

entific testing. Those who uphold the HIV "party line" have so far refused. We object.

Eleen Baumann

Tom Bethell

Harvey Bialy

Peter H. Duesberg

Celia Farber

Charles L. Geshekter

Phillip E. Johnson

Robert W. Maver

Russell Schoch

Gordon T. Stewart

Richard C. Strohman

Charles A. Thomas Jr.

*For the Group for the Scientific
Reappraisal of the HIV/AIDS Hypothesis,
7514 Girard Avenue, No. 1-331,
La Jolla, CA 92037, USA*



Mayan Archaeology

One of the most important principles in science is that of the priority of ideas. We need to know who proposed an idea, who supported or opposed it, and when it was ultimately accepted or rejected. That is one of the reasons that *Science* ends its articles with phrases like "[ms

received] 20 May 1994; accepted 15 September 1994."

The idea that Calakmul was the capital of a powerful state rivaling Tikal (T. Appenzeller, "Clashing Maya superpowers emerge from a new analysis," *Research News*, 4 Nov., p 733) is not new. It was advanced and published 21 years ago in *Science* by Joyce Marcus (1). It was later confirmed by William J. Folan of the Autonomous University of Campeche, Mexico, during 15 years of archaeological research at Calakmul.

In 1972, most Mayanists considered Tikal the sole "capital" of the lowland Maya. In 1973, Marcus pointed out that at least three other Maya cities—Copán, Palenque, and Calakmul (whose emblem glyph she identified)—were listed as equals to Tikal on stelae at Copán and Seibal. She pointed out in later publications that Calakmul had the largest number of carved stelae of any Maya site and that its emblem glyph was mentioned more often than that of any other Maya city (2).

Most significantly, Marcus discovered that the secondary centers below Calakmul (places such as Sasilhá, Oxpemul, Altamira, Uxul, and Naachtún) were spaced almost equidistant from each other

and from Calakmul, forming what geographers call a "k-7 administrative lattice." Such a lattice clearly indicates that Calakmul was the "central place" of a powerful state, one which held sway even over cities as large and important as Naachtún and Uxul.

On the basis of Marcus' findings, and with the support of the National Geographic Society, Folan began in 1982 a long-term research project at Calakmul. He and his collaborators soon discovered that the city was much larger than expected and had a density of structures higher than that of Tikal (3). Folan also extended his surveys outward toward the secondary urban centers which made up Calakmul's administrative lattice, finding incontrovertible evidence linking them to Calakmul. In fact, it was partly as a result of Folan's discoveries that the Mexican government recently spent millions of pesos reconstructing Calakmul as a major tourist attraction. Folan and Marcus continue to collaborate on a study of Calakmul and its satellite cities.

Kent V. Flannery

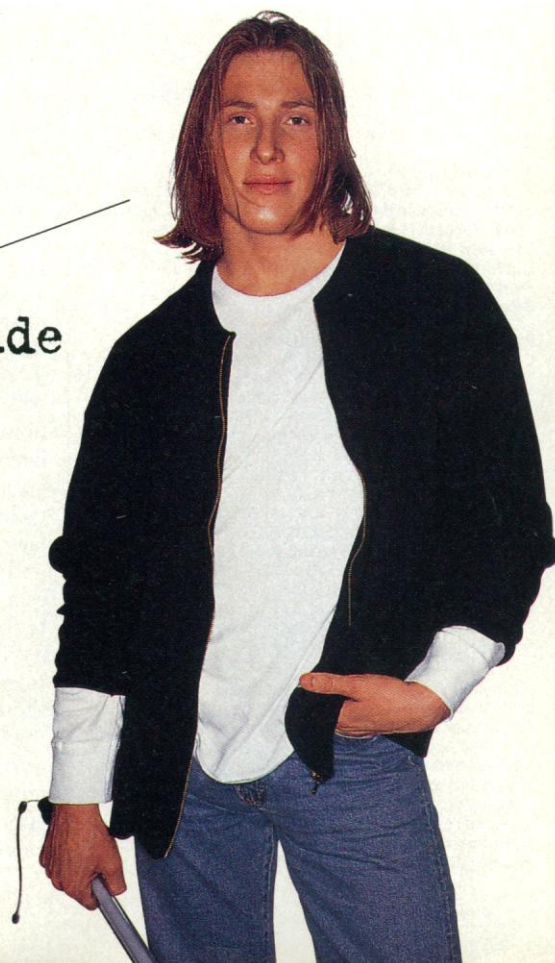
Museum of Anthropology,

University of Michigan,

Ann Arbor, MI 48109-1079, USA

Superdex Peptide gives me
the highest resolution in peptide
purification and has changed
the way I choose to work.

