AGENDA (as of October 20, 2014)

GeneExpression Systems & Appasani Research Conferences & University of Cambridge Presents:

MicroRNAs & Single Molecule Biology/Genome Editing Europe Symposia-2014

(Two meetings at One Location)

Venue: Peterhouse College, University of Cambridge, Cambridge, **United Kingdom** **Date:** November 3 – 4, 2014

Organizer: **Krishnarao Appasani, PhD.** GeneExpression Systems, Inc. of USA

NOVEMBER 3, 2014, Monday

8:00 AM	**REGISTRATION OPEN:** Coffee/Tea & Refreshments		
8:30 – 10:35 AM	**JOINT INAUGURAL SESSION I:** **Chair: Krishnarao Appasani, PhD.**		
8:30 – 8:45 AM	Welcome Address by Organizer: **Krishnarao Appasani, PhD.** GeneExpression Systems, Inc. **USA**		
8:45 – 9:15 AM	**KEYNOTE SPEKER:** **René F. Ketting, PhD.** Professor & Director of Institute of Molecular Biology University of Mainz, Mainz, Mainz, **Germany** **Title:** Priming the next generation with small RNAs		
9:15 – 9:45 AM	**KEYNOTE SPEKER:** **Hagan Bayley, PhD.** Professor of Chemical Biology & Fellow of Hertford College University of Oxford, Oxford, England, **United Kingdom** **Title:** Polymers through pores: single-molecule experiments with nucleic acids, polypeptides and polysaccharides		
9:45 – 10:10 AM	**INDUSTRY KEYNOTE SPEKER:** **Johnathan Lai, PhD.** Senior Research Scientist Exiqon Life Sciences, Exiqon A/S, Vedbaek, **Denmark** **Title:** Effective and long lasting KD of nuclear retained lncRNA in a broad range of mouse tissues achieved with single stranded LNA enhanced antisense oligonucleotides		
10:10 –10:35 AM	**William C. Skarnes, PhD.** Senior Group Leader Sanger Institute, Wellcome Trust Genome Campus, Hinxton, Cambridge, **UK** **Title:** High-throughput bi-allelic targeting of human iPS cells using CRISPR technology		
10:35 –11:00 AM	**25 minutes BREAK**		
	TWO PARALLEL SESSIONS STARTS FROM NOW		
	MICRO RNAs & NON CODING RNAs **Held at Peterhouse Theater**		**SINGLE MOLECULE BIOLOGY & GENOME ENGG / EDITING** **Held at Upper Hall**
11:00 – 12:45 PM	**Session II: MicroRNAs in Development** **Chair: Jan Oxholm Gordeladze, PhD. NORWAY**	**11:30 – 12:45PM**	**Session II: Genome Editing and FRET Analysis** **Chair: Morten Frodin, PhD. DENMARK**
11:00 – 11:30 AM	**Jan Oxholm Gordeladze, PhD.** **Plenary Speaker** University of Oslo, **Norway** **Title:** Epigentic factors involved in "mineralizing/demineralizing" capability of cell phenotypes: Histone deacetylases, transcription factors, microRNAs, and vitamin K2	11:00 – 11:30 AM	**Morten Frodin, PhD.** **Plenary Speaker** University of Copenhagen, **Denmark** **Title:** High-efficiency genome editing by combining FACS with 2A-coupling of fluorescent proteins to ZFNs or Cas9
11:30 – 11:55 AM	**Guy Wheeler, PhD.** University of East Anglia, **United Kingdom** **Title:** The function of microRNA-140 in cartilage development and osteoarthritis	11:30 – 11:55 AM	**Lorenz A. Fenk, PhD** Student MRC-Laboratory of Molecular Biology, **UK** **Title:** Ctrl+Alt+Delete: Editing the genome of a worm

11:55 – 12:20 PM	**Gracjan Michlewski PhD.** University of Edinburgh, Scotland, **UK** **Title:** Lin28a regulates neuronal differentiation and controls miR-9 production	11:55 – 12:20 PM	**Victoria Birkedal, PhD.** Aarhus University, **Denmark** **Title:** Structural dynamics of nucleic acids studied by single molecule FRET
12:20 – 12:45 PM	**Victor X. Jin, PhD.** University of Texas Health Science Center, **USA** **Title:** MicroRNA-31 predicts the presence of lymph node metastases and survival in lung adenocarcinoma patients	12:20 – 12:45 PM	**Timothy Craggs, PhD.** University of Oxford, Oxford, **UK** **Title:** Single-molecule FRET for dynamic structural biology: DNA Polymerase I structure and mechanism with angstrom precision
12:45 – 2:00 PM	**1 Hour 15 min: Lunch Break (Provided)**		
2:00 – 4:15 PM	**Session III: MicroRNAs in Neurobiology & Immunology Chair: Li Zeng, PhD. SINGAPORE**	**2:00 – 4:15 PM**	**Session III: HT Screenings & Genome Editing** **Chair: Holger Erfle, PhD. GERMANY**
2:00 – 2:30 PM	**Li Zeng, PhD. Plenary Speaker** National Neuroscience Institute, **Singapore** **Title:** Deciphering function and regulation of miRNA in neural differentiation in the developing cerebral cortex	2:00 – 2:30 PM	**Holger Erfle, PhD. Plenary Speaker** BIOQUANT-University of Heidelberg, **Germany** **Title:** High throughput screenings at single molecule level
2:30 – 2:55 PM	**Carlos P. Fitzsimons, PhD.** University of Amsterdam, **Netherlands** **Title:** From microRNA profiling to target regulation by cooperative microRNA action. Lessons learned from an experimental model of epilepsy	2:30 – 2:55 PM	**Katsuyuki Shiroguchi, PhD.** RIKEN Ctr. for Integrative Medical Sciences, **Japan** **Title:** Accurate system-wide gene expression analysis with single molecule resolution by using molecular barcoding
2:55 – 3:20 PM	**Dr. Rodrigo M. Maza** Hospital Nacional de Parapléjicos, **Spain** **Title:** MicroRNAs in the pathophysiology and treatment of the spinal cord injury	2:55 – 3:20 PM	**Beata Klejevskaja, PhD** Student Natl. Heart&Lung Inst. Imperial College London, **UK** **Title:** Single molecule FRET studies of G-quadruplex structure formed in DNA mini-circles
3:20 – 3:45 PM	**Bassam Badran, PhD.** Lebanese University of Beirut, **Lebanon** Title: Role of microRNAs in the expression of the human IL-21	3:20 – 3:45 PM	**Yueng Tchern Lenn, PhD.** Queen Mary University of London, **UK** **Title:** Organization of energy production in bacterial cells
3:45 – 4:10 PM	**Hussein Fayyad-Kazan, PhD.** Université libre de Bruxelles, **Belgium** **Title:** A microRNA profile of human CD8 positive regulatory T lymphocytes and characterization of the effects of microRNAs on Treg cell associated genes	3:45 – 4.10 PM	**Takuma Sugi, PhD.** Kyoto University, **Japan** **Title**: Regulation of gene expression and behavior by genome editing technology in *C. elegans*
4:10 – 4:45 PM	**35 min. BREAK (POSTER & EXHIBIT VIEWING)**		
4:45 – 6:45 PM	**Session IV: MicroRNAs in Cancer Biology** **Chair: Peter Leedman, MBBS, PhD. AUSTRALIA**	**4:15 – 6:45 PM**	**Session IV: Dynamics of Single Molecules** **Chair: David Suter, MD, PhD. SWITZERLAND**
4:45 – 5:15 PM	**Peter Leedman, MBBS, PhD. Plenary Speaker** Harry Perkins Inst. of Medical Research, **Australia** **Title:** miR-7: a potent tumor suppressor and candida replacement therapy	4:45 – 5:15 PM	**David Suter, MD, PhD. Plenary Speaker** Ecole Polytechnique Federale de Lausanne, **Swiss** **Title:** Transcription at the single cell level

5:15 – 5:40 PM	**Stefan Erkeland, PhD.** Erasmus University Medical Center, **Netherlands** **Title:** Deregulation of miR-139-3p and miR-199a-3p drives leukemic transformation of interstrand cross-link induced bone marrow failure	5:15 – 5:40 PM	**Laszlo Puskas, PhD., DSc.** Avidin Biotechnology Ltd. & Hungarian Academy of Sciences, **Hungary** **Title:** Digital PCR to determine the number of transcripts from single neurons after patch-clamp recording
5:40 – 6:05 PM	**Stephen G. Maher, PhD.** University of Hull, **UK** & Trinity College, **Ireland** **Title:** miRNA-mediated regulation of sensitivity to chemoradiotherapy in oesophageal cancer	5:40 – 6:05 PM	**Andrea Soranno, PhD.** University of Zurich, **Switzerland** **Title:** Probing the polymer properties of intrinsically disordered proteins with single-molecule spectroscopy
6:05 – 6:20 PM	**Anke Nijhuis, Student** **SHORT PRESENTATION** Queen Mary University of London, UK **Title:** MicroRNAs expression profiling of colorectal cancer tissue and cell lines in low oxygen tension	6:05 – 6:30 PM	**TBA** **PRESENTATION**
6:20 – 6:45 PM	**TBA** **PRESENTATION**	--- ---	---- -------- ------
6:45 PM	**End of 1st day session**	**6:30 PM**	**End of 1st day session**

NOVEMBER 4, 2014, Tuesday

8:00 AM	**REGISTRATION OPEN:** Coffee/Tea & Refreshments		
8:45 – 10:35 AM	**JOINT INAUGURAL SESSION IV: Chair: Krishnarao Appasani, PhD.**		
8:45 – 9:00 AM	Welcome Note by Organizer: **Krishnarao Appasani, PhD.** GeneExpression Systems, Inc. **USA**		
9:00 – 9:35 AM	**KEYNOTE SPEKER: Tudor A. Fulga, Ph.D.** Associate Professor of Genome Biology University of Oxford, **UK** **Title:** Deciphering miRNA-target regulation by site-specific genome engineering		
9:35 –10:05 AM	**Radislav Sedlacek, PhD.** Institute of Molecular Genetics, **Czech Republic** **Title:** Use of Talens and CRISPR editing tools for generating transgenic animals		
10:05 –10:30 AM	**Joon Won Park, PhD.** Professor & Chair of Chemistry Pohang University of Science and Technology (POSTECH), **Korea** **Title:** Reading and analysis of Single DNA Bases, microRNAs and HCV RNA with Atomic Force Microscopy		
10:30 –11:00 AM	**30 min BREAK**		
	TWO PARALLEL SESSIONS STARTS FROM NOW		
	MICRO RNAs & NON CODING RNAs **Held at Peterhouse Theater**		**SINGLE MOLECULE BIOLOGY & GENOME ENGG / GENOME EDITING** **Held at Upper Hall**
11:00 – 12:45 PM	**Session V: MicroRNAs as Biomarkers** **Chair: Jennifer Winter, PhD. GERMANY**	**11:00 – 12:45PM**	**Session V: Genome Editing & Protein Dynamics Studies** **Chair: Radislav Sedlacek, PhD. CZECH**
11:00 – 11:30 AM	**Oluf Dimitri Røe, MD, PhD. Plenary Speaker** Norwegian Univ. of Science & Technology, **Norway** **Title:** Early diagnosis of lung cancer and mesothelioma by microRNA-where are we?	11:00 – 11:30 AM	**Nikos S. Hatzakis, PhD. Plenary Speaker** University of Copenhagen, **Denmark** **Title:** The art of understanding structure function correlations of membrane related enzymes by observing one molecule at a time
11:30 – 11:45 AM	**Sofie Sølvsten Sørensen, MD., PhD. Student** **SHORT PRESENTATION** Copenhagen University Hospital, **Denmark** **Title:** miRNA expression profiles as diagnostic biomarkers of acute ischemic stroke	11:30 – 11:55 AM	**Gerald Schwank, PhD.** Hubrecht Inst. **Netherlands &** ETH, **Switzerland** **Title:** Genome editing by CRISPR/Cas9 in intestinal stem cell organoids
11:45 – 12:00 PM	**Karin Ekström, PhD. SHORT PRESENTATION** University of Gothenbur, **Sweden** **Title:** Extracellular miRNA, exosomes and cell-cell communication	11:55 – 12:20 PM	**Yasutaka Mizoro, PhD.** CiRA, Kyoto University, **Japan** **Title:** Transcriptome analysis of iPS cells and differentiation cells using single cell RNA sequencing
12:00 – 12:15 PM	**Steffen Panzner, PhD. SHORT PRESENTATION** Lipocalyx GmbH, **Germany** **Title:** Transfection of Nucleic Acids: Viral and Synthetic Techniques Converge	12:20 – 12:45 PM	**Pétur O. Heidarsson, PhD.** University of Copenhagen, **Denmark** **Title:** Calcium-dependent folding and misfolding pathways in a neuronal calcium sensor
12:15 – 12:40 PM	**Jennifer Winter, PhD.** J. Gutenberg University of Mainz, **Germany** **Title:** miR-379-410 cluster regulation in neurogenesis and neuronal migration	--- ---	---- -------- ------
12:45 – 2:00 PM	**1 Hour 15 min: Lunch Break (ON YOUR OWN)**		

2:00 – 4:15 PM	**Session VI: MicroRNAs in Homeostasis & Metabolic Diseases** **Chair: Blanche Schroen, PhD. NETHERLANDS**	**2:00 – 4:15 PM**	**Session VI: Single Molecule Biology** **Chair: Satoshi Habuchi, PhD. SAUDI ARABIA**
2:00 – 2:30 PM	**Blanche Schroen, PhD. Plenary Speaker** Maastricht University, **Netherlands** **Title:** Cardiac immune activation in heart failure – a causative role for the pro-inflammatory microRNA-155	2:00 – 2:30 PM	**Mark C. Leake, PhD. Plenary Speaker** University of York, **UK** **Title:** Probing DNA interactions with proteins at the single-molecule level in cellulo, in vitro, and in silico
2:30 – 2:55 PM	**Michaela Frye, PhD.** Stem Cell Institute, University of Cambridge, **UK** **Title:** Small RNAs regulation and epigenetic modifications in homeostasis and cancer	2:30 – 2:55 PM	**Satoshi Habuchi, PhD.** King Abdullah University of Science and Technology, **Kingdom of Saudi Arabia** **Title:** Multi-parametric analysis of single-molecule diffusion and conformational dynamics
2:55 – 3:20 PM	**Xavier Loyer, PhD.** INSERM-University of Paris Descartes, **France** **Title:** Inhibition of microRNA-92a prevents endothelial dysfunction and atherosclerosis in mice	2:55 – 3:20 PM	**Rodolphe Marie, PhD.** Technical University of Denmark, **Denmark** **Title:** Mapping single DNA molecules to the human genome in a nanofluidic device
3:20 – 3:45 PM	**Hongbin Zhang, PhD.** University of Copenhagen, **Denmark** **Title:** microRNA regulation of brown adipogenesis	3:20 – 3:45 PM	**Sergio Garcia-Manyes, PhD.** Nano Center, Kings College London, **UK** **Title:** Mechanical protein folding at the single molecul level
3:45 – 4:00 PM	**A. Martinez-Sanchez, PhD.SHORT PRESENTATION** Imperial College London, **UK** **Title:** Role of miRNAs in the articular chondrocyte: new insights into miR-145 function	3:45 – 4:10 PM	**TBA PRESENTATION**
4:00 – 4:15 PM	**Amy Lewis, PhD. SHORT PRESENTATION** Queen Mary University of London, UK **Title:** Extracellular microRNAs in stricturing Crohn's disease	--- ---	---- -------- ------
4:15 – 4:35 PM	**20 min. BREAK (POSTER / EXHIBIT VIEWING & CLOSE UP)**		
4:35 – 6:45 PM	**Session VII: MicroRNAs Methodology & MicroRNAs in Disease Biology** **Chair: Daniela Taverna, PhD. ITALY**	**4:35 – 6:45 PM**	**Session VII: Single Molecule Imaging** **Chair: Hannu Myllykallio, PhD. FRANCE**
4:35 – 5:05 PM	**Cecilia Mannironi, PhD.** CNR-Institute at University of Rome, **Italy** Title: miR-135a and miR-124 in Stress Response	4:35 – 5:05 PM	**Hannu Myllykallio, PhD. Plenary Speaker** Ecole Polytechnique, **France** Title: : Structural and cellular dynamics of archaeal nucleases
5:05 – 5:30 PM	**Daniela Taverna, PhD. Plenary Speaker** University of Turin, **Italy** **Title:** miR-214 in melanoma progression	5:05 – 5:30 PM	**Steven F. Lee, PhD.** University of Cambridge, **UK** **Title:** Single molecule analysis with super resolution imaging
5:30 – 5:55 PM	**Juliane Braun, PhD.** Martin Luther University Halle, **Germany** **Title:** Rapid and comprehensive identification of regulatory microRNAs by miTRAP	5:30 – 5:55 PM	**Gautam V. Soni, PhD.** Raman Research Institute, **India** **Title:** Measuring physical properties of nucleosomes, one molecule at a time

5:55 – 6:20 PM	**Nicola Valeri, MD., PhD.** The Institute of Cancer Research, **UK** Title: Role of miR-135 b in the cancer progression	--- ---	---- -------- ------
6:20 – 6:45 PM	**Claudia Piovan, PhD.** IRCCS-National Cancer Institute of Milan, **Italy** **Title:** Involvement of microRNAs in HER2-driven breast cancer	--- ---	---- -------- ------
6:45 PM	**End of Meeting**	**6:00 PM**	**End of Meeting**