

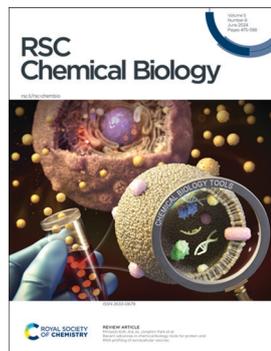
RSC Chemical Biology

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(6) 475-588 (2024)



Cover

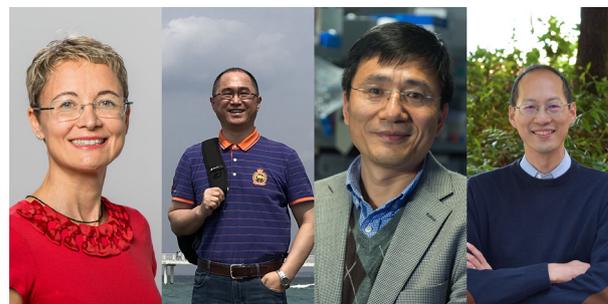
See Minseob Koh, Ala Jo, Jongmin Park *et al.*, pp. 483-499. Image reproduced by permission of Jongmin Park from *RSC Chem. Biol.*, 2024, 5, 483.

EDITORIAL

481

Introduction to "Chemical biology of metals"

Angela Casini, Hui Chao, Hongzhe Sun and Christopher J. Chang*

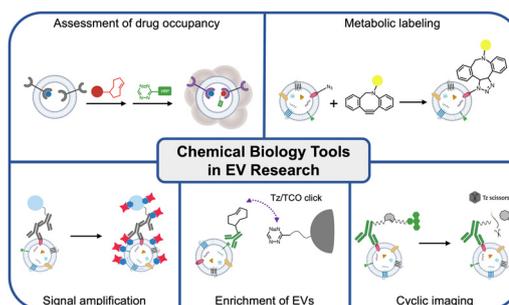


REVIEWS

483

Recent advances in chemical biology tools for protein and RNA profiling of extracellular vesicles

Woojeong Lim, Soyeon Lee, Minseob Koh,* Ala Jo* and Jongmin Park*



Royal Society of Chemistry approved training courses

Explore your options.
Develop your skills.
Discover learning
that suits you.

**Courses in the classroom,
the lab, or online**

Find something for every
stage of your professional
development. Search our
database by:

- subject area
- location
- event type
- skill level

Members **get at least 10% off**

Visit rsc.li/cpd-training



**SAVE
10%**

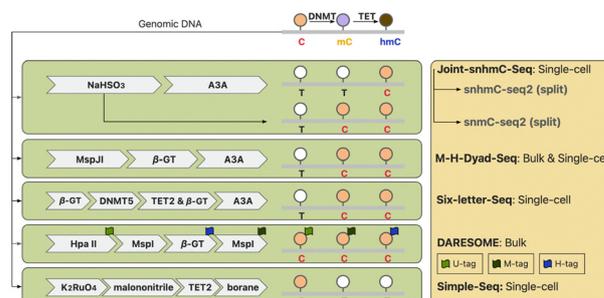


REVIEWS

500

Advances in the joint profiling technologies of 5mC and 5hmC

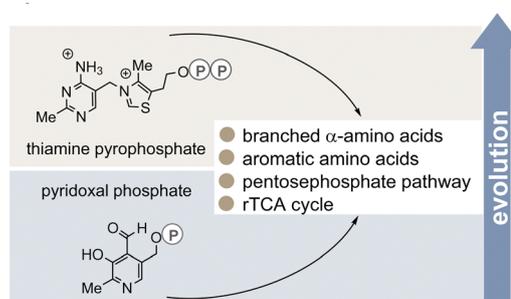
Bo He, Haojun Yao and Chengqi Yi*



508

Why pyridoxal phosphate could be a functional predecessor of thiamine pyrophosphate and speculations on a primordial metabolism

Andreas Kirschning

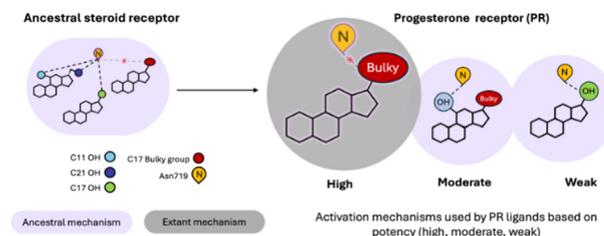


PAPERS

518

Ancient and modern mechanisms compete in progesterone receptor activation

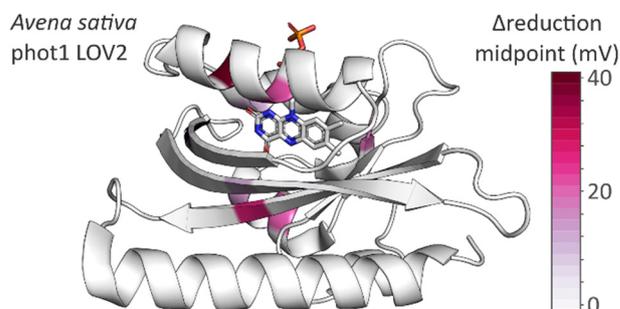
Sabab Hasan Khan, Namita Dube, Nishanti Sudhakar, Olivia Fraser, Priscilla Villalona, Sean M. Braet, Stephanie Leedom, Erin R. Reilly, Jacob Sivak, Kenidee Crittenden and C. Denise Okafor*



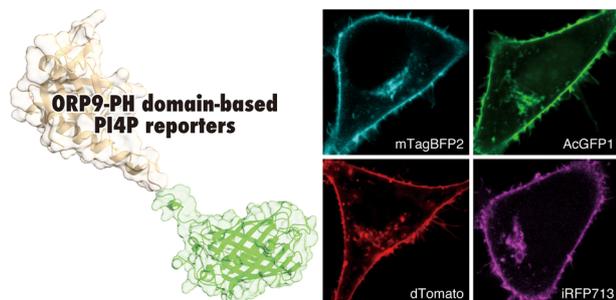
530

Reduction midpoint potential of a paradigm light–oxygen–voltage receptor and its modulation by methionine residues

Andrés García de Fuentes and Andreas Möglich*



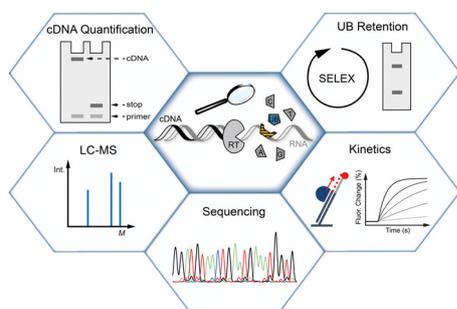
544



ORP9-PH domain-based fluorescent reporters for visualizing phosphatidylinositol 4-phosphate dynamics in living cells

Moeka Ajiki, Masaru Yoshikawa, Tomoki Miyazaki, Asami Kawasaki, Kazuhiro Aoki, Fubito Nakatsu* and Shinya Tsukiji*

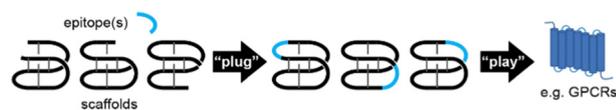
556



Reverse transcription as key step in RNA *in vitro* evolution with unnatural base pairs

Eva S. Hoffmann, Mareike C. De Pascali, Lukas Neu, Christof Domnick, Alice Soldà and Stephanie Kath-Schorr*

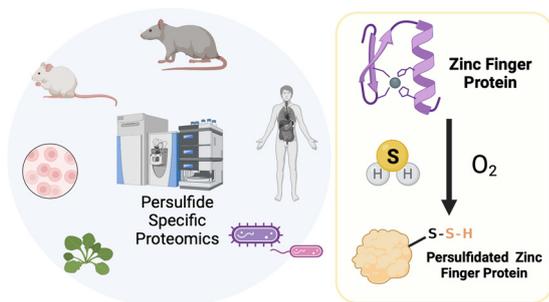
567



Chemical synthesis of grafted cyclotides using a "plug and play" approach

Johannes Koebach,* Edin Muratspahić, Zakaria M Ahmed, Andrew M White, Nataša Tomašević, Thomas Durek, Richard J Clark, Christian W Gruber and David J Craik*

572



Mining proteomes for zinc finger persulfidation

Haoju Li, Andrew T. Stoltzfus and Sarah L. J. Michel*

