

# ISS National Laboratory Q3FY25 Report

Quarterly Report for the Fiscal Year 2025 Period April 1, 2025 – June 30, 2025

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# Q3FY25 Metrics

### ISS NATIONAL LAB UTILIZATION AND OPERATIONS TARGET METRICS

In alignment with NASA's current budgetary guidance and internal allocation constraints, our program has paused new grant awards for FY25. This decision reflects NASA's strategic prioritization in response to broader fiscal challenges and the anticipated limitations on available payload opportunities through the ISS National Lab.

The pause in awards has impacted performance against the metrics outlined below; however, we continue supporting NASA's objectives and stand ready to resume awards as soon as conditions allow.

TA	RGET METRICS	FY25 Q1	FY25 Q2	FY25 Q3	FY25 Q4	YTD FY25 Total	FY25 Target	FY25 Stretch	
		DEMAND F	OR ISS RESOU	RCES					
1)	Ratio of awardable proposals evaluated to expected awards (year to date)	3:1	3:1	4:1 <sup>d</sup>		4:1 <sup>d</sup>	3:1	N/A	
2)	Leverage ratio of external funding to internal funding (new awards) (year to date)	11:1	6:1	6:1		6:1	1:1	2:1	
		FUNDAM	IENTAL SCIEN	CE					
3)	Fundamental Science projects selected		1			1	7	9	
4)	External funding supporting Fundamental Science users of the ISS National Lab	\$	\$0.8M	\$		\$0.8M	\$6M	\$9M	
	APPLIED RESEARCH & DEVELOPMENT								
5)	Applied Research & Development projects selected	<b>1</b> <sup>c</sup>		$O_{d}$		1 <sup>cd</sup>	<b>2</b> <sup>a</sup>	3	
6)	Ratio of external funding (self-reported) to CASIS and MI&O funding supporting Applied Research & Development users of the ISS National Lab (year to date)			O <sub>q</sub>		O <sub>q</sub>	1:1	2:1	
		TECHNOLOG	Y DEMONSTR	ATION					
7)	Technology Demonstration projects selected	3	4	$O_{q}$		<b>7</b> <sup>d</sup>	11	14	
8)	Ratio of external funding (self-reported) to CASIS and MI&O funding supporting Technology Demonstration users of the ISS National Lab (year to date)	14:1	6:1	6:1 <sup>d</sup>		<b>6:1</b> <sup>d</sup>	4:1	6:1	
		EDUCATION	ON & OUTREA	СН					
9)	Education & Outreach projects selected	1				1	2	3	
10)	New Corporate or OGA sponsorships agreements	0	0	0		0	1	2	
		PROPOSA	L MANAGEME	NT					
11)	Time from solicitation close to selection/non-selection notification (year to date)	67 days	65 days	57 <sup>d</sup> days		57 <sup>d</sup> days	≤65 days	≤60 days	

# ISS NATIONAL LAB UTILIZATION AND OPERATIONS TRACKING METRICS

The following metrics have no target for FY25 but will be tracked internally and discussed in face-to-face meetings with NASA.

TRACKING METRICS	FY25 Q1	FY25 Q2	FY25 Q3	FY25 Q4	YTD FY25 Total
OVERALL PR	OJECT QUALITY A	ND DEMAND			
1) Percent of proposals reviewed that were awardable (year to date)	61%	61%	62%		62%
2) Percent of proposals reviewed that were high quality (year to date)	13%	13%	15%		15%
3) Percent of high-quality proposals not selected (year to date)	0%	40%	50% <sup>d</sup>		<b>50</b> % <sup>d</sup>
<ol> <li>Percent of completed projects that met research objectives (year to date)</li> </ol>	75% <sup>c</sup>	89% <sup>c</sup>	83%		83%
5) Percent of completed Technology Dev/Demo and In-Space Production projects demonstrating technology readiness level (TRL) advancement (year to date)	100%	100%	100%		100%
6) ISS National Lab projects selected	5°	5	1 <sup>d</sup>		11 <sup>d</sup>
7) Users by new/returning					
(a) ISS National Lab return users	2 <sup>c</sup>	0	O <sub>q</sub>		<b>2</b> <sup>d</sup>
(b) ISS National Lab new users	3	5	<b>1</b> <sup>d</sup>		9 <sup>d</sup>
8) Projects by type					
(a) Commercial	<b>4</b> <sup>c</sup>	4	1 <sup>d</sup>		9 <sup>d</sup>
(b) Academic/nonprofit	1	1	$O_q$		<b>2</b> <sup>d</sup>
(c) Government agency	0	0	Oq		O <sub>q</sub>
9) Leverage ratio of external funding to internal funding (year to date)	11:1	5:1°	5:1		5:1
10) Active solicitations	2	3	Od		5 <sup>d</sup>
11) ISS National Lab concepts received	53°	173°	54 <sup>e</sup>		280 <sup>e</sup>
12) ISS National Lab proposals received	23	13	77		113
13) Time from selection notification to agreement draft sent to principal investigator (year to date)	39 days	34 days	35 days		35 days
14) Time from agreement draft to award (year to date)	32 days	33 days	31 days		31 days
15) Time to flight	16 <sup>c</sup> months	12 months	22 months		17 months

