# RNA Society Newsletter

# February 2010

# **RNA Society**

#### Officers

Rov Parker Evelyn Jabri Jim Bruzik Angela Kramer

President ('10) Reinhard Luhrman Past President ('09) CEO CFO Secretary/Treasurer ('09-'11)

#### Directors

Ben Blencowe	('09-'10)
David Brow	('10-'11)
Elena Conti	('09-'10)
Rachel Green	('10-'11)
Eric Sontheimer	('09-'10)
Gerhart Wagner	('10-'11)

#### **RNA** Journal

http://www.rnajournal.org/ Tim Nilsen Editor in Chief

#### **RNA Society Web Page**

http://www.masociety.org/ Maintained by WebMaster Fabrice Jossinet

#### **Contact the RNA Society**

rna@faseb.org 9650 Rockville Pike Bethesda, MD 20814 (301) 634-7120

#### **RNA Newsletter Editors**

Brenda Peculis Evelyn Jabri

#### **Comments:**

Please direct any Newsletter comments, suggestions, rebuttals and articles for submission to : Brenda Peculis peculisb@missouri.edu

### From the Desk of the President, **Roy Parker**

As the year 2010 begins, I wonder what new insight will arrive from the RNA community. The last thirty years of RNA has



been unbelievably, and reliably, exciting, and the future shows no sign of slowing down. Groundbreaking discoveries such as splicing, catalytic RNA, RNA editing, ribosome structure/function. as well as the diverse biological roles of both large and small non-coding RNAs have become commonplace. Today, we see the study of RNA in almost all areas of fundamental

biology, important roles of RNA biology in human diseases, and therapeutics being developed using either RNA molecules, or small molecules targeting post-transcriptional control mechanisms. One cannot help but wonder, and anticipate, what the next decade will reveal in the world of RNA (Continued on p2)

# In this issue :

From the Desk of the President, Roy Parker	1
RNA 2010	3
RNA & Society Dinner. Lynne Maquat	4
From the Desk of the CEO, Evelyn Jabri	5
Chairman of the Meetings Committee, David Lilley	6
Grad Student/Postdoc Pages	7
Meetings of interest	8
Employment opportunities	15



The RNA Society plays a vital role in bringing together all the different fields of research on RNA, which could all too easily fragment into subdisciplines with little interaction. After all, the principles of RNA chemistry and how RNA-protein machines have evolved to perform biological roles are fundamentally the same no matter what the area of RNA biology. Moreover, the overlap between so many areas of RNA biology highlights how we need to interact and learn from each other.

The flagship activities of the RNA Society are the RNA journal, which provides a high-quality venue for publishing work on RNA that is seen by the entire RNA community, and the annual RNA Society meeting. Two key features of the annual RNA Society meeting were instrumental to me as a graduate student and postdoc, both in my development as a scientist and in becoming a member of the RNA community. First, the ability to present my work myself was important in gaining confidence that I could be a valued producer of new science and not just a consumer of previously discovered facts. Second, the open nature of the RNA community and the interactions I had with the luminaries at that time gave me a sense of belonging to the community, which was instrumental in my continuing to work on biological problems related to RNA.

To me, the value of the RNA Society is to create a community that promotes and integrates research in all areas of RNA biology, and is selfsustaining. In this light, one important role of the Society is to continue to support mechanisms that facilitate the development and integration into the RNA community of students, postdocs, and young faculty. The formation of the student and postdoc groups, the Career Mentoring Workshop, and the continued emphasis on short talks given by postdocs and students are all examples of important activities in this regard. As President, I hope to try to promote additional community-building efforts that cut across the different strata in our Society, and welcome any ideas about or efforts towards how we can more effectively build an intellectual community and integrate the next generation of scientists.

The annual RNA Society meeting will be in Seattle this June and should be an exciting conference. This year the organizers are trying an experiment to reach a broader audience and to cover neglected areas. To this end, they are planning 5 plenary sessions, each with 5 longer talks given by leading experts in the field. The afternoon sessions will still focus on short talks given primarily by students and postdocs. It will be important after the meeting to give feedback to the organizers and officers as to how this different format affects the conference. In addition to the great science, I also look forward to seeing old and new colleagues and interacting with the next generation of scientists, as well as attending the RNA & Society Dinner, which should be eye-opening this year (see article on p 4 by Lynne Maquat).

Hope to see you all in Seattle. Roy (<u>rrparker@email.arizona.edu</u>)

# Contribute to RNA, our Society journal!

Have you published in The *RNA* journal (<u>http://rnajournal.cshlp.org/</u>) lately? As a reminder, members received reduced publication and open access fees.

In the coming year, the journal and CSHP would like to publish more short (5-8 pages) reviews in the journal. These reviews will educate the community about a particular area of RNA and discuss common themes in the numerous RNA processes. If you are interested in writing a review, send a brief outline and cover letter to Tim Nilsen.



