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"Failure is the condiment that gives success its flavor."

— Truman Capote

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CDI projects highlighted at the Earth Science Information Partners (ESIP) July Meeting By Community for Data Integration (CDI) July 21, 2026 A poster about the Community for Data Integration (CDI) at the 2026 Earth Science Information Partners (ESIP) Meeting highlights CDI projects and products. The Community for Data Integration coordinators are presenting a poster at the Earth Science Information Partners (ESIP) July Meeting . The poster highlights CDI products, including workflows, tools, and guidance documents, that help users throughout the science data lifecycle. In addition to the project pages linked below, the CDI Data Management Working Group has contributed to several resources on the USGS Metadata Review webpage . Related Science Items per page 6 12 Label May 21, 2025 GeoDRAW (Geospatial Data Retrieval and Alignment Workflow) to advance data-visualization and earth systems model development A reusable Python workflow for the standardized retrieval and alignment of geospatial data By Community for Data Integration (CDI) GeoDRAW (Geospatial Data Retrieval and Alignment Workflow) to advance data-visualization and earth systems model development May 21, 2025 GeoDRAW (Geospatial Data Retrieval and Alignment Workflow) to advance data-visualization and earth systems model development A reusable Python workflow for the standardized retrieval and alignment of

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The Chesapeake Bay Gets a Boost from Our Summer Interns

It's summertime—but that doesn't mean a vacation from learning! Four interns are spending this summer gaining experience with us and pitching in on important Chesapeake Bay-focused projects. These paid internships run for 12 weeks, giving them solid insight into a potential career path—and supporting our busy summer of work. Each intern is mentored by an expert on our staff who provides guidance for the intern's summer project. Our four interns also participate in sessions with a larger group of Chesapeake Bay-focused interns to develop career and networking skills. We partner with the Chesapeake Research Consortium to make these internships possible. Who are our dynamic interns for summer 2026, and what projects are they working on? Kate Koblegarde Kate, who will enter her senior year at New York University this fall, is majoring in environmental economics. She learned about the Chesapeake Bay internships from another student who had previously interned with the NOAA Chesapeake Bay Office. Kate is working on a way to put a value on restoring oyster reefs so policy makers can incentivize external funding for oyster reef conservation in the Chesapeake Bay estuary. It's a complex model; she's including denitrification, phosphorus sequestration, and how oyster reefs provide habitat for blue crab and striped bass. "Throughout this process, I aim to quantify the value of ecosystem services to design a market where the right actors pay for the mitigation of relevant environ-

ments,” she explained. “Experiences such as estuarine field work, policy and literature synthesis, and communicating with organizations will guide me to reach these goals.” Being outdoors—and appreciating the value nature provides to her life—got Kate on the path toward her current studies. “I grew up in Oregon frequently visiting the coast, playing in tidepools, swimming in rivers, and skiing and hiking the mountains. The nature that surrounded me provided a reliable sanctuary. Learning about the factors contributing to degrading the environment in my home, and more severely in other parts of the world, led me to pursue environmental economics. In this field I can design solutions that are incentivized and financeable. With this focus, my work is both fulfilling and passion driven with deliverable results.” Oyster reefs are one type of Chesapeake Bay habitat, but Kate finds other Bay habitats interesting, too. “I am most fascinated by submerged aquatic vegetation such as seagrass and attached macro-algae (aside from when it gets tangled in my toes while swimming). It provides so many services to habitats and water filtration that I hope to learn more about it throughout my time at the NOAA Chesapeake Bay Office.” Elizabeth Moty Liz is a rising senior at the University of Vermont’s Rubenstein School for the Environment and Natural Resources. She is studying sustainability, ecology, and policy with a concentration in applied ecology. She’s also minoring in soil science and geospatial technologies. Liz applied for the internship at the NOAA Chesapeake Bay Office through the Chesapeake Research Consortium after she saw an advertisement for the opportunity online. This summer, she is helping with

