thesis submitted by a graduate student member of the society in the previous year. This year's Medal winner was Naomi Stevens, who trained at the Gurdon Institute with Jordan Raff. Naomi was a very worthy and accomplished winner with her project resulting in three first author publications to date, with more on the way. Naomi gave an excellent talk explaining how she worked out the roles that *Ana2* and *Ana3* play in regulating the process of centriole duplication in flies. We wish Naomi continuing success in her post-doc in Jennifer Zallen's lab in New York. The mystery winner of the 2010 Waddington Medal was unveiled as Robin Lovell-Badge. Kept a closely guarded secret, only a few "deep throats" outside of the committee were tipped off about the winner so they could provide me with appropriate (and inappropriate) anecdotes for the introduction. Robin's thoroughly entertaining lecture started with his early days as a young lad and included archive footage of action packed home movies starring him in the leading role. Under the direction of his brother, Robin's roles focussed on dramatic enactments of his last dying moments from arrows, sword blows and best of all impressive and potentially really lethal home-made bombs! Robin also managed to cover Sox and sex, with his discovery of the *Sry* gene, as well as ongoing work in the lab tackling multiple Sox gene functions in organogenesis. Robin concluded his talk with some thoughts on communicating science to the public and his involvement with crafting legislation.

I suspect that the 2010 Spring Meeting will be remembered for some years to come, not only because of the quality of the science, but also because the end of the meeting coincided precisely with the shut

down of Heathrow and Gatwick as a result of the ash plume from the Eyjafjallajökull volcano. The subsequent paralysis of European airspace meant that unfortunately many of our overseas guests were stranded here for an extra week, resulting in over exposure to the UK spring weather, and unanticipated clothes shopping expeditions.

I also have some changes to the composition of the BSDB committee to report. A very big thank you goes to Andy Jarman (Edinburgh) who finishes as Publications Officer after putting together this, his very final Newsletter, and will also step down from the committee. Malcolm Logan (NIMR London) has kindly agreed to become the new Publications Officer. Stefan Hoppler (Aberdeen) and Kate Lewis (Cambridge) have rolled off the committee – our thanks to them for all their help in organizing workshops and meetings during their tenure. We welcome our three new members Andrew Chalmers (Bath), Lynda Erskine (Aberdeen) and Jenny Nichols (Cambridge) who were elected in a ballot held at the AGM during the Spring Meeting.

The next few months promise to be interesting if anxiety provoking. It's the start of a new period of Government, and with it the unfortunate statistic that the Election resulted in a decrease in the number of MPs with a background in science. We're still left wondering whether the coalition government pledge to provide both better education and health care will translate to the imposition of below average "efficiency savings" on the science and higher education budgets. Clearly our academic leadership has its work cut out in lobbying to protect and promote scientific research. Finally the volcanic ash still swirling over Europe seems set to make travel plans for upcoming conferences particularly challenging, and those of us who rashly committed and have already bought tickets are now pondering how many extra sets of underwear to pack. I hope to see some of our less risk adverse members at the summer meetings!

Liz Robertson

"By the time you read this, the [ISDB2009] registration website will be open and all the signs are that there will be a large and fully international attendance"

www.isdb2009.com



Committee changes

There have been several changes on the BSDB committee as members come to the end of their term.

We have one new officer: **Malcolm Logan**, takes over from Andrew Jarman as Publications Officer.

At the AGM in April 2010, three new committee members were voted in to replace **Steffan Hoppler**, **Kate Lewis** and **Malcolm Logan** (who vacated his ordinary member post when he became Publications Officer). As a result of the vote, we now have **Jenny Nichols**, **Andrew Chalmers** and **Lynda Erskine** as new members.

Jenny Nichols is at the Wellcome Centre for Stem Cell Research at the

University of Cambridge, where she works on mouse and human ES cells. Andrew Chalmers works at the Centre for Regenerative Medicine, University of Bath, where he researches cell junctions and cell proliferation. Lynda Erskine works on visual system development at the University of Aberdeen.

For those who don't know, ordinary committee members serve for five years, but that clock gets reset if the member becomes an officer during their term. The student representative is co-opted by the committee (rather than being elected) and serves until they receive their degree.

Do your contact details need updating?

As always, it's a hard job keeping the database of the Society membership up to date. If you change your address, please remember to send us the details. You can use a new online feedback form to give us this information.

<http://www.bms.ed.ac.uk/services/webpace/bsdb/BSDBfeedbackform3.htm>.

