

RNA

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CONTENTS

Reviews

- Rho-dependent transcription termination: mechanisms and roles in bacterial fitness and adaptation to environmental changes 1207^{OA}

Thuy Duong Do, Nara Figueroa-Bossi, Johnathan C. Black, Eric Eveno, Mildred Delaleau, Lionello Bossi, and Marc Boudvillain

- RNA aptamers as tools for the purification and analysis of in vivo assembled ribonucleoproteins 1235^{OA}

Daniel G. Rocca and Ute Kothe

Bioinformatics and Databases

- Evaluating computational tools for protein-coding sequence detection: Are they up to the task? 1248

DJ Champion, Ting-Hsuan Chen, Susan Thomson, Michael A. Black, and Paul P. Gardner

RNA and Gene Expression

- Structural analysis of the lncRNA SChLAP1 reveals protein binding interfaces and a conformationally heterogeneous retroviral insertion 1260^{OA}

James P. Falese, Emily J. McFadden, Christopher A. D'Inzeo, and Amanda E. Hargrove

- Novel ADAR2 variants in children with seizures, intellectual disability, and motor delay have reduced RNA editing 1287

Qiupei Du, Anna Cherian, Raymond J. Louie, Giulia Barcia, Natasha L. Rudy, Rima Nabbout, Eugénie Sarda, Maelle Charpié, Wesley G. Patterson, Liam P. Keegan, and Mary A. O'Connell

- Crystal structures of free-state tRNA^{Leu} reveal conformational flexibility of type-II tRNAs 1305

Gyuhyeok Cho, Jaehun Yoo, Ki-roo Shin, Jangmin Lee, Jihyo Lim, and Jungwook Kim

(continued)

Cover Illustration: Systemic RNA interference defective protein 1 (SID1) in complex with dsRNA (PDB id: 8XC1; Wang R, Cong Y, Qian D, Yan C, Gong D. 2024. Structural basis for double-stranded RNA recognition by SID1. *Nucleic Acids Res* **52**: 6718–6727). The cryo-EM structure provides a major step towards understanding the mechanism of dsRNA recognition by SID1, involving extensive interactions between basic amino-acid residues and the sugar-phosphate backbone. The dsRNA chains are depicted by red, green, blue, and yellow ribbons, with bases and Watson-Crick base pairs represented as color-coded blocks and minor-groove edges colored white: A/A-U in red, C/C-G in yellow, G/G-C in green, U/U-A in cyan; SID1 is shown by a gold ribbon. Cover image provided by X3DNA-DSSR, an NIGMS National Resource for structural bioinformatics of nucleic acids (R24GM153869; skmatics.x3dna.org). Image generated using DSSR and PyMOL (Lu XJ. 2020. *Nucleic Acids Res* **48**: e74).

Contents (continued)

Pseudouridine reprogramming in the human T-cell epitranscriptome: from primary to immortalized states	1320 ^{OA}
<i>Oleksandra Fanari, Dylan Bloch, Yuchen Qiu, Michele Meseonznik, Dinara Boyko, Amr Makhamreh, Meni Wanunu, and Sara H. Rouhanifard</i>	
Proteins that recognize unique features of U7 snRNA and may substitute for Gemin5 in the assembly of U7-specific Sm ring	1335
<i>Xiao-cui Yang and Zbigniew Dominski</i>	
RNA: Instructions for contributors	1356

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