RNA Society Newsletter

August 2010

From the Desk of the President,
Roy Parker

It was terrific to attend and see many of you at the 16th Annual Meeting of The RNA Society this June in Seattle. I would like to extend my thanks, and the gratitude of the society, to those of you who helped make the meeting a special success. A special thanks goes to the organizers, **Tim Nilsen, Douglas Black, Juli Feigon,** and **Elisa Izaurralde** for all their hard work. We must also thank the session chairs, the microphone runners, and the Seattle-based staff of Simple Meetings. Finally, I want to personally thank all the presenters for their efforts in developing their posters and talks that make the meeting an exciting venue to hear about new science.

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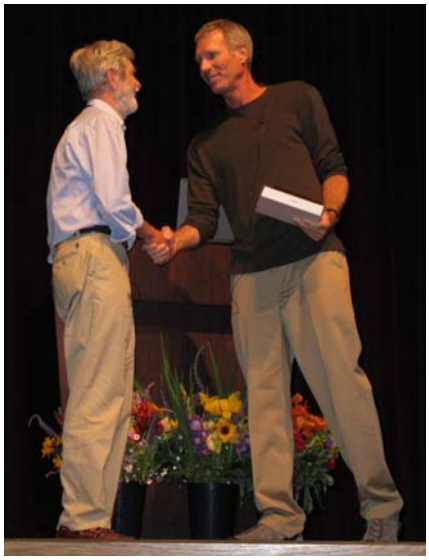
In this issue :

In addition to the science, a number of awards were presented at the Annual Awards Ceremony that takes place before the banquet. It was a great pleasure for me to present the Society's Lifetime Achievement Awards, as well as the Scaringe and poster awards that go to graduate students and postdoctoral fellows.

This year's Society's Lifetime Achievement Award for Service was given to **Dr. Lynne Maquat**, currently a Professor at the University of Rochester Medical School. Lynne has been very influential in the development of the RNA Society and has served the Society as a Director, Secretary-Treasurer, a co-organizer of the RNA Conference, and President. To me, Lynne's most important contributions have been in developing a sense of community within the society as a whole and enhancing the involvement of the graduate students and postdoctoral fellows through organizing some of the mentor-mentee lunches, initiating the graduate student and postdoctoral groups, and continuing to organize the Women in Science dinners (that have evolved into the RNA & Society Dinner). As the Society matures it will be important that we follow Lynne's lead and continue to develop and empower the graduate students and postdoctoral fellows that are interested in RNA.

The Society's Lifetime Achievement Award for Science was presented to **Dr. Fritz Eckstein**, who was a Group Head at the Max-Planck Institute in Gottingen. Fritz was selected for his landmark contributions for developing methods to introduce chemical modifications into nucleic acids, including the development of phosphorothioate chemistry. Such chemical methods have now been used in understanding the structural or enzymatic properties of many RNAs and in modifying RNAs for their potential use in a variety of therapies. Fritz's work is an important demonstration of how the development of new chemical methods can have a wide and long-lasting impact on a research field.



The Awards ceremony also announced the RNA Society/Scaringe Award winners. These awards are given to recognize the achievement of young scientists engaged in RNA research and to encourage them to pursue a career in the field of RNA. The 2010 RNA Society/Scaringe Awards are described in more detail on page 9.

A number of individuals were also honored for the best posters in several categories. These include the ACS Chemical Biology award, the Nature Reviews in Molecular and Cell Biology prize and 3 awards sponsored by Nature Structural and Molecular Biology for poster presentation in three different focus areas. Please see page 9 for more details on these awards and their winners.

I also want to thank all of the individuals who participated in choosing the award recipients. It is a difficult job to evaluate and judge between the numerous possibilities, particularly with the number of high quality posters in each area.

The RNA meeting included, as usual, the mentor-mentee lunch, the career and scientific communications workshops, and the graduate student and postdoctoral social. These events can be a great help to young scientists in developing their career and in building friendships and networks that can make your career more productive and enjoyable.

This year we also had the second "RNA & Society" dinner. This year's speaker was **Dr. Brian Nosek**, who is an Associate Professor and Director of Graduate Studies in the Department of Psychology at the University of Virginia. Brian is an expert in implicit cognition, which are the unconscious

information processing that our brains undertake that can influence how we perceive the world. Through a series of entertaining and revealing exercises he made us aware of how much our perceptions are affected by those unconscious processes. I think a particularly important one for scientists is how what one sees in a setting is influenced by what your attention is focused on detecting. This is why it is so important to have an open mind when looking at the results of an experiment and not to be looking for a specific single result. I look forward to what intriguing speaker Lynne will find for the next RNA & Society dinner!

I also wanted to thank all of the Society members who were willing to run for an office in the RNA Society elections. The Society is lucky to have a wealth of new developing leaders and you can all help the Society by participating in these leadership positions. In that light, I would like to congratulate the newly elected officers of the RNA Society. These are **Manny Ares** as President, along with **Narry Kim**, **Scott Strobel**, and **Kathy Collins** as Directors. My best wishes to them as they carry on the leadership of the Society.

Finally, I will end my letter by noting that this meeting tried a new format with plenary talks from established investigators in the morning sessions. This was an interesting variation from our more established style of meeting wherein the talks are primarily by graduate students and postdocs. The feedback from our post-meeting survey suggests that while some plenary talks (particularly on the first night) are valued, a continued emphasis on talks by graduate students and postdoctoral fellows is important and presents stimulating (if a bit hectic) science.

Our next meeting will be our first trip to Asia and will be held in Kyoto, Japan June 14-19, 2011. Preparations are already underway for an exciting meeting and I look forward to seeing many of you there. Until Kyoto, my best wishes to all of you.

Our Thanks to Evelyn Jabri …& Looking for a new CEO

It is with sadness, and with great thanks to her, that I inform you all that **Evelyn Jabri** is stepping down as CEO of the RNA Society in January 2011. Evelyn has been the CEO for six years and has done a spectacular job of guiding the RNA Society during that time. She will be sorely missed and we all owe her a great deal of gratitude.

The Society will now be looking for a new CEO. The CEO is a very important position within the Society and really takes care of the day-to-day business that allows the Society to run smoothly and productively. The CEO position takes about 20 hours a month. Evelyn describes the features and benefits of this job in more detail on page 4 and as a FAQ on page 5 in this newsletter. I will be chairing a search committee to look for a new CEO. If you are interested, please email me a brief letter of interest and your CV by August 31st (rrparker@email.arizona.edu).

From the Desk of the CEO
Evelyn Jabri

It was great to see many of you in Seattle! For those who could not attend, I expect this newsletter will provide a great overview of the highlights.

Those who attended the meeting received news that I will 'retire' as CEO of the RNA Society at the end of this year after 6 years of service. Serving as CEO of the Society is an enjoyable volunteer gig that fills my spare time. However, the growing number of personal and professional responsibilities this year (and on the horizon) precludes me from performing the CEO duties with the attention that the position requires.

So what does the CEO of the RNA Society do? I answer this and a few additional questions in the 'CEO FAQ'. I can also provide additional details to those who are considering this position with the RNA Society.

The CEO position offers a chance for anyone engaged in the RNA community to manage and expand the operations of a successful non-profit scientific society. The CEO gig offers many perks! For me one of the major perks is working with smart, creative, and supportive volunteers and contractors who continue to teach me so much about many topics (science, publishing, non-profits, member societies, managing and coaching volunteers, the international science scene, etc.). The Society would not function without all of these wonderful people.

Another major perk is traveling around the world with the Society's annual meeting. Each location offers the opportunity to learn about a new city, meet new people (scientist and non-scientists) while sampling its local food and beverages. Another perk of being CEO is that it offers an opportunity to expand my understanding of non-profit organizations — how they work, the challenges they face, the opportunities they offer, and the contributions they make to the communities they serve.

I am very proud of what we have accomplished and contributed to the RNA community during my tenure as CEO. We:

- Grew the Society membership by ~60% since 2005.
- Enhanced author services at our journal *RNA* by negotiating reduced publication charges and an open access option with our publishing partner Cold Spring Harbor Press.
- Improved the Society's financial position in difficult times by effectively managing contracts and establishing interest bearing savings accounts to increase cash reserves from <$100K to >$500K.
- Encouraged and supported experimentation in annual meeting format and financial structure resulting in increased attendance and five years of profitable meetings garnering $30-$80K/year in revenues.
- Established an open and transparent decision making process including an electronic accounting of decisions, contracts, and discussions.
- Improved responsiveness to members – established a Junior Scientists Group to develop activities for this growing segment of members; developed an RNA & Society Dinner to address broader issue of interest to members; initiated this RNA Society Newsletter to keep all members up-to-date on Society decisions and initiatives.
- Updated and enhanced the Society's organizational structure to facilitate greater member participation and dissemination of information — enhanced the committee structure to ensure smooth annual operations; established an electronic Membership Renewal System and Member Directory; developed an electronic Ballot & Survey for Society elections and member input.

Your assistance with and support for these enhancements were instrumental in bringing about these important changes. With >1300 members, a strong annual meetings program, and an established publication, the Society is poised to continue its growth and success.

