Headline From The Future. (Headlines) (3-D fax machine) (Brief Article). Seth Copen Goldstein. **Popular Science** 266.3 (March 1, 2005): p34.

Byline: Seth Copen Goldstein

2029 THE 3-D FAX MACHINE BRINGS BACK THE HOUSE CALL

A new communication medium known as programmable matter or "claytronics" is enabling doctors to visit patients without ever having to leave their offices. An assembly of millions of catoms--micron-size mobile computers--form a 3-D facsimile of a doctor in a patient's home and a patient in the exam room. As the doctor interacts with the claytronic patient in his office, the claytronic doctor mimics the real doctor's movements, performing a checkup on the real patient. Each catom is loaded with sensors that relay information on the patient's pulse, temperature, reflexes and other vital signs. It's small-town medicine with a high-tech twist.

Associate professor of computer science Seth Copen Goldstein heads claytronics research with Todd Mowry at Carnegie Mellon University. They're now experimenting with 2-D prototypes.