the NOAA Chesapeake Bay Interpretive Buoy System and the hypoxia monitoring programs by working on the maintenance, deployment, and retrieval of sensors. She is also developing updates for the Coastal and Marine Ecological Classification Standard map product. “I’m very excited to have the opportunity to gain hands-on fisheries experience outside of the classroom. It’s always thrilling when I am able to apply the information I have been learning these past few years in my degree,” she said. “I also want to further develop my field skills and continue to gain experience with different field sampling techniques.” Her work is a great fit for some of her classroom learning: “I’m looking to develop real-world applications of my geospatial knowledge. I’d like to contribute to meaningful data visualizations and create a product that can be used beyond my time here this summer.” Liz’s time this summer is a natural extension of her interests. “Ever since I was a kid I always have had a passion for the outdoors. I was fascinated with the critters that would run around in my backyard, and when the time came to decide what major I’d be pursuing in college, I knew I wanted to focus on something meaningful and impactful,” she explained. “Choosing to study ecology was based on my own fascination with the natural world but also wanting to be a part of the movement protecting it. I had the opportunity to take my first fisheries class last fall, and I fell in love with the subject through our hands-on field training in a multitude of sampling techniques from e-fishing to midwater trawling. Fish are awesome! ” (We agree!) Given her work with sensors that track conditions in the water column, it makes sense that an aspect of

the Bay that interests her involves a beloved species using the water column. “The Chesapeake Bay habitat has so many different moving parts but what intrigues me the most is the fact that we have dolphins that come far up into the Bay! I always knew that they hung out around the mouth of the Bay, but I had no idea that they traveled as far up as I saw them in the Choptank River earlier this summer.” Oluwole Okusanya Oluwole, who will graduate in spring 2027 from Towson University, is majoring in computer science with a focus on data science and data engineering. He came across the internship opportunity when he was searching for data-focused internships online. This summer, Oluwole is taking a deep dive into data acquired by our observation platforms, including the NOAA Chesapeake Bay Interpretive Buoy System and hypoxia monitoring stations . He’s working to create several data-driven tools that will help scientists as they track conditions on and in the Chesapeake. “ I'm building Python data pipelines and visualizations for environmental monitoring,” he said. “That includes wind and wave ‘rose’ tools pulling from the buoy data, plotting systems for conductivity, temperature, and depth sensor readings, and an automated quality-control system that flags dissolved oxygen data to help track hypoxia in the Choptank River. That system will follow national Quality Assurance of Real-Time Oceanographic Data standards.” Oluwole is looking to connect some big, important dots this summer. He wants to learn “how environmental data science actually drives management decisions in the Bay, turning raw sensor readings into something scientists and decision-makers can trust and act on.” Oluwole

credits his research and professions for kick-starting his interest in data analytics. “A geology professor in particular opened my eyes to how much data can shape environmental research, and that's what pulled me toward this field,” he explained. Just as data provides an important foundation for so many decisions regarding the Bay, Oluwole finds salt marshes to be a foundational habitat in the Chesapeake. He appreciates “the way they buffer the shoreline and support so much of the Bay's life.” Ruby Ondatje Ruby is a rising senior at the University of Maryland, where she’s studying environmental science and policy, with a concentration in policy. She’s also minoring in health, humanities, and medicine. An advisor at her University suggested she explore the opportunity with the NOAA Chesapeake Bay Office. This summer, she’s working with our science educators at the Environmental Science Training Center. “My main project is creating a database of Chesapeake Bay watershed phenomena to promote phenomena-based learning in classrooms around the watershed,” Ruby said. “K-12 educators will use this database when developing phenomena-based lessons and Meaningful Watershed Educational Experiences. Both are vital components for reaching the Chesapeake Bay Program’s education goals . I will also support the science education staff in educator workshops and outreach events.” Ruby joined other NOAA experts at the Sail250 event in Baltimore, running an activity to help young event participants learn how salinity affects the Bay and the critters that live in it. Ruby is eager to work with scientists and experts at NOAA Fisheries and beyond during her internship: “While working at NOAA this summer,

I am particularly excited to collaborate with peers and mentors in collecting material for the database. I look forward to the opportunity to participate in fieldwork and learn from the experience and expertise of the staff.” A Chesapeake Bay native, Ruby grew up surrounded by nature. “Witnessing environmental change in my own backyard motivated me to study policy as a method for change.” Her time in the Chesapeake has led her to treasure a special habitat: “My favorite Chesapeake Bay habitat is the beautiful bay grasses, which provide habitat, dissolved oxygen, and filtration for polluted water.”

