9th International Symposium on DNA-encoded chemical libraries
Zurich, Switzerland
September 5-6, 2019

SYMPOSIUM PROGRAM
www.del-symposium.org

Venue of the Event
ETH Zürich
Institute of Pharmaceutical Sciences
Vladimir-Prelog-Weg 1-5/10
Lecture Hall HCI J3/J7
8093 Zürich
Switzerland

Organizers
Prof. Dr. Dario Neri, ETH Zürich
PD Dr. Jörg Scheuermann, ETH Zürich

Patronage
**Thursday - September 5, 2019 - DAY 1**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>09:00</td>
<td>Registration</td>
</tr>
<tr>
<td>09:40</td>
<td>Information &amp; Opening</td>
</tr>
</tbody>
</table>

**Track 1 Advances in DNA-encoded Chemistry (Chair: Dario Neri & Jörg Scheuermann)**

**Session in Honour of Dr. Christopher P. Davie**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s) &amp; Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00</td>
<td>The Success and Failure of on-DNA Reaction Development and its Application for DEL Synthesis</td>
<td>Xiaojie Lu / Shanghai Institute of Materia Medica (China)</td>
</tr>
<tr>
<td>10:25</td>
<td>Development of a Solution-Phase, TaqMan-qPCR Assay for Evaluating DNA-Damage</td>
<td>Anokha Ratnayake / Pfizer (USA)</td>
</tr>
<tr>
<td>10:50</td>
<td>Single Electron Processes to Enable DEL Synthesis</td>
<td>Gary A. Molander / University of Pennsylvania (USA)</td>
</tr>
<tr>
<td>11:15</td>
<td>Synthetic and Encoding Efficiency in DNA-encoded Libraries</td>
<td>Dennis Gillingham / University of Basel (Switzerland)</td>
</tr>
</tbody>
</table>

**Lunch & Poster Session**

**Track 2 Advances Library Design (Chair: Sylvie Sakata)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s) &amp; Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td>New Selection Methods of DNA-encoded Chemical Libraries</td>
<td>Xiaoyu Li / University of Hongkong (China)</td>
</tr>
<tr>
<td>14:25</td>
<td>Library Design and Output in Encoded Library Screening</td>
<td>Matthew A. Clark / X-chem (USA)</td>
</tr>
<tr>
<td>14:50</td>
<td>Encoded Chemical Space: Widening the Scope of DNA-compatible Chemistry</td>
<td>Frederic Berst / Novartis (Switzerland)</td>
</tr>
<tr>
<td>15:15</td>
<td>Encoded Self-Assembling Chemical Libraries</td>
<td>Florent Samain / Philochem (Switzerland)</td>
</tr>
</tbody>
</table>

**Coffee Break & Poster Session**

**Track 3 Advances in Screening Technologies (Chair: Robert Goodnow)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s) &amp; Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:25</td>
<td>Critical Evaluation of in vitro Selection Assays for Encoded Libraries and Activity-based Probes</td>
<td>Casey J. Krusemark / Purdue University (USA)</td>
</tr>
<tr>
<td>16:50</td>
<td>Activity-based DNA-encoded Library Screening</td>
<td>Brian M. Paegel / Scripps Florida (USA)</td>
</tr>
<tr>
<td>17:15</td>
<td>Development of methods for estimating affinity from DEL selection data</td>
<td>David Israel / HitGen (China) &amp; Justin Hall / Pfizer (USA)</td>
</tr>
</tbody>
</table>