# RNA 2010

Fifteenth Annual Meeting of the RNA Society Seattle, Washington June 22 – 26, 2010

http://depts.washington.edu/rna2010

Topics include:

Alternative splicing Bioinformatics Catalytic RNA Genome wide analysis (HITS, CLIP, etc) Interplay between transcription and posttranscriptional processes mRNA quality control mRNA transport and localization mRNA turnover Prokaryotic non-coding RNAs Ribosomes and translation Riboswitches

RNA editing RNA helicases RNA-protein complexes RNA structure and folding RNP granules snRNAs and snoRNAs Splicing mechanisms Transcriptional and post-transcriptional gene silencing (siRNAs, miRNAs, piRNAs) Translational control 3' end processing Viral RNAs

**New this year** - In five Plenary Sessions leading RNA scientists will provide a wide overview of a particular field of RNA biology highlighting open and important questions.

Join us for another **RNA & Society** dinner with speaker **Brian Nosek**, **Ph.D.**, Associate Professor, Department of Psychology, *University of Virginia-Charlottesville*. Brian is a social/behavioral scientist and outstanding speaker. He will talk about implicit cognition, helping each of us become aware of inherent beliefs and feelings that lie beyond our awareness or control and that bias not only our personal but also our scientific perspectives.

The gradate student and postdoc representatives have once again planned several mentoring sessions and networking opportunities targeted towards the junior scientists attending the meeting.

Organizing Committee: Tim Nilsen, Case Western Reserve University; Elisa Izaurralde, Max Planck Institute, Tübingen; Doug Black, University of California, Los Angeles; Juli Feigon, University of California, Los Angeles

The Organizing Committee invites abstracts on all aspects of RNA. Afternoon Sessions will consist of short oral presentations selected from the submitted abstracts by the Organizing Committee and the Session Coordinators. Topics covered in these afternoon oral presentations will be determined based on the abstracts received. Abstracts that are not selected for oral presentations will be presented as posters.

The deadline for registration and submission of abstracts is **Monday March 15, 2010**. **Register today at** <u>http://depts.washington.edu/rna2010</u>



### Second Annual "RNA & SOCIETY" Dinner With Keynote Speaker Brian Nosek, Ph.D. By Lynne E. Maquat

In the spirit of our RNA & SOCIETY Dinner, which is to address a wide breadth of issues that affect RNA researchers, we are pleased to introduce Brian Nosek as our speaker for RNA 2010 in Seattle, WA. Brian is an Associate Professor and Director of Graduate Studies in the Department of Psychology at the University of Virginia-Charlottesville (<u>http://projectimplicit.net/nosek/</u>).

Brian will talk about "implicit cognition". I think we all know that high-quality critical thinking in research



science, as in life generally, requires an impartial, informed and unprejudiced approach. Nevertheless, even we, who pride ourselves as living in the realm of the "hard sciences", do not always utilize a thoughtful and fair mind. In fact, our reasoning can often contain inferences or perceptions that lead us to draw inaccurate conclusions. Put another way, our hidden agendas can distort our interpretation of data – scientific or other.

Brian will illustrate, sometimes using the audience as "guinea pigs" and probably with surprising effects, that our attitudes, thoughts and acts are often influenced by mental activities that reside outside of our conscious awareness. These activities can reflect our professional status, social status, gender, age, race and, if they exist, religious beliefs. We are often suspicious of those unlike ourselves, and we tend to view situations through a lens that stereotypes. Thus, our judgments and decisions have an implicit bias that we are often unaware of and may, if confronted, emphatically deny. Such biases can lead to, e.g., gender differences in math and

science performance, resistance to change, tolerance of social inequality, and missing a scientific discovery even though, in retrospect, the evidence is staring us straight in the face. By being self-serving, we can be self-deceived. As we have all experienced, trusting our gut certainly has value; however, it should not be confused with critical thinking.

Brian, who is a social and behavioral scientist, and his research group have developed advanced quantitative and methodological protocols to assess self-selection mechanisms. In what is sure to be a thought-provoking presentation that will stimulate much discussion, Brian will help us become aware of our inherent beliefs and feelings that lie beyond our awareness or control.

Please join us on June 24th, 2010 at 7 PM for this exciting event. Everyone registered for the meeting is welcomed and encouraged to attend. Advanced sign-up for the event is important since seats are limited.

As always, suggestions for future topics and speakers are certainly welcome. To relate your ideas, please contact **Evelyn Jabri** (<u>ejabri@gmail.com</u>) or myself (<u>lynne\_maquat@urmc.rochester.edu</u>).



# From the Desk of the CEO Evelyn Jabri

At the start of this New Year (and new decade), the focus of the RNA Society is on renewing memberships and planning our fifteenth annual meeting.

Have you been waiting to renew your membership? Now is the perfect time to do so.



The RNA Society recently updated it membership database to include the enhancements you have requested. The new database allows for online renewals (including pre-filled forms), online membership applications, real time updates and a comprehensive membership directory for active members. The members-only menu allows you to log in and update your profile, search directory of members, pay renewals, change passwords, and request password reminders (sent automatically!).

If you have lost your renewal notice, please contact rna@faseb.org to request another copy. You will need this renewal notice as it provides a new username and password for accessing the new system. You may change both once you have logged in.

