

LETTER FROM THE CHAIRMAN

I must apologize that we've let too big a gap fall between our newsletters. But as I have observed previously, we are all working scientists and our day jobs come first. Nevertheless, please don't take this to indicate a lack of enthusiasm from the committee – we remain passionate about nucleic acids, and the promotion of our science in the UK and beyond.

The best way to achieve our goal is by having an exciting program of conferences for our membership. Each year we try to hold a major international conference. This year this was the *Single-Molecule Bacteriology* conference in Oxford that took place very recently. **Achilles Kapanidis** has written a report on this exciting meeting in this newsletter. This conference also provided an platform for the group's annual flagship lecture – *the Gait Lecture*. This year it was delivered by **Taekjip Ha** from Johns Hopkins University. On behalf of the whole NAG committee I thank Achilles and his co-organizers for putting together a highly successful conference.

Our major meeting next year will be in Dundee University, 28-30 June. There is already a stellar list of speakers, and the intention is to keep the registration fee low. So we hope all our nucleic acid enthusiasts will come and participate. I have written a preliminary announcement of this conference elsewhere in this Newsletter.

The *Nucleic Acids Forum* has become a wonderfully successful fixture in our calendar. In contrast to the big international meetings with star speakers, this provides an opportunity for our



DAVID LILLEY DUNDEE

younger scientists to present their work and discuss it with the wider community. The 2019 meeting will be the 15th *Nucleic Acids Forum*, organized by **David Rueda**, and will take place on 12 July at Burlington House in London. The deadline for abstract submission will be around the end of May.

Some important committee changes have happened since the last newsletter. Our long-serving treasurer **Rick Cosstick** has passed the baton on to **John Brazier**. Huge thanks to Rick for his service to the committee, and welcome aboard John. **Mark Dillingham** is also stepping down at the end of the year. He has been a tremendously proactive and energetic group secretary, but is handing over to the capable hands of **Zöe Waller**. Zöe is a former *Forum* organizer, and I know she will be excellent in the new role.

Finally I thank **Glenn Burley** for putting this newsletter together. I look forward to seeing everyone at the upcoming meetings, in London, Dundee or elsewhere!

David Lilley, Chair NAG



SINGLE-MOLECULE BACTERIOLOGY MEETING, OXFORD SEPTEMBER 2018

The first "Single-molecule Bacteriology" meeting, also the 84th Harden conference (sponsored by the Biochemical Society), took place at Oxford on Sept 9-12, 2018 at the Lady Margaret Hall College. The meeting attracted 110 attendees and included 25 invited talks, 23 talks chosen from the abstracts and 32 posters. The meeting was co-organised by Achillefs Kapanidis, Meriem el Karoui, Stephan Uphoff and Jie Xiao, and received generous sponsorship from the Wellcome Trust and the BBSCR, as well as from academic, industrial, publishing, and industrial sponsors.

The conference concentrated on studies of the spatial organization and mechanisms of living bacterial cells by using single-molecule experimental methods and theoretical modeling approaches. Topics covered mechanisms related to the processing of nucleic acids, ranging from transcription and translation to CRISPR-based recognition.

The meeting opened with a lecture by Professor Taekjip Ha (Johns Hopkins University, Baltimore) who was awarded the Michael Gait Lectureship for his outstanding contributions to the understanding of chemistry and biochemistry of nucleic acids using single-molecule fluorescence and force microscopy methods. The conference also included the 2018 Biochemical Society Keilin Memorial Prize Lecture, given by Professor Neil Hunter (University of Sheffield).



ACHILLEFS KAPANIDIS PRESENTING PROFESSOR HA WITH THE $\mathbf{5}^{\mathrm{TH}}$ GAIT LECTURE AWARD



14TH NUCLEIC ACIDS FORUM LONDON JULY, 2018

The RSC Nucleic Acids Group held the 14th annual nucleic acids forum at Burlington House. This meeting showcased emerging talent in the area of nucleic acids research across the chemistry-biology interface.