Thank you for the superb opportunity to serve as the CEO of the RNA Society! It's been a fantastic volunteer gig with exceptional and supportive people. I've very much enjoyed working with you and learned a lot (about RNA science, the RNA Society, and how to run a successful scientific society). I wish the Society the greatest success in the coming years and into the future.

I look forward to seeing you in Kyoto next year!
Evelyn (ejabri@gmail.com)

The CEO FAQ

Q: What are the key characteristics of an effective RNA Society CEO?
The CEO of the RNA Society is the master coordinator of Society activities. They are : a strategic thinker engaged in Society activities and the RNA community; able to implement projects and manage multiple timelines; an exceptional communicator able to gain consensus among disparate groups of members of various ages; a detail-oriented problem solver; a decision maker; able to review all options with various stakeholders and gain agreement on best options for the Society; an effective negotiator with experience managing contracts and coordinating contractual obligations; a business savvy individual with ability to direct contractors to meet contractual obligations and complete quality work. Knowledge of non-profit business operations is helpful but not necessary as you can learn it (and a few of the other skills listed above) on the job.

Q: What does a CEO do?
The CEO directs and manages the business activities of the Society working with other officer and Directors to develop and implement strategic objectives.

- Establish long-range plans for the Society in partnership with Directors and Officers. Implement strategic activities as needed to ensure long-term success of the organization.
- Represent the Society in negotiations, with existing contractors (CSHP, FASEB, etc.).
- Ensures business contracts are appropriate and financially sound prior to signing.
- Work with the CFO to develop the Society's annual budget and review non-profit status to ensure Society meets IRS requirements. Budgeting activities include projecting membership, establishing member dues, finalizing member subscription costs, establishing meeting budgets, and any additional activities requiring a financial commitment.
- Serve as director of the business activities of the Society journal. This includes developing and negotiating contracts for publication, dispersal of support funds, and other related business activities. Coordinate the strategic business initiatives in partnership with the Editor-in-Chief, CFO, ad hoc publications committee, and publishing partner.
- Direct and manage business aspects of the annual meeting program. This includes evaluating future meeting sites and performing site visits; updating and distributing Organizer Handbook and tentative timeline for each annual meeting; facilitating communication between scientific organizers, on-site coordinator, abstract services and generally keep everyone on schedule; working with the CFO to finalize

the budget and registration costs; ensuring the websites are completed in a timely manner; providing any required information for registration and abstract websites; sending promotional information to various outlets to advertise meeting; resolving contractual issues and broadly track expenses to monitor progress; completing a final walk through with contractor to close out processes and ensure timely accounting of meeting expenses; serving as back up organizer should the need arise.

- Direct and manage the membership and administrative activities coordinated by FASEB. This includes monitoring FASEB activities to ensure work is completed on deadline, and where needed providing feedback for improvement of services. It may also includes performing reviews of Society databases (membership, mailing lists) to ensure accuracy and update as needed; coordinating membership renewal; tracking and reviewing membership to ensure continued growth; developing new mechanisms/plans to increase membership of the Society as needed.
- Organize and chair the Board of Directors meeting at the annual meeting. This includes collecting for discussions relevant financial, membership and publication data as requested by the Directors; review and finalize minutes developed by Secretary/Treasurer.
- Ensure all committees are established in a timely manner. These include the Nominating committee, the Award committee, the RNA Society/Scaringe Award committee, and ad hoc committees. Where necessary, develop budgets for the activities of each committee, and as needed to support Society awards, solicit necessary supporting funds from sponsoring individuals/organizations.
- Direct the election of new officers. This includes establishing the nominating committee in partnership with the President; developing and testing the ballot in partnership with FASEB; coordinating announcement and distribution of election results to members.
- Direct the distribution of Meeting Support/Sponsorship for other RNA–related meetings.
- Approve and monitor the content of Society website.
- Assist the newsletter editor with acquiring content, writing, and editing as needed.
- Keep the history of the Society. Maintain database of officers, meeting organizers, etc.

Q: What is the time commitment?
You can expect to spend 20 hrs/month managing RNA Society activities. Some month, for example December, January, March, and the month right before the annual meeting may require more time to organize concurrent activities.

Q: How long does the CEO serve the Society?
The CEO is appointed by the Directors to serve a three-year renewable term. The expectation is that the CEO will remain with the Society for more than one term.

Q: Does the RNA Society CEO get paid?
The CEO receives a small honorarium each year. The Society also covers CEO expenses associated with travel for the annual meeting with the publisher, site visits to review meeting sites, and the Society's annual meeting.

Q: Where can I learn more about the business structure and officer responsibilities?
The Society Articles of Incorporation, found in the annual directory (distributed as a PDF file) and on the Society website (see bottom of Officers page http://www.rnasociety.org/officers), outlines some of these responsibilities and you are encouraged to review this document for clarification of the Society organizational structure.

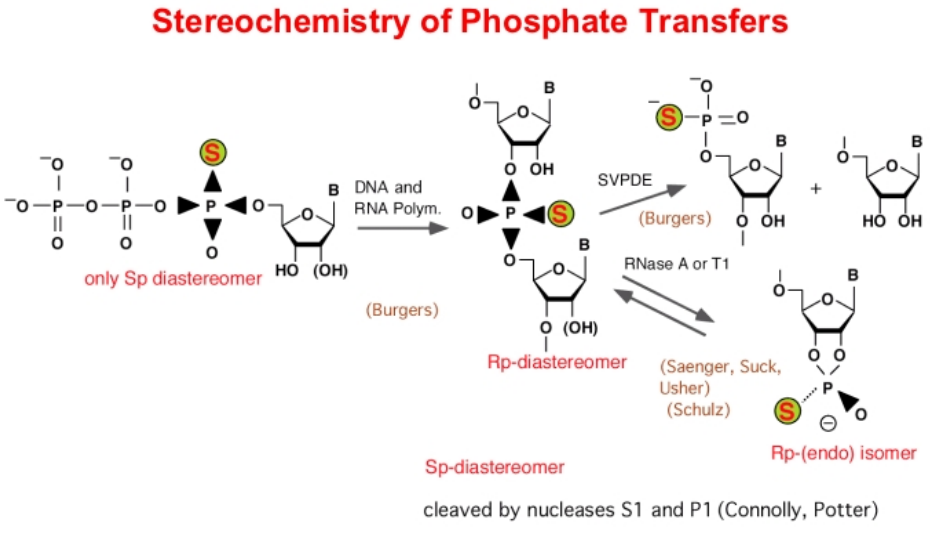
RNA 2010 Meeting review

The 2010 RNA Society Lifetime Achievement Award for Research : Fritz Eckstein

The RNA Society Lifetime Achievement Award for Research acknowledges the impact of an outstanding RNA scientist on the general scientific community. At RNA2010 the award was given to **Fritz Eckstein** at the Max-Planck Institute, Gottingen

As President Roy Parker introduced Dr. Eckstein, he began with the impressive list of accomplishments over 40 years including over 300 research papers and an award Dr. Eckstein is particularly proud of, an honorary PhD degree from Hebrew University in Jerusalem. Roy stressed that the award is given not only for the research work that Dr. Eckstein has accomplished but also for the importance of the chemical methods in the analysis of RNAs today. Fritz's lab was responsible for the synthesis of modified nucleotides, currently widely used for a variety of applications in biology and chemistry. Additionally he developed the synthesis of phosphorothioates and devised their chemical methods for incorporation into nucleic acids. For the wide variety of techniques that depend on the fundamental chemistry devised and developed by Dr. Eckstein, that are widely used by RNA researchers today, the RNA Society awarded the Lifetime achievement award for research.

Fritz then gave a brief overview of the development of phosphorothioates and explained the stereochemistry of phosphate transfers, demonstrating why these modified nucleotides are stable to hydrolysis. He explained the stereochemistry of the phosphate transfer and indicated that replacing an oxygen with sulfur on the alpha phosphate position resulted in a nucleotide that could incorporate into an oligonucleotide which would then be resistant to cleavage at that position. Conversely, replacing an oxygen with sulfur at the gamma phosphate position resulted in a non-hydrolysable form. He then explained the distinct advantages of each form and the variety of applications that have arisen from use of each.The substitution makes a chiral center out of the normally-prochiral phosphodiester.
This enabled Fritz and others to analyze the stereochemistry of reactions catalyzed by enzymes (eg RNaseA, restriction enzymes) and ribozymes (eg hammerhead).



Phosphorothioates incorporated at the alpha position of a modified nucleotide can be incorporated into oligonucleotides which are more stable in vivo, not just in tissue culture cells but in whole organisms. This would allow one to take advantage of a variety of methods like RNaseH-

directed cleavage and in vivo competitions. Other in vivo applications take advantage of the mammalian immune response when foreign DNA activates the defense mechanism. CpG-containing phosphorothioates mimic the $C^{me}pG$ in bacterial DNA and can be used as adjuvants with vaccines stimulating B-cell proliferation, antibody and interferon-alpha production.

Likewise, site-specific incorporation of phosphorothioates has allowed researchers to identify residues that are critical for metal binding, for example in Group 1 introns. The sulfur does not coordinate the metal binding in the same way; the loss-of-function allows definitive identifiation of the residues involved in coordinating metals. Iodine cleavage of phosphorothioates has also facilitated sequencing of unknown RNAs and has been used to assess RNA structure by a variety of resaech laboratories.

