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From the Desk of the President, Anna Marie Pyle



It isn't often that an airline delay turns out to be a good thing, but I consider myself fortunate that my flight out of Krakow was inexplicably cancelled after the RNA Meeting. RNA2019 was so incredibly great that I was fully

engaged with the meeting itself and barely peeked out of the ICE building. The sessions reflected the breadth of excitement going on in the RNA field, and we received many new ideas about research areas and constituencies that will be highlighted in RNA2020 and beyond. In addition to a great scientific program and a fantastic conference center, the special events and social activities all reflect that hard work of the 2019 organizers, along with our officers **Evelyn Jabri, Jim McSwiggen, Brenda Peculis, Juan Valcarcel** and head of the Meetings Committee **Benoit Chabot**.

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And then there was Krakow itself, which is an incomparable place. But that's where the magic of Lufthansa comes in, along with the mystery of my flight cancellation (which was never explained). I was booked on a flight the next day and so I had 24 hours to enjoy one of the most beautiful corners of Poland, learn about its rich history, shop for my kids and take many photos. I left Krakow feeling fortunate that the RNA Society can now host its meetings at sites all over the globe, bringing together diverse scientists from far-flung places to enjoy all that's great about RNA science. I'm excited that we are developing new mechanisms for reducing student travel costs and highlighting the accomplishments of young scientists, as exemplified by new the **Elisa Izaurralde Award** that was announced at RNA2019 (see p21). We have much to look forward to, as our field gets stronger every year, and there are many great meetings ahead. See you in Vancouver next year!

With best wishes,

Anna

RNA 2019 in Review

Adrian Krainer, RNA Society 2019 Lifetime Achievement Award

The 2019 RNA Society Lifetime Achievement award went to Adrian Krainer. His short seminar this year provided perspective, gave the audience a real appreciation of his research focus and pathway, and reminded us that he has been a leader in the RNA splicing field for many years.



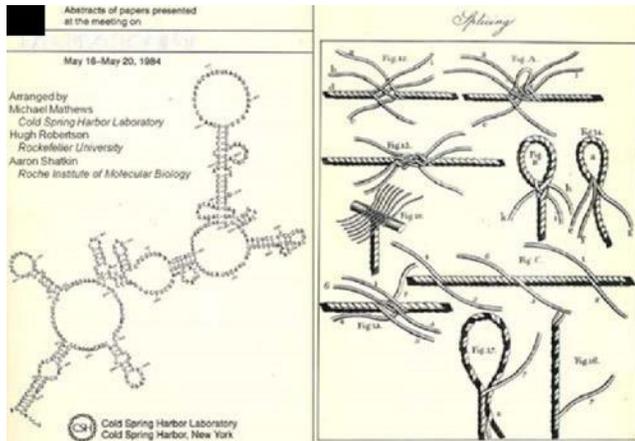
Adrian's first slide showed the faces of the previous 16 awardees. He reminded us of the impressive collection of highly talented scientists within our Society; he said that he felt honored and humbled to join this group. He is the youngest to have been acknowledged by our Society in this way.

Adrian started his presentation well before his emergence on the scene. His grandparents on both

sides of his family lived in Transylvania (Romania or Hungary), not far from where we were sitting in Krakow. His maternal grandparents emigrated to Uruguay around 1930. His father was a refugee in Italy after WWII, before settling in Montevideo, Uruguay in 1950. His parents met there, married in 1953, and had two boys. As kids, Adrian and his older brother were encouraged to study, attending a bilingual French and Spanish elementary school in Uruguay; English became his third language later on. With encouragement from his parents to continue his education, Adrian left Uruguay in 1977 and came to the US. He was very interested in genetics but was not really certain what direction that would take him.

Adrian went to Columbia University in New York on a full scholarship and earned his BA in Biochemistry in 1981. While at Columbia he did research as an undergrad with **Catherine Squires**, studying bacterial transcription termination. He said she was a great mentor to him, believing in him more than he believed in himself at the time. With that experience and the confidence that she instilled in him, he went to Harvard for his PhD. Adrian rotated in the laboratories of **Matt Meselson**, **Wally Gilbert** and **Jim Wang** before settling into the laboratory of **Tom Maniatis**.

While in the Maniatis lab, Adrian established an *in vitro* splicing system, independent of transcription. Using an SP6 phage promoter fused to an intron-containing beta-globin gene, and Sp6 RNA polymerase to make pre-mRNA, he demonstrated that splicing in HeLa cell nuclear extracts requires ATP and magnesium. He could tell that uncapped RNAs were spliced at a lower level and could visualize potential intermediates and discrete likely degradation products using primer extension and S1 nuclease mapping. To confirm the identity of the



individual bands in these pre-PCR days, Adrian had to do a large-scale reaction, then cut the primer-extension bands out of the gel and perform Maxam-Gilbert sequencing on that material. He spent late hours in the lab loading and running several gels, and he recalled that in those days, the lights never went off in the Maniatis lab.

Adrian did recount that he was really tired the next morning, as he was taking down three gels, and his hands accidentally shorted the power supply, taking a 1500 volt discharge. When he came to, he was on the floor outside the lab. The last gel also ended up on the floor, in pieces. He was able to get some data from that third gel, but he decided he had the data he needed and was definitely *not* going to repeat that experiment!

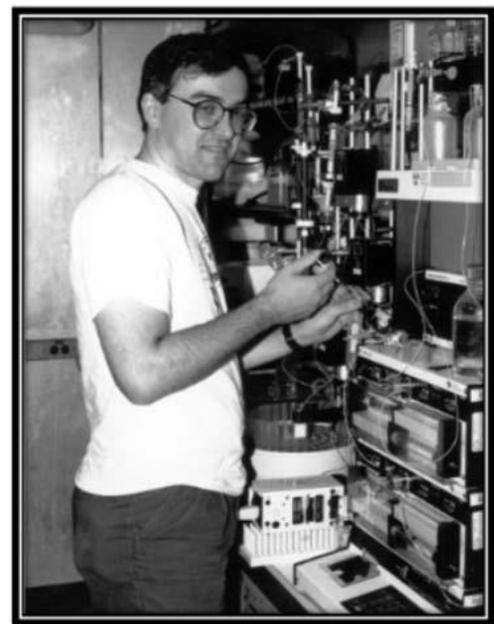
Adrian wrote up his findings and on a Friday afternoon he drove the manuscript to the offices of Cell Press. It was clear that **Dr. Ben Lewin**, the Editor of Cell, had the manuscript reviewed over the weekend: five days later, on Wednesday, Maniatis received a letter in the mail stating that the manuscript was accepted without any revisions. Adrian now admits he was a bit naïve at this point;

he was disappointed that he didn't get back written reviews, because he wanted to understand what people thought of the work. He also acknowledged that that experience never happened again.

Adrian's work on splicing continued and in 1984 he attended his first Cold Spring Harbor Meeting on RNA Processing, where he gave his first talk on RNA splicing. The RNA Processing meeting was the precursor to the current RNA Society annual meeting. Adrian proudly recalled that he's been at 36 meetings now, having attended every one since 1984.

In 1986, while still completing his PhD in the Maniatis lab, Adrian was selected to be the first Fellow in the new Cold Spring Harbor Laboratory (CSHL) Fellows Program. He has now been at CSHL for 33 years; as a full Professor since 1994.

When Adrian arrived at CSHL as a fellow, his intent was to work on separating the components in extracts to identify the factors that are required for splicing. He spent several years in the cold room and in 1990 he identified SF2 (SRSF1) as a factor required for *in vitro* splicing that also affected alternative splice site selection. **Jim Manley's** lab independently identified the same factor and dubbed it ASF. Adrian reminded us that we now know of about 200 proteins and 5 small RNAs required to carry out splicing *in*



CSHL, 1990



vitro. He quipped that had we known that back then, it was likely no one would have started that type of biochemical fractionation project!

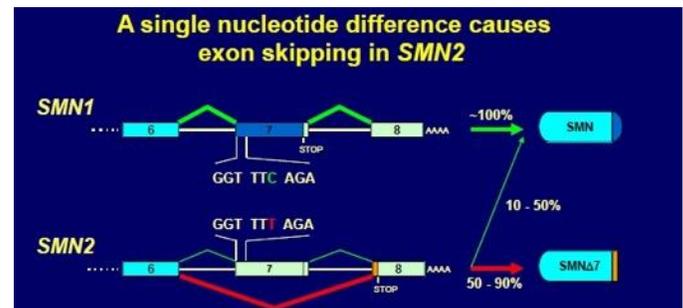
In 1989, Adrian hired his first postdoc, **Akila Mayeda**, who took Adrian's spot in the cold room. They used a complementation assay to identify antagonistic interactions between hnRNPA1 and SF2 and learned how they affect the recognition of alternative 5' splice sites. When **Javier Cáceres** joined the group, they extended these findings to alternative splicing in live cells. While their previous experiments had used transcribed RNA precursors added to cell extracts, some of their projects now involved examining RNA products isolated from intact cells transfected with a plasmid to express the precursor substrate. These experiments were critical to the direction that the Krainer lab took next.

Meanwhile, other labs also started to identify related factors. For example, **Fu and Maniatis** identified SC35 (SRSF2) and **Mark Roth** identified an entire family of SR proteins, later found to play roles in splicing. Several labs contributed to identify binding sites for these proteins and to understand the consequences of mutations in the binding sites for each protein. They started asking "bigger questions". Not just where does one protein bind and what does it do, but considering that some nonsense mutations result in altered splicing, is the reading frame recognized within the nucleus when alternative splicing occurs? They eventually realized this was not the case: postdocs **Hong-Xiang Liu** and **Luca Cartegni**, with collaborator **Michael Zhang**, demonstrated that a nonsense or missense mutation could prevent SR protein binding to an exon, resulting in exon skipping or alternative splicing, but independent of the translational reading frame.

The data from those experiments on exonic splicing enhancer motifs and binding of individual SR proteins set the stage for one focus of the Krainer lab to move into a more applied area. It was understood that reduced levels of the SMN protein resulted in the disease spinal muscular atrophy (SMA) but little was known about how this happened or whether a treatment might be possible.

The disease was first identified in the 1890s. Over many decades, many people contributed knowledge to help understand the disease, but little was known

about the mechanism until the *SMN* genes were identified in 1995 by **Judith Melki**. **Chris Lorson** in **Eliot Androphy's** lab studied the expression of the *SMN1* and *SMN2* genes, then reported results that caught Adrian's attention. It was known that mutations or deletions in the *SMN1* gene resulted in the disease phenotype. The closely related *SMN2* gene can express the identical SMN protein, but only in low amounts, because alternative splicing of exon 7 results in a predominant isoform with a much



shorter protein half-life. Lorson and colleagues showed that a translationally silent nucleotide change in exon 7 of *SMN1* versus *SMN2* is responsible for the difference in exon 7 splicing between these two genes. Work in Adrian's lab by **Luca Cartegni** and **Michelle Hastings** subsequently provided an explanation for why exon 7 is skipped in *SMN2*: the single nucleotide change prevents the binding of a splicing activator, SRSF1, to the exon.

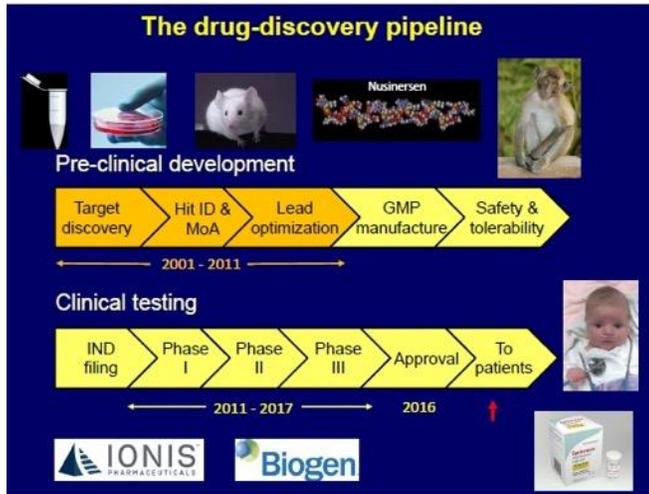
While other labs, notably **Ryszard Kole's**, had previously demonstrated that antisense oligonucleotides could correct abnormal splicing *in vitro*, Adrian's group took this concept one step further, using antisense to promote exon inclusion. They created a chimeric molecule that tethered a synthetic SR protein activation domain to an antisense oligonucleotide that would base-pair with the mutated exon in the *SMN2* pre-mRNA. This would make up for the loss of SRSF1 binding to exon 7, increasing the splicing via exon inclusion.

That chimeric molecule helped restore exon inclusion in a concentration-dependent manner. Unexpectedly, the control antisense molecule alone had detectable, albeit weaker activity, and this became the focus of subsequent efforts in the lab. When Luca moved on to a new position, a new postdoc, **Yimin Hua**, picked up the project. In collaboration with Ionis Pharmaceuticals, he carried



out a systematic screen with overlapping oligonucleotides complementary to the target *SMN2* pre-mRNA, to identify the positions that resulted in the highest level of exon inclusion.

By 2008, they developed a lead modified oligonucleotide, latter dubbed nusinersen/Spinraza. Investigating its mechanism of action, they showed



that by binding to a known intronic splicing silencer, ISS-N1, Spinraza prevents binding of the splicing repressor hnRNPA1. Thus, their work had come full circle back to their original basic research on SRSF1 and hnRNPA1 as splicing regulators. Working with SMA mouse models, they then demonstrated that increased splicing induced by nusinersen administration effectively alleviated the SMA phenotype. While this was an impressive finding, Adrian reminded us that this reflected a methodical drug-discovery effort that spanned from 2001 to 2011. Then the application for clinical use started in 2011, and following impressive

The Breakthrough Prize, including the interactions with celebrities, is intended to help society become more aware of advances in science and the potential implications for their own lives

clinical trials sponsored by Ionis and Biogen, the drug received FDA approval at the end of 2016. By now it has been administered to >8,000 patients (with amazing outcomes!).

Adrian then showed a close up of the prescribing information for the drug. The description states that “Nusinersen binds to a specific sequence in the intron downstream of exon 7 of the *SMN2* transcript” and “SPINRAZATM is an antisense oligo (ASO) designed to treat SMA caused by mutations ... SPINRAZATM was shown to increase Exon 7 inclusion in *SMN2* messenger ribonucleic acid (mRNA) transcripts and production of full-length SMN protein.” Adrian felt happy and proud to see all this RNA-splicing terminology in a medication package insert, 40 years after the discovery of split genes.