Recruit your friends to become members. There are many benefits to membership including (but not limited to):

- Reduced costs for publishing your research in *RNA*. You receive a 50% discount on page charges (a \$25 dollar savings), 50% discount on the first color figure (a \$225 dollar savings) and the majority of proof correction charges are waived. Members have reduced open access fees (\$500 savings from the non-member fee).
- Reduced registration fees (a savings of \$100) for the annual meeting of the Society, a great conference for RNA scientists to discuss their work with a diverse community of researchers. Students/Postdocs can become members for as little as \$35, and faculty can become full members for \$145.
- Opportunity to request Travel Fellowships and Meeting Support for RNA-related meetings you are organizing. We provide over \$10,000/year to an increasing number of smaller RNA meetings world-wide.

If your RNA friends publish in the Society's journal (and you should be persuading them to do so), or if they wish to attend the annual meeting at reduced costs, encourage them to use our new online membership application to join the RNA Society. They can access the database from our membership page: <a href="http://www.rnasociety.org/membership">http://www.rnasociety.org/membership</a>.

Once you have renewed your membership, you will be ready to take advantage of the reduced registration fees for RNA2010. As noted elsewhere in this newsletter, the organizers of RNA2010 are continuing the experiment with the format of our annual meeting program. Leading RNA scientists have been invited by the organizers to provide a wide overview of a particular field of RNA biology highlighting open and important questions during the morning plenary sessions. Afternoon Sessions will consist of short oral presentations selected from the submitted abstracts by the Organizing Committee and the Session Coordinators.

We will continue to offer various networking sessions including an opening reception, a grad student & postdoc social hour, and the RNA & Society Dinner (see page 4).

A special thanks to the graduate student and postdoc representatives who have once again planned several mentoring sessions targeted towards the junior scientists attending the meeting (see page 7). I look forward to seeing your name in our membership directory and welcome the opportunity to connect face-to-face in Seattle. Happy New Year,

Evelyn (ejabri@gmail.com)



# Chairman of the Meetings Committee David M.J. Lilley

At the time of writing we are pretty much mid-way between meetings, six months away from the next meeting in Seattle (June 22-27, 2010). The main organizing team are Doug Black, Elisa Izaurralde and Juli Feigon, lead by



Tim Nilsen. From what I hear there are significant changes planned for the format of this meeting. In 2012 we shall be going to Ann Arbor for the first time. The 2013 meeting will be back in Europe, at a venue to be decided at the Meetings Committee meeting in Seattle. I shall say rather more about these meetings later in the year, but I want to devote the majority of this short piece to the 2011 conference.

2011 will see a new departure for our annual meeting – the first meeting to take place in Asia. It will be held in Kyoto, Japan between June 14-19. We will be hosts of the Japanese RNA Society. We recently site-visited the Center with Yoshi

Nakamura (current president of the Japanese RNA Society), and met

the highly professional team who will be responsible for all the local, non-scientific organization. The selection of abstracts and construction of the scientific program will be handled by the RNA Society as usual, with an organizing committee comprising Lynne Maquat, Jamie Williamson, Melissa Jurica, Yoshi Nakamura and Haru Siomi, lead by Eric Westhof.

The meeting will be held in the Kyoto International Conference Center, a venue owned by the Japanese government and run by a non-profit organization. It is, famously, the site at which the Kyoto Protocol Framework Convention on Climate Change was agreed in 1997. The huge center includes





conference halls, meeting rooms, banquet halls and restaurants, and is set in beautiful parkland on a lake, with a Japanese garden and tea house. There is also a large hotel on site. The center has excellent communications, located at the end of the subway line from central Kyoto, a 20 minute ride away.

Kyoto itself is the former imperial capital city of Japan. It is one of the best preserved ancient cities of Japan, with something like 2000 temples and shrines. These include the famous Golden Pavilion (Ginkaku-ji) and the rock garden of Ryōan-ji. There are 17 UNESCO World Heritage Sites in Kyoto, and many gardens and museums. Kyoto is also widely known for its cuisine.

We hope that our membership will strongly support our first Asian conference, and take advantage of this opportunity to combine our usual excellent science with unforgettable sight-seeing.

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



# **GradStudent and Postdoc Corner**

Happy New Year! We are eager to start a new year of exciting events for junior scientist members of the RNA society. The biggest of these, as always, is our annual meeting. This year we will be returning to Seattle for a great week full of innovative science and opportunities for networking and career development. It is still early in the planning process, but we anticipate many social and scientific events of interest to post-docs and graduate students. We hope to start with a tour of Seattle before the meeting begins. Please be in touch if you would like to participate or help plan the tour (especially Seattle locals!). Marc Schneider, our newest postdoctoral representative, is working to design a T-shirt, which will be available at the meeting. If you have any ideas or suggestions for T-shirt designs, please contact Marc.

We are happy to announce that we will continue to host Career Workshops for the third year in a row. These workshops have been a valuable addition to the meeting, and though they are intended to appeal to grad students and post-docs, they have proven popular with more-senior members of the Society as well. We have selected two very interesting and relevant topics for all scientists for the workshops. We will build upon last year's scientific communication workshop which dealt with "How to get published" and this year we will address "How to present your science" with an emphasis on oral presentation. Effective and audience-appropriate communication is critical for all scientists, particularly for junior scientists during the job search. The second workshop will cover grant writing, a topic that is undoubtedly pertinent for all our members. With the recent changes at the NIH, even the most experienced grant seekers have needed to readdress this process. We hope to have individuals from all facets of the grant review process, including members of postdoctoral fellowship review boards contribute their insights for the benefit of RNA Society members. We expect that RNA 2010 will be another productive meeting for junior scientists and all members.