We were shown a long list of oligonucleotides and their targets currently used in human clinical trials. There was a brief outline of the various methods used to assist in delivering the modified nucleotides to different but specific cellular compartments. The talk was ended on a very inspiring note as Dr. Eckstein acknowledged some of the many students who worked with him and helped contribute to the phosphorothioate field. He acknowledged some important collaborators who worked with him in furthering the chemistry and applying these fundamental discoveries to research questions. Fritz has been far from alone in exploiting his phosphorothioate methodology. The research of at least 20 of our colleagues in the RNA field has benefitted tremendously by his work and who have gone on to make great discoveries because of the ground breaking fundamental chemistry made possible by the work of Dr. Fritz Eckstein.

The 2010 RNA Society Lifetime Achievement Award for Service : Lynne Maquat

The overall mission of the RNA Society is to facilitate sharing and dissemination of experimental results and emerging concepts in RNA research. Each year beginning in 2003, the Board of Directors, through an appointed Nominations Committee, identifies a recipient who receives a lifetime membership in the Society for his/her exemplary contributions to the Society mission. This year's Service award was given to **Lynne Maquat** a Professor of Biochemistry & Biophysics and Oncology and Director of the Center for RNA Biology at the University of Rochester Medical Center.

President Roy Parker awarded the plaque to Lynne after providing an extensive list of just some of her contributions to the RNA Society. This included acting as Session chair at many meetings, being a member of the Society's Board of Directors (2000-2002), Secretary/Treasurer for the Society (2003-2005), President of the Society (2006), an organizer of RNA2003 in Vienna, and an organizer of RNA 2011 in Kyoto. In addition she has initiated a number of the community-building activities in the Society including establishing the Mentor-mentee lunch which has become very popular over the years, facilitating the development of the GradStudent and Postdoctoral organizations, and establishing the Women in Science dinner in 2007 which has evolved into the RNA & Society dinner in order to cover a broader range of topics. Roy quipped – perhaps only half-joking – that the only roles Lynne has not (yet) served for the Society include CEO and CFO.

The RNA Society awards and/or poster prizes presented at RNA2010

Nature Structural Molecular Biology Poster Prizes:

In Mol. Biol. & Biochemistry : Adrien Decorsiere (poster #115) "HnRNP H/F binds to a G-quadruplex of the P53 pre-mRNA to regulate its 3'end processing during DNA damage"

In Genetics & Development : Henriette Kurth (poster #206) "The Tetrahymena Argonaute-binding protein Giw1p directs a mature Argonaute-siRNA complex to the nucleus"

In Biophysics & Struct. Biology : Andrea Edwards (poster #333) "Crystal structure of the SAH riboswitch aptamer"

***Nature Reviews Mol. Cell Biology* Poster Prize For 'Innovation and Interdisciplinary Research' Sara Gonzalez-Hilarion (poster #456) "NMD inhibition as a therapeutic approach for genetic diseases caused by nonsense mutation"**

***ACS Chemical Biology* Poster Prize For 'Innovative use of chemical biology applied to the study of RNA' Keith Connolly (poster #248) Investigation of Ribosome Biogenesis Defects induced by Genetic Manipulation of Ribosome Biogenesis Factors**


Adrien Decorsiere

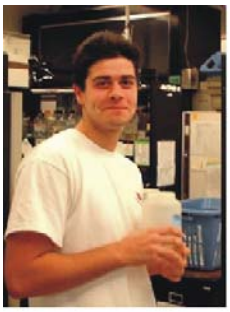

Henriette Kurth


Andrea Edwards


Sara Gonzalez-Hilario


Keith Connolly

The RNA Society/Scaringe Young Scientist Award was established to recognize the achievement of young scientists engaged in RNA research and to encourage them to pursue a career in the field of RNA. Open to all junior scientists (graduate students and post-docs) worldwide who have made a significant research contribution to the broad area of RNA. This year's winners are :


John Calarco


Luciano Marraffini

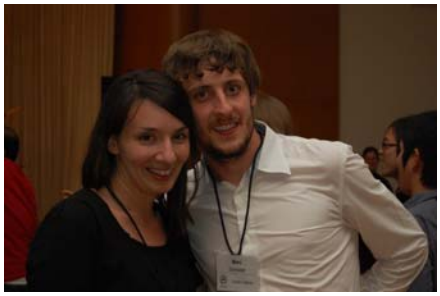
Graduate Student - **John Calarco**
University of Toronto (Blencowe Laboratory)
"Analysis of genome wide and neuronal alternative splicing"

Postdoctoral fellow - **Luciano Marraffini**
Northwestern University (Sontheimer Laboratory)
"Analysis of CRISPR systems in bacteria"

RNA2010 from the Junior Scientist Perspective

By Kim Dittmar and Marc Schneider

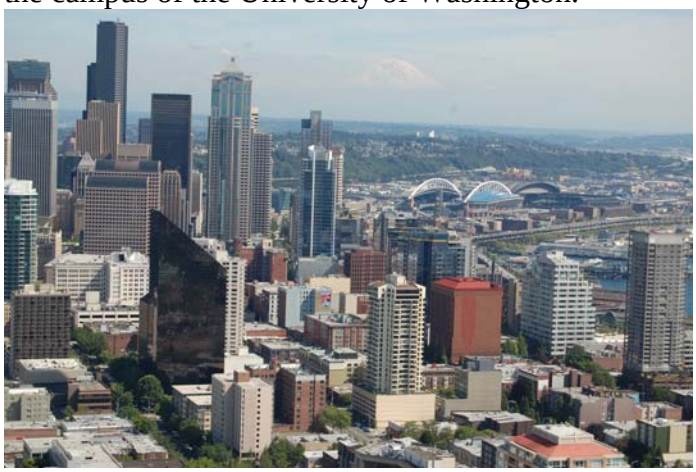
For senior scientists, conferences are not only a place to listen to recent developments, but also a place to meet old friends and collaborators. For young researchers the situation is a little different. For some of them it is the first big conference that they have experienced. They may not know anybody, apart from their supervisor and perhaps a lab mate. The new situation is fascinating but also a little frightening. It is the first time when many students are finally able to assign a face to the big names they only knew from papers. Many of them have no idea where they will be in a couple of years. Will they stay in science, will they continue a career outside of academia? For these reasons, the Ph.D. and postdoc representatives of the RNA Society set up a program for the RNA meeting each year that specifically addresses the needs and interests of young researchers.



Although the conference started on Tuesday, we met with a crowd of 20 grad students and postdocs from all over the world at the Elysian Brewery in the Capitol Hill neighborhood of Seattle on Monday night to get to know each other before the serious science began. Everyone enjoyed the flights of local beers, which allowed us to sample many different varieties. Kudos to our friends from overseas who showed up and braved the jetlag after arriving in Seattle the very same day!

The next day, we were greeted by sunshine, something that does happen too often in Seattle. But it looked like the organizers had picked a good week, with beautiful weather in store. A group of 40 –50 young scientists showed up at 9AM to join us for a tour around downtown Seattle. We were astonished at the great turnout, as was the bus driver who obviously had some problems coping with the number of people who wanted to get a ride into town. We had to split the group and wait for the next bus, but we eventually all made it to Pioneer Square, where we got an introduction to the history of Seattle and a tour through the underground. We learned about the first settlements in 1851, the great fire in 1889 and the strange way the city was rebuilt afterwards. At that time the entrance of many houses were about 10-15 feet below street level. After the fire the city decided to raise the street level to avoid problems with the tide. The shop and company owners downtown did not want to wait until this had happened and decided to rebuild their houses before or at the same time as these reconstructions occurred. The result was a large underground network beneath the walkways around Pioneer Square. While the first group enjoyed their tour through the underground, the other half decided to visit Pike Place Market where you can buy all sorts of fresh food like fish, meat, fruits or vegetables as well as a lot of handcrafted items. And the first Starbucks is just

around the corner! It is definitely a place worth visiting. In the afternoon we finished our trip with a visit of the most prominent building of Seattle – the Space needle. Beautiful weather allowed us a wonderful view over Seattle and beyond with Mt. Rainier at the horizon. Finally we headed back to the conference to listen to the first talks of RNA 2010 on the campus of the University of Washington.



Early Wednesday evening, Peter Fiske gave a great workshop about "Putting Your Science to Work", focusing on how to translate our scientific skills into many different career paths. Kim and Claudia did a wonderful job inviting him to our conference. He gave a very inspiring talk about the dark side (as Harry Noller would say) of the job market. He pointed out that Ph.D.s learn more during their academic careers than pipetting. Working independently, solving problems, dealing with frustration or public speaking are skills, which are not only required in science but in many other jobs too. Feeling good after his pep talk, we went straight on to our annual graduate student and postdoc social. Peter joined us and continued answering questions over dinner and drinks. We all enjoyed some food and one or two beers before we went up to the poster session. Our president, Roy Parker, was even spotted at this event, picking the brains of junior scientist members for ideas on how to make our Society better.

