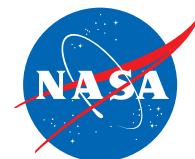# THE INNOVATION CATALYST

NEWSLETTER

NASA

Partnership with *Intel*

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📅 **EVENTS**

Byte Sized Talks
Wednesday November 15, 2023
12:00 PM - 1:00 PM
Join us in the building 21 cafeteria for a refreshing twist on the traditional lunch-and-learn format!

HAPPY
Thanksgiving

This month's Tech Transfer Tip with Strategic Partnerships Office Chief *Darryl Mitchell*

There are a lot of complex business, technical, and legal factors that must be considered when determining whether NASA can and should file a patent application on a new technology. If you are uncertain whether you should report a new technology you've developed, don't hesitate to reach out to the Strategic Partnership Office (SPO) or the Office of General Counsel for guidance.
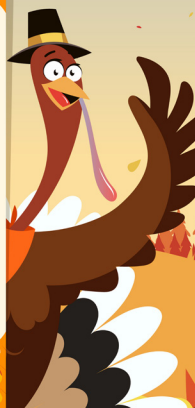
Students in an Intel STEM workshop work on a robotics assignment. Photo Credit: First Global/Intel Corporation

NASA Goddard Partners with the Intel Corporation to Develop and Implement AI STEM Learning Activities

At a recent Town Hall, Center Director Dr. Mackenzie Lystrup talked about the importance of developing more partnerships with private industry and academia and asked for attendees to consider a deeper question: "How do we make partnerships that really matter?" In September, she got an inspired answer. NASA Goddard teamed with Intel Corporation to form a dynamic partnership designed to prepare the next generation of scientists and engineers to tackle future technological challenges in artificial intelligence (AI).

This joint alliance, brokered by Goddard's Strategic Partnership Office (SPO), will enable the agency and Intel to work together on robotic-oriented science, technology, engineering, and math (STEM) challenges for high school students. Through this unique academic program, Goddard and Intel will provide STEM learning sessions for students, including a "Meet the Innovator and Expert" series and foundational AI content.

"NASA needs a diverse and skilled STEM workforce today, and in the future," said SPO Chief Darryl Mitchell. "This partnership with Intel shows NASA Goddard's commitment to connecting with students and attracting future generations of engineers and scientists."

The program's STEM curriculum is designed to foster a community of shared learning between industry leaders, technologists, and the next generation of high school students, contributing to the application of AI for industry innovation. This affiliation will allow Goddard and Intel to achieve the following goals:

- Promote the value of STEM to educational and public audiences
- Increase student interest and participation in STEM
- Expose and inspire young people to explore STEM careers

"Together with the expertise of Goddard, we are pleased to offer exciting and engaging STEM educational programming, from AI to robotics and beyond, to further students' educational pursuits," said Stacey Shulman, vice president of Network and Edge, and general manager of the Health, Education, and Consumer Industries Division at the Intel Corporation. "We hope to create new learning opportunities for next-generation makers and inspire students' passion by introducing them to industry innovators."

Ranked 45th on the 2020 Fortune 500 list of the largest companies in the United States, Intel is recognized by the magazine as one of the world's largest manufacturers of semiconductor chips. The Santa Clara, California-based corporation also manufactures motherboard chipsets, network interface controllers and integrated circuits, flash memory, graphics chips, embedded processors, and other devices related to communications and computing. Additionally, Intel supplies microprocessors for computer system manufacturers such as Acer, Lenovo, HP Inc., and Dell.

This unique collaboration is a perfect marriage merging Goddard's goal of providing STEM education opportunities and materials for students, combined with Intel's focus of establishing and promoting STEM programs specifically related to AI. The partnership also achieves the goal of the 2023 NASA Strategic Plan Objective 4.3, To Build the Next Generation of Explorers. That objective makes it a priority for the agency to engage students to "become the diverse STEM workforce of the future" by providing "the next generation of explorers with the technical skills needed to continue pursuing NASA's mission."

"We are excited to work in collaboration with the Intel Corporation with STEM engagement activities," said Samantha Kilgore, Goddard agreement manager at SPO. "Inspiring young minds and providing that window into the amazing world of STEM is so important for our future."
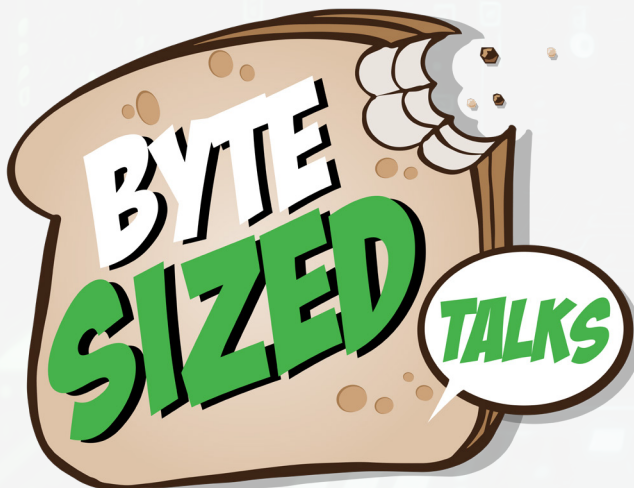
Mark your calendars because the next date for our exciting new initiative, "Byte Sized Talks," is set for **November 15th, 2023**, from **12:00 PM to 1:00 PM**. Join us in the building 21 cafeteria for a refreshing twist on the traditional lunch-and-learn format!

As more of our fantastic staff return to the vibrant halls of Goddard, we're thrilled to introduce this monthly in-reach program designed to foster connections and knowledge-sharing among members of the Strategic Partnership Office (SPO) and our wider Goddard family.

STRATEGIC
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GSFC SBIR/STTR Project Support Specialist Marcus Payne and Marketing Specialist Jessie Birnberg help attendee sign in at Byte Sized Talks event.
Photo Credit: N4 Solutions

Byte Sized Talks Hit the Spot with the Goddard Community

Many members of the Goddard community who went to the cafeteria for lunch on October 10th were served up a special culinary lunch-and-learn cuisine with the Strategic Partnerships Office's (SPO) new Byte Sized Talks. SPO's delicious new monthly in-reach event, which promotes knowledge-sharing with the larger Goddard community, served as the ideal appetizer for the noontime audience. The overarching goal of the Byte Sized Talks is to enhance general awareness of technology transfer and offer an open smorgasbord forum for questions and answers with SPO staff.

While enjoying Taco Tuesday, approximately three dozen engineers and scientists eagerly sampled some of the informative technology transfer hors d'oeuvres SPO staff had to offer at the Byte Size Talks booth. Participants learned how their innovations can move from the laboratory and into the hands of businesses and academia for commercial and research applications. The meatiest ingredient on the Byte Size Talks menu was learning why and how to file a New Technology Report (NTR).

August Weber, a flight operations engineer with the Earth Science Mission Operations (ESMO) Project (Code 428) spoke for many individuals who visited the booth when he said, "I never heard about the NTR process before. But, after talking with the folks from SPO, I learned.... If I ever design something or come up with a new innovation, I now know there are technology managers in the SPO office who could help me to develop and commercialize the technology."

"I found it interesting to hear about the kinds of technologies that are being developed at Goddard, and learn how, through commercialization and licensure, they are being used for other applications other than just up in space," added Sean Lantto, a robotics systems engineer in NASA's Explorations and In-space Services Division (NExIS) (Code 480). "I did not know that you could file an NTR yourself. I thought somebody had to review it first."

During Byte Sized Talks, SPO staff also focused on how Goddard-developed technologies and innovations are licensed to private industry. They explained the licensing process, the types of licensing agreements NASA offers, and the prerequisites for a private company to commercialize a NASA technology.

Byte Sized Talks displays a variety of giveaways for attendees at the October 10ᵗʰ event. Photo Credit: N4 Solutions

"It was very convenient that the Byte Size Talks was right along my path [at the cafeteria]," said Adrian Daw, a research assistant and solar physicist in the Heliophysics Science Division (Code 670). "It is interesting to know there are these kinds of tech transfer programs in place at NASA to help get technologies licensed."

While a cafeteria lunch is good, there is nothing like takeout. As a token of appreciation, attendees to the booth received a copy of the latest Spark magazine, an Inventor's Notebook, a copy of Spinoff magazine, and a NASA keychain or another NASA tech transfer item. Before the event was over, 23 people – including Dominic Palaia, executive chef and general manager of the cafeteria – signed up to be on the distribution list to receive The Innovation Catalyst newsletter and The Spark magazine.

"This is the first time I have seen or read The Spark magazine; the content really intrigued me because I love reading about new inventions and new innovations that people are coming out with," said Weber after flipping through the articles in the SmallSat issue. "Reading about great ideas that engineers and scientists come up with is a great way to inspire me or other people to do something and come up with more ideas."

For many who visited the Byte Size Talks booth, it brought back memories before the pandemic of Goddard Day. "They would have all these booths set up in the gallery area in Building 28 and we could see what projects people are working on and what was new on base," recalled Anthony Licilla, a computer operator, with the Earth Science Mission Operations (ESMO) Project (Code 428). "There was always something to look forward to and [the campus] has not been the same since they ended that. Like Goddard Day, it is really nice to have somebody to talk with and Byte Size Talks reminds me of that."

October 10ᵗʰ was the inaugural kickoff for Byte Size Talks. SPO plans to continue to have this event each month with a break for the December holiday season. Stay tuned to The Innovation Catalyst and Dateline for the dates and time for the next opportunity.

"I really felt like I learned something here today," said Muramatsu Haruka, a post doctorate research associate in the Detector Systems Branch (Code 553). "I thought this was a valuable event."

Inside Innovation: Technology Managers and Codes

The technology managers in Goddard's Strategic Partnership Office (SPO) shepherd technologies from NASA laboratories to the marketplace, helping to make matches in industries that may find the technology useful. With successful commercialization, technologies eventually turn into "spinoffs," entering the commercial sector and making a positive impact on the world.

As stewards of Goddard's intellectual property, technology managers promote Goddard's innovations, unique facilities, and capabilities, seeking out ways to align with industry and national needs. Through their work, Goddard takes an active role in transferring technology to the private sector for national benefit.

Each technology manager is responsible for covering specific codes, which you can see in the chart below. Reach out to your technology manager if you have questions about submitting a New Technology Report (NTR) or if you would like to play a more active role in promoting technology transfer at Goddard.

Hossin Abdeldayem	Manohar Deshpande	Josh Levine	Viva Miller	Dennis Small
Codes: 400, 410, 440, 460, 490, 551, 554, 596-599, 660	Codes: 470, 550-553, 555, 610	Codes: 450, 480, 551, 540, 560, 590-595, 690	Codes: 800	Codes: 100, 200, 300, 420, 580, 600, 603-606, 700

Contact Your Technology Manager Today

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