He then showed slides from the ceremony where he and co-awardee **Frank Bennett** received the 2019 Life Sciences Breakthrough Prize, which among other things was “a great opportunity to meet celebrities”. He stressed that the prize, including the interactions with celebrities, is intended to help society become more aware of advances in science and the potential implications for their own lives.

Adrian concluded by acknowledging the many current and former lab members who have worked with him in the lab, his 50+ collaborators over the years, and his wife Kate. He ended by sharing an Email from a parent of a child who was receiving his first dose of Spinraza; the father concluded by saying that “I pray that you and your lab will continue to be blessed with overabundant funding and brilliant grad students”.



Jim McSwiggen RNA Society 2018 Lifetime Service award

It was with great pleasure that we recognized Jim McSwiggen with the 2019 Lifetime service award for his work as CEO for the Society. For the past 9 years, Jim's dedication and ceaseless effort has kept the Society running day-to-day while maintaining perspective and long-term focus. Jim will step down at the end of December 2019 after 9 years as CEO. He has worked to achieve seamless transitions and continuity across 7 different presidents, 3 CFOs and countless Board members. During his time as CEO, the number of Society members has doubled, the financial assets have more than doubled, and the Society has facilitated meeting attendance for Junior members by providing both travel awards and group registrations for larger labs. Other standing committees have been created to ensure the growth of the Society in depth as well as breath; we, as a Society, have benefited much from these years of Jim as CEO. Many thanks, Jim!



RNA Society 2019 Early Career awardee: Maria Barna

Dr. Barna is an Assistant Professor of Genetics and Developmental Biology at Stanford University in California, USA. She was nominated for her groundbreaking work on ribosome heterogeneity. Her work has created an entirely new field of research, which many labs are also beginning to pursue. Maria discovered heterogeneity in ribosomes at the level of ribosomal-protein (RP) composition and ribosome-associated-protein (RAP) composition. Collectively these appear to control the ability of diverse ribosomes to translate different mRNAs. She has demonstrated that translational specificity occurs at the level of ribosome heterogeneity and this diversity appears to be important for controlling key cellular decisions. She has been a full member since 2017 but has presented her work at several RNA meetings.



RNA Society 2019 Mid-Career awardee: Ailong Ke

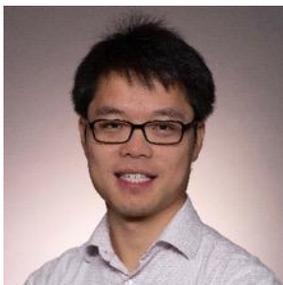
Dr. Ke is a Professor in the Department of Molecular Biology and Genetics at Cornell University in New York, USA. A structural biologist by nature, his work can be broadly classified into three areas. His lab examines RNA-guided CRISPR immunity, a focus of his lab for over 10 years. He is also interested in structure-function of non-coding RNAs including T-box riboswitches and quaternary RNA ring structure. In addition, his lab works on RNA 3'-processing and degradation by the exosome complex—including 3D reconstructions of the yeast core exosome. He has been a full member of the RNA Society since 2006



The RNA Society 2019 Scaringe Awards

The RNA Society is pleased to announce the winners of the 2019 RNA Society/Scaringe Awards. There were three awardees this year; one post-doctoral recipient and two graduate student recipients. The awardees were celebrated at RNA 2019.

RNA Society/Scaringe Post-Doctoral Award



Xuebing Wu is a postdoctoral researcher who has just completed his postdoctoral work in the lab of **David Bartel** at the Whitehead Institute in Cambridge, MA, USA. He received his BS and MS at Tsinghua University, Beijing, China. He received his Ph.D from MIT in the lab of **Phil Sharp**. Since 2010 he has been examining RNA-centric gene regulation in mammalian systems using integrated experimental and analytical approaches including the roles of RNA structure, roles of RNA processing signals in transcriptome regulation, targeting mechanisms used by the CRISPR machinery. Most recently, he has developed a new framework for sequence-motif analysis. (not present at meeting)

RNA Society/Scaringe Graduate Student Award

Michael C. Chen was a graduate student working with both **Professor Sir Shankar Balasubramanian** at the University of Cambridge and with **Dr. Adrian R. Ferré-D'Amaré** at the National Institutes of Health (NIH) in the USA. He received his PhD degree from the University of Cambridge. He received his B.S. degree working in the laboratory of **Nicholas Hud** at Georgia Tech. His doctoral work examined the biology and the molecular/structural biology of G-quadruplexes (G4), the ubiquitous four-stranded, G-rich secondary structures that are enriched in regulatory elements throughout the human genome and transcriptome. His work represents the first structure of a helicase-G4 interaction and characterizing this is the first critical step in understanding its role in biology.



RNA Society/Scaringe Graduate Student Award

Max E. Wilkinson is a graduate student working on his doctorate with **Kiyoshi Nagai** at the MRC Laboratory in Cambridge, UK. He received his B.Sc. and did research with **Peter Fineran** and **Kurt Krause** at University of Otago, New Zealand. His undergraduate work helped him understand the power of combining crystallography, bacterial genetics and biochemistry to understand molecular mechanisms of recognition. His graduate work has applied cryo-EM to understanding the structure of the spliceosome immediately after the branch-formation step of splicing. Recent work with cryoEM have allowed us to visualize the dynamic nature of the spliceosome indicated by biochemical methods including the RNA and snRNA structural alterations and roles of the associated proteins that drive spliceosome remodeling are critical for efficient splicing.



RNA 2019 Poster awards

We would like to congratulate the poster award winners from RNA 2019



(from left to right)

Amina Jbara # 655 RBOX2 acts as a tumor suppressor in metastatic pancreatic cancer. The Hebrew University-Hadassah Medical School, Israel

Mohammad Ghaem Maghami #438 Ribozyme-catalyzed site-specific labeling of RNA. University of Würzburg, Germany

Furqan Fazal #543 Atlas of Subcellular RNA Localization Revealed by APEX-seq. Stanford University, USA

Chase Weidmann #265 RNP-MaP: Mapping protein interaction networks on any RNA in living cells. University of North Carolina - Chapel Hill, USA

Franka Voigt #551 Quantifying gene expression noise via single mRNA imaging in living cells. FMI, Switzerland

Rosario Avolio #378 Role of the RNA-binding protein Csde1 in oncogene-induced senescence. Centre for Genomic Regulation (CRG), Spain

Dagmar Zigackova #596 The effect of the Perlman syndrome DIS3L2 exoribonuclease in the regulation of gene expression. CEITEC – MU, Czech Republic

Almudena Ponce-Salvatierra #135 Structural determination of the yjdF riboswitch from *Staphylococcus aureus*. International Institute of Molecular and Cell Biology, Poland

Sunandan Mukherjee #422 A Tool for Quick Refinement of Nucleic Acid Structures using Amber Force-fields. International Institute of Molecular and Cell Biology at Warsaw, Poland

Boxuan Zhao #268 Brain-APEX-seq: spatial proximity-based capture of local transcriptomes in neurons from the mammalian brain. Stanford University, USA

Shiba Dandpat #436 Local-to-global signal transduction at the core of a Mn²⁺ sensing riboswitch. University of Michigan, USA

Mentor-Mentee Lunch RNA 2019 and Individual Mentoring Program

Nancy L. Greenbaum

Career Mentoring Lunch:

As always, the Career Mentoring Lunch was an enjoyable, dynamic, and rewarding event. Because of space limitations at the Park Inn Hotel, partnering with the Krakow Conference Center (ICE), this was the first time in recent memory that we had to cap attendance to a total of 400 participants (compared with 600 attendees at the



previous two meetings) – 96 registered mentors and 286 mentees, plus a last-minute bonus of 10-12 additional mentors. The hotel provided excellent food (from the perspective of this reviewer and feedback from attendees); creative crowd management and multiple buffet lines kept delays to a minimum.

Prospective participants indicated their intent to participate as mentors or mentees upon registering for the meeting (in a protocol started last year), and confirmed their interest by choosing topics in a later communication. Mentees included students (graduate and even some undergraduate) and postdocs, and mentors represented research and teaching faculty, industry professionals, research staff, and several advanced postdocs. Topics were similar to those of the past few years and addressed preparation and success in careers in academic research, teaching, or biotech/industry (or deciding between the two), in balance of family/career, and writing successful grant/fellowship proposals. While the majority of those registering as mentors have experience in academic careers, a growing fraction of our mentees are seeking guidance for Private Sector careers (or Deciding Between Academic and Private Sector Paths), usually resulting in mentor-challenged tables for the latter topics. However, an impressive response to an email plea sent to our Private Sector meeting attendees (and some additional on-site volunteers) resulted in a fully balanced ratio of mentors/mentees in this field for the first time – so a hearty “thank-you!” to all the Private Sector mentors who stepped up (as well as all those in other fields, both first-time and repeat mentors) – your participation contributed to a valuable experience for many junior scientists!



As at last year’s event, we combined trainees at different levels at tables discussing career paths (students seeking advice for postdoctoral decisions with postdocs seeking advice for faculty positions), as the postdocs, in addition to the mentors, enjoy sharing recent experience with students – feedback suggests that everyone benefits from the mix. As the membership and meeting attendance reflect a more international Society, so does representation of participants at this event. Wherever possible, each table included both male and female mentors and mentees, with a wide geographical representation to address a wide range of questions. Although this diversity works well for most participants, a few mentees have questions relating to a specific geographical area for advice on specific issues that could not be answered at the table, mentees are encouraged to search our RNA Society Membership List for someone in that particular country, university system, or field.

I welcome any suggestions for enhancement of this event in the future, and I look forward to seeing you at RNA 2020 in Vancouver!

Individual Mentoring Program:

We are now in the middle of the second year of the RNA Society's Individual Mentoring Program introduced by our outgoing President, Juan Valcárcel, following the 2017 annual meeting. Although many students, postdocs, and junior faculty members receive career mentoring at their institutions, some find this guidance to be insufficient or not directed toward their specific goals. Others feel the need to have the opinions and support of an outside senior scientist. While the annual Career Mentoring Lunch may provide junior members with support or answers about standard issues encountered during career transitions, a single 1½ hour group event just can't provide the in-depth mentoring some are seeking. The new program pairs up junior scientist applicants with suitable senior member mentors (who are individually targeted from the Society membership or from those who have expressed their interest in serving as mentors). Each of the first two cycles has included about 20 mentor-mentee pairs.

The first year "pilot phase" established the feasibility and basic structure of such a one-on-one mentoring program. A geographically diverse group of mentees and mentors with complementary expertise were provided with information about mentoring goals/tools, and were encouraged to communicate throughout the 2017-18 academic year; most chose to use email/Skype for their periodic communications. Mentees sought assistance with career direction, preparation of grant proposals, narrowing a research niche, and developing networking skills. Results of surveys sent to all participants indicated that most pairs found the interaction productive, but several pairs failed from the beginning because mentees feared "bothering" their mentors.

Learning from our mistakes, some improvements were incorporated into the current round: mentees were reminded to be more proactive in contacting mentors, and pairs were provided more specific information regarding goal-setting, structured mentoring, how to establish a preferred structure and frequency of communication. Pairs were also encouraged to define goals and evaluate progress in meeting those goals (although it appears that even more recommendations will be welcomed in that regard). We also extended the cycle through December 2019 to accommodate individual schedules. As in the first year, almost all mentees responded that this program has provided them with a great form of support and guidance. Our appreciation goes out to those mentors who have shared their time and expertise to their junior scientist partners: **Anna Marie Pyle, Tom Cooper, Luiz Penalva, Gerhart Wagner, Elena Conti, Jeff Wilusz, Roy Parker, Doug Black, Subhash Lakotia, Reinhard Lührmann, Gene Yeo, Miriam Gorope, Markus Landhaler, Karla Neugebauer, and Joan Steitz for the first cycle; and Andre Gerber, Jean Beggs, Gene Yeo, Donald Burke, Bill Marzluff, Anita Hopper, Fatima Gebauer, Chonghui Chen, Matthias, Hentze, Ute Kothe, Ann Ephrussi, Juan Valcárcel, Kristen Lynch, Florian Heyd, Ben Blencowe, Melissa Moore, and Manny Ares for the current cycle.** Your support and guidance have given a significant boost to many young scientists!

If you have benefited from the experience of asking questions about specific issues at an annual Career Mentoring Lunch or other mentoring event, or have enjoyed sharing your expertise with junior scientists, we invite you to build on that activity by applying to be a mentee, or serving as a mentor, respectively, in our upcoming round of the Mentoring Program. Application forms for prospective mentees will be available in the coming weeks. The form asks for info about a candidate's background and career goals that will enable optimal pairing with a mentor. We will continue to contact individual senior members to who we feel would be a good "fit" for a particular mentee, but senior members who would like to be considered as mentors should contact me directly (nancy.greenbaum@hunter.cuny.edu) and include any information you feel will help in matching you with a mentee, as well as preferences about level of mentee, topics, limitations, etc. Later in the Fall, each assigned mentoring pair will be contacts with suggestions for getting started on the mentoring process.

If you have additional ideas or comments, please contact me (nancy.greenbaum@hunter.cuny.edu) and/or Juan Valcárcel (juan.valcarcel@crg.eu)



News from the RNA Society Junior Scientists Krakow in Review

Pre-meeting activity: Exploring Wieliczka Salt Mine

For the traditional pre-conference activity this year, Jr Scientists explored the beautiful and pleasantly fresh Wieliczka Salt Mine. After short journey and very warm welcome by the bus drivers and representatives of the sponsor for the pre-meeting activity (thanks again Lexogen), a group of 80 Jr RNA scientists bravely faced over 800 stairs in order to descended 130m underground. The faith in the promised elevator to go back up from underground kept the spirits high and the group joyfully explored magnificent chambers chiseled out in rock salt, amazing underground saline lakes, majestic timber constructions, and unique statues sculpted in salt. Some brave and particularly analytical personalities even organoleptically tested the composition of walls and reported them to be very salty. The mixture of folk legends, historical tales, and mechanical curiosities made this tour particularly stimulating. After meticulous counting we confirmed no-one was left behind in the mine and we could



all return to Krakow ready to start the RNA 2019 meet-ing.

