RNA Society Newsletter Feb 2020

RNA Society

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RNA Journal

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http://www.rnasociety.org/

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Comments:

Please direct any Newsletter comments, suggestions, rebuttals and articles for submission to : Brenda Peculis

From the Desk of the President, Anna Marie Pyle

As 2019 comes to an end, it is worthwhile to pause and reflect on the incredible accomplishments



and achievements of our community during the last year. RNA Society members have revealed the structures of massive RNA processing complexes, created life-saving RNA therapeutics, discovered new types of functional RNA molecules, and manipulated the

sequences of genomes, among their many achievements. As interest in RNA science and its impact on human society expands, 2020 promises to be another phenomenal year, and an ideal time to explore ways for The RNA Society to build community, expand diversity and support the best in RNA research. (cont p.2)

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In my view, a top priority of the RNA Society is to continue building our sense of community among members across generations, groups and geographies. This is important not only because we all enjoy a sense of belonging. It is important because it helps get things done. When students attend an RNA Society meeting and they become

... enable all of us to participate in building the foundation for an RNA Society that invests in the future of its community

acquainted with their peers from other institutions, they feel more comfortable asking for reagents, or inquiring about a protocol. When young investigators share a meal with senior scientists, they feel more comfortable asking for feedback on a grant proposal or a manuscript. These interactions lead to great discoveries, and just as important, they build meaningful friendships that last our lifetimes. A diverse community that supports and respects all its members is also one that fosters creative solutions to the many scientific challenges that we confront. Many initiatives, such as the regional RNA Clubs and Salons and activities of the Junior Scientists Committee, all of which are supported by funds from the RNA Society, have greatly enhanced our lives as RNA scientists. We welcome your suggestions on how to build on our strong foundation, and to create a more diverse, inclusive RNA Society.

With greater financial resources, the RNA Society will be in a better position to meet this goal. It will be possible to sponsor more travel fellowships, thereby enhancing the ability of students and young investigators to attend our events. It will facilitate participation by constituencies that cannot otherwise afford to participate, enabling college students to present posters and become involved early in their

careers. We will be able to recognize outstanding accomplishments and highlight distinguished investigators such as Lori Passmore, who is the inaugural recipient of the Elisa Izaurralde Award. This prestigious award was initiated by an anonymous donor who wished to honor Elisa's impact on our professional life and encourage colleagues to influence the field similarly. The donor worked with the Society to craft a broad vision for the Elisa Award and provided the financial support to sustain it. Efforts such as these will help our members succeed and they will showcase the tremendous accomplishments in our field, thereby enabling our community to thrive within a competitive research environment. To make this happen, we are expanding our development initiatives. complementing our outreach to corporations (led by Gianpiero De Leva) with outreach to individual members and potential donors. Sean Ryder has agreed to lead this charge, and he is formulating a plan of action that would enable all of us to participate in building the foundation for an RNA Society that invests in the future of its community.

... a top priority of the RNA Society is to continue building our sense of community among members across generations, groups and geographies.

In closing, I want to thank our outgoing CEO, **Jim McSwiggen**, for guiding The RNA Society with wisdom, energy and great humor. And I thank our incoming CEO, **Kristian Baker**, for her dedication as she takes the helm on January 1. I wish you all a 2020 that is filled with thoughts about RNA!

Anna Marie Pyle (anna.pyle@yale.edu)



RNA 2020 The 25th Annual Meeting of the RNA Society Vancouver, BC May 26 – May 31, 2020.

Abstract deadlines

February 28, 2020 (to be considered for oral presentation) March 15, 2020 (for poster-only).

You must register before submitting an abstract! Talks will be selected from submitted abstracts.

Workshops and satellite meetings

<u>RiboWest</u>

RNA Granules,

Bioinformatics session during meeting RNA-seq computational modeling hackathon

Page 5 for more info, we welcome suggestions for more workshops related to rapidly developing areas. Final topics will depend on the abstracts received.

2020 Organizers:

Sarah Woodson (Lead), Ling-Ling Chen, Michaela Frye, Alain Laederach, Oliver Muehlemann and Stephen Rader (Local)





From the Organizers of RNA 2020 Registration for RNA 2020 is open!

The RNA Society is pleased to invite you to its annual meeting that provides extensive coverage of the most exciting areas in RNA research. For our 25^{th} anniversary, <u>RNA 2020</u> will be held in the beautiful and diverse city of **Vancouver**, **BC**, from **May 26 – May 31, 2020**.

Situated along the waterfront between the Strait of Georgia and the Coast Mountains, Vancouver sits on land first settled by the Musqueam, Squamish and Tsleil-Waututh First Nations, whose culture and history continue to shape the region. Now a thriving and diverse international hub, Vancouver offers world class museums, shopping, bars and restaurants to enjoy whenever you need a break from all that thrilling RNA science! One of the most beautiful cities in the world, Vancouver also offers many opportunities to enjoy the spectacular views of coastline and mountains. Bike to Stanley Park, kayak in the harbor, or just enjoy a leisurely walk.



More information on the city of Vancouver can be found <u>here</u>

The RNA 2020 Meeting will be held at the <u>Vancouver Convention Centre</u>, a sparkling LEEDS facility on the downtown Vancouver harbor front that offers ample room for oral sessions, workshops, and posters. A wide variety of <u>hotels</u> are within easy walking distance of the Convention Center. <u>Modern dorm-style</u> accommodations have been arranged at the

University of British Columbia. Shuttle buses will operate daily between the UBC dorms and the Convention Center during the conference and before and after the banquet.

The RNA 2020 program will cover topics ranging from splicing, translation, and pre-mRNA processing to noncoding RNA, chromatin, transcriptomics, RNA modification, structure and nanotechnology. Two keynote speakers, Jack Szostak and Melissa Moore, will highlight the importance of RNA from the origins of life to modern therapeutics. This year, we are also planning satellite activities (see p. 5) including a hands-on bioinformatics workshop (see p. 20). Information on these satellite activities will be on the meeting website.

As in previous years, the RNA 2020 program will depend on your submitted abstracts! Therefore, we strongly encourage you to submit your abstracts for oral presentation by **February 28, 2020** and posters by **March 15, 2020**. Talks by postdocs, graduate students and junior PIs covering recent work will be prioritized.

Visit <u>the meeting website</u> for more information on the program as it develops, including links to accommodation, transportation and travel fellowships. We can't wait to see you in Vancouver!

The Organizers:

Ling-ling Chen (Shanghai Institute of Biochemistry and Cell Biology) Michaela Frye (Deutsches Krebsforschungszentrum Heidelberg) Alain Laederach (University of North Carolina, Chapel Hill) Oliver Mühlemann (University of Berne) Stephen Rader (University of Northern British Columbia) Sarah Woodson (Lead Organizer, Johns Hopkins University)



Satellite Meetings and Activities around RNA 2020

The 16th annual <u>RiboWest</u> meeting, in Vancouver, May 23-26, 2020.

The Western Canada RNA Conference, RiboWest, brings together RNA scientists from across Canada and the northwestern United States for the purpose of disseminating current research and providing an opportunity for trainees to present their work. Presentations at the meeting have covered a wide range of RNA topics, including transcription, RNA processing, translation, viruses, genomics, bioinformatics, etc.

RiboWest 2020 will be hosted at the University of British Columbia in the Pharmaceutical Sciences Building in Vancouver BC.

