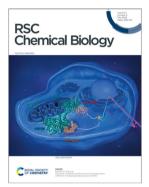
RSC Chemical Biology

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(5) 389-474 (2024)



Cover

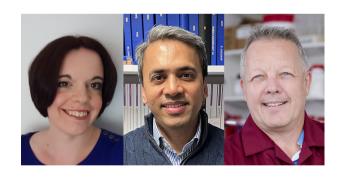
See Edward W. Tate et al., pp. 439-446. Image reproduced by permission of Jana Volaric from RSC Chem. Biol., 2024, 5, 439.

EDITORIAL

395

Introduction to 'Medicinal Chemistry Small Molecule Probes'

Gemma Nixon, Khondaker Miraz Rahman and John Spencer*



PROFILE

397

Contributors to the RSC Chemical Biology **Emerging Investigators Collection 2023**





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

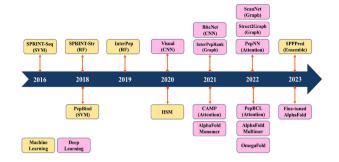


REVIEWS

401

Leveraging machine learning models for peptide-protein interaction prediction

Song Yin, Xuenan Mi and Diwakar Shukla*



418

Pseudouridine and N1-methylpseudouridine as potent nucleotide analogues for RNA therapy and vaccine development

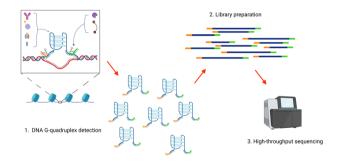
Lyana L. Y. Ho, Gabriel H. A. Schiess, Pâmella Miranda, Gerald Weber and Kira Astakhova*



426

Genome-wide mapping of G-quadruplex DNA: a step-by-step guide to select the most effective method

Silvia Galli,* Gem Flint, Lucie Růžičková and Marco Di Antonio*

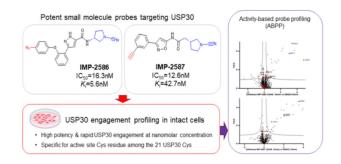


PAPERS

439

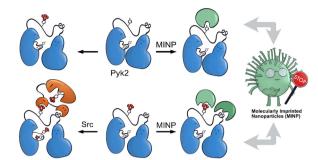
Discovery of potent and selective activity-based probes (ABPs) for the deubiquitinating enzyme USP30

Milon Mondal, Fangyuan Cao, Daniel Conole, Holger W. Auner and Edward W. Tate*



PAPERS

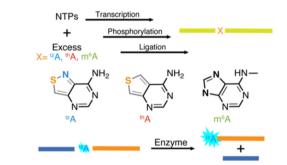
447



Molecularly imprinted nanoparticles reveal regulatory scaffolding features in Pyk2 tyrosine kinase

Tania M. Palhano Zanela, Milad Zangiabadi, Yan Zhao and Eric S. Underbakke*

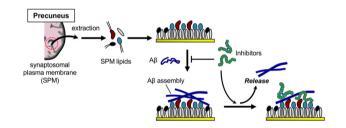
454



Site-specific RNA modification via initiation of in vitro transcription reactions with m⁶A and isomorphic emissive adenosine analogs

Deyuan Cong, Kfir B. Steinbuch, Ryosuke Koyama, Tyler V. Lam, Jamie Y. Lam and Yitzhak Tor*

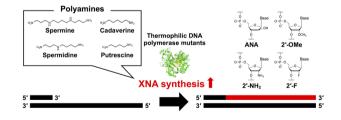
459



Prevention of amyloid β fibril deposition on the synaptic membrane in the precuneus by ganglioside nanocluster-targeting inhibitors

Erika Miyamoto, Hideki Hayashi, Shigeo Murayama, Katsuhiko Yanagisawa, Toshinori Sato* and Teruhiko Matsubara*

467



Polyamines promote xenobiotic nucleic acid synthesis by modified thermophilic polymerase mutants

Hidekazu Hoshino,* Yuuya Kasahara and Satoshi Obika*