The last part of our program took place on Friday. Rea and Marc organized a workshop about grant writing with Lynne Maquat from the University of Rochester, Jamie Williamson from the Scripps Research Institute, and Reinhard Luhrmann from the Max Planck Institute for Biophysical Chemistry. After a brief introduction by Rea and Marc, Lynne gave us some insights into the NIH funding process. Then Jamie talked about the secrets of a good postdoc proposal, which will hopefully help some of us to get the grants we so desperately depend on. In the end, Reinhard talked about the European funding landscape. In Europe more collaborative funding programs are available than in the US. He also argued that Europe is a great place to do science and invited young scientists to experience this. With this, the junior scientist portion of the RNA 2010 came to an end.

Our two graduate student representatives will be moving on and we would like to thank Rea and Claudia for their wonderful work during the last two years. If you attended the meeting, you heard us ask for volunteers to serve as graduate student representatives for the next two years. If you weren't there and would be interested in this position, please contact us. Serving as a representative involves attendance at the meeting and assistance in planning the junior scientist programming described here. We also prepare short pieces for the bi-annual newsletters. Other than that, we are trying to have a more active Facebook group throughout the year and as a representative you can generally act as a contact for junior scientist members to give feedback about the Society.

We are looking forward to another great year for the RNA Society. The involvement of our fellow post-docs and graduate students is important for the continued growth of the Society so we encourage you to get involved. Please join our Facebook group "RNA Society Junior Scientist Members" and contact us with any ideas for future meetings or other RNA Society activities or if you have any other questions or comments. We hope to see all of you next year in Kyoto for more RNA science and karaoke!

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Second Annual "RNA & SOCIETY" Dinner

With Keynote Speaker Brian Nosek, Ph.D.

By Kimberly Dittmar and Lynne E. Maquat

As scientists, we like to think of ourselves as unbiased, rational and logical. As we all know, a key aspect of the scientific method is objectivity. Therefore, we were shocked when **Brian Nosek** uncovered some of our so-called "implicit biases" at this year's RNA & Society Dinner during RNA2010 in Seattle. Brian is an Associate Professor and Director of Graduate Studies in the Department of Psychology at the University of Virginia-Charlottesville. He is also Director of Project Implicit, a collaborative effort between scientists at Harvard University, the University of Virginia, and the University of Washington designed to facilitate the research of implicit social cognition – thoughts and feelings that are beyond our awareness and conscious control. Project Implicit aims to understand how these thoughts and feelings impact our everyday perceptions, judgments and actions.

Brian began his presentation with a demonstration of the McGurk Effect, in which the perception of sound depends on whether or not one is looking at the speaker, illustrating that speech perception is not simply auditory but also visual. Another exercise tested our attention. Many of us were so focused on the assigned task of counting passes between two teams of basketball players that we didn't even see a woman with an umbrella walking right through the game! Even though our eyes must have seen this woman, our mind told us not to perceive it since we were engaged in something else. Subsequent demonstrations were related to basic processes such as reading and depth perception that have become automatic in our minds. All of these exercises underscored Brian's point that the mind makes assumptions and imposes interpretations without our conscious consent.

The remainder of his presentation focused on the issue of gender bias. The whole audience performed an Implicit Association Test, associating male or female words with terms pertaining to the sciences or the arts. Even among our audience of highly educated scientists (including many women scientists), we had an easier time associating male with science! Among all of the subjects that have taken this test, Brian reported that ~70% of people have an easier time associating male terms with science while only ~10% have an easier time associating female terms with science. Interestingly, this bias was not linked to gender, meaning that women are just as likely as men to have these stereotypes against women in science.

What are the implications of these implicit stereotypes? Brian shared some data showing that the stronger a woman has this stereotype, the less likely she is to major in science, engineering or math. This stereotype strengthens with age, but is already there in children by about year 8 or 9. And this phenomenon is not limited to Americans. In fact, there is a worldwide correlation between stronger stereotypes against women in science, engineering, and math and male dominance in these fields. While Brian pointed out that these biases are hard to change since we don't even know we have them, he offered hope for the future with evidence that the bias goes down for girls who have had a female science teacher. Perhaps this will inspire many of the women who were in attendance to make sure to serve as strong role models for the next generation of female scientists.

Brian's presentation was followed by many thoughtful questions and comments that led to lively and fascinating dinner conversations as we probed our own prejudices and biases. Everyone in attendance learned a lot and left the event with much to consider. If you are interested in Brian's research and Project Implicit, you can learn more at http://projectimplicit.net.

We are very pleased with the great success of our second annual RNA & Society Dinner. Feel free to contact us if you have feedback or suggestions for future RNA & Society presenters.

Chairman of the Meetings Committee

David M.J. Lilley

As I write this we have just emerged from this year's RNA Society meeting in Seattle. The format of this meeting was described as 'experimental', with each morning given over to longer invited talks that should be overviews of fields. As a consequence there were necessarily fewer short talks selected from the submitted abstracts that had always been the hallmark of our meetings - an opportunity for our younger scientists to present their work and gain visibility. The general feeling expressed at the meetings committee meeting was that this had been a step too far, and that there should be greater opportunity for our membership more generally to present their work at our meetings. We need to preserve the very special character of our conferences.

Next summer we shall be going to Kyoto as guests of the Japanese RNA Society, for the 2011 conference. We are very excited to be holding our first RNA Society meeting in Asia. The organization is in the very capable hands of Eric Westhof and his co-organizers, who are already well advanced in their planning. The meeting will take place at the Kyoto International Conference Center, and the local organization is being handled by Yoshi Nakamura and a highly professional team. Many of you will have seen their display in Seattle. I have absolutely no doubt this is going to be a very special experience for us all. The format will return to something more like that of, say, Berlin, with a single invited overview talk per session given by its chair, and workshops on exciting, emerging topics. Indeed, nearer the time of the meeting suggestions for workshop topics would be welcomed.

In 2012 we return to the US, to Ann Arbor MI. Rachel Green has been selected as lead organizer, with Nils Walter as the local organizer. There is already significant activity in the forward planning of this meeting, and we look forward to meeting in a new US location.

Four years on from the wonderful Berlin meeting we return to Europe in 2013. Three candidate venues made excellent bids to hold the conference at the meetings committee. But Frédéric Allain made an outstanding presentation for Davos in Switzerland that won over the committee. The site has been the venue for several G8 meetings, and it is consequently very experienced in hosting large conferences. It is located in the Alps, and is strikingly beautiful, though sadly (from my personal perspective) we shall be there out of the skiing season ! But on the positive side, it seems that after Berlin, no European meeting site can be without a biergarten !

A happy feature of recent times is the willingness of our members to come forward with suggestions for new locations. Indeed, Fréd Allain contacted me to propose Davos after reading one of these pieces in the Newsletter. Please do keep these suggestions coming in. We shall probably be back in the US in 2014 and I should be delighted to hear suggestions for locations for this as well as meetings further in the future. As a rule, I generally need at least three years from the first proposal to the realization of a meeting. So please feel free to email me with these proposals, or any aspects of our conferences.

David
d.m.j.lilley@dundee.ac.uk

Mt RNAier with a 5’ cap ?

Recent RNA Society-supported meetings

Oxford University Biochemical Society Seminar
Dr Marc Bühler, Friedrich Miescher Institute for Biomedical Research, Basel, Switzerland: "Spatial and temporal analysis of the fission yeast RNAi pathway"
March 8, 2010

Dr Marc Bühler visited Oxford University on 8 March 2010 and gave a seminar in the Department of Biochemistry. The visit was organised by Muhan Wang, a graduate student in Dr James Parker's laboratory, and Dr Simon Hänni, a postdoctoral worker in Dr André Furger's group and sponsored by the RNA Society.

In his talk, Dr Bühler presented some exciting recent results from his laboratory. His group works on the RNAi (RNA interference) pathway of gene silencing in the fission yeast *Schizosaccharomyces pombe* and its relationship to heterochromatin formation. The talk focused on Dcr1, the *S. pombe* Dicer protein that cleaves dsRNA (double-stranded RNA) into siRNAs (short interfering RNAs), which are involved in post-transcriptional gene silencing. In *S. pombe*, siRNAs can associate with the RITS (RNA-induced transcriptional silencing) complex to induce heterochromatin formation.

Dr Bühler's work resolved the controversy about the sub-cellular localization of Dcr1, which was previously unclear. Using Dcr1 tagged with fluorescent proteins, they were able to observe its localization in live *S. pombe* cells. Significantly, they showed that the localization depended on the expression levels of the protein. When expressed at endogenous levels, Dcr1 localized to the perinuclear region, in contrast to the cytoplasmic localization observed when it was over-expressed. They showed that Dcr1 localizes to nuclear pores through its C-terminal region and concluded that this was important for the regulation of Dcr1 function.

Following the seminar, Dr Bühler had dinner with students, postdoctoral workers and principal investigators from the Department of Biochemistry and the Dunn School of Pathology.

EMBL Conference, The Complex Life of mRNA: From Synthesis to Decay
March 18 – 20, 2010

The regulation of gene expression has been studied traditionally at the level of transcription. While a few examples of translational regulation were known, they were considered interesting exceptions to the general rule of regulation at the level of RNA synthesis. However, over the last few years it has become evident that several widespread posttranscriptional, mostly cytoplasmic mechanisms have profound effects on gene expression. All of these mechanisms ultimately contribute to control protein synthesis, either directly, by affecting the rate of translation, or indirectly, by affecting the abundance of mRNA. Some of them exert a qualitative, all-or-none control, for example by complete repression or elimination of certain mRNAs, others determine the intracellular location or the cell-type in which a particular RNA is translated, and still others have a quantitative effect, controlling the amount of protein made from a certain mRNA.

