

# Noesis 36A

The Journal of the Hoeflin Research Group  
(Issue 36, March 1989)

**Note:** The following mention of the Hoeflin Research Group appeared in the March 13, 1989 issue of U.S. News & World Report, p. 50, in an article dealing with John H. Sununu.

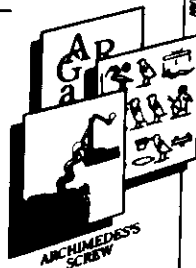
## U.S. NEWS

### WHAT SUNUNU KNOWS AND YOU PROBABLY DON'T

John Sununu is one of just eight people ever to answer correctly more than 43 of the 48 questions on the Mega Society test, one of the hardest IQ tests in the world. Since the answers to the test Sununu took are not made public, here are questions developed by the same person who designed the Mega Society test—

**Verbal analogies:** Complete each analogy:

1. Alphabet: hieroglyphics  
Archimedes's screw: (?)
2. Generalized: localized  
Anemia: (?)



### Spatial problems

3. Given the following five views of a solid object, draw the sixth.



4. Several identical cubes are fused together to form a solid object. Given the following five views of that object, draw the sixth.





**Numerical problems:** Complete these number series:

5. 1 12 66 220 495 792 (?)
6. 1 4 18 96 600 (?)

**Answers:** 1. Shadoof (water-irrigation device used in Near East)

2. Ischemia (lack of blood in an organ or tissue)

3.  4.  5. 924 (multiply first number by  $12/11$ , second by  $11/10$ , third by  $10/9$  and so on)

6. 4,320 (first number is  $1 \times 1^2$ , second  $1 \times 2^2$ , third  $1 \times 2 \times 3^2$ , fourth  $1 \times 2 \times 3 \times 4^2$ , and so on)

USNEWS—Basic data: Omni IQ Quiz Contest by Marilyn Mach von Savant (1985, McGraw-Hill Book Company), Hoeflin Research Group, Mega Society  
For a free copy of the Mega Society test John Sununu took, send a self-addressed, stamped envelope to Hoeflin Research Group, P.O. Box 7430, General Post, New York, N.Y. 10116. The Group charges \$25 to grade the completed tests. Individuals placing in the 99.9999% percentile qualify for admission to the Mega Society.

## Editorial

Ronald R. Hoeflin  
O. Box 7430  
New York, NY 10116

This is my last issue as editor of Noesis, at least for awhile. Eric Erlandson will serve as general editor, starting with the April 1989 issue. His address is at the top of the following page. His phone number is (402) 475-5746. His job will be to coordinate the editing to be done by each of the rest of you. I am assigning each of you to edit one monthly issue over the coming 20 months. See the next four pages to find what month has been assigned to you. You have the following five options:

- (1) Compile, photocopy, staple, and mail out an 8-or-more page issue on your own, sending Mr. Erlandson no funds. You may include at your own discretion any material submitted to you by other members for publication. You should continue to use roughly the same format I have been using for this journal, e.g., by having your material photoreduced from standard typing paper size (8½ by 11 inches) to this size (8½ by 5½ inches) and by stapling each copy along the center line with a saddle stapler. Since saddle staplers cost in the vicinity of \$50, you may find this option impractical unless you already own or can borrow or otherwise gain access to one.
- (2) Compile an 8-or-more page issue yourself and pay Mr. Erlandson \$10 to photocopy, staple, and mail it out. If your issue is unusually lengthy, however, you should pay Mr. Erlandson extra in order to cover his costs. If you select this option, the material you submit to Mr. Erlandson should be typed (or if necessary, neatly printed) on 8½ by 11 inch paper, from which size Mr. Erlandson will have it photoreduced to this 8½ by 5½ inch size.
- (3) Pay Mr. Erlandson \$20 to compile as well as to photocopy, staple, and mail out an issue for you. You may reduce this amount by \$1.25 for each page (up to 8) that you do submit, including any pages submitted to you by other members but excluding any pages submitted directly to Mr. Erlandson by other members.
- (4) Switch issues with another member or subscriber if you wish to do an issue earlier or later than the month that I have assigned to you. Notify Mr. Erlandson of any such switches.
- (5) Cancel your membership (or subscription) by contacting Mr. Erlandson. If this is your option, in all fairness you should cancel now rather than accept issues that others would otherwise be going to the trouble and expense to send you over the coming months. Any gaps created by cancellations can either be left empty (i.e., no issue would appear) would be filled by new members, if any, would be filled by Mr. Erlandson's getting volunteers from late on the list to fill gaps from early on the list, or could be filled by Mr. Erlandson on his own, if he so chooses.

