

## Poultry research could aid arthritis sufferers

NEWARK, DEL. — Jack Rosenberger, chairperson of the University of Delaware's department of animal science and agricultural biochemistry, is trying to characterize a group of viruses that cause arthritis in chickens. Affected birds are often crippled, resulting in loss of quality and reduced marketability. The disease also retards growth,

since affected birds eat without gaining weight. As a result, growers suffer severe economic losses. Rosenberger is studying the virus group in order to develop an effective vaccine.

University of Michigan Medical School biochemist/physician Thomas Schnitzer is interested in the same poultry virus group for another reason. He believes its

behavior could provide a better understanding of a human arthritis, his medical specialty.

The USDA competitive grants program has awarded \$100,000 to Rosenberger and Schnitzer to cooperate on the study of this group of viruses. The Delaware Agricultural Experiment Station has hired molecular biologist Dr. Vera Gouvea, former graduate

student of Schnitzer, to assist with the project for a year.

Rosenberger and Gouvea isolate virus pathogens from diseased birds, inoculate healthy birds, and study the effects. Their results are shared with Schnitzer who provides information on the structure and characteristics of the genetic material found in the virus group, in an attempt to identify the genes responsible for the disease-producing effects.

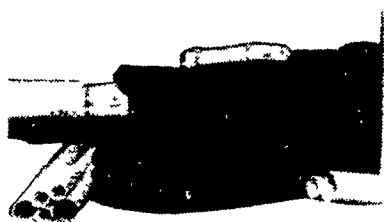
According to Donald F. Crossan, director of the Delaware Agricultural Experiment Station, Rosenberger's research could have great implications for the poultry industry and the public at large. Even at times of agricultural surplus and low commodity prices, he says, continuing research is crucial to improve efficiency and add to the storehouse of human understanding.



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## Swine facilities handbook offered

A new handbook which can help pork producers design their facilities to operate more efficiently is available from the Midwest Plan Service (MWPS).

The Swine Housing and Equipment Handbook, MWPS-8, is a completely revised fourth edition written by agricultural engineers from the North Central Region. It summarizes current agricultural engineering recommendations for swine building design, operation, and equipment.

MWPS-8 discusses building design factors (temperature, sanitation, floor surfaces, etc.), building types, and facility sizing for farrowing, nursery, growing and finishing, and gestation and breeding buildings.

This edition has a greatly expanded environmental control section, with chapters on mechanical and natural ventilation, manure pit ventilation, cooling systems (including zone cooling), and insulation.

Solid and liquid manure handling are covered in the manure management section, along with a discussion of slotted floors.

The handbook has new chapters on site selection, scheduling, swine handling, combining buildings,

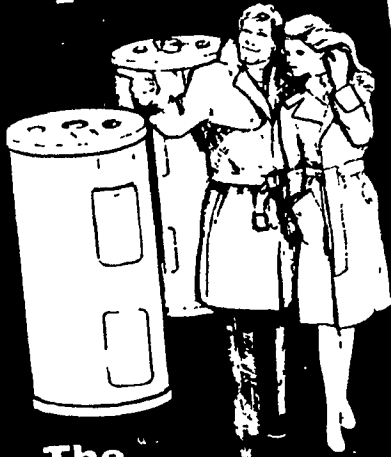
remodeling existing buildings, and utilities. Another new chapter on grain-feed centers covers grain storage, feed processing, and delivering rations. The equipment section has 29 pages of fencing, windbreaks, handling equipment, stalls, chutes, feeders, waterers, and sunshades.

The 112-page Swine Housing and Equipment Handbook, MWPS-8, costs \$5.00 and is available from the Midwest Plan Service, 122 Davidson Hall, ISU, Ames, IA 50011. Swine building plans for farrowing, finishing, breeding, and gestation buildings are also available from MWPS. Ask for the free 1982-83 MWPS catalog for a complete swine plans list.



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