



NEWS

FROM **WATERLOO LUTHERAN UNIVERSITY**

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For Immediate Release

\$40,000 Grant Will Develop Computer

Approach to Archaeological Research

Computers, already proven in mathematical applications, may soon be playing a crucial role in unravelling the early history of man thanks to Canadian research.

That's the hope of Waterloo Lutheran University archaeologist Dr. Norman Wagner who has just received a \$40,000 Canada Council grant, one of the largest approved in this field, to develop the application of the computer to archaeology.

The grant will assist Dr. Wagner, Dr. Lawrence Toombs, who is chairman of the WLU School of Religion and Culture and another pioneer in the field, plus six students as they work this summer at ancient village sites in both Canada and the Near East.

Dr. Wagner, who has been vigorously examining the application of computers to its innovative use in archaeology, explained the WLU research project this way:

"In the past century a large number of archaeology excavations have been carried out in the Old World and Canadians have played a modest role in both field work and analysis. But much of the material uncovered has been discarded and lost forever due to the problems of analysis in the field.

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"That which survived has been culled and published, usually after an unbelievable delay. Unfortunately, the publications have too often included insufficient information to permit restudy by a later generation of scholars."

"With the use of a computer we can now record significantly more information than ever before. In addition, we are able to analyse this data quickly. There is no longer any good excuse for not recording much more material while on the site."

Dr. Wagner and Dr. Toombs have already done preliminary work on material recovered by WLU teams working at ancient sites in the Near East and at an Indian village site in Waterloo County.

The Canada Council grant will enable the professors and their students to make in depth studies this summer at both sites where finds will be coded by students trained in archaeological methods, plus a continuing study by faculty and students during the next academic year on campus.

In hailing the intensive study to begin at Waterloo Lutheran University, Dr. Frank C. Peters, president, said:

"The existence at WLU of a senior field archaeologist (Dr. Toombs) and an archaeologist competent in both field techniques and computer science (Dr. Wagner) allowed the formation of a unique research team.

"The presence also at the university of pottery collections from two diverse cultures, North American Indian and pre-Israelite Palestinian, gives this team direct access to a distinctive body of data.

"Moreover, the course programs here provide students trained in field archaeology and in interpretive techniques to serve as research assistants, while also giving students a valuable learning experience."

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Dr. Wagner added that 7,000 pieces of pottery from the late bronze age (1500 B.C.) found at ancient Shechem in Israel are now at Waterloo Lutheran and 8,000 more are available to Dr. Toombs, chief archaeologist at another site in Israel.

Dr. Toombs and Dr. Wagner and six WLU students will return to Israel this summer where they will take on the task of preparing new finds for the computer, a "coding" technique that requires patience and extreme care.

"Based on past experience, as many as 20,000 pottery fragments will be found," Dr. Toombs said. "About 15,000 pieces will be coded for the computer, a far more difficult task than the usual key punch operator faces. Every piece must be carefully studied, drawn, and a decision made on whether it merits inclusion in the study.

"Due to the heat and working conditions we will have some sickness, so our students will have to work to absolute capacity during the 45 days we will be at Tell el Hesi in southern Israel."

Dr. Wagner will be involved in the Hesi dig but will also be concentrating on the Indian dig south of Kitchener where other teams of students will be engaged in the same work at the camp there.

Dr. Wagner hopes that the project will finally result in a coding system that will point the way for computer analysis of other ancient sites and thus preserve for the future a far more complete story of man's beginnings than has ever been possible up to now.