Meeting Organizers: Judy Wong, University of British Columbia, Timothy Audas, Simon Fraser University, Gregg Morin, BC Cancer at University of British Columbia, and Peter Unrau, Simon Fraser University. For more information on the program and registration, see their web site!

The <u>RNA Granules</u> 2020 meeting in Vancouver, May 24-26, 2020

Following the first (Halifax 2014) and second (Heidelberg 2017) Symposiums on **Stress-Associated RNA Granules in Human Disease and Viral Infection**, the third, RNA Granules 2020, will be May 24-26, 2020 in Vancouver at the Fletcher Challenge Canada Theatre of Simon Fraser University Harbour Centre Campus.

This symposium will bring together experts investigating RNA granules that impact different fields and that have been implicated in infectious diseases, neurological disorders and cancer. Oral and poster presentations will discuss the latest advances in cell biology, neurobiology, microbiology and physical chemistry that have revealed exciting insights into the molecular composition of distinct RNA granules, the mechanisms that regulate assembly of RNA granules and the contribution of RNA granules to disease and immunity.

Meeting Organizers: **Neil Cashman**, University of British Columbia, **Eric Jan**, University of British Columbia and **Poul Sorensen -** BC Cancer, University of British Columbia

Bioinformatics Events :

Arranged by RNA2020 Organizers, **Stephen Rader** and **Alain Laederlach**, there are three bioinformatics-focused events that will be held in conjunction with <u>RNA2020</u>. See Web site for more information!

- an **RNAseq hackathon**, a multi-day event encouraging all interested attendees to work on a specific bioinformatic challenge that the participants have selected ahead of time (*see p. 20 for more info!*)
- a **bioinformatics-focused session** during the meeting (see schedule)
- a **Principles of Transcriptomic Analysis** session, held Tuesday, May 26th. This will be targeted to PIs who want to learn exactly what it is that their students *are doing*, what kinds of things they *should look for* to ensure that the work is done to a high standard, and what *resources are available to help* all of them. This will be held at the Wosk Centre in downtown Vancouver. Watch the web site or check the Abstract book, when available!



Awards to be presented at RNA 2020

The RNA Society is pleased to announce the winners of several awards, all of which will be presented at the Award ceremony before the banquet on May 30th. Please join us in congratulating all of these award recipients and join us at the RNA 2020 conference in Vancouver, BC.

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 two-year 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 2020 Travel Award Application

The RNA Society provides travel fellowships in support of researchers who are constrained financially from attending our conference. In most cases, the fellowships will be made in the form of reduced or waived registration fees, although it is possible that some contribution toward travel costs could be made in addition to the fee waiver. Travel reimbursement, if awarded, will be presented in the form of a check that you pick up with your conference materials, or as a credit card reimbursement or an electronic funds transfer from the RNA Society shortly after the close of the conference.

Please note:

- Fellowships are restricted to RNA Society members. To become a member go to: <u>https://www.rnasociety.org/become-a-member/</u>. To renew your membership, go to: <u>https://www.rnasociety.org/members/members-only/?url=arssainvpay.pay_page</u>
- Abstracts submitted with this travel fellowship application will NOT be entered into the conference registration system. You will need to make a separate conference registration, followed by a separate abstract submission once you have registered for the conference.
- The application for travel fellowships should be submitted by **February 21, 2020** for those who want to be notified in time to make the orals application deadline **or want to be considered in the first round of funding.** We will continue to accept applications after this date, until **March 8th**, but available funds are likely to be diminished substantially in a second round and may be absent completely.

Questions can be addressed to travel@rnasociety.org.

If you wish to apply for a fellowship, please complete the application at the following link: <u>https://www.rnasociety.org/members/travel-fellowships/</u>

Group Registration Incentive

The RNA Society wants to encourage as many members as possible to attend our annual meeting. To that end, we are offering a discount to our members who bring three or more lab members to the conference – see link.

- This offer is only for overseas labs (i.e. outside of North America) whose lab head is an RNA Society member. Click to <u>become a member</u> or to <u>renew your membership</u>.
- There must be at least three paid registrations from the same lab–excluding individuals who receive travel fellowships from the Society. The lab head must be a conference attendee. We want to encourage participation by more senior researchers, as well as grad students and post docs.

• Only one registration refund per lab – the lowest of the three or more paid fees will be refunded. Travel fellowship recipients cannot be included among the three.

• Refunds will be paid to the PI in the form of the original payment (credit card, check, or electronic funds transfer) shortly after the close of the conference.

• Due to foreign exchange fluctuations, the refund received may vary somewhat from the original payment sent. We will, however, make every effort to minimize the difference.

• This offer expires on **May 1, 2020**. Three participants must be identified, registered and paid prior to May 1, 2020 for the lab to be eligible for a refund. We look forward to seeing you in Vancouver this summer!



Upcoming events at RNA2020 with the RNA Society Junior Scientists

PRE-MEETING ACTIVITY

For this year's pre-meeting social activity, the Junior RNA Scientists are hosting a bike ride through Stanley park to Third beach (20min one way) for a day of fun in the sun! Don't worry if you're not Tour de France ready, this is for all skill levels. However some riders may choose to bike the entire seawall (~10 km), which can be done at a moderate pace in 1-1.5hrs with stops. The reasonable rental fee (~25 CAD) will be well worth the views along the world's longest uninterrupted waterfront path as you get to know your fellow Junior RNA scientists!



SOCIAL NIGHT

To emphasize making connections and future collaborations, the Junior RNA Society will host a social event for Junior Scientists at the 2020 RNA meeting in Vancouver. If you plan to partake you better level up your drawing skills - because we're going to play a game of RNA-themed Pictionary! We will provide a free and relaxed environment to connect and talk science after an intense day at the conference. So, grab a drink and have a guess: wrong and funny answers are very welcome.

MEETING WORKSHOP

Numerous researchers find day-to-day experience of being a scientist demanding and unrewarding. We believe that scientific community should acknowledge the challenges we are facing and aim at establishing supporting and enhancing environment. For that reason, this year Junior Scientist Committee is organizing a panel about "Overcoming Barriers in Science".

We would like to arrange the "Overcoming Barriers in Science" workshop in the format of a 2-hour panel discussion, where inspiring mentors from the RNA community would share their personal experiences as well as provide support and positive guidance on how to overcome some of the frequent difficulties faced by especially young researchers. If you or someone you know would be interested in contributing to this workshop, please reach out to the Junior RNA Society representatives (junior_scientists@rnasociety.org)



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.

Email: junior_scientists@rnasociety.org Facebook: <u>https://www.facebook.com/RNASocietyJuniorScientists/</u> Twitter: @jrRNAscientists

Malgorzata (Gosia) Rogalska – <u>Malgorzata.Rogalska@crg.eu</u> Luc Roberts – <u>luc.roberts@uleth.ca</u> Simon Hoser – <u>Simon.Hoser@i-med.ac.at</u> Liana Boraas – <u>Liana.Boraas@yale.edu</u>

RNA Society Junior







You can keep in touch with us throughout the year via email (<u>junior_scientists@rnasociety.org</u>) or social media. Our contact information is also posted on the RNA website.

Get involved in your Society!

The 2020 Nominations Committee of the RNA Society is identifying candidates for election to the open positions effective January 2021. We are looking to fill three Board of Directors positions, and for the next President of the RNA Society. All of these positions are two-year terms (2021-2022), with the President serving also as President elect (from June 2020) and Past-President (2023-2024).

