# **RNA Society Newsletter**

Aug 2020

# **RNA Society**

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#### Comments:

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## From the Desk of the President, **Anna Marie Pyle**

This is a challenging, but rewarding time for RNA scientists, as our community works together to



understand the underlying biology of the global pandemic, to develop new antiviral strategies and create entirely new kinds of vaccines for protecting humanity. At the same time, the mutual within support our community has helped to maintain research programs in

all areas of RNA Science and to ensure that our members have active forums for exchanging ideas, protocols and reagents. (cont p.2)

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In spite of the constraints imposed by the pandemic, our annual and affiliated meetings pivoted to online formats that presented challenges and opportunities that promise to change the way that we communicate in the future. RNA2020 was a surprising success that resulted in a doubling of the RNA society membership and a vibrant virtual meeting filled with exciting talks, poster sessions and discussion. This accomplishment was made possible through the decisive actions of the meeting organizers, member volunteers and meeting staff, for which I am very grateful. I also appreciate your extensive member feedback on the meeting, in which there was strong support for continued on-line content, even for future meetings that are held in There are several reasons that online person. meeting content is likely here to stay: First, it was widely believed that the talks were high in quality and viewed by more people. Second, online participation inherently improved inclusivity, which is a central goal of our society. Remote participation enabled RNA scientists to participate regardless of their travel budget, family situation or career stage. Some of the most vocal respondents were caregivers of young children and elderly relatives, who were grateful that they could finally participate in our meeting. We still have much work to do, as session discussion formats need improvement and we must develop other opportunities for engagement. But RNA2021 is in good hands, as organizers are already planning an outstanding event that builds on our decades of shared experience.

While we have overcome significant challenges this year, there are many areas that require our immediate attention. We must build a more diverse and equitable RNA Society, calling on all our members to help ensure that this goal is met. We must maintain a strong financial foundation to enhance opportunities for our members, particularly our students who represent the future of RNA science. And we must support our wonderful *RNA Journal* in the face of changes to the publishing industry. But I am optimistic that we will meet these challenges, and I feel fortunate to participate during this remarkable time of growth and change in our community.

With best wishes from your President, Anna Marie Pyle (anna.pyle@yale.edu)

### Notes on RNA 2020 On-line The Organizers

Thanks to everyone who made the first ever online RNA 2020 meeting a success! Although we were not able to meet in Vancouver, the 25<sup>th</sup> Annual Meeting of the RNA Society featured a packed week of recorded talks and posters. As the organizers were finalizing the program, we knew how important the annual meeting is for the international RNA scientific community, especially as a showcase for the work of our junior scientists.

We did not anticipate how many of you would submit new poster abstracts and register for the meeting! In the end, more than 3,000 participants – the highest number of any RNA Society meeting – collectively watched 440,000 minutes of video and viewed almost 700 posters. Zoom discussions were improvised, slack channels were opened, and the tweets kept the action going. It was your outpouring of enthusiasm, good will, scientific engagement and optimism that turned online content into a meeting.

Highlights of the meeting were keynote talks by **Jack Szostak** (Harvard Medical School) on RNA chemistry and the origins of life, and by **Melissa Moore** (Moderna Therapeutics) on making mRNA a drug and a tool for scientific discovery. The keynote talks were co-sponsored by the International Union of Biochemistry and



Molecular Biology (IUBMB), in honor of the 50<sup>th</sup> Jubilee of this scientific society. This first collaboration with IUBMB serendipitously turned into a wonderful opportunity to connect with scientists all over the world.

The 17 oral sessions covered topics ranging from alternative splicing to long non-coding RNA, RNA modification, therapeutics and new technologies. Another high point of the meeting was the chance to hear award winners **Lori Passmore, Jernej Ule** and **Igor Ulitsky** talk about their work (see p. 6). Although everyone missed the ability to ask questions and interact with presenters in real time, the talks were polished, they were available on demand, and the coffee lines were unusually short.

The organizers warmly thank the many individuals who worked so hard to make the meeting a reality: all of our session chairs, speakers, and poster presenters, plus **Kristian Baker, Benoit Chabot, Evelyn Jabri, Anna Pyle, Gianpiero Di Leva, Olivia Rissland, Ute Kothe,** and **Nancy Greenbaum** of the RNA Society for their constant support and heroic efforts, **Kristin Scheyer** and **Mary McCann** of Simple Meetings for their tireless work and unflappable professionalism, **Glenn Heckard** and **Chad Phillips** for their work on the abstract book and website, and the First Nations Artist **Clayton Gauthier** for his commissioned Raven with RNA. We also thank all of our meeting sponsors, especially our Gold Sponsor, Lexogen.

The world needs RNA research as never before. RNA 2020 displayed the commitment, integrity, creativity and resilience that will carry our RNA community forward through these difficult times. May we meet (again) in Singapore!

The RNA 2020 Organizers Ling-Ling Chen, Michaela Frye, Alain Laederach, Oliver Mühlemann, Stephen Rader and Sarah Woodson



### Upcoming meetings – mark your calendars!

**RNA 2021** June 1<sup>st</sup> to 6<sup>th</sup> 2021 in Singapore at Suntec Singapore Convention & Exhibition Centre in downtown Singapore.

**RNA 2022** May 31<sup>st</sup> to June 5<sup>th</sup> in Boulder, Colorado, USA at University of Colorado in Boulder



# Congratulations RNA 2020 On-line Poster Award Winners



 Benjamin Akiyama (Univ of Colorado)

 Three-dimensional structure of an RNA regulator of viral replication in mosquito-borne flaviviruses

 Jasmine Barra (K U Leuven)

 The integrator complex regulates paraspeckles biogenesis by promoting the isoform switching of the long non-coding RNA NEAT1

 Sung Ho Boo (Korea Univ)

 UPF1 facilitates rapid degradation of m6A-containing mRNAs via interaction with YTHDF2 and PNRC2

 Stefan Bresson (Univ of Edinburgh) - Mechanisms of stress-induced translational reprogramming in budding yeast

 Christina Herrmann (Univ of Basel) - Probing the RNA 3' end landscape

 Image: Imag



 Fabian Hia (Kyoto Univ) - Codon bias confers stability to human mRNAs

 Brady Johnston (Univ of Western Australia) - Developing a FRET-based RNA biosensor

 Dmitry Kretov (Boston Univ)

 Ago2-dependent processing allows miR-451 to evade the global microRNA turnover during erythropoiesis

 Geneva LaForce (Case Western Reserve Univ)

 Intronic polyadenylation evasion leads to reduced mRNA isoform diversity and neurodegeneration



Rea Lardelli (Locana, Inc.) - RNA targeting gene therapy for human genetic diseases John Laver (Univ of Toronto) A neuronal Atlas of RNA-binding protein expression and localization at single-cell resolution Yicheng Long (Univ of Colorado Boulder) - RNA-protein interactions regulate epigenetic silencing Chiara Paolantoni (Univ of Lausanne) m6A restricts axonal growth in Drosophila through modulation of Fragile X mental retardation protein target selection Yekaterina Shulgina (Harvard Univ) A computational screen for alternative genetic codes in all sequenced organisms



# **RNA Society Awards 2020**

The RNA Society is pleased to remind you of the winners of our annual Society awards. Please join us in congratulating all of these award recipients – we hope you enjoyed their presentations at RNA 2020 On-line.

# We are pleased to announce Matthias Hentze as the recipient of the 2020 RNA Society Lifetime Achievement Award.



**Matthias Hentze**, Professor and Director at the European Molecular Biology Laboratory in Heidelberg, Germany, is recognized for his longstanding contributions in the fields of RNA biology and gene regulation. Matthias' early work focused on translation regulation, having identified the first *cis*-acting mRNA regulatory element and RNA binding protein partner during the regulation of iron homeostasis in mammalian cells. More recently, the Hentze lab has developed mRNA interactome capture to identify hundreds of previously uncharacterized RNA-binding proteins – a critical advance in elaborating RNP networks in the cell. Discoveries by the Hentze group have contributed not only to our fundamental understanding of gene control at the level of RNA but have also provided critical insight in the areas of developmental biology, brain function, cancer development and other

diseases. In addition to his significant scientific contributions, Matthias is recognized for his leadership, training and mentoring of hundreds of young scientists within his lab, at EMBL, and throughout Europe.