This was a great way to get to know fellow Jr Scientists and to explore one of Poland's main attractions. A big thank you to Lexogen for sponsoring the transport and to all of the participants for the amazing atmosphere.

Junior Scientists Social: RNA Trivia night

The Junior Scientists Committee hosted a social get-together on Wednesday evening at the Krakow Event Center, the main location of the 2019 RNA meeting in Krakow. After an intense day at the conference, the young scientists helped themselves to drinks and snacks while quickly introducing themselves to each other.

The Junior Scientists Committee members had arranged a game of trivial pursuit, playfully testing the knowledge and guessing capability of the young scientists, with questions about RNA biology and organization details. By random grouping of contestants into teams, the making of new contacts was facilitated. Tricky questions created a fun



and open environment of cooperation and dialogue. As the grand prize, a traditional polish candy bar was awarded to the members of the winners' group. Nonetheless, everybody was able to enjoy the gathering by making new friends and matching interests for future collaborative efforts.

Panel discussion: Publishing and the Editorial Process

On Saturday afternoon, the RNA Junior Scientist Committee hosted an outstanding lineup of leaders in publishing. The workshop “Publishing and the Editorial process” brought together Chief Editors, Senior Editors, and Reviewing Editors to discuss the future of scientific publishing.

Welcome remarks were given by session chair **Eleonora de Klerk** of the RNA Junior Scientist Committee followed by ten-minute talks from a variety of exceptional speakers. Speakers included **Eric Westhof** (Executive Editor, RNA), **Keith Fox** (Senior Executive Editor, Nucleic Acid Research), **Andrew Marshall** (Chief Editor, Nature Biotechnology), **Agnieszka Chacinska** (Reviewing Editor, eLIFE), **Ines Alvarez-Garcia** (Senior Editor, PLOS Biology) and **Stefanie Boehm** (Editor, EMBO). Each speaker touched on their own personal experience and viewpoints on publishing and the editorial process. One interesting topic of discussion focused on open access journals. Specifically, the difference between open access and standard subscription-based publications, as well as policies regarding open access in different countries was discussed. Additionally, the dilemma between unpublished pre-prints and peer-reviewed articles was also touched on. Following speaker presentations, the floor was open for a panel discussion, and speakers fielded questions from the audience. The discussion was a candid and charming conversation filled with useful (and realistic!) information on the review process. This workshop was extremely well attended and well received. Thanks to the Junior Scientist organizing committee and to our excellent invited speakers for making this workshop a huge success.



Junior Scientist Committee Representatives for 2019-2020

The Junior Scientist Committee works throughout the year to plan workshops and events for the annual RNA Society meeting. With our three new incoming members this year; Liana, Luc and Simon, we are very excited to plan next year's activities and workshops! Meet our committee members:

Liana Boraas – Incoming Postdoc Representative

I am a postdoctoral researcher at Yale University in **Stefania Nicoli's** laboratory in the Cardiovascular Research Center. As a postdoc, my work merges my previous experience with mechanobiology (PhD in biomedical engineering) with my new fascination with RNA biology. Specifically, I'm investigating the functional role of RNA localization and local translation in cell-matrix interactions.

Attending my first RNA Society Meeting in Krakow allowed me to experience the forefront of RNA research and present my own work to the world's best RNA biologists. I appreciate the support the society has to offer and through the Junior Scientist Committee I have the opportunity to give back. Together, I want to help build a strong scientific community that assists one another at all levels.



Luc Roberts – Incoming Graduate Student Representative



Hello! My name is Luc Roberts and I'm a PhD Candidate in the lab of **Hans-Joachim Wieden** at the Alberta RNA Research and Training Institute (ARRTI). My thesis work is very diverse but revolves primarily around prokaryotic translation and the role of structured RNAs therein. In addition to lab work and helping organize our local RNA meetings (RiboWest) I spend my time playing board games and enjoying the outdoors. I'm also heavily active on twitter (@ScienceLuc), tweeting about science, being a dad, and whatever I'm watching on Netflix.

I'm very excited to be joining the Junior RNA Scientist Committee and look forward to serving the RNA Society to the best of my abilities. One of my main priorities will be ensuring the younger scientists have a voice in the RNA Society and I look forward to meeting you all in Vancouver!

Simon Hoser – Incoming Graduate Student Representative

I am a PhD student at the Medical University of Innsbruck in Austria in the laboratory of **Dr. Alexander Hüttenhofer**. The Hüttenhofer lab is mostly affiliated with the searching after and characterization of ncRNAs in disease and disease development. Our computational analysis revealed a pre-mRNA-intrinsic, novel type of ncRNA in the introns of several nuclear genes. We found that these ncRNAs affect splicing and I am therefore in the process of defining the mechanism of action of ncRNA-mediated splicing modulation. Since I am working in a department that is not specifically sophisticated in splicing, I am grateful to be part of an interconnected and diversified organization such as the RNA society. Partaking in the RNA Congress in Krakow in 2019, I was warmly welcomed by an enthusiastic group of young scientists, eager to help and encourage. Now being a member of the RNA Junior Society, I aspire to become a part of this as well, by building up new networks and collaborations for myself and others.





Malgorzata Ewa Rogalska – Returning Postdoc Representative

I am a Postdoctoral Researcher in the laboratory of **Juan Valcárcel Juárez** at the Centre for Genomic Regulation (CRG) in Barcelona, studying regulation of pre-mRNA alternative splicing. My research project uses transcriptome-wide sequencing merged with network analysis and biochemical studies in order to deepen our understanding of the molecular mechanisms of splicing regulation.

I am passionate about enhancing the exchange of ideas between scientist from all over the world and at different stages in their careers. I have been fortunate to be a part of the Junior Scientist Committee since last year and it has been an amazing experience so far and I really looking forward to the next year meeting in Vancouver.

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 – liana.boraas@yale.edu

Luc Roberts – luc.roberts@uleth.ca

Simon Hoser – Simon.Hoser@i-med.ac.at

Malgorzata Rogalska – Malgorzata.Rogalska@crg.eu

RNA Society Junior



@jrRNAscientis



RNA Society Junior



Award opportunities for members: Applications due Oct 1st

The RNA Society seeks nominations for these annual awards, to be presented at RNA 2020, the annual meeting of the RNA Society, which is to be held in Vancouver, BC, Canada.

RNA Society Early Career Award ([click to download](#))

- Eligible recipients will be within their first 7 years as an independent investigator as of July 1, 2020.
- 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 ([click to download](#))

- Eligible recipients will be within their first 15 years as an independent investigator as of July 1, 2020.
- 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 Izaurrealde Award for Innovation in Research, Teaching, and Service ([click to download](#)) (see p 21)

- 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 service—and 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

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.

[Download the Application](#)



Judging Procedures:

All applications are evaluated by the RNA Society Awards Committee. The applicants will be divided into one of two groups: graduate students or postdoctoral fellows. Applications will be judged on the quality of the research and the entrant's ability to articulate his or her research contributions to the field of RNA. This committee will choose one graduate student and one postdoctoral fellow winner prior to the abstract deadline for the annual meeting.

Prizes:

The winners will receive a cash prize along with being reimbursed for registration, travel and lodging expenses associated with attending the RNA Society's annual meeting at which their award is presented. They will also have their names published in the meeting abstract book and receive a 1-year membership to the Society. By accepting the prize, the winner agrees to write a minireview or review for RNA. The review can be written solely by the winner or in collaboration with their advisor.

Deadline: Only completed applications received by **October 1st, 2019** will be considered.

From the desk of the CEO Jim McSwiggen

The time has come for me to pen my last newsletter piece as CEO of the RNA Society. As you all probably know, I'll be stepping down at the end of the year and handing off this job to **Kristian Baker**. Kristian has served as our membership chair since 2014. She is now in transition—learning the job of CEO while also helping **Olivia Rissland** to transition into the role of membership chair. From my perspective the transition is going well for all of us.



After nine years in this position, I'm certainly going to miss doing this work and serving the Society. What I won't miss, however, is writing this newsletter; it's always been hard for me to think of interesting things to talk about, and it's gotten harder as the number of newsletters that I've contributed to has accumulated. Ironically, for this last piece I have a lot of things to write about. I'll try to keep them brief.

First, I want to congratulate the organizers of RNA 2019—**Witold Filipowicz, Brenda Bass, Elena Conti, Tetsuro Hirose, Artur Jarmolowski, and Gene Yeo**—for an extremely successful meeting. The city, the venue, the scientific talks, and the non-scientific program were all top notch. We had between 1102 and 1115 attendees (depending on whether you count the exhibitors, who actually do participate in the meeting). That makes this meeting almost identical in attendance to last year's Berkeley meeting, and one of the highest attended meetings for the Society. The post-meeting survey was also very positive, of course with a healthy set of suggestions on making future meetings even better. Results of that post-meeting survey can be viewed [here](#).

Next year's meeting will be in Vancouver, BC, Canada on May 26-31, 2020 at the Vancouver Convention Centre. This beautiful venue sits right on the water. The organizers—**Sarah Woodson, Ling-Ling Chen, Michaela Frye, Alain Laederach, Oliver Muehlemann, and Stephen Rader**—are already hard at work planning the event. Many of you have already helped them in their planning by making suggestions—via the 2019 post-meeting survey—for scientific topics that you feel are underrepresented at our meetings. The organizers have seen those suggestions and are considering how best to address them. You can help the organizers even more by encouraging scientists from those underrepresented subject areas to attend our conference.

At our 2019 conference, the Society began a campaign to more actively seek donations to help support our travel fellowship program. Since I've been the CEO, travel fellowship funds have increased every year, with the exception of this year. We have now reached the maximum that the Society can spend on this activity without outside support, and we need to seek outside funds if we want to continue to grow the program. We ask that you consider this program when you're planning your charitable giving. To make a donation, simply follow this [link](#), or go to the RNA Society home page and click on **donate** button. Under the Fund dropdown choose "Student Travel Fellowships". 100% of your donation will be used for travel awards.

As part of my final newsletter piece, I thought I should review how far we've come in the nine years that I've been CEO. These accomplishments are due to the efforts of many people; I do not claim these as my own, but I am happy to have been a participant in bringing about these results. In the period from the end of 2010 to the middle of 2019, the following milestones have been achieved.

- Our total membership has grown by 50% (from 1348 to 2022).
- Our student and post doc membership has grown by 85% (from 548 to 1008)
- Our journal income has increased by 95% (from \$150 K to \$292 K)
- The Society assets have increased by 130% (from \$1.049 to \$2.412 million) despite now committing almost all excess income to grants and fellowships in the last three years.
- We increased spending on travel fellowships from ~\$15,000 in 2010 to ~\$150,000 in 2018 (with a slight reduction this year).
- We established lifetime and emeritus membership levels to encourage long-term membership in the Society.
- We expanded our awards to include Mid-Career and Early-Career awards (2016) and now with the help of an anonymous donor–The Elisa Izaurralde Award for Innovation in Research, Teaching, and Service (2019).
- We've established a membership committee (2011) to better serve our membership, a business development committee (2012) to seek more participation from corporate scientists, and now a planned giving committee (2019) to seek large donations for developing new awards and programs.
- We established the RNA Salons (2016) to encourage more interactions between RNA scientists at different institutions, as well as developing a more active social media campaign and highlighting the work of our membership through the Member Spotlight Series
- We've expanded the activities of, and the level of participation by, the junior scientists in the annual meeting. Recent activities have attracted >100 participants.
- We've expanded participation in the mentoring lunch at our annual meeting and have developed a separate one-on-one mentoring program that is now in its third year.
- We changed the author page fee schedule (2016) to allow more use of color figures and submissions from groups that make heavy use of color figures.
- We began assisting other small conferences (in 2014) by providing contract signing and banking services for the conference. Thus far, we have helped or committed to help eight conferences in this way.
- We established changes in the Society bylaws (2011) that created a 2-year presidential term, an appointed CFO & Secretary, electronic voting, and more.

This last accomplishment—changing the bylaws—may seem small, but its effect has been substantial for the Society. The establishment of a 2-year presidency has really helped provide more stable leadership for the Society. Before that, the President would serve just long enough to become familiar with their role and then their term was over. The 2-year term has made it possible for the president to develop long-term goals and then see them to fruition. Likewise, splitting the roles of CFO and Secretary has really helped to develop coherent financial strategies as well as the new programs listed above. With that in mind, I want to thank the Society



presidents that I have worked with over the years: **Manny Ares, Doug Black, Rachel Green, Adrian Krainer, Sarah Woodson, Juan Valcarcel, and Anna Pyle.** They have all stepped up to do the work that was needed, as well as to provide advice, guidance, and friendship. It's been a great pleasure working with all of them, all of the RNA Society volunteers, and with all of you. There are too many thank yous to make as a group. I hope I have thanked you in person over the years.

As always, if you have questions, comments, concerns or commendations regarding the RNA Society, please let me know. I am always happy to hear from our members (and happy, as well, to hear from non-members who want to become members). By the way, the email address below will be passed on to Kristian when she becomes CEO at the end of the year.

Jim McSwiggen, CEO CEO@rnasociety.org

From the Desk of the CFO Evelyn Jabri

In the first quarter of 2019, the Society successfully passed its financial audit, submitted its 2018 tax returns, and approved the 2020 budget.



2018 Actuals. The Society ended the year with ~\$2.1M in net assets, comparable to where it stood at the end of 2017. Although the budget targeted a profitable year, the Society effectively broke even (\$1.594M revenues, \$1.599M expenses) in part because it did not collect the projected passive income from its investments. The last quarter of 2018 saw a significant dip in the US stock market, which negatively impacted most society portfolios. In consultation with our external investment advisor, the Finance Committee and the Board approved replacing an underperforming fund and minimizing exposure to specific volatile markets (China and the United Kingdom). These changes are expected to help the portfolio weather a volatile market and yield better returns.

As a side note, the Society develops the annual budget a year in advance using best estimates for revenues and expenses. The budget is set to break even and, in a good year, generates a surplus (also called profit). As a nonprofit, we are allowed to generate significant revenue and not pay taxes on any of it! (see *Did you know this about the Society's finances?*) In 2016 and 2017, the Society realized a surplus and poured it back into the operations, increasing expenses by ~25%/year (see table). It expanded commitments to the programs without having to touch its reserves. Those funds generated >\$240K in passive income during the same two-year period. It was an ideal financial situation for the Society as it provided more to its members without touching its nest egg.