Candidates must be current, Full members of the RNA Society. Roles and responsibilities for the positions of Director and President are included below and can also be found on the RNA Society website at www.rnasociety.org/about/rna-society-organization-and-structure/.

Any eligible RNA Society member who would like to nominate themselves for one of these positions are encouraged to send their name and a brief description of interest and qualification for the position to the Secretary of the RNA Society, Brenda Peculis, at <u>secretary@rnasociety.org</u> by February 7th, 2020. If you would like to nominate a colleague to serve, <u>please confirm that the individual is willing to serve</u> and provide a brief description of interest and qualification!



From the Desk of the CEO Kristian Baker

Dear colleagues,

Happy New Year! As we turn the page on 2019 and enter into a new decade, I have the privilege of telling



you about some of the exciting changes that are occurring within our organization. One of course is the beginning of my term as Society CEO - I want to thank the Board of Directors for their vote of confidence in my ability to serve in this role and tell

you how extremely fortunate I feel to have the opportunity to work alongside the fantastic group of scientists who volunteer their time as Officers and Directors. I look forward to working together over the next few years to promote the society's mission of advancing RNA research and education and to ensure the engagement of our members and overall success of the Society.

Before telling you about some of the new changes, I would like to take this opportunity to express my gratitude to Jim McSwiggen, who served the RNA Society tirelessly as CEO for the past nine years (2011-2019). Jim was a committed leader whose efforts lead to substantial growth for our organization - and in recognition of his work, Jim received the RNA Society Lifetime Service award at our annual meeting last summer in Krakow. I would like to also thank Jim personally for all of the help and guidance he offered during my time as Chair of the Membership Committee, and for the knowledge and support he continues to provide during this time of transition. Although Jim has stepped back from RNA Society leadership, he continues to be an important volunteer member and has agreed to administer our Travel Fellowship Program in 2020 (see p. 9) providing financial support to facilitate the participation of researchers to our annual meeting in

Vancouver in May. Jim worked hard during his time as CEO to expand this program and increase the number of awards, and so it is fitting that Jim continues to ensure the success of this important society initiative.

With the new decade comes some important changes for our Society. On the business end, we will be transitioning our society management duties from our longstanding partner FASEB to MCI USA - an internationally renowned society management company with global experience in assisting with the administration of non-profit societies and associations. For our members, the transition over the next several months should be seamless and will be most obvious in our new business address - which will move 12 miles from Bethesda, Maryland to McLean, Virginia. For our Officers and Directors, the transition to MCI is expected to expose us to new opportunities and fresh approaches to serve and engage our members.

The second set of changes that we are presently undergoing is an update to our member database and the RNA Society website. Upgrading our database will allow for more streamlined membership renewal, provide increased opportunities to identify members based on research interest or award eligibility, and provide an on-line portal for communication between members. Key to taking advantage of the opportunities the new database has to offer will be to ensure that our membership data is complete and up-to-date - including member's professional addresses, career stage and research interests. Please be on the lookout for an e-mail in the near future asking you to log-in and update your member profile (including new profile fields). Please know that your information is safe and secure, and that we only use your personal data to ensure that the Society is serving you in the best possible ways.



Also in the works is a facelift for the RNA Society website! We are currently in the midst of migrating to a new website platform that will better feature the latest Society news (including meeting information, employment opportunities, and guidelines/deadlines for our various Society awards and programs), highlight the cutting-edge research findings published in *RNA* (the official journal of the RNA Society), and now include our lively RNA Society Twitter feed. Launch of the new RNA Society website is expected late February - so keep a lookout at <u>www.rnasociety.org</u> and the announcement coming soon to your e-mail inbox. Please visit the new site and let us know what you think.

While the current changes are expected to help us better manage Society business, I want to emphasize that the success of the RNA Society depends on you. Your scientific advances and mentorship are the bedrock of our organization, and your attendance at our annual meeting ensures dissemination of the latest RNA research, opens opportunities for collaboration amongst your colleagues, and provides precious opportunities for junior researchers to grow professionally and scientifically. Moreover, your annual membership dues and choice to publish your research findings in *RNA* provide important revenue that is used to support our various member programs (i.e. RNA Salons, Travel Fellowships, Meeting Sponsorship Program). So while upgrading our technology platforms is an important step for the society, we really need to hear from you to fully understand and appreciate how the Society can best serve you. Please contact me (or any society officer or member of the board) - either directly at ceo@rnasociety.org or via the *Ideas, Suggestions & Volunteer* button that will debut on the new society website.

So cheers to the new decade, new changes to the Society, and to you - our members who make this organization such a fun and beneficial group to be part of!

Look forward to seeing you all in Vancouver in May at our 25th annual meeting!

Best, Kristian CEO@rnasociety.org





From the desk of the CFO Evelyn Jabri

In 2019, the Finance Committee continued to address the financial sustainability of the Society focusing on



refining the investment portfolio and establishing a Reserves Spending Policy to govern the use of the ~\$1.5M in investment funds. Recall that the Society established an investment fund to support the 5+ year sustainability of the organization and to generate passive income.

Why did the Society need a Reserves Spending Policy?

Creating a Reserves Spending Policy is a financial best practice for associations with growing investment portfolios. Such a policy also addresses member questions about the use of the funds.

What are the key highlights of the policy?

Let's start by exploring the <u>use cases</u> when the Society may need or want to spend its reserve funds. These are:

- Cash Emergency This is an unexpected situation in which the Society has exhausted its Operating Cash and Emergency Funds (as defined in the Investment Policy) but still requires cash to continue to sustain its operations and meet its annual commitments.
- Non-emergency Opportunity The Society may identify an opportunity that furthers the mission of the organization, such as a desire to establish a new program that requires significant financing to get it off the ground.
- Reserve Excess In this situation, the Society has reserves that exceed the set 'maximum' level for two years in a row.

Organizations set <u>targets for the maximum and minimum levels of reserves</u> to establish guideposts to inform the spending and replenishment of their investments. These levels are unique to each association as they depend on net assets, the state of the existing reserves, and the financial risks to operations.

After an update of industry practices, benchmarking to comparable scientific member associations, and a review of the Society's revenue and expense risks, the Finance Committee recommended the following targets:

- Maximum: 2Y (24 months) operating expenses = \sim \$3.2M (based on audit 2018)
- Minimum: 1Y(12 months) operating expenses = \sim \$1.6M (based on audit 2018)

As of the end of 2019, the reserves are at the minimum level.

Variance from these maximum and minimum levels are discussed with the Finance Committee and managed as follows. When the reserves exceed the targeted maximum level for two consecutive years (for example, when the markets are delivering significant passive income to the portfolio), the Society has the option to retain and reinvest the monies for future special projects or spend the funds on its annual operations. In the opposite situation, when the reserves fall below the set minimum level, the Board will adopt an operational budget that includes a projected surplus sufficient to rebuild the funds in a minimum of 3 years until the Reserve is restored to the target balance to secure the nest-egg.

The policy outlines a <u>process to withdraw funds</u> in situations where there is either an emergency or an opportunity. In brief, the officers submit a request to the Finance Committee detailing the need for the funds.



The committee reviews and recommends a course of action to the Board. The Board can accept or reject the recommendation to use the reserves to address the need or opportunity.

The Board approved the Reserve Spending Policy, and it will be in effect starting in 2020. As with the existing Investment Policy, this new process will be reviewed and updated every two years to stay current with the Society's growth.

