

The **INTERCHANGE** Newsletter

Inspiring and engaging everyone in STEM

From the Regional Math & Science Center at Grand Valley State University  
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[InterChange homepage](#)

## Connections for the STEM Classroom

### The 1 mm Journey: Daily Microbial Movement that Possibly Shaped the Early Biosphere

*By Bopi Biddanda, Tony Weinke, and Ian Stone, Annis Water Resources Institute, Grand Valley State University*

Newly published research with modern-day microbial mats catches in the act the tiny but daily vertical migration of microbes in response to changing light and chemicals in the environment. In what might have been the largest daily mass migration of life for the first 3.5 billion years of life when the biosphere was a thin Mat World, these daily movements may have optimized photosynthesis and carbon burial – oxygenating our biosphere.

[STEM Classroom article](#)



**What are your students doing this summer?**

GVSU is hosting a number of [STEM camps!](#)

**STEPS Engineering Camp**



June 12-15, 2023

June 19-22, 2023

STEPS (Science, Technology, and Engineering Preview Summer) Camp is a fun and engaging week-long introduction to the world of science, technology, and engineering through the lens of aviation for participants currently in 6th grade.

[STEPS Camp article](#)

## Energizing Our World Camp

June 26-29, 2023

Energizing Our World is a four-day camp designed to spark interest in renewable energy. Students will participate in activities that provide hands-on experiences with a variety of renewable energy sources. Participants must be in the 6th or 7th grade

[EOW Camp article](#)



## sHaPe Camp

July 10-13, 2023

sHaPe (Summer Health Activities and Professions Exploration) is a four-day introduction to health careers for boys and girls currently in 7th and 8th grade.

[sHaPe Camp article](#)

## Advanced Manufacturing Camp

July 17-21, 2023

Advanced Manufacturing Camp is a five-day, hands-on immersive experience for students currently in 5th and 6th grade. Campers participate in activities include team-building in addition to breakout sessions facilitated by GVSU staff, students, and industry professionals from the West Michigan area.

[Advanced Manufacturing Camp article](#)



For more information and to register for these camps and other camps offered by GVSU, visit [gvsu.edu/camps](https://gvsu.edu/camps). For a printable flyer of these STEM camps and other summer STEM activities, visit the [RMSC website](#).

## Van Andel Institute Opens Registration for 2023 Summer Camps with New 1-Day and 4-Day Options

VAI's 2023 Summer Camps for grades K-12 are now open for registration. And, after the success of last year's K-12 Summer Camps, VAI is now expanding the programming to include new 1-day camp options, in addition to our traditional 4-day camp options.

[VAI Summer Camp article](#)

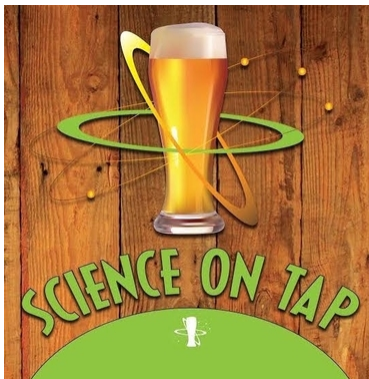
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## Plan to Attend the Regional Meeting of the Geological Society of America

May 4-6, 2023, GVSU will host the meeting for north central section of the Geological Society of America in Grand Rapids.

[GSA article](#)

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## Attend Science on Tap!

March Topic: New Treatments For Alzheimer's Disease  
*Presented by David Morgan, Dept. of Translational Neuroscience,  
College of Human Medicine, Michigan State University*  
Thursday, March 9

[Science on Tap article](#)

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## GVSU Annis Water Resources Institute Seeks Seasonal Science Instructors for Research Vessels

The Annis Water Resource Institute (AWRI) seeks passionate and energetic environmental educators to engage students in hands-on, place-based learning experiences onboard its research vessels and in its indoor/outdoor classroom programming.

[Science Instructor article](#)

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## Interested in PCR training?

The GVSU Cell and Molecular Biology Department is working to develop a PCR (polymerase chain reaction) training to support local teachers.

[PCR article](#)

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## Check out the latest MiSTEM Network- Greater West Michigan Region Newsletter!

The MiSTEM Network is connecting education, businesses, and community partners across the state to transform the way Michigan does STEM.

[MiSTEM Newsletter](#)



Greater West  
Michigan Region

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