I can't say it's done much for
your choice in clothes.



References

1. J. Marcus, *Science* **180**, 911 (1973).
2. ———, *Emblem and State in the Classic Maya Lowlands: An Epigraphic Approach to Territorial Organization* (Dumbarton Oaks, Washington, DC, 1976); *Am. Antiq.* **48**, 454 (1983); *The Inscriptions of Calakmul* (Museum of Anthropology, Ann Arbor, MI, 1987).
3. W. J. Folan and J. May Hau, *Información* **8**, 1 (1984); W. J. Folan, *ibid.* **9**, 161 (1985).



International Programs and Scientists in the Former Soviet Union

Scientists in the former Soviet Union (FSU) appreciate help from Western colleagues and international organizations. However, cultural differences and mutual misunderstanding bring some problems that undermine the effectiveness of current programs. I think it useful to list some general points, in a random sequence.

- Besides the International Science Foundation (ISF), there still are no institutions in the FSU that provide grants based on open competition and reliable expertise. Funding in the Soviet Union used to be a kind of trade; often the same people distributed and benefited from a grant. The term

"conflict of interest" is unknown there. Thus, in trying to change the mentality of people in the East, it is important to do everything in an open-handed way.

- Long-term experience taught researchers in the East to think that the main aim of collecting open proposals was to collect new ideas and information that could be used by those having access to the files. Not once in the Soviet era were slightly modified, previously rejected proposals successfully submitted on behalf of another research group.

- Many scientists in the FSU think that the main aim of the ISF small-grant program is to collect a personal data bank. Therefore, they consider themselves not awarded, but just paid for the information provided.

- The illusion is widespread in the East that Western scientists are much less creative than their Eastern colleagues. This assumption is based on a common practice of using Eastern results without proper referencing of work from the West. Therefore, the ISF larger grants program is considered by many to be an easy way of collecting new ideas and results. If each proposal is not given a short analysis that proves serious consideration and honest

competition, the program will produce undesirable side effects.

- The advertising campaigns usually do not correspond to the real value of awards, and this brings some disappointment even to those awarded.

- There is still no routine way for FSU scientists to get financial support for their participation in international conferences. They often travel at their own expense. Conference organizers ought to consider reducing registration fees for scientists from countries where such a fee may equal one-month's salary.

- Nonmilitary and basic sciences, which lack lobbying groups and means of direct pressure on the local and national authorities, suffer the most.

- Time is critical, and it is often lost: when support comes, the recipient may already have lost his position.

- People in the FSU used to live in a kind of corporate state; therefore, they usually cannot distinguish between the supportive scientific community and the discriminative visa policy of a foreign country.

- Close contacts with FSU governmental bodies can discredit international scientific organizations in the eyes of the public because the majority of these governments do

When it comes to purifying peptides, what you wear makes no difference. It's the separation technique you choose that matters.

While RPC is the accepted standard, size exclusion may sometimes give you the best results. And because it's an alternative that's easy to work with, you may want to look closely at it.

If you choose size exclusion, Superdex® Peptide will give you the highest resolution possible. With an ideal fractionation range from Mr 100 to 7,000, you get optimal purification of natural, recombinant and synthetic peptides in FPLC® and other high-performance purification systems.

What's more, Superdex Peptide gives you extraordinary physical and chemical stability—so you can use it with

practically any solvent. A fact which lets you simplify many time-consuming steps, like sample preparation.

At Pharmacia Biotech, we give you options that let you work with practically every purification technique. And because all our products for peptide purification are as tried and tested as those we offer for protein purification, you'll know they're reliable.

All of which has been reason enough for molecular-life scientists—from Bethesda to Kuala Lumpur and more—to have chosen to work with us over the years. Just call us at 1 (800) 526-3593 in North America, or +46 18 16 50 11 from the rest of the world, to find out how we can extend your research options. Oh, and if you're looking for advice on lab attire, don't ask us. We don't wear ties in the lab either.

 **Pharmacia
Biotech**
Uppsala, Sweden. (And the rest of the world)