An EMBL meeting focusing on the most exciting aspects of these nuclear and cytoplasmic mechanisms of gene regulation has recently been held in Heidelberg. This was the first conference to take place in the EMBL Advanced Training Centre, the brand-new conference venue of the European Molecular Biology Laboratory (www.embl.de/atc) after its official opening. It brought together researchers from all over the world working on the various aspects of eukaryotic mRNA and provided the rare occasion to discuss the complex life of mRNA in a holistic way.

In total 306 persons registered and 278 took part in the conference. From the RNA Society grant the following eight poster presenters benefited by receiving each EUR 200 to cover part of their travel expenses:

Manuel Daniel Diaz Munoz	The Babraham Institute	Processing body assembly in activated B lymphocytes
Elena Garre García	Universitat de Valencia	Characterization of an mRNA-binding protein involved in the translational regulation during osmotic stress
Norimasa Iwanami	MPI of Immunobiology	ENU-mutagenesis in zebrafish identifies a specific requirement for Lsm8 in thymus development
Pradipta Kundu	Friedrich Miescher Institute	Mechanism of the HuR-mediated reversal of miRNA repression in human cells
Lionel Le Gallic	UMR CNRS 5247	Interleukin 20 mRNA Stabilisation in Psoriasis
Eleonora Leucci	BRIC, University of Copenhagen	miR-9 orchestrate inflammatory response in Hodgkin Lymphoma
Yuichiro Mishima	Kobe University	The molecular mechanism of TNRC6 to induce translational repression and deadenylation in zebrafish
Bjoern Schwanhaeusser	MDC	Genome-wide analysis of protein and mRNA half-lives reveals dynamic properties of mammalian gene expression

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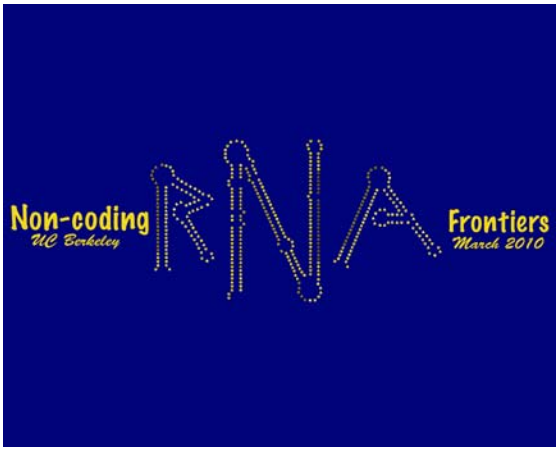
2010 UC Berkeley MCB/CDB Symposium: Non-coding RNA Frontiers
March 23, 2010

The theme for the UC Berkeley MCB/CDB Spring Symposium 2010 was 'Non- coding RNA Frontiers' - an opportunity for thought provoking, cross-disciplinary presentations and discussion on emerging insights about non-coding RNAs. The



Symposium brought together 8 speakers for 30-40 min talks each, with a chance for the speakers to interact with each other, students and faculty (over lunch and a nice dinner), and the wider audience (at receptions and breaks). The symposium was well attended by researchers at UC Berkeley, UCSF, Stanford, UCSC, UC Davis, and numerous local biotechs. Four talks in the morning covered 'long' ncRNAs and four talks in the afternoon focused on 'short' ncRNAs. The co-organizers were Kathy Collins and Lin He. The speakers were Thomas Gingeras, Chris Ponting, David Spector, Jeannie Lee, David Bartel, Xuemei Chen, V. Narry Kim, and Erik Sontheimer. The contribution of the RNA Society was used to pay for speaker and student/postdoc box lunches. The 8 speakers and 2 organizers and about 20 students and postdocs had 1.5 hours of close contact time over the box lunches in a room adjacent to the main auditorium.

Microsymposium on Small RNAs
May 17-19, 2010

The fifth "Microsymposium on small RNAs" left us with a wonderful taste of the world of RNA interference. We brought to Vienna a powerful blend of senior and junior scientists in the field of RNA silencing. Don't be confused: junior does not only apply to junior group leaders, but actually also to outstanding Post-Docs on their way to an independent position as well as PhD students participating in the PhD Workshop. The award for the best talk of the Workshop – a free registration to the next EMBO-meeting in Barcelona as well as a DVD and Viennese chocolates – went to Jordi Xiol from Cataluña, Spain, who is doing his PhD-Thesis in the laboratory of Ramesh Pillai at EMBL-Grenoble.

A large number of companies, EMBO, the RNA Biology Journal and the RNA Society fully supported the Microsymposium. We thank them very much for their generous support, which allows us keeping the Microsymposium a registration-free meeting!

Almost 300 people attended this year. Compliments were given to splendid lunches, coffee breaks and dinners; to our colleagues receiving and guiding the participants, booking taxis, arrivals, departures; to our insignia flag "in vivo, in vitro, in silico, in situ, in Vienna" and to the entire setup. Thank you!

The goal for the future is to keep improving, as easy and as difficult as that. Thanks to all of you for participating, and see you next May with a new edition of the Microsymposium on Small RNAs!

2010 FASEB Summer Conference on Nucleic Acids Enzymes
June 6-11, 2010

The FASEB 2010 meeting entitled "Nucleic Acid Enzymes" focused on the structures, mechanisms, biological roles, and medical relevance of enzymes that are composed of, and/or act on DNA and RNA. It was co-organized by Phil Bevilacqua, Sheila Davis, and Virgis Siksnys. The Scientific Program consisted of nine sessions of oral presentations by distinguished invited speakers, junior faculty, and student poster talks in the following subject areas: Phosphodiester Hydrolysis; Phosphoryl Transfer; Nucleic acid Processing and Modification; Motors, Machines and Translocation; Polymerization Reactions; and Emerging Methods, Approaches, and Areas. There were 45 speakers, including nine short talks from junior faculty members, post-docs and graduate students. The keynote talk was by Professor Stephen Kowalczykowski from UC Davis, who presented a talk entitled, "Visualization of recombinational DNA repair at the single-molecule level: DNA motor proteins and nucleoprotein filaments".

Funds from RNA society were used for graduate students and post-docs to help with travel and poster awards. Winners of poster awards were as follows:

Lisa Engstrom, Sheila David's Lab at UC Davis, "Characterization of the [4Fe-4S]2+ cluster in the Base Excision Repair glycosylase AfUDG"

Noah Ribeck, Omar Saleh's Lab at UC Santa Barbara, "Single-molecule measurements reveal details of DnaB's interactions with both strands at a DNA Fork"

Emily Rubinson, Brandt Eichman's Lab at Vanderbilt U "Crystal structures of DNA repair protein AlkD reveal a novel capture mechanism for excision of DNA damage"

Upcoming RNA Society-supported meetings

19th Annual GFST Symposium: RNA in Motion
September 9-12. 2010
Ames, Iowa
http://www.bb.iastate.edu/~gfst/phomepg.html

Molecular motion underlies all essential activities relating to life. Yet we still know vey little about this most important molecular behavior. RNA molecules are among some of the most versatile and mobile macromolecules. The role of molecular motion in function has been studied in a variety of RNAs from very small aptamers and riboswitches to the much larger ribosome. This symposium will explore RNA motions and their consequences for function in the ribosome, viral RNAs, molecular motors and small molecules including riboswitches, aptamers and ribozymes. In addition there will be a session on computational approaches to predict RNA folding and simulate intramolecular movements.

During this symposium on RNA in Motion, some the world's leading experimental and computational scientists will convene at Iowa State University. The symposium venue is designed to promote informal discussion and interaction, and potentiate collaborations. It will provide an opportunity for students and new and established investigators to gain a working knowledge of the current state of the field and the researchers who are expanding it.

The sessions in the symposium will emphasize current research by which we are obtaining an understanding of the role of molecular motion in the function of RNAs: 1) Ribosomes; 2) Viral RNAs; 3) Functional RNAs and molecular motors; 4) Small RNAs: Riboswitches, ribozymes and aptamers. The final session will consider RNA conformational analysis, folding and simulations of molecular motion.
Organizer: Marit Nilsen-Hamilton

4th International RNA Stability Meeting
October 17-20, 2010
Montreal, Canada
http://www.cvmbs.colostate.edu/mip/rnameeting2010/index.html

The fourth International RNA Stability meeting will take place on October 17- 20th, 2010 at the exquisite Marriott Chateau Champlain in the exciting city of Montreal, Quebec, Canada. The city’s unique blend of European charm and North American pizzazz is home to many museums, fine restaurants and professional sports teams, including the famous Montreal Canadiens NHL hockey team. This is the fourth meeting in a series that began in 2003, the first held in Florence, Italy, the second in Arolla, Switzerland and the third in Asheville, North Carolina, USA in 2008. The research presented at this meeting will cover a wide range of aspects related to RNA stability and translation, particularly as it applies to basic and applied areas of science

This year the meeting will open with a Sunday evening dinner and will feature our Keynote speaker, Dr. Thomas Tuschl, Professor and Head of the Laboratory for RNA Molecular Biology, Howard Hughes Medical Institute, Rockefeller University, as our Keynote Speaker.

For the other sessions, 32 invited speakers have been recruited to ensure exciting interesting presentations. Additional oral presentations will be selected from the submitted abstracts. Abstracts that are not selected for oral presentations will be presented as posters.

This conference historically attracts between 125 and 150 principal investigators and students from over 40 labs from North America, Europe and Asia. Thus the meeting will provide ample opportunity for networking and one-on-one discussions with attendees.
Organizers: Imed Gallouzi and Jeff Wilusz

New Frontiers of Functional Nucleic Acids: Chemistry, Biology and Applications symposium at Pacifichem
December 15-20, 2010
Honolulu, HI
http://www.pacifichem.org/symposia/c_symp_208.htm

Nucleic acids play very important roles in living organisms. Understanding the chemistry and biology of nucleic acids is essential to understanding their biochemical and biological functions, especially in vivo. Although DNA and RNA each have only four simple and similar building blocks, nucleic acids can store genetic information and regulate gene expression. Equally excitingly, nucleic acids can form well-defined 3D structures, specifically recognize ligands and substrates, catalyze chemical and biological transformations, and evolve new structures and functions. Nucleic acids unquestionably offer both chemists and biologists an excellent scientific arena for rich scientific discoveries and for endless creativity and innovation. This symposium will focus on the latest exciting developments in the field of functional nucleic acids. The topics that will be covered include: (I) oligonucleotides as therapeutics and nucleic acids as drug targets; (II) in vitro selection of new ribozymes and deoxyribozymes; (III) mechanistic and structural studies of natural ribozymes and artificial ribozymes and deoxyribozymes; (IV) nucleic acids for chemical and biological applications, such as sensing, pathogen and disease detection, and nanostructure construction; (V) nucleic acid dynamics, charge migration, damage and repair; (VI) structure and function studies of non-coding RNAs, and (VII) chemistry and biology of nucleic acid-protein interactions. Organizers: Zhen Huang, Yingfu Li, Yi Lu, Scott Silverman, Hiroaki Suga, and Naoki Sugimoto

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2011 Gordon Research Conference on RNA Editing: Editing and Modification of RNA and DNA
January 9-14, 2011
Galveston, TX
http://www.grc.org/programs.aspx?year=2011&program=rna

The 2011 Gordon Research Conference on RNA Editing brings together leading investigators to discuss cutting edge research on the editing and modification of RNA and DNA. Editing and modification is found in all organisms, and influences many vital processes including splicing, protein synthesis, immunoglobulin class switch recombination, somatic hypermutation, cancer virus replication, nervous system development and function, control of miRNA, and genetic imprinting. This conference has been held every other year since 1997, and is the only regularly scheduled meeting devoted to these topics. This GRC provides an outstanding venue for investigators to present new findings on the diverse nucleic acid editing and modification systems, and to present new approaches to understanding these systems, in a forum that promotes active discussion among participants, and which often leads to new insights and deeper understanding of editing and modification mechanisms.

This meeting will include about 50 speakers representing the central areas of RNA and DNA Editing and Modification, and a total of about 140 participants. The program will be comprised of nine morning or evening sessions, which will be organized to bring together investigators working on different systems with common areas of interest, in the following broad areas: evolution and diversity in editing and modification; target site recognition and catalysis by editing and modification enzymes; editing and innate immunity; regulation of editing and modification; editing, viral infection and host defense; macromolecular machines and functional interactions; structural insights into RNA editing and modification; biological and medical impact of editing and modification; RNA editing and RNA interference. A number of the speakers will be chosen from submitted abstracts, particularly from graduate students, postdoctoral fellows, junior faculty, and underrepresented minorities. In addition, the program will include four late afternoon poster sessions at which all participants are encouraged to present results, and otherwise free afternoons to further foster interactions.

Organizers: Eric Phizicky and Kazuko Nishikura

Other Upcoming Meetings of Interest :

American Society for Cell Biology
To explore the depth and breadth of biology, network, sharpen teaching strategies, and/or consider career options, don't miss the ASCB Annual Meeting. Held December 11-15, 2011, in Philadelphia, the meeting offers unique opportunities to:

- Hear cutting-edge research and learn valuable techniques.
- Research new tools and equipment for your lab, in ASCB's comprehensive Exhibit Hall, showcases, and workshops.
- Meet with colleagues and representatives from funding agencies such as NIH and NSF.
- Get your questions answered C at dozens of oral Minisymposia and Symposia and extensive poster sessions.
- Explore big questions in Working Groups on Aging, In Vivo Imaging, Nanoscale Biology, and Screening.
- Present posters in your area of research, with special, welcoming sessions for undergraduates and minority students/young scientists.
- Learn about career opportunities, tips, and job openings…or interview candidates.
- Apply for travel and childcare awards (by September 1).

On Dec. 11-15, 2010, Philadelphia is the place to hear:

- RNA Biology, with Javier Caceres and Daniel St. Johnston
- Improving Cancer Chemotherapy: How Can a Basic Scientist Contribute, with Timothy J. Mitchison
- In Vivo Imaging, with John Condeelis, Kat Hadjantonakis, and Ralph Weissleder
- Protein and RNA Folding and Quality Control, with Douglas Cyr and Sandra Wolin
- And more!

September 1 is the deadline for Regular Abstract Submission, and October 14th is the deadline for Late Abstracts. ASCB members can submit their own abstract or sponsor one. No sponsors are required for membership. For information, visit www.ascb.org/meetings, email ascbinfo@ascb.org, or call 301-347-9300.

Employment

The RNA Society is pleased to make this Employment and Careers web page available to the RNA community. Advertisements for employment opportunities are free to members of the RNA Society. All employment opportunities remain on this page for a three-month period. In addition, positions listed on this page are also published in the RNA Society newsletter (distributed to more than 1000 members and subscribers) as a free service and on a one-time basis.

Faculty positions

Position available in Department of Chemistry & Biochemistry of the University of Bern , Bern, Switzerland
Position posted on Tuesday, July 13, 2010
Full Professor in Biochemistry

The Department of Chemistry and Biochemistry of the University of Bern, Switzerland, invites applications for a full professorship in biochemistry. Research at the department (www.dcb.unibe.ch) is focused on the molecular foundations of biological processes and includes nucleic acids.

Candidates should demonstrate exceptional potential to develop an innovative research program in RNA biochemistry (e.g. processing/function/dynamics/RNA-protein interactions) and be willing to cooperate within and outside the University of Bern. The candidate is expected to contribute to the undergraduate and graduate teaching curricula in protein biochemistry and biophysical methods for students of biochemistry, chemistry and biology.

The University of Bern is an equal opportunity employer and strives to increase the number of women in the faculty. Qualified female researchers are especially encouraged to apply.

The position is to be filled by August 1, 2011, the deadline for applications is August 31, 2010.

Interested candidates should submit their curriculum vitae, a synopsis of their past, current and proposed research, a list of publications, indicating the 5 most relevant papers, an outline of their teaching experiences and the completed questionnaire (to download at: www.dcb.unibe.ch/content/departement/offene_stellen/) as a single PDF file or as a hard copy to:

Prof. Urs Feller
Dean Faculty of Science
University of Bern
Sidlerstrasse 5, CH-3012 Bern, Switzerland
e-mail: dekan@natdek.unibe.ch

Informal inquiries may be addressed to:
Prof. André Schneider, phone + 41 (0)31 631 4253
e-mail: andre.schneider@ibc.unibe.ch

Contact :
Dr Oliver Muhlemann
Tel : +4131 631 4627
Email : oliver.muehlemann@dcb.unibe.ch

Postdoctoral positions

Position available in Dept of Biochemistry and Biophysics of the University of Rochester , Rochester, United States
Position posted on Tuesday, July 13, 2010

A postdoctoral position is available in the laboratory of Dmitri Ermolenko at the Department of Biochemistry and Biophysics & Center for RNA Biology, School of Medicine and Dentistry, University of Rochester to begin August 2010 or as negotiated. We are seeking talented and motivated postdoctoral fellow to study mechanism of bacterial and eukaryotic translation. We use ensemble and single molecule fluorescence resonance energy transfer to study structural dynamics of the ribosome and translation factors.

Applicants must have a recent Ph.D. and expertise in molecular biology with publications in international peer-reviewed journals. Applicants with experience in ribosome and RNA biochemistry and/or fluorescent spectroscopy are encouraged to apply.

Please submit a statement of research interests and experience, and current curriculum vitae to Dmitri Ermolenko at Dmitri_Ermolenko@URMC.Rochester.edu.

Contact :
Dr Dmitri Ermolenko
Tel : 585-275-3704
Email : Dmitri_Ermolenko@URMC.Rochester.edu

Position available in Dept of Ecology and Evolutionary Biology of the Princeton University , Princeton, United States
Position posted on Monday, June 07, 2010

Postdoctoral Research Associate or senior research position in the Department of Ecology and Evolutionary Biology at Princeton University, with focus on DNA Rearrangements, Recombination, Epigenetics, Evolution, and non-coding RNAs in the unicellular eukaryote Oxytricha.

Professor Laura Landweber seeks a postdoctoral research associate to study the mechanism of scrambled gene and genome rearrangements in ciliates, particularly the role of non-coding RNAs or epigenetic factors, using experimental or bioinformatic research tools or both.

Requirements: PhD in molecular biology or relevant field. Strong experimental or computational training, experience, and publications from the PhD, ability to work independently and creatively, and strong research and written/oral communication skills are necessary.

For more information about the lab, see http://www.princeton.edu/~lfl and recent publications, such as Nature 2008, v451, p153 (http://www.ncbi.nlm.nih.gov/pubmed/18046331) or Science 2009, v324, p935 http://www.ncbi.nlm.nih.gov/pubmed/19372392 .

This is initially a one-year appointment with possibility of renewal based on satisfactory performance. Funding is currently available for three years. Apply online at http://jobs.princeton.edu/. Search for Requisition # 1000366 and include a letter, CV, statement of research interest, and email addresses of three references. Application review will begin immediately; start date is flexible.

Princeton University is an equal opportunity employer and complies with applicable EEO and affirmative action regulations

Contact :
Dr Laura Landweber
Tel : 1-609-258-1947
Fax : 1-609-258-7892
Email : lfl@princeton.edu

Position available in PGD, NICHD of the NIH, Bethesda , Bethesda, United States
Position posted on Monday, May 17, 2010

Postdoctoral Fellowship Position
Eukaryotic RNA Metabolism
National Institutes of Health (NIH), Bethesda, Maryland

The Fellow will investigate molecular mechanisms involved in RNA metabolism, and this may include links between transcription, RNA processing, nuclear transport, and translation. Fission yeast as well as mammalian cell culture serve as a model genetics systems, and efforts may include massively parallel whole genome sequencing for mutant mapping. We also use biochemistry, mammalian tissue culture, and genetically altered mice. Laboratory approaches integrate cell biology, molecular biology, genetics, biochemistry and structural biology.

The applicant should email a cover letter that details his/her specific interest in the research areas described above and as reflected by the publications from the Maraia lab.

Candidates must hold a Ph.D. or M.D. and have less than 5 years postdoctoral experience. Expertise in molecular biology, genetics and/or biochemistry is required, as are strong letters of recommendation. The successful candidate will confer regularly with the principal investigator but must incorporate self-directed research, as well as excellent technical, presentation, and communication skills as essential parts of the job.

Position to start Oct 1, 2010 with duration of appointment up to 5 years contingent on annual performance evaluation.

Send your cover letter, C.V., and the names of three references with their email addresses and telephone numbers by Email to:
Richard J. Maraia, M.D.
Email: maraiar@mail.nih.gov
31 Center Dr., Room 2A25
Bethesda, MD 20892-2426

Contact :
Dr Richard J. Maraia
Tel : 301 402-3567
Email : maraiar@mail.nih.gov

Position available in Center for Anatomy & Cell Biology of the Medical University of Vienna , Vienna, Austria
Position posted on Monday, May 10, 2010

A postdoctoral position to study a presumptive role of mitochondrial tRNA maturation in the pathogenesis of Alzheimer's disease is available in the lab of Walter Rossmanith at the Medical University of Vienna. The project originates from the recent identification of the components of human mitochondrial RNase P and is embedded in the group's broad interest in mitochondrial tRNA biology in health and disease. The project is funded by a grant from the Agouron Institute.
Eligible candidates should hold a PhD in molecular biology, biochemistry, or related field. They should have documented experience in RNA biology and/or enzymology. The position is available now and funded for one year.
Please submit a statement of research experience and interests, a CV including list of publications, names and contact details of three references, as well as a minimum of one reference letter. Address applications to walter.rossmanith[at]meduniwien.ac.at

Contact :
Dr Walter Rossmanith
Tel : +43 1 4277 61187
Email : walter.rossmanith@meduniwien.ac.at

Position available in Department of Cell Biology of the Lerner Research Institute, Cleveland Clinic , Cleveland, US
Position posted on Saturday, May 01, 2010

A Postdoctoral Fellow position is available in the laboratory of Donna Driscoll to study the mechanism and regulation of selenoprotein synthesis (Mol. Cell, 35:479, 2009; RNA Biology, 6:73, 2009; J. Biol. Chem. 282:34653, 2007; Nature Str. Mol. Biol,12: 408, 2005). Selenoproteins are a small but important group of proteins that play a variety of roles in human health and disease. The translation of selenoprotein mRNAs involves the recoding of the UGA stop codon as selenocysteine, the 21st amino acid. The goals of our research are to characterize the trans-acting factors that are required for this novel recoding event, identify functionally important RNA structures and RNA-protein interactions, and elucidate regulatory pathways that control selenoprotein expression during selenium deficiency. More information about our research program can be found at http://www.lerner.ccf.org/cellbio/driscoll/.

We are seeking highly motivated, independent, creative, and enthusiastic individuals who have excellent oral and written communication skills. A Ph.D. in biochemistry, chemistry, molecular biology or a related discipline is required. Students who are finishing their Ph.D. degree and recent graduates are encouraged to apply. The ideal candidate will have expertise in RNA biology or translational control, but applicants with strong training in molecular biology, nucleic acid biochemistry, or protein biochemistry will be seriously considered. The position is available as of July 1, 2010 but the start date is flexible. The initial appointment is for one year and is extendable, depending on mutual agreement as per institute policy.

The Department of Cell Biology is a vibrant and diverse department, with over 20 faculty members (http://www.lerner.ccf.org/cellbio/). The Lerner Research Institute provides an excellent environment for

biomedical research, with state-of-the-art facilities and competitive salaries and benefits. Our Research Education Office provides continuing support for career development. For information on our postdoctoral training program, see http://www.lerner.ccf.org/education/postdoc/. Applicants will also have the opportunity to interact with the extensive RNA community within the institute and at nearby Case Western Reserve University.

As an equal opportunity and affirmative action employer, the Cleveland Clinic recognizes the power of a diverse community and encourages applications from individuals with varied experiences, perspectives, and backgrounds. To apply, please email a CV, a brief description of research interests and career goals, and the names and contact information for three references to Dr. Donna Driscoll (driscod@ccf.org).

Contact :
Dr Donna Driscoll
Tel : 216-445-9758
Fax : 216-444-9404
Email : driscod@ccf.org

Position available in Dept of Biology of the Brandeis University , Waltham, United States
Position posted on Saturday, May 01, 2010

A postdoctoral position starting in July 2010 is open in the laboratory of Nelson Lau, at Brandies University, in Waltham, MA, near Boston. We are looking for a candidate with a PhD and prior molecular biology and biochemistry experience, a record of publications, and some proficiency with bioinformatics. Skills with mouse genetics, Xenopus biology and tissue culture will also be highly considered.

Our group studies basic gene regulation mechanisms by small RNAs and the RNA interference pathway in animals. Specifically, we are interested in dissecting the molecular mechanisms of Piwi proteins and piRNAs, and to compare their functions with microRNAs, siRNAs and Argonaute proteins.

Candidates should send an email to nlau@brandeis.edu with a CV, list of publications, and three references.

Contact :
Dr Nelson Lau
Tel : 781-736-2445
Email : nlau@brandeis.edu

Position available in Dept of Chemistry and Biological Chemistry of the University of Michigan - Scripps Florida , Ann Arbor, United States
Position posted on Saturday, May 01, 2010

An NIH-funded post-doctoral position is available to study the structure and function of essential proteins required for small ribosomal subunit assembly in yeast. A variety of in vitro and in vivo methods will be used to develop and test models regarding the function of individual assembly factors, providing training opportunities in diverse research techniques. This project is located in Prof. K. Karbstein's laboratory, who is relocating to Scripps Florida from the University of Michigan (http://www.umich.edu/~ribosome/). Scripps Florida is a dynamic research environment where scientists with both academic and industry experience work collaboratively, ideal for the postdoctoral fellow who is undecided about future career trajectories (http://www.scripps.edu/florida/).

Contact :
Dr Katrin Karbstein
Tel : 734 615 2867
Email : kkarbst@scripps.edu

Position available in Dept of Plant and Microbial Biology of the University of California, Berkeley , Berkeley, US
Position posted on Friday, April 23, 2010
Experimental Studies of Ultraconservation and Gene Regulation by Nonsense-Mediated mRNA Decay Induced by Alternative Splicing ; Understanding an ultraconserved newly-discovered means of gene regulation
Research Group of Steven Brenner
University of California, Berkeley

Project background
Nonsense-mediated mRNA decay (NMD) is a cellular RNA surveillance system that recognizes transcripts with premature termination codons and degrades them. We discovered large numbers of natural alternative splice forms that appear to be targets for NMD, and this has proven to be a mode of gene regulation. We found that all members of the SR family of splice regulators have an unproductive alternative mRNA isoform targeted for NMD. Strikingly, the splice pattern for each is conserved in mouse and always associated with an ultraconserved or highly-conserved region of 100 or more nucleotides of perfect identity between human and mouse. Remarkably, the unproductive splicing and exceptionally conserved sequences seem to have evolved independently in nearly every one of the genes, suggesting that this is a facile mode of regulation.

Project description
Our computational experimental studies have identified thousands of human alternative isoforms that are likely targets of NMD, some of which are associated with ultraconserved elements. This position is for an experimental researcher to understand:
- The regulatory role of alternative splicing coupled to NMD, targeting mRNAs for degradation
- The functional significance and evolutionary mechanisms that underlie ultraconserved elements

This project will use a variety of RNA molecular biology technologies, cell culture, RNA biochemistry, as well as newer approaches including RNA-Seq high-throughput sequencing, microfluidic massively-parallel quantitative real time PCR, and ZFN genome editing.
Position requirements Candidate should preferably have a Ph.D. in molecular biology or related field with a strong publication record and strong professional references. The ideal candidate will be an expert experimentalist in some area of RNA biology and capable of learning new technologies. As this position will involve writing research papers, grant proposals, and working closely with both experimentalists and computational biologists, communication skills and the demonstrated ability to work independently will be weighted heavily. Work outside of regular business hours and travel is required.

The Berkeley academic environment The Brenner lab is an interdisciplinary research group at the University of California, Berkeley, one of the world's premiere research universities. We are associated with the Department of Plant and Microbial Biology, the Department of Molecular and Cell Biology, the Department of Bioengineering, as well as the University of California, San Francisco and Lawrence Berkeley National Lab. Donald Rio and his group are close collaborators for this project.

The University of California, Berkeley ranks first nationally in the number of graduate programs in the top 10 in their fields, according to the most recent National Research Council study. Berkeley is committed to diversity in its staff, faculty, and student body, and invites all qualified people to apply, including minorities and women, veterans and individuals with disabilities. Information about Berkeley's outstanding benefits are at:
http://atyourservice.ucop.edu/forms_pubs/misc/benefits_of_belonging.pdf. Please refer to the University's statement on confidentiality, found at http://apo.chance.berkeley.edu/evalltr.html .

The University of California is an Equal Opportunity/Affirmative Action Employer.
Interested applicants should have statement of interest, CV, transcript, and at least three letters of reference sent to jobs@compbio.berkeley.edu For more information, see http://compbio.berkeley.edu/
Contact :
Dr Steven E Brenner
Tel : 510-642-9614
Email : jobs@compbio.berkeley.edu

Government & corporate positions

Position available in Dept. of Research of the New England Biolabs Inc. , Ipswich, United States
Position posted on Tuesday, July 13, 2010

New England Biolabs is actively seeking a full-time Research Associate in the RNA Biology Division to start immediately. This position will assist with discovery and development focused research projects. Projects will be a part of a basic research program into gene regulation mediated by small regulatory RNA pathways. Research will be undertaken in a highly collaborative and academic-style environment where publication of results is a top priority.

The candidate will work on projects related to:
· Small RNA isolation, identification, characterization, and manipulation using enzymatic, biochemical, and high-throughput techniques.
· RNA-protein complex identification and characterization using chromatographic purification, electrophoresis, and mass spectrometric analysis.
· Functional characterization of ribonucleoprotein complexes including cloning and over expression, and in vitro reconstitution.

The ideal candidate will have:
· Proven bench skills in RNA analysis, protein analysis and standard molecular biology techniques.
· Experience with protein expression and purification.
· A strong work ethic, emphasizing both efficiency and quality of work.
· The ability to multi-task effectively while working independently, and/or contributing to team goals.
· Excellent written and verbal communication skills.
· A commitment to research excellence, strong analytical skills, and enthusiasm to learn and develop new techniques.

Qualifications:
· Advanced degree in molecular biology, biochemistry, or other related fields.
New England Biolabs, Inc. is an equal opportunity employer M/F/D/V

Contact :
Dr Brett G Robb
Tel : 978-380-7592
Email : robb@neb.com

Position available in Dept of Molecular Tools Lab of the Agilent Laboratories , Santa Clara, United States
Position posted on Saturday, May 01, 2010

R&D Scientist, RNA Sciences, Agilent Laboratories, Santa Clara, CA

Agilent Laboratories, Agilent Technologies' central research laboratories in Santa Clara, CA is seeking a Scientist for the Molecular Tools Lab to actively pursue life sciences research as part of an innovative multidisciplinary team developing novel RNA measurement technologies. The successful candidate will identify and pursue advancements in RNA measurement technology that will have a tangible impact on advancing the next generation of biological research in key areas such as cancer, neurological diseases, cardiovascular disease, stem cell research and synthetic biology. The candidate will join a team working to invent, develop and test new methods for the next generation of Agilent platforms and establish and lead strategic collaborations between Agilent Labs and external researchers to validate and proliferate these novel methods. For example, conduct applied research into developing new methodologies for profiling RNAs using microarrays as well as other emerging technologies and for characterizing structural and functional properties of non-coding and coding RNAs.

In the course of developing new applications, evaluate opportunities for creating new data analysis and visualization tools in order to provide an integrated solution for acquiring and reducing data and representing complex biological information in collaboration with Agilent Labs computational biology and informatics experts.

Communicate progress and results to management and technical leadership, to selected external organizations and, when appropriate, to the general scientific community via presentations at scientific conferences and peer-reviewed publications.

REQUIRED QUALIFICATIONS:
• Ph.D. in Biochemistry, Physical Chemistry, Molecular Biology, Biology, Chemistry or other relevant field plus minimum 2-3 years post-doctoral experience (academic or industrial) or equivalent.
• Demonstrated forefront achievements in life sciences research as evidenced, for example, by high profile peer-reviewed publications, patents or invited talks.
• Demonstrated expertise in enzymology associated with nucleic acid manipulation and measurement.
• Expertise in physical chemistry of nucleic acids, especially as relevant to RNA manipulation and measurement.
• Hands-on experience with RNA measurement technologies, e.g. DNA microarrays, sequencing, and related methods.
• Demonstrated success and direct responsibility for developing and/or utilizing new or emerging technologies for RNA profiling and/or functional characterization of different classes of RNAs.
• Demonstrated leadership in initiating and pursuing successful collaborative research projects with interdisciplinary and inter-institutional teams.
• Strong problem solving and quantitative data analysis expertise.
• Excellent communication, teamwork and leadership skills.

DESIRED QUALIFICATIONS:
• Experience analyzing large data sets and using bioinformatics tools.
• Experience with in silico and experimental tools for determining RNA structure.
• Experience studying RNA-Protein interactions.

We invite you to please visit www.jobs.agilent.com and apply directly to requisition 2033207. Candidate must have work authorization.

Contact :
Dr Laurakay Bruhn
Tel : 408-553-2475
Email : laurakay_bruhn@agilent.com

Other positions

Position available in Dept. of Cellular and Molecular Pharmacology of the Chicago Medical School, Rosalind Franklin University , North Chicago, United States
Position posted on Monday, May 17, 2010

A Department of Defense-funded Research Associate/Research Technician position is available immediately in the laboratory of Dr. Judith Potashkin at the Chicago Medical School, Rosalind Franklin University of Medicine and Science, North Chicago, IL, to study biomarkers for Parkinson's disease. We are looking for a highly motivated scientist experienced in working with RNA who will conduct experiments to identify a splice isoform biosignature for Parkinson's disease. For more information visit our lab website.

Requirements: A BS or BA degree in molecular biology, biochemistry or related field is required. Preferred applicants will have experience in working with RNA, qPCR analysis and bioinformatics.

Location: The Chicago Medical School at Rosalind Franklin University of Medicine and Science is located twenty miles north of downtown Chicago with convenient train access to the city. The University provides a diverse, multidisciplinary, and collaborative research environment.

Application:
Candidates should submit by e-mail a (1) CV and (2) a cover letter that includes an approximate date when you would be available to start to:

Dr. Judith Potashkin
Chicago Medical School, Rosalind Franklin University
Dept. of Cellular and Molecular Pharmacology
3333 Green Bay Rd.
North Chicago, IL 60064
judy.potashkin@rosalindfranklin.edu.

Contact :
Dr Judith Potashkin
Tel : 847-578-8677
Email : judy.potashkin@rosalindfranklin.edu

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eJobs with the RNA Society

The RNA Society is pleased to provide this job posting webpage to the RNA community. Postings are free to members of the RNA Society. All advertisements are posted within two weeks of receipt and remain on this page for a three-month period. In addition, positions listed on this page are also published in our society newsletter as a free service and on a one-time basis.

- Please complete this form using Microsoft Word by typing your text into the gray boxes, which will expand as you write.
- Name the completed form as LastName_eJobs.doc (for example, Jabri_eJobs.doc)
- Return the saved file via email to rna@faseb.org.

Type of position (please click on one gray box to select category of job)

☐ Postdoctoral Fellow Positions ☐ Government & Industry Positions
☐ Faculty Positions ☐ Other Positions (*please specify*)

Description of position (please include area of research, skills required, start date and duration of position)

Contact information *(required)*

Name (*Must be a member to post on this site*)
Organization
Dept.
Address
City State/ Prv.
ZIP/Postal Code Country
Tel.
Fax *(optional)*
E-mail
URL *(optional)*

Signature *(electronic signature of available)*
Date

The RNA Society has the right to reject job advertisements that they deem are inappropriate for posting on this site.