We thank the generous sponsorship from Link Technologies, ATDBio, Molecular Models and ChemGenes corporation.

NUCLEIC ACID NEWS A NEWSLETTER FROM THE NUCLEIC ACIDS GROUP OF THE RSC



NASSAU, BAHAMAS

FUSION NUCLEIC ACIDS MEETING NASSAU, BAHAMAS. 13-16 FEBRUARY, 2019

David Lilley and Wei Yang have organized a series of conferences on *Nucleic Acids* around the Caribbean Sea over a number of years. Understanding processes involving DNA and RNA at the molecular and chemical level is the central theme of these conferences, with a marked structural and mechanistic perspective. These were previously held as Zing meetings, but as that company is no more they continue as a Fusion conference. The feel of the meetings is very much like a Gordon conference, held in a beautiful beach-side resort in the middle of the northern winter. The hallmark is informality combined with a very high level of scientific interchange. Participants are encouraged to submit abstracts for either oral or poster presentations.

Next year's conference will include the following speakers:

Ronald Breaker, Chuan He, Joe Piccirilli, Steve West, John Diffley, Steve Kowalczykowski, Marv Caruthers, Yamuna Krishnan, Rich Roberts, Mike O'Donnell, Bik Tye.

The Nucleic Acids symposium will be held on the beautiful island of Nassau. The conference venue is surrounded by truly breath-taking views of Cable Beach, making the perfect setting for our conference.

For more details and to register, please go to <u>https://www.fusion-conferences.com/conference87.php</u>

NUCLEIC ACIDS IN DUNDEE 28-30 JUNE, 2019

There will be a conference to celebrate all things *Nucleic Acids* next summer in Dundee. This is in part to denote the Lilley-laboratory approaching 40 years, and David Lilley passing a big birthday (he is coy about which!).

The meeting will cover all aspects of the structure and function of nucleic acids, both DNA and RNA. The conference shall include the following speakers:

Wei Yang, Taekjip Ha, Joe Piccirilli, Steve West, Malcolm White, Yamuna Krishnan, David Sherratt, Eric Westhof, Ben Luisi, Daniel Lafontaine, David Rueda, Toni Gartner, Yiliang Ding

The organizers intend to keep the registration fee very low for this conference, and hope to see good attendance from members of the RSC Nucleic Acid Group.

FORTHCOMING CONFERENCES DATES FOR YOUR DIARY



30 th Jan–1st Feb	2019 6 th UK RNA Splicing Workshop, Rydall Hall (Biochemical Society)
13-16 Feb	Fusion Nucleic Acids Meeting, Nassau, Bahamas
11 th -16 th June	24 th Annual Meeting of the RNA Society, Krakow, Poland
4 - 9 June	Gordon Research Conference, Nucleic Acids, University of New England, USA
25 - 30 June	Gordon Research Conference, Nucleosides, Nucleotides and Nucleic Acids, Salve Regina University, USA
28 - 30 June	Dundee Nucleic Acids symposium
12 July	15 th Nucleic Acids Forum, Burlington House, London

David Lilley (Chair), University of Dundee (d.m.j.lilley@dundee.ac.uk) John Brazier (Treasurer), University of Reading (j.a.brazier@reading.ac.uk) Zöe Waller, (Secretary), University of East Anglia (Z.Waller@uea.ac.uk)

Glenn Burley, University of Strathclyde Jason Chin, Laboratory of Molecular Biology Mark Dillingham, University of Bristol David Hodgson, University of Durham Achillefs Kapanidis, University of Oxford Ben Luisi, University of Cambridge David Rueda, Imperial College London

ABOUT US

The Nucleic Acids Group is a subject group of the Royal Society of Chemistry and part of the Chemical Biology Forum. The group was formed in 2003, having previously been a special interest group (The Nucleic Acids and Molecular Biology Group) of both the RSC and the Biochemical Society.

The purpose of the group is to promote the subject of nucleic acids (including aspects of their chemistry, biochemistry, molecular biology and biophysics), primarily via organization of meetings covering topics within the subject.