# We are pleased to announce **Sarah Woodson** has been awarded the **2020 RNA Society Lifetime Service Award**.



**Sarah Woodson**, the T.C. Jenkins Professor of Biophysics at Johns Hopkins University, is recognized for her years of contribution and service to the RNA Society. In addition to her successful research program, Sarah has generously dedicated her time and leadership under a variety of society roles including Director (2006 - 2007), Secretary (2000 – 2002) and, most recently, as society President (2015-2016) - serving the first twoyear presidential term upon the revision of society bylaws and expansion of the role in 2015. During her time as a Society member, Sarah has also served on the Nominating Committee, and in almost every role during one or more of our annual meetings, including mentor, poster judge, Session Chair, and co-organizer (for the 2000 meeting in Madison, Wisconsin, and 2013 meeting in Davos, Switzerland). Sarah continues her long

history of service in her role as lead organizer of RNA2020 this year in Vancouver, Canada.



# The RNA Society is very pleased to announce that Lori Passmore is the recipient of the inaugural 2020 Elisa Izaurralde Award.



**Lori Passmore**, from the MRC Laboratory of Molecular Biology in Cambridge, UK, is the first recipient of the **Elisa Izaurralde Award**. Lori has made outstanding contributions to our understanding of the mechanisms of RNA polyadenylation and deadenylation and their coupling to transcription and translation. Her courage and commitment to long-term challenging projects, along with her contributions to the development of cryo-EM methods, allowed her to functionally reconstitute and determine the structure of large multi-protein complexes involved in nucleic acids metabolism, including the 1MDa cleavage and polyadenylation (CPF) complex, the 0.5 MDa Ccr4-Not deadenylation complex and the

Fanconi anemia ubiquitin ligase complex. A concept emerging from her work is that the regulatory properties of such complexes critically depend on the entangled activities and mutual influences of their components. Lori is also a dedicated mentor and a passionate science educator and activist. She was nominated by Kevin Weeks and Witek Filipowicz.

#### 2020 RNA Society Mid-Career Award Winner, Jernej Ule



**Jernej Ule**, from UCL and The Francis Crick Institute in London, UK, is the recipient of this year's **Mid-Career Award**. Jernej has been instrumental – initially during his PhD in the laboratory of Bob Darnell and then as Group Leader at the LMB – for the development of highly popular CLIP methods to study RNA-Protein and RNA-RNA interactions. These, in turn, have been essential to establish transcriptome-wide positional effects of regulatory factors in alternative splicing decisions (RNA Maps), including proteins involved in neurodegenerative disease. His group also established the widespread occurrence of recursive splicing in the mammalian brain and its regulation by exon junction complexes, as well as the key role that transposable elements play in shaping the evolution of post-transcriptional

mechanisms. Jernej is a dedicated mentor and a generous contributor to the RNA community, including the organization of courses and workshops. He was nominated by Chris Smith.

#### 2020 RNA Early-Career Award Winner, Igor Ulitsky



**Igor Ulitsky**, from the Weizmann Institute of Science in Rehovot, Israel, is the recipient of this year's **Early-Career Award**. Originally trained as a computational biologist, Igor became interested in experimental biology and long non-coding RNAs during his postdoc in David Bartel's lab. Since the establishment of his independent group six years ago, Igor has become a leader in studies to decipher the evolution, biological roles and mechanisms of lncRNAs. Igor's contributions include the demonstration of the role of lncRNAs in neuron regeneration, the role of sequences enriched in Alu repeats in the nuclear localization of lncRNAs and how these molecules modulate the activity of RNA binding proteins such as Pumilio repressors. The group also develops high-throughput methods to assess function

through RNA localization and a rich toolbox for the identification of lncRNA homologs. Igor has also generously contributed to spread the importance of the biology of non-coding RNAs by organizing workshops, meetings and courses.



The RNA Society is pleased to announce the winners of the **2020 RNA Society/Scaringe Awards.** There were three awardees this year; two post-doctoral recipients and one graduate student recipient

#### **RNA Society/Scaringe Post-Doctoral Award**



**Furqan Fazal** is a postdoctoral researcher in the laboratory of **Howard Y. Chang** at Stanford University School of Medicine in Stanford, California. While in the Chang lab, Furqan worked on a method to map RNA secondary structures in different compartments of the cell. The method, APEX-Seq, has excellent spatial and temporal resolution that can be applied to map RNA localization at sites not amenable to biochemical purification. Using this technique, Furqan has discovered that that mRNA isoforms of the same gene often have distinct localization patterns and has identified specific RNA elements that direct localization to distinct nuclear territories and cytoplasmic organelles. Furqan has been awarded the Stanford Genomics Training T32 Award, the prestigious Beckman Fellowship, as well as an NHGRI

K99/R00 award. He has been a member of the RNA Society since 2018.

#### **RNA Society/Scaringe Post-Doctoral Award**



**Sebastian Fica** is a postdoctoral researcher in the laboratory of Professor **Kiyoshi Nagai** at the MRC Laboratory of Molecular Biology in Cambridge, UK. Sebastian has utilized CryoEM to elucidate the three-dimensional structure of splicing complexes at near atomic resolution, which rationalized decades of functional studies. He has solved the structure of the yeast C\* complex, which elucidated how exon ligation proteins remodel the spliceosome after the first catalytic step to promote mRNA synthesis. He then developed a strategy to purify yeast post-catalytic P spliceosomes stalled after exon ligation, which allowed discovery of the mechanism for recognition of the 3' splice site. Sebastian then used this same strategy to purify and solve

the structure of mammalian P complexes, which revealed four novel proteins that associate with spliceosomes only in higher eukaryotes to promote exon ligation. His work was supported by an EMBO Long Term Fellowship and by a Marie Sklodowska Curie Fellowship from the EU. He has been a member of the RNA Society since 2009.

#### **RNA Society/Scaringe Graduate Student Award**



**Robert Battaglia** is a graduate student in the laboratory of Dr. Ailong Ke at Cornell University in Cornell, New York. While working in the Ke lab, Robert first crystalized and elucidated the structure of the guanidine-sensing *ykk* riboswitch using X-ray crystallography. He then worked with an undergraduate, Itai Levi, to establish a genetic screen to identify the genetic conditions that turn on or off a number of orphan riboswitches. Robert than turned his attention to determining the X-ray crystal structures of the Glycine T-box riboswitch bound to its cognate tRNA. He succeeded in obtaining first the structure of the complex with uncharged tRNA (at 2.9 Å resolution), then the structure of the T-box bound to tRNA containing a 2'3'-cyclic

phosphate. The latter mimics a charged tRNA and showed that the T-box riboregulator initially can accommodate the binding of both forms of tRNA, uncharged and charged. He has been a member of the RNA Society since 2017.



## **RNA Society Junior Scientists**

The year 2020 has been a challenge for people worldwide. The novel SARS-CoV2 coronavirus continues to shake up global health and the economy. Intriguingly, the potential hazard of coronaviruses had previously been recognized and global shutdown might have been preventable through more research on RNA viruses. Therefore, we must solve the crisis at hand and be well prepared for potential future pandemics. It is increasingly important for RNA researchers, especially junior researchers, to form and maintain collaborations and support. As the Junior RNA Society Committee, we continue to work on providing platforms for young RNA scientists to connect with each other and share ideas.

This year's RNA congress was held online for the first time; however, this didn't stop junior researchers from presenting a cornucopia of novel research data either as posters or pre-recorded videos. We would also like to specifically thank HackseqRNA for sponsoring a slack channel for young scientists to gather, talk, and share ideas over a drink. Unfortunately, the planned panel discussion on "Overcoming Barriers in Science" featured by the Junior RNA Society Committee couldn't be realized. Therefore, we want to announce that we are working to hold this panel discussion as an online live event (more information on that soon!). These barriers are only being heightened given the current state of the world. From online PhD defenses and delayed postdocs to systemic discrimination, it is critical that we address these acute and chronic issues. We hope you tune in and participate in the discussion on what is disrupting scientific progress and how we can overcome it. We look forward to seeing you all online and hopefully in person at RNA 2021!

Finally, there will be a change in the composition of the Junior RNA Society Committee. For the last five years, we were lucky to have **Dr. Sam Butcher** from the University of Wisconsin-Madison on our team as a supportive member guiding us in our undertakings. As Dr. Butcher leaves, we want to thank him for all his efforts, he will be hard to replace.

Finally, we will be looking for new representatives soon! If you are interested in joining us, reach out! You can keep in touch with us throughout the year via email as well as social media channels: junior\_scientists@rnasociety.org or Liana Boraas – <u>liana.boraas@yale.edu</u> Luc Roberts – <u>luc.roberts@uleth.ca</u> Simon Hoser – <u>Simon.Hoser@i-med.ac</u> Malgorzata Rogalska – Malgorzata.Rogalska@crg.eu



#### Help us build the junior scientist community throughout the year!

Stay connected to your colleagues throughout the year via social media (we're on Facebook and Twitter). We encourage discussions and posts. Feel free to post your successes (such as recently published papers), questions, or celebrate all things science with #FailureFriday.