I hereby grant Mr. Erlandson permission to change the name of this journal to whatever he pleases, but numbering of issues should continue with 37, 38, 39, etc. Also, the name of the society may now be switched to The Noetic Society, the Titan Society, or whatever other name Mr. Erlandson deems appropriate, since I used "Hoeflin Research Group" to deter others from coopting it during my period of active involvement as the Mega Society was previously coopted.

July 1990

Jeff Ward  
13155 Wimberly Square, 284  
San Diego, CA 92128

August 1990

Karl G. Wikman  
Åsklostervägen 41  
430 21 Åskloster  
Sweden

September 1990

Ray Wise  
48 Winthrop Street  
Torrington, CT 06790

October 1990

S. Woolsey  
P. O. Box 1942  
Houston, TX 77251

November 1990

Ronald K. Hoeflin  
P. O. Box 7430  
New York, NY 10116

April 1989

Eric Erlandson  
2051 Worthington Ave.  
Lincoln, NE 68502

May 1989

Geraldine Brady  
5728 S. Blackstone Ave., 210  
Chicago, IL 60637

June 1989

A. J. Bruni  
112 Harvard Ave., No. 81  
Claremont, CA 91711

July 1989

Chris Cole  
P. O. Box 9545  
Newport Beach, CA 92658

August 1989

H. W. Corley  
626 Charles Court  
Arlington, TX 76013

September 1989

Eric Hart  
P. O. Box 813  
Miller Place, NY 11764

October 1989

James D. Hajicek  
5894 Spring Valley Road  
Burlington, WI 53105

November 1989

Dean Inada  
23333 Ridge Route Drive, 51  
El Toro, CA 92630

December 1989

C. M. Langan  
P. O. Box 131  
Speonk, NY 11972

January 1990

Richard May  
53 Hancock St., Apt. 5  
Boston, MA 02114

February 1990

Johann Oldhoff  
Högalundsg. 37 VI  
S-17151 Solna  
SWEDEN

March 1990

Keith Raniers  
3 Flintlock Lane  
Clifton Park, NY 12065

April 1990

Robert D. Russell  
304 Lexington Blvd.  
Carmel, IN 46032

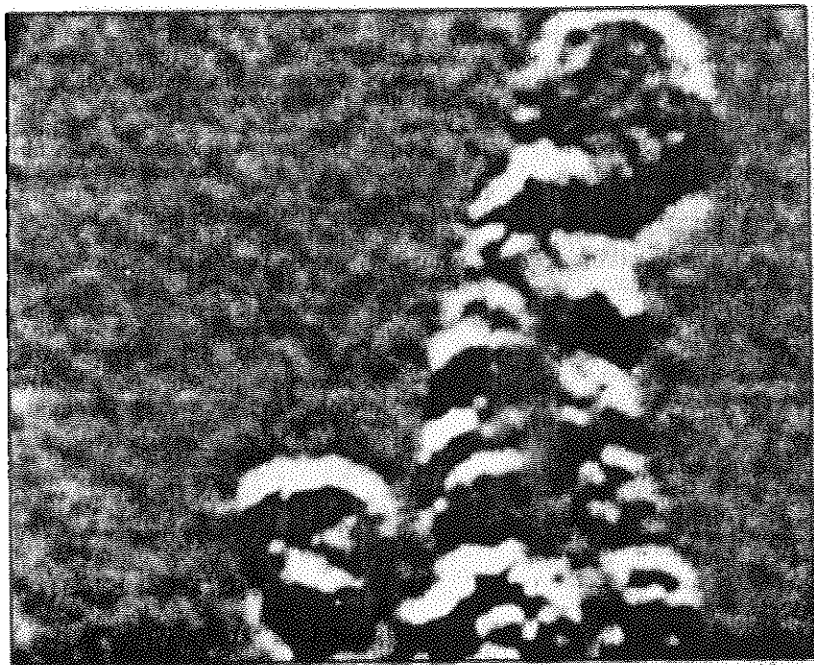
May 1990

Marilyn vos Savant  
124 West 60th St., Apt. 39E  
New York, NY 10023

June 1990

Cedric Stratton  
P. O. Box 60111  
Savannah, GA 31420

# DNA, Molecule of Heredity, Seen Directly for First Time



Associated Press

**A strand of DNA, viewed through a scanning tunneling microscope.**

**T**HE first direct image of pure DNA, the double-stranded molecule of heredity, has been made with a microscope that magnifies objects one million times.

The work could have major importance for molecular biologists who hope to map and decipher the chemistry of the estimated 100,000 human genes that are made of DNA, deoxyribonucleic acid. If sharper images are made, scientists said, it might be possible to read the body's genetic code directly.

The images were produced by scientists at the Lawrence Berkeley and Lawrence Livermore Laborato-

ries in California and were reported at a meeting of the American Association for the Advancement of Science last week in San Francisco.

