

## COVER

Deciphering the physical basis for the high fidelity of translation by solving the crystal structure of the 30S ribosomal subunit. The cover shows a detailed view of the interactions by which the ribosomal RNA recognizes cognate codon-anticodon pairing at the wobble codon position. For further information, see the article by James Ogle on pages 57-60.

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75 Events, Imprint

## RESEARCH

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Reliability, fairness and predictive validity of peer review. Evaluation of the selection of post-graduate fellowship holders by the Boehringer Ingelheim Fonds.  
*Peer review is one of the oldest and best established methods in science for deciding on the allocation of research grants and for the selection of manuscripts for publication. In the first comprehensive study on committee peer review for the selection of postgraduate scholarship holders, Bornmann and Daniel investigated the process of the Boehringer Ingelheim Fonds and found that it indeed succeeds in selecting the best young scientists.*
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In the hands of social researchers. B.I.F.'s answer to Lutz Bornmann's and Hans-Peter Daniel's evaluation  
*The managing director of the Boehringer Ingelheim Fonds comments on the findings of the study which examined the Foundation's selection process.*
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Fungal attack. Identification and analysis of virulence factors of fungal pathogens  
*Since fungi are eukaryotes, the development of anti-fungal therapies is more difficult than the development of therapies for bacterial infections. At the same time, the number of life-threatening fungal infections is on the increase. Stehr examined a family of secreted lipases of *Candida albicans*, one of the major fungal pathogens, as possible virulence factors and potential drug targets.*

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**Making neurons smarter. Principles in the subcellular distribution of voltage-gated ion channels in the CNS**

*The distribution pattern of HCN channels on the surface of neurons is complex and cell type-dependent. This non-uniform distribution increases the computational power of neurons and needs to be deciphered to comprehend information processing by individual neurons as well as by their networks.*

## SCIENCE

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**Scientific foundations. Engines of change and innovation**

*An increasing number of foundations not only provide considerable additional financial resources for science and research. As private and independent institutions, they can also take higher risks and are much more flexible than funding organizations of the public sector.*

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