	2016 (Actuals, Audited)	2017 (Actuals, Audited)	2018 (Actuals, Audited)	2019 (Projected, Budget)	2020 (Projected, Budget)
Revenues (aka Income)	\$1.142M	\$1.493M	\$1.594M	\$1.503M	\$1.599M
Expenses	\$1.007M	\$1.275M	\$1.599M	\$1.534M	\$1.609M
Surplus/ (Deficit) (aka Profit/Loss)	\$136K	\$218K	(\$5K)	(\$31K)	(\$10K)

2019 Budget & Status. In 2019, we are projecting revenues to be similar to those in 2018, and therefore, are holding expenses to previous year levels to target breaking even. The approved budget is for ~\$1.503M in revenues and \$1.534M in expenses with the expectation that the investments will generate >\$65K in passive



income. As of July, our operations are running to budget. The investment portfolio is showing positive returns, but the markets continue to swing as trade wars escalate.

2020 Budget. In June, the Board approved a 2020 budget which holds spending close to 2019 levels (see table). The CEO and I will revise the numbers at the end of 2019 when we have a better perspective on where finances stand for the year.

You may be wondering if breaking-even for a couple of years will impact our operations. The budget is our financial target, a realistic data-driven spending plan for the Society, that ensures the organization will have enough money for the currently planned programs. To do more for our members, either by expanding existing programs (as we did in the past) or adding new ones, we'll need to generate an annual surplus. We may yet see positive outcomes in 2019. Opportunities such as higher than expected attendance/earnings from the annual meeting, more sponsorship, and increased investment income, could affect the existing financial plan positively.

We are not in control of all events that could impact the Society's financial plan, but we can control our response to achieve the desired outcomes. I will continue to monitor the spending against the annual plan and provide quarterly financial updates to the CEO, President, and the Board. We will collectively decide if and how to adjust the expenses to keep the Society on its positive financial footing.

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

Did you know this about the Society's finances?

There is a misconception that if a nonprofit makes a profit, it will compromise its 501(c)(3) and tax-exempt status. As a mentor once said to me, "*just because we are a nonprofit does not mean we should not make a profit.*" They are essential to the sustained growth of the organization because they fund service expansions and operational upgrades. Let's take a deeper dive into what it means to be tax-exempt and how an organization can lose it.

Nonprofits receive and maintain tax-exempt status by operating for an exempt purpose, such as charitable, religious, educational, scientific, literary, among others. The IRS permits nonprofits to generate significant revenues as long as the income comes from activities that support the exempt purpose of the organization. The federal tax law also allows a nonprofit to create income from unrelated events. This type of revenue, which has to be reported separately from other income, is called **Unrelated Business Income (UBI)**.

The IRS defines what constitutes UBI. "Unrelated business income comes from a trade or business that is regularly carried on and is an activity that's NOT substantially related to accomplishing the organization's exempt purpose." UBI-generating activities include the sale of advertising space in publications/websites, the sale of goods that do not have a relationship to the purpose of the organization, providing management services to other groups, and some types of fundraising activities.

Currently, the Society's main UBI comes from advertising in the journal and its associated websites. That advertising revenue (~\$30K in 2018) is reported to the IRS and is small enough not to jeopardize our tax-exempt status.

If UBI becomes significant relative to the income generated from activities directly related to our stated tax-exempt purpose, then the Society may jeopardize its exempt status. The IRS decides what is 'significant' and does not define what percentage of UBI will compromise exempt status. It depends on the particular circumstances. Importantly, the IRS is interested in how the organization earned the unrelated income, not in



how it used it. That means the UBI may be taxable even if that income is used to further the organization's tax-exempt purpose.

In summary, nonprofits should generate an annual surplus to support the expansion of programs and services. To retain 501(c)(3) tax-exempt status, the nonprofits limit UBI and complete the necessary tax forms, including the IRS 990-T, to document all sources of income. The IRS ultimately decides if the organization is allowed to continue to function as a nonprofit. If you want to dive deeper and understand the benefits, limitations, and expectations for 501(c)(3) exempt organizations, head over to this IRS site for their interactive learning videos: <https://www.stayexempt.irs.gov/home/resource-library/virtual-small-mid-size-tax-exempt-organization-workshop>.

From the Desk of the Meetings Committee Chair Benoit Chabot

Our annual 2019 meeting in **Krakow**, Poland was memorable. I want to congratulate and thank **Witek Filipowicz** and his team (**Brenda Bass, Elena Conti, Tetsuro Hirose, Artur Jarmolowski, Gene Yeo**) for organizing such a scientifically rewarding meeting in a venue that was ideally suited to serve the needs of over 1100 participants, and in an amazing city that provided fascinating opportunities for cultural (and epicurean) discoveries.



We are now gearing up for 2020 in **Vancouver**, as well as planning future RNA Society meetings. Here is the plan for our meeting venues as decided in the last Meetings Committee and approved by the board.

- **2020 – Vancouver, Canada - May 26-31 - Sarah Woodson** (lead), **Stephen Rader, Lingling Chen, Michaela Frye, Alain Laederach, Oliver Mühlemann**
- **2021 – Singapore - Gene Yeo** (lead), **Xavier Roca, Kathrin Karbstein, Jörg Vogel, Anna Marie Pyle**
- **2022 – Boulder, Colorado – Roy Parker** (lead)
- **2023 – Europe**

Our objective is always to set up organizing teams that offer a balance in expertise, geography and gender. We are working toward this goal for the 2022 meeting in Boulder, and off to a good start by having **Roy Parker** as the leader in this effort. We have a list of potential European venues lined up for 2023, and site visits to a few potential ones will likely take place next fall/winter.

I am very grateful to members of the Meetings Committee for their contribution and wisdom in helping select venues and organizers for our meetings. Members of the Meetings committee now include **Florian Heyd** (Germany), **Andrei Korostelev** (USA), **Rui Zhao** (USA), **Maayan Salton** (Israel), **Kathrin Karbstein** (USA), **Karla Neugebauer** (USA), **Yukihide Tomari** (Japan), **Jörgen Kjems** (Denmark), and **Lingling Chen** (China). The service of **Shinichi Nakagawa** and **Marie Öhman** was much appreciated in the last three years.

As always, we welcome suggestions from members willing to champion their institution or city as possible venues. Benoit Chabot Benoit.Chabot@USherbrooke.ca

The Elisa Izaurralde Award for Innovation in Research, Teaching, and Service

Elisa Izaurralde was a multidisciplinary RNA biologist and former director of the Department of Biochemistry at the Max Planck Institute for Developmental Biology in Tübingen, Germany. She passed away in April 2018, and this award honors her passion, scientific rigor, intellectual fearlessness and wholehearted dedication to her work, her group, and her collaborators. She was an extraordinary role model who provided exceptional mentoring; conveying high standards of excellence and a supportive, can-do attitude to all who interacted with her.



Credit: Carolin Thiersch Photography

The Elisa Izaurralde Award will sustain the Society's mission to foster research and education in the field of RNA science by providing a prestigious prize to early career researchers pursuing or using innovative approaches in research, teaching or service. The award is open to all researchers. Applicants who come from non-traditional educational backgrounds from under-represented groups in the society, or from areas outside of the traditional scientific concentrations in the RNA research community are particularly encouraged to apply.

In brief, the award is a single annual prestigious cash prize of **\$20,000 USD** that the winner can use in any manner they deem appropriate and supportive of their career aspirations. In addition, the awardee will be invited to give a talk at the RNA Society's annual meeting, with their registration, hotel and travel expenses paid for by the Society.

- 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.
- Applicant must have demonstrated an innovative mindset or approach to research, teaching, or service—and 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 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

Application Process

Nominators must be members of the RNA Society. Both self-nominations and nominations of others are welcome and encouraged. Nominations must include a complete CV of the candidate, and a letter of nomination that clearly and briefly addresses the three bullet points above. The person nominated will also be asked to submit a one-page research or vision plan and a second page addressing the importance of the RNA Society or the greater RNA community in their work. Additional letters of support are welcome but not required.

The award will be granted without regard to race, gender, age, religion, ethnicity, nationality, sexual orientation, gender expression, gender identity, or presence of disabilities.

Applications can be submitted here: [Elisa Izaurralde Award Applications](#) The deadline for this application cycle is **October 1, 2019**

From the Desk of Membership Chair Kristian Baker



In my last note as Chair of the Membership Committee, I want to provide a quick update on member engagement and on-going programming, and also pave the way for incoming Chair, **Olivia Rissland**, to let you know of the new initiatives

she is busy working on to enhance your experience in the Society.

MEMBERSHIP COMPOSITION AND ENGAGEMENT

The RNA Society aims to provide a welcoming community for RNA researchers at all stages of their career. As of August 1st, 2019, we boast ~1900 members who are evenly split between trainees and senior researchers – with 474 and 447 Student and Post-doctoral members, respectively, and 865 Full members. This ratio provides great opportunities for networking, peer interaction, and mentoring – which are also facilitated through the **RNA Society Junior Scientist** group (on Facebook at www.facebook.com/RNASocietyJuniorScientists/) and **Mentoring Program** (see information in this newsletter). These and many other benefits ensure that membership is fun, engaging and a great value – so remember to renew early and consider our multi-year options that allow for 2- and 3-year memberships at discounted rates (save time and \$\$).

RNA SALONS – UPDATE AND CALL FOR APPLICATIONS FOR 2019/2020 SERIES

This fall will mark the fourth season for our **RNA Salon** initiative, which provides sponsorship to foster scientific and professional development between local RNA communities. This program has been met with tremendous enthusiasm and has grown each season, with 2018/2019 engaging 5,000 participants in 48 locales around the world. For 2019/2020 we have continued our partnership with

industry co-sponsor LEXOGEN so as to once again offer up to \$1,500 USD in support for your Salon events. Please look for the ‘*Call for Application*’ in this newsletter or contact Program Coordinator, **Ute Kothe** (RNASalon@rnasociety.org) for more information, and visit <https://www.rnasociety.org/rna-salons/> for guidelines and the official application (due Sept 10th, 2019).

MEMBER SPOTLIGHT SERIES HIGHLIGHTS THE SCIENTIFIC JOURNEYS AND DIVERSITY OF OUR SOCIETY

As we begin the second year of our very popular **Member Spotlight Series** profiling the outstanding lives and accomplishments of our members, I want to share my delight on how this program has served to highlight our members and shine a light on the wonderful diversity of scientists we have within our organization (visit the RNA Society’s website to see both past and present member profiles). Special thanks to **Olivia Rissland** and all of the Spotlight writers for their engaging and informative pieces, and to you for all of your positive feedback! If you are interested in writing for the 2019/2020 series or want to nominate yourself or another scientist to be featured, please e-mail Spotlight@RNASociety.org.

SPECIAL THANK YOU AND INVITATION

I want to take a moment to thank all our members for their continued commitment and participation in the Society and send a special thanks to my committee members **Ute Kothe** and **Olivia Rissland** for their tireless efforts in running our programs. I look forward to working with them and all of the volunteers that help guide the success of this organization in my upcoming role as CEO, and extend an invitation to each of you to come forward if you have ideas or comments, or want, in any way, to help serve this fantastic community.

Kristian



A NOTE FROM INCOMING MEMBERSHIP CHAIR

I first want to thank **Kristian Baker** for her hard work as Membership Chair. I am excited to build upon her efforts and to continue to make our community strong and vibrant. As I transition into my new position, we are now looking for volunteers for people to help run the Spotlight series. So please email me if you would like to learn more or if you would like be involved in other aspects of the committee. Finally, I welcome any ideas about how we can improve the experience of our members and encourage you to reach out to me directly at Membership@RNASociety.org

Olivia



Salon *noun*

/sɑːˈlɒ, səˈlɑːn/

a regular meeting of important or influential people, esp. of writers or artists at the house of someone famous

(Cambridge Dictionary)

RNA Salon *noun*

recurring local and/or regional RNA science-based gatherings of important and interesting RNA researchers making the meeting place famous

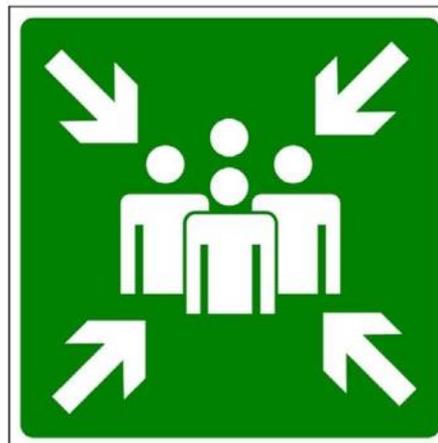
(RNA SOCIETY)

Ergo, by organizing or participating RNA Salon, you will:

- Meet interesting RNA researchers – junior and senior
- Engage in regular gatherings and form strong networks
- Feel that you are an important and valued member of the RNA community (and hopefully the **RNA SOCIETY**)
- Render your city, University and/or local region a famous place in the current RNA world
- Be a recognized leader in the international RNA community by organizing an RNA Salon

New Applications for RNA Salons 2019/2020 are now accepted!

- Check out the RNA Society website for application guidelines and the application form:
<https://www.rnasociety.org/rna-salons/>
- Submit the application by September 10th, 2019.
- For questions, contact Dr. Ute Kothe at RNASalon@rnasociety.org.



Make your RNA Salon the next meeting point for RNA researchers!

The RNA Society presents

THE SPOTLIGHT SERIES

Featuring our diverse and outstanding members
from around the world



Read

We profile a junior
and senior
member each
month.



Nominate

Suggest
members to
feature in the
2019-20 series.



Volunteer

Become a writer
for the series and
connect with other
Society members.

To nominate someone for the Spotlight series or volunteer to write,
contact Dr. Olivia Rissland at RNASpotlight@masociety.org.

Thank You, Volunteers

The RNA Society both survives and thrives because of the efforts of our many volunteers. We hire out some of our activities (to FASEB, Cold Spring Harbor Laboratory Press, and Simple Meetings), but the key creative and decision-making activities are performed entirely by Society volunteers. In this article, the RNA Society Board would like to acknowledge those efforts for the past year. Please accept our sincere apologies if we've left out anyone.

Committees and Committee Chairs

A variety of committees help the Society carry out its essential functions.

