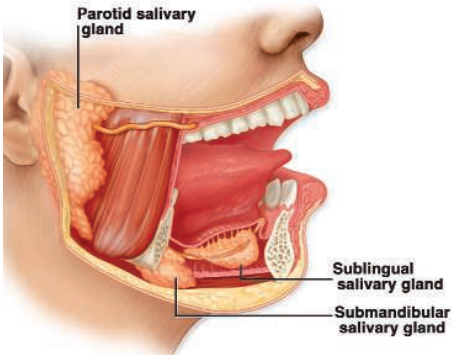


A Proteome to Drool Over

Saliva is a world of its own, teeming with bacteria, mucus, enzymes, skin cells, blood cells, and hundreds of different proteins—the product of multiple glands, serum leakage, drainage from nasal cavities, and whatever you put in your mouth. Saliva is routinely used to test for hormone levels and illegal drugs. But so far the only disease it is used to detect is AIDS.

That may soon change, thanks to the Saliva Proteome Project. For 3 years, several institutions have been cataloging every protein that appears in healthy people's spit. With 1500 proteins in the data bank, scientists now want to collect samples from patients with diseases that might reveal their presence via saliva, dental researcher David Wong of the University of California, Los Angeles, told the International Association for Dental Research this week in New Orleans, Louisiana.

Although the AIDS saliva test merely checks for HIV antibodies, scientists look toward more complex tests—monitoring ratios of various substances in the saliva—in the future. Wong expects that tests for oral cancer and Sjögren's syndrome, an autoimmune disease that affects saliva production, will be available in the next couple of years. Further down the road, he predicts scientists will be able to detect protein markers for lung, breast, and pancreatic cancers, as well as diabetes and even Alzheimer's disease.

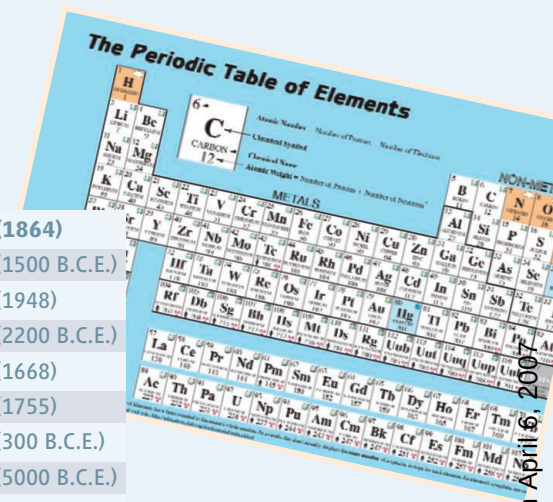
Wong says a "Salivary Diagnostic Roadmap"—combining both the proteome and data from another project cataloging pieces of RNA that relate to the proteins—will be available in about 4 months.

Susan Fisher, who works on the Saliva Proteome Project at the University of California, San Francisco, says that as biochemistry is unraveled, "there are always very interesting surprises"—as scientists have discovered, for example, from the blood test for prostate cancer. So she says it's possible saliva will yield information that can't be obtained from blood tests.

CREDITS (TOP TO BOTTOM): MCGRAW-HILL INC.; THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY, OFFICE OF SCIENCE EDUCATION; FRANCISCO WELTER-SCHULTES

Great Materials Moments

Who says materials science isn't sexy? At the international meeting of the Minerals, Metals, and Materials Society last month in Orlando, Florida, 4200 members voted on a list of the Greatest Materials Moments in History. Here's their top 10.



1	**The Periodic Table of Elements**	**(1864)**
2	Iron smelting	(1500 B.C.E.)
3	Transistor	(1948)
4	Glass	(2200 B.C.E.)
5	Optical microscopy	(1668)
6	Concrete	(1755)
7	Crucible steelmaking	(300 B.C.E.)
8	Copper extraction and casting	(5000 B.C.E.)
9	X-ray diffraction	(1912)
10	Bessemer process	(1856)

Rehabilitating Pluto

The latest strike in the Pluto wars has come from the New Mexico State House of Representatives. Lawmakers there last week defied the decision by the International Astronomical Union (IAU) to reclassify Pluto as a "dwarf planet." In a statement approved 70–0, the House declared Pluto "a planet" and 13 March—the day of the vote—as "Pluto Planet Day" in New Mexico. It was on 13 March 1930 that 24-year-old Clyde Tombaugh of Las Cruces, an amateur astronomer, announced his discovery of Pluto, inspiring local pride that apparently endures. Tombaugh died in 1997, but his widow Patsy was present for the vote.

"There are people who take [the IAU's action] as an affront to American astronomy," says planetary scientist S. Alan Stern of the Southwest Research Institute in San Antonio, Texas. "The discovery of Pluto was epochal. It was heralding the Kuiper belt—one of the hottest topics in planetary science." The New Mexico Senate must vote on the measure to make it official.

NET WATCH

Taxonomy, the Early Years

By the late 1700s, scientists had categorized more than 4000 species of animals. Often tucked away in out-of-print publications, these early descriptions can be difficult for modern researchers to hunt down. AnimalBase from the University of Göttingen in Germany opens up the classic taxonomic literature.

Goatskin-covered books from late 17th and early 18th centuries.

The library stores or links to digitized versions of more than 700 books and papers, some from as far back as the 1550s. Along with a stack of works by Carolus Linnaeus, the Swedish botanist who reformed taxonomy in the 1700s, the holdings include lesser-known contributions such as the 1768 treatise by the Austrian naturalist Josephus Nicolaus Laurenti that describes the true toads (*Bufo*). To help visitors track down the first use of a particular scientific name, curators have begun combing the texts for mentions of species and other taxonomic groups. >> www.animalbase.org