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

Did you know this about the Society's finances?

Twice a year, the Finance Committee (e.g., select Board Members, CEO & CFO) meets with the investments financial advisors, **Cynthia L. Keith**, CFA at the Omega Group, to review portfolio performance. We also assess if any adjustments are required to manage the expected changes in global economics. Every other year, the Society also review the Investment Policy to evaluate the asset allocation and its risk tolerance in light of changes in the Society's finances.

To help the Society stay up-to-date on the impact of market fluctuations, the investment advisers launched an interactive dashboard through which we can monitor the daily status of the Society's investment portfolio. This change satisfied the Society's desire to move all of its financial monitoring systems from monthly paper statements to electronic real-time monitoring. The Society continues to work with our advisor to chart the best path forward to protect the association's reserve nest-egg while gaining passive income from these investments.





Chairman of the Meetings Committee Benoit Chabot

We are getting closer and with much anticipation to the 2020 RNA Society meeting in beautiful Vancouver, Canada (May 26-31). The decision to go to Vancouver in 2020 was taken at the Prague meeting in 2017. Even former Czech president, **Václav Havel** had been rooting for it for a while,

as evidenced by the photo on the right!

Sarah Woodson, our former RNA Society president, is the lead organizer. She has put together a brilliant team of co-organizers: Stephen Rader, Lingling Chen, Michaela Frye, Alain Laederach and Oliver Mühlemann. Keynotes speakers will be Melissa Moore (Moderna Therapeutics, Cambridge, USA) and Jack Szostak (Harvard Medical School, Cambridge, USA).

- Szostak (Harvard Medical School, Cambridge,

Registration is now open!

Satellite meetings are popping up, so check the <u>RNA2020</u> website!

<u>**RiboWest 2020**</u>, organized by **Gregg Morin** and **Judy Wong** from University of British Columbia (UBC), and **Peter Unrau** and **Tim Audas**



from Simon Fraser University. RiboWest 2020 will be held in the Pharmaceutical Sciences Building at UBC, starting in the evening of May 23, and concluding with a dinner Banquet on May 25. Keynote speakers will be **Kathy Collins, Erik Sontheimer** and yours truly. RiboWest has been successfully attracting RNA researchers in Canada and northwestern USA. Registration to <u>RiboWest 2020</u> is open to all researchers and trainees interested in RNA work.

Another satellite meeting focuses on <u>RNA granules</u> and is being organized by **Neil Cashman, Eric Jan** and **Poul Sorensen** (UBC) to be held May 24-26. Keynote speakers are **Paul Anderson** and **Gene Yeo**. Follow the



link to register for <u>RNA Granules</u> 2020. Focus of this meeting is to bring together experts investigating RNA granules that impact different fields and that have been implicated in infectious diseases, neurological disorders and cancer.

The 2021 RNA Society meeting is also on track. It will be held June 1-6 in Singapore at the Suntec Singapore Convention & Exhibition Centre in downtown Singapore. **Gene Yeo** is the lead organizer for this meeting. His team of co-organizers include **Xavier Roca** (Singapore), **Narry Kim** (South Korea), **Kathrin Karbstein** (USA), **Jörg Vogel** (Germany), **Anna Marie Pyle** (USA). The picture to the left was taken when visiting Suntec last year with Simple Meetings (**Mary McCann and Kristin Scheyer**), our CEO, **Jim McSwiggen**, CFO, **Evelyn Jabri** and **Xavier Roca**, the local host and an organizer of RNA 2021.

The 2022 the RNA Society meeting will be at University of Colorado in Boulder from May 31 to June 5. **Roy Parker** has accepted the leadership for this meeting. Roy has already secured the help of **Howard Chang** (USA), **Amy Buck** (UK), **Štěpánka Vaňáčová** (Czech Republic), **Kristen Lynch** (USA) and **Rui-Ming Xu** (China) as co-organizers. (continued, next page)



As for venues for RNA2023, with the tremendous help of **Mary McCann and Kristin Scheyer** from Simple Meetings, we are now visiting and gathering information on a few European cities.

As always, I am very appreciative of members of the Meetings Committee for their efficient contributions in the often difficult task of selecting continents, venues and organizers for our meetings. Members of this committee now include Florian Heyd (Germany), Andrei Korostelev (USA), Rui Zhao (USA), Maayan Salton (Israel), Katrin Karbstein (USA), Karla Neugebauer (USA), Yukihide Tomari (Japan), Jörgen Kjems (Denmark), and Lingling Chen (China).

We continue to welcome suggestions from members willing to champion their institution or city as possible future venues.

Best wishes to all for a productive New Year 2020! Benoit Chabot <u>Benoit.Chabot@USherbrooke.ca</u> Chair of the Meetings Committee Université de Sherbrooke, Canada

Update on the Society's Mentoring Program Nancy Greenbaum

Individual Mentoring Program: By the end of January, the third cycle of the RNA Society's



Mentoring Program will be in full swing. This program, launched in Fall 2017, arranges for individual mentoring, for a period of up to one year, to junior scientists (PhD students, postdocs, Assistant Professors)

at critical points in their careers. They are paired with senior Society members with complementary expertise. This program is designed to enhance mentoring 'in-house' mentoring by adding an intrainstitutional experience to trainees or those starting independent positions. One advantage of this program is to fill-in gaps in research field- or career path-specific mentoring, or to provide an uninvolved perspective, that research advisors and new faculty colleagues may not be able to offer.

During the first two years of this program, we accommodated 20 mentor-mentee pairs each cycle.

Mentees had submitted applications to be in the program, seeking guidance on career direction, grant proposals, narrowing focus, preparation for future positions, and relationships with colleagues. Each was matched with a mentor targeted from the Society's senior membership. Participants were provided with information about mentoring goals/tools, but with no imposed structure about mode or frequency of communication. Almost all participants found the mentoring experience helpful.

We are now scaling up the program: this cycle will include 30 mentor-mentee pairs. As before, mentees expressed their interest by submitting an application; however, for the first time, most mentors have volunteered to fulfill this important service (rather than being asked). Some senior faculty having expertise that makes them particularly good matches for individual mentees are still being invited directly. Mentees, as in earlier cycles, range in level from PhD student through Assistant Professors in North America,

Europe, Asia and Australia. Mentors representing a range of academic ranks are associated with fouryear colleges, research universities and institutes, and medical schools covering the same geographic range as our mentees. One enterprising junior faculty member is acting both as a mentor AND a mentee. The pairing process is almost completed, and all mentors and mentees will be notified of their partners in the coming week or two. Scientists with private sector positions have not been as active in volunteering their time and expertise as those in the academic sector – perhaps in the future we will also be able to extend the program to provide mentoring for junior scientists hoping to pursue this direction. Those who are starting in this cycle (as well as those from the previous two cycles) are encouraged to attend the RNA Society Meeting in Vancouver and to meet there in person.

As this program matures, we plan to invite requests from prospective mentors at mentees each Fall, with the possibility of an additional start date in the Spring if enough people are interested. So - if you have benefited from the experience of asking questions on specific issues at one of the annual Career Mentoring Lunches or other mentoring events, or enjoyed providing answers or suggestions to those seeking help, you may want to build on that activity by requesting to be a mentee, or serve as a mentor, respectively, in an upcoming next round of the Mentoring Program.

Career Mentoring Lunch: As we have at all annual RNA Society Meetings, we are scheduling the **Career Mentoring Lunch** at the Vancouver meeting. Please consider registering as a mentor or mentee when registering for the meeting. We always have a good-size group of mentors representing academic science (please keep it up!), but as more mentees express interests in private sector jobs (or deciding between academic and private sector) each year, we definitely encourage those with expertise in biotech or industrial positions (as well as in science policy) to volunteer to share their experience with junior scientists by signing up as mentors for table focusing on these topics!

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

From the desk of Membership Chair Olivia Rissland

As this is my first note as Chair of the Membership Committee, I want to start by recognizing **Kristian Baker** for all the hard work she did as the previous Chair. I also want to thank all the people who have helped with the transition and who



continue to work hard in their free time to make the RNA Society community special, especially **Julie Aspden, Neva Caliskan, Suja Jagannathan, Ute Kothe**, and **Nancy Greenbaum**. Together, we run programs intended to enhance our members' experiences: awards to help support small meetings (see the list of upcoming and supported meetings in this newsletter, p.20); the mentoring program (see the update from Nancy Greenbaum in this newsletter, p. 17); the RNA Salon program; the Member Spotlight Series; and social media outreach.

RNA SALONS 2019/2020

We are now into the fourth season for our **RNA Salon** initiative, which provides sponsorship to foster scientific and professional development in local RNA communities. With each year, this program has grown, and I am delighted to announce that we have funded 54 RNA Salons for the

2019/2020 iteration. We have also continued our partnership with industry co-sponsor LEXOGEN to further support your Salon events. In total, RNA Salons occur in five continents and engage 6300 participants around the world. Ute Kothe continues to do an exceptional job running this initiative, and its success is due in no small part to her dedication.



MEMBER SPOTLIGHT SERIES

Neva Caliskan has taken over our very popular Member Spotlight Series, which highlights the outstanding lives and accomplishments of our members. (Visit the RNA Society website to see <u>past and present profiles</u>.) She has assembled 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), and the 2020 series looks to be our best one yet. 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.

INCLUSION AND EQUITY INITIATIVES

One area that I am particularly excited about is furthering equity and inclusion in the RNA Society. **Suja Jagannathan** is spearheading this new effort so stay tuned for diversity-focused initiatives over the next year. If you have any ideas for how we can make the RNA Society more inclusive and equitable or if you would like to be involved, please let us know.

SOCIAL MEDIA OUTREACH

Together, **Julie Aspden** and I run the RNA Society twitter account (@RNASociety). As one of the RNA Society's most public faces, the twitter account represents a key (and fun) way to interact with the members and the broader scientific community. Follow us for the latest RNA news—and stay for the glorious world of RNA puns!

LOOKING TO VANCOUVER, RNA2021, AND BEYOND

As you know, the annual meeting will take place this May in Vancouver, and I personally am looking forward to what promises to be a tremendous meeting. For those of you who have not yet renewed your membership, remember that members receive discounts on registration and eligibility for travel awards (see p 9). Trainees, be sure to check out the mentoring lunch and activities organized by the **RNA Society Junior Scientists** (see p. 10). If you see me in Vancouver, please introduce yourself—there's nothing I enjoy more than meeting another member of the RNA tribe.

Finally, as I start my time as Chair, I want to hear from you! Do you have an idea about how to make our members' experiences better? Do you have a suggestion about how we can increase inclusion and equity? Do you want to take on a more active role in the RNA Society? Let me know by email (<u>olivia.rissland@cuanschutz.edu</u>) or in person in Vancouver.

I'm really looking forward to getting to know and work with you,

Olivia







An \${RNA}omics hackathon

May 22-24, 2020 (prior to the RNA Society meeting) Vancouver, BC

First Applications due: Feb 28th, 2020

hackseq is a computational biology hackathon

- Propose a computational RNA project
- Recruit a team of world-class researchers
- Sprint for 72 hours to code it into reality



hackseq.com/rna

@hackseq



RNA Society-supported meetings

Upcoming Meetings Sponsored by the Society

RNA UK 2020 Jan 24th – 26th 2020 Windermere, UK https://www.rnauk2020.org

Bermuda Principles–Impact on Transcriptomics 2020 Feb 5th – 9th 2020 Southampton, Bermuda www.bermudaprinciples.org

2020 Rocky Mountain RNA Symposium Feb 13th 2020 Aurora, Colorado, USA www.rockyrna.org/symposium/

2020 EMBO Workshop on the Epitranscriptome April 22nd – 24th 2020 Heidelberg, Germany https://www.embl.de/training/events/2020/ETC20-01/

2020 EMBO Workshop on the Epitranscriptome April 22nd – 24th 2020 Heidelberg, Germany https://www.embl.de/training/events/2020/ETC20-01/

Gordon Research Seminar: Post-transcriptional Gene Regulation July 11th – 12th 2020 Newry, Maine USA https://www.grc.org/post-transcriptional-gene-regulation-conference/2020/

La and LARP Society Meeting August 9th – 12th 2020 Toronto, Ontario, Canada http://www.larp-society.com/



Past Meetings Sponsored by the Society

11th International Retroviral Nucleocapsid and Assembly Symposium (IRNCAS)

August 15th – 17th 2019 Boston, Massachusetts, USA

The 2019 IRNCAS focused on the retroviral nucleocapsid protein (NC) and its Gag precursor, a polyprotein responsible for viral assembly. Approximately 90 scientists attended the meeting, which was held at Northeastern University in the new conference center located on the 17th floor of East Village. Topics included RNA and membrane interactions, chaperone properties, interactions with cellular factors, immature virus assembly and budding, and therapeutic strategies. Keynote



talks were by Jennifer Lippincott-Schwartz, who discussed the making of the HIV viral envelope membrane, and **Volker Vogt** who reviewed fifty years of retrovirus assembly research through his own personal lens.

The organizing

committee members (Mark Williams (chair), Victoria D'Souza, Karin Musier-Forsyth, Eric O Freed, Delphine Muriaux, and Ben Berkhout) are very grateful to the RNA Society for financial support, which was used to support accommodation costs for junior scientists.

2019 RiboClub Symposium

RNA: 20 Years of Discoveries In Association with the Gairdner Foundation

September 22nd – 27th, 2019 Orford, Québec, Canada

The RiboClub in association with the Gairdner Foundation and the Université de Sherbrooke celebrated 20 years of RNA research in Canada by a spectacular 5 days meeting that grouped the best scientists in the field. The meeting started with a public session aimed at communicating and explaining the latest discovery in RNA research and its impact on the society and population health. Stakeholders including Drs. Ronald Pearlman (Gairdner Foundation) and Michael Strong (Canadian Institutes for Health Research) discussed the importance of supporting basic research in RNA biology. Lead RNA society

scientists illustrated the value of RNA research and how the investment in RNA research improve health care and impact the society using concrete examples and recent success stories. Prof. Erik Sontheimer explained the challenges and opportunities of genome editing. Prof. Allan Jacobson presented the Translarna as treatment for Duchenne Muscular Dystrophy focused on how to translate basic research into therapy and present a case study of how inherited genetic defects could be treated. Finally,



Prof. Adrian Krainer described the first approved drug for spinal muscular atrophy. For the following 5 days of scientific discussion included 289 scientists from universities across the world and the meeting ended with a Gala celebrating 20 years of RNA meetings in Orford/Sherbrooke.