- **Evelyn Jabri** is our Chief Financial Officer. She acts as the interface with our business office at FASEB, requests and approves payments for Society expenses, oversees the investment committee, and generally ensures that we stay on track financially. Evelyn just started in this role in May, but she has vast experience with our society as she was the CEO from 2005-2010.
- **Benoit Chabot** is our Meetings Committee Chair. He leads the effort to find the next interesting place to hold our annual meeting, while ensuring that the venue is both workable and affordable. He then works diligently to help build a great team of organizers for the meeting. The focus right now is on 2023 somewhere in Europe, and we are already thinking about 2024 (North America?; Asia?). Benoit is assisted this year by a meetings committee that includes: **Ling-Ling Chen, Florian Heyd, Katrin Karbstein, Jorgen Kjems, Andrei Korostelev, Karla Neugebauer, Maayan Salton, Yukihide Tomari, Rui Zhao,** and **Brenda Peculis** (Secretary, ex officio).
- **Kristian Baker** is the Chair of our Membership Committee. She works to find more and better ways to serve our membership and to encourage more people to join. She also runs our grants program for small conferences and the RNA Salons program with **Ute Kothe. Olivia Rissland** now runs our member social media campaign. Things are changing, however for 2020. Kristian will take over as CEO and Olivia will step in as Membership Chair. We're looking for volunteers to work the social media "desk".
- **Gianpiero Di Leva** is the Chair of our Business Development Committee. He is tasked with building better connections between the RNA Society and the RNA business community, to seek financial support from them for our activities, and to encourage their participation in the annual conference. Gianpiero is expanding our support base with sponsors and is establishing new company connections.
- The Nominating Committee is appointed by the president each year to search for the best candidates to run for our elected offices of President and Board Members. Most importantly, after identifying such candidates they have to convince them to agree to run for office! This year the job was handled by: **Andrei Korostelev, Ling-Ling Chen, Eckhard Jankowsky,** and **Alain Laederach**. An excellent field of candidates was identified and persuaded to run for office.
- The Scaringe Award Committee reviews and selects the winners for the annual RNA Society / Scaringe Award. The committee is composed of **Tim Nilsen**, the Editor-in-Chief of our journal, *RNA*; **Phil Bevilaqua**, as an editor of that journal; board members **Greg Matera, Jörg Vogel,** and **Mihaela Zavolan**; and **Brenda Peculis** as Secretary (ex officio).
- The Career Award Committee reviews and selects the winners for the annual Early- and Mid-Career Awards. The committee is composed of Past-President **Sarah Woodson**; board members **Jeff Coller, Wendy Gilbert,** and **Stepanka Vanacova**; and **Brenda Peculis** as Secretary (ex officio).

Junior Scientist Reps & Advisors

The Junior Scientist Reps are graduate students and post-docs who are working diligently to gain a greater voice for junior scientists in the Society. They do all the planning and heavy lifting for junior scientist events at each of the annual meetings, among other things. This year's events were a great success due to their hard work.

Grad Reps

Julie Loiselle and Fadi Marayati

Post-doc Reps

Eleonora de Klerk and Kristopher Brannan

Faculty Advisors

Katrin Karbstein and Sam Butcher



Mentoring Program

In 2018, our then-president, Juan Valcarcel, convinced the Board to establish a one-on-one mentoring program for students and young faculty who sought the guidance of more established RNA scientists outside of their home institution. He recruited Nancy Greenbaum to run the program with great success. This program is now in its 2nd year and has matched up about 20 pairs of mentors and mentees each year. We neglected to thank the mentors last year, so the list here includes volunteers from both 2018 & 2019. The mentors include: **Manny Ares, Jean Beggs, Doug Black, Ben Blencowe, Donald Burke, Chonghui Cheng, Elena Conti, Tom Cooper, Anne Ephrussi, Will Fairbrother, Margarida Gama-Carvalho, Fatima Gebauer, Andre Gerber, Myriam Gorospe, Brent Graveley, Matthias Hentze, Florian Heyd, Anita Hopper, Ute Kothe, Subhash Lakhota, Markus Landthaler, Reinhard Lührmann, Kristen Lynch, Bill Marzluff, Melissa Moore, Karla Neugebauer, Roy Parker, Luiz Penalva, Thomas Preiss, Anna Marie Pyle, Joan Steitz, Peter Unrau, Juan Valcárcel, Gerhart Wagner, Jeffrey Wilusz, and Gene Yeo**

RNA Journal Editors, Board and Reviewers

What can we say? You all know what editors do, and you also know that it can be a lot of work. Both the contributors' decisions to submit top-quality manuscripts to *RNA*, and the editors' efforts to ensure that accepted manuscripts maintain the highest quality, has resulted in a journal that is highly regarded in the field. It has also made *RNA* a good, consistent source of revenue for the Society.

Editor-in-Chief: **Timothy W. Nilsen**

Deputy Editor-in-Chief: **Eric Phizicky**

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. Lilley, Reinhard Lührmann, Kristen W. Lynch, James Manley, Lynne E. Maquat, Kiyoshi Nagai, 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 thank the roughly 600 scientists who agree to review manuscripts for *RNA* each year. Their work is essential to maintaining the high quality of published papers in *RNA*.



Conference Organizers

Our annual meetings just keep getting better, in large part due to the tremendous efforts of the volunteers who agree to organize the events. This year's meeting in Berkeley was a great success with attendance topping 1100. The RNA 2019 organizers are now hard at work preparing for next year's conference in Krakow.

RNA 2019 Organizers **Witek Filipowicz, Brenda Bass, Elena Conti, Tetsuro**
(Krakow): **Hirose, Artur Jarmolowski, and Gene Yeo**

RNA 2020 Organizers **Sarah Woodson, Ling-Ling Chen, Michaela Frye, Alain**
(Vancouver): **Laederach, Oliver Muehlemann, and Stephen Rader**

Conference Volunteers

Other volunteers also help with specific projects at the annual meeting.

- Each year the conference organizers rely heavily on the session and workshop chairs to help in selecting abstracts for oral presentations, and then for introducing the session or workshop and ensuring that talks stay on schedule. This year, as always, the session chairs did an excellent job in these tasks. Thanks to: **Andrea Jeanne Berman, Jeffrey Chao, Matthew Disney, Andrzej Dziembowski, Chuan He, Magda Konarska, Oliver Muehlemann, Karla Neugebauer, Rick Russell, Julia Salzman, Nahum Sonenberg, Woan-Yuh Tarn, Yukihide Tomari, and Jernej Ule.**
- The keynote speakers who agreed to give their time and a fascinating lecture are also gratefully acknowledged. They are: **Maria Carmo-Fonseca, Tom Cech, and Phillip Sharp.**
- We also had speakers for a wonderful panel discussion on “The Future of RNA”, as well as a helpful Junior Scientist session on “Publishing and the Editorial Process”. Speakers for those two sessions include: **Ines Alvarez-Garcia, Stefanie Boehm, Agnieszka Chacinska, Gideon Dreyfuss, Keith Fox, Anastasia Khvorova, Andrew Marshall, Joan Steitz, and Eric Westhof.**
- Also, each year, the Society awards prizes for the best posters in various categories. This year the organizers asked all attendees to vote on posters and 31 of you did just that. Thank you to those who helped select poster award winners.
- The Mentoring Lunch is one of the highlights of the annual conference for many attendees. It's a big job to organize the tables so that people sit in groups according to their topics of interest, then to make sure people find their tables and that the plan actually works out. Thanks to **Nancy Greenbaum** for making the lunch a big success.

Newsletter Editor

Our RNA Society Secretary, **Brenda Peculis**, also has been the Newsletter Editor since 2005. Twice a year she sends out reminders for articles to be added to the newsletter, then gently pesters the contributors until they complete their tasks. Finally, she formats the whole thing, adds pictures and quotes, and then sends it out for the rest of us to read.

To all of these volunteers—and to any that we might have missed—we offer our sincere thanks for all that you've done and continue to do for the RNA Society.

Sincerely,

The RNA Society Board of Directors.

Anna Marie Pyle, President; **Juan Valcarcel**, Past-President; **Jim McSwiggen**, CEO; **Evelyn Jabri**, CFO; **Brenda Peculis**, Secretary; Board Members **Jeff Coller, Wendy Gilbert, A. Gregory Matera, Stepanka Vanacova, Jörg Vogel, and Mihaela Zavolan**



RNA Society-supported meetings

Upcoming RNA meetings supported by the Society

EMBO Workshop: Protein Synthesis and Translational Control
September 4th – 7th, 2019
EMBL Heidelberg, Germany

Translational control is a major focus of attention that extends to many fields, including developmental biology, neurobiology, cell physiology, disease, synthetic and systems biology, among others. In addition to messenger RNA translation, the conference will feature advances in the fields of epitranscriptomics and non-coding RNAs that influence the translation process. Data-rich high-throughput technologies and structural advances will also be central, as they are pushing the field forward in manners that were unthinkable only few years ago, and are helping to create a “systems” view of translation.

Website: <https://www.embl.de/training/events/2019/TRC19-01/>

RNA Informatics
September 9th – 11th, 2019
Wellcome Genome Campus, UK

The meeting will cover all aspects of RNA biology with a focus on computational methods to elucidate structure, function and interactions of non-coding RNAs across different species. The conference will showcase technological advances and exciting results unveiled through the application of high-throughput sequencing as well as single sequence approaches. It will also cover the involvement of non-coding RNAs in translational control and shine a spotlight on RNA biology in disease. Website: <https://coursesandconferences.wellcomegenomecampus.org/our-events/rna-informatics-2019/>

3rd Meeting of the RNA Society of Sweden
September 18th – 20th, 2019
Hotel Lappland, Lycksele

The overall aim of the “3rd Meeting of the RNA Society of Sweden” is to promote scientific exchange and synergies in the field of RNA research by getting together leading established and upcoming scientists to discuss novel concepts, share the latest cutting-edge technology developments, and explore new disease mechanisms. This conference will encompass the most exciting areas in RNA research. The three-day meeting will include invited talks on recent discoveries from senior and young faculties, short talks based on the selection from the abstracts submitted, and posters by Ph.D. students and Post-doctoral fellows. We welcome every scientist working on any aspects of RNA.

Website: <http://swedishrnasocietymeeting.se>

20th Annual RiboClub Meeting
September 22nd – 27th, 2019
Orford, Quebec, Canada

RNA scientists in Sherbrooke have organized the 20th RiboClub Meeting to be held in Orford at Hotel Chéribourg. Sessions will include RNA silencing, decay and editing, non-coding RNAs, ribosomes and spliceosomes, RNA granules and bacterial RNA. Additional talks will be selected from submitted abstracts. Registration and abstract deadline are until June 30, but late registration is accepted until September 2nd.

Website: <http://main.riboclub.org/annual-meeting/#upcoming>



RNA Biology Symposium 2019
October 3rd & 4th, 2019
NUS, Singapore

We are excited to host our 5th annual RNA Biology Symposium by the RNA Biology Centre of CSI Singapore, NUS. This year's symposium will be held at the NUS, Clinical Research Centre (MD11) Auditorium. This symposium brings together internationally renowned experts in the field of RNA Biology, with the focus on: RNA editing & splicing, Non-coding RNA, RNA viruses, RNA Platforms & Technologies, Epitranscriptomics, and Transcription and Translational Control.

Website: <https://www.csi.nus.edu.sg/web/rna-biology-symposium/welcome-to-rna-biology-symposium/>

Exploring Biological Sequences

October 8th – 10th, 2019

European Bioinformatics Institute, Wellcome Genome Campus, Cambridge, UK

This workshop will introduce basic bioinformatics approaches that are used to find, analyse and understand nucleotide or protein sequences. It will explore how to conduct searches across biological databases using both metadata and sequence data approaches. The course will explain how sequence searching techniques work, and how to use them effectively to find relevant results.

Website: <https://www.ebi.ac.uk/training/events/2019/exploring-biological-sequences-2>

14th Asia Epigenome Meeting/3rd Taipei Epigenetics and Chromatin Meeting

October 16th – 18th, 2019

Taipei

The Asia Epigenome Meeting is an annual event that rotates in South Korea, Japan, China, Taiwan ROC, Singapore and India. It is to engage world leading scientists and outstanding Asia researchers to promote Asia science in the field of epigenetics, in particular, epigenetic regulation in development and disease. The exciting three-day conference will discuss the cutting edge research of epigenetic mechanisms and epigenetic impact in embryonic development, cell differentiation and reprogramming, cancer, aging and neurodegenerative disease, etc.

Website: <https://www.abcam.com/events/14th-asia-epigenome-meeting-aem-3rd-taipei-epigenetics-and-chromatin-meeting>

EMBO | EMBL Symposium: The Non-Coding Genome

October 16th – 19th, 2019

EMBL Heidelberg, Germany

This symposium will explore the diverse, dynamic and multifaceted roles of RNA across a spectrum of cellular processes. It will provide an interdisciplinary discussion of the roles of non-coding RNAs in both prokaryotes and eukaryotes, with the aim of enhancing our understanding of gene regulation and function.

Website: <https://www.embo-embl-symposia.org/symposia/2019/EES19-10/>

Symposium on RNA Biology XIII: RNA Tool and Target

October 17th & 18th, 2019

Duke University, Durham, NC

The RNA Society of North Carolina invites you to attend this year's Symposium on RNA Biology XIII: RNA Tool and Target. This biennial conference features presentation from both national and local scientists, as well as a poster session and short talks selected from submitted abstracts. Travel awards are available for students and post-doctoral fellows.

Website: <https://sites.duke.edu/ncrna2019/>



2019 CornBelt RNA Regional Meeting
October 18th & 19th, 2019
Columbia, Missouri, USA

Keynote speaker is Barb Golden from Purdue University, presenting her science seminar on Friday afternoon at 1 pm to kick off our meeting. All other oral presentations (Friday afternoon, early evening and Saturday morning) will be talks selected from abstracts submitted by undergraduates, graduate students and post-doc participants. There will be no registration fee for participants. Funds from the RNA Society will be used to provide awards for posters and oral presentations.

Website: <https://rna-cornbelt-regional-meeting.webnode.com/>

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

The Rustbelt RNA Meeting (RRM) brings together more than 300 scientists from the Midwestern and Mid-Atlantic United States and Canadian provinces each October. Themed platform sessions cover such diverse topics as non-coding RNAs and RNA-mediated regulation; synthesis, processing and turnover of mRNA; ribosome assembly and translational control; and catalytic mechanisms of ribozymes and RNA-protein complexes. This year's Keynote Speaker is Dr. Adrian Krainer (CSHL) and the 2019 meeting will also feature two workshops aimed at trainees: 1) RNA targeting using the CRISPR/Cas13 system (led by Dr. Mitchell O'Connell; Univ. of Rochester); and 2) manuscript preparation and publishing (led by Dr. Jo Ann Wise, CWRU and Executive Editor of *Nucleic Acids Research*). Trainees receive free room and board and the \$99 registration fee is waived for students and post-docs from under-represented minority groups. Registration is open August 19th - September 20th.