Previous images of DNA have been made after the molecule was coated with a metal, usually a gold alloy, so that it could be "seen" by electron microscopes. Such microscopes magnify objects 300,000 times. Conventional microscopes, which use photons of light for imaging purposes, can only magnify objects 1,000 times and are not powerful enough to resolve individual DNA molecules.

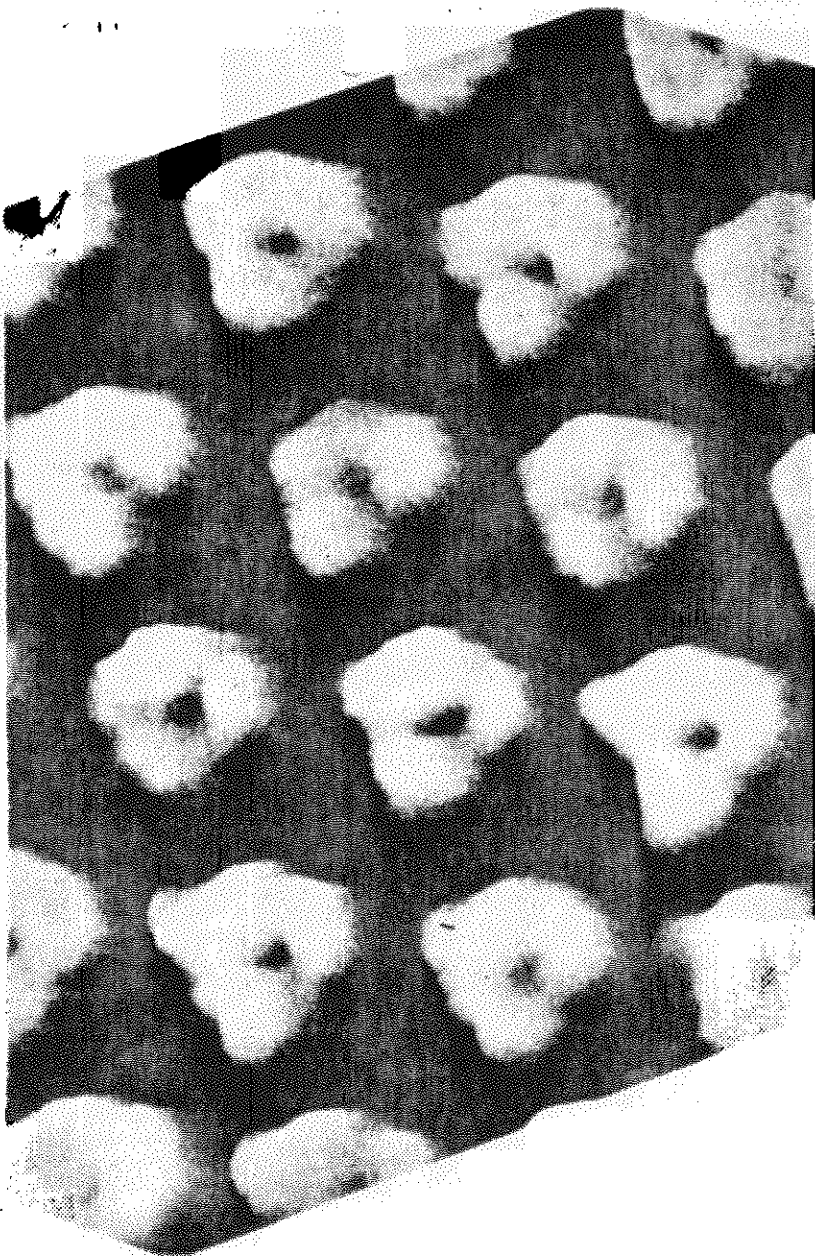
The new images were taken with a scanning tunnel microscope, a recently invented device that can distin-

THE NEW YORK TIMES, TUESDAY, AUGUST 16, 1988

guish individual atoms. The microscope has a sharp-tipped needle that is brought close to the surface of the DNA molecule. At a certain distance, a current of electrons crosses the gap between the needle and its target in a phenomenon known as tunneling. As the needle moves up and down, relative to the topography of the DNA

molecule, the shape and contours are recorded by a computer. A three-dimensional image is later printed by the computer.

The scientists were Miquel Salmeron, Frank Ogletree and Joseph Katz, of the Berkeley lab, and Wigbert Siekhaus, Thomas Beebe, Troy Wilson and Rod Balhorn of Livermore lab.



12.11  
First photograph of ring-shaped benzene molecules, in rows, made with a scanning tunneling microscope. The photograph supports century-old deductions about the molecular structure of benzene.