

University of Montana

ScholarWorks at University of Montana

University of Montana News Releases, 1928,
1956-present

University Relations

9-25-1981

UM math student finds results for Missoula air pollution study

University of Montana--Missoula. Office of University Relations

Follow this and additional works at: <https://scholarworks.umt.edu/newsreleases>

Let us know how access to this document benefits you.

Recommended Citation

University of Montana--Missoula. Office of University Relations, "UM math student finds results for Missoula air pollution study" (1981). *University of Montana News Releases, 1928, 1956-present*. 7059. <https://scholarworks.umt.edu/newsreleases/7059>

This News Article is brought to you for free and open access by the University Relations at ScholarWorks at University of Montana. It has been accepted for inclusion in University of Montana News Releases, 1928, 1956-present by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.



University of Montana

Office of University Relations • Missoula, Montana 59812 • (406) 243-2522

MEDIA RELEASE LOCAL NEWS

holmquist/mmm
9/25/81
dailies (+Anaconda)

UM MATH STUDENT FINDS RESULTS FOR MISSOULA AIR POLLUTION STUDY

By Cary E. Holmquist
University of Montana
Office of University Relations

MISSOULA--

When the parents of teen-agers return to school, the kids begin asking questions like "Don't you have homework to do tonight, Mom?"

That's the experience of University of Montana senior Deborah Pennell, a mother of three who graduated from high school in 1962 and attended a year of nursing school.

She said that she had always planned to finish her education, but that it didn't work out very well when the children were younger. Now she said it works fine and often puts her and her children on the same level, allowing for a lot of teasing.

But Pennell not only returned to college to earn a bachelor of arts degree in mathematics from UM; she also has gotten involved in a sophisticated research project in statistics.

Last spring, Pennell received a \$1,000 Watkins Senior Honors Scholarship from the UM College of Arts and Sciences to develop a project and write an honors paper on the statistics of the first year of the Montana Air Pollution Study (MAPS) in Missoula.

(more)

UM MATH STUDENT -- add one

The MAPS was authorized by the 1977 Montana Legislature in part to determine the health impacts of air pollutants on the pulmonary (lung) functions of Montanans in Missoula, Billings, Great Falls and Anaconda.

According to Pennell, funds for the project ran out before the data from the 1977-78 period of the Missoula MAPS could be organized and analyzed by researchers. She said that the data from that first year were more difficult to interpret than those of the other two years because they were collected and recorded differently and required more complex computer programs for statistical analysis. That portion had been left incomplete until Pennell chose it as a research topic.

With help from her faculty project adviser, Dr. Don O. Loftsgaarden, a UM mathematics professor who was one of the original MAPS researchers, Pennell will write new computer programs which can manipulate the 6,000 items of data into useful information.

"It's a great learning experience for me," Pennell continued, "and it's the kind of experience that will make it a lot easier for me to get a job."

Pennell said that she will continue her studies in mathematics to receive the master of arts degree and may pursue a doctoral degree. However, she said she is undecided about a specific career objective.

###