## From the Desk of the Chief Executive Officer Kristian Baker

Dear colleagues,

It goes without saying that 2020 is a year like no other. COVID-19 has impacted our lives in every possible way - our ability to gather with extended family, co-workers and collaborators; our lab environments and the



research we conduct; how we communicate and share our knowledge and discoveries. Despite the challenges and set-backs, our scientific community has risen to the times and RNA researchers worldwide are showing that, more than ever, they are determined and unified in their efforts to advance our understanding of RNA and its impact on human health.

COVID-19 has also had significant impact on the RNA Society as an organization. Foremost has been in preventing our in-person meeting in Vancouver. There was vast disappointment in being unable to reunite with friends and colleagues to network, foster our junior researchers, advance our knowledge, and enjoy the sights of the

beautiful coastal city. Despite this misfortune, the RNA Society maintained its commitment to promote RNA research and education, and made the unprecedented decision to transition our annual meeting to an on-line event that, in turn, made our science accessible in ways that were previously impossible. COVID-19 presented significant challenges for the RNA Society, but in responding, we demonstrated receptivity to the needs of our community, we were nimble in our ability to pivot, and savvy in the utilization of our resources. During this time, our role as an organization has proven to be more important than ever, and our efforts have been recognized by our members and by the greater scientific community.

#### RNA 2020 goes On-line

The events impacting our annual meeting happened quickly – in a time span of less than three weeks, we moved from *initial* conversations of 'what if' to, on March 19th, having to cancel the meeting due to restrictions imposed by Canadian government on public gatherings. Once that happened, RNA Society leadership (including myself, Anna Pyle, Evelyn Jabri, Sarah Woodson and Benoit Chabot, and in coordination with our meeting planners, Mary McCann and Kristin Scheyer of Simple Meetings) immediately made the decision to transition the in-person meeting to an on-line/virtual event – but the logistics of this first-time endeavor needed to be worked out. We enlisted Benoit Chabot (Chair of our Meetings Committee) and Alain Laederach (RNA 2020 organizer) to serve as our Task Force to research web-based meeting platforms that could serve our needs, and on April 1<sup>st</sup> we entered into a contractual agreement with *Morressier* to host RNA 2020 On-line. Meeting registration was made *complimentary* to current RNA Society members and we extended the poster abstract submission deadline 2 weeks to allow researchers who originally could not attend the meeting in Vancouver an opportunity to share their science via this new platform. The rest of the story is one for the history books – by the time registration closed on May 19<sup>th</sup> (ahead of the May 26<sup>th</sup> meeting start date) we had **3200 registered meeting participants** – almost triple the number typically at our in-person meeting. Additionally, RNA Society membership spiked to an astonishing 3373 members in response to the accessibility of our meeting and remarkable excitement for the event that was amplified through social media channels. Your responses to our efforts were overwhelming and I would like to specifically thank all those who reached out to congratulate the Society and applaud meeting Organizers for their heroic efforts. If you were unable to



participate in RNA 2020 On-line or just want more information about the program, you can find additional details about the meeting in this newsletter.

I would like to thank those of you who took the time to answer the RNA 2020 On-line meeting survey. We had over 1200 responses and hundreds of written comments on the meeting platform and how to improve future virtual events. A condensed summary of survey responses can be found at this link, but I will highlight a couple of important insights here. First and foremost, the vast majority of respondents felt that the quality of the science at the meeting was excellent or above average, and that the individual sessions were very informative an important indicator that the on-line platform provided an effective and robust medium to share our research discoveries. Notably, 63% of responders indicated that they preferred the pre-recorded talks (despite no Q&A) over real-time presentations, due mainly to time zone considerations but also for the benefit of being able to view material on their own schedules and to revisit talks or posters more than once. Despite the tremendously positive response to the meeting, many noted the lack of opportunities for participants to interact (with speakers and with each other) as a significant shortfall, and a strong preference for inclusion of Zoom and/or Slack channels on the meeting platform. While meeting feedback has always served a critical role in helping to shape and improve member experience at our annual meeting, the thoughtful comments and creative suggestions from this year's survey will be especially helpful as RNA 2021 organizers start their process (during continuing uncertain times) and as the Society as a whole recognizes the many benefits of expanding our web-based scientific content.

#### Thank you and congratulations

It is important to acknowledge the many, many individuals who volunteer their time and energy in serving the RNA Society and executing its mission. These volunteers include Council members and Officers, committee chairs and their members, Society program administrators, meeting organizers, our junior scientist leaders and their advisors, and the countless members who work alongside us in carrying out our programing. A comprehensive list of our volunteers and the various Society committees and Programs can be found in the *Thank you to our Volunteers* section of the newsletter - please have a look and take a moment to let these dedicated individuals know that their service to the RNA community is appreciated. This year, however, I think it is important single out the RNA 2020 Meeting Organizers – Sarah Woodson, Alain Laederach, Oliver Muhlemann, Ling-Ling Chen, Michaela Frye, and Stephen Rader – for their tireless efforts in transitioning RNA 2020 into an on-line event and for assembling an outstanding meeting program. They demonstrated extraordinary dedication in overcoming the challenges presented by COVID-19 and moving the RNA Society into new era.

I want to close by once again congratulating our President-elect, **Maria Carmo-Fonseca** (Instituto de Medicina Molecular, Portugal) and newly-elected Directors **David Bartel** (HHMI and MIT, USA), **Kristin Patrick** (Texas A&M University, USA) and **Alain Laederach** (University of North Carolina, Chapel Hill, USA), who will each serve a two-year term beginning in January. I look forward to working alongside you and the continuing Directors in supporting our members and executing the mission of our society.

Best wishes for a safe and enjoyable fall season, Kristian CEO@rnasociety.org



## From the Desk of the Chief Financial Officer Evelyn Jabri

How is 2020 treating the Society's finances? Well, not too bad so far.

**Financial Standing 2020** - The Society is projecting a smaller than anticipated budget deficit, which is excellent news considering that it had to cancel the face-to-face Vancouver meeting and pivot to a virtual format. As we



head into Q3, the Society has the necessary cash in its operating accounts (>\$650K) to cover planned 2020 expenses. Furthermore, the Emergency Fund remains untouched during this COVID economic chaos, and the Reserves are recovering from the market dip in March/April. In short, we are in an enviable position among nonprofits of being financially sound with cash in the bank to invest in opportunities that present themselves!

**Budget 2021** – In June, the Board approved the proposed Budget 2021 (see table) projected to result in a \$60K deficit. We don't like to see the words' Budget' and 'Deficit' in the same sentence and usually take steps to turn the negative into a positive before approval. However, the global health emergency and the associated volatile economic situation, expected to

continue in 2021, necessitates a different approach. The Board agreed there is significant uncertainty in the estimated revenues and expenses. Hence, the projected deficit has a significant '±' value. They accepted that the estimates are' best guesses' based on Q2, 2020 data and that they are likely to change as the year develops. In this uncertain budget situation, we will look for opportunities to minimize each program's financial risk. Decreasing the risk may involve finding additional financial support to offset expenses and offering a different type of programming (e.g., hybrid meeting) to reach the revenue goals. The Board agreed to revisit the budget estimates and adjust accordingly before the 2021 fiscal year.

**Finance Committee Updates** – In April, the committee reviewed the Reserves Investment Portfolio during the COVID shutdown and divested from 50% of an international fund expected to underperform in 2020. In July, the committee met again to perform a Portfolio Risk Assessment, re-evaluate the asset allocations in light of assessment, and update the Investment Policy. After reviewing the portfolio performance and discussions with the Society's investment advisors, the consensus was to retain the Reserves' current risk and asset profile. This decision means the Investment Policy, updated in 2018, remains valid for the next two years and will continue to guide investment decisions on the Society nest-egg.

As of July 31, the Reserves are at ~\$1.57M, approximately the

desired minimum of \$1.60M, and weathering the extreme market fluctuations. The Emergency Fund remains at ~\$390K, primarily invested in CDs. It will receive an influx of ~\$200K, the 2019 surplus that the Society held in its operating accounts to cover the potential losses on RNA2020. That additional emergency buffer puts the Society on solid financial footing as we head into the remainder of this unpredictable year and begin planning for 2021. Thanks to all past and current Board members, officers, and volunteers for making this possible.

