

# RSC Chemical Biology

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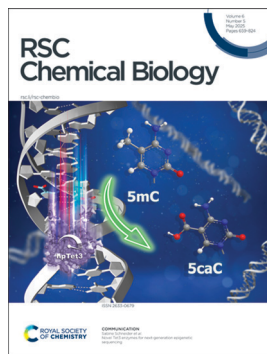
## IN THIS ISSUE

ISSN 2633-0679 CODEN RCBSAO 6(5) 659-824 (2025)



### Cover

See Hiroshi Inaba, Kazunori Matsuura *et al.*, pp. 737–745. Image reproduced by permission of Hiroshi Inaba, Kazunori Matsuura from *RSC Chem. Biol.*, 2025, 6, 737.



### Inside cover

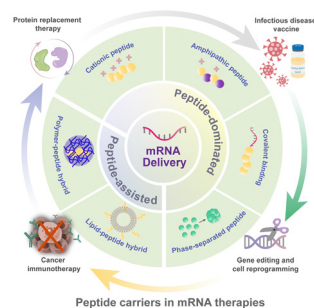
See Sabine Schneider *et al.*, pp. 731–736. Image reproduced by permission of Simsir, Walter, Sahin, Carell, Schneider from *RSC Chem. Biol.*, 2025, 6, 731.

## REVIEWS

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### Peptides: potential delivery systems for mRNA

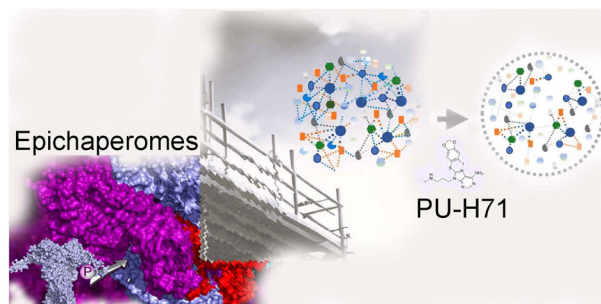
Huiting Liang, Yun Xing, Kexin Wang, Yaping Zhang,\* Feng Yin\* and Zigang Li\*



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### Epichaperomes: redefining chaperone biology and therapeutic strategies in complex diseases

Chiranjeevi Pasala, Chander S. Digwal, Sahil Sharma, Shujuan Wang, Alessia Bubula and Gabriela Chiosis\*



# Environmental Science: Atmospheres

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Fundamental questions  
Elemental answers

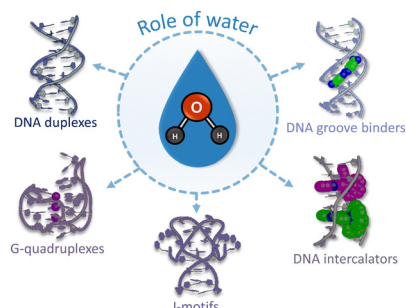


## REVIEWS

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## The role of water in mediating DNA structures with epigenetic modifications, higher-order conformations and drug–DNA interactions

Roshan Satange and Ming-Hon Hou\*

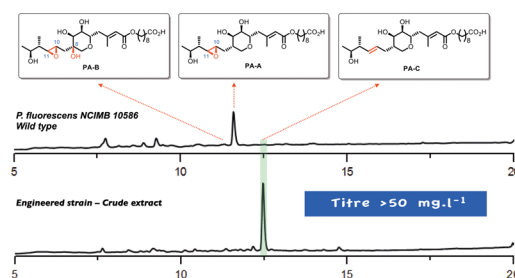


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## Synthetic biology routes to new and extinct natural products

Thomas J. Simpson

Pathway engineering to optimise biosynthesis of improved antibiotic structure

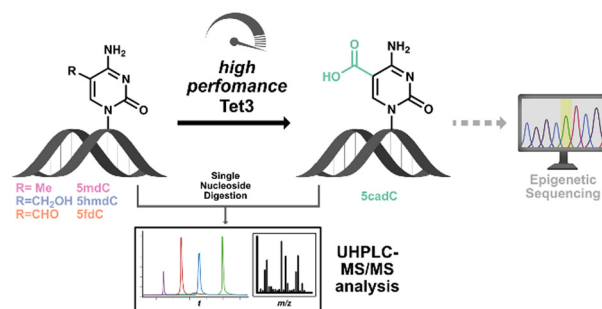


## COMMUNICATION

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## Novel Tet3 enzymes for next-generation epigenetic sequencing

Özge Simsir, Tobias Walter, Hanife Sahin, Thomas Carell\* and Sabine Schneider\*

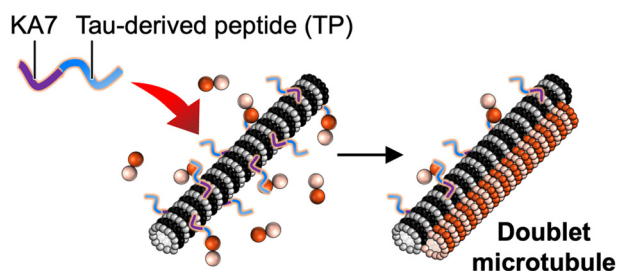


## PAPERS

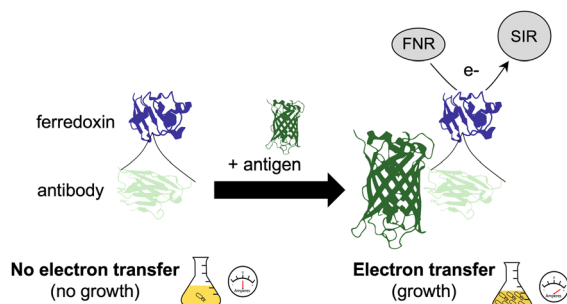
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## Peptide-mediated display of Tau-derived peptide for construction of microtubule superstructures

Hiroshi Inaba,\* Daichi Kageyama, Soei Watari, Mahoko Tateishi, Akira Kakugo and Kazunori Matsuura\*



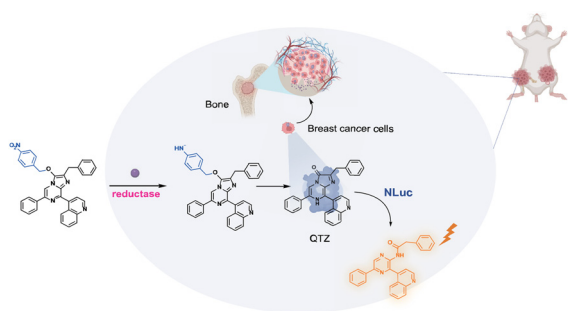
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## Regulating ferredoxin electron transfer using nanobody and antigen interactions

Albert Truong and Jonathan J. Silberg\*

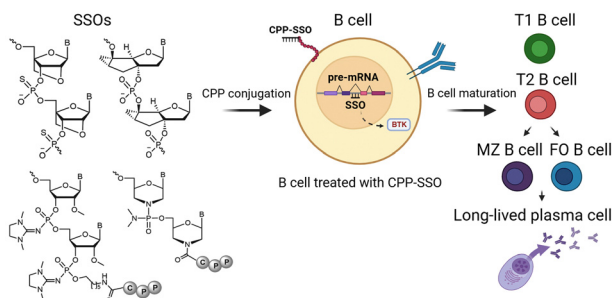
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## Real-time bioluminescence imaging of nitroreductase in breast cancer bone metastasis

Kang Lu, Mengxi Zhang, Zuotong Tian and Han Xiao\*

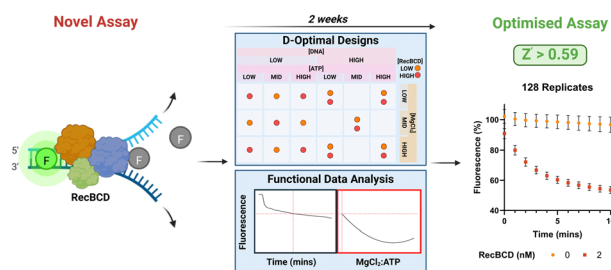
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## Cell-penetrating peptide-conjugated, splice-switching oligonucleotides mitigate the phenotype in *Btk/Tec* double deficient X-linked agammaglobulinemia model

Burcu Bestas, H. Yesid Estupiñán, Qing Wang, Shabnam Kharazi, Chenfei He, Dara K. Mohammad, Dhanu Gupta, Oscar P. B. Wiklander, Taavi Lehto, Karin E. Lundin, Anna Berglöf, Mikael C. I. Karlsson, Frank Abendroth, Samir El Andaloussi, Michael J. Gait, Matthew J. A. Wood, Christian J. Leumann, Dmitry A. Stetsenko, Robert Månsson, Jesper Wengel, Rula Zain and C. I. Edvard Smith\*

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## Development of a fluorescence-based assay for RecBCD activity using functional data analysis and design of experiments

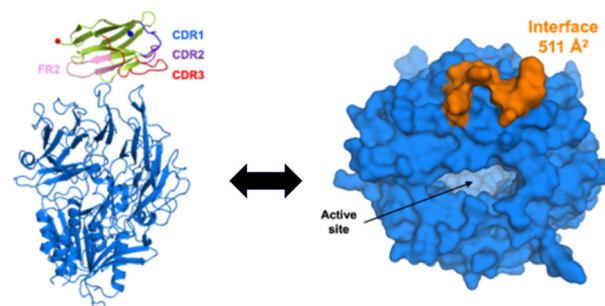
Adam Winniffrith, Steven R. Brown, Piotr Jedryszek, C. Grant, Philip E. Kay, Adam M. Thomas, Jacob D. Bradbury and Thomas Lanyon-Hogg\*



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## Cryo-electron microscopy reveals a single domain antibody with a unique binding epitope on fibroblast activation protein alpha

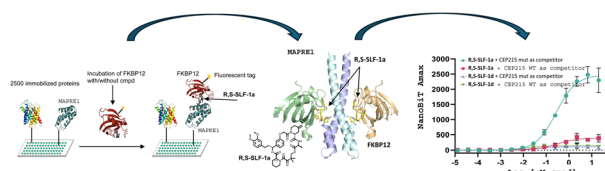
Zhen Xu, Akesh Sinha, Darpan N. Pandya, Nicholas J. Schnicker\* and Thaddeus J. Wadas\*



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## Identification and characterization of ternary complexes consisting of FKBP12, MAPRE1 and macrocyclic molecular glues

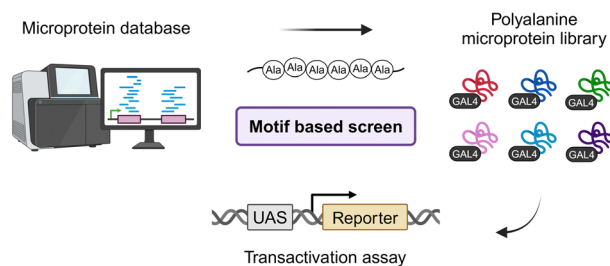
Michael Salcius, Antonin Tutter, Marianne Fouché, Halil Koc, Dan King, Anxhela Dhembli, Andrei Golosov, Wolfgang Jahnke, Chrystèle Henry, Dayana Argoti, Weiping Jia, Liliana Pedro, Lauren Connor, Philippe Piechon, Francesca Fabbiani, Regis Denay, Emine Sager, Juergen Kuehnoel, Marie-Anne Lozach, Fabio Lima, Angela Vitrey, Shu-Yu Chen, Gregory Michaud\* and Hans-Joerg Roth\*



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## Identification of microproteins with transactivation activity by polyaniline motif selection

Archita Agrawal and Alan Saghatelian\*



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## Ganglioside lipids inhibit the aggregation of the Alzheimer's amyloid- $\beta$ peptide

Zenon Toprakcioglu, Akhila K. Jayaram and Tuomas P. J. Knowles\*