TRACKING METRICS (Continued)	FY25 Q1	FY25 Q2	FY25 Q3	FY25 Q4	YTD FY25 Total
	YLOADS DELIVER	<u> </u>	Ų3	Q4	TOTAL
16) Commercial Service Provider Facility Utilization payloads delivered	14	2	33		49
(a) Percentage of Commercial Service Provider Facility Utilization payloads flown that met mission success criteria (previous fiscal year quarter) <sup>b</sup>	100%	96%	N/A		98%
17) Education & Outreach payloads delivered	2	0	3		5
18) Fundamental Science payloads delivered	5	0	4		9
(a) Percentage of Fundamental Science payloads flown that met mission success criteria (previous fiscal year quarter) <sup>b</sup>	100%	100%	N/A		100%
19) Applied Research & Development payloads delivered	2	0	1		3
(a) Percentage of Applied Research & Development payloads flown that met mission success criteria (previous fiscal year quarter) <sup>b</sup>	0%	67%	N/A		34%
20) Technology Demonstration payloads delivered	2	0	1		3
(a) Percentage of Technology Demonstration payloads flown that met mission success criteria (previous fiscal year quarter) <sup>b</sup>	N/A	100%	N/A		100%
21) Total ISS National Lab-sponsored payloads delivered	25	2	42		69
COMMUNITY E	NGAGEMENT AN	D INVESTMENT			
22) New partnerships formed	0	0	1		1
23) Total external funding committed	\$5,474,854	\$1,857,634	\$0 <sup>d</sup>		\$7,332,488 <sup>d</sup>
24) Funds raised post award and postflight by startup companies with ISS National Lab-sponsored flight projects					
(a) Funds raised postflight	\$146.4M	\$56.3M	\$28.5M		\$231.2M
(b) Funds raised post award	\$146.4M	\$56.3M	\$31.6M		\$234.3M
25) External funding committed from new OGA partnerships	\$0	\$0	\$0		\$0
26) New educational partnerships	0	0	0		0

TRACKING METRICS (Continued)	FY25 Q1	FY25 Q2	FY25 Q3	FY25 Q4	YTD FY25 Total
COMMUNITY ENGAGE	•	•			
27) (a) Number of high school and higher education students contributing to research projects completed during the fiscal year	11 <sup>c</sup>	28°	11		50
(b) Number of interns supported by ISS National Lab - Industry Partner cost-share program	0	0	18		18
28) Total individuals participating in ISS National Lab Education & Outreach programs and projects (self-reported)	1,232,064	347,832	91,386		1,671,282
29) Total individual users of ISS National Lab online education products (self-reported)	2,535,547	1,291,474	3,534,518		7,361,539
IMPLEMENTATION PARTNERS A	AND COMMERCIA	L SERVICE PROVII	DER ACTIVITIES		
30) Number of Implementation Partners (year to date)	33	33	32		32
31) Number of Commercial Service Providers (year to date)	13	13	13		13
32) New Umbrella User Agreements executed	0	0	1		1
33) New commercial facilities added	0	0	0		0
34) Commercial facilities (year to date)	23	23	23		23
35) RRFs submitted	26	23	14		63
36) RRFs approved	25	21 <sup>c</sup>	14		60
37) RRF approval time	6 days	10° days	9 days		8 days
RES	SOURCE UTILIZATI	ON			
38) Crew time (actual vs. increment pair – 3 months allocation)	51	.%			51%
(a) Ascent flight resources					
Upmass	91%	96%	98%		95%
Cold stowage	51%	N/A	12%		32%
Big bags	25%	N/A	13%		19%
Powered lockers	75%	N/A	N/A		75%
(b) Facility resources (reported in Q2 and Q4)					
Commercial facilities	42	2%			42%
JEM airlock	10	0%			100%
Life Sciences Glovebox	33				33%
Microgravity Science Glovebox	67	<b>'</b> %			67%

	FY25	FY25	FY25	FY25	YTD FY25		
TRACKING METRICS (Continued)	Q1	Q2	Q3	Q4	Total		
RESOURCE	UTILIZATION (CC	NTINUED)					
39) Number of payloads that did not turnover per the nominal delivery schedule	2	0	1		3		
Principal investigators	0	0	1		1		
Implementation Partners	2	0	0		2		
CASIS	0	0	0		0		
NASA	0	0	0		0		
40) Number of re-flight experiments flown	0	0	0		0		
Fundamental Science	0	0	0		0		
Applied Research & Development	0	0	0		0		
Technology Demonstration	0	0	0		0		
Education and Outreach	0	0	0		0		
Commercial Service Provider Utilization	0	0	0		0		
41) Number of payloads ready to fly that were left on the ground due to limited resources (upmass, crew time, cold stowage, etc.)	0	44	7		51		
42) Number of payloads removed from the manifest after the freeze date because the principal investigator/payload could not make the flight	1	0	0		1		
OVERALL PROJECT RESULTS							
43) Number of peer-reviewed papers including those accepted for publication in Tier 1 journals	18°	15°	15		48		
44) Number of new patents pending	2	2	4		8		

a. Beginning in FY25, the Applied Research & Development target metric will not include an estimate of NASA InSPA NRA awards flying under ISS National Lab allocation.

b. Data is from the previous fiscal year quarter. Whether a payload met research objectives often cannot be determined until it has been returned to the investigator and initial data has been reviewed.

c. Additional/new data available after previous quarterly report completion.

d. Numbers impacted due to budget reductions beginning in Q3.

e. Includes the 53 fully compliant ISS National Lab-evaluated Orbital Edge Accelerator concepts. (In total, 193 concepts were submitted to the Orbital Edge Accelerator.)

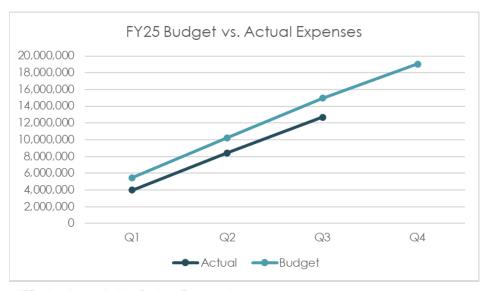
#### **FINANCIALS**

## Business Status Report (unaudited)

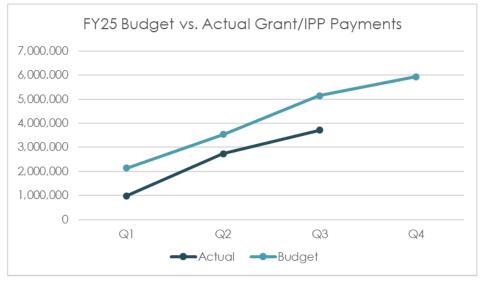
Expenses	Q3 Actuals	Q3 Budget	Variance	Actual YTD FY25	Budget YTD FY25	Variance YTD FY25
Direct Labor	\$2,072,218	\$2,451,045	(\$378,827)	\$6,309,356	\$7,280,373	(\$971,017) <sup>a</sup>
Subcontracts	\$362,083	\$187,831	\$174,252	\$865,723	\$681,783	\$183,940
Other Direct	\$690,273	\$285,532	\$404,741	\$1,291,245	\$1,205,109	\$86,136
Travel	\$97,046	\$124,057	(\$27,011)	\$255,934	\$360,831	(\$104,897)
Office Supplies and Equipment	\$89,104	\$94,076	(\$4,972)	\$265,912	\$290,812	(\$24,900)
Grants & Implementation Partner	\$979,232	\$1,615,956	(\$636,724)	\$3,712,817	\$5,149,541	(\$1,436,724) <sup>b</sup>
Total Expenses	\$4,289,956	\$4,758,497	(\$468,541)	\$12,700,987	\$14,968,449	(\$2,267,462)

a. Salaries and Benefits: At 6/30 50.5 FTE vs 53 budgeted.

b. Grants & Implementation Partner Payments: Recipient milestone payments shifted based on awardees' actual spend rates and their ability to successfully deliver milestones on schedule.







IPP = Implementation Partner Payments

## Breakout of ISS National Lab Grants Payments

	Q1FY25	Q2FY25	Q3FY25	Q4FY25	FY25 YTD Total
Academic	\$270,708	\$297,877	\$277,093		\$845,678
Commercial	\$715,465	\$1,444,534	\$702,139		\$2,862,138
Other Government Agency	-	\$5,000	-		\$5,000
Total	\$986,173	\$1,747,411	\$979,232		\$3,712,816

# Total Value of Grants Awarded (i.e., funds committed toward future projects)

	ACTUAL Q1	ACTUAL Q2	ACTUAL Q3	ACTUAL Q4	ACTUAL FY25
Total value of grants awarded <sup>a</sup>	\$487,798	\$340,693	\$0 <sup>b</sup>		\$828,491 <sup>b</sup>

a. Grants include awards to projects and programs as well as modifications and extensions. The ability to award new grants will be dependent on the availability of additional funding for the ISS National Lab.

# **Breakout of Cooperative Agreement Funding**

	Q1FY25	Q2FY25	Q3FY25	Q4FY25	FY25 YTD Total
Direct	56%	32%	48%	%	45%
Indirect	19%	29%	29%	%	26%
Grants	25%	39%	23%	%	29%

b. Numbers impacted due to budget reductions beginning in Q3.

#### **IN-ORBIT ACTIVITIES**

- <u>NASA's SpaceX CRS-32 mission</u> launched to the ISS, delivering 10 ISS National Lab-sponsored investigations
  despite manifest reprioritization. These investigations include a project to produce <u>nanomaterials to treat</u>
  <u>osteoarthritis</u>, research using a new <u>holographic microscope</u>, and three projects funded by the <u>U.S. National</u>
  <u>Science Foundation</u>.
- <u>The SpaceX CRS-32 return</u> via splashdown in the Pacific Ocean—the first West Coast return of a Dragon capsule since 2020—brought back several ISS National Lab-sponsored investigations, including a long-duration plant biology experiment from Rhodium Scientific and the U.S. Air Force Academy.
- <u>Axiom Space's fourth private astronaut mission</u> launched to the ISS carrying more than 20 ISS National Labsponsored investigations—including studies to <u>advance diabetes management</u> in space and test the ability to store and analyze data from <u>wearable biometrics technology</u>.
- The final investigation for the Materials Science Research Rack (MSRR) Material Science Laboratory (MSL) concluded, marking the end of the MSL's 15-year run supporting more than 6,000 hours of materials research on the ISS.
- The Fluid Integration Rack was decommissioned following the completion of a Case Western Reserve University study, marking the end of a 15-year legacy that supported more than 40 investigations with contributions from more than 50 astronauts.

#### **R&D PROGRESS AND SUCCESSES**

- In Q3, 15 new peer-reviewed journal articles were published, including three from top-tier journals (view a
  full list of publications related to ISS National Lab research at <a href="www.ISSNationalLab.org/publications/">www.ISSNationalLab.org/publications/</a>):
  - Aguilar M, Ambrosi G, Anderson H, et al. <u>Properties of cosmic lithium isotopes measured by the Alpha Magnetic Spectrometer</u>. *Phys Rev Lett*. 2025;134(20):201001.
    - This publication in the top-tier journal *Physical Review Letters* describes the first cosmic-ray flux measurement of 6Li and 7Li isotopes collected by the Alpha Magnetic Spectrometer on the ISS. The results showed that the isotopes are produced by collisions of heavier cosmic-ray nuclei with the interstellar medium rather than the primary theory of creation during the Big Bang.
  - Coblentz M, Evans JD, Kothe CI, et al. <u>Food fermentation in space: Opportunities and challenges.</u> *iScience*.
     2025;28(4):112189.
  - o Ignatius IB, Dinesh B, Dietze GF, Narayanan R. <u>Gravitational effects on Faraday instability in a viscoelastic liquid</u>. *J Fluid Mec*. 2025;1011:A28.
  - o Ignatius IB, Dinesh B, Dietze GF, Narayanan R. <u>Thwarting Marangoni instability in a viscoelastic liquid film via parametric forcing.</u> *Phys Rev Fluids*. 2025;10:04401.
  - o Kim DW, Bevan MA. <u>Energy landscapes for interfacial colloidal crystallization on three-dimensional surface topographies</u>. *J Colloid Interf Sci.* 2025;696:137882.
  - Lu S, Yin R, Shang C, Westerhoff P. <u>Efficient production of HO\* and 3DOM\* via far-UVC photolysis of dissolved organic matter in water.</u> Environ Sci Technol. 2025;59(26):13505-13515.
    - This publication in the top-tier journal Environmental Science & Technology discusses findings that could help improve water treatment methods that use UV light. When exposed to UV