Questions and suggestions? Feel free to email me at cfo@rnasociety.org

RNA Society Proposed Budget 2021	
	June, 2020
INCOME	
DEPARTMENT	
Membership	\$ 68,000
Journal	\$ 467,000
Annual Meeting	\$ 1,146,000
Industry Sponsorship	\$ 80,000
Singapore Government Grant	\$ 140,000
Conference Support	\$ 35,000
Meeting Partnerships	\$ 111,000
Awards & Fellowship	\$ 221,000
Development & Fundraising	\$ 10,000
General & Administrative	\$ 70,000
TOTAL INCOME	\$ 2,348,000
EXPENSES	 
DEPARTMENT	
Membership	\$ (5,000)
Journal	\$ (307,000)
Annual Meeting	\$ (1,353,000)
Conference Support	\$ (130,000)
Meeting Partnerships	\$ (111,000)
Awards & Fellowship	\$ (320,000)
Development & Fundraising	\$ (3,000)
General & Administrative	\$ (180,000)
TOTAL EXPENSES	\$ (2,409,000)
GAIN/LOSS	\$ (61,000)



## From the Desk of the Chair of Business Development Gianpiero Di Leva

As the novel coronavirus outbreak shut businesses,



disrupted everyday life for billions around the globe, our annual event was cancelled and offered as a virtual alternative. No doubt the event was a smashing success but, at the same time, the new format posed

numerous commercial and business challenges.

Before the cancellation, the sponsorship efforts focused on the biotechnology industries of the Vancouver area, different RNA therapeutics companies and global RNA reagent suppliers, plus all our previous sponsors and exhibitors. More than 100 companies were e-mailed multiple times starting in September 2019 and, three months before the Annual Meeting, we had commitments from 18 sponsors, including 10 exhibitors, 4 sponsored seminars, a gold sponsorship, an opening gala sponsor and a sponsor for both of the keynote sessions. Discussions were also ongoing with other sponsors for novel exhibitions and session sponsoring activities. For the first time in the last five years, we had to turn away offers for sponsored seminars due to the exclusivity of the sponsored morning sessions and limitations in space/time.

With the news of the Canada lockdown and the transition to the virtual meeting, several sponsors immediately requested a full refund or credit of their sponsorship for the RNA2021 meeting in Singapore. In collaboration with the Simple Meetings team and the meeting organizers, we needed to identify new sponsorship opportunities that were compatible with the virtual platform, could provide visibility for the sponsors and foster interactions between the attendees and the sponsor's teams. We also needed to re-design entirely the sponsorship prospectus and *re-start our "sponsors rush" approach*.

We all acknowledge that virtual conferences cannot entirely replicate the conference experience, provide the chance encounters and networking opportunities that occur at face-to-face events. However, several companies saw potential opportunities in our virtual event to reach wider audiences: scientists who have limited travel budgets, family commitments and/or disabilities. This provided an opportunity to break the diversity and equity barriers that exist in our "normal" meetings. My warmest thanks go to those sponsors that have supported our online RNA2020/Vancouver event and helped the RNA Society to create the virtual place where we have discussed new RNA technologies and provided people a way to connect in spite of it all. We have forgot for 5 days the pandemic because we needed to focus again on RNA.

The shift to virtual events may be commonplace for the foreseeable future and we are ready to deal with what happens. However, for 2021, we look forward to an exciting face-to-face Annual Meeting of the RNA Society that will enable us to interface with the society members and commercial exhibitors in person. We have already created our new sponsorship prospectus RNA2021 – Singapore; this aims to reinforce the sponsors presence and win credibility needed for trust with potential sponsors that have not yet been present at our conference. We have created additional marketing and branding options that will provide opportunities to showcase a company's products while increasing their visibility.

We are willing to offer a more personalized interaction to sponsors and discuss opportunities beyond what is specified in the prospectus. On that, please pass the information to any relevant Companies or Institutions that you can think interested in sharing their brands and connecting with our people.

<u>Your help identifying new sponsors or opportunities</u> <u>to support our annual events are welcome</u>. If you would like to discuss options please contact me <u>bd@rnasociety.org</u> or the Simple Meetings team <u>RNA2021@rnasociety.org</u>



## From the Desk of the Chair of the Meetings Committee Benoit Chabot

Following the cancellation of our 2020 annual meeting in Vancouver, the RNA Society offered a virtual online meeting that took place on the same dates. This adjustment turned out to be quite successful. **RNA2020 On-line** 



**meeting** attracted 3189 registered attendees. Our two keynote presentations each received approximately 1500 views. We had 111 selected talks. The organizers had originally selected 131 talks for Vancouver, but 20 withdrew after the meeting moved online. Likewise, 608 posters out of the 803 submitted were presented online. The number of views for talks varied, attendees choosing individual talks but not necessarily running through a full session (e.g. number of views in Plenary 1 ranged from 450 to 1190 for the eight talks). The number of views per poster ranged between 100 and 250. Some posters got only a few views and many got more, but hundreds fell within this range. Importantly, some chairs organized postsession discussions via Zoom or other formats. Overall, we can be proud of this first

experience. My warmest thanks go to the organizers, as well as to **Mary McCann** and **Kristen Scheyer** from Simple Meetings and everybody from the RNA Society who participated in initiating, preparing, testing and launching this experiment!

This global shift in favor of virtual meetings has generated excitement but also some reflections. Given the low cost of attendance (free for members), one of the positive effects is to stimulate attendance by more junior graduate and undergraduate lab members, by research technicians, as well as by labs that may have limited resources. Participants also appreciated the quality of the talks, the ability to be more selective and to distribute their listening time to fit their own at-home schedule. While this is all good to publicize your own progress or to assess the status of the competition, in-person meetings do add incredible value by witnessing and participating in discussions following talks and at posters, and by building your network of colleagues and collaborators. We are social beings and science is a social endeavor that benefits from the multiple types of individual contacts that occur during an in-person meeting, especially if the venue and the city add to the excitement of being part of the experience. So, despite the success of our on-line meeting, I do look forward to our next in-person **RNA 2021 annual meeting** that will be held **June 1-6, 2021 in Singapore** at the Suntec Singapore Convention & Exhibition Centre in downtown Singapore. **Gene Yeo** is leading an impressive team of co-organizers: **Xavier Roca** (Singapore), **Narry Kim** (South Korea), **Kathrin Karbstein** (USA), **Jörg Vogel** (Germany) and **Anna Marie Pyle** (USA). As the situation is still evolving, a hybrid meeting is being considered, and because we are scientists, we like experiments. Exciting times ahead!

The RNA 2022 meeting is planned to take place at University of Colorado in Boulder from May 31<sup>st</sup> to June 5<sup>th</sup>. Roy Parker will be our lead organizer and he has secured the help of Howard Chang (USA), Amy Buck (UK), Štěpánka Vaňáčová (Czech Republic), Kristen Lynch (USA) and Rui-Ming Xu (China) as his co-organizers.

Given the impact of COVID-19 worldwide including on the European meeting venues that we were considering for the **RNA 2023** meeting, we are postponing our decision for that venue until the current volatility in the conference business decreases a little.

To assist me going forward with these decisions, three new members have joined the Meetings Committee to participate in the always difficult process of selecting venues for our annual meeting. They are **Anita Corbett** (Georgia, USA), **Akila Mayeda** (Japan) and **Dawn Chandler** (Ohio, USA). Anita, Akila and Dawn



are replacing **Karla Neugebauer, Katrin Karbstein** and **Yukihide Tomari** who each have served for three years. Thanks to all six of you for your dedicated service to the RNA Society!

Benoit Chabot Benoit.Chabot@USherbrooke.ca Chair of the Meetings Committee

### Mid-Cycle Update on the Society's Mentoring Program Nancy Greenbaum

We are now in the middle of the third annual cycle of the RNA Society Mentoring Program, a program



that matches junior scientists with designated senior members of the Society for one-on-one mentoring over a period of one year. After two cycles involving ~20 menteementor pairs per year, the current cycle has expanded significantly to include 32

pairs of participants. I had hoped that the Annual Meeting in Vancouver would provide an opportunity for a number of these pairs to meet face-to-face, but that opportunity was denied us – however, most of our mentees speak with their mentors on a regular basis by electronic means, and I hope those communications have not been adversely affected by the stresses of the health crisis.

Who are our mentees? All are early-stage scientists, include MS and PhD students, postdocs, technicians, and junior faculty members representing every corner of the globe – and they are seeking assistance with an equally wide range of questions and problems that range from broad career choices (biotech or academics? medical school or liberal arts environment?) to refining research plans for a grant proposal; some are simply

seeking more encouragement and guidance than is provided by their institution.

