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Photo: Brett Eloff, courtesy of Lee Berger and the University of the Witwatersrand

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**Y. He**

Is Critical for Vascular Development

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**SCIENCE**

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**RESEARCH ARTICLE: AAA+ Proteins RUVBL1 and RUVBL2 Coordinate PIKK Activity and Function in Nonsense-Mediated mRNA Decay**

*N. Izumi* et al.

Two ATPases regulate molecular complexes that ensure genome integrity and accurate gene expression.

**RESEARCH ARTICLE: Regulation of G Protein–Coupled Receptor Signaling—Specific Dominant-Negative Effects of Melanocortin 2 Receptor Accessory Protein 2**

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Two homologous accessory proteins exert opposing effects on the responsiveness of the melanocortin 2 receptor to the hormone ACTH.

**PERSPECTIVE: A Trojan Horse for Parkinson’s Disease**

Y. Hu and Y. Tong

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**PERSPECTIVE: Rod-Derived Cone Viability Factor for Treating Blinding Diseases—From Clinic to Redox Signaling**

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A neuroprotective protein may be broadly useful for treating degenerative retinal diseases caused by mutations in a number of different genes.

**COMMENTARY: Training Translators for Smart Drug Discovery**

C. Skarke and G. A. FitzGerald

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**RESEARCH ARTICLE: KIF15 Deficiency Is a Molecular Link Between Heart Failure and Aortic Aneurysm Formation**

S. M. Holdar et al.

KIF15 deficiency causes cardiomyopathy and aortopathy by a shared mechanism and defines a novel therapeutic pathway.

**RESEARCH ARTICLE: Airway PI3K Pathway Activation Is an Early and Reversible Event in Lung Cancer Development**

A. M. Gustafson et al.

A cancer-associated signaling pathway is reversibly activated in the normal airways of smokers before they develop lung cancer.

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