NASA to Host Media Briefing on Roman Telescope, Launching Next Month

Technicians and engineers at NASA's Kennedy Space Center in Florida use a crane to lift the agency's Nancy Grace Roman Space Telescope to a specialized work stand June 26, 2026, as the mission prepares to launch nine months ahead of schedule. The Roman Space Telescope will offer a field of view at least 100 times larger than the Hubble Space Telescope's, resulting in deep, sweeping explorations of the cosmos. Credit: NASA/Sydney Rohde (Rocz)

Media are invited to join NASA for a virtual news conference at 2 p.m. EDT, Wednesday, July 29, to preview the Nancy Grace Roman Space Telescope mission, scheduled to launch from the agency's Kennedy Space Center in Florida on Sunday, Aug. 30. NASA will stream this event live through a variety of platforms. Learn where to watch online: <https://www.nasa.gov/live> . Participants in the briefing, who will provide an overview of the mission and its status, include: Shawn Domagal-Goldman, director, Astrophysics Division, NASA Headquarters in Washington Jackie Townsend, Roman telescope project manager, NASA's Goddard Space Flight Center in Greenbelt, Maryland Julie McEnery, Roman telescope senior project scientist, NASA Goddard Jeremy Perkins, Roman telescope integration and test scientist, NASA Goddard Media interested in participating by phone must RSVP no later than two hours prior to the start of the briefing to Rob Garner at

rob.garner@nasa.gov . A copy of NASA's media accreditation policy is online. Named after NASA's first chief astronomer, the Nancy Grace Roman Space Telescope will have a deep, panoramic view of the cosmos, generating never-before-seen pictures that will revolutionize our understanding of the universe. The observatory will usher in a new era of cosmic surveys, unveiling troves of celestial objects and shedding light on some of the universe's most profound mysteries, including phenomena we can't see. Roman also will showcase cutting-edge technology, including a test of the most advanced technology ever flown in space to directly image planets around nearby stars, a key step in NASA's search for life on other worlds. The Roman telescope is managed at NASA Goddard with participation by the agency's Jet Propulsion Laboratory in Southern California; Caltech/IPAC in Pasadena, California; the Space Telescope Science Institute in Baltimore; and a team of scientists from various research institutions. The primary industrial partners are BAE Systems Inc., L3Harris Technologies, and Teledyne Scientific & Imaging. Contributions to Roman also are made by ESA (European Space Agency), JAXA (Japan Aerospace Exploration Agency), the French space agency CNES (Centre National d'Études Spatiales), and the Max Planck Institute for Astronomy in Germany. For more information about NASA's Roman telescope, visit: <https://nasa.gov/roman> -end- Alise Fisher Headquarters, Washington 202-358-2546 alise.m.fisher@nasa.gov Claire Andreoli / Rob Garner Goddard Space Flight Center, Greenbelt, Md. 301-286-1940 / 301-286-5687 claire.andreoli@nasa.gov / rob.garner@nasa.gov Share

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After weight loss, exercise beats weight-loss drugs for heart health

