RNA in physiology and disease

2026

SPEAKERS

RNA IN CELL AND DEVELOPMENTAL BIOLOGY 1
DONAL O'CARROLL, UK
MAITE HUARTE, SPAIN
ALFREDO CASTELLO, UK

RNA IN CELL AND DEVELOPMENTAL BIOLOGY 2
DAVID TOLLERVEY, UK
CRISTIAN BELLODI, DENMARK
MANUEL IRIMIA, SPAIN

RNA IN INFECTION AND IMMUNITY
MARTIN TURNER, UK
SARA MACIAS, UK

RNA IN DISEASE AND THERAPY 1
SEBASTIAN FICA, UK
ALENA SHKUMATAVA, UK

RNA IN DISEASE AND THERAPY 2
MICHAELA FRYE, GERMANY
OLGA ANCZUKOW, USA
JERNEJ ULE, UK
CHUAN HE, USA

UNIVERSITY OF NEWCASTLE

7-9TH SEPTEMBER 2026

SCIENTIFIC ORGANISERS

LOVORKA STOJIC
QUEEN MARY UNIVERSITY OF LONDON

KAMIL KRANC
INSTITUTE OF CANCER RESEARCH

PAWEL GRZECHNIK
UNIVERSITY OF MANCHESTER

DAVID ELLIOTT
UNIVERSITY OF NEWCASTLE

JONATHAN PETTITT
UNIVERSITY OF ABERDEEN

FARAZ MARDAKHEH
UNIVERSITY OF OXFORD

the genetics society

DAY 1 – Monday 7th September 2026

12:00 – 13:30 Registration and refreshments

13:45 – 14:00 Welcome address, **David Elliott** (University of Newcastle)

Session 1: RNA in Cell and Developmental Biology 1

Chair: Lovorka Stojic - Queen Mary University of London

14:00 – 14:30 Safeguarding germline immortality**, Donal O'Carroll** (University of Edinburgh)

14:30 – 15:00 Noncoding RNA roles in the coordination of DNA replication in human cells, **Maite Huarte** (CIMA Institute, Pamplona)

15:00 – 15:15 piRNA evolution: insights from nematodes, **Peter Sarkies** (University of Oxford)

15:15 – 15:30 Long non-coding RNA CHERR regulates chromatin remodeller HELLS to safeguard (epi)genome stability, **Giulia Guiducci** (Queen Mary University of London)

15:30 – 16:00 Refreshment break

16:00 – 16:05 Sponsor talk - Immagina Biotechnology

16:05 – 16:35 Hidden Heroes: Nuclear RNA-binding proteins and their secret antiviral powers, **Alfredo Castello** (University of Glasgow)

16:35 – 16:50 Reading the epitranscriptome: Identification of novel RNA modification readers using interaction proteomics, **Aniek Verstappen** (Radboud University)

16:50 – 17:05 Brain translatomics implicates conserved alternative ORF initiation motifs in regulating voltage-gated sodium channels, **Ira Iosub** (The Francis Crick Institute)

17:05 – 17:30 Flash poster session 1

17:30 – 19:00 Poster session 1, networking reception

DAY 2 – Tuesday 8th September 2026

08:30 – 09:00 Refreshments

Session 2: RNA in Cell and Developmental Biology 2

Faraz Mardakheh - University of Oxford

09:00 – 09:30 Lighting Up RNA-Protein Interactions, **David Tollervey**, (University of Edinburgh)

09:30 – 10:00 RNA Pseudouridylation-Driven Control of Protein Synthesis as a Cancer Vulnerability, **Cristian Bellodi** (University of Copenhagen)

10:00 – 10:15 Cellular context restricts IDR plasticity to a single essential effector interface for m6A-dependent mRNA turnover, **Folkert van Werven** (The Francis Crick Institute)

10:15 – 10:30 The moonlighting functions of SEC13 in nonsense-mediated mRNA decay and the regulation of ER stress, **Laura Monaghan** (University of Edinburgh)

10:30 – 11:00 Refreshment break

11:00 – 11:30 Proteome specialization by cell type specific microexons in health, disease and evolution, **Manuel Irimia** (Universitat Pompeu Fabra - Centre for Genomic Regulation)

11:30 – 11:45 Splicing factor engagement and regulation of RNA processing during caloric restriction, **Timothy Rhoads** (University of Wisconsin)

11:45 – 12:00 A SunTag recombinant OC43 coronavirus reveals dynamic changes in viral translation throughout infection, **Cody Hecht** (University of Colorado Boulder)

12:00 – 12:30 Flash poster session 2

12:30 – 13:30 Lunch

13:30 – 15:00 Poster Session 2

Session 3: RNA in Infection and Immunity

Jonathan Pettitt - University of Aberdeen

15:00 – 15:05 Sponsor talk - EIRNABio

15:05 – 15:35 The RNA binding proteins ZFP36 and ZFP36L1 regulate effector and memory T- cell responses, **Martin Turner** (Babraham Institute)

15:35 – 16:05 The role of double-stranded RNA in development and immunity, **Sara Macias** (University of Edinburgh)

16:05 – 16:20 Loss of SMG6-dependent RNA decay suppresses hepatocellular carcinoma and reveals a role for NMD in endogenous dsRNA homeostasis, **David Gatfield** (University of Lausanne)

16:20 – 16:35 RNA helicase DDX1 supports germinal centre selection and affinity maturation by promoting tRNA splicing, **Emily Horner** (Babraham Institute)

16:35 – 17:00 Refreshment break

Session 4: RNA in Disease and Therapy 1

Pawel Grzechnik - University of Manchester

17:00 – 17:30 Visualizing the Human Spliceosome in Action:Structural Mechanisms of Alternative Splice-Site Selection**, Sebastian Fica** (University of Oxford)

17:30 – 18:00 One RNA, two functions: an ultra-conserved element controlling stem cell fate, **Alena Shkumatava** (University of Edinburgh)

18:00 – 18:15 A modular toolkit for high-resolution RNA structural mapping in cells, **Bianca Pierattini** (University of Cambridge)

18:15 – 18:30 Development of next-generation antimalarials using mRNA technology, **Alexander Welch** (University of Oxford)

18:30 – 19:30 Travel to the Gala dinner for those attending

19:30 – 22:00 Gala Dinner at St James Park (paid for in advance only)

DAY 3 – Wednesday 9th September 2026

08:30 – 09:00 Refreshments

Session 5: RNA in Disease and Therapy 2

Kamil Kranc - The Institute of Cancer Research

09:00 – 09:30 Targeting RNA modifications in cancer, **Michaela Frye** (German Cancer Research Center)

09:30 – 10:00 Decoding the Cancer Splicing Landscape: From Aging-Associated Isoforms to Regulatory Networks and Therapeutic Targets**, Olga Anczukow** (The Jackson Laboratory for Genomic Medicine)

10:00 – 10:15 YTHDF3 is a selective dependency in AML with dual mA-dependent and -independent functions, **Marie Hautin-Ropert** (Institute of Cancer Research, London)

10:15 – 10:30 GNG12-AS1 lncRNA acts as a key regulator of a non-canonical imprint maintenance center at the DIRAS3 locus, **Giuseppina Pisignano** (University of Bath)

10:30 – 11:00 Refreshment break

11:00 – 11:30 Protein-RNA feedback loops and their roles in cellular homeostasis, **Jernej Ule** (The Francis Crick Institute)

11:30 – 12:00 RNA-guided chromatin regulation in disease: from molecular mechanisms to therapeutic targeting**, Chuan He** (University of Chicago)

12:00 – 12:15 A pre-rRNA positive feedback loop drives malignant ribosome biogenesis, **Emilie Alard** (University of Oxford)

12:15 – 12:30 A FENDRR-FOXF1 negative feedback loop controls human lung fibroblast-to-myofibroblast transition, **Martin Sauvageau** (Montreal Clinical Research Institute, Canada)

12:30 – 13:30 Round table discussion and closing remarks