And how do we recruit good mentors? In several cases, a potential mentor was specifically requested by a mentee; others had responded to my general request for mentors in previous articles or group

emails; and still others are members of the RNA Society membership who were singled out for their area of research/biotech/teaching experience, geography, or previous mentoring experience and who were kind enough to respond positively to my request to mentor a specific candidate. This cycle was marked by an increase in the number of mentee candidates interested in non-academic research positions – and I greatly appreciate the willingness of senior RNA scientists in industrial, policy, and teaching-intensive careers to offer their time and skills.

Overall, thanks to the community spirit and generosity of so many highly qualified senior scientists to serve the Society and our junior scientists in such a meaningful way, it has been possible to find an excellent match for each junior scientist seeking mentoring. Very importantly, we would like to thank the current group of mentors, who have been very generous with their time and advice: Mark Bayfield, Sharon Crary, Sujatha Jagannathan, Manny Ares, Ambro Van Hoof, Katja Straesser, Mariano Garcia-Blanco, Mark Peter Ashe, Sarah Woodson, Anita Corbett, Shobha Vasudevan, Virginia Castilla Llorente, Christy Chow, Alessia Boiti, Dan Herschlag, David Tollervey, Schraga Schwartz, Markus Bohnsack, Nicholas Conrad, Lukas Paul, Rachel Mitton-Fry, Tom Cooper, and Katrin Karbstein. An extra round of thanks goes to Chonghui Cheng, Matt Hentze, Gene Yeo, Fátima Gebauer and Juan Valcárcel. All these individuals are repeat mentors and/or are mentoring two mentees on this round.



If you are interested in becoming a mentee in the future, a call for applications for the next (fourth) cycle of the Mentoring Program will be posted and sent out (by email to all members) in September 2020; at the same time there will also be an invitation for anyone interested in acting as a mentor to contact

me with some details about your area of expertise or preferences – so keep reading the Newsletter and checking your email in-box for information!

Nancy L. Greenbaum nancy.greenbaum@hunter.cuny.edu

### From the desk of Membership Chair Olivia Rissland

What a six months we have had since my last update! While the pandemic stopped us from seeing each other in Vancouver this summer, the organizers put together an amazing online experience, and in the process recruited



many new members. We are now at an all-time high of 3373 people from 42 countries in our RNA squad!

For those of you who have recently joined the RNA Society, welcome! And for those of you who have renewed, thank you for continuing to be part of this community to enrich all of our experiences!

Looking ahead, I hope we can use the pandemic and recent discussions around race as a galvanizing force to make the RNA Society more just and inclusive. I am particularly excited about the potential for hybrid conferences and expanded online tools to engage our members across the globe, to remove barriers for participation, and to increase

opportunities for all RNA scientists, especially those from regions that have typically been underrepresented in the RNA Society. I welcome ideas about how we can continue to build our community, especially right now, and how we can include and nurture members (such as Black scientists) who have historically faced systemic barriers.

Finally, I want to thank everyone who continues to work hard and run the initiatives of the Membership Committee, especially **Julie Aspden**, **Neva Caliskan**, **Suja Jagannathan**, **Ute Kothe**, and **Nancy Greenbaum**. Each of these scientists volunteers their time, energy, and enthusiasm, and they are key to making the RNA Society so special. If you want a more active role in the RNA Society, please <u>email me</u>. We would be delighted to have you on the team!

#### RNA SALONS 2019/2020 AND BEYOND

The 2019/2020 **RNA Salon** season funded 54 Salons and engaged 6300 participants. And this spring, each of the organizers showed amazing agility to migrate their activities to online formats, enabling local RNA communities to stay strong despite the disruptions. We are now looking forward to our fifth RNA Salon season, and we are very lucky that Dr. **Ute Kothe** has agreed to continue to lead this initiative. This remains one of the most successful programs from the RNA Society and its success is due in no small part to her dedication. Watch for more information about deadlines and how to apply!

#### **MEMBER SPOTLIGHT SERIES**

**Neva Caliskan** has done a spectacular job running our very popular **Member Spotlight Series**, which highlights the outstanding lives and accomplishments of our members. (Visit the RNA Society <u>website</u> to see past and present profiles.) With a great team of writers (**Carla Oliviera**, **Petra Celadova**, **Diana Ferro**, **Luca Gebert**,



Sarah Keane, Prakash Kharel, Rachel Niederer, Matthew Rollins, Estefanía Sánchez Vásquez, Meaghen Sullivan, and Nik Tsotakos), the recent pieces have been engaging and an always-welcome bright spot in many of our inboxes. Thank you to all the members who have been part of the Series, and, if you're asked to be featured in the future, I hope you'll say yes. Stay tuned in the fall for information about how you can be involved for the 2021 series.

#### **INCLUSION AND EQUITY INITIATIVES**

**Suja Jagannathan** has been tireless in spearheading our efforts to make the RNA Society more inclusive and equitable, and we will be unrolling specific initiatives this fall, including opportunities to sponsor memberships for students with financial need and guidelines for ensuring that Society-sponsored meetings are diverse. If you have any ideas for how we can make the RNA Society more just and diverse or if you would like to be involved, please let us know.

I hope to see you next year in Singapore. Until then, stay safe, and my best,

Olivia <u>olivia.rissland@cuanschutz.edu</u>

# Call for RNA Salons 2020/2021

	YES	Ν
Are you an RNA researcher?	Ο	(
Would you like to learn more about the latest RNA research?	0	(
Do you enjoy scientific discussions with like-minded individuals?	0	(
Would you like to interact regularly with other RNA researchers?	0	(

If you answered most of the questions with yes, it is time to either establish or renew an RNA Salon for your region! The RNA Society continues to fund these regular events in 2020/2021 (virtual or in person) to foster interaction and engagement amongst trainees and PIs.

Applications will open in mid August 2020. Please check the <u>RNA Society webpage</u> for features of current RNA Salons and for detailed application guidelines.

We are looking forward to learning about your creative ideas to engage RNA researchers! Ute Kothe, RNA Salon Program Organizer



# Award opportunities for members: Applications due Oct 1st

The RNA Society seeks nominations for these annual awards, to be presented at RNA 2021, the annual meeting of the RNA Society, to be held in Singapore.

#### RNA Society Early Career Award (here for application)

- Eligible recipients will be within their first 7 years as an independent investigator as of July 1, 2021.
- The award can be for a single important discovery or for an extended portfolio of work.
- The basis for the award must be from independent research conducted in the recipient's laboratory.
- The winner must be a member of the RNA Society and contributions to the RNA Society can factor into the award decision.
- The winner will have the opportunity to give a short talk at the RNA meeting where the award is presented.

### RNA Society Mid-Career Award (here for application)

- Eligible recipients will be within their first 15 years as an independent investigator as of July 1, 2021.
- The award can be for a single important discovery or for an extended portfolio of work.
- The winner must be a member of the RNA Society and contributions to the RNA Society can factor into the award decision.
- The winner will have the opportunity to present a short talk at the RNA meeting where the award is presented.

### Eliza Izaurralde Award for Innovation in Research, Teaching, and Service (here for application)

- Applications are open to all early career RNA Society members. An early-career scientist is considered someone who is 5-15 years post-PhD who holds an independent research position at an academic institution.
- Applicants must have demonstrated an innovative mindset or approach to research, teaching, or serviceand most ideally to more than one of those areas.
- Applicant must be a person who acts in a manner that honors Elisa's legacy and her support of the scientific community. This individual is always engaged and asking questions at the meeting, enabling the development of the next generation of scientists, and being a great scientific collaborator to colleagues)—someone who makes a positive impact on the RNA community.
- The winner receives a \$20,000 cash prize and will have the opportunity to speak at the annual RNA Society meeting where the award is presented.

### RNA Society / Scaringe Award (here for application and upload here)

The RNA Society/Scaringe Young Scientist Award was established to recognize the achievement of young scientists engaged in RNA research and to encourage them to pursue a career in the field of RNA. The award is open to all junior scientists (graduate students or postdoctoral fellows) from all regions of the world who have made a significant contribution to the broad area of RNA. The award is not restricted to authors who have published in the RNA Journal, although it is restricted to active RNA Society members (click here to join). The prize will recognize one outstanding graduate student and one postdoctoral fellow based on their research accomplishments to date, a 7000-character (~1500 word) essay describing their scientific contributions to RNA research, and a 2500-character (~500-word) abstract for a review in their field of RNA research.









### A note of appreciation to the many RNA Society volunteers!

The RNA Society is able to execute our mission of promoting RNA research and education because of the dedicated efforts of many volunteers who provide their time, energy and insight in serving the Society. While we contract with outside organizations to help perform some of our activities (e.g. *Cold Spring Harbor Laboratory Press* to publish our journal, *RNA*; *Simple Meetings* to assist with the planning and execution of our annual meeting; *MCI USA* to manage our membership services and accounting), key decision-making and programming are performed entirely by volunteers. The RNA Society Board of Directors would like to acknowledge the efforts of the many individuals who have served the Society in the past year.

#### **Elected Directors**

Three Directors are elected by the Society every year and serve for a 2 year period comprising six (of the 9) voting members of the Board of Directors. These individuals develop and contributes to long range planning for the Society and are responsible for approving the selection of meeting venues and the budget. Directors in 2020 were **Greg Matera, Jörg Vogel, Mihaela Zavolan, Archa Fox, Lori Passmore**, and **Yukihide Tomari**,

#### **Officers, Committee Chairs and Committee Members**

A variety of individuals serve as Officers of the Society or function within committees to carry out the essential activities of the RNA Society and its programming.

- **Kristian Baker** Chief Executive Officer. Kristian serves to oversee Society activities and, in collaboration with the President and Board of Directors, establishes and implements long-range strategic plans for the Society. Additionally, she manages the RNA Society journal, *RNA*, works with the CFO to develop the annual Society budget, and assists the various committee chairs to execute their roles and programing.
- **Evelyn Jabri** Chief Financial Officer. Evelyn oversees all financial activities for the Society, interfaces with our Society Management Office at MCI USA to approve and process payments for Society expenses, and Chairs the Finance Committee which acts to manage RNA Society investments. Evelyn has impressive experience consulting non-profit organizations and in academic publishing, and served as RNA Society CEO from 2005-2010.
- **Brenda Peculis** Secretary. Brenda chronicles all RNA Society business, ensures adherence to Society By-laws and maintains all historical documents. Additionally, Brenda serves an administrative role on many of the Society's committees, oversees the various nomination committees, collates candidate applications and oversees reviews for the awards, runs electronic elections and surveys, updates parts of the web site and provides other critical support to Board members, as needed.
- **Benoit Chabot** Meetings Committee Chair. Benoit leads the effort to find appealing and viable locations for our annual meeting and works diligently to build the team of meeting organizers. Benoit is assisted by a panel of committee members including: Ling-Ling Chen, Florian Heyd, Jorgen Kjems, Andrei Korostelev, Maayan Salton, Rui Zhao, Anita Corbett, Akila Mayeda, Dawn Chandler, and Brenda Peculis (Secretary, ex officio).
- Olivia Rissland Membership Committee Chair. Olivia works to find ways to serve our members and enhance your membership experience. She also administers our Small RNA Meeting grant program, oversees the RNA Salon program lead by Ute Kothe, and provides support to Neva Caliskan who runs the Member Spotlight series. Additionally, she works with Julie Aspden to provide content and keep you up to date on RNA news via the RNA Society Twitter account.
- **Gianpiero Di Leva** Business Development Committee Chair. Gianpiero is tasked with building and fostering connections between the RNA Society and the business community (including industry,



biotech, publishing, etc), securing financial support from these sectors for RNA Society activities and programs, and encouraging their participation in our annual meeting.

- The Nominating Committee appointed each year by the President and tasked to identify candidates to serve our elected offices (President and members of the Board of Directors). For the 2020 election, this effort was led by **Tracy Johnson, Maria Luisa Cochella, Andy Berglund,** and **Zefeng Wang,** working with **Brenda Peculis** as Secretary (ex officio).
- The Scaringe Award Committee solicits, reviews and selects winners for the annual RNA Society Scaringe Awards (for outstanding research each by a graduate student and post-doctoral fellow). The committee is composed of **Tim Nilsen**, Editor-in-Chief of Society journal, *RNA*; **Phil Bevilacqua**, *RNA* Editorial Board member; Board members **Greg Matera**, **Jörg Vogel**, and **Mihaela Zavolan** working with **Brenda Peculis** as Secretary (ex officio).
- The RNA Society Career Award Committee reviews and selects winners for the annual Early- and Mid-Career Awards and for the newly established Elisa Izaurralde Award. The committee is composed of RNA Society Past-President Juan Valcarcel and board members Wendy Gilbert, Jeff Coller and Stepanka Vanacova working with Brenda Peculis as Secretary (ex officio).

#### Junior Scientist Representatives & Advisors

The Junior Scientist representatives are a small group of graduate students and post-doctoral fellows who work to provide programing aimed at our junior researchers and trainees. They plan and coordinate 'junior scientist' activities and events at the RNA Society Annual Meeting and promote RNA research, networking, and community via the Junior Scientist Twitter account.

Graduate Students:	Luc Roberts and Simon Hoser
Post-doctoral Fellows:	Liana Boraas and Malgorzata Rogalska
Faculty Advisors:	Katrin Karbstein and Sam Butcher

#### **Mentoring Program**

Initiated by RNA Society past-president **Juan Valcárcel** and administered by **Nancy Greenbaum**, the Mentoring Program pairs Society members and promotes one-on-one mentoring for trainees and young faculty who seek guidance from established RNA scientists outside of their home institution. We acknowledge the following mentors who offered their time, wisdom and experience for the 2019/2020 series: **Chonghui Cheng**, **Mark Bayfield**, **Sharon Crary**, **Sujatha Jagannathan**, **Manny Ares**, **Ambro Van Hoof**, **Gene Yeo**, **Katja Straesser**, **Fátima Gebauer**, **Mariano Garcia-Blanco**, **Mark Peter Ashe**, **Sarah Woodson**, **Anita Corbett**, **Shobha Vasudevan**, **Virginia Castilla Llorente**, **Christy Chow**, **Alessia Boiti**, **Michael Sattler**, **Dan Herschlag**, **David Tollervey**, **Schraga Schwartz**, **Wendy Gilbert**, **Markus Bohnsack**, **Nicholas Conrad**, **Lukas Paul**, **Juan Valcárcel**, **Matt Hentze**, **Rachel Mitton-Fry**, **Fátima Gebauer**, **Tom Cooper** and **Katrin Karbstein**.

#### RNA Journal Editors, Editorial Board and Reviewers

The RNA Society would like to thank the Editors, Editorial Board and many manuscript reviewers of *RNA* for their dedication to ensuring our Society journal continues to be the premier academic journal to publish the most cutting-edge advances in RNA research.

Editor-in-Chief:	Timothy W. Nilsen
Deputy Editor-in-Chief:	Eric Phizicky
Editorial Coordinator:	Ann Marie Micenmacher
Editors:	Javier F. Caceres, Maria Carmo-Fonseca, Kathleen Collins, Elena
	Conti, Adrian R. Ferré-D'Amaré, Fátima Gebauer, Britt Glaunsinger,
	Daniel Kolakofsky, Marina V. Rodnina, Rob Singer, Erik Sontheimer,



Peter F. Stadler, Jörg Vogel, Eric Westhof, John Woolford, and Mihaela Zavolan **Reviews Editor: Thomas R. Cech Editorial Board:** Manuel Ares, David P. Bartel, Brenda L. Bass, Philip C. Bevilacqua, Douglas L. Black, Ronald R. Breaker, Chris Burge, Lingling Chen, Soo-Chen Cheng, Bryan Cullen, Anne Ephrussi, Witold Filipowicz, Mariano A. Garcia-Blanco, Wendy Gilbert, Brenton R. Graveley, Matthias W. Hentze, Daniel Herschlag, Jane E. Jackman, Allan Jacobson, Martin Jinek, Arlen Johnson, Katrin Karbstein, Magda Konarska, Andrei Korostelev, Adrian R. Krainer, Alan M. Lambowitz, David M.J. Lillev, Reinhard Lührmann, Kristen W. Lynch, James Manley, Lynne E. Maguat, Harry F. Noller, Mary O'Connell, Richard A. Padgett, Tao Pan, Roy Parker, Joseph A. Piccirilli, Ramesh Pillai, Anna Marie Pyle, Donald Rio, Michael Rosbash, Phillip A. Sharp, Stewart Shuman, Haruhiko Siomi, Mikiko C. Siomi, Jonathan Staley, Joan A. Steitz, Gisela Storz, Scott Strobel, David Tollervey, Juan Valcárcel, Yanli Wang, Marvin Wickens, Sandra L. Wolin, Sarah A. Woodson, and **Phillip Zamore** 

We also recognize the over 600 researchers who assist in reviewing manuscripts for *RNA* each year. Their careful assessments and suggestions are critical for maintaining the high quality of science published in *RNA*.