Website: <http://www.rustbeltrna.org>.

From DNA to RNA Synthesis, Processing and Cancer
November 8th, 2019
Edinburgh, UK

This scientific meeting will mark the retirement of Professor Jean Beggs, CBE, FRS after 48 years in research. This meeting brings an outstanding programme of eminent scientists with whom Jean has worked, and some former members of her laboratory, to present their recent research on topics that will be of interest to many molecular and cell biologists and geneticists. Registration is essential. There is a small registration fee to cover catering costs. The RNA SOCIETY has provided sponsorship to support attendance by junior scientists - 20 places are available free to students studying any area of RNA biology.

Website: <http://beggs.bio.ed.ac.uk/content/home>

RNA UK 2020
January 24th – 26th, 2020
Windermere, UK

We are happy to invite you to attend RNA UK 2020, a bi-yearly meeting organized by the UK RNA community. The meeting covers all aspects of RNA biology and aims to promote cooperation and exchange of ideas within the UK RNA community. The meeting has a particular focus on the development of junior researchers. Talks and posters will be allocated by selecting Abstracts from the submitted ones and a number of bursaries are available.

Website: <https://www.rnauk2020.org/>



Bermuda Principles Impact on Transcriptomics 2020
February 5 – 9th, 2020
Southampton, Bermuda

We are delighted to invite all RNA researchers to the sunny isles of Bermuda for our 4th Annual meeting. The 2020 conference will cover topics such as the splicing code, single cell transcriptomics, splice isoform analysis, global RNA structures, emerging technologies, CLIP and its analysis, epitranscriptomics, therapeutics and ncRNAs.

*Early bird & Oral abstract deadline: **September 30, 2019** Poster abstract deadline: **October 31, 2019** Registration deadline: **December 17, 2019** contact admin@bermudaprinciples.org*

For more details please see: www.bermudaprinciples.org

RNA 2020 – 25th Annual Meeting of the RNA Society
May 26th – 31st, 2020
Vancouver, British Columbia, Canada

The RNA Society will hold its annual meeting May 26th – 31st, 2020 in beautiful Vancouver, Canada. Watch for registration opening late 2019 and Travel Fellowship opportunities sponsored by the RNA Society.

Website: <https://www.rnasociety.org/conferences/rna-2020/>

Past Meetings Sponsored by the Society

Gordon Research Seminar on RNA Nanotechnology
January 12th & 13th, 2019
Ventura, California, United States

The RNA Nanotechnology Gordon Research Seminar (GRS) entitled ‘New Frontiers in RNA Nanotechnology-Based Therapeutics and Diagnostics’ took place on January 12-13, 2019 in Ventura, California. The Chairs of the GRS were Drs. Joy Wolfram (Mayo Clinic, United States) and Lorena Parlea (National Cancer Institute, United States). The GRS brought together early-career scientists from graduate students to junior faculty members in the field of RNA nanotechnology and focused on four pillars of RNA nanotechnology: structure, diagnostics, therapeutics, and delivery, with an emphasis on current challenges and benefits. The seminar included a keynote talk from Dr. Kirill Afonin (University of North Carolina at Charlotte, United States), 17 oral presentations, two poster sessions, and a career panel. The seminar offered junior investigators valuable experience in networking and presenting research to an international audience. The career panel, which featured panelists from both academia and industry, was a unique aspect of the seminar and consisted of lively discussions around topics such as alternative career paths. We thank our sponsors, including the RNA Society, whose support was used to cover partial expenses for Morgan Chandler (University of North Carolina at Charlotte, USA), Floris Engelhardt (Technische Universität München, Germany), Anna Graczyk (Polish Academy of Sciences, Poland), Sijin Guo (The Ohio State University, USA), Zhefeng Li (The Ohio State University, USA), Erika Urdaneta (Humboldt University of Berlin, Germany) who received awards for outstanding presentations.

Gordon Research Conference on RNA Nanotechnology
January 13th – 18th, 2019
Ventura, California, United States

The RNA Nanotechnology Gordon Research Conference (GRC) on ‘Nucleic Acid Architectures for Therapeutics, Diagnostics, Devices and Materials’ took place on January 13-18, 2019 in Ventura, California. The GRC was chaired by Thomas Hermann (UC San Diego, United States) and Tushar Patel (Mayo Clinic, United States), with Vice-Chairs Louise Laurent (UC San Diego, United States) and Sarah Woodson (Johns Hopkins, United States). This third GRC on RNA Nanotechnology encouraged scientific exchange on topics ranging from RNA structure and nanoscale devices to RNA therapeutics and nucleic acids in extracellular vesicles. A well-attended GRC ‘Power Hour’ led by Louise Laurent



featured open dialog about the challenges facing early career scientists and mentor/mentee relationships. The meeting Chairs thank the RNA Society, and other sponsors, for their support. The next GRC in this series is planned for January 2021 to be held again in Ventura.

ptRNA2019
January 24th & 25th, 2019
Porto, Portugal

The VIII Portuguese Meeting, ptRNA2019, took place at the i3S in Porto, on the 24-25th January 2019. This 2-day conference brought together more than 110 young and established scientists from Europe and USA, to present their new results and participate in enthusiastic scientific discussions. Keynote lectures were delivered by Maria Carmo-Fonseca (IMM; Lisbon, Portugal) Manuel Santos (iBiMed, Aveiro, Portugal), Nicholas Proudfoot (University of Oxford, UK) and Christine Mayr (Sloan-Kettering Institute, USA). The meeting featured talks from both invited speakers and young scientists covering all aspects of RNA Biology. In addition, the meeting included a poster session where 44 posters were presented (and evaluated by the Scientific Committee) and activities to promote discussion and interaction between the participants. The RNA Society financial support was fundamental for providing two Best Poster Awards and four Travel



Grants to PhD students and Post-docs. Travel Grants were awarded to **Gonçalo Nogueira** (PhD student, BioISI, Lisbon), **David Rufino-Ramos** (PhD student, CNC, Coimbra), **Alba R. Díez** (PhD Student, IGC, Oeiras) and **Mariline Silva** (Post-doc, CNC, Coimbra). The Best Poster awardees delivered excellent presentations at the meeting: **Joana Teixeira** (PhD student, i3S, Porto) presented her PhD work on the zebrafish pancreas regulome and **Dora Szakonyi** (Post-doc, IGC, Oeiras) presented her post-doc work on the role of SR45 in stress response during plant development. The conference organizers, **Alexandra Moreira**, **Margarida Gama-Carvalho**, **Isabel Pereira-Castro** and **Jaime Freitas**, are very grateful to the RNA Society for the financial support.

Swiss RNA Workshop
January 25th, 2019
Bern, Switzerland

On January 25, 2019, the 20th edition of the Swiss RNA Workshop took place at the University of Bern, which was attended by over two hundred participants. The first edition of the workshop took place in 1995, organized by **Angela Krämer** and **Daniel Schümperli**. The workshop continues bringing together RNA researchers from Switzerland and neighboring countries for a one-day meeting. This year's keynotes were delivered by **Eric Miska** (Gurdon Institute, University of Cambridge, United Kingdom) on "*An ancient machinery drives piRNA transcription in C. elegans*" and **Alena Shkumatava** (Curie Institute, Paris, France) on "*Dissecting the in vivo functions and mechanisms of action of lncRNAs*". Fourteen short talks were presented that were selected from submitted abstracts and fifty-nine posters presented covering a wide range of RNA research topics. For their financial support, we would like to thank the RNA Society and the corporate sponsors.



Gordon Research Seminar on Translation Machinery in Health and Disease
February 16th & 17th, 2019
Galveston, TX

The second GRS of Translation Machinery in Health and Disease was organized by Mridu Kapur (UCSD) and Elif Sarinay Cenik (UT Austin). This meeting was supervised and attended by GRC chair Susan Ackerman from UCSD, and ~50 postdoctoral and student mentees in the area of protein translation. The keynote seminar by Aaron Gitler (Stanford) highlighted his lab's contributions on the mechanisms and therapeutic targets for neurodegenerative diseases. Two main sessions, chaired by postdocs Haissi Cui (Scripps) and Viviana Volta (NYU School of Medicine) included 12 presentations from participants on protein translation and pathway integration in diverse organisms as well as various disease states. Highlights include: (i) Mechanism of NAD⁺ on protein translation, (ii) role of ribosomal protein S25 in translation of C9orf72 Repeat Expansions, (iii) ribosome profiling to define discreet ribosome elongation states and (iv) depletion of ribosomal protein L12 to partially restores expression of cystic fibrosis causing variants. These sessions were accompanied by two lively poster sessions where almost all attendees presented their research. Last but not least, the meeting included a mentorship component where Virginia Walbot (Stanford) discussed strategies to increase visibility for early career scientists and held an informal CV clinic during the breakfast hour where she reviewed attendees' CVs and talked about critical components of a well-written CV. Overall, this meeting was widely attended both nationally and internationally and provided an intimate environment for discussing cutting-edge, unpublished research in the field. It also allowed a diverse group of mentees to discuss their science, network, and obtain advice on career prospects.

Gordon Research Conference on Translation Machinery in Health and Disease
February 17th – 22nd, 2019
Galveston, TX

The third GRC of this series, organized by Susan Ackerman (USCD) as chair and Tao Pan (U. Chicago) as vice chair, brought together ~150 participants in the area of protein synthesis with an emphasis on aspects of human health and disease. The meeting started with a keynote session, “New Insights in Protein Synthesis Machinery”, by Rachel Green (HHMI/Johns Hopkins), and two peer-selected student/post-doc speakers from the accompanying GRS. A total of 32 invited speakers and 17 speakers selected from submitted abstracts presented research on translation in cancer, metabolic diseases, neurological diseases, responses to stress, in the microbiome and in pathogens, diseases in the immune and hematological systems, innovative technologies, and mitochondrial translation. In addition to basic mechanisms of translation, talks covered many fields with biological systems ranging from prokaryotes to disease specimen where translation was found to play new and fundamental roles in disease mechanisms. The meeting also included an over-capacity attended GRC ‘Power Hour’ chaired by Susan Ackerman and Xiang-Lei Yang (Scripps) to address challenges women face in science, and to support the professional growth of women in our communities. The RNA Society sponsored poster prizes to (pictured left to right) Kathryn Oliver (Emory University), Cedric Gobet (Ecole Polytechnique Fédérale de Lausanne), *Shebna Cheema* (Baylor College of Medicine), and *Viviana Volta* (New York University Langone Medical Center). The next GRC meeting in this series will take place in February/March 2021 to be organized by **Tao Pan** as chair, and **Zoya Ignatova** (University of Hamburg) and **Katherine Borden** (University of Montreal) as co-vice chairs.



2019 Gordon Research Seminar (GRS): RNA editing
March 23rd & 24th, 2019
Lucca, Italy

The 4th RNA editing meeting - “RNA and DNA Editing and Modification: Mechanism, Function and Tools for Precision Medicine”- took place in March 2019 in Italy. The GRS is a unique forum for graduate students, post-docs and other scientists to present and exchange new data and cutting-edge ideas. The meeting brought together 49 attendees, including 20 graduate students and 23 postdoctoral fellows. The meeting featured a keynote talk from Dr. Eric Phizicky (University of Rochester Medical Center) on “Conservation and Evolution in the Biology of tRNA Modifications”. There were 16

talks by students/postdocs and two poster sessions. Talk sessions were chaired by students and postdocs. The 2019 GRS included a panel discussion titled "Diverse Career Pathways for PhDs", providing a platform for students and post-docs to discuss career development with professionals working in diverse careers (including academia, life science industry, and science communication). RNA Society funds were used to support registration cost for 2 graduate students (**Tuangtong Vongpipatana**, Osaka University, Japan; **Tewoderos Ayele**, Emory University, USA) and 2 postdoctoral fellows (**Jacki Heraud-Farlow**, St Vincent's Institute, Australia; **Disa Tehler**, University of Copenhagen, Denmark).

2019 Gordon Research Conference (GRC): RNA editing
March 24th – 29th, 2019
Lucca, Italy

The 11th RNA editing GRC was held last March in the hills of Tuscany under the overarching theme of “Next-Generation Epitranscriptomics in Health and Disease”. 200 scientists from Europe/Israel (102), USA/Canada (84) or Asia/Australia (14) then attended the GRC meeting that started with a Keynote speech from John Mattick (Oxford U) on “RNA at the Epicentre of Human Development and Cognition” and was followed by 62 oral presentation spread in 9 sessions. Nearly half were short talks given by young investigators or post-doctoral fellows. Four sessions showcased the 124 posters presented at the meeting.



RNA Society funds were used to offer on a competitive basis, travel awards to three Graduate students [See **Hee Park** (University of California Davis), **Edgar Campbell** (Stanford U) and Oguzhan Begik (Centre for Genomic Regulation, Barcelona)] and three post-doctoral fellows [**Joseph Smith** (State University of NY, Buffalo), **Sabrina Huber** (ETH Zurich) and **Markus Schosserer** (University of Natural Research and Life Sciences, Zurich)].

International course of Post-Transcriptional Gene Regulation: Mechanisms and Networks
April 15th - 19th, 2019
Paris, France

The 4th international course on *Post-Transcriptional Gene Regulation: Mechanisms and Networks* was organized by M. Dutertre and S. Vagner (Institut Curie) and H. Le Hir (IBENS). The course covered a wide range of topics including mRNA capping, splicing, polyadenylation, decay, translation, methylation and localization, and gathered 41 participants (33 PhD students) from 7 European countries, Canada and USA and included 19 speakers from 7 European countries, Israel, Canada and USA. The Keynote speaker was Adrian Krainer and selected participants presented short talks, with other presenting a poster and a flash talk. Three travel fellowships funded by the RNA Society were awarded to (pictured left to right) **Kif Liakath-Ali** (Sudhof lab, Stanford University, USA), **Ekaterina Eroshok** (Ohler lab, Berlin, Germany) and **Michela Lisi** (Bozzoni's lab, Rome, Italy). We are very grateful to the RNA Society for their support of trainee participation in this course and invite your participation in the next course held in 2021 in Paris.



2019 Southern California RNA Meeting
April 26th, 2019
Duarte, California, USA

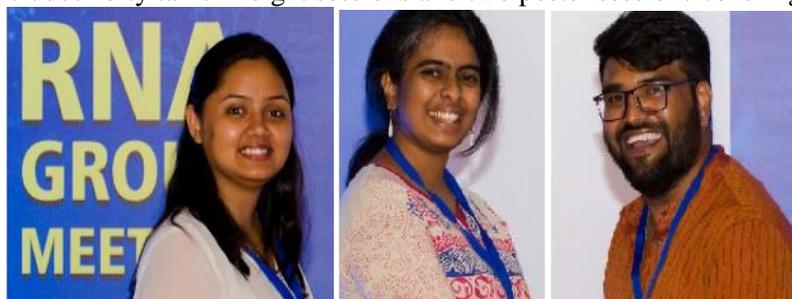
The 2019 Southern California RNA Meeting, hosted by the City of Hope Graduate School with additional RNA Society support, was held on April 26, 2019 in Duarte CA. This meeting, organized by Anita Hopper, RJ Lin, and John Rossi,

highlighted PhD student and postdoctoral discoveries in RNA – the first of its kind in Southern CA. Twenty oral presentations were selected by a PI panel from the participating academic institutions: Aravin – Cal. Tech., Boldin – COH, Gu – UCR, Johnson – UCLA, Luptak – UCI, Pasquinelli – UCSD, with investigators Aravin – Cal. Tech., Buisson – UCI, Chen – COH, Karginov – UCR, Koehler – UCLA, Kortylewski – COH, Sandmeyer – UCI, and Zheng – UCR serving as session chairs and judges for oral presentations. Awards were presented to **Mike Fernandez** (PhD candidate COH), **Erin Sternberg** (PhD candidate UCR), **Luke Frankiw** (PhD candidate Cal. Tech), **Si-ping Han** (postdoc COH), **Rea Lardelli** (postdoc UCSD), and **Maria Ninova** (postdoc Cal. Tech). Keynote talks were delivered by **John Abelson** (UCSF) and **Tracy Johnson** (UCLA), and following dinner, 48 poster presentations that were judged by attending PIs and poster awards were presented to: **Laura Chipman** (PhD Candidate UCSB), **Kristen Dias** (PhD Candidate UCR), **Catherine Eichhorn** (postdoc UCLA), **Alberto Herrera** (PhD Candidate COH), **Nerea Muniozguren** (PhD Candidate – UCSB), and **Graham Read** (PhD Candidate – UCLA).



10th RNA Group Meeting, 2019 May 2nd – 4th, 2019 RGCB, Trivandrum, India

The 10th RNA group meeting was held May 2nd - 4th at the Rajiv Gandhi Centre for Biotechnology, (Uday Samudra Resort, Kovalam) in Trivandrum, India. This meeting serves as the largest platform for RNA biologists in India for scientific sharing, establish collaborations and engagement at all levels from faculty to students. The three-day meeting included forty talks in eight sessions and two poster sessions covering different aspects of RNA from structure to



functional significance in diseases. New findings on cellular toxic RNAs, lncRNAs, RNA-methylations, RNA-based strategies for crop improvement and putative therapeutics for human diseases were some of the highlights of the meeting. As a tradition of this RNA group meeting series, students are not charged registration fees and thanks to the generous support from the RNA Society, we were able to include more student

attendees in the meeting. Moreover, we awarded one best oral presenter **Mr. Santosh Kumar Kuncha** (CCMB, Hyderabad), and two best poster awards **Ms. Upasana Rai** (CCMB, Hyderabad) and **Ms. Manasasri Muralidharan** (IIT Guwahati) from the support selected by a jury from the poster and short talk sessions of students (pictured right to left).

14th Microsymposium on Small RNAs May 15th – 17th, 2019 Vienna BioCenter, Austria

The “Microsymposium on Small RNAs” is an annual conference hosted at the Vienna BioCenter, which attracts scientists from all over the world. This year 170 participants from outside the Vienna BioCenter, together with around 100 local scientists took advantage of the excellent cohort of speakers. The 2019 program consisted of 34 talks ranging from mechanisms of RNA silencing to the biology of small RNAs in genome defense, inheritance, development and differentiation, as well as new technologies. Beyond the outstanding line-up of international speakers, a clear highlight were the invited talks from six postdocs and nine PhD students. As it became tradition, an RNA Society -sponsored award was given to the best PhD student speaker. This year **Elena Kingston** (Bartel Lab) was awarded for her talk on “Global



analyses of the dynamics of mammalian microRNA metabolism”. As always, the spirit was collegial, open and supportive and lively exchange took place during the poster session that featured 67 posters. We are looking forward to welcome everybody again to the 15th anniversary of the Microsymposium to be held May 6-8, 2020.

2019 Gordon Research Seminar and Conference on Nucleic Acids

June 2nd - 7th, 2019

Sunday River, Maine, USA

The 2019 Nucleic Acids Gordon Research Conference took place from June 2-7 at Sunday River, Maine. This GRC has been a forum for sharing cutting edge DNA and RNA science since 1962. The theme of the 2019 meeting was: *DNA and RNA Transactions at Atomic to Organismal Scale*. The GRC was preceded by a successful 2nd Gordon Research Seminar on Nucleic Acids, organized by graduate students **George Ghanim** (UC Berkeley) and **Anam Ejaz** (Cornell Medical College) and attended by 57 student and postdoc scientists who also attended the GRC. The GRC program comprised: 46 oral presentations over nine thematic sessions; 100 poster presentations at daily poster sessions (highly interactive); and a “Power Hour” discussion forum focused on women’s issues in science. The GRC featured a new thematic session on Nucleic Acids in Immunity and a high percentage of “first time” invited conference speakers. Many of the GRC talks were given by junior scientists (new PIs, postdoc and students). Every post-talk discussion period was structured so that the session chairs solicited questions and comments from student and postdoc attendees before recognizing senior scientists in the audience. Support from the RNA Society covered the full on-site GRS costs of six student/postdoc attendees.

RiboWest

June 23rd – 26th, 2019

Winnipeg, Manitoba, Canada

The Western Canada RNA Conference, RiboWest 2019, was held on the University of Manitoba campus in Winnipeg, Manitoba on June 23-26th. The conference featured 110 RNA scientists from across Canada and the northwestern United States sharing their work in “RNA Health and Disease” and “New RNA Technologies”. Keynote lectures were presented by Dr. Susan Baserga (Yale University) on regulators of ribosome biogenesis and Dr. Ren-Jang Lin (Beckman Research Institute at City of Hope) on CRISPR gene screening and miRNA function. Special thanks to the RNA Society for supporting Travel Awards to undergraduate and graduate trainees (back row, left to right with certificates) **Hope Vienneau, Tyler Mrozowich, Daniel Andrews, Amir Abdolazadeh, Donald Wong, Delong Zhou**, (front row, left to right) **Sam Ernest, and Matilda McGirr** to attend the meeting and present their work.



2019 mRNA turnover

June 25th – 28th, 2019

Montréal, Quebec, Canada

The ‘mRNA Turnover Mechanisms, Regulation and their Implication in Infectious and Age-Related Diseases’ meeting took place June 25-28, 2019 in the vibrant and exciting city of Montréal, Canada. This was the eighth installment in a series of RNA stability meetings that began in 2003. As the title suggests, the meeting covered a wide range of basic and applied topics related to RNA stability. There was a total of 61 talks and 49 posters, as well



as lively discussion from the 120 participants. By all measures, the meeting was a great success. In addition to awards made to students and postdoctoral fellows for their oral and poster presentations, Dr. **Jack D. Keene** of Duke University was recognized by the group with a Life Time Achievement Award. Co-organizers **Jeff Wilusz** and **Imed Gallouzi** (pictured left to right) also tried dazzling attendees with their dancing skills at meeting's gala dinner. Thank you to the RNA Society for its continued support of this meeting and congratulations to the following students/fellows for receiving RNA Society -sponsored awards: **Hannah Burgess**, **Lara Contu**, **Hana Fakim**, **Zachary Hawley**, **Louis-Philippe Leroux** and **Benjamin Towler**.

Nucleic Acids in Dundee **June 29th – 31st, 2019** **Dundee, Scotland**

An international conference was held at Dundee University to mark 40 years of the laboratory of David Lilley, with all the speakers having some connection with the lab. The RNA themes ranged from structural elements (**Eric Westhof**), co-transcriptional folding of riboswitches (**Daniel Lafontaine**, **Sunchul**



Hohng), chemistry (**Stephanie Kath-Schorr**), catalysis (**Tim Wilson**, **Darrin York**), riboswitch structure (**Huang Lin**), 6-methyladenine (**Zhang Yi**), cleavage of miRNA (**Ding Yi Liang**) and single-molecule studies of CRISPR-Cas (**Taekjip Ha**; **David Rueda**). **Joe Piccirilli** delivered the PCCP Journal lecture describing the use of antibody fragments in the crystallization of RNA, and **Wei Yang** was presented with the Gait Award after a lecture that covered both the structural biology of the hydrolytic cleavage of RNA and the structure of the DNA replisome. DNA-themed lectures were delivered by **Steve West**, **Mark Dillingham** and **Dave Sherratt**. **David Lilley** presented a retrospective lecture, tracing the interconnected themes of 40 years of research in nucleic acid structure and mechanism from cruciform and Holliday junctions through to ribozyme structure and mechanism and the structure and ligand binding of riboswitches. Sponsorship from the RNA Society provided travel fellowships for five postdoctoral researchers to attending the conference: **Matthew Newton** (Imperial College), **Zhang Yue Ying** (John Innes Centre), **Januka Athukoralage** (University of St Andrews), **Jack Braithwaite** (University of Nottingham) and **Liu Zhen Shan** (John Innes Centre).

2019 International Society for Computational Biology - Special Interest Group **July 24th & 25th, 2019** **Basel, Switzerland**

The 16th Special Interest Group meeting on RNA Biology (RNA COSI) was held July 24-25, 2019 in Basel, Switzerland. As part of the annual International Society for Computational Biology meeting, the RNA COSI is designed to bring together world experts in RNA processing, non-coding RNAs, and computation to discuss recent advances in the integrated view of RNA biology and its relation to human disease. The RNA COSI aims to bridge the gap between the different research fields to foster new research ideas for deciphering the regulation of RNA processing. This year we had an exciting line-up of researchers that covered advances and challenges of miRNA-dependent mRNA decay (**Dr. Ana Claudia Marques**, Université de Lausanne), novel computational approaches to dissect post-transcriptional gene expression (**Dr. Uwe Ohler**, Max-Delbrück-Centrum für Molekulare Medizin), the regulation of translation in cell fate (**Dr. Mihaela Zavolan**, Biozentrum – Universität Basel), single cell genomics and novel experimental and computational tools to analyze the impact of RNA on cell homeostasis. The following students received RNA Society co-sponsored financial support to attend the RNA COSI. **Maina Bitar** from the QIMR Berghofer Medical Research Institute, Australia, **Michal Sadowski** from the University of Warsaw, and **Jasleen Grewald** from Canada's Michael Smith Genome Center. The poster prize was awarded to **Gianvito Urgese**, a postdoctoral fellow from the Politecnico di Torino for his work on "RNA sequence-structure alignment from comparing pseudoknot structures and virus terminals".

TREnD2019

July 30th, 2019

Toronto, Ontario, Canada

Toronto RNA Enthusiasts' Day 2019 (TREnD2019) is a student-led and trainee-focused scientific forum for a diverse group of RNA researchers that was held on July 30st, 2019 at the Peter Gilgan Centre for Research and Learning in Toronto. This year's organizing committee included six trainees from across the U. of Toronto:

Amanda Charlesworth, Lauren Ostrowski, Dr. Matthew Hildebrant, Pallavi Pilaka, France Milone, Sameen Ahmed, Marat Mufteev and Akashdeep Dhillon



with support from Faculty Mentors Drs. **Julie Claycomb** and **John Calarco** (pictured: back row, left to right; **John Calarco, Sameen Ahmed, Lauren Ostrowski, Akashdeep Dhillon**; front row, left to right; **Julie Claycomb, Amanda Charlesworth, Francine Milone, Pallavi Palaka**; not pictured, **Matthew Hildebrant, Marat Mufteev**). TREnD has become a vital part of our RNA community, providing opportunities to nearly 150 trainees. The sole non-trainee presentation was that of our outstanding keynote speaker, Dr. Tracy Johnson (UCLA, HHMI), who also presented a workshop on "Why Diversity in Science Matters." Thanks to generous support from the RNA Society, TREnD awarded prizes for the Best Talk: **Hanane Hadj-Moussa** (Carlton University), and Best Posters: **Emma Bondy-Chorney** (University of Ottawa, Post-Doc), **Wendy Cao** (University of Toronto, Graduate Student) and **Robert Lao** (University of Toronto, Undergraduate Student). Overall, TREnD2019 was another smashing success, and because of continued support from the RNA Society and other sponsors, TREnD2020 will take place on July 29th, 2020. Mark your calendars and meet us in Toronto!

Employment

If you are a member and would like to have your employment opportunity listed on this page, follow the instructions on [this page](#) (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.

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

[Scientist/Senior Scientist – Cell & Molecular Biology](#)

Posted on [August 19, 2019](#)

Apply: <https://bit.ly/31MI8hl>

Flagship Labs 63 Inc. (FL63) is a privately held, well-funded, early-stage platform biotechnology company that is leveraging emerging insights in RNA biology to develop novel human therapeutics with a focus on mRNA translation and post-transcriptional RNA modifications.

We are seeking to hire an exceptional scientist to join our growing team. A successful candidate will have a Ph.D. in cell/molecular biology (or equivalent), an additional 3-5 years of relevant experience, and a proven track-record of scientific excellence as evidenced by a strong publication and/or patent record. The candidate's career goals, laboratory skills, and core competencies should be aligned with the description: [see web site](#).

[Postdoctoral Position Available, Single Molecule Imaging Group, Professor David Rueda, at the MRC, London](#)

Posted on [August 9, 2019](#)

The Single Molecule Imaging Group, led by Professor David Rueda, at the MRC London Institute of Medical Sciences (LMS), and the Department of Medicine at Imperial College London, is offering a 3-year Postdoctoral Position in Single Molecule Cell Biophysics.

You must have a PhD (or equivalent experience), with a strong background in biophysics, quantitative biology or related disciplines. Candidates should be familiar with several of the following techniques: fluorescence microscopy, mammalian tissue culture, RNA transcription and processing, programming (e.g., python, Matlab, Labview, etc), image analysis (e.g.

ImageJ) and quantitative data analysis. Equally important are outstanding creativity and enthusiasm for interdisciplinary science. Excellent English communication skills (spoken and in writing) are required.

Interested individuals must apply online:

<https://mrc.tal.net/vx/lang-en-GB/appcentre-1/candidate/postings/1275>

[mRNA Biochemist \(EU funded position\) at Sixfold Bioscience, London \(UK\)](#)

Posted on [August 7, 2019](#)

We founded Sixfold to tackle the biggest challenge in healthcare: how to safely deliver therapeutics to diseased cells. As an mRNA Biochemist you'll have the opportunity to build a radically different approach to how we deliver mRNA in vivo. You'll be applying your knowledge of RNA biochemistry to design and synthesize mRNA that works in harmony with Sixfold's proprietary drug delivery systems. You'll be utilizing intra- and extra-cellular systems to 'hack' biology for more effective therapeutic potential.

Must have an awarded or soon-to-be-awarded PhD; resided or carried out your main activity in the UK for no more than 12 months in the previous 3 years. please email careers@sixfold.bio or Apply here: <http://bit.ly/H2020-RNA>

Visit our website: <https://www.sixfold.bio/>

[Computational Engineering of Nucleic Acid Nanostructures \(EU funded position\) at Sixfold Bioscience, London \(UK\)](#)

Posted on [August 7, 2019](#)

We founded Sixfold to tackle the biggest challenge in healthcare: how to safely deliver therapeutics to diseased cells. As an RNA nanotechnologist you'll have the opportunity to radically improve how we deliver Cell and Gene therapeutics. You'll learn how to use computational methods to build advanced functionalities into our drug delivery systems to improve both safety and efficacy. You'll be working in-sync with intra- and extra-cellular systems to 'hack' biology for more effective RNA based therapeutics.

Must have awarded or soon-to-be-awarded PhD, resided or carried out your main activity in the UK for no more than 12 months in the previous 3 years and be able to relocate to London. Should you have any questions, please email

careers@sixfold.bio or Apply here: <http://bit.ly/H2020-RNA> Visit our website: <https://www.sixfold.bio/>

[Postdoctoral Position Available, Newly Established Group of Dr Lovorka Stojic, London](#)

Posted on [August 7, 2019](#)

A postdoctoral position is available in a newly established group of Dr Lovorka Stojic at the Barts Cancer Institute in London to work on the role of long noncoding RNAs (lncRNAs) in genome stability and cancer.

The project is aimed at identifying mechanisms by which specific lncRNAs safeguard genome integrity and determine the contribution of lncRNA dysregulation to genome instability in cancer. This project is based on our previous work, mainly: Stojic et al., NAR, 2018; Stojic et al., bioRxiv, 2019. For more information about the lab, please visit stojiclab.com.

Interested candidates should send their CV, cover letter and the names of three referees to: lovorka.stojic@cruk.cam.ac.uk

Deadline: 31st September 2019. About the Institute please visit www.bartscancer.london and www.bci.qmul.ac.uk

[Research Technician / Research Associate Position Available, University of Delaware](#)

Posted on [August 5, 2019](#)

Research Technician / Research Associate position available to study RNA-protein interactions and mechanism, University of Delaware. The Mugridge Lab (mugridgelab.org) in the Department of Chemistry & Biochemistry at the University of Delaware is seeking a full-time Research Associate I to join our team. We are a new lab at UD focused on a mechanistic understanding of enzymes that control RNA function and impact human disease. The ideal candidate will have research laboratory experience in protein expression and purification as well as some experience with biochemical or biophysical assay development.

Applications should consist of a one-page cover letter and a CV including publication record, brief descriptions of previous research accomplishments and techniques, and the names and contact information for three references.

APPLY HERE: <https://careers.udel.edu/cw/en-us/job/494198/research-associate-i-chemistry-biochemistry>

[Postdoctoral Fellow Position Available, RNA Modification and Function, University of Delaware](#)

Posted on [August 5, 2019](#)

Postdoctoral Fellow position available to develop new tools to study RNA modification and function, University of Delaware. The Mugridge lab (mugridgelab.org) in the Department of Chemistry & Biochemistry at the University of Delaware is seeking a postdoctoral fellow to join our team. The ideal candidate will have a PhD in chemistry,



biochemistry, synthetic biology, or a related field, and have experience with protein engineering, in vitro aptamer selection, or chemical biology approaches. Candidates with experience in structural biology or molecular biology with interests in protein-nucleic acid interactions and/or RNA modification biology are also encouraged to apply. Applications should consist one page cover letter and a CV including publication record, brief descriptions of previous research accomplishments and techniques, and the names and contact information for three references.

APPLY HERE: <https://careers.udel.edu/cw/en-us/job/494158/post-doctoral-fellow-chemistry-biochemistry>

[Two Post-Doc Positions Available, The Ke Lab, Jackson Laboratory](#)

Posted on [July 29, 2019](#)

The Ke Lab at The Jackson Laboratory with two Post-doc postings online:

1) Computational Biology Postdoc:

<https://careers-jax.icims.com/jobs/25557/postdoctoral-associate—ke-lab/job>

2) RNA Biology Postdoc:

<https://careers-jax.icims.com/jobs/25230/postdoctoral-associate—ke-lab/job>

The Laboratory of Dr. Shengdong Ke has two postdoctoral associate openings (one in RNA biology, and the other in computational biology) 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 (<https://www.jax.org/research-and-faculty/faculty/shengdong-ke>).

[Research/Laboratory Manager, Research Group of Steven Brenner, University of California, Berkeley](#)

Posted on [July 24, 2019](#)

The Brenner research group is an interdisciplinary research group, at the University of California, Berkeley. Our research has implications for diseases from cancer to Crohn's Disease, and the future of personalized medicine for all people.

Please submit your cover letter and resume as a single attachment through the UC Berkeley job site:

https://jobsprod.is.berkeley.edu/psp/jobsprod/EMPLOYEE/HRMS/c/HRS_HRAM.HRS_CE.GBL?Page=HRS_CE_JOB_DTL&Action=A&JobOpeningId=27300&SiteId=1&PostingSeq=1

[Research/Laboratory Supervisor Position Available, University of California, Berkeley](#)

Posted on [July 24, 2019](#)

The Brenner research group is an interdisciplinary research group, at the University of California, Berkeley. Our research has implications for diseases from cancer to Crohn's Disease, and the future of personalized medicine for all people.

Please submit your cover letter and resume as a single attachment through the UC Berkeley job site:

https://jobsprod.is.berkeley.edu/psp/jobsprod/EMPLOYEE/HRMS/c/HRS_HRAM.HRS_CE.GBL?Page=HRS_CE_JOB_DTL&Action=A&JobOpeningId=27301&SiteId=1&PostingSeq=1

[Postdoctoral Position Available, University of California, Davis](#)

Posted on [July 18, 2019](#)

A postdoctoral position is available at the University of California, Davis to work on an interdisciplinary research grant spanning the Montpetit, Fraser, and Shah laboratories focused on positive-strand RNA viruses, including Zika, Dengue, and Hepatitis C. Research will involve investigating aspects of viral RNA transport, viral protein translation, and viral RNA interactions with host cell factors that are required for infection. Candidates with a strong research track record in virology, RNA biology, single molecule imaging, and/or molecular biology are encouraged to apply. Positions will remain open until filled with start dates available September 2019. To enquire, please email a cover letter and CV to benmontpetit@ucdavis.edu.

[Post Doctoral Fellow Position Available, RNA Innovation](#)

Posted on [July 10, 2019](#)

RNA Innovation is a unique partnership between the University of Lethbridge, Université de Sherbrooke, and industry collaborators, providing trainees with an exceptional learning experience during their graduate studies program. This NSERC Collaborative Research and Training Experience (CREATE) program aims to produce highly qualified personnel with skills in advanced RNA research, scientific leadership, and industry experience.

Application Form (available at www.RNAInnovation.ca) Two letters of reference from academic or industry referees

Transcripts (undergraduate, MSc, PhD, as applicable) Application documents can be sent to admin@RNAInnovation.ca.

This opportunity is open to Canadian and international students.



[Lab Manager Position, Research Group of Dr Kinga Kamieniarz-Gdula, AMU, Poznan, Poland](#)

Posted on [July 10, 2019](#)

Adam Mickiewicz University, Poznan, Poland; Institute of Molecular Biology and Biotechnology, Faculty of Biology Center of Advanced Technologies We are seeking a highly motivated Lab Manager to join the new group of Dr Kinga Kamieniarz-Gdula at Adam Mickiewicz University in Poznan. You will be offered the opportunity to participate in cutting edge research aiming at understanding the role of transcription termination in gene expression regulation as well as support for your professional development. Qualifications: Bachelor's, Master's or PhD degree in biology or related life science field, laboratory experience. Background in basic molecular biology techniques and tissue culture. Enthusiasm toward new techniques, strong communication skills, ability to make independent decisions. Fluency in English and Polish. Interested candidates should send their CV, the contacts of three referees, and a cover letter to kinga.kamieniarz-gdula@path.ox.ac.uk <http://ibmib.amu.edu.pl/en/main-page/>

[Two Postdoctoral Positions on RNA Regulations in Cancer at Institute Curie \(Paris, France\).](#)

Posted on [July 10, 2019](#)

Two postdoctoral positions on RNA regulations in cancer at Institute Curie (Paris, France).

We are seeking two highly motivated postdocs to join our lab studying RNA regulations in cancer, specifically for the following two projects: (i) translation regulation in drug-resistant cancer cells; and (ii) regulation of intronic polyadenylation in response/ resistance to genotoxic drugs. Website: <https://science.institut-curie.org/research/biology-chemistry-of-radiations-cell-signaling-and-cancer-axis/umr3348-genotoxic-stress-and-cancer/team-vagner/>

Application: Please send your CV, motivation letter and 2 letters of support to stephan.vagner@curie.fr

[PhD Student in RNA Structure and Transcriptome Bioinformatics](#)

Posted on [July 10, 2019](#)

We are looking for a PhD student in RNA structure and transcriptome Bioinformatics The Bioinformatics research group of Prof. Irmtraud Meyer at the BIMSB and MDC in Berlin is seeking to recruit a PhD student in Bioinformatics. We develop new computational methods and algorithms to analyze large-scale transcriptome data (e.g. RNA-seq). For the details on the position and how to apply, please see <https://www.mdc-berlin.de/career/jobs/phd-student-bioinformatics> and <https://www.mdc-berlin.de/meyer>

[Post-doctoral Fellow in RNA Structure and Transcriptome Bioinformatics](#)

Posted on [July 10, 2019](#)

We are looking for a post-doctoral fellow in RNA structure and transcriptome Bioinformatics The Bioinformatics research group of Prof. Irmtraud Meyer at the BIMSB and MDC in Berlin is seeking to recruit a post-doctoral fellow in Bioinformatics. Our goal is to discover new mechanisms of transcriptome regulation in diverse biological settings with a particular emphasis on mechanisms involving RNA-structures or *trans* RNA-RNA interactions. For the details on the position and how to apply, please see <https://www.mdc-berlin.de/career/jobs/post-doc-bioinformatics> and <https://www.mdc-berlin.de/meyer>

[Rfam Biocurator at EMBL-EBI, Cambridge, UK](#)

Posted on [July 2, 2019](#)

Rfam is the database of RNA families, without analogs anywhere in the world. Continuously developed since 2002, it has grown to include >3,000 families and is used by many scientists for a wide range of applications, such as the annotation of new genomes and developing RNA structure prediction algorithms. The Rfam Biocurator will be responsible for creating new RNA families and updating the existing ones based on the scientific literature and the community input. The post-holder's main task will be to update consensus secondary structures in Rfam multiple sequence alignments using the experimentally determined RNA 3D structures. See <http://bit.ly/rfam-biocurator> for further details.

Apply now: <http://bit.ly/rfam-biocurator>

[Postdoctoral Position Available, RNA Mediated Gene Regulation, Frederick, MD](#)

Posted on [June 27, 2019](#)

A postdoctoral position is available in the RNA Mediated Gene Regulation Section (RNA MGRS), RNA Biology Laboratory (RBL), Center for Cancer Research (CCR) – Frederick, MD, National Cancer Institute (NCI), National Institutes of Health (NIH), Department of Health and Human Services (DHHS). The candidate will perform basic



research on small RNA functions. Applicants must have a strong background in molecular biology and biochemistry. Experience with RNA research and/or deep sequencing data analysis is a strong plus. Salary is commensurate with research experience and accomplishments. E-mail shuo.gu@nih.gov URL <https://ccr.cancer.gov/RNA-Biology-Laboratory/shuo-gu>

[Postdoctoral Position Available, RNA Mediated Gene Regulation Section, Frederick, MD, National Cancer Institute](#)

Posted on [June 26, 2019](#)

A postdoctoral position is available in the RNA Mediated Gene Regulation Section (RNA MGRS), RNA Biology Laboratory (RBL), Center for Cancer Research (CCR) – Frederick, MD, The candidate will perform basic research on small RNA functions. The goal of our program is to uncover the mechanisms by which the function of miRNA is regulated in health and disease and to apply those in developing effective treatments for cancer. Interested candidates must have a Ph.D. and/or an M.D. and have less than 2 years of postdoctoral experience. E-mail shuo.gu@nih.gov URL <https://ccr.cancer.gov/RNA-Biology-Laboratory/shuo-gu>

[Postdoctoral Positions for RNA Cell Biologists](#)

Posted on [June 26, 2019](#)

NIH-funded postdoctoral positions available immediately at the Albert Einstein College of Medicine (Einstein) in New York to study the cellular impact of the bone marrow failure syndrome dyskeratosis congenita (DC) on ribonucleoproteins and to investigate their biogenesis and localization within the cell nucleus. For more details check out the webpage of the Belfer Institute: <http://www.einstein.yu.edu/research/belfer-institute/> Interested candidates should send their CV, the contacts of three references, and a cover letter with past achievements and current and future research interests to tom.meier@einstein.yu.edu <http://www.einstein.yu.edu/faculty/5249/u-thomas-meier/>

