Open Access Article. Published on 03 January 2024. Downloaded on 1/11/2026 10:30:37 PM.
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

RSC Chemical Biology

rsc.li/rsc-chembio

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 2633–0679 CODEN RCBSAO 5(1) 1–64 (2024)

Cover
See Martin Münzel, Akane Kawamura *et al.*, pp. 12–18.
Image reproduced by permission of Prof. Akane Kawamura, Mr Thomas P. Smith and Robyn Hare from *RSC Chem. Biol.*, 2024, **5**, 12.
Image by Thomas P. Smith (author and image creator) and Robyn Hare (glass blower).

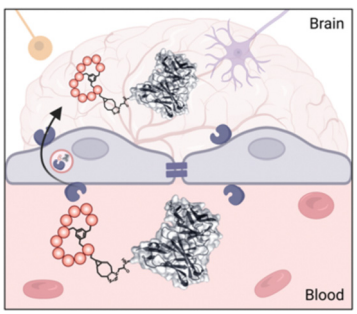
Inside cover
See Paul M. O'Neill *et al.*, pp. 19–29.
Image reproduced by permission of Paul M. O'Neill from *RSC Chem. Biol.*, 2024, **5**, 19.

COMMUNICATION

7

BrainBike peptidomimetic enables efficient transport of proteins across brain endothelium

Maria C. Lucana, Roberta Lucchi, Fabien Gosselet, Cristina Díaz-Perlas* and Benjamí Oller-Salvia*

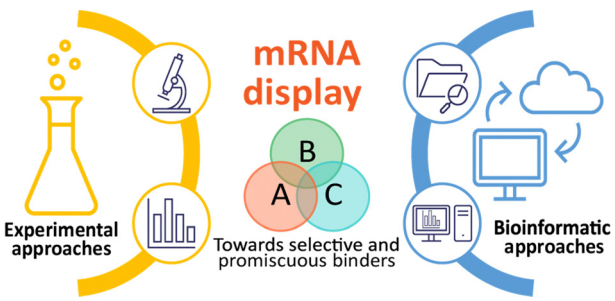


PAPERS

12

Identification and engineering of potent cyclic peptides with selective or promiscuous binding through biochemical profiling and bioinformatic data analysis

Thomas P. Smith, Bhaskar Bhushan, Daniele Granata, Christian S. Kaas, Birgitte Andersen, Klaas W. Decoene, Qiansheng Ren, Haimo Liu, Xinping Qu, Yang Yang, Jia Pan, Quijia Chen, Martin Münzel* and Akane Kawamura*



ROYAL SOCIETY OF CHEMISTRY

Advance your career in science

with professional recognition that showcases your **experience, expertise and dedication**

Stand out from the crowd
Prove your commitment to attaining excellence in your field

Gain the recognition you deserve
Achieve a professional qualification that inspires confidence and trust

Unlock your career potential
Apply for our professional registers (RSci, RSciTech) or chartered status (CChem, CSci, CEnv)

Apply now

rsc.li/professional-development

Registered charity number: 207890

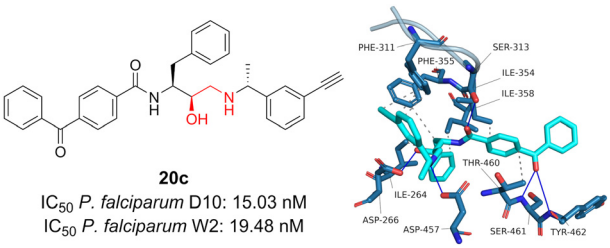
Open Access Article. Published on 03 January 2024. Downloaded on 1/11/2026 10:30:37 PM.
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

Open Access Article. Published on 03 January 2024. Downloaded on 1/11/2026 10:30:37 PM.
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

19

Design, synthesis and modelling of photoreactive chemical probes for investigating target engagement of plasmepsin IX and X in *Plasmodium falciparum*

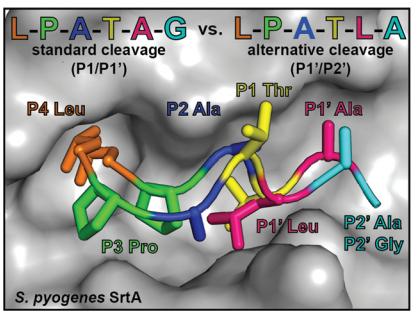
Monika Lisauskaitė, Gemma L. Nixon, Christopher M. Woodley, Neil G. Berry, Andy Coninckx, L. Charlie Qie, Suet C. Leung, Donatella Taramelli, Nicoletta Basilico, Silvia Parapini, Stephen A. Ward, Oscar Vadas, Dominique Soldati-Favre, W. David Hong and Paul M. O'Neill*



30

A unique binding mode of P1′ Leu-containing target sequences for *Streptococcus pyogenes* sortase A results in alternative cleavage

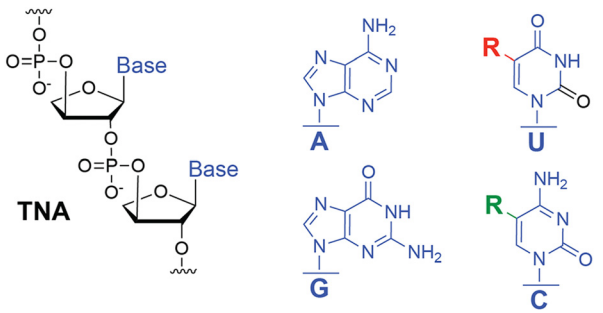
Brandon A. Vogel, Jadon M. Blount, Hanna M. Kodama, Noah J. Goodwin-Rice, Devin J. Andaluz, Sophie N. Jackson, John M. Antos* and Jeanine F. Amacher*



41

Increasing the functional density of threose nucleic acid

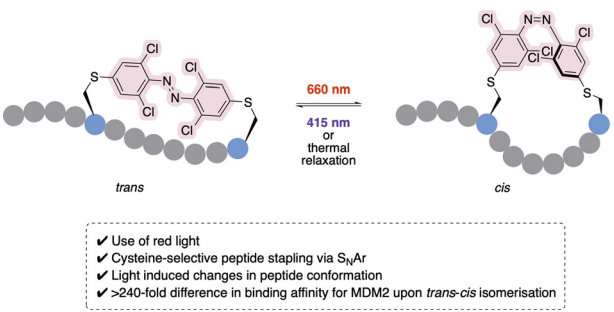
Biju Majumdar, Daisy Sarma, Yutong Yu, Adriana Lozoya-Colinas and John C. Chaput*



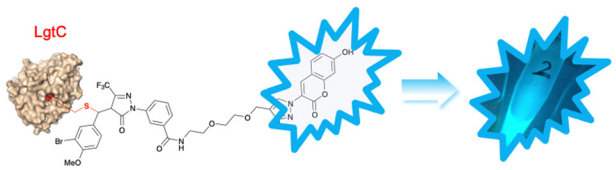
49

Red-light modulated *ortho*-chloro azobenzene photoswitch for peptide stapling *via* aromatic substitution

Mia Kapun, F. Javier Pérez-Areales, Nicola Ashman, Pamela J. E. Rowling, Tim Schober, Elaine Fowler, Laura S. Itzhaki and David R. Spring*



55



A cell-permeable probe for the labelling of a bacterial glycosyltransferase and virulence factor

Yong Xu and Gerd K. Wagner*

Open Access Article. Published on 03 January 2024. Downloaded on 1/11/2026 10:30:37 PM.
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

This journal is © The Royal Society of Chemistry 2024