**Drinking Reception & Poster Session**

**Dinner**
# Friday - September 6, 2019 - DAY 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>Registration</td>
<td></td>
</tr>
<tr>
<td>09:00</td>
<td>Information &amp; Opening</td>
<td></td>
</tr>
<tr>
<td>09:05</td>
<td><strong>Track 4 New Applications for DNA-coding</strong></td>
<td><strong>Chair: Guang Yang</strong></td>
</tr>
<tr>
<td>09:05</td>
<td>The journey of a DEL screen at Roche</td>
<td>Moreno Wichert / Roche (Switzerland)</td>
</tr>
<tr>
<td>09:30</td>
<td>Unlocking a New Mode of Substrate-selective Inhibition for Insulin-Degrading Enzyme to Block Insulin Cleavage and Allow Glucagon Proteolysis</td>
<td>Juan Pablo Maianti / Exo Therapeutics (USA)</td>
</tr>
<tr>
<td>09:55</td>
<td>Affinity-guided Conjugation of DNA to Proteins</td>
<td>Kurt V. Gothelf / Aarhus University (Denmark)</td>
</tr>
<tr>
<td></td>
<td>Lunch &amp; Poster Session</td>
<td></td>
</tr>
<tr>
<td>10:50</td>
<td><strong>Track 1 Advances in DNA-Encoded Chemistry</strong></td>
<td><strong>Chair: Yun Ding</strong></td>
</tr>
<tr>
<td>10:50</td>
<td>Development of Novel DNA-compatible Methodologies</td>
<td>Dongchen Dai / Amgen Asia (China)</td>
</tr>
<tr>
<td>11:15</td>
<td>Advancing Dual-display Library technology</td>
<td>Marco Catalano / ETH Zürich (Switzerland)</td>
</tr>
<tr>
<td>11:40</td>
<td>Unleashing DNA-Encoded Library Technology: Drug Discovery and Beyond</td>
<td>Letian Kuai / WuXi AppTec (China)</td>
</tr>
<tr>
<td>14:00</td>
<td><strong>Track 2 Advances in Library Design</strong></td>
<td><strong>Chair: Barry Morgan</strong></td>
</tr>
<tr>
<td>14:00</td>
<td>Understanding How Library Designs Affect Screening Outcome</td>
<td>Raphael M. Franzini / University of Utah (USA)</td>
</tr>
<tr>
<td>14:25</td>
<td>Introducing Dynamic Self-assembling and Single Molecular Detection to DNA-encoded Libraries</td>
<td>Yixin Zhang / University of Dresden (Germany)</td>
</tr>
<tr>
<td>14:50</td>
<td>Phage Selection and High-throughput Screening of Cyclic Peptides</td>
<td>Christian Heinis / EPFL (Switzerland)</td>
</tr>
<tr>
<td>14:55</td>
<td>Coffee Break &amp; Poster Session</td>
<td></td>
</tr>
<tr>
<td>15:45</td>
<td><strong>Track 5 Success Stories in Drug Discovery</strong></td>
<td><strong>Chair: Dario Neri &amp; Jörg Scheuermann</strong></td>
</tr>
<tr>
<td>15:45</td>
<td>Discovery of IDO1 Inhibitors with a Novel MoA through DNA-Encoded Library Screening</td>
<td>Lisa Marcaurelle / GlaxoSmithKline (USA)</td>
</tr>
<tr>
<td>16:10</td>
<td>Identification of nanomolar inhibitor of RuvBL1/2 from a DEL</td>
<td>Iolanda Micco / Vipergen (Denmark)</td>
</tr>
<tr>
<td>16:35</td>
<td>Medicines from Encoded Libraries</td>
<td>Sir Gregory Winter (Nobel Prize Chemistry 2018) / Trinity College, Cambridge (UK)</td>
</tr>
<tr>
<td>17:15</td>
<td>Final remarks</td>
<td>Dario Neri &amp; Jörg Scheuermann</td>
</tr>
</tbody>
</table>

**Drinking Reception and Apero / sponsored by DELopen**
Symposium Venue

University of Zurich
Restaurant Uniturm
Rämistrasse 71
8006 Zurich

Dinner Venue
Presented Posters

P1  Fragment Library Design; Quantitative Analysis of Molecular Shape and Functionality (Vector Efficiency)  
Charmeine Chu, Paul Colbon, Phil Cox, Chris Swain and Neil Berry

P2  Critical evaluation of selection parameters for the implementation of efficient DNA-encoded chemical library selections - Alessandro Sannino

P3  New DEL QC Profiling Automation - Irakusne Lopez

P4  Designer Building Blocks for DNA-Encoded Chemical Libraries - Christensen, A. B.; Madsen, D.; Slak, F.; Pedersen, L. K.; Micco, I.; Blakskjaer, P.; Azevedo, C.; Andersen, C.; Kristensen, O.; Hansen, N. J. V.

P5  Self-Assembled Bivalent Ligand Complexes (SABLCs) a Universal Platform for Dual Molecular Display of Ligands - Stefan M. Matysiak, K. Hellmuth, M. De Jong

P6  Core polyfunctional building blocks for DNA-encoded library technologies (DELT): status and outlook - Pashenko A.E., Smaliy R.V., Savych O., Volochnyuk D.M., Ryabukhin S.V.

P7  Solid-phase bound DNA - Less instable than expected  
Marco Potowski, Verena Kunig, Florian Losch, Andreas Brunschweiger

P8  Encoded Self-Assembling Chemical (2+1) Libraries: Expanding the Scope of ESAC Technology - Adrian Gironda

P9  DyNAbind – Hit Discovery and Validation - Francesco Reddavide

P10 Ligands hiding in plain sight: Exploring the effect of selection coverage on detection  
Kelly A McCarthy, G Joseph Franklin, David R Lancia, Martin Olbrot, Christopher S Kollmann

P11 Development of encoded combinatorial chemistry for the identification of specific ligands for G-quadruplex DNA structure  
Pierre Rieber, Yang Si, Camille Van Wessemael, Remy Lartia, Isabelle Baussanne, Martine Demeunynck, Thomas Lavergne

P12 Micellar Brønsted Acid-Mediated Synthesis of DNA-Tagged Heterocycles  
Mateja Kláško, Katharina Götte, Christian Gramse, Sabrina Pospich, Stefan Raunser, Ralf Weberskirch, Andreas Brunschweiger

P13 The criteria for capping agents selection for DNA-encoded library technologies (DELT) needs  
Smaliy R.V., Pashenko A.E., Savych O., Volochnyuk D.M., Ryabukhin S.V.

P14 Diversity-Based DEL Development and Construction  
Xuan Wang, Jiaxiang Liu, Min Cheng, Dongcheng Dai, Xiaojie Lu

P15 A Hierarchical Structural Similarity Search Approach for Large-Scale DNA-Encoded Libraries  
Hongyao Zhu

P16 Synthesis of C-3-Alkylated Indoles on DNA via Indolyl Alcohol Formation Followed by Metal-Free Transfer Hydrogenation - Pinwen Cai, Guanyu Yang, Lanzhou Zhao, Jinqiao Wan, Jin Li and Guansai Liu

P17 The Development of DNA-Encoded Library in WuXi - Ke Li

P18 On-DNA Decarboxylative Arylation: The Merger of Photoredox with Nickel Catalysis in Water  
Dominik K. Kölmel, Jiang Meng, Mei-Hsuan Tsai, Jiamin Que, Richard P. Loach, Thomas Knauber, Jinqiao Wan, Mark E. Flanagan

P19 Quantitative Comparisons of Enrichment from DNA-Encoded Library Selections - John C. Faver

P20 WuXi DEL New Capability - Pre-selection QC & Hit Confirmation - Wenji Su

P21 Identification of Cyclic Peptoid Inhibitors of Skp2 Using a Vast DNA-Encoded One-Bead One-Compound Library - Min Hyeon Shin, Jun Hyung Park-Hyun-Suk Lim

P22 Y-shaped DNA-Encoded Chemical Library allows Dynamic Recombination of Fragment-Based Library - Meiying Cui, Francesco V. Reddavide, Weilin Lin, Naiqiang Fu, Helena Andrade, Michael Thompson, Yixin Zhang

P23 DEL Out of Water - Dillon Flood and Phil Dawson
The Journal "BBRC" (Biochemical and Biophysical Research Communications), published by ELSEVIER, has offered to serve as official publication medium of the Symposium.

A Special Issue on DEL technology will be issued in early 2020 with peer-reviewed communications on DNA-Encoded Library Technology. The Special Issue will be guest-edited by Ernesto Carafoli, Dario Neri and Jörg Scheuermann.

Submission of manuscripts by Symposium attendees is strongly encouraged, please see: https://www.journals.elsevier.com/biochemical-and-biophysical-research-communications

Deadline for submission is 30 November 2019.

If you are interested in submitting a manuscript, please indicate your interest by sending an email to: del-symposium2019@pharma.ethz.ch
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ETH Zürich - facts and figures

- CHF 1.8 billion, including CHF 1.3 billion total contribution from the federal government and CHF 0.5 billion third-party funding
- 109 patent applications
- 205 invention disclosures
- 2 Fields Medal winners
- 2 Nobel Prize winners (including Albert Einstein and Wolfgang Pauli)
- 119th in the THE ranking
- 7th in the QS ranking
- 19th in the ARWU ranking
- 407 spin-offs since 1996
- 243 invention disclosures
- 120 countries

21,400 students, including
4,180 doctoral students, from
120 countries
530 professors
6,090 scientific staff*
2,770 technical and administrative staff* and also
170 apprentices

* full-time equivalents (FTEs), annual average
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### Prime Sponsor

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