The RiboClub is thankful for the support of the RNA society for sponsoring the public session and for travel awards. Recipients of travel awards were: **Abigail Leistra** (University of Texas, USA); **Craig Kerr** (Stanford University, USA); **Kirsten Reimer** (Yale University, USA); **Gaultier Hericher** (Université de Laval, Canada); **Mia Mihailovic** (University of Texas, USA); **Shinichiro Akichika** (University of Tokyo, Japan).



2019 CornBelt regional RNA meeting

October 18th & 19th, 2019 Columbia, Missouri, USA

The 2019 CornBelt regional RNA meeting was held on the campus of the University of Missouri-Columbia on Oct 18/19, 2019. Keynote speaker **Barb Golden** from Purdue University opened the meeting, followed by three 3 sessions of short talks by graduate students and postdocs (and a few faculty). After dinner the first evening, 50 posters presentations were abuzz with activity for about 3 hours before people hit the saturation point; there were more talks starting at 8:15 the next morning.

Young RNA researchers and their faculty advisors from 16 institutions across 6 states came together to share their science and network. RNA Society funds helped with the cost of dinner (allowing registration to be free to all participants) and provided 5 poster awards: Grad Student **Paige Gruenke** from the Burke lab at Univ. Missouri, Grad Student **Jacob Peter** from the Flynt lab at University of Southern Mississippi, Grad Student **Geralle Powell**



from the Djuranovic lab at Wash U, Grad Student **Jack Samuelian** from the Baum lab at St. Louis University and Undergraduate student **Spencer Thompson** from Julie Soukup's lab at Creighton University. (Pictured left to right: Barb Golden, Jack Samuelain, Jacob Peter, and Geralle Powell.)

6th Annual Israeli RNA Society Meeting

October 24th, 2019 Tel Aviv, Israel

On October 24, the Israeli RNA Society held its annual meeting in memory of **Joseph Sperling**. This was the 6th Israeli RNA Society meeting focused on RNA biology and processing. The meeting attracts 250 participants each year from some of the leading groups in Israel. This year the meeting was in Tel Aviv University. Prof. **Alberto Kornblihtt** (University of Buenos Aires) and Prof. **Chuan He** (University of Chicago) were the keynote speakers, along with 16 invited speakers, 11 short talks by students and postdocs, and over 50 posters. The poster winners were **Yehuda Danino** (Dr. Eran Hornstein lab, Weizmann Institute of Science) and **Amalie Grenov** (Dr. Ziv Shulman lab, Weizmann Institute of Science).

Rustbelt RNA Meeting (RRM) 2019

October 25th & 26th , 2019 Cleveland, Ohio, USA

The 2019 Rustbelt RNA Meeting (RRM) was held at the Tinkham Veale University Center on the Case Western University

campus in Cleveland, Ohio on October 25th & 26th, 2019. The meeting was organized by Co-chairs **Hua Lou** and **Jo Ann Wise** (Case Western Reserve University) and **Peng Yao** (University of Rochester).

A hallmark of the RRM is its focus on trainee research and career development. Following a rich tradition, the 2019 meeting highlighted cutting-edge research through 25 oral presentations by undergraduate, graduate and postdoctoral trainees, as well as 173 poster presentations.

Oral and poster presentation award recipients received books donated by Cold Spring Harbor Laboratory Press: **Andrew Gupta** (University of Illinois at Urbana-Champaign); **Nathan Kudlapur** (The Ohio State University); **Jenna Lentini** (University of Rochester); **Allison Williams** (Penn State University); **Kiel**



Kreuzer (SUNY Buffalo); Aiswarya Krishnamohan (The Ohio State University); Rachel Braun (The Ohio State University), Audrey Bui (St Bonaventure University); Courtney Hershberger (The Cleveland Clinic); Chathuri Pathirage (The Ohio State University); Gina Nostramo (The Ohio State University); Eric Strobel (Northwestern University).



From DNA to RNA Synthesis, Processing and Cancer

November 8th, 2019 Edinburgh, UK

The "From DNA to RNA Synthesis, Processing and Cancer" symposium was held November 8, 2019 in Edinburgh, UK. It

marked the retirement of Jean Beggs from the University of Edinburgh with an outstanding program of talks by eminent scientists who have been Jean's colleagues, collaborators and inspiration. Talks covered: DNA damage as a clinical application (Steve Jackson); p53 discovery and its central role in cancer (David Lane); disruption of 9-fold symmetry in centrosomes can cause human disease (David Glover); RNase H2 defects can cause autoinflammatory disease (Martin Reijns); RNA structure acting as a barrier to RNA polymerase backtracking (David Tollervey), insights from analyses of nascent transcription and splicing (Karla Neugebauer), a stabilizing triple helix in viral transcripts (Joan Steitz); multi-functional LSM proteins (Joanna Kufel); insights from a novel cryo-EM structure of the spliceosomes during the second step of splicing (Sebastian Fica); links between splicing, transcription and chromatin (Isabella Maudlin),



Jean Beggs then summarized her research career, from developing a novel method for gene cloning in yeast, to studying RNA splicing and links to transcription and chromatin. The meeting attracted over 120 attendees. 20 students benefitted from free registration, thanks to RNA Society support. The symposium was organized by Emanuela Sani, David Barrass, Isabella Maudlin, Karen Traill, Shiney George, Susana de Lucas, Eve Hartswood, and Jean Beggs.

Bay Area RNA Club 2019

December 4th, 2019 San Francisco, California, USA

The 2019 session of the Bay Area RNA Club was a great success, with 243 registrants across career stages and in academia and biotech. The poster session spilled across the atrium and 2nd floor of Genentech Hall at UCSF, and, as usual, was full of interesting science. The talks were also outstanding, from RNA in Zika virus to endogenous siRNAs targeting rDNA and sorting of miRNAs into exosomes. The organizers would especially like to recognize our talk and poster award winners in the photo below (left to right): **Nimit Jain** (Stanford), **Mia Pulos** (UC Berkeley), **Leanna Monteleone** (UC Davis), **Ryan Muller** (UC Berkeley), **Qin Li** (Stanford), and **Jessie Lopez** (UC Santa Cruz). We hosted the 2nd



annual mentor-mentee lunch, which was a huge success with hundreds of attendees. Thanks to all our sponsors for keeping registration free and all of us fed and caffeinated: the RNA Society, Zymo, Echo, Synthego, Takara, and Thermo.



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.

Nucleic Acid Chemist, Sixfold Bioscience, London

Posted on January 3, 2020

About us We founded Sixfold to tackle the biggest challenge in healthcare: how to safely deliver therapeutics to diseased cells. We saw the huge potential of gene therapies being limited to how safely and effectively they can be systemically delivered in people.

As an RNA Chemist you'll have the opportunity to build a radically different approach to how we deliver RNA therapeutics in vivo. You'll be applying your knowledge of nucleic acid chemistry to design and synthesise oligos that enhance our proprietary drug delivery systems. You'll be utilising intra- and extra-cellular systems to 'hack' biology for more effective therapeutic potential.

Further Information

Should you have any questions, please email careers@sixfold.bio Apply here: <u>http://bit.ly/sixfold-rna-chemist</u> Visit our website: <u>https://www.sixfold.bio/</u>

<u>Postdoctoral Researcher or Staff Scientist Position Available, Lab of Dr. Xin Li, University of Rochester Center for</u> <u>RNA Biology, Genome Therapeutics, Dept Biochemistry</u>

Posted on December 30, 2019

Germ cells are the only cell type whose lifespan is not limited as they are reprogrammed with totipotency in the next generation. We want to understand the basic principles in germ cells that ensures the sustainability of a species from two unique angles. DNA is not the only information carrier. The first is through an RNA biology oriented approach. We strive to understand how various germ-line RNAs prepare and shape epigenetic information flowing across generations. The second focuses on comparative biology. We have established alternative model organisms, such as chickens and lizards, for studying germ cell biology.

Please provide a cover letter describing your past projects and career goals. Please also describe what you hope to get out of this position and what you hope to bring to the Lab. Enclose your detailed CV with names and contacts of three references to <u>Xin_Li@URMC.Rochester.edu</u>.

Postdoc Position Available, Dept of Cellular, Computational and Integrative Biology – CIBIO of the University of Trento

Posted on December 26, 2019

The laboratory of Dr Emilio Cusanelli at the Department of Cellular, Computational and Integrative Biology – CIBIO of the University of Trento is currently seeking a motivated postdoc with expertise in molecular biology and cell biology and a strong interest in the telomere and noncoding RNA fields. The successful candidate will conduct a project aimed at investigating the function of the telomeric noncoding RNA TERRA in the activation of ALT mechanisms in human cancer cells. The project will combine live cell imaging, molecular biology and cell biology approaches and benefit from the multidisciplinary and collaborative environment present at the CIBIO Department. https://www.cibio.unitn.it/; https://www.unitn.it/en.

Highly motivated candidates with a strong interest in the research field are encouraged to apply by sending their cv along with the names of two scientists who can provide reference letters to <u>emilio.cusanelli@unitn.it</u>



PhD Project on RNA-binding Activity of glycolytic enzymes in melanoma (Stéphan VAGNER's team, Institut Curie, FR)

Posted on December 21, 2019

Stéphan VAGNER's team focuses on the role RNA-binding proteins in cancer biology and anticancer therapies (genome instability and genotoxic chemotherapy, oncogenic signaling pathways and targeted therapies, cancer-immune cells cross-talk and immunotherapy). The team uses a combination of approaches (biochemical analyses of RNA, proteins and their interactions, genome-wide analyses of RNA regulation (RNA-seq, 3'seq, polysome profiling) and RNA-protein interactions (iCLIP), analyses of cancer cell phenotypes in cell culture, tumor biology in vivo and patients' tumors).

The start date of the position is September 2020 and funding is available for 3 years. More information & application: training.institut-curie.org/eureca Application deadline: January 13th, 2020 at 4pm (CET)

Postdoctoral Position, Available Immediately, Lab of Dr. Paul F. Agris, Duke University Dept of Medicine Posted on December 21, 2019

A postdoctoral position is immediately available in the Lab of Dr. Paul F. Agris recently established at Duke University Department of Medicine. Applicants are sought with expertise in the following areas: cellular and molecular biology, genetics and biochemistry with experience in RNA and protein expression and mammalian cell culture. Applicants must provide a complete curriculum vitae with publication list, three names and contact information for references, and a cover letter summaring the experience with RNA molecular/cellular biology. Apply through Duke at the link:

https://career4.successfactors.com/sfcareer/jobreqcareer?jobId=2226&company=dukeuniverP1&username=

Scientist I, Molecular Biology/Platform Development Skyhawk Therapeutics

Posted on December 21, 2019

Skyhawk Therapeutics is seeking a Scientist to join the talented, growing startup team in Waltham, MA. Skyhawk is committed to discovering, developing and commercializing small molecule therapeutics that correct RNA splicing. We use our novel SkySTARTM platform (Skyhawk Small molecule Therapeutics for Alternative splicing of RNA) to develop drug candidates directed to targets for some of the world's most intractable diseases including cancer, neurological conditions, and other "undruggable" targets against a wide range of conditions. To Apply: Please send resume and cover letter to taesun@skyhawktx.com

A COVER LETTER IS REQUIRED. Please explain why this job is of interest to you. Detail your strengths and weaknesses as they pertain to the requirements and responsibilities of this position.

Lab Research Analyst, Available Immediately, Lab of Dr. Paul F. Agris, Duke University Dept of Medicine

Posted on December 21, 2019

A Lab Research Analyst 1 (LRA1) is sought immediately for the Lab of Dr. Paul F. Agris recently established at Duke University Department of Medicine.

Applicants should have significant expertise in the following areas: cellular and molecular biology/biochemistry with mammalian cell culture and microbiology experience; and experiential experience with RNA and protein expression. The primary duties for this position are initially related to Dr. Agris research on Type II Diabetes. Applications should be entered through the Duke Human Resources website:

https://career4.successfactors.com/sfcareer/jobregcareer?jobId=15001&company=dukeuniverP1&username=

<u>intps://career4.successractors.com/sreareer/jobreqeareer/jobre_15001&company_dukeuniverr1&duse</u>

Postdoctoral Training Program, Tufts University, Boston, Massachusetts

Posted on December 21, 2019

Tufts IRACDA (Institutional Research and Academic Career Development Awards Program), is funded by the IRACDA mechanism of NIH-NIGMS and designed to prepare talented young scientists for the multiple demands of an academic career in biomedical research. Scholars spend on average 75% of their time conducting bench research and 25% of their time in career development activities. Teaching skills are developed through programs involving mentored classroom assignments at minority-serving institutions in the Boston area. The training is further supplemented by workshops on



essential skills such as grant and manuscript writing, mentoring, lab management, and scientific presentations, as well as on teaching methods that encourage active learning.

The application deadline for positions beginning in the fall of 2020 is March 1, 2020. Later applications will be considered if positions are available. For additional information on the Tufts IRACDA Program and application procedures, please visit our website: <u>https://gsbs.tufts.edu/academics/TuftsIRACDA</u>.

Post Doc Position Available, Max Planck Institute, Leipzig, Germany

Posted on December 12, 2019

The Smerlak group at the Max Planck Institute for Mathematics in the Sciences (Leipzig, Germany) seeks a talented postdoc to join an international collaboration working on the origin of life.

The RNA world hypothesis posits that an early stage of life involved RNA acting as both information carrier and catalyst. Extant self-splicing introns (such as the Azoarcus ribozyme, which can catalyze its own self-assembly from ~50nt-long fragments) may provide a window into this ancient world.

The project aims to combine computational and experimental techniques to design RNA self-replicators from group I introns and test whether they can evolve in vitro.

The position is for one year (renewable for up to three years). Start date preferably in the spring of 2020.

Funding is through HSFP Young Investigator Award RGY0077/2019.

Contact: Matteo Smerlak Email: <u>smerlak@mis.mpg.de</u> URL: <u>www.smerlak.group</u>

Postdoctoral position at Johns Hopkins University

Posted on December 12, 2019

A postdoctoral position is available in the laboratory of Dr. Ryuya Fukunaga at Johns Hopkins University School of Medicine. The laboratory is focused on understanding RNA biology, including the molecular mechanisms of (1) biogenesis and function of small silencing RNAs such as miRNAs and siRNAs and (2) post-transcriptional gene regulation by RNA-binding proteins, RNases, RNA helicases, and RNA modification enzymes. More information is available at: https://sites.google.com/site/fukunagalabjhmi/

https://bcmb.bs.jhmi.edu/people/faculty/ryuya-fukunaga

Please email [1] cover letter, [2] CV, [3] a brief summary of research interests, accomplishments, and career goals, and [4] contact information of at least three references to Dr. Ryuya Fukunaga at <u>fukunaga@jhmi.edu</u>

<u>Postdoctoral Position at NIH to Study Structures and Mechanisms of Cellular and Viral Noncoding RNAs and RNPs</u>

Posted on December 12, 2019

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. To apply: Please email a cover letter indicating preferred start date, CV, a brief summary of research interests, accomplishments, and career goals, and names and contact information for at least three references to: Dr. Jinwei Zhang, Email: jinwei.zhang@nih.gov. The NIH is dedicated to building a diverse community in its training and employment programs. DHHS/NIH is an Equal Opportunity Employer.

Postdoctoral Positions Available, Dr. Xuebing Wu's Lab, Columbia University Medical Center, New York Posted on December 12, 2019

Postdoctoral positions are available in Dr. Xuebing Wu's lab at Columbia University Medical Center, New York, NY. We study the mechanisms of mammalian mRNA regulation by using integrated experimental and computational approaches. We are also exploring the therapeutic potential of CRISPR-based mRNA-targeting for treating human diseases. Please visit <u>https://xuebingwu.github.io/</u> for more information.

Interested applicants should apply to $\underline{xw2629@cumc.columbia.edu}$ by sending (1) a cover letter summarizing research interests and accomplishments, (2) a complete CV with a publication list, and (3) contact information for three references.

PhD Position at Queen's University, Belfast

Posted on December 6, 2019



Funded PhD position at Queen's University, Belfast – RNA transport in the context angiogenesis: deciphering mechanisms of RNA localisation to understand blood vessel growth.

The desired candidate will have experience in routine cell culture and molecular biology techniques. The start date of the position is September 2020 and funding is available for 3 years. Application deadline: 20 January 2020. Apply at https://www.findaphd.com/phds/project/rna-transport-in-angiogenesis-deciphering-mechanisms-of-rna-localisation-to-understand-blood-vessel-growth/?p116296

<u>Postdoctoral fellow position available to study alternative RNA splicing and DNA damage response, Monrovia,</u> <u>California, USA</u>

Posted on December 6, 2019

The Wang Laboratory at the Department of Systems Biology, Beckman Research Institute, City of Hope, is seeking for a talented and motivated Postdoctoral Fellow to lead the project for RNA splicing dysregulation, DNA damage response, and oncogenesis in blood malignancies. Candidates with strong background in RNA splicing, DNA damage, cancer biology, animal models, and bioinformatics are encouraged to apply. Wang Laboratory is currently funded by R01 grants, foundation grants, and City of Hope Startup package.

For consideration, please directly send a CV, a brief statement of scientific research interests, contact information for at least two references and start date availability to: <u>lilwang@coh.org</u>. For detail laboratory information, please visit <u>https://www.cityofhope.org/research/systems-biology/systems-biology-research-labs/lili-wang-lab</u>.

Postdoctoral Fellow Position Available, Study Bacterial Alternative Ribosomes, Chicago, Illinois Posted on November 29, 2019

Postdoctoral fellow position available to study bacterial alternative ribosomes, Chicago, Illinois, USA. The Yap lab is seeking a postdoctoral fellow (https://www.northwestern.edu/hr/careers/, Job ID 36889) to investigate the molecular basis and functional consequences of customized ribosomes in the context of Staphylococcal infections and antibiotic resistance. The lab is part of the Department of Microbiology-Immunology at the Northwestern University in downtown Chicago.

The stipend level will be commensurate with years of experience according to the NIH guidelines. Start date is negotiable. Application open until filled. Please email application and any inquiries directly to Dr. Frances Yap : <u>frances.yap@northwestern.edu</u>

Post Doctoral Fellow Position Available, University Of Michigan, Dept. of Neurology

Posted on November 29, 2019

Over half of the genome is made up of transcribed repetitive elements, but we know very little about how this "repeatome" influences neuronal function or contributes to human neurological disease beyond a few loci. The Todd Lab at the University of Michigan studies both disease-specific nucleotide repeat expansions (C9orf72 associated ALS/FTD and Fragile X-associated disorders such as FXTAS and Fragile X Syndrome) as well as the broader novel roles of the Repeatome on biology and disease. We use multimodal model systems (Fly, Rodent, and human iPSC/hESC derived neurons) coupled to biochemical, bioinformatics and molecular tools to understand pathogenic mechanisms and develop novel therapeutic strategies.

We currently have independent funding for up to two new fellows including generous benefits and support for travel to international meetings. Past fellows and students have consistently gone on from the lab to tenure track faculty positions or other successful positions within industry/academia.

Positions are available as early as January 1, 2020. E-mail petertod@umich.edu

Post-doctoral Position Available, RNA Laboratory of Dr. Vivian G Cheung, University of Michigan

Posted on November 29, 2019

A post-doctoral position is available in the RNA laboratory of Dr. Vivian G Cheung at the University of Michigan. Our laboratory studies RNA sequences and structures to understand how they affect cell functions. Projects include identifying and characterizing proteins that alter RNA sequences and/or structures, and determining how the resulting nucleic acids regulate cellular activities. Candidate will work independently, and are skillful in oral and written research communication. Salary is commensurate with experience. Send or e-mail a curriculum vitae, a letter stating research interests and contact information for three references to: Vivian G Cheung, MD Email: <u>vgcheung@umich.edu</u>



Staff Scientist, RNA Biologist, Laboratory of Dr. Vivian Cheung, University of Michigan Posted on November 29, 2019

We have an opening for an RNA biologist in the laboratory of Dr. Vivian Cheung at the University of Michigan. Dr. Cheung's laboratory studies basic mechanisms in RNA, particularly the regulatory roles of RNA structure and sequence. This position will be responsible for designing and carrying out experimental and analytical work. Email: vgcheung@umich.edu

Postdoctoral Position in RNA biology of Planarian Stem Cells, Yale University

Posted on November 29, 2019

The Van Wolfswinkel Lab [www.vanwolfswinkellab.org] at Yale University is seeking a driven and creative postdoctoral associate to join our group. We are a young and collaborative NIH-funded lab working on the regulation of planarian stem cells. We apply and develop innovative molecular approaches to address fundamental questions concerning stem cell health, regulation of cell fate, and cell population dynamics. We are particularly interested in the molecular processes involved in the long-term maintenance of pluripotency and in the transition towards differentiation.

To apply, please send a CV (including names and contact information of three references) and a cover letter explaining your experience and your motivation to Josien van Wolfswinkel (josien.van.wolfswinkel@yale.edu).

Post Doc Fellow Position Available, The NeuroEpigenetics LAB

Posted on November 22, 2019

The NeuroEpigenetics LAB – is offering a full-time postdoctoral position to investigate altered molecular mechanisms in Huntington's Disease (HD) pathology. The lab (<u>https://biagiolilab.wordpress.com</u>) is located in the ambitious and supportive research environment of the Department CIBIO (<u>https://www.cibio.unitn.it/</u>), within the University of Trento (ITALY). We are seeking enthusiastic and highly motivated scientist keen to investigate how wild-type and mutant huntington regulate Linear Alternative Splicing and Back-Splicing processes locally at the HTT gene locus, and more globally at the genome-wide level. -

To learn more about our scientific interests, please see our publications:

https://www.researchgate.net/profile/Marta_Biagioli/publications

Applications_Please send a cover letter detailing your research interests, CV to Dr. Marta Biagioli at marta.biagioli@unitn.it