Our new RNA Society President, Roy Parker, has expressed a strong interest in hearing from junior members of the Society about activities and programs that would be of interest to us. As your representatives, we welcome your ideas. Feel free to contact us via email or through some of the social networking mechanisms we have developed. You can find us on Facebook at the "RNA Society Graduate Student Members" group page (Postdocs are welcome too!). "The RNA Society" group on Linkedin.com is another way to stay in touch with other







RNA Society members all year long. We are always happy to hear from other junior members of the society with any questions or suggestions you might have. We look forward to seeing you all in Seattle!

Claudia Recinos Rea Lardelli Kimberly Dittmar Marc Schneider

Kimberly Dittmar (Postdoctoral representative) Rea Lardelli (Graduate student representative) Claudia Recinos Seldeen (Graduate student representative) crecinos@med.miami.edu Marc Schneider (Postdoctoral representative)

dittmar@mail.med.upenn.edu realardelli@mail.utexas.edu schneider marc18@yahoo.de



# **RNA Society-supported meetings**

# **Reports from recent meetings supported by the Society :**

#### 8th International Conference on Ribosome Synthesis, Regensburg, August 26 – 30, 2009.

The 8th International Conference on Ribosome Synthesis took place in Regensburg from August 26 - 30, 2009. This meeting is another in a series that occurs every three years at alternating locations in the USA and in Europe. While the focus is on the complex and important pathway of making ribosomes, the conference brings together the scientists working on the different aspects of ribosome biogenesis.

The meeting hosted many of the leading scientists working on aspects of ribosome biogenesis in Regensburg. More than 70 group leaders attended, most presented their latest results as oral presentations. Further highlights were the two special lectures on ribosome structure and function presented by Knud Nierhaus and Harry Noller.

The scientific program covered all aspects of ribosome biosynthesis with emphasis on questions how the many different steps are interconnected. These included transcription by all three nuclear RNA polymerases, rRNA processing, r-protein assembly and the transient interaction with snoRNPs and non-ribosomal protein factors. Additional topics included the tight regulation of ribosome biogenesis requiring the coordinated activity of many cellular processes and its integration into the general cellular metabolism and development. Recent discoveries link defects in ribosome biogenesis to diseases, thus broadening aspects of making ribosomes and nucleolar relevance into medical considerations.

The conference venue was well suited providing a platform for both a pleasant atmosphere and many possibilities to exchange thoughts and ideas.

In summary, we think that due to this conference the scientific community with interest in ribosome biosynthesis took a step forward to understand how the many individual steps and processes leading to production of mature ribosomes are coupled and coordinated and to develop ideas about their integration into comprehensive models.

The RNA Society supported this meeting and contributed to travel grants for 12 young scientists and a poster prize, which included an iPod. The winner of the poster prize was **Jorge Pérez-Fernandez** (CNRS) with a poster entititled: "When the tree shows the forest", illustrating correlation between quantitative ChIP and Miller spread of rDNA.

#### RiboWest 2009

The 2009 RiboWest meeting was held at the University of Northern British Columbia, Prince George, on July 20 and 21. Keynote speaker Manny Ares, of UC Santa Cruz, described "Splicing Regulation in Mammals and Yeast" for the 70 participants, who came primarily from BC and Alberta, but also from as far afield as Manitoba. He was joined by RNA Society CEO Evelyn Jabri, and IDT representative Bob Setter, for a lively session on science careers. Invited Speaker Martin Bisaillon (University of Sherbrooke, QC) presented recent work on substrate recognition by a eukaryotic RNA 5'-triphosphatase. Student speakers and poster presenters were awarded prizes by their peers and also by a committee of scientists, with topics ranging broadly from RNA biochemistry to theoretical biophysics. The meeting concluded with a phenomenal aurora borealis display, seen from the patio of the local pub, even by those who were not drinking. This year's meeting will be held in Lethbridge, Alberta, and more information can be found at: <a href="http://people.uleth.ca/~ribowest/">http://people.uleth.ca/~ribowest/</a>



#### **Prize Winners:**

- Best Talk: **Angela Fung** (Fahlman Lab, UA): Functional investigation of leucyl/phenylalanyl-tRNA-proteintransferase: the role of aspartic acid 186
- Best Poster: Matt Schellenberg (MacMillan Lab, UA): RNA Binding by the Spliceosomal Protein p14
- Best Talk (student selected): **Evan Mercier** (Wieden Lab, UL): A molecular dynamics study of nucleotide dissociation in elongation factor Tu: insights in silico and in vitro
- Best Poster (student selected): **Dana Thompsen** (Lee Lab, UNBC): Analysis and inhibition of the CD44 mRNA-CRD-BP interaction

#### Talk Prizes:

- Elizabeth Dunn (Rader Lab, UNBC): Modeling U6 snRNA structure reveals a potential role for U4 snRNA in pre-mRNA splicing
- **Dustin King** (Lee Lab, UNBC): Halting the invasion: steps toward breaking the CD44 mRNA-CRDBP interaction
- Michael Shields (Wieden Lab, UL): Pre-steady state analysis of HflX, a novel ribosomal associated factor
- Chris Uy (Lee Lab, UNBC): Identification of Cysteine-99 as an important residue for RNA binding in Apurinic/Apyrimidinic Endonuclease 1 (APE1)

Poster Prizes:

- Amy Hayduk (Rader Lab, UNBC): Dissection of U4 snRNA Functional Domains using In Vitro Reconstitution
- Laurent Estoppey (Rader Lab, UNBC): Signaling the Spliceosome: Investigations of Prp24 Phosphorylation
- **Bencze Gyenge** (Rader Lab, UNBC): Crystallization of Splicing Cofactor Prp28 from Cyanidioschyzon merolae for X-Ray Crystallography





#### 2009 Rustbelt RNA Meeting

In October 2009, scientists from Illinois, Indiana, Kentucky, Michigan, Ohio and Pennsylvania gathered together in Deer Creek Park located south of Columbus (OH) for the 2009 Rustbelt RNA meeting (RRM) to share their latest findings in RNA research. The 2009 Rustbelt RNA meeting was one of the largest in its 11-year history with 206 participants. The meeting was organized by Girishi Shukla (Cleveland State University), Saba Valadkhan (Case Western Reserve University) and David Rueda (Wayne State University).

Over thirty talks were heard in six sessions over two days. The topics spanned Ribosome and Translation Control; RNA Modification, Structure and Function; Regulation of RNA Processing, Regulatory Non-protein-coding RNAs and Ribotechniques and Bioinformatics. In addition two keynote lectures by David Lilley (U. Dundee) and Gordon Carmichael (U. Connecticut Health Center) topped the program.

The 2009 meeting was marked by a large number of outstanding platform talks and posters. Three platform talks and 3 posters were recognized for their quality. **The "best talk" awardees were**:

- **I-Ming Cho** (Venkat Gopalan's lab, Ohio State University, "Validating ribosomal protein L7Ae as a subunit of archaeal RNase P"):
- **Yasaman Jaladat** (Saba Valadkhan's lab, Case Western Reserve University, "CTD fragment of prp8 enhances a snRNA catalyzed splicing reaction")
- Jessica Spears (Juan Alfonzo's lab, Ohio State University, "Evidence for a composite active site in the editing deaminase of trypanosomes")

#### The awards for best posters went to:

- Cecilia Go (Venkat Gopalan's lab, Ohio State University, "Developing novel antibacterials using cyclic peptide mimics of the protein subunit of bacterial RNase P")
- **Thomas Bebee** (Dawn Chandler's lab, Ohio State University, "Determining the therapeutic time-point for SMN replacement in a mouse model of spinal muscular atrophy")
- Jun Zheng (Quinn Li's lab, Miami University of Ohio, "Reconstitution of a Plant mRNA Polyadenylation in vitro Assay System")

The Rustbelt RNA society has grown so rapidly in the past few years that the 2010 meeting will have to move to a larger venue near Cleveland, OH. If you would like to learn more about the Rustbelt meeting, please visit www.rustbelt.org. The 2009 RRM meeting was made possible in part by the generous funding support from the RNA Society, which we gratefully acknowledge.

#### Symposium on RNA Biology VIII: RNA Tool and Target

October 16-17, 2009 North Carolina Biotechnology Center Research Triangle Park, NC

The biennial Symposium on RNA Biology hosted by the RNA Society of North Carolina was held October 16-17, 2009 in Research Triangle Park, NC. The meeting featured talks by invited speakers Judith Kimble, Greg Hannon, Tina Henkin, Jeffrey Kieft, Kristen Lynch, Karin Musier-Forsyth, Nahum Sonenberg, Sarah Woodson, Ada Yonath, and Phillip Zamore and eight short talks selected from the submitted abstracts. One of the highlights of the meeting was celebrating with Ada Yonath who had been awarded the Nobel Prize in Chemistry just days before the meeting. A packed auditorium enjoyed her talk exploring the makeup of an ancient proto-ribosome and its evolution to the contemporary ribosome. Another highlight was the presentation of 72 posters and the generous contributions of the RNA Society, Stephen Scaringe, Nucleic Acids Research, and the RNA Society of NC, which funded travel awards for students and postdocs.



#### **RNA Society Student and Postdoc Award winners:**

- Michael Budiman, Cleveland Clinic (Donna Driscoll), Unexpected function of eukaryotic initiation factor 4a3 (eIF4a3)
- **Jiqiang Ling**, Yale University (Dieter Soll), Oxidative stress induces protein mistranslation through inactivation of an aminoacyl-tRNA synthetase editing site
- **Rao Nallagatla**, Penn State University (Philip Bevilacqua), Nucleoside modification and RNA dimerization modulate activation of the protein kinase PKR by tRNAs
- **Tamara Zarubica**, Virginia Commonwealth University (Tonie Wright), Substrate specificity for Arm/Rmt methyltransferases

# **Upcoming Meetings of Interest :**

**EMBL Conference: The complex life of mRNA: From synthesis to decay** March 18-20, 2010 EMBL Heidelberg, Germany http://www.embl.de/training/courses\_conference/2010/RNA10-01/

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. The analysis of some of the most exciting aspects of these cytoplasmic mechanisms of gene regulation is a major focus of this meeting.

#### Organizers: Utz Fischer, Matthias Hentze, and Elmar Wahle

**2010 UC Berkeley MCB/CDB Symposium: Non-coding RNA Frontiers** March 23, 2010 UC Berkeley, CA http://mcb.berkeley.edu/seminars/cdb2010symposium/

The sixth annual UC Berkeley MCB/CDB Symposium will be held on Tuesday March 23<sup>rd</sup>, 2010. The theme is 'Non-coding RNA Frontiers' - an opportunity for thought-provoking, cross-disciplinary presentations and discussion on emerging insights about non-coding RNAs.

#### **Organizers: Kathleen Collins and Lin He**



Ribosomes 2010 May 3-7, 2010 Orvieto, Italy http://www.ribosomes2010.de/

The Ribosomes 2010 meeting will take place in the Palazzo del Popolo in Orvieto, Italy, May 3 - 7, 2010. The meeting is open to anyone whose work contributes to an understanding of the structure and function of ribosome, mechanisms of translation, and translation regulation. We expect a particularly exciting meeting, given that the Nobel Prize in Chemistry 2009 was awarded for the atomic structures of the ribosome. The Keynote Speaker will be Dr. Erin Schuman (Max Planck Institute for Brain Research, Frankfurt), presenting "Identification, visualization and dynamics of newly synthesized proteins." Online registration and abstracts are due Monday, February 8, 2010.

#### **Organizers: Rachel Green and Marina Rodnina**

5<sup>th</sup> Microsymposium on Small RNAs May 17-19th, 2010 IMBA, Vienna, Austria http://www.imba.oeaw.ac.at/microsymposium/welcome/

The Microsymposium on small RNAs nucleates young group leaders, advanced Postdocs and representatives from companies in the field of RNA Silencing and small RNAs. This years keynote speakers will be Phil Zamore and Olivier Voinnet. As usual there will be short company talks intercalated with academic ones. The very successful "Workshop for PhD students" will again take place this year. Those who are interested in coming to Vienna and presenting their data should send an abstract to Javier Martinez. Selected students will be fully invited (flight/train ticket, hotel, meals, etc). There will also be an award for the best presentations.

Organizer: Javier Martinez (javier.martinez@imba.oeaw.ac.at)

2010 FASEB Summer Conference on Nucleic Acids Enzymes June 6-11, 2010 Saxtons River, Vermont http://src.faseb.org/



The FASEB 2010 meeting entitled "Nucleic Acid Enzymes" will focus on the structures, mechanisms, biological roles, and medical relevance of enzymes that are composed of, and/or act on DNA and RNA. The meeting attracts a broad cross-disciplinary group of scientists with expertise in structural biology, biochemistry, and cell biology. The meeting provides a unique forum for discussion of enzymes that are composed of or act on nucleic acids, the central role of DNA and RNA enzymology in biotechnology, and the metabolic disorders and diseases in which nucleic acid enzymes are implicated.

#### Organizers: Philip Bevilacqua, Sheila David, Virginijus Siksnys



#### 2010 FASEB Summer Conference on Post-transcriptional Control of Gene Expression: Mechanisms of mRNA Decay

July 11 - July 16, 2010 Carefree, Arizona http://src.faseb.org/

The significance of mRNA turnover broadly impacts all aspects of post-transcriptional gene regulation and is integral to all areas of RNA biology. This conference is concentrated on the mechanistic and structural aspects of mRNA turnover from the molecular to the organismal levels in diverse biological systems and kingdoms. It will include a broad range of topics from structural and mechanistic developments pertaining to the nucleases and complexes that degrade mRNA, the ever expanding and pleiotropic role of small non-coding RNAs in gene silencing by targeted mRNA decay and implementation of our understanding of RNA quality control mechanisms and decay nucleases for therapeutic applications.

More information regarding this conference and a tentative program can be found at the FASEB Summer Research Conference web site. Online registration will initiate on 3/12/10.

#### Organizers: Megerditch Kiledjian and Kenneth McDowall

**RiboWest Conference 2010** July11-14, 2010 University of Lethbridge, Alberta, Canada http://www.uleth.ca/~ribowest

The sixth annual RiboWest Conference will take place at the University of Lethbridge, Alberta, Canada, from July 11 - 14, 2010. This meeting usually attracts more than 100 RNA researchers from about 35 different research groups in western Canada. We are very pleased to announce that Dr. Reinhard Lührmann from the Max-Planck Institute in Göttingen, Germany, past president of the RNA Society, has agreed to be our keynote speaker in 2010. In addition, we are looking forward to have Dr. Jean-Pierre Perreault as an invited speaker from the RiboClub in Sherbrooke, Quebec, since it is our tradition to strengthen the inner-canadian network of RNA investigators. It is the specific aim of the RiboWest Conference to facilitate student participation in order to support their training in RNA research. Therefore, students can obtain fellowships, have reduced registration fees, have many opportunities to give oral presentations, can win awards for presentations or posters and can participate in a career workshop. We thank the RNA Society for the generous contribution to our student support.

Registration for the RiboWest Conference 2010 will open in May; details will soon be available on the webpage (<u>http://www.uleth.ca/~ribowest</u>). If you are interested in this meeting, please feel free to sign up for our email list (<u>ribowest@uleth.ca</u>). We are looking forward to another exciting RiboWest Conference allowing us to once again share our passion for RNA research.

#### Organizers: Ute Kothe, Hans-Joachim Wieden, and Steven Mosimann



#### 2010 Gordon Research Conference on The Biology of Post-transcriptional Gene Regulation

July 18-23, 2010 Salve Regina University, Newport, RI http://www.grc.org/programs.aspx?year=2010&program=posttrans

The 2010 Gordon Research Conference (GRC) on The Biology of Post-Transcriptional Gene Regulation will be the fourth in a series that is held every other year. This GRC provides an outstanding forum to present and discuss new findings about the mechanisms and regulation of RNA biogenesis in normal and disease states. The emphasis will be on the post-transcriptional transactions during the processing of mRNA. However, this focus will extend to bioinformatic approaches to study gene expression and RNAomics; transcriptional coupling; and factors involved in the regulation of mRNA transport, translation and decay, including rRNA, tRNA and microRNAs. Elucidating the basic mechanisms of post-transcriptional gene regulation is essential to gain a full understanding of the organization, function, and evolution of the human genome, and other genomes, as well as of the extensive involvement of RNA-processing dysfunction in numerous genetic and acquired disorders.

#### **Organizers: Lynne Maquat and Manuel Ares**

New Frontiers of Functional Nucleic Acids: Chemistry, Biology and Applications symposium at Pacifichem 2010 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



#### **Employment opportunities**

#### **Postdoctoral positions :**

**Position available** in Department of Nucleic Acid Structure Research Group, University of Dundee, UK Position posted on Wednesday, January 20, 2010

Postdoctoral Researcher for international collaboration on functional plant RNA species

We seek a postdoctoral fellow for research into the structure and dynamics of functional RNA species identified from plant cells. This will involve studies using FRET, single-molecule methods and other biophysical approaches.

The work will be carried out in the laboratory of David Lilley at the University of Dundee, United Kingdom, in the Nucleic Acid Structure Research Group.

This work is funded by the Human Frontiers Science Program for three years. It is a four-way collaboration between the laboratories of Philip Bevilacqua and Sally Assmann (Penn State University), François Major (Université de Montréal) and Dundee.

The position is available immediately.

Contact : <u>Dr. David Lilley</u> Email: d.m.j.lilley@dundee.ac.uk

**Position available** in Dept of Cell and Molecular Biology, Medical Nobel Institute of the Karolinska Institute, Stockholm, Sweden Position posted on Monday, January 04, 2010

A postdoctoral position in RNA structural biochemistry is open in my lab at the Department of Cell and Molecular Biology at the Karolinska Institute in Stockholm.

Successful candidates will participate in all steps involved in structure determination of RNA-protein complexes relevant to tRNA biogenesis. Suitable candidates have a PhD in a relevant area, preferably in RNA biochemistry, structural biology or closely related subjects. A general requirement to be eligible for this position is a recent doctoral degree from a University outside Sweden. The position is available from 1st of February and for at least two years.

The application should contain a cover letter and a CV with publication list. Send the application as an email with attachments to Martin.Hallberg@ki.se Contact : Dr Martin Hallberg

Tel : +46-8-52486630 Email: Martin.Hallberg@ki.se



**Position available** in Dept of Cell Activation and Gene Expression of the IBMC , Porto, Portugal Position posted on Thursday, December 10, 2009

A Post-Doctoral position is available immediately in the laboratory of Dr. Alex Moreira and Dr. Alexandre Carmo to work on the project "NANOFOL - Folate-based nanobiodevices for integrated diagnosis/therapy targeting chronic inflammatory diseases", FP7-NMP-2008-LARGE-2 (FP7 NMP-2008-4.0-1).

We are looking for highly motivated candidates with experience in at least one of the following: transfection and expression in eukaryote systems; RNA interference; flow cytometry; biochemistry of signal transduction/cell activation; RNA techniques. Experience in knockout or transgenic animals is advantageous as well. The ideal candidate will hold a Ph.D. in the fields of Biomedicine, Biology, Biochemistry, Molecular Biology or related areas.

NANOFOL proposes to develop a new diagnostic/therapy approach using folate based nanobiodevices (FBN) able to provide a new type of cost efficient treatment for chronic inflammatory diseases such as Atherosclerosis (AS) and Rheumatoid Arthritis (RA) with low side effects that will constitute a more advantageous solution than current therapies.

In the CAGE group, the successful candidate will be responsible for: establishing culture conditions for in vitro activation of peripheral blood (PB)-derived monocytes/macrophages and macrophage cell lines; analyzing siRNAs stability, release and effect in activated macrophages; evaluating the lipophilic drug release and physiological effect in activated macrophages; in vivo testing of FBN in animal models of RA and AS.

The initial appointment will be for one year, renewable for up to a maximum of 4 years.

The applications should be received between November 30th and December 18th, 2009.

Proposals must include a letter of motivation, CV, and 2 letters of reference, and should be sent to Dr. Alexandre Carmo (acarmo@ibmc.up.pt; amcarmo[at]ibmc.up.pt).

Employment at the IBMC is regulated by current laws relating to the Statute of Science Research Fellows, namely Law 40/2004 of August 18, and the Regulation of Scientific Research Studentships of the IBMC (www.ibmc.up.pt/fellowships.php).

Contact : <u>Dr Alexandra Moreira Carmo</u> Tel : +351226074951 Email : <u>amcarmo@ibmc.up.pt</u>

**Position available** in Dept of Pathology and Cell Biology of the Columbia University, New York, United States Position posted on Wednesday, December 02, 2009

A Post-doctoral position is available in the laboratory of Dr. Livio Pellizzoni at Columbia University to study the biogenesis and function of ribonucleoprotein complexes as well as the role of RNA dysfunction in the pathophysiology of inherited human motor neuron diseases. The research project will focus on the identification of genetic modifiers of the expression and function of SMN, the Spinal Muscular Atrophy (SMA) disease gene product, using genome-wide RNAi.

The candidate must hold a Ph.D. in the biological sciences and have strong laboratory expertise in biochemistry, molecular and cellular biology. Prior experience working with RNA-protein complexes is desired.

Candidates should submit electronically a cover letter with a description of scientific interests and career goals, detailed curriculum vitae, and contact information for three references. The anticipated start date for this position



is February 2010. The initial appointment is for one year with the possibility of extension for additional years based on performance and availability of funds.

Contact : <u>Dr Livio Pellizzoni</u> Tel : 212 305-3046 Fax : 212 342 0276 Email : lp2284@columbia.edu

**Position available** in Dept of Chemistry and Biochemistry of the University of Texas at Austin, Austin, United States

Position posted on Wednesday, December 02, 2009

A postdoctoral position is available in the lab of Rick Russell to investigate folding of large RNAs and the mechanisms of DEAD-box RNA chaperone proteins by using biochemical and biophysical approaches. Applicants must have a PhD in biochemistry or a related field and have experience in performing quantitative studies of RNA. Experience in working with proteins is preferred but not essential. The initial appointment will be for one year with the expectation of renewal. Interested candidates should send a CV and the names of three references to rick\_russell@mail.utexas.edu

Contact : Dr Rick Russell Tel : 512-471-1514 Email : rick\_russell@mail.utexas.edu

**Position available** in Dept of Molecular Genetics and microbiology of the University of Texas at Austin, Austin, United States

Position posted on Monday, November 09, 2009

I am anticipating a postdoctoral position opening in March 2010 (possibly earlier) in my lab at the University of Texas at Austin. We study nuclear export and maturation of ribosomes in yeast. We are particularly interested in the final steps of assembling a functional ribosome, the mechanisms that release the export factors and the interface between ribosome biogenesis and translation. Applicants must have a PhD degree in Biochemistry or Molecular Biology or a related field and have experience in protein purification and RNA analysis. Prior experience in ribosome biochemistry or translation is preferred. The initial appointment will be for one year with the expectation of renewal. Interested candidates should email a cover letter, CV, and contact information for three references to Dr Arlen Johnson at arlen@mail.utexas.edu. http://www.bio.utexas.edu/faculty/ajohnson/

Contact : <u>Dr Arlen Johnson</u> Tel : 512 475-6350 Email : arlen@mail.utexas.edu



**Position available** in Institute for RNA Science and Technology (IRNAST) of the State University of New York , University at Albany, United States Position posted on Monday, November 09, 2009

Three post-doctoral associate positions are available within the Institute for RNA Science and Technology (IRNAST). Research areas include studies of RNA/RNA and RNA/protein interaction in control of gene expression, and their involvement in human infectious diseases, HIV and MRSA. Applicants should have a Ph.D degree in either: a) biochemistry/chemistry with the theoretical background and experience in operating modern high field NMR instruments and restrained molecular dynamics calculations for determining bio-macromolecular structure, or b) molecular biology/biochemistry with experience in RNA's control of gene expression. All three positions are available in the Spring of 2010.

IRNAST is located at the State University of New York in Albany, the State Capital. Centrally located between the Catskill and the Adirondack parks, the region provides abundant opportunities for outdoor recreation, and is also close to the metropolitan centers of New York City, Boston and Montreal.

Competitive salary for a first time postdoctoral position is dependent on the Ph.D. experience. Medical benefits are provided in addition to salary. Appointments are for one year, renewable for a second and third year dependent on successful scientific progress, publications and availability of funding. Applicants are expected to seek and apply for federal and private agency postdoctoral fellowships. The successful applicants will have the experience cited above and be expected to use that knowledge to help and supervise a culturally diverse research group of graduate and undergraduates students. Applicants must respond with detailed curriculum vitae, statement of research experience and interest, and three reference letters from their immediate supervisor, and others aware of their research capabilities. Please apply online via http://albany.interviewexchange.com/jobofferdetails.jsp?JOBID=16223&CNTRNO=0&TSTMP=1260849456036

http://albany.interviewexchange.com/jobornerdetans.jsp?jOBID=10225&CN1KNO=0&151WF=12008

Contact : Dr Paul F. Agris Tel : 919-515-6188 Fax : 919-515-2047 Email : Paul\_Agris@ncsu.edu



# 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  $\underline{\text{rna@faseb.org}}$ .

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

Postdoctoral Fellow Positions

Faculty Positions

Government & Industry 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 State/ Prv. Citv 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.