#### **Conference Organizers**

The RNA Society Annual Meeting represents the *jewel-in-the-crown* of Society programing and provides the premier opportunity for members to network, collaborate and share their newest research advances. Our meetings continue to grow in size and popularity, due, in large part, to the tremendous efforts of the Organizing Committee who volunteer to plan and execute the event each year. It is particularly important to commend this year's committee for their heroic efforts in transitioning our planned meeting in Vancouver to an On-line event in an extremely condensed time frame – and congratulate them for its overwhelming success.

RNA 2020 Organizers	Sarah Woodson, Ling-Ling Chen, Michaela Frye, Alain
(Vancouver & On-line):	Laederach, Oliver Mühlemann, and Stephen Rader
RNA 2021 Organizers	Gene Yeo, Katrin Karbstein, V. Narry Kim, Anna Marie Pyle,
(Singapore):	Xavier Roca, and Jörg Vogel

#### **Conference Volunteers**

We would like to thank the volunteers also assist with specific events for RNA 2020 On-Line, including:

- Session and Workshop Chairs who help in selecting abstracts for oral presentations and who provide introductions and content for each scientific session. Many thanks to: Soo-Chen Cheng, Carla Oliveira, Ming Lei, Li Yang, Peter Unrau, Marina Chekulaeva, Yiliang Ding, Sharon Aviran, Carika Weldon, Ute Kothe, Juan Valcarcel, Traci Hall, Franck Martin, Jeremy Wilusz, Anastasia Khvorova, Olivia Rissland, and Nicholas Conrad.
- Our Keynote speakers for their informative and engaging lectures: **Melissa Moore** (Moderna Therapeutics) and **Jack Szostak** (Harvard Medical School).
- All of our session chairs, speakers, and poster presenters for helping to make the on-line meeting a success, with a special thanks to **Kristin Scheyer** and **Mary McCann** of Simple Meetings for their assistance in working with us to make this unexpected event a reality. Particular thanks to **Glenn Heckard** and **Chad Phillips** for their work on the abstract book and website.



#### **Newsletter Editor**

**Brenda Peculis** has been compiling, arranging, editing and distributing the RNA Society biannual newsletter since 2005. Her efforts result in the production of this on-line communication that serves to connect RNA Society members and identify and highlight many of the activities, events, participants, and volunteers that make up our organization.

We wish to express our deepest appreciation to all of the dedicated volunteers who serve to ensure the growth, success and sustainability of the RNA Society and its members, and in executing our mission of promoting RNA research worldwide.

Sincerely, *The RNA Society Board of Directors.* 

## **RNA Society-supported meetings** Past Meetings Sponsored by the Society

#### **The RNA UK 2020** Jan 24-26<sup>th</sup> 2020 Windermere, UK

The RNA UK 2020 meeting comprised 46 lectures organized into thematic session covering Transcription and Nuclear RNA metabolism, Regulation of pre-mRNA splicing, Ribosome biogenesis and control of mRNA translation, RNA quality control and turnover, Systems-level RNA biology, Noncoding RNAs and RNA localization and RNA editing and post-translational modifications of RNA-binding proteins, as shown in the attached program. The sessions were chaired by five

female and four male senior scientists. 22 of the 46 lectures were given by students and postdocs. The program also included a poster session, where 78 posters were presented, and, different from previous meetings, two flash talk sessions, which provided additional 27 students and postdoctoral scientists with the opportunity to showcase the work in front of ~160 delegates. The talks, poster and flash talk presentation included much unpublished and exciting work, from new insights into molecular mechanisms of RNA biogenesis, processing and modification to the use of systems level approaches to understanding RNA functions.

It is worth noting that during the organization of the meeting we sourced a childcare provider to ensure that parents with small children could attend the meeting, Nipperbout. However, the demand for this service was very low (only two people said they might be interested) and this arrangement was not financially viable. As a workaround, we booked several sufficiently large rooms at the venue (Low Wood hotel), which allowed two families with small children to attend the meeting, at a very little cost to the delegates and to the attendees themselves.

Congratulations to the three Poster Prize winners (**Thomas Dix**, **Helen Knight** [pictured], and **Tobias Schmidt**) and the three oral presentation prize winners (**Ester Griesbach**, **Emma Linney**, and **Etienne Nubiez**). Overall, we received very positive feedback, on both the



scientific content and structure and the organization. We would like to thank again the RNA Society for its support to the meeting, which has been instrumental to its success. The next RNA UK meeting will be organized by Matthias Söller, from Birmingham University.



# **Employment Opportunities**

If you are a member and would like to have your employment opportunity listed on this page, follow the instructions on <u>this page</u> (you must log in to view the page). If you are interested in applying for a position, please contact the person listed in the advertisement; see the RNA Society links (provided) for more info. Sign up for our jobs feed and receive email notification when we post to this page.

#### **Postdoctoral positions in New York City – functions and mechanisms of noncoding RNAs** *Posted on August 4, 2020*

We are seeking one or more postdoctoral fellows to join Dr. Kleaveland's newly-established basic research lab in the Department of Pathology and Laboratory Medicine at Weill Cornell Medicine in New York City. The Kleaveland Lab is passionate about...<u>read more</u>

#### Postdoctoral Associate - Ke Lab

Posted on August 4, 2020

The Laboratory of Dr. Shengdong Ke has one postdoctoral associate opening at The Jackson Laboratory in Bar Harbor, Maine. The Ke Lab focuses on RNA, a central node of genetic information flow from DNA to protein...<u>read more</u>

#### **Research Positions - Rational design of programmable anti-infectives**

Posted on August 4, 2020

The Institute for Molecular Infection Biology at the University of Würzburg is seeking doctoral and post-doctoral researchers to drive a 5-year collaborative research program on RNA-based anti-infectives. The program aims to build a platform technology for...<u>read more</u>

# **Postdoctoral Position at NIH** — Structures and Mechanisms of Cellular and Viral Noncoding RNAs and RNPs *Posted on July 28, 2020*

A postdoctoral position is available in the Structural Biology of Noncoding RNAs and Ribonucleoproteins Section, Laboratory of Molecular Biology (LMB), NIDDK, in NIH's vibrant main campus in Bethesda, MD near Washington DC...<u>read more</u>

#### **Postdoctoral position to study modifications in human mitochondrial tRNAs, in Vienna, Austria** *Posted on July 28, 2020*

The role of modifications in the 'core' of human mitochondrial tRNAs - A postdoctoral position is available in the lab of Walter Rossmanith at the Medical University of Vienna, Center for Anatomy & Cell Biology. The research of the lab is focused on tRNA biogenesis...<u>read more</u>



### Postdoc positions in RNA and gene therapy at University of Massachusetts Medical School

Posted on July 28, 2020

The Horae Gene Therapy Center at University of Massachusetts Medical School invites applications for postdoctoral researcher positions. Several positions are open in the newly established Wang Lab, and the research topics include AAV-based gene...<u>read more</u>

#### Postdoctoral position in RNA regulation at Boston University School of Medicine

Posted on July 28, 2020

A funded postdoctoral position is available for immediate incorporation in the Cifuentes laboratory at Boston University School of Medicine for a highly talented and motivated candidate willing to address fundamental questions of RNA regulation...<u>read more</u>

### Scientist, Computational RNA Biology

Posted on July 20, 2020

Do you have the passion to join a group whose mission is to pioneer the discovery of a new class of medicines to treat diseases unaddressed by today's therapies? Does it excite you...<u>read more</u>

#### **Postdoctoral Fellow in molecular / cellular biology / biochemistry. Charles University, Prague, Czech Republic** *Posted on July 20, 2020*

Postdoctoral position is available for a molecular biologist / biochemist / cellular biologist to study a cellular role of the noncanonical cap-binding translation initiation factors of the eIF4E family...<u>read more</u>

#### A Research Associate Position at the Rabani Lab (Hebrew University, Israel)

Posted on July 20, 2020

The Rabani Lab investigates the molecular and cellular biology of RNA molecules, and how post-transcriptional gene regulation at the RNA level underlies embryonic development...<u>read more</u>

#### **Postdoc positions in bacterial epitranscriptomics and translational regulation (Chicago, IL, USA)** *Posted on July 15, 2020*

Two postdoc openings are available in the research group of Dr. M.-N. Frances Yap in the Department of Microbiology-Immunology at Northwestern University Feinberg School of Medicine to work on molecular aspects...<u>read more</u>



#### **Post-doc positions available at Massachusetts General Hospital Cancer Center and Harvard Medical School** *Posted on July 15, 2020*

Post-doc positions available at Massachusetts General Hospital Cancer Center and Harvard Medical School (Simches Building, Boston) in our lab working on ribosomes, translation, RNA modifications and non-coding RNAs and their roles in cancer quiescence and chemoresistance...<u>read more</u>

#### **Postdoctoral position to study the regulation of translation at Goethe University Frankfurt (Germany)** *Posted on July 10, 2020*

A postdoc position is available in the Schmid lab at the Institute of Biochemistry I (Goethe University Frankfurt, Germany) to investigate alternative modes of translational regulation by RNA/protein...<u>read more</u>

#### **Nine-Month (Academic Year) Tenure-Leading Assistant Professor Faculty Position** *Posted on July 10, 2020*

The University of Nebraska-Lincoln is seeking applicants for a nine-month (academic year) tenure-leading Assistant Professor faculty position (75% research and 25% teaching) in the Department of Biochemistry addressing...<u>read more</u>

#### **Professor (W3) in "Chemical Systems Biology of Nucleic Acids"** *Posted on July 10, 2020*

The Faculty of Chemistry and Chemical Biology at TU Dortmund University is seeking to fill the position of a Professor (W3) in "Chemical Systems Biology of Nucleic Acids", commencing as soon as possible...<u>read more</u>

#### **Postdoctoral Fellow on RNA/Protein Biochemistry and Molecular Biology at Johns Hopkins University** *Posted on June 30, 2020*

Highly motivated postdoctoral candidates are invited to lead several new projects to address fundamental questions on RNA homeostasis (Zhang et al. Molecular Cell 2018; Haeusler et al. Nature 2014) and protein homeostasis (Lu et al. Nature Neuroscience 2019; Liu et al. Genes & Development 2018...<u>read more</u>

#### **Postdoctoral position studying RNA structure and regulation at Baylor College of Medicine** *Posted on June 30, 2020*

A funded postdoctoral position is available in the laboratory of Anthony (Tony) Mustoe at Baylor College of Medicine (BCM) in Houston, Texas. The lab's work lies at the intersection of biology, chemistry, and computation, with the primary goal of defining the roles of RNA structure in gene regulation...<u>read more</u>



#### Postdoctoral position at the University of Illinois in Chicago, USA, to study premature stop codon bypass Posted on June 26, 2020

The Mankin/Vazquez laboratory in the Center for Biomolecular Sciences, University of Illinois at Chicago, USA, is looking for a postdoctoral researcher to join a project focusing on developing a new approach for identifying therapeutic peptides capable of stimulating...read more

#### Postdoctoral position in Bacterial ncRNA Regulation: Boston College, Chestnut Hill, MA

Posted on June 24, 2020

An NIH funded postdoctoral position utilizing high-throughput approaches to study the biology of structured RNA regulation in bacteria, and/or the impact of translation inhibiting antibiotics on structural RNA regulation, to is available in the Meyer Lab...read more

#### Postdoctoral position to study alternative splicing using single-molecule microscopy in Australia Posted on June 24, 2020

The Weatheritt Lab at the Garvan Institute is seeking a talented postdoctoral scientist to work in collaboration with the Single Molecule Science (SMS) centre at UNSW Sydney. The candidate will investigate the impact of alternative...read more

#### **Two Postdoctoral Positions - Boston University Medical Campus** Posted on June 12, 2020

Two Postdoctoral Associate positions are available in the laboratory of Dr. Ruslan Aphasizhev at the Department of Molecular and Cell Biology, Boston University Medical Campus, Our NIH-funded program focuses on mechanisms of RNA processing in trypanosomes...read more

# Postdoctoral position to study RNP organization

Posted on June 12, 2020

A funded postdoctoral position is available in the laboratory of Dr Daniel Zenklusen at the Université de Montréal in Montréal, Canada (zenklusenlab.org). The project aims to study fundamental aspects of mRNP and lncRNA organization and its role in regulating metabolism...read more

#### Postdoctoral Position in Germ Cell Differentiation and RNA Modifications Posted on June 9, 2020

A postdoctoral position is available in the laboratory of Dr Marcos Morgan at NIEHS, part of the National Institutes of Health (NIH), in the Research Triangle Park, North Carolina. The main goal of the lab is to understand the mechanisms that control cell differentiation...read more



#### Postdoctoral Associate Position to Study Protein Synthesis in Single Cells - The University of Maryland, College Park

Posted on June 9, 2020

A postdoctoral position is available in the laboratory of Dr. Jiqiang (Lanny) Ling at The University of Maryland, College Park to study microbiology, single cells, host-pathogen interactions, and antibiotic resistance. The Ling lab is interested in combining state-of-the-art single-cell, microbiology, biochemical, genetic, genomic, and proteomic approaches to understand the mechanisms and disease connections ...<u>read more</u>

#### **Postdoctoral Research Associate Position**

Posted on June 3, 2020

We are currently looking to fill a postdoctoral position available in Dr. Lydia Contreras' lab at the University of Texas at Austin, a top research university in the US. Dr. Contreras is an Associate Professor in the Department of Chemical Engineering and a member of the Biophysics...<u>read more</u>

#### Postdoctoral Research Fellow (Co-mentored)

Posted on June 1, 2020

Co-mentored post-doctoral research positions are available in the laboratories of Dr. Steve Ziegler and Dr. Ram Savan. Ziegler lab is located at the Benaroya Research Institute (www.benaroyaresearch.org), and the Ram lab is in the Department of Immunology, University of Washington...<u>read more</u>

#### **Postdoctoral fellowship in epigenetics and lncRNA biology in the Calabrese Lab at UNC Chapel Hill** *Posted on May 25, 2020*

A postdoctoral fellowship is available in the Calabrese lab to study relationships between chromatin-modifying enzymes, RNA-binding proteins, and long noncoding RNAs (lncRNAs) during stress. Projects build upon several recent findings from our lab, both published and unpublished. The position offers rigorous training in multiple disciplines and the chance to build a new, high-impact...read more

**Postdoc position available at Columbia University to study the biology of m6A RNA methylation in neurons** *Posted on May 25, 2020* 

A Post-doctoral position is available immediately in the Pellizzoni lab at Columbia University to study the role of m6A RNA methylation in development and disease of the nervous system with a specific focus on the biology of motor neurons...<u>read more</u>



#### Postdoc Position to Study the Structural Biology of RNA Triple Helices

Posted on May 25, 2020

The Brown Laboratory at the University of Notre Dame is interested in understanding the biological, biochemical, and structural roles of RNA triple helices, structures that were deduced to form over 60 years ago yet only 3 examples in the human transcriptome...<u>read more</u>

# Postdoctoral Position in Single Molecule Biophysics of pre-mRNA Splicing in the Hoskins Lab at U. Wisconsin-Madison

Posted on May 19, 2020

We are recruiting a highly motivated postdoctoral scientist to pursue research in biochemical and biophysical characterization of human splicing factors. We are specifically interested in scientists ...<u>read more</u>

#### **One-year funded postdoc position to study Hepatitis C Virus (HCV) RNA structure and modification** *Posted on May 19, 2020*

A 1-year postdoc position is available at the Vinther Lab, Department of Biology, University of Copenhagen. The position will be available as of September 1st, 2020. We are looking for a motivated and skilled postdoc to work on Hepatitis C Virus (HCV) RNA structure...<u>read more</u>

## Postdoc in Eukaryotic Ribosome Assembly

Posted on May 15, 2020

I have a funded post-doc position open in my lab to study ribosome assembly in eukaryotic cells and the impct of faulty assembly on gene expression. Two broad brojects are: 1) Understanding the molecular mechanisms...<u>read more</u>

#### **Postdoctoral Position Available in the Laboratory of Dr. Kamena Kostova** *Posted on May 15, 2020*

At the Carnegie Institution for Science, Department of Embryology in Baltimore, MD, we are investigating the fundamental question of how cells respond when their ribosomes break down...<u>read more</u>

# Postdoctoral Fellow Position at NIH to study the impact of alternative splicing on cell fate decision and disease using CRISPR-based functional genomics

Posted on May 7, 2020

Fully funded postdoctoral research positions are available in Thomas Gonatopoulos-Pournatzis Functional Transcriptomics section within the RNA Biology Laboratory at the National Cancer Institute (NCI) in Frederick, MD...<u>read more</u>



#### Funded Post Doctoral Positions in the Conlon Lab

Posted on May 7, 2020

Fully funded postdoctoral positions are presently available in the Conlon Lab, whose studies focus on sex disparities in development and disease. For these studies, we use a highly integrated approach...<u>read more</u>

# Postdoctoral Research Fellow position:Biochemistry and Structural Biology of Functional RNAs and RNA/protein Complexes

Posted on May 6, 2020

A postdoctoral training position is available in the laboratory of Yunsun Nam, in the Cecil H. and Ida Green Center for Reproductive Biology Sciences at UT Southwestern Medical Center to study the mechanisms of post-transcriptional gene regulation...<u>read more</u>

