

## Schedule

Joint Symposium of 18<sup>th</sup> International Roundtable on Nucleosides, Nucleotides and Nucleic Acids and 35<sup>th</sup> International Symposium on Nucleic Acid Chemistry

September 8 (Mon)					
Time	Session	Chairperson	No	Authors	Title
14:00-18:00	Registration				
18:00-19:00	Reception				
September 9 (Tue)					
Time	Session	Chairperson	No	Authors	Title
8:30-8:40	Opening Remarks				
8:40-9:25	Plenary Lecture		1L-1	<u>Dinshaw J. Patel</u> (Memorial Sloan-Kettering Cancer Center)	Structural Biology of Riboswitch-mediated Gene Regulation and Argonaute-mediated Gene Silencing
9:25-9:40	Oral Presentation		1O-1	Karl Börjesson, Peter Sandin, Bo Albinsson, Jerker Mårtensson, Tom Brown and <u>L. Marcus Wilhelmsson</u> (Chalmers University of Technology)	Characterization and Use of Tricyclic Fluorescent Nucleic Acid Base Analogues
9:40-9:55			1O-2	<u>Poul Nielsen</u> , Khalil I. Shaikh, Lise J. Nielsen, Nicolai K. Andersen, Lucie Spáčilová, Henrik Nielsen, Petr Kočalka and Mikkel S. Christensen (University of Southern Denmark)	Nucleic acid duplexes with zippers of additional nucleobases and aromatics in minor or major groove
9:55-10:10			1O-3	Anne De Cian, Julien Gros, Aurore Guédin, Meriem Haddi, Sébastien Lyonnais, Lionel Guittat, Jean-François Riou, Chantal Trentesaux, Barbara Sacca, Laurent Lacroix, Patrizia Alberti and <u>Jean-Louis Mergny</u> (INSERM U565)	DNA and RNA Quadruplex ligands
10:10-10:20	Coffee Break				
10:20-10:50	Invited Lecture		1I-1	<u>Daniela Montesarchio</u> (Università degli Studi di Napoli "Federico II")	G-quadruplex forming oligonucleotides as finely tunable aptamers: towards better DNA mimics
10:50-11:20			1I-2	<u>Dipankar Sen</u> (Simon Fraser University)	The use of light to investigate and modulate DNA and RNA conformations
11:20-11:35	Oral Presentation		1O-4	<u>Kazuo Harada</u> , Maki Sugaya, Futoshi Nishimura and Akira Katoh (Tokyo Gakugei University)	Manipulation of the peptide-binding specificity of an RNA in a rational manner by combinations of specificity-altering mutations
11:35-11:55	Company Presentation		1C-1	<u>Charles R. Cantor</u> (SEQUENOM, Inc.)	Quantitative, Sensitive Analysis of DNA and RNA
11:55-13:00	Lunch				
13:00-14:30	Poster Presentation (Category A and B)				
14:30-15:15	Plenary Lecture		1L-2	Eike Friedrichs, Angeliki Tsokou, Ralf Jungmann and <u>Friedrich Simmel</u> (Technische Universität München)	Artificial molecular switches made from DNA
15:15-15:30	Oral Presentation		1O-5	<u>Xingguo Liang</u> , Kenta Fujioka, Yuichiro Tsuda, Ryuji Wakuda and Hiroyuki Asanuma (Nagoya University)	Construction of a photo-switchable gene for turning on and off gene expression with light irradiation
15:30-15:45			1O-6	Ulla Jakobsen, Adam C. Simonsen and <u>Stefan Vogel</u> (University of Southern Denmark)	DNA Controlled Assembly of Liposomes
15:45-16:00			1O-7	<u>Yuko Osawa</u> , Hiroaki Motoki, Takafumi Matsuo, Michio Horiuchi, Koji Sode and Kazunori Ikebukuro (Tokyo University of Agriculture & Technology)	Zinc finger protein-based detection system of PCR products for pathogen diagnosis
