

NEW CHAUCER: Reflecting on the work of medieval writers such as Chaucer can “enrich our engagement with the unfolding realities of the 21st century,” says Rochester scholar Thomas Hahn.



Answers: 1-B, 2-C, 3-E, 4-A, 5-D

CITATIONS

Research Roundup

WHY CHANGE YOUR GENES WHEN YOU COULD BORROW SOME?

John Jaenike, a professor of biology, and his colleagues have documented an example of a new mechanism at work in evolution: bacteria infecting an animal, giving the animal a reproductive advantage, and being passed from mother to children. In a study published in the journal *Science*, Jaenike reports that members of a particular species of fruit fly that have been infected with the bacteria *Spiroplasma* are less likely to be affected by a parasitic worm that normally renders the flies sterile. The symbiotic relationship allows the infected flies to reproduce and pass the bacteria to their offspring. Aside from shedding light on an important evolutionary mechanism, the findings could aid in studying ways to stave off diseases by using defensive bacteria.

PURPLE LIGHT MEANS GO, ULTRAVIOLET LIGHT MEANS STOP

A new membrane developed at the Laboratory for Laser Energetics blocks gas from flowing through it when one color of light is shined on its surface and permits gas to flow when another color is used. It's the first time that scientists have developed a membrane that can be controlled in this way by light. The membrane—created by Eric Glowacki, a graduate student at the laboratory, and his advisor, Kenneth Marshall, a research engineer—could be useful in drug delivery, industrial processing, and other applications.

WOMEN ATTRACTED TO MEN IN RED

What could be as alluring as a lady in red? A gentleman in red, finds a multicultural study led by Andrew Elliot, a professor of psychology, and published in the *Journal of Experimental Psychology: General*. Simply wearing red or being bordered by the color makes a man more attractive and sexually desirable to women, according to work by scientists at Rochester and other institutions. Red's charm lies in making men appear more powerful—it signals rank through cultural and biological associations, researchers say. The effect—seen in undergraduates in the United States, England, Germany, and China—was limited to status and romance; it did not make men seem more likeable, kind, or sociable.

SCIENTISTS PINPOINT EARLIEST STEPS OF MUSCULAR DYSTROPHY

Nearly two decades after identifying the genetic flaw that causes a common type of muscular dystrophy, scientists believe they have figured out how that flaw helps bring about the disease. Published in *Science*, the study—by an international team, including Rochester scientists led by Rabi Tawil '91M (Res), '93M (Flw), a professor of neurology—indicates that several deleted versions of a gene that makes a protein harmful to muscle cells trigger remaining copies of the gene to be much more active than usual.

VITAMIN D EMERGES AS KEY PLAYER

Within the human digestive tract is a teeming mass of hundreds of types of bacteria that help us digest food and keep bad bacteria in check. A team of Rochester scientists—led by Jun Sun, an assistant professor of medicine, microbiology, and immunology—has found that vitamin D is a key player amid the gut bacteria, helping to govern their activity, responding to their cues, and sometimes countering their presence. The findings, published in the *American Journal of Pathology*, offer a new lead to scientists looking at the role of bacteria in inflammatory bowel diseases such as Crohn's disease or ulcerative colitis.

SCIENTIST FINDS NEW WAY TO BOOST VACCINES

Richard Phipps, a Dean's Professor of Environmental Medicine, reports he has discovered that the same molecules used in drugs to treat diabetes also stimulate B cells in the immune system, pushing them to make antibodies for protection against invading microorganisms. Further research, Phipps says, may show that low doses of insulin-sensitizing drugs may be useful in supporting vaccines, particularly for people with weakened immune systems who cannot produce a proper antibody response.