The Node

IN June 2010, the journal *Development* and the Company of Biologists launched a new community website for developmental biologists called **The Node**. Here's what they say about it:

"The Node (thenode.biologists.com) is a new not-for-profit community website for developmental biologists, which is being launched by Development. At its helm is Eva Amsen, Development's Online Editor and the Node's Community Manager, who is an active science blogger and writer with a track record in community building, and at its heart is a blog that will be open to the community. All that community members need to do to participate on the Node is to register, be approved by Eva and you are then free to post your news on the site. In addition, anyone can leave comments on any of the posts. We will be posting too: news about top research published in

Development and in other community journals; deadlines and updates for conferences and funding programmes; reports from conferences we are attending; interviews with our Editors and authors; as well as other posts of general relevance and interest to the community. Sometimes we will invite specific people to contribute something on a particular topic, but we do want everyone in the community to feel free to sign up and contribute something spontaneously. Nobody knows better what is going on in the world of developmental biology than the people actively doing the research, so we're happy to give you a chance to address your colleagues directly by signing up for the Node and posting your news and events."

Visit:
<http://thenode.biologists.com/>



Financial report

"Grants were made to 115 members to attend BSDB meetings, (distributing £40,770) and 89 CoB travel grants were made to allow members to attend international meetings (£27,660)"

Are you paying your fair share?

We still have a 'hard core' of members who are paying less than they should.

Please check your standing order today and update if necessary!

I am pleased to report that the Society continues to be in good financial health. Our total income over the financial year has remained almost constant at £89K, of which over £87K was given out to support developmental biology, the primary aim of the Society. Thus, grants were made to 115 members to attend BSDB meetings, (distributing £40,770) and 89 CoB travel grants were made to allow members to attend international meetings (£27,660). The remaining funds were mainly used to support and subsidise the organization of BSDB meetings, notably the travel expenses of speakers to ensure that we attract the top scientists in the field. This was exemplified by the ISDB meeting in Edinburgh in September which attracted a stellar cast of speakers and which was a highlight for international and UK developmental biology community in 2009.

The costs for such meetings are borne partly by subscriptions from the membership, but also by extremely generous support from the Company of Biologists. I am happy to report that this support (totalling £57,500) will be continued in 2010, enabling the Society to both continue its own meetings and to

provide support for members to attend overseas meetings.

The ISDB conference mentioned above proved not only to be a scientific but also a financial success, with a clear surplus for the Society resulting. More details will be provided in the accounts, for 2010 but the added security provided by this success means that the BSDB has additional financial bedrock as it enters the next few years, which are likely to pose challenges for publicly funded science and, as a consequence, societies such as the BSDB. Thanks are once again due to the BSDB organisers of this meeting for all of their efforts.

Finally, as we go to press the Warwick meeting has just finished as the Society returns to its normal routine of Spring and Autumn events. So far, 68 BSDB travel grants and 34 CoB travel grants have been awarded this year, in line with our budget for these activities. The deadline for applications for BSDB travel grants for the Oxford meeting is 16th July and applications for CoB grants to attend overseas meetings and workshops are always welcome - though please make sure that these applications are made well in advance of the event.

Payment option for overseas members



It is possible to pay your subscription by PayPal. This facility is primarily aimed at our overseas members and we do not encourage other members to use this route as it causes us certain problems when it comes to renewal of subscriptions. For those who need to use it, the process is fairly painless and full instructions can be found on our webpage.

<http://www.bms.ed.ac.uk/services/webpace/bsdb/BSDBpaypal.htm>

Travel grants (Company of Biologists Travel Awards)

BSDB Spring and Autumn meetings

These are the *only* UK meetings for which there is BSDB support. Grants cover cost of registration (but not conference dinners) and basic travel if funds permit. Generally we are receiving more applications than we can fund in full and preference is given to student members who present posters. BSDB members based abroad are eligible for a contribution (max. £400) to attend our meetings. All applications for travel grants to attend BSDB meetings must be in the hands of the Treasurer by the published deadline.

Note: The deadline for BSDB travel grant applications to attend the Autumn Meeting in Oxford is 16 July 2010.

Overseas meetings

There is considerable demand for funds to travel to meetings overseas. Applications are collected each month and a decision on awards made at the end of the month with funds awarded according to the remaining budget. To allow us to fund as many applicants as possible we are currently limiting awards to a maximum of £400. Preference is given to members presenting work at the meetings.

Practical courses

The BSDB will also provide funds up to a maximum of £500 for members to attend courses or to visit

laboratories overseas. These applications are considered alongside those for overseas meetings.

I process the applications as rapidly as I can but it can be 6–8 weeks after you submit an application before you are notified of your award. Please note that I do not make funds available to attend meetings that have already taken place when I come to consider the applications. Please bear this in mind and submit your application at least two months before the start date of the meeting.

Applying for a travel grant

Members should complete a Travel Grant Application form and send it to the Treasurer. Forms can be downloaded from the BSDB website: www.bsdb.org.

Applications for overseas meetings are advised to be submitted 3–4 months in advance so that the BSDB contribution can be used as a lever to prise the rest of the money from other sources. Grants will NOT be awarded in arrears.

Please note: Nobody will be awarded more than one travel grant per year for an overseas trip. No more than two people from one department or one person from a group will be awarded a grant to a particular meeting. Also, due to our charitable status, the purpose of any award must be clearly identifiable as Developmental Biology

Deadline for Travel Grants to BSDB Autumn Meeting: 16 July 2010

Warning!

Only members paying the correct subscription to the Society will be eligible for a Travel Grant

Louie Hamilton Fund

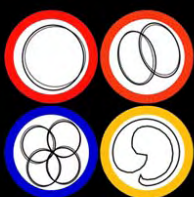
There is a small amount of money available from the Louie Hamilton Fund to provide travel support for handicapped members. Applicants should contact the Treasurer.

Subscription information

Full members	£35 per annum
Student members	£15 per annum

Student members that joined the Society in 2005 are reminded that they should upgrade their subscription to the full member rate of £35.





BSDB Autumn Meeting 2010

British Society for Developmental Biology

Development of Sensory Systems

Detlev Arendt (Heidelberg)
Clare Baker (Cambridge)
Linda Barlow (Colorado)
Jo Begbie (Oxford)
Patrik Ernfors (Stockholm)
Anthony Graham (London)
Andy Groves (Houston)
Bill Harris (Cambridge)
Thomas Hummel (Munich)
Andrew Jarman (Edinburgh)
Ilona Kadow (Munich)
Robert Kelsh (Bath)
Lucia Manni (Padova)
Adrian Moore (Tokyo)
Filippo Rijli (Basel)
Jane Sowden (London)
Angelika Stollewerk (London)
Tanya Whitfield (Sheffield)
Darren Williams (London)

*Organizers: Jo Begbie, Anthony Graham
and Darren Williams*



7-9th September 2010

St Anne's College, Oxford

website: <http://tinyurl.com/y9f9ffh>



The Graduate Students' Section

This issue of the BSDB newsletter comes out on the heels of the BSDB spring meeting in Warwick. Despite the extended stay on campus some attendees got thanks to that now tiresome ash cloud, I hope you'll agree the meeting was a great success. As part of the meeting we organised a graduate symposium in an attempt to continue the long-running BSDB tradition of showcasing graduate student research and providing opportunities for graduate students to gain valuable communication skills.

My event management experience is limited at best, so I'm thrilled to say that it actually went off without a hitch. I'd like to thank our speakers for three very interesting and well prepared talks, and also everyone who submitted an abstract. We had over 30 submissions, which is a clear indication that there is demand for this sort of thing. I'd also like to thank Cheryl Tickle from the University of Bath for generously giving up her time to chair the event.

This has given us a good grounding to improve on for next year's graduate symposium, which we're planning on having at a better time in order to encourage as much attendance as possible. In addition, I'm hoping to get a student social organised too. That said, the social environment at the spring meeting was pretty good, as can be observed from the photos uploaded over at the BSCB facebook group. Feel free to tag/untag at will.

This issue of the BSDB newsletter also sees us coming into the summer months, which means exciting things like fewer undergrads around

campus and hopefully some warmer weather. If you are seeking a few days of *genuine* summer though (and possibly some science), then it's worth exploring the myriad conferences and courses held around the world over the next few months. The BSDB and ISDB websites have a few good ones listed, but feel free to share any others you may be attending on the BSDB Student facebook group.

While the society travel grants are exclusively for travel to BSDB sponsored meetings (like the spring meeting), you can apply through the society for Company of Biologists (COB) travel grants for travel to international meetings or courses. There's no specific deadline, as they're considered on a month-by-month basis, but I'd urge you to apply a good couple of months before the meeting or course.

As always, feel free to get in touch if you have any questions about the BSDB, suggestions for things you'd like to see us do, or want to get involved with organising stuff in the future.

Hayden Selvadurai

h.j.selvadurai@sms.ed.ac.uk

BSDBook

Visit the 'BSDB graduate student group' at Facebook.com to keep up to date about student events

Get in touch and get involved!

I'm happy to consider anything for the newsletter: articles, short tips, etc.



Waddington Medal 2010

Robin Lovell-Badge

Liz Robertson

*Dunn School of
Pathology, University
of Oxford*

*“Robin was
recognized for his
numerous and
remarkable*

*contributions to our
understanding of the
mechanism of sex-
determination in
mammals”*

The Waddington Medal lecture is always one of the highlights of the BSDB spring meeting. It's the most prestigious award given by the Society and named after Conrad Waddington, an influential and distinguished geneticist and embryologist who made many seminal contributions during his career spanning the 1930-1950's. One now very popular concept he developed was the notion of the “epigenetic landscape” and how this was likely to underpin embryonic development - a remarkable accomplishment given that his theory was developed in the complete absence of any molecular detail about genes and the genome. Waddington was also an accomplished palaeontologist, and the medal, designed by the late Rosa Beddington, shows one of his favourite animals the ammonite, who's shell structure reveals it's entire life history. The reverse of the medal depicts a snake eating its own tail to symbolize feedback control, and the inscription “one entity incorporates itself into all other entities of the universe”.

The medal is given for outstanding achievements in developmental biology, and it was a great personal pleasure to announce that the winner of the 2010 Waddington Prize was Robin Lovell-Badge from the National Institutes of Medical Research. Robin was recognized for his numerous and remarkable contributions to our understanding of the mechanism of sex-determination in mammals, work he initiated back in the 1980s, with the major breakthrough coming in 1991 with the identification of the correct testis determining gene on the Y chromosome he named Sry. This in

turn led to the identification of a large family of related transcription factors the so termed Sox genes since shown to play diverse roles in multiple aspects of patterning and organogenesis.

Robin was born in Taunton, but at a young age the family relocated to Norfolk. Robin attended the King Edward Sixth Grammar school in Norwich where he excelled in skiving off English lessons and hanging out behind the bike sheds, and playing lots of sport including fencing, hockey and rugby. He also developed a keen interest in biology and chemistry, especially in the Chemistry Club who's after school projects were often subject to controlled explosions by the local fire brigade. In the early 1970's, and well ahead of his time Robin took a “Gap Year” before going to University. Unlike most teenagers of the present generation who spend their year off visiting exotic locations like the beaches of Thailand and Bali, Robin spent his year working as an Assistant Research Officer at the John Innes Institute, where his project was focussed on making the world's first genetically modified tomato. Unfortunately he was unsuccessful in this goal, but his early years in the lab certainly seem to have shaped his future thinking. After finishing his Zoology degree at University College, Robin joined Martin Evans lab for his PhD studies, and when Martin accepted a position in Dept of Genetics in Cambridge in the late 70's Robin moved with him as a post-doc. Robin was given the task of relocating and setting up the lab, including driving all of the mice from the centre of London to Cambridge in the back of his car.

I first got to know Robin when I joined Martin's lab in the late 1970's. Robin cut a dashing figure in his invariably crisp white shirt and blue jeans, and characteristically was never seen wearing a jacket or coat even during the decidedly cold damp Fen Winters. He was very absorbed with his experiments, which mostly seemed to involve running round the building carrying large Pyrex trays containing acrylamide gels. As with his early foray into GM crops, Robin was again thinking ahead of his time ambitiously pioneering proteomics approaches involving 2D gel electrophoresis to map proteins changes during embryonal carcinoma cell differentiation and in early embryos. In 1981 Robin went off to do a second post-doc in Paris with Jacques Jami, returning a year later to become a group leader in the MRC Unit at UC run by the late Anne McLaren, where he first started his work on sex determination. In 1988 Robin was recruited to Mill Hill and since 1993 has headed the Division of Developmental Genetics.

Robin's numerous scientific contributions have been acknowledged in a variety of ways – he's been elected a member of EMBO, he's also a Fellow of the Royal Society and of the Academy of Medical Sciences. Together with Peter Goodfellow, his long time collaborator, he won the 1995 Louis Jeantet prize in Medicine for the cloning of Sry. Robin used part of his personal prize to fulfil a lifetime ambition to become the owner of a "proper" fast car - a Special Edition Purple Lotus. Sadly after many happy driving years Lotus number one was written off after a most unfortunate collision with a Domino's

Pizza delivery motorcycle, but thankfully has been replaced by a sleek Electric Blue version.

Apart from being widely known for driving a Lotus, Robin is also very skilled with his hands. He's a talented microinjectionist, a skill he learnt in Paris. But I quote a former post-doc who told me that "he seems to have been drawn to transgenesis by a need to sit in a small quiet room and listen to the cricket". His lab members told me I had reminded everyone that "Robin's a very good chef, renowned for throwing really good parties with great food. He is famous for making apple pies, with the pastry decorated in the theme of the research of whoever the party is for". He's also an incredibly gifted artist and at one point regularly contributed cartoons to Nature. He's designed innumerable T-shirts for the Cold Spring Harbor Mouse Course, which he has helped teach, without a break, for more than 20 years. A couple of final comments from the lab "he quite likes drinking red wine, and although he is usually very reserved, when he has had a drink or two and there is dancing to be done, he's always the first one on the dance floor. Second, "he is a total pyromaniac" simultaneously delighting small children while scaring their parents witless at Guy Fawkes parties by setting off wickedly large rockets, an activity which has boosted sales of home fire extinguishers across North London. Finally I quote from one of Robin's former colleagues: "perhaps you could mention his spectacular intelligence, unfailing high standards, and incredible personal warmth and generosity".

(continued overleaf)

"he seems to have been drawn to transgenesis by a need to sit in a small quiet room and listen to the cricket"

“He’s interacted extensively with the media and is a well-known face of British Science providing knowledgeable comments and informed opinions”

The Waddington Medal also honours public engagement and communication of Science. As very many of us are aware Robin has made extremely important contributions in this area. He’s advised innumerable committees on stem cells and therapeutic cloning including the House of Lords Select committees on Stem Cells and on Science and Technology. He provided information with respect to the Human Fertility and Embryo Bill as it progressed through Parliament. He’s interacted extensively with the media and is a well-known face of

British Science providing knowledgeable comments and informed opinions on genetics, cloning and stem cells in newspapers, and on television and radio. Robin was a worthy and popular winner of the Waddington Medal and his lecture not only provided us with amusing stories about his childhood, and early days in the lab, but also fascinating insights into the strategies that lead to the successful hunt for the mammalian sex determining gene.

Liz Robertson



Open letter from the ISDB to the members of the BSDB

As you may know, I was elected President of the International Society of Developmental Biologists (ISDB) in Edinburgh last September and started on the job in January this year. At this point, we feel that it is important to re-introduce the ISDB briefly and especially to give individual developmental biologists an opportunity to have a say in what we can do for you and the community of developmental biologists over the next 4 years and beyond.

You will probably also know that the ISDB is not strictly a society but rather a federation of national and regional societies (see box on p12 for a list). The main mission of the ISDB is to further interactions between developmental biologists on a wider, more international level than is possible through local societies. To date it has been doing this mainly through its meeting which occurs once every 4 years. The last of these took place in Edinburgh in 2009 and the next will be in Cancun, Mexico, in 2013. They are very successful, typically attended by more than 1000 participants and the atmosphere is very lively. In addition to the main meeting the ISDB has been co-sponsoring other occasional meetings on an ad-hoc basis with other societies, but in my opinion this has been less successful because few people knew about it and because there is not enough funding.

The ISDB is funded from two sources. One is an annual contribution from Elsevier arising from the royalties of the journal "Mechanisms of Development" (MOD), the official journal of the ISDB. The other source is an almost nominal capitation fee payable by the member societies. The ISDB does not spend any money on

administration or on itself - all of the income goes to fund activities that benefit the developmental biology community around the world. Every penny therefore counts. Until recently I was one of the Editors of MOD, but I stepped down to avoid a conflict of interest when I became President of ISDB. The relationship with MOD and the income it brings to the ISDB is crucial for the development of the society - the more income, the more the society can do for the community. Your support of MOD is therefore very important so please consider submitting some good papers.

It seems to us that ISDB could be doing more than just one meeting every 4 years. We could increase the frequency of meetings and start other initiatives to serve the international community of developmental biologists. One suggestion might be to co-sponsor/co-organise 3 regional meetings (for example covering Europe, pan-American and Asia-Pacific regions respectively), each every 4 years, out of cycle so that there is a major regional meeting somewhere every year, supporting a local organizing committee. However others have suggested that there are enough meetings already and some of the national societies are concerned that a regional meeting could compete with their own regional mission.

We would like to continue to provide small grants to invite one or more major international speakers, and/or to sponsor attendance of particularly promising students or postdocs or even mid-career developmental biologists (who are neither new investigators nor the most famous ones - the forgotten majority, which

Claudio Stern
President of ISDB
University College,
London

"...we feel that it is important to re-introduce the ISDB briefly and especially to give individual developmental biologists an opportunity to have a say in what we can do for you and the community of developmental biologists"

The current officers of the ISDB are:

Claudio Stern (UK; President)

Marianne Bronner-Fraser (USA; Secretary)

Stefan Schulte-Merker (Netherlands; Treasurer)

Douglas Sipp (Japan; Business Manager)

David Wilkinson (UK) is also being included in this executive board in his capacity as Chief Editor of MOD.

no other scheme wants to fund), to developmental biology meetings. A requirement of this is that these lectures and grants will be advertised widely as "MOD-ISDB lecture", etc.

The ISDB should also strive to develop a louder voice, coming from every corner of the world, to influence funding agencies and streams for basic research. At times of increasing financial stringency, funding bodies can become obsessed with translation that brings benefits only in the short term, or disproportionately interested in topics like stem cell biology and regenerative medicine. However many need reminding that these areas are part of developmental biology, that all of the major findings in stem cell science came from this discipline and will continue to do so for some time, and that without the basic science the innovation will stop and the economy will suffer even more. For the ISDB to strengthen its voice it needs to be seen, both within and outside the community of developmental biologists, as inclusive and representative. We are currently working very hard to

increase our base of member societies by incorporating under-represented communities, helping to revive a few dormant developmental biology societies, and generally encouraging a more community-based feeling for these common goals around the world.

Of course all of this will require improving our funding base considerably. Both the funding and the new activities need to be developed at the same time for this to work, and the former is particularly challenging in these difficult financial times.

I hope that this letter will arouse your interest in the ISDB and that you will contribute to its development in the future, alongside your national and regional societies. You may well have some ideas of your own concerning how the ISDB may be improved to become more visible and to serve you better - if so, we want to hear from you. Please write to me either directly (c.stern@ucl.ac.uk) or via your national society. We will consider all suggestions and I will do my best to acknowledge every email.

Best wishes,
Claudio Stern

The ISDB web site is www.developmental-biology.org (soon to be updated)

The current member societies of the ISDB are: SDB (USA), BSDB (UK) and the Societies for Developmental Biology of Japan, Germany, France, Netherlands, Israel, Finland, Portugal, Latin-America and Australia/New Zealand. We are also currently talking to a few more national societies and encouraging them to join formally: the Asia-Pacific network (APDBN) and the SDBs of Belgium, Italy (ABCD and GEI), Sweden (Swedbo), Spain, India, Mexico and Hong Kong. We are also currently in discussions with other countries that have a sizeable developmental biology community but not yet a society, including South Africa, Singapore, China, Taiwan, Korea, Russia and Iran, as well as possibly a European or East European grouping.

BSDB Autumn Meeting 2010

Development of sensory systems

7–9 September, St Anne's College, Oxford

Organised by Jo Begbie, Anthony Graham, Darren Williams. Thomas Hummel.

See poster on p6.

Progenitor populations

Robert Kelsh, Claire Baker, Jo Begbie.

Somatosensory systems

Filippo Rijli, Patrick Ernsfor, Wesley Grueber, Andrew Jarman, Darren Williams.

Eyes/vision

Jane Sowden, Bill Harris,

Auditory

Tanya Whitfield, Andy Groves.

Taste

Linda Barlow, Ilona Kadow.

Evolution of sensory systems

Detlev Arendt, Lucia Manni, Angelika Stollewerk

There will also be talks selected from abstracts.

Latest meetings news

Check the BSDB website for latest meetings updates and to submit details of meetings to be advertised to members.
<http://www.bsdb.org>

BSDB Spring Meeting 2011

26-30 April 2011. University of Kent at Canterbury

Joint Spring Meeting with BSCB.
BSDB organisers: Chris Thompson and Juan Pablo Couso

Ideas for a meeting?

A major task of the BSDB Committee is to host high quality scientific meetings. We welcome suggestions for future topics for meetings or for a half-day themed session at the Spring Symposium. Contact James Briscoe

Future BSDB meetings

Autumn 2011

2nd Joint Meeting of the British and French Societies for Developmental Biology

3-6 September 2011. Nice, France.

BSDB organisers: Andrea Munsterberg and Stefan Hoppler.

The meeting will cover exciting and wide-ranging topics in developmental biology and will feature a number of outstanding scientists, international experts in their fields as well as opportunities for participants to be selected for platform presentations.

Other meetings of interest

Latest meetings news

Check the BSDB website for latest meetings updates and to submit details of meetings to be advertised to members.
<http://www.bsdb.org>

13th International *Xenopus* Conference

12-16 September 2010
 Chateau Lake Louise, Alberta, Canada
 Keynote Speaker: Nancy Papalopulu, University of Manchester
<http://www.xenopus2010.org>

EMBO Meeting: Molecular and Cellular Basis of Regeneration and Tissue Repair

26-30 September 2010
 Sesimbra Portugal
<http://cwp.embo.org/cfs3-10-01>

CSH Meeting on Germ Cells

5-9 October 2010
 Cold Spring Harbor Laboratory, New York

Abstract Deadline: 16 July 2010

Organizers: John Eppig, Margaret Fuller, Phillip Newmark.

The specific goals of this conference are to bring together a diverse group of scientists studying various molecular, cellular and genetic aspects of germ line and gamete development. This meeting is intended to provide a format for the exchange of ideas and information, to discuss the latest research findings and technical advances, and to facilitate the intellectual unification of research on germ cells and related disease states in diverse systems.

<http://meetings.cshl.edu/meetings/germ10.shtml>

Emergent Properties of the Cytoskeleton: Molecules to Cells

3-8 October 2010
 Hotel Eden Roc, Sant Feliu de Guixols, Spain

European Science Foundation (ESF) and EMBO

Deadline for application: 15 July 2010

This conference is part of the 2010 ESF Research Conferences Programme

<http://www.esf.org/conferences/10326>

CSH Meeting on Mouse Development, Genetics & Genomics

26-30 October 2010
 Cold Spring Harbor Laboratory, New York

Abstract Deadline: 6 August 2010

Organizers: Kathryn Anderson, Haruhiko Koseki, William Skarnes, Michael Shen.

The specific goal of this conference is to bring together a diverse group of scientists studying various molecular and genetic aspects of mammalian development. This meeting is intended to provide a format for the exchange of ideas and information, to discuss the latest research findings and technical advances towards the study of mammalian development and disease.

<http://meetings.cshl.edu/meetings/mouse10.shtml>

5th International Meeting of the Latin American Society for Developmental Biology

11-15 November 2010
Santa Cruz, Chile

<http://www.lasdb2010.com/>

Frontiers in Cell Biology and Medicine

26-29 September 2010
York

Organised by Jo Milner

Intracellular programming and transport pathways.
Molecular and organelle assemblies.
Mechanisms of Apoptosis.
Differentiation of adult neural stem/precursor cells.
Neuroimaging.
Switchable genetic models for therapeutic target validation.
P53, cell cycle and cancer.
Nano-therapy and targeted delivery.

This meeting is being held in honour of Pierre May, who passed away July 2009 30 years after he first described the p53 tumour suppressor protein.

<http://www.york.ac.uk/res/p53>

Other Cold Spring Harbor Meetings

www.meetings.cshl.edu/meeting.html

Translational Control
September 13 – 17 abstracts due June 13

Genome Informatics [Hinxton, UK]
Sept. 15 - 19 abstracts due June 25

Axon Guidance, Synaptic Plasticity and Regeneration
September 21 – 25 abstracts due July 2

Molecular Genetics of Aging
September 28 – October 2 abstracts due July 9

Germ Cells
October 5 – 9 abstracts due July 16

Mouse Development, Genetics & Genomics
October 26 - 30 abstracts due August 6

Non-coding RNAs in Development

1 October 2010
The BioPark, Hertfordshire, AL78 3AX

Eukaryotic gene expression is modulated at many layers of regulatory control. It is becoming apparent that differentiation and development involve the action of numerous regulatory non-protein coding RNAs (ncRNAs). This meeting will focus on the discovery and characterization of ncRNAs in the context of embryogenesis and organismal development, highlighting recent technological advances for high-throughput functional genomics. Meeting Chair: Paul Bertone, European Bioinformatics Institute, Cambridge

<http://www.regonline.co.uk/rna2010>

Adjunct Meeting: 9th IEEE Genomic Signal Processing and Statistics (GENSIPS)
November 10 - 12 abstracts due July 10

Pharmacogenomics & Personalized Therapy
November 17 – 21 abstracts due Sep 3

Neurodegenerative Diseases: Biology & Therapeutics
December 1– 4 abstracts due Sep 17

Automated Imaging & High-Throughput Phenotyping
December 5 - 8 abstracts due Sep 24

Blood Brain Barrier
December 8 - 11 abstracts due Sep 24

Induced Pluripotent Stem Cells: Production and Utility in Regenerative Medicine

7 October 2010
The BioPark, Hertfordshire, AL78 3AX

The production of iPS cells from dermal fibroblasts has generated intense interest in the utility of such cells for research purposes and clinical applications. iPS cell production currently requires the use of transcription factor gene delivery to reprogramme cells into iPS cells. Hence, both gene delivery technology and iPS cell characterization and subsequent cell differentiation are critical aspects of iPS cell biology. Meeting Chairs: Professor Peter Andrews, University of Sheffield and Dr Chris Denning, University of Nottingham

<http://www.regonline.co.uk/IPS09>



Your Inner Fish

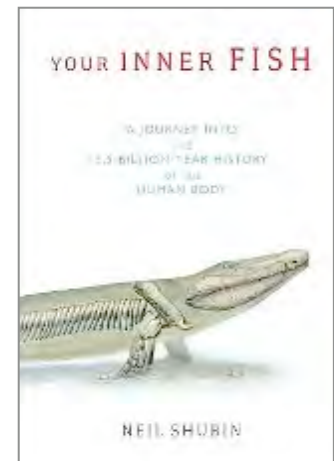
Neil Shubin

Pantheon Books

ISBN: 978-0375424472 ~£12 (hardback)

Penguin Books

ISBN: 978-0141027586 ~£6 (paperback)



Simon Hughes

*Randall Division for
Cell and Molecular
Biophysics and MRC
Centre for
Developmental
Neurobiology, King's
College, London*

*"...it has an exciting
main theme, conveys
the joy of applying
obscure knowledge to
the real world and re-
affirms our
commitment to
science as intellectual
pursuit, as opposed
to a government
economic productivity
package."*

If you want to get a feel for what palaeontology could add to your research, this is the book to take on the next plane or train. It's a good fast read and contains much that will be familiar to all but the youngest BSDB members. Yet it has an exciting main theme, conveys the joy of applying obscure knowledge to the real world and re-affirms our commitment to science as intellectual pursuit, as opposed to a government economic productivity package.

As a child, I dreamt that becoming a biologist would combine science and walks in the countryside. I was interested in animals; particularly dead ones. I bought litres of formalin at the chemist and, not knowing about perfusion, fixed corpses by i.p. injection and preserved them in jam jars. It worked surprisingly well. At Rievaulx Abbey one damp Yorkshire autumn, I found a common shrew, and gave my 7-year old brother the job of storing it until my return. Freaking out, he left it in the cupboard under the stairs, with predictable results. Thereafter, he preferred his animals very dead – he subsequently became a palaeontologist. Shubin's book realistically reflects my brother's

life: the romance of palaeontology, the joys of travel, the unexpected twists of fieldwork and its relationship to periods of lab work and teaching.

The book starts in the field with the discovery of *Tiktaalik*, a Devonian ('Age of Fishes') fossil with characters intermediate between fish and tetrapods. The first half of the book describes Shubin's personal journey from graduate school to leading light of EvoDevo. It is entertaining, and gives real insight into the importance of the fossil record. The modified structure of the pectoral fin/limb, its link to the backbone, the bones at the rear of the skull and in the ear, all leading to an animal with a mobile neck is nicely woven into the ecology of the Devonian estuary in which *Tiktaalik* lived. The cover image of a 'fish that can do push-ups' is justly memorable.

The latter half of the book is less coherent, although it provides some entertaining anecdotes for developmental biologists who teach gross anatomy. We go on an eclectic tour of highlights of the last 30 years of developmental biology. But the text oscillates between the rise of mammalian characters and more basic stuff, like Hox genes,



intercellular signalling and the invention of animal-type cell adhesion in choanoflagellates. Seemingly coming out of Shubin's anatomy lectures, certain of our infirmities are interpreted as unhappy reminders of our fishy past. Several chapters each cover one special sense. Although well written, I got the feeling we were reading through a list of Nobel Prize winners. While there is nothing wrong with explaining major advances in modern science to the public, this seemed disjointed from the earlier more personal story. To me, it felt a bit lazy; more care could have retained a stronger link with *Tiktaalik*. On the other hand, Shubin does a good job of quoting the history of some cherished ideas in developmental biology, such as Reichert's 1837 tracking of jaw bones to the ear, as befits someone with the long view of time.

An interesting aspect of the book is the take on evolution. This is not an overt attack on the anti-Darwinian forces at work in the Western world. But a theme woven deep in the text is the

ever-lengthening thread of evidence for evolution. We should all empathise with palaeontologists, who are in the front line of the fight to defend Enlightenment thought, yet lack the weapons available to us in the form of useful biomedical advances. While entirely avoiding biochemistry and molecular genetics, the book does an excellent job of giving the reader a feel for the vast quantity of recent DNA evidence in favour of descent with modification, and how it bolsters what was known from earlier work.

To study some of the evolutionary links between fish and people, I now live and work in central London. I feel lucky to have sight of trees, grass and evening foxes from my office window. My brother maintains a keen interest in developmental biology, yet spends months each year strolling in the most beautiful regions on Earth. With very dead animals, he is never troubled by a failed experiment. Read this book and feel envious of a life in science far removed from the goals of a UK Academic Health Sciences Centre.

"Read this book and feel envious of a life in science far removed from the goals of a UK Academic Health Sciences Centre."

Reviewing a book for the BSDB

Suggestions for future book reviews are always welcome. If you know a book you think should be reviewed, please contact the Editor. Reviewers receive a free copy of the book for their trouble.

Here are some possibilities:

From CUP

Cancer Stem Cells
W. L. Farrar
9780521895283

The Neural Crest, Second Edition
N. Le Douarin, C. Kalcheim
9780521122252

Shoot Apex and Leaf Growth (first published 1975)
R. F. Williams
9780521112871

From OUP

Doing Science
Design, Analysis, and Communication of Scientific
Research
Second Edition
Ivan Valiela
978-0-19-538573-1

BSDB Discount from CSHL Press

Cold Spring Harbor Laboratory Press is offering a 15% discount on titles for BSDB members. In order to take advantage of this, visit their special offers page (<http://www.scionpublishing.com/special/index.php>).

Recent titles from CSHL Press:

Statistics at the Bench: A Step-by-Step
Handbook for Biologists
Martina Bremer
978-087969857-7

Live Cell Imaging: A Laboratory Manual,
Second Edition
Robert Goldman (ed.)
978-087969893-5

Mouse Hematology: A Laboratory Manual
Michael P. McGarry, Cheryl, A. Protheroe,
James J. Lee
978-087969886-7

Francis Crick: Hunter of Life's Secrets
Robert Olby
978-087969798-3

Journal discounts for members

BSDB member discounts from Elsevier Press:

Mechanisms of Development (print): \$120

Mechanisms of Development + Gene Expression Patterns (print): \$125

Developmental Biology (print): \$380



The main function of the BSDB Committee is to organise our meetings, from deciding on appropriate topics to arranging organisers and venues. If you have any ideas on topics for a good meeting, or on a good venue, don't hesitate to convey them to James Briscoe (or another committee member). The officers of the Society will be happy to answer any questions relating to their specific subjects.

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