People with severe obesity who exercise regularly have healthier blood vessels and lower inflammation than those who rely on medication alone, a new study shows. More and more people are living with severe obesity, and weight-loss medication is being used widely. But what does that mean for overall health beyond weight loss? A new study from the University of Copenhagen shows that exercise plays a crucial role in cardiovascular health—even after significant weight loss. Researchers followed 130 people with severe obesity for one year after they had completed a low-calorie diet and lost an average of 13.7 kg (30.2 lbs). Participants were then divided into four groups: exercise only, liraglutide only, exercise plus liraglutide, and placebo. Those who exercised developed healthier blood vessels and lower inflammation. While medication alone helped maintain weight loss, it did not improve vascular health. “The study shows that while medication supports weight maintenance, it is exercise—with or without medication—that improves vascular health,” says Signe Torekov, professor at the biomedical sciences department at the University of Copenhagen. After one year, researchers measured the thickness of the carotid artery wall—a marker of cardiovascular risk. The thicker the wall, the greater the risk of atherosclerosis, blood clots, and stroke. Participants who exercised saw a 6–7% reduction in artery wall thickness. There was no improvement in the liraglutide-only or placebo groups. Levels of

several inflammatory markers also fell among the physically active participants. Chronic inflammation is a key driver of cardiovascular disease. Combining exercise with medication led to further weight loss and improved several markers of vascular function. “Medication can help maintain weight loss, but exercise provides additional health benefits that we do not see with medication alone,” says Rasmus Sandsdal, medical doctor and PhD student at the biomedical sciences department and first author of the study. The effect did not require intense training. Participants in the exercise groups trained on average around two and a half hours a week, mainly spinning and circuit training. Activity was measured objectively using heart-rate monitors. “What is striking is how little it takes. Replacing just a few hours of screen time each week with physical activity improves cardiovascular health,” says Torekov. To the researchers, the participants were of particular interest because they were obese but still relatively healthy. “The participants were in their mid-40s and had not yet developed diabetes or heart disease, so it’s encouraging that even a modest amount of exercise can improve key risk factors for cardiovascular disease,” says Sandsdal. The study examined liraglutide, an earlier generation of GLP-1 weight-loss medication. The results cannot be directly applied to newer drugs such as semaglutide (e.g. Wegovy), but liraglutide maintained weight loss at a comparable level. The researchers emphasise that exercise should remain a central part of treatment for severe obesity—especially as more people use weight-loss medication. “Weight-loss medication is an important tool, but our results indicate that

it cannot replace exercise. Physical activity remains essential for protecting the heart and blood vessels,” says Torekov. The research appears in *Nature Metabolism* . Source: University of Copenhagen The post After weight loss, exercise beats weight-loss drugs for heart health appeared first on Futurity .

USDA puts Montana forests back to work, supporting jobs and rural communities

U.S. Forest Service Chief Tom Schultz today signed the Montana Tri-Forest Federal Sustained-Yield Unit management plan that will support economic stability, strengthen central Montana's wood processing capacity and advance forest health through timber harvests that will be processed within the boundaries of the unit. The Tri-Forest unit includes the Beaverhead-Deerlodge, Custer Gallatin and Helena-Lewis and Clark national forests. Leadership from these forests will work together to provide forest products that support local economic stability, strengthen central Montana's wood-processing capacity and advance forest health in alignment with existing forest plans. "Our focus is restoring and sustaining the ability of forests to provide the services that people want and need. This mission is more critical than ever, and the forest products industry is a partner among many to help us achieve our healthy forest goals," said Forest Service Chief Tom Schultz. "We estimate that over the first 10 years, the three forests will offer between 350-500 million board feet to local processing facilities in central Montana. That predictable supply not only helps to carry out forest restoration work but also supports local economies in an area where national forests make up a considerable part of the land base." A stable wood-processing industry also supports investments in modern technologies, such as combined cogeneration

systems and biochar production, while enhancing the region's capacity to manage forests and reduce wildfire risk. "Establishing the sustained-yield unit reflects the collaborative work of leaders in the three central Montana forests who are committed to supporting local communities while advancing priority work on the landscape," said Regional Forester Troy Heithecker . "This plan will help provide stability for the forest products industry in central Montana while contributing to meaningful, on-the-ground progress that reduces wildfire risk, improves forest conditions for wildlife and expands outdoor opportunities for the outdoor recreation community." Visit the project website to review the plan and for more information.

Activity Time - Word Search

Find the words below in the puzzle. Words go across or down only.

Words to Find:

