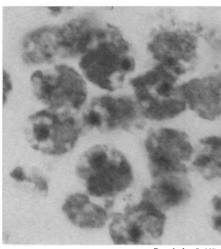
ployes who are "disadvantaged."

Dr. Cohn reports that some workers were upset with privileges that blacks initially received, but there were also some other less anticipated results. "White blue-collar workers have learned from blacks to be freer and more assertive toward management in bargaining. Blacks are less intimidated," he contends.

Dr. Sar Levitan, who organized the symposium of research studies, believes that the lower-middle class will be the "in" group of the seventies. "In the sixties, social scientists and governmental programs showered attention on the poor, but the problems of bluecollar workers are likely to receive top billing in the years ahead," he says.

**PARISITOLOGY** 

## **Amoebic killers**



Dr. J. L. Griffin N. gruberi: Invader of the brain.

Although medicine is even older than civilization, new disease discoveries are still being made. A fearsome one has been recognized in recent years, produced by a one-cell organism that now and then gives up its free-living state to become a parasite of man. Mercifully, human invasion is rare, for the invader, an amoeba, destroys the brain tissue and produces death in from four to seven days. Only 50 cases are known,

The largest outbreak of the amoeba-born disease occurred in a swimming pool in Czechoslovakia. Thousands of persons used the pool. Some 17 contracted encephalitis. Autopsy examination of their brains showed that amoebas had deeply penetrated the cortex of the brain, clustering around blood capillaries. The abundant oxygen in the brain's blood supply may be why this new-found invader chooses brain tissue. As a free-living organism it requires oxygen, unlike most of the parasites who live with man.

These amoebic invaders enter the nose of swimmers and eat their way

through the olfactory tract to reach the brain. Their victim usually feels he has a bad cold. The amoebas move faster than body defenses can be mobilized against them, according to Dr. Joe L. Griffin of the Walter Reed Armed Forces Institute of Pathology, who has watched them outpace blood cells in tissue culture. By the time moving amoebas can be detected in samples of cerebrospinal fluid, the invaders have reached the brain, the patient is unconscious and chemotherapy is useless.

Two of three brothers who picked up the amoeba playing in a pond of an English garden were, however, saved. When one of the boys died, physicians found the organism in his brain and quickly gave an antibiotic, amphotericin B, to the others. Dr. S. R. Das of the Central Drug Research Institute of India had shown that the drug checks the disease in mice.

This free-living amoeba, Naegleria gruberi, is not confined to tropical countries lacking modern sewage disposal. Four deaths traced to Naegleria occurred in 1967-69 in Virginia. Dr. Charles Richards of the National Institute of Allergy and Infectious Diseases, Bethesda, Md., has found Naegleria in domestic fresh-water snails. Cysts, the survival capsules in which amoebas live when separated from a food supply, suggest that snails may be a vector.

The most marked aspect of this disease is its rapid onset in young and healthy persons. When such patients are seen with flu-like states resistant to common antibiotics and when no bacteria can be found in cerebrospinal fluid, physicians should suspect amoebic meningoencephalitis, Dr. Lubor Cerva of the Czechoslovak Army Institute of Hygiene, Epidemiology and Microbiology in Prague advised colleagues at an international congress of parasitology last week in Washington.

The brain-invading amoebas have nothing at all to do with the widespread amoebic dysentary produced by much larger protozoa, *Entamoeba histolytica*. This cell is without the normal apparatus (mitochondria) for using oxygen. It is anaerobic and must live as a parasite. In the human gut, it causes chronic and debilitating disease, sometimes invades the liver and other organs.

**Dr. L. S. Diamond** of the National Institute of Allergy and Infectious Diseases has perfected a simple skin test useful to detect amoebic dysentary on a mass basis. He did this by developing a bacteria-free culture of *E. histolytica*, from which test antigen is derived. Before his work, parasitologists thought this amoeba must have bacteria to live (it feeds on them in the gut). These contaminants caused nonspecific reactions to earlier tests.

POLITICAL SCIENCE

## Relevance and a new candidate

Prof. Carlos Munoz of the Chicano Caucus interrupted his low-keyed, almost inaudible presentation.

"If I can have your attention . . .," he thundered. The 30 or 40 listeners, who had been twittering like starlings, snapped into abrupt silence. "I'm getting tired of all this liberal b———," continued Prof. Munoz.

The audience winced at the word liberal. For the concept of liberalism has an Establishment ring to it, and this was a meeting of the Caucus for a New Political Science. The caucus has little use for the Establishment, either that of the nation, or that of the American Political Science Association.

"In 1967," says Dr. Phillip Brenner of Johns Hopkins University, "the American Political Science Association had its annual meeting at a time when the war in Vietnam was in full rage, with a tremendously unsettling effect on the American polity. Yet the association made no mention of it. This is supposed to be a body of scholars who are studying the American polity, and yet it saw no relationship between the war and what was going on in America."

It was this silence that led to the formation of the caucus. In the years since, its members have had considerable influence on the topics discussed at the annual meetings of the association. Last week in Los Angeles (see page 250) there were numerous panels not only on Vietnam but on caucus interests such as the rights of blacks, women and chicanos, and including topics like "Political Repression in the '70's" and "Radicalism in the Social Sciences."

But if the meeting has loosened up—largely as a result of the caucus's ability to turn the association's business meetings into parliamentary shambles—the leadership of the association, and the pages of the association's professional journal, haven't. The officers of the association are nominated by a small committee; until recently there has been no opposition candidate. And the journal—The American Political Science Review—has been firm, says Dr. Brenner, in its refusal to open its pages to research which the caucus deems important.

As for the association leadership, the caucus is optimistic. Last year it sponsored an opposition candidate who gained a third of the votes cast by mail ballot by the members during the year. This year it is supporting a man for president-elect whose prominence makes him a stronger contender: Dr. Hans Morgenthau of the Univ. of Chicago and City University of New York.

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