

The DEAN'S MESSAGE

The Christmas season has finally arrived, and we here at CPMS have enjoyed our Christmas lights and poinsettias. And with this newsletter, we also send you our warmest holiday wishes. I hope that the season finds you and your family happy and warm this year.

Overall, the college is doing very well. There has been plenty going on this year to keep everyone engaged. Earlier this semester the Department of Chemistry & Biochemistry hosted Chem Week, where families came and experienced the wonders of science together. Similarly, the Department of Physics & Astronomy again held their Astro Fest, an event that attracts a few thousand participants from the community each year.

BYU Alumna Sue Allen visited us and spoke to computer science students about her experiences and the importance of careers in technology. The animation department was also awarded \$20,000 from the General Motors Foundation. We are continually grateful for the generosity demonstrated by those who support this college.

Along with the activities, we have also had some exciting events and discoveries. The Department of Physics and Astronomy was well represented at this year's Four Corners Meeting at the University of Denver. There, students were able to present research and network with professional physicists.

Also, our geologists Eric Christiansen and Myron Best received coverage of their work that identified a set of super volcanoes that erupted in western Utah some 30 million years ago, which was very exciting news for the college.

Along with these singular events that attracted attention from the community, we had hundreds of our students engaged in exciting and meaningful mentored research with our dedicated faculty members. We are confident that their efforts will lead to additional exciting findings that we will be able to report on in future editions. Our students regularly indicate that this mentored research is one of the most meaningful aspects of their education, and we are committed to continuing to provide these experiences for them.

We look forward to even more progress and growth for next year. And we hope to continue to include you in our progress.

Thank you for your continued support of the college, and we wish you a very Merry Christmas and a Happy New Year!

Happy holidays from CPMS!

.....→ **Scott Sommerfeldt, Dean**

DEPT. NEWS

CHEMISTRY

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[BYU Alumni wins ACS Hero Award](#)
[Chem Week at BYU](#)

COMPUTER SCIENCE

[BYU Animation and the Killers](#)

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[BYU #1 in Physics Teaching](#)

MATH EDUCATION

[New Assist. Professor Kate Johnson](#)

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BYU Geologists Discover Supervolcanoes in Western Utah

Brigham Young University geologists found evidence of some of the largest volcanic eruptions in earth's history right in their own backyard.

These supervolcanoes aren't active today, but 30 million years ago more than 5,500 cubic kilometers of magma erupted during a one-week period near a place called Wah Wah Springs. By comparison, this eruption was about 5,000 times larger than the 1980 Mount St. Helens eruption.

"In southern Utah, deposits from this single eruption are 13,000 feet thick," said Eric Christiansen, the lead author for the BYU study. "Imagine the devastation - it would have been catastrophic to anything living within hundreds of miles."

Dinosaurs were already extinct during this time period, but what many people don't know is that 25-30 million years ago, North America was home to rhinos, camels, tortises and even palm trees. Evidence of ancient flora and fauna was preserved by volcanic deposits.

The research group, headed by Christiansen and professor emeritus Myron Best, measured the thickness of the pyroclastic flow deposits. They used radiometric dating, X-ray fluorescence spectrometry, and chemical analysis of the minerals to verify that the volcanic ash was all from the same ancient super-eruption.

They found that the Wah Wah Springs eruption buried a vast region extending from central Utah to central Nevada and from Fillmore on the north to Cedar City on the south. They even found traces of ash as far away as Nebraska.

[Read more of this story.](#)



BYU geologists Eric Christiansen and Myron Best at the site of the discovery.

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