16:00-16:10	Coffee Break				
16:10-16:30	Company Presentation		1C-2	<u>Nitin Pari</u> , Xiaohui Wang, Rajeev Varma, Chris Burnett, Lesslie Beauchamp, Diana M. Batten, Michelle Young, Vivian Sule, Kathy Latham, Tim Sendera, Chris Echeverri, Christophe Sachse and Susan Magdaleno (Ambion Inc.)	LNA <sup>®</sup> incorporated siRNAs exhibit lower off-target effects compared to 2'-OMethoxy in Cell Phenotypic Assays and Microarray Analysis
16:30-17:00	Invited Lecture		1I-3	<u>C. I. Edvard Smith</u> , Karin E. Lundin, Oscar E. Simonson, Pedro M.D. Moreno, Mathias G. Svahn, Malgorzata Wenska and Roger Strömberg (Karolinska University Hospital)	Building Biologically Active Nucleic Acid Nanocomplexes
17:00-17:30			1I-4	<u>Oliver Seitz</u> , Tom N. Grossmann, Stefanie Thurlay and Lars Röglin (Humboldt University Berlin)	Recognizing and Controlling Biomolecules with "Smart" Hybridization-based Switches

September 10 (Wed)					
Time	Session	Chairperson	No	Authors	Title
8:30-9:15	Plenary Lecture		2L-1	Gabriela D. Ivanova, Martin M. Fabani, Andrey A. Arzumanov, Rachida Abes, Haifang Yin, Bernard Lebleu, Matthew Wood and <u>Michael J Gait</u> (Medical Research Council)	PNA-peptide conjugates as intracellular gene control agents
9:15-9:30	Oral Presentation		2O-1	Benoît Y. Michel, Kollappillil S. Krishnakumar, Magnus Johansson, Måns Ehrenberg and <u>Peter Strazewski</u> (Université Claude Bernard Lyon 1)	Structural and functional prerequisites for ribosomal nascent peptide acceptors: Attempts to decipher the nature of the ribosome's catalysis of peptide bond formation.
9:30-9:45			2O-2	<u>Jeremy G. Lackey</u> and Masad J. Damha (McGill University)	The acetal levulinyl ester (ALE) group for the 2'-hydroxyl protection of ribonucleosides and the synthesis of oligoribonucleotides
9:45-10:00			2O-3	<u>Erik B. Pedersen</u> , Amany M. A. Osman, Daniel Globisch, Manikandan Paramasivam, Susanna Cogo, Niels Bomholt, Per T. Jørgensen, Luigi E. Xodo and Vyacheslav V. Filichev (University of Southern Denmark)	Triplex glue by synthesizing conjugated flexible intercalators
10:00-10:10	Coffee Break				
10:10-10:55	Plenary Lecture		2L-2	<u>Mitsuo Sekine</u> , Akihiro Ohkubo and Kohji Seio (Tokyo Institute of Technology)	New strategies for the synthesis of unmodified and modified oligonucleotides
10:55-11:25	Invited Lecture		2I-1	Malgorzata Sierant, Katarzyna Kubiak, Julia Kazmierczak-Baranska, Alina Padaszyska, Tomoko Kuwabara, Masaki Warashina, Benedetta Nacmias, Sandro Sorbi and <u>Barbara Nawrot</u> (Polish Academy of Sciences)	RNA interference in silencing of genes of Alzheimer's disease in cellular and rat brain models
11:25-11:40	Oral Presentation		2O-4	<u>Yusuke Kurose</u> , Yosuke Taniguchi, Fumi Nagatsugi and Shigeki Sasaki (Kyushu University)	Synthesis of the new nucleoside analogue connecting 2-amino-6-vinylpurine to the 2'-deoxyribose skeleton <i>via</i> the methylene linker
11:40-12:00	Company Presentation		2C-1	<u>Troels Koch</u> (Santaris Pharma A/S)	Potent single stranded RNA inhibition
12:00-13:00	Lunch				
13:00-	Excursion				

September 11 (Thu)					
Time	Session	Chairperson	No	Authors	Title
8:30-9:00	Invited Lecture		3I-1	<u>François Morvan</u> , Albert Meyer, Gwladys Pourceau, Sébastien Vidal, Yann Chevolut, Eliane Souteyrand and Jean-Jacques Vasseur (Université Montpellier 2)	Click chemistry and Oligonucleotides: How a simple reaction can do so much
9:00-9:30			3I-2	<u>Natalia Tretyakova</u> , Rebecca Guza and Brock Matter (University of Minnesota)	Endogenous cytosine methylation and the formation of carcinogen-DNA adducts
9:30-9:45	Oral Presentation		3O-1	Thomas Lavergne, Anthony Martin, Françoise Debart and <u>Jean-Jacques Vasseur</u> (Université Montpellier 2)	A Whole Base-Labile Strategy for RNA Synthesis with 2'-O-acetalester Protections
9:45-10:00			3O-2	<u>Michal Hocek</u> , Milan Vrábel, Hana Cahová, Jan Riedl, Lubica Kalachová, Hana Pivoňková, Petra Horáková, Luděk Havran and Miroslav Fojta (Institute of Organic Chemistry and Biochemistr ASCR)	Novel base-functionalized DNA. Efficient methodology for construction and bioanalytical applications
10:00-10:10	Coffee Break				
10:10-10:40	Invited Lecture		3I-3	Jacek Cieślak, Andrzej Grajkowski, Cristina Ausín and <u>Serge L. Beaucauge</u> (Food and Drug Administration)	Recent Developments in the Synthesis of RNA Oligonucleotides for Potential Therapeutic Applications.
10:40-11:10			3I-4	<u>Hiroshi Ide</u> , Toshiaki Nakano, Amir M.H. Salem, Hiroaki Terato, Seung Pil Park and Keisuke Makino (Hiroshima University)	Repair of DNA-protein crosslink damage: Coordinated actions of nucleotide excision repair and homologous recombination
11:10-11:40			3I-5	<u>Mikiko C. Siomi</u> and Haruhiko Siomi (Keio University School of Medicine)	Characterization of endogenous human Argonautes and their miRNA partners in RNA silencing
11:40-12:00	Company Presentation		3C-1	Christian Maasch, Klaus Buchner, Dirk Eulberg, Stefan Vonhoff and <u>Sven Klussmann</u> (NOXXON Pharma AG)	Physicochemical Stability of NOX-E36, a 40mer L-RNA (Spiegelmer) for Therapeutic Applications
12:00-13:00	Lunch				
13:00-14:30	Poster Presentation (Category C and D)				
14:30-15:00	Announcement about Next Conference				
15:00-15:30	Invited Lecture		3I-6	Yanrong Wu, Youngmi Kim and <u>Weihong Tan</u> (University of Florida)	Molecular engineering of DNA bases: Building block for functional molecular probes in biomedicine
15:30-16:00			3I-7	Diana Rothe, Denise Werk, Mariola Dutkiewicz, Steffen Schubert, Hans-Peter Grunert, Heinz Zeichhardt, Volker A. Erdmann, Henry Fechné and <u>Jens Kurreck</u> (University of Stuttgart)	Inhibition of picornaviruses by means of RNA interference
16:00-16:10	Coffee Break				
16:10-16:30	Company Presentation		3C-2	<u>Balkrishen Bhat</u> , Christine Esau, Scott Davis, Stephanie Propp, Garth Kinberger, Hans Gaus, Susan Freier, Eric E. Swayze and C. Frank Bennett (Regulus Therapeutics, LLC)	2'-O-Methoxyethyl/2'-Fluoro Modified Oligonucleotides Result in More Potent Inhibition of micro RNA-122 in Vivo: A Target implicated in HCV Replication
16:30-17:00	Invited Lecture		3I-8	<u>Nora Zingler</u> , Amanda Solem and Anna Marie Pyle (Yale University)	Protein-Facilitated Ribozyme Folding and Catalysis
17:00-17:15	Oral Presentation		3O-3	<u>Yoshio Kato</u> (National Institute of Advanced Industrial Science and Technology (AIST))	An efficient fluorescent method for selective detection of mature miRNA species
17:15-17:30			3O-4	<u>Marcel Hollenstein</u> , Christopher Hipolito, Curtis Lam and David Perrin (University of British Columbia)	In vitro selection of a DNAzyme with <i>three</i> modified nucleotides
19:00-	Banquet and Awards Celebration				

September 12 (Fri)					
Time	Session	Chairperson	No	Authors	Title
8:30-9:15	Plenary Lecture		4L-1	<u>Vern L. Schramm</u> , Jemy A. Gutierrez, Grace Cordovano, Indranil Basu, Chandan Guha, Thomas J. Belbin, Gary B. Evans, Peter C. Tyler and Richard H. Furneaux (Albert Einstein College of Medicine)	Transition state analogues in quorum sensing and SAM recycling
9:15-9:45	Invited Lecture		4I-1	<u>Lak Shin Jeong</u> (Ewha Womans University)	Development of A <sub>3</sub> Adenosine Receptor Ligands
9:45-10:00	Oral Presentation		4O-1	<u>Marcus A. Cheek</u> , Mikhail I. Dobrikov, Charlotta K. Wennefors, Zhihong Xu, Syed Nadeem Hashmi, Xiaoying Shen and Barbara Ramsay Shaw (Duke University)	Synthesis and properties of ( <i>α</i> - <i>P</i> -borano)-nucleoside 5'-triphosphate analogues as potential antiviral agents
10:00-10:10	Coffee Break				
10:10-10:40	Invited Lecture		4I-2	<u>Satoshi Ichikawa</u> and Akira Matsuda (Hokkaido University)	Chemistry and Structure-Activity Relationship of Antibacterial Nucleoside Natural Products
10:40-10:55	Oral Presentation		4O-2	<u>C. Meier</u> , H. J. Jessen and J. Balzarini (University of Hamburg)	Nucleoside Diphosphate Prodrugs
10:55-11:10			4O-3	<u>Lakshmi P. Kotra</u> and Emil F. Pai (University of North Carolina at Greensboro and University Health Network)	Inhibition of Orotidine-5'-monophosphate decarboxylase – Discoveries and lessons
11:10-12:30	Poster Presentation (Category E, F and G)				
12:30-13:30	Lunch				
13:30-14:15	Plenary Lecture		4L-2	<u>Hideyoshi Harashima</u> (Hokkaido University)	Multifunctional envelope type nano device for non-viral gene delivery: Concept and application for nanomedicine
14:15-14:30	Oral Presentation		4O-4	Yuyan Zhao and <u>Hongbin (Tony) Yan</u> (Brock University)	Preparation of Mannosylated Oligoribonucleotides
14:30-14:45			4O-5	Gaëlle Creusat and <u>Guy Zuber</u> (Université de Strasbourg)	Tyrosine-modified PEI : A novel and highly efficient vector for siRNA delivery in mammalian cells
14:45-15:00	Coffee Break				
15:00-15:30	Invited Lecture		4I-3	Yan Liu and <u>Hao Yan</u> (Arizona State University)	Designer DNA Architectures for Nanobiotechnology
15:30-16:00			4I-4	<u>Frederick D. Lewis</u> (Northwestern University)	DNA electron transfer mechanism and dynamics
16:00-16:15	Oral Presentation		4O-6	<u>John Tumpane</u> , Erik P. Lundberg, L. Marcus Wilhelmsson, Tom Brown, and Bengt Nordén (Chalmers Univ. of Technology)	Addressable Molecular Node Assembly – Functional DNA Nanostructures
16:15-16:30	Poster Award Celebration				
16:30-17:00	Closing Remarks				