A pair of chemical compounds (light blue and purple) target wild-type and mutant forms of the *Plasmodium falciparum* chloroquine resistance transporter, which mediates the parasite’s (yellow) resistance to the widely used antimalarial drug. Using high-throughput chemical and genetic analyses, Yuan et al. identify potential new antimalarial drugs that could be used in combination to suppress the development of drug resistance. See page 724.

*Image: Ethan Tyler and Alan Hoofring, Division of Medical Arts, National Institutes of Health*
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718 Effects of Working-Memory Training on Striatal Dopamine Release
L. Bäckman et al.
A cognitive training program that improves working memory is associated with increased dopamine release during task performance.

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719 Glacial-Interglacial Indian Summer Monsoon Dynamics
Z. An et al.
Indian summer monsoon changes during the Pleistocene were influenced by dynamic effects originating in both hemispheres.

724 Chemical Genomic Profiling for Antimalarial Therapies, Response Signatures, and Molecular Targets
J. Yuan et al.
There are a limited number of ways that the malaria parasite can develop drug resistance.

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729 Nonreciprocal Light Propagation in a Silicon Photonic Circuit
L. Feng et al.
An engineered metallic-silicon waveguide allows for direction-dependent light propagation.

733 A Synthetic Model of the Mn₃Ca Subsite of the Oxygen-Evolving Complex in Photosystem II
J. S. Kanady et al.
A model compound sheds light on the puzzling role of calcium in the metal cluster that oxidizes water during photosynthesis.

736 Spectroscopic Observation of Dual Catalytic Sites During Oxidation of CO on a Au/TiO₂ Catalyst
I. X. Green et al.
The low-temperature oxidation of carbon monoxide proceeds initially with oxygen molecules that bridge titanium and gold sites.

740 Seasonal Flows on Warm Martian Slopes
A. S. McEwen et al.
Rare meter-scale slope features on Mars might be explained by the transient flow of liquid salty water.

743 Reduced Interannual Rainfall Variability in East Africa During the Last Ice Age
C. Wolff et al.
Extreme rainfall was weaker and less frequent in East Africa during the last ice age.

747 A 10,000-Year Record of Arctic Ocean Sea-Ice Variability—View from the Beach
S. Funder et al.
Sea-ice coverage near northern Greenland and in the western Arctic Ocean varied in opposition over much of the Holocene.

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K. L. Akre et al.
Receiver perception limits the evolution of increasingly elaborate calls in túngara frogs.

753 Extending the Carbon Chain: Hydrocarbon Formation Catalyzed by Vanadium/Molybdenum Nitrogenases
Y. Hu et al.
The molybdenum nitrogenase enzyme can reduce carbon monoxide, albeit inefficiently, in addition to its native substrate, nitrogen.

755 High-Speed Atomic Force Microscopy Reveals Rotary Catalysis of Rotorless F₁-ATPase
T. Uchihashi et al.
Intrinsic cooperativity drives cyclic propagation of conformational states in the stator ring of an adenosine triphosphate–driven rotary motor.

758 Structural Basis for Tail-Anchored Membrane Protein Biogenesis by the Get3-Receptor Complex
S. Stefer et al.
Docking of cytoplasmic and membrane receptors facilitates conformational changes that drive protein insertion.

762 The Plant Cell Wall–Decomposing Machinery Underlies the Functional Diversity of Forest Fungi
D. C. Eastwood et al.
Comparative genomic analysis of “dry rot” fungus shows both convergent evolution and divergence among fungal decomposers.

765 The Leukemogenicity of AML1-ETO Is Dependent on Site-Specific Lysine Acetylation
L. Wang et al.
A protein that drives the growth of leukemia does so only when it carries a specific posttranslational modification.

769 Cartilage Acidic Protein–1B (LOTUS), an Endogenous Nogo Receptor Antagonist for Axon Tract Formation
Y. Sato et al.
A molecule that functions in normal olfactory tract development could provide clues to failed neuronal regeneration in adults.

773 Integrating What and When Across the Primate Medial Temporal Lobe
Y. Naya and W. A. Suzuki
Structures of the medial temporal lobe provide distinct but complementary signals to encode temporal-order information.

776 Google Effects on Memory: Cognitive Consequences of Having Information at Our Fingertips
B. Sparrow et al.
Owing to Internet search, we are more likely to encode “where” aspects of memory rather than “what.”
A rare mutation leads to deformed hands and feet.

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