

RNA Society

Officers

Rachel Green President (2013)
Douglas Black Past President (2012)
Mary O Connor Secretary/Treasurer ('12/'14)

Chief and Chairs

James McSwiggen Chief Executive Officer (CEO)
Andrew Feig Chair, Finance Committee (CFO)
Kimberly Dittmar Chair, Membership Committee
David Lilley Chair, Meetings Committee
Peter Watson Chair, Business Development

Directors

Maria Carmo-Fonseca ('13 '14)
Brenton Graveley ('12 '13)
Tracy Johnson ('12 '13)
Jon Lorsch ('13 '14)
Mikiko Siomi ('12 '13)
Jonathan Staley ('13 '14)

RNA Journal

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

Tim Nilsen
Editor in Chief

RNA Society Web Page

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

Contact the RNA Society

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

RNA Newsletter Editor

Brenda Peculis

Comments:

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

From the Desk of the President, Rachel Green

Happy new year to the RNA world. As I take over the reins of the RNA Society as president for a year, it seems



worth reflecting on where we have been as a society, what is new, what is the same, and what should be different. What certainly always seems to be true is that the science just gets more interesting. While I think that we all worry that the big discoveries have been made and that we are just dotting i's and crossing t's, every year brings new

excitement of an unanticipated sort that keeps us engaged. As an RNA scientist trained in a different era, I look at what's happening and feel like I need to go back to graduate school and learn a new set of skills – starting with some basic knowledge in programming. But I suspect that this feeling is inevitable and simply makes us appreciate the pace of science. (Continued on p2)

In this issue :

From the Desk of the President, Rachel Green	1
RNA 2013 Meeting Overview	3
18 th Annual RNA Meeting, Davos, Switzerland	
Jr Scientists Corner :	5
Mentor / Mentee Lunch	6
Chairman of the Meetings Committee, David Lilley	7
From the desk of our CEO, James McSwiggen	8
New RNA Society Staff Members	9
RNA Society supported meetings	10
Employment	15



First and foremost, what remains the same is that exciting science is the standard. What I find most exciting about science in the RNA field is the extent to which different approaches converge on common questions to provide insights that only emerge from such convergence. In my own field, structural and biochemical approaches have dominated the field for about a decade (though it is possible this is my bias), but all of a sudden, ribosome profiling, a genomic approach, is providing the type of detailed information about translation in the cell that we have long been missing. For those interested in functional RNAs, high throughput sequencing has provided incredible job security – apparently most of the eukaryotic genome is transcribed, and perhaps very little of it is “junk”. These notions should keep the field working for some time to figure out what role such “pervasive” transcription plays in the life of the cell. And, while eukaryotic small RNAs are no longer the newest thing on the horizon, we are beginning to gain real molecular insight into their various roles in the cell, from regulation to immunity. In the bacterial kingdom, a similar expansion of our understanding of the roles of RNA in the cell has emerged. Riboswitches and other cis regulatory sequences are abundant, as are a wealth of trans acting factors that play as yet incompletely described roles in the cell. Understanding evolutionary relationships between these systems and those found in eukaryotes remains an engaging topic to think about. For all of us, as always, there is an exciting future in RNA science.

What I find most exciting about science in the RNA field is the extent to which different approaches converge on common questions to provide insights that only emerge from such convergence

What also remains the same in the RNA field is the focus on collegiality. I grew up in the RNA field, and my graduate school friends were always surprised to learn how interactive the field was, and how encouraged we felt as young people to become active participants. This is why most of us figured out a way to keep studying RNA even as the field and our interests evolved. What this means is that

meetings are composed of colleague-friends that we have known for a very long time. I hope that this feeling is evident to young people joining the field and that they feel as welcome as we did. One of my fondest memories is of Olke Uhlenbeck cornering me

What also remains the same in the RNA field is the focus on collegiality.... friends were always surprised to learn how interactive the field was, and how encouraged we felt as young people to become active participants.

several years ago, telling me that I must continue to attend meetings, to sit in the front row, to ask questions, to go to the poster session, and to stay late at the bar. He was passing the torch, prematurely I might add, but I got the message. I feel very lucky to have been scientifically raised by the RNA community and plan to give back as I go.

What does this mean in concrete terms for all of us? For one thing, it means attending the yearly RNA meetings. Last year, the RNA Society meeting was in Ann Arbor, Michigan with organizers Nils Walter, Melissa Moore, Gerhart Wagner and myself. By all accounts, the meeting was a smash success. This year’s meeting will take place in Europe in the mountains in Switzerland with Frederic Allain, Witold Filipowicz, Adrian Kramer, Osamu Nureki and Sarah Woodson as organizers – Davos, a winter ski resort, is a beautiful hiking destination in the summer. The format for this year’s meeting will mirror that of meetings past -- with perhaps even greater emphasis on talks by young people. Our days will be filled with scientific sessions composed of short talks principally by graduate students and post-docs. While some complain about this grueling format, I think we all remember our first talk at this meeting with very fond memories, and feel that it is a format that is representative of our culture of inclusion. What it really means is that we are hearing the science first hand from the people who are doing the experiments! In addition, there will be evening sessions where some of the most interesting scientific discussions occur. Finally, there will be mentoring events and a banquet together to wind the meeting up. I know that the organizers have made a



tremendous effort to keep the costs reasonable for the meeting in order to encourage attendance. We very much hope to see you all there.

So, what should be different or what more can we do? This is where participation in broader activities comes to mind. Be involved in RNA Society decisions by becoming a member and voting. Read the RNA journal and encourage your institution's library to subscribe to it so that others

can as well. Send us your new ideas. Together as a community we need to stay at the cutting edge of science. Database, method, analysis, protocol sharing all seem like areas where we as a community could come together and synergize. Perhaps these ideas could be discussed in Davos. I am anxious to help make the community all that it can be and ask for your guidance in this endeavor.

Rachel Green, ragreen@jhmi.edu

Welcome to RNA 2013!

After Edinburgh (1999), Vienna (2003) and Berlin (2008), the Annual Meeting of the RNA Society is back to Europe for its 18th edition. The 2013 meeting will take place from **June 11th to June 15th in Davos, Switzerland**. A new venue for the RNA Society, Davos is a beautiful small town located in the middle of the Swiss Alps, easily reached by train and only two hours from the international Zurich Airport.

This year, we will have two outstanding keynote speakers: **Venki Ramakrishnan**, (MRC-LMB, Cambridge) and **Tom Cech** (HHMI-University of Boulder, Colorado), winners of the Nobel Prize in Chemistry in 2009 and 1989, respectively. There will be 6 plenary sessions, 6 concurrent sessions and several workshops covering a diversity of RNA topics (non-coding RNAs, RNA editing and modification, translation, RNA localization, RNA processing and decay, RNA-based gene expression, RNA and RNP structures, RNA and disease, systems biology, RNA bioinformatics, viral RNA, RNA biophysics, RNA therapeutics). Sessions will be chaired by leading figures in the field who will introduce the topics and put the big remaining questions in context. As always, the selected talks will be chosen from the submitted abstracts.

In addition to the scientific sessions, the program will include special events, such as a Beer Garden located at walking distance from the conference center, Junior Scientists' Social, Mentor-Mentee Lunch and the Awards Ceremony. Last but not least, we will reserve one free afternoon for you to admire the beautiful mountains around Davos.

We invite you to join us for another fantastic RNA Society Meeting.



Frédéric Allain, ETH-Zürich
Witold Filipowicz, Friedrich Miescher Institute
Adrian Krainer, Cold Spring Harbor Laboratory
Osamu Nureki, University of Tokyo
Sarah Woodson, Johns Hopkins University



RNA 2013:
The 18th Annual Meeting of the RNA Society
June 11 – 15, 2013
Congress Center Davos,
Davos, Switzerland

Abstract Deadlines:

March 1, 2013 for oral abstracts (i.e. to be considered for an oral presentation),
April 1, 2013 for poster abstracts (i.e. to submit a poster-only abstract).

- Two Keynote Speakers, both Nobel Prize winners :
 - **Venki Ramakrishnan**, MRC Laboratory of Molecular Biology, Cambridge, England
 - **Tom Cech** University of Boulder, Colorado
- 6 Plenary sessions, 6 concurrent sessions, 2 workshops, and 3 poster sessions, covering all things RNA
- Beer Garden, Junior Scientists Social, Mentor-Mentee Lunch
- Free afternoons for socializing in the beer garden or optional hikes and other activities offered
- Aperero/Banquet/Awards/Dance

For more information and to register, go to:

<http://www.mnociety.org/conferences/rna-2013/>

The organizing committee:

Frédéric Allain, ETH-Zürich

Witold Filipowicz, Friedrich Miescher Institute

Adrian Krainer, Cold Spring Harbor Laboratory

Osamu Nureki, University of Tokyo

Sarah Woodson, Johns Hopkins University



Graduate Student / Postdoc Corner: RNA Society Junior Scientists Michael Meers, Marc-David Ruepp, Rita Strack, and Callie Wigington

Hello and Happy New Year! We are excited about another wonderful year with the RNA Society Junior Scientists. Coming off a great experience in Ann Arbor this past June, we are now looking forward to another fun series of events for RNA 2013 in **Davos, Switzerland!**

To kick things off with the Junior Scientists, we are planning a pre-meeting hike followed by lunch on Tuesday morning. This hike will be a great way to explore the picturesque landscape of Davos as well as to catch up and mingle with fellow junior scientists. Currently we are planning to take the gondola lift to the Rhinerhorn station, followed by a scenic hike around the mountain. We will then take a slowly descending path to Sertig Dörfli for lunch at a local restaurant. Our planned hike is easy and does not change much in elevation, so it should be feasible for hikers of any skill level. We are still in the planning phases for this event, so if you have any suggestions or are interested in attending please contact us on Facebook (RNA Society Junior Scientist Members group), LinkedIn (The RNA Society group), or by email (listed below). If inclement weather prevents our planned hike, we will either tour a cheesery or Switzerland's highest elevation brewery (fingers crossed for rain!). Further details on the pre-meeting events will be provided through the RNA Society website, Facebook, and via email following your meeting registration.



We are also looking forward to hosting another **Junior Scientists workshop** at this year's meeting. Last year's workshop consisted of a panel of guests discussing how to select a postdoctoral position as well as how to obtain jobs in academia and industry. The panel did a fantastic job of informing the crowd of junior scientists about the process and politics of applying for postdoctoral and faculty positions. For this year's workshop, we are excited to report that the theme will be **career and skills development** with an emphasis on skills for career advancement, regardless of your career track. The session will touch on a wide range of common concerns

related to initiating and advancing a career in science such as choosing the right career, career planning, time management, networking, resume building, work/life balance and other related skills that are recognized by hiring companies and institutions. We are in the process of putting together a great lineup of engaging speakers that will address these issues in a fresh and exciting way. This promises to be a can't-miss event for junior scientists looking to market their skills and potential in the next stage of their career. We hope to see you all there!

Finally, we will also be hosting our annual **Junior Scientists social**. The social provides an opportunity for junior members of the RNA society to socialize and network over a few drinks in a relaxed setting. This event is sure to be a great time, so don't miss out!

We are quite enthusiastic about the events at RNA 2013 and are confident that this meeting will be exciting for both junior and senior members alike! As your representatives, we are happy to hear from



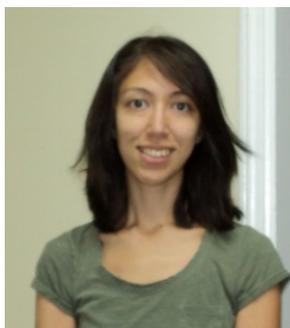
you with any comments, questions, or suggestions that you may have. We are always looking for new Representatives. If you are interested in representing your fellow junior scientists and sharing our perspectives with the meeting organizers and Society leaders, we would love to hear from you. Please feel free to reach us through the social networking sites (listed above) or through our email addresses provided below. We look forward to seeing you in Davos!

Michael Meers (Graduate Student Representative) mpmeers@email.unc.edu

Marc-David Ruepp (Postdoctoral Representative) marc.ruepp@dcb.unibe.ch

Rita Strack (Postdoctoral Representative) ris2016@med.cornell.edu

Callie Wigington (Graduate Student Representative) callie.wigington@gmail.com



Mentor-Mentee Lunch Event

Elizabeth J. Tran and Sarah Woodson

The Mentor-Mentee Lunch has been a staple at the annual meeting of The RNA Society. This luncheon provides a fantastic opportunity for students and postdocs to get advice from faculty and other professionals in a casual environment. At RNA 2013, we will be building off the successes of previous luncheons by providing more choices for discussion topics and by organizing discussion groups by currently held positions. This will enhance discussions by grouping individuals with common interests and concerns. The discussion choices will include popular topics such as obtaining a postdoctoral position and careers in academia as well as new ones on enhancing your teaching skills, writing grant and fellowship applications and balancing work and family life. As these latter subjects are essential aspects of scientific success, we are happy to provide our junior scientists with these new and varied discussion opportunities. We are excited about this format and are looking forward to an exciting time in Davos this year. Students and postdocs, please sign up for this event and select your first and second choice discussion topic. Mentors, please volunteer your time to share your experience and advice to our junior scientists. The mentor-mentee lunch relies on the collegiality and caring nature of the society and our recognition that mentoring is a fundamental aspect of scientific training. Registration for the mentor-mentee meeting is required for this event and is currently available on the RNA 2013 registration site.



David M.J. Lilley Chairman of the Meetings Committee

This year we shall meet in the **Swiss Alps in Davos, between 11-15 June**, organized by lead organizer Frédéric Allain together with Witek Filipowicz, Sarah Woodson, Adrian Krainer and Osamu Nureki. This is our first return to Europe since the memorable meeting in Berlin in 2008. And some features of Berlin will return, notably the wonderful beer garden ! By the time of publication of the newsletter, the registration will open. See : <http://www.rnasociety.org/conferences/rna-2013/>



The deadline for abstract submission for **oral presentations is 1 March**, and that for **posters is 1 April**. The registration fee for Ph. D.

students is \$650, so that the total cost for the meeting should be less than \$1,000 including accommodation, food and registration. Two Nobel prize winners have agreed to be the keynote speakers, **Venki Ramakrishnan** and **Tom Cech**. Davos is a very pretty two-hour ride south-east of Zürich, alongside lakes and through the mountains. And the organizers are leaving Thursday afternoon free for activities such as hiking in the mountains.



In **2014** we again explore new territory, meeting in the old **Canadian city of Québec**, with lead organizer **Benoît Chabot**. The pretty walled city is high above the St Lawrence river. We shall meet in the large conference center, with hotel accommodations available a short walk away. We made a site visit a year ago in December, a very cold time of the year in that part of the world, but in June the weather should be beautiful.

In **2015** we return to North America. We have been unable to use **Madison** for several years because of the ongoing restoration of their facilities, but by then they will be ready to have us back. Madison retains many advantages of ease of access and relatively low costs, providing an opportunity for graduate students and postdoctorals to attend in significant numbers. Many of us attended our first RNA Society meeting in Madison, and retain an affection for the place. This is not yet confirmed, but seems a probable location for **RNA2015**.

The decision has already been taken to go back to **Japan in 2016**, although the actual venue has not been decided. I hope we can finalize this during the Davos meeting. Beyond 2016 we are open to suggestions. If you want to suggest a venue, please contact me and I'll send you our guidelines for preparing a proposal.

So that's as far ahead as I can look right now. But the RNA Society can help in a number of ways with smaller meetings outside our annual meeting. We exist to promote RNA science, and a major vehicle is the organization of conferences large and small. As an example, I helped organize an international meeting on RNA regulation in Shanghai last fall - I have written a report on this elsewhere in this Newsletter. We are an international society with a world-wide membership, and I see the promotion of our science everywhere as firmly part of our remit. We can advertise meetings through the Newsletter and by email, and consider requests for the provision of fellowships.

I look forward to seeing you all in Davos in June ! David Lilley, d.m.j.lilley@dundee.ac.uk



From the desk of the CEO Jim McSwiggen

Welcome to 2013 and the 20th anniversary of the founding of the RNA Society. It's been an exciting 20 years for RNA research. In this short time, we've witnessed—among other things—the discovery of siRNAs, microRNA, long non-coding RNA, epigenetic regulation by RNA, the sequencing of dozens of complete genomes, and the recognition that much of the genomic DNA is transcribed into RNA. We've also seen the role of RNA expand dramatically from its traditional ones of information carrier and structural element to having a much greater role in all levels of gene regulation. I continue to be amazed at the new discoveries that are reported each year at our annual meeting, and I look forward to attending this year's meeting in Davos, Switzerland with the expectation that I will continue to be amazed.



The RNA Society begins its third decade in very good condition. Our journal continues to attract high quality manuscripts and is the financial engine of the Society. The 2011 Kyoto conference and the 2012 Ann Arbor conference were both critically and financially successful. The Society's membership levels have recovered from their low point in 2011, and have actually increased in 2012 to the highest numbers in our history (1434 members). This was despite the financial downturn that continues to slow the world economic recovery.

As a consequence, the financial health of the Society remains strong. That, in turn, provides us with the ability to expand our financial support for the RNA community. Our support for other small RNA conferences and colloquia has more than doubled in the last two years, and we've committed almost \$100K to the RNA 2013 Davos conference in an effort to keep registration costs moderate. As CEO, my goal is to expand the Society's membership and income so that we can continue to expand our mission of supporting RNA research and education. I am grateful to the many, many volunteers who have helped in our endeavor, and who continue to do so. I look forward to seeing how our combined efforts work to build and support RNA research over the next decade.

Jim McSwiggen, CEO
CEO@rnasociety.org



New Staff Members

We are happy to announce that two new staff members have joined our ranks in 2013.

Andrew Feig has stepped into the role of Chief Financial Officer (CFO) for the Society. Andrew is an Associate Professor of Chemistry and Biochemistry at Wayne State University and is studying bacterial non-coding RNAs, the thermodynamics of RNA folding, and the mechanistic enzymology and biophysics of large Clostridial cytotoxins. He has been a member of the RNA Society from its early days and served as lead organizer of the 2009 annual meeting in Madison. As CFO, Andrew will be concerned with all things financial, including overseeing the work of our FASEB accountant, budgeting for the annual meeting and the Society as a whole, reviewing contracts, and approving expenses. He's the one to contact if you need a reimbursement from the Society.



Peter Watson has agreed to be the Society's Chair of Business Development—a position that was newly created in 2013. Peter received his PhD from The Scripps Research Institute in 2012 and is now working as an associate consultant in biotechnology at McKinsey & Co., the world's largest global management consulting firm. Peter also served as one of the Society's Junior Scientist Reps from 2010 through 2012. As BD Chair, Peter will be looking for ways that the Society can better engage the corporate sector in our activities. That would include more participation by industry scientists at our annual meeting, and (hopefully) more industry sponsorship of our conferences. Peter will also be exploring grants to help fund student travel to our meetings.

The RNA Society is an all-volunteer organization, and we thrive because of the efforts of these and many other volunteers (see page one, sidebar). Please be sure to thank them for their service when you have the opportunity.



RNA Society-supported meetings

Reports from recent meetings supported by the Society

International Conference on Riboregulation, September 10 - 12, 2012

Science is booming in China, and there is considerable interest in RNA especially from the point of view of cellular regulation. In the early fall, an international conference on RNA regulation was held on the medical campus of Shanghai's Fudan University, greatly assisted by the provision of four RNA Society fellowships. The meeting was attended by about 100 people altogether.

The central concept of the meeting was conceived in the light of the growing importance of RNA as a regulatory molecule in the cell. This includes miRNA and siRNA and CRISPR as well as riboswitches and ribozymes. These phenomena were predominantly discussed from biological, structural, chemical and mechanistic points of view. Plenary speakers were presented by leaders in the field, including Jennifer Doudna, Narry Kim, Scott Strobel, Adrian Ferré D'Amaré, Eric Westhof and Xiang Dong Fu. In addition there were excellent talks from a category of young RNA scientists as well as contributed talks and posters. Four RNA Society fellowships were awarded to **Yi Liang Ding (Penn State)**, **Hong Zhou Gu (Yale)**, **Yamuna Krishnan (NCBS, Bangalore)** and **Alexander Serganov (NYU)**. Posters were judged by **Eric Westhof, Adrian Ferré D'Amaré and Hong Li**. Poster prizes were awarded to **Jing Zhang and Xu Jia (Fudan University)** and to **Lin Huang and Jia Wang (Dundee University)**. (Photo on left : poster awards, from left, **Jia Wang, Eric Westhof** (presenting award), **Lin Huang**.)



Of course the majority of scientists attending the meeting were Chinese (either local or ex-pat), but there were significant numbers of attendees who were North American or European. Many were able to take advantage of the opportunity to combine excellent science with some exploration of the wonderful culture and experience of visiting China.



The Shanghai Riboregulation meeting was very successful in terms of showcasing excellent RNA science to local students, and hopefully fostering more interactions between Chinese and western scientists. It is likely that this meeting will be repeated in two or three years time. I hope that by this time western scientists will attend such meetings on a regular basis, and look forward to welcoming RNA Society members to China.

Photo above, taken by Huangpu river in Shanghai with the Bund in the background. Left to right: **Hong Li, Yi Zhang, David Lilley, Rui Zhao, Ke Qiong Ye**.

RiboClub 2012 September 24-26, 2012

The RiboClub meeting 2012 in Canada was a great success again this year. Thanks to the support of the RNA Society, two travel scholarships were given on a competitive basis.

This year, the two travel scholarships from the RNA Society were awarded to **Michael Charette** (Postdoctoral fellow, Yale University School of Medicine) and **Samir Rahman** (Graduate student, Université de Montreal).

L to R : **Michel Charrette**, **Samir Rahman** and **Éric Massé** - member of the RiboClub of Sherbrooke



GBM Study Group RNA Biochemistry October 4-7, 2012

The GBM Study Group RNA Biochemistry had a very successful meeting in Bonn, with excellent talks and terrific poster presentations. The poster prize judges had a hard time deciding, but finally they nominated three young scientists who were awarded an RNA Society-sponsored poster prize for their outstanding poster presentations.

The awardees are:

- **Maren Thomas**, Pharmazeutische Chemie, University of Marburg, Marburg, Germany “*PEI-complexed LNA antiseeds as miRNA inhibitors*” Thomas, M., Lange-Grünweiler, K., Dayyoub, E., Bakowsky, U., Weirauch, U., Aigner, A., Grünweiler, A, Hartmann, R.K.
- **Manja Wachsmuth**, Institute for Biochemistry, University of Leipzig, Leipzig, Germany “*De novo design of a synthetic riboswitch that regulates transcription termination*” Manja Wachsmuth, Sven Findeiß, Nadine Weissheimer, Peter Stadler, Mario Mörl,
- **Alexander Westermann**, Institute for Molecular Infection Biology, University of Wuerzburg, Wuerzburg, Germany. “*Dual RNA-Seq of Host and Pathogen*” Alexander J. Westermann, Leon N. Schulte, Konrad U. Förstner, Steve Hoffmann, Peter F. Stadler and Jörg Vogel.

2012 Rustbelt RNA Meeting October 19-20, 2012

The Crowne Plaza in downtown Dayton, OH was the venue for the Rustbelt RNA Meeting (RRM2012) held October 19-20, 2012. The 185 participants drawn from research groups throughout the Midwest included 34 PIs, 140 graduate and postdoctoral trainees and 11 undergraduates. The meeting was organized by co-Chairs Ahmad Khalil (Case Western Reserve University) and Subha Das (Carnegie Mellon University), and co-Vice Chairs Jane Jackman (The Ohio State University) and Kristian Baker (Case Western Reserve University). The broad session topics which covered critical aspects of pre-mRNA splicing and translational control, gene



regulation and expression, nucleic acid structures and regulation, transfer and other non-coding RNAs, was perfectly fitting with the diverse research of the participants. In accordance with the tradition of the Rustbelt RNA meetings, presentations were by trainees (25 talks). The Keynote lecture, “Adventures in Personal Genomics and Whole Omics Profiling” was presented on the evening of the 19th by Michael Snyder (Stanford University). Two new investigators, Cheryl Thompson and Kausik Chakrabarti also presented their work as platform presentations at the end of the conference. The late evening and night of the 19th was devoted to two sessions in which 85 posters were presented.

The sponsorship from the RNA Society along with some additional funds was applied towards trainee awards. The awards for the best oral presentations went to:

- **Chase Weidmann** (graduate student, Aaron Goldstrohm lab, University of Michigan)
- **Jennifer Wilcox** (graduate student, Phil Bevilacqua lab, Penn State)
- **Maryanne Rubio** (postdoc, Juan Alfonzo lab, OSU)

The awards for best poster were won by:

- **Stella Lai** (graduate student, Mark Foster lab, OSU)
- **Sarah Choudury** (undergraduate student, Jane Jackman lab, OSU)
- **Nathan Raynard** (graduate student, Aaron Goldstrohm lab, University of Michigan)

If you wish to learn more about the Rustbelt RNA Meeting, please visit www.rustbelttrna.org. The organizers of the 2012 meeting would like to acknowledge generous funding from the National Science Foundation and academic sponsors including the RNA Society, The Ohio State University Center for RNA Biology, Nationwide Children’s, Case Western Reserve University School of Medicine, Carnegie University Center for Nucleic Acids Science & Technology, Cleveland State University Center for Gene Regulation in Health & Disease, and Wright State University.



RRM2012 Prizes Winners

L to R: **Subha R. Das, Kristian Baker, Sarah Choudury, Maryanne Rubio, Nathan Raynard, Jennifer Wilcox, Chase Weidmann, Jane Jackman.** (Not shown : Ahmad Khalil and Stella Lai)

XXIV tRNA Conference December 2 - 6, 2012

The XXIV tRNA conference took place in Chile from December 2-6, and attracted 200 attendees from all over the world. Sessions covered a wide range of tRNA related topics all the way from the chemistry of modification to the development of new therapeutics for a variety of diseases. For those interested the abstract book is available for free download at:

<http://www.trna2012.cl/images/XXIV%20tRNA%20Conference.pdf>

The next tRNA meeting is already scheduled and will take place from September 21-25, 2014 in Kyllini, Greece.



The funds provided by the RNA Society were combined with donations from other sponsors to fund a number of travel awards and poster prizes.

Student travel awards:

- **Patrick Thiaville** - de Crécy-Lagard Lab, University of Florida
- **Andrew Hadd** - Perona Lab, Oregon Health and Science University
- **Julie Phillips** - Ardell Lab, UC Merced
- **Jamie Abbott** - Francklyn Lab, University of Vermont
- **Carolin Aldinger** - Igloi Lab, University of Freiburg
- **Medha Raina** - Ibba Lab, Ohio State University
- **Ilya Osterman** - Sergiev Lab, Moscow State University

Poster prizes:

- **My-Nuong Vo** - Schimmel-Yang Lab, Scripps “*Monomer-dimer equilibrium of a human tRNA synthetase is a functional switch for cell-signaling and aminoacylation activities*”
- **Kan Kobayashi** - Nureki Lab, University of Tokyo “*Structural basis for translation termination by archaeal RF1 and GTP-bound EF1 α complex*”
- **Phanelie Perche-Letuvee** - Atta Lab, CNRS Grenoble “*Pyrococcus abyssi TYWI is a tRNA-modifying enzyme with two [4Fe-4S]⁺2 clusters that bind the two co-factors: SAM (S-Adenosyl-L-methionine) and pyruvate*”

Upcoming Meetings of Interest :

Joseph Gall 85th Birthday Symposium

April 12-14, 2013

Baltimore, Maryland

<http://sites.google.com/site/gallsymposium2013>

This celebration will be held at the Carnegie Institution Department of Embryology in Baltimore MD. To register please send email to clewis@princeton.edu

Organized by Susan Gerbi, Ji-Long Liu, Zehra Nizami* Alison Singer* and Virginia Zakian (* denotes student organizer)

EMBO Conference on Eukaryotic RNA Turnover: From Structural Insights to Diseases

April 21-24, 2013

Strasbourg France

<http://events.embo.org/13-rna-turnover/>

Eukaryotic RNA turnover is increasingly recognized as a key regulatory step of gene expression and an important quality control mechanism. The structural organization of the RNA decay machinery and the coordinated action of ribonucleases are subject of intense studies. This conference will present the latest results in this area with a specific focus on the contribution of altered RNA degradation to human diseases.

This meeting aims to spur discussions on the latest results in the field of eukaryotic RNA turnover including medical implications of RNA degradation and its role in genetic diseases, integration of RNA decay in cellular functions and networks, transcriptome-wide analyses of mRNA decay, systems biology



approaches assessing the contribution of RNA turnover to global gene expression programs, identity and atomic structures of RNA decay factors, as well as on the organization of these factors in complexes and pathways and their mode of regulation. The diversity of mechanisms used by unicellular and multicellular organisms, including surveillance pathways, will be explored. The conference will provide a platform for presenting advances in methods development and the use of interdisciplinary approaches, both from invited speakers and from up to 20 participants selected from abstract submissions. Registration and abstract submission deadline is February 15.

Organizers: Bertrand Séraphin, Georg Stoeklin, and Roberto Gherzi

8th Microsymposium on Small RNAs

May 27-29, 2013

Vienna, Austria

<http://www.imba.oeaw.ac.at/microsymposium>

The Eighth Microsymposium will take place at IMBA, the Institute of Molecular Biotechnology of the Austrian Academy of Sciences in **May 2013**, from **Monday 27th** in the morning to **Wednesday 29th** in the evening. The Microsymposium features a **Workshop for PhD students**. Please send us your abstract for an oral presentation **not later than March 31st**. Selected students will be invited with all expenses covered. The best presentation will be awarded. The Microsymposium also welcomes **Posters** – 70 x 100 cm. Registration **deadline is April 30th**. For those presenting posters no fellowships will be available.

Keynote Speakers: Narry Kim and Craig Mello (to be confirmed).

Organizers: Javier Martinez, Julius Brennecke, and Stefan Ameres

2013 Gordon Research Conference on Nucleic Acids

June 2-7, 2013

Biddeford, ME

<http://www.grc.org/programs.aspx?year=2013&program=nucleic>

The Gordon Research Conference on Nucleic Acids was first established more than 50 years ago. Since that time the field of nucleic acids has exploded with tremendous discoveries regarding the chemistry, functional potential and biologic significance of nucleic acids. Through these advances the Nucleic Acids GRC has provided a critical forum for discussion of new ideas by promoting interaction between investigators specializing in all the diverse areas of nucleic acids research. In particular, the past decade has brought renewed recognition and excitement regarding the breadth of nucleic acid functions in cells (i.e. all classes of non-coding RNAs) and the extent to which various steps in nucleic acids biosynthesis and processing are mechanistically intertwined. The 2013 meeting of the Nucleic Acids GRC will highlight recent advances in the areas of DNA and RNA biology, biochemistry and biophysics with a view toward identifying emerging concepts and technologies in these fields. Specific topics of discussion will include: Nucleic acid structure and catalysis, Transcription and chromatin dynamics, Ribosome function regulation, DNA replication, RNA processing and export, Genomic integrity, Non-coding RNA, and Co- and Post-transcriptional Regulation. Young scientists, or those newly engaged in nucleic acids research, will be particularly encouraged to attend and present, with time built into the schedule for short talks selected from submitted abstracts. Applications must be submitted by May 5, 2013.

Organizers: Rachel Green and Karolin Luger



Ribosomes 2013

July 9-12, 2013

Napa Valley, CA

<http://www.zingconferences.com/index.cfm?page=conference&intConferenceID=105>

Protein synthesis by the ribosome plays a central role in connecting genotypes to phenotypes in biology. Ribosomes 2013 continues the long tradition of bringing together scientists who are unraveling ribosome function and structure. The 2013 meeting brings a new era in the study of the ribosome, with the accelerated pace of structural and mechanistic discoveries of how the ribosome is assembled, how it synthesizes proteins, and how it is regulated. Understanding all these processes at the molecular level is the major theme of this conference. Abstract submission deadlines are March 8 (for talks) and May 9 (for posters).

Organizers: Jamie Cate and Jamie Williamson

9th International Retroviral Nucleocapsid (NC) Symposium

August 25-28, 2013

Montreal, Quebec, Canada

<http://www.ncsymposium2013.org/>

This 9th International Retroviral Nucleocapsid Protein and Assembly Symposium will be held in Montreal, Quebec, Canada, from the 25th to 28th of August, 2013. Montreal, known as the city of festivals, at this time is gloriously warm and enjoyed by visitors from all around the world. It is a culturally diverse city with the two major languages, French and English, spoken on the streets, in stores and in restaurants. The World Film Festival coincides with the timing of this meeting.

The conference has historically focused on the multiple roles of Nucleocapsid (NC) protein of retroviruses, which is involved in the synthesis, maintenance and integration of proviral DNA and in virus particle assembly. Its role as a chaperone protein is perhaps its most important function as it promotes reverse transcription and coats the retroviral genomic RNAs. In the context of Gag, NC promotes viral RNA assembly and dimerization and interacts with several host cell factors. It is therefore a prime target for anti-HIV-1 therapy. In the 2013 edition of the meeting in Montreal, we have extended the focus of the meeting to include the latest developments in viral RNA function, metabolism and trafficking, restriction factors and on the control of viral assembly. In addition, we have invited speakers with topical expertise in structural biology and anti-viral therapies to round out the meeting and to recognize where the virology field is moving in the future.

Organizers: Andrew Mouland, Karin Musier-Forsyth, Robert Gorelick, Larry Kleiman, Chen Liang, and Michael Laughrea

Positions available

Sign up for our [jobs feed](#) and receive email notification when we post to this page.

[Postdoc Position in RNA Synthetic Biology](#)

Posted on [January 10, 2013](#)

The Seelig lab at the University of Washington is inviting applications for a postdoctoral research position in RNA synthetic biology. The goal of our project is to engineer synthetic gene regulatory networks that can be used to control and understand cellular decision-making in mammalian cells. To this end we take advantage of existing pathways for RNA-based gene regulation, including the microRNA, RNA interference, and RNA splicing pathways.



We are looking for a candidate with a strong background in molecular/cellular biology. Expertise with cell culture, time-lapse microscopy and RNA biochemistry are a plus. Applicants must have recently earned a doctoral degree in Bioengineering, Biology, Biochemistry, Biophysics or a related discipline. Strong communication skills, good problem solving skills and independent thinking are required.

Interested individuals should send their CV, one representative publication, and a list of three references (with e-mail addresses and phone numbers) to Prof. Georg Seelig, gseelig@u.washington.edu.

Postdoctoral position at The Scripps Research Institute in La Jolla, California

Posted on [January 4, 2013](#)

A postdoctoral position is available immediately at The Scripps Research Institute in the Department of Chemical Physiology in Marty Fedor's research group to investigate RNA-mediated gene regulation. This postdoctoral project involves the study of regulatory RNAs, known as riboswitches, that integrate information from a variety of chemical signals to regulate gene expression in response to the metabolic state of the cell. The position provides an opportunity for an energetic RNA scientist to learn how to apply quantitative approaches to investigate RNA-mediated reactions in vivo.

The ideal candidate will have a recent Ph.D. in Molecular Biology or Biochemistry and laboratory experience working with RNA. Salary support at a level commensurate with experience is assured for one year, with funds likely to be available for subsequent years depending on mutual agreement. To apply for this position, please send your CV, the names of three references, and a brief statement of your scientific goals to mfedor@scripps.edu.

Postdoctoral Position: Small RNA Trafficking

Posted on [December 11, 2012](#)

UMASS Medical School/ RNA THERAPEUTICS INSTITUTE, Worcester, MA Postdoctoral Position: small RNA trafficking

A postdoctoral research position is available in the laboratory of Anastasia Khvorova (RNA Therapeutic Institute, UMASS Medical School) to discover, characterize and adapt mechanisms of small RNA extracellular and intracellular trafficking for development of novel classes of oligonucleotide drugs. A serious limitation in realizing the potential of oligonucleotide based therapies has been the exceedingly inefficient transit of oligonucleotides from outside cells to the intracellular compartments where the biologically relevant activity happens. On the other hand, there are multiple lines of evidence supporting the notion that nature has implemented evolutionarily conserved mechanisms and pathways for efficiently trafficking small RNAs across cellular boundaries.

The objective of future studies will be the systematic evaluation of mechanisms of cellular uptake of different classes of oligonucleotides and their comparison to mechanisms of native RNA trafficking using a combination of experimental approaches, including advanced RNA chemistry and high temporal and spatial resolution microscopy in living cells, Mass spectrometry, cell biology and others. The successful candidate will work closely with the UMASS imaging group and receive training in RNA chemistry, biochemistry, cell biology and pre-clinical development

MINIMUM QUALIFICATIONS:

- Applicants must have (or expect to obtain shortly) a Ph.D. in Chemistry, Biochemistry, Cell Biology, Molecular Biology or a related field, be independent and collaborative.
- Research experience in nucleic acid molecular and cell biology is a plus.
- Be up to date in the current literature in the field, and participate in grant and manuscript writing.

RNA Therapeutics Institute. RTI is co-directed by Craig Mello, Melissa Moore, Phil Zamore and Victor Ambros and is located in the brand new Sherman Center (January 2013 opening) (<http://www.umassmed.edu/rti/index.aspx>). By interweaving basic and applied nucleic acid scientists with clinicians dedicated to finding new cures, RTI goal is to create



a new paradigm for organizing molecular research that enables the rapid application of new biological discoveries to solutions for unmet challenges in human health. Be part of vivid scientific community with major leaders in the RNA field to build a novel model for scientific exploration

CONTACT: please send your CV and contact information for three references to Anastasia.khvorova@umassmed.edu

Work on Preclinical Development of Nucleic Acid Therapeutics

Posted on [December 11, 2012](#)

UMASS Medical School/ RNA THERAPEUTICS INstitute, Worcester, MA

Postdoctoral Position: RNAi preclinical development

A postdoctoral research position is available in the laboratory of Anastasia Khvorova (RNA Therapeutic Institute) to work on preclinical development of nucleic acid therapeutics. Oligonucleotides represent a new class of drugs, which have the promise to become a major class of future therapeutics. There are several classes of oligonucleotides which can efficiently silence genes in various tissues with acceptable level of toxicity. There are also new chemistries being developed to further improve oligonucleotide tissue distribution and cellular uptake.

The successful candidate will be a key part of an intra-disciplinary team working with biologists and chemists to develop novel types of therapeutics for treatment of neurological disease, liver disease and orphan indications. The work will include compounds identification, screening, characterization, in vivo efficacy and PK/PD studies, novel assays development etc. In addition exposure and training in nucleic acid pre-clinical development, project management etc will be provided.

MINIMUM QUALIFICATIONS:

- Applicants must have (or expect to obtain shortly) a Ph.D. in Chemistry, Biochemistry, Cell Biology, Molecular Biology or a related field, be independent and collaborative.
- Previous experience in cellular biology or/and pharmacology is a plus.
- Be up to date in the current literature in the field, and participate in grant and manuscript writing.

RNA Therapeutics Institute. RTI is co-directed by Craig Mello, Melissa Moore, Phil Zamore and Victor Ambros and is located in the brand new Sherman Center (January 2013 opening) (<http://www.umassmed.edu/rti/index.aspx>). By interweaving basic and applied nucleic acid scientists with clinicians dedicated to finding new cures, RTI goal is to create a new paradigm for organizing molecular research that enables the rapid application of new biological discoveries to solutions for unmet challenges in human health. Be part of vivid scientific community with major leaders in the RNA field to build a novel model for scientific exploration

CONTACT: please send your CV and contact information for three references to Anastasia.khvorova@umassmed.edu

Develop and Characterize Novel RNA Chemistries to Promote Efficient Oligonucleotide Internalization and Tissue Distribution

Posted on [December 11, 2012](#)

UMASS Medical School/ RNA THERAPEUTICS INstitute, Worcester, MA

Postdoctoral Position: RNAi Medicinal Chemistry/ RNA oligonucleotide chemistry

A postdoctoral research position is available in the laboratory of Anastasia Khvorova (RNA Therapeutic Institute, UMASS Medical School) to develop and characterize novel RNA chemistries to promote efficient oligonucleotide internalization and tissue distribution. Oligonucleotides represent a new class of drugs, which have the promise to become a major class of future therapeutics. There are several chemistries and formulations developed by us and others that effectively support oligo internalization and favorable PK/PD. In most cases in vivo efficacy is limited by (1) poor PK (2) inefficient tissue distribution (3) compound entrapment in biologically inactive intracellular compartments. The objective of future studies will be development of novel chemistries, which promote receptor mediated cellular



internalization and/ or endosomal escape. The successful candidate will be responsible for the design and synthesis of novel RNA precursors, optimization of RNA synthesis and conjugation protocols and interface with the biology part of the lab. In addition, exposure to pre-clinical development programs and oligonucleotide manufacturing will be available.

MINIMUM QUALIFICATIONS:

- Applicants must have (or expect to obtain shortly) a Ph.D. in Chemistry, Organic Chemistry Biochemistry, Cell Biology, Molecular Biology or a related field, be independent and collaborative.
- Research experience in nucleic acid / oligonucleotide chemistry is required.
- Be up to date in the current literature in the field, and participate in grant and manuscript writing.

RNA Therapeutics Institute. RTI is co-directed by Craig Mello, Melissa Moore, Phil Zamore and Victor Ambros and is located in the brand new Sherman Center (January 2013 opening) (<http://www.umassmed.edu/rti/index.aspx>). By interweaving basic and applied nucleic acid scientists with clinicians dedicated to finding new cures, RTI goal is to create a new paradigm for organizing molecular research that enables the rapid application of new biological discoveries to solutions for unmet challenges in human health. Be part of vivid scientific community with major leaders in the RNA field to build a novel model for scientific exploration

CONTACT: please send your CV and contact information for three references to Anastasia.khvorova@umassmed.edu

Uncover Novel RNA Regulatory Mechanisms

Posted on [December 5, 2012](#)

We are looking for postdocs to join the Jaffrey lab at Weill Cornell Medical College in New York City. The Jaffrey lab uses chemical biology, molecular biology, next-generation sequencing, and imaging approaches to uncover novel RNA regulatory mechanisms.

Recently, we discovered that mRNA contains a highly prevalent post-translational modification on adenosine, which results in N6-methyl-adenosine (m6A). We discovered m6A in mRNA using novel next-generation sequencing approaches (Meyer, K.D., Saletore, Y., Zumbo, P., Elemento, O., Mason, C.E., Jaffrey, S.R. Comprehensive analysis of mRNA methylation reveals pervasive adenosine methylation in 3' UTRs, *Cell*, 149:1635-46, 2012). Our findings suggest that mRNA is subjected to reversible post-transcriptional modifications analogous to phosphorylation in proteins. Indeed, we and others also showed that a highly prevalent obesity risk gene in humans, the fat mass and obesity-associated protein gene (FTO), encodes an m6A demethylase. The medical consequences of the FTO mutation indicate the importance of m6A as a regulator of physiological processes.

Our major goal is to identify how adenosine methylation affects target mRNAs. We are looking for postdocs to spearhead projects related to identifying how signaling pathways dynamically regulate m6A levels in response to signaling pathways, and how m6A affects the fate of mRNA. We are also identifying novel m6A-binding proteins, and using these proteins to identify the functional roles of m6A in cells. We are also identifying novel enzymes and pathways that catalyze adenosine methylation and m6A demethylation. We are currently using next-generation sequencing, bioinformatics, chemical biology, and molecular biology approaches to address these and other key questions regarding m6A in mRNA regulation.

The Jaffrey laboratory uses a variety of established and novel molecular biological, biochemical, fluorescence microscopy, and fluorescence techniques. Therefore, the laboratory environment provides an opportunity to obtain broad and interdisciplinary training.

Cornell University's Weill Medical College is located in Manhattan's Upper East Side, immediately adjacent to the Sloan Kettering Institute and Rockefeller University. This "tri-institutional campus" includes several hundred principal investigators and postdocs, and has one of the highest densities of biomedical scientists in the world. This rich scientific environment provides unique and unparalleled research training opportunities, including research seminars given by leaders in science from throughout the world, opportunities for collaborations, exposure to diverse research programs, and highly sophisticated core facilities.



More information about the lab is available on our website: www.jaffreylab.org. Questions and/or applications, comprising a CV, statement of research interests, and the date that you could start a postdoctoral position, should be e-mailed to: Dr. Samie R. Jaffrey, Cornell University, Weill Medical College, jaffreylab2@gmail.com. Applicants should not mail, call, or send applications to any other email address.

Charting the Interface Between Metabolic States and Gene Regulation in Heart Disease

Posted on [December 5, 2012](#)

The John Curtin School of Medical Research, The Australian National University is looking for a PhD student with strong talent and motivation to do first class basic research in a project entitled 'Charting the interface between metabolic states and gene regulation in heart disease'.

Cells constantly respond to external challenges by changes in gene expression as well as metabolic state. How cells coordinate this interplay between metabolism and genes is a key challenge for future research. We investigate the novel concept of widespread interactions between major components of gene expression (RNA) and metabolism (Enzymes and Metabolites) to form coordinative REM networks. Perturbations of gene regulation as well as metabolism manifest themselves in serious and common diseases including diabetes and obesity, cancer or cardiac disease.

The PhD student will be based in the RNA Biology Group headed by T Preiss at The John Curtin School of Medical Research at ANU, Canberra, Australia and will participate in a collaborative project with MW Hentze at The European Molecular Biology Laboratory, Heidelberg, Germany, to tackle the relevance of REM networks in cardiac disease. Mass spectrometry will be employed to determine proteins in complex mixtures (proteomics). Similarly, next generation sequencing technology will be used to characterise gene regulation at the level of RNA.

You will:

- Work on an exciting scientific project with internationally renowned experts in the field
- Receive scholarship funding for 3 – 3.5 years
- Enjoy the benefits of a state-of-the-art scientific research school with first-class facilities.
- Have opportunities to meet and collaborate with international academics and attend conferences.
- Benefit from practical, academic and professional training at a world-class research-intensive university

Eligibility: Australian BSc(Honours) at H1 standard or international equivalent in biology, biomedicine, or related science. Practical experience in the lab working on a scientific project. Excellent English language skills. Expression of interest documents required (1) Curriculum vitae (2) Summary of previous research (3) Copy of academic transcripts

More information about the program can be obtained from medical.gradprog@anu.edu.au

Expression of interest deadline: 14th December

PhD and Postdoc Positions in Post-Transcriptional Regulation of Gene Expression

Posted on [December 5, 2012](#)

The University of Regensburg and the Bavarian Center for Molecular Biosystems (BioSysNet) is inviting applications for PhD and Postdoc positions in post-transcriptional regulation of gene expression

BioSysNet (www.biosysnet.de) pools and strengthens biosystems research in Bavaria, including a network for molecular biosystems (BioSysM) that will encompass up to 25 projects at different universities and clinics. The Center aims to train a new generation of researchers that think interdisciplinary and will decisively shape the future of life sciences in Germany and Europe.

We seek exceptionally endowed candidates for PhD and Postdoc positions with a strong background in molecular biology and biochemistry to the earliest possible date. Expertise in tissue culture and bioinformatic skills are desired.

Successful candidates will be part of a young research team located at the University of Regensburg, a



UNESCO World Heritage Site. We offer a well equipped research environment with access to all modern technology including mass spectrometry, confocal microscopy and deep sequencing. Our aim is to understand in molecular detail how RNA-binding proteins and small upstream open reading frames control translation in eukaryotic organisms. PhD students will have access to the Regensburg International Graduate School of Life Sciences (RIGeL).

Applications received by January 15th, 2013 will be considered for interview until the positions are filled. Disabled candidates with equivalent qualifications will receive preferential consideration. The University of Regensburg is an equal opportunity employer and is seeking to increase the number of female scientists.

Please submit your application including a CV, motivation letter with research interests and experience, publication list, and addresses of three references to:

Jan.Medenbach@vkl.uni-regensburg.de

Biochemistry Laboratory Research Manager-Agris Lab

Posted on [December 5, 2012](#)

Biochemistry Laboratory Research Manager-Agris Lab
The RNA Institute at University at Albany

Areas of research include studies of RNA/RNA and RNA/protein and RNA/small molecule interactions involved in the control of gene expression with applications to specific human health issues. This position supports the research of Dr. Paul Agris, Professor of Biological Sciences and Chemistry and Director of The RNA Institute. The incumbent will oversee and manage all aspects of the academic lab and maintain lab infrastructure related to the operation of an RNA specialized lab. Responsibilities will include, but are not limited to, ordering lab supplies and consumables, maintaining biochemical techniques particular to the lab, maintain an organized lab environment, supervising and training students, assisting in manuscript and grant writing, and conducting an independent research project. Qualifications: BS in biological or biochemical fields plus four years experience beyond the bachelor's as a technician and/or lab manager in an academic and/or industrial biochemical lab. Preferred two years of research/lab management experience beyond the master's degree.

Vacancy announcement in its entirety and apply online at

<http://albany.interviewexchange.com/jobofferdetails.jsp?JOBID=36198>

All applicants must possess excellent organizational, verbal, written and interpersonal skills. The successful applicant will have demonstrated independence and experience in supervision of others. In applying candidates must address their ability to work with and instruct a culturally diverse population. Competitive salary and benefits. Application review begins immediately and continues until position is filled.

The University at Albany is an EO/AA/IRCA/ADA Employer.

Post-Doctoral Position for Studying RNA Turnover in the Collier Lab

Posted on [October 31, 2012](#)

We are looking for a postdoctoral scientist to join our research team in the Center for RNA Molecular Biology at Case Western Reserve University. The Collier lab focuses on the relationship between mRNA turnover and mRNA translation in eukaryotic cells. The turnover of mRNA is intimately connected to the process of protein synthesis. Importantly, work from our lab over the past five years has shown that key factors in promoting mRNA decay do so by affecting ribosome function. We continue to investigate the interconnection of mRNA stability and translation and are developing new methodologies and utilizing emerging technologies to monitor these events globally.

The Center for RNA Molecular Biology is a collection of research laboratories with a strong focus on post-transcriptional regulation. Postdoctoral scientist in the RNA Center benefit from the close interactions between faculty and students all sharing similar interests. Moreover, the RNA Center is the home of the RNA Journal and is host to world-class seminar speakers from all aspect of RNA biology and chemistry.



Candidates should have a PhD in Biochemistry, Molecular Biology, or related fields, strong technical and communication skills, and an established publication record. Experience with biochemistry and/or molecular biology is preferred. Past experience working in RNA is an asset. If you are interested in joining our research team, please visit our web site (www.collelab.org) for additional information. To apply for the position, please submit a CV, a statement of research interest and career goals, and the names and contact information for three references to Jeff Collier, jmc71@case.edu.

Post-Doctoral Fellow Position with The European Molecular Biology Laboratory (EMBL)

Posted on [October 29, 2012](#)

The European Molecular Biology Laboratory (EMBL) is one of the highest ranked scientific research organisations in the world. The Headquarters Laboratory is located in Heidelberg (Germany) and the outstations are in Grenoble (France), Hamburg (Germany), Hinxton (UK) and Monterotondo (Italy).

RNA-protein interactions are a largely uncharted territory of biology, yet play a major part in gene regulation. Recent progress in quantitative mass spectrometry is opening the door to the systematic mapping of RNA-binding proteins (RBPs); it is complemented by immunoprecipitation and high-throughput sequencing (CLiP, iCLIP, PAR-CLiP). The Hentze group is at the forefront of applying these approaches to biological areas that range from medically-relevant RBPs (NMD, 3'end processing) to RBPs involved in the regulation of metabolism (Castello*, Fischer* et al. (2012), Cell 149, 1393-1406). For computational scientists, this new field of biology offers exciting opportunities, ranging from the development of statistical algorithms for primary analysis of new data to data integration and systems-level inference.

We are looking for a PhD-level computational scientist who is interested in being actively involved in the design and analysis of new experiments in quantitative mass spectrometry, CLiP and their derivatives. He/she will address novel questions in the intersections of applied statistics, machine learning, bioinformatics and systems biology. He/she will be practically responsible for the design and execution of cutting-edge data analysis workflows for the experimental projects in the group.

The position is situated in the group of Matthias Hentze at the EMBL in Heidelberg, Germany, with a joint appointment with the group of Wolfgang Huber in the Genome Biology Unit. Medically-relevant RBP projects emerge from collaborations within the Molecular Medicine Partnership Unit (MMPU) of EMBL and the University of Heidelberg.

Qualifications and Experience

The successful candidate should hold a PhD in a quantitative or computational discipline (e.g. bioinformatics, physics, computer science, statistics). Ability for multidisciplinary work covering applied statistics, bioinformatics, the biology of gene expression, and experimental technologies as well as strong mathematical and computational skills are mandatory. Experience in data analysis and familiarity with data analysis languages (R, Matlab, Python) are expected. A good publication record (which can include academic papers and scientific software) is required.

An ability to independently take responsibility over his/her own project, as well as strong teamwork and communication skills, are required as well as reliability, attention to detail and effective time management. Motivation to work in a multidisciplinary and international environment is fundamental to this position. Good communication and presentation skills and fluency in English are expected.

The successful candidate will benefit from the joint activities within the Hentze and Huber groups, the valuable knowledge transfer among the participants and the stimulating international and interdisciplinary environment at EMBL.

Application Instructions

Please apply online through www.embl.org/jobs

Additional Information

Contract duration: 2 years, closing date: 15 December 2012.

EMBL is an inclusive, equal opportunity employer offering attractive conditions and benefits appropriate to an international research organisation. Please note that appointments on fixed term contracts can be renewed, depending on circumstances at the time of the review.



RNA PROCESSING DURING DEVELOPMENT AND DISEASE

Posted on [October 29, 2012](#)

“RNA PROCESSING DURING DEVELOPMENT AND DISEASE”

A post-doctoral position is available in the Department of Biochemistry at the University of Illinois at Urbana-Champaign starting January 2013 to study the mechanisms and role of RNA processing in mammalian liver development and disease. Research in the laboratory will focus on investigating both the alternative splicing and alternative polyadenylation networks in liver. We will utilize inter-disciplinary approaches that combine mouse genetics, biochemistry, and genome-wide analyses (e.g. RNA-seq, CLIP-Seq and splicing-sensitive microarrays) to understand the mechanisms through which alternative splicing drives critical developmental transitions in liver. We also intend to determine how RNA processing impacts metabolic functions of the liver and how crosstalk between microRNAs and RNA binding proteins integrate with coordinated gene expression changes that propel normal liver development or disease.

Highly motivated candidates with a strong interest in RNA biology, other aspects of gene regulation, and/or developmental biology are encouraged to apply. Experience with mouse genetics or mammalian cell-based approaches is a plus but not required. Interested applicants should respond electronically with curriculum vitae, statement of career interests, and contact information for three references to Aunash Kalsotra, PhD at kalsotra@illinois.edu and kalsotra33@gmail.com.

Post-Doctoral Fellow Position in Biophysical Studies of RNA

Posted on [October 29, 2012](#)

A post-doctoral fellow position is available in biophysical studies of RNA (UV-thermal melts, CD-spectroscopy, DSC, ITC, X-ray diffraction and SAXS). The projects are NIH funded. Previous experience in RNA biochemistry and thermal stability studies would be major advantage along with a solid grasp of the fundamentals of thermodynamics. Experience with crystallography and SAXS are not essential.

Recent graduates with a strong background in RNA production and purification and an interest in learning crystallography are also encouraged to apply. Start date of January 15, 2013 (negotiable) and duration of 4 years. The position requires a Ph.D. at time of hire with prior experience in RNA or protein biochemistry, molecular biology, and/or biophysical methods.

The candidate must have clear oral and written communication skills in the English language and the desire to work as part of a highly motivated team. Applications should be received by December 1, 2012 for full consideration. Interested individuals send to blaine-mooers@ouhsc.edu (1) a cover letter that includes research interests and future goals, (2) a CV that includes a list of publications and presentations and a list of experimental expertise and skills relevant to this position, and (3) contact information (including e-mail addresses) for three references able to assess your scientific abilities, experience, and potential.

Ouhsc is an Equal Opportunity/Affirmative Action Employer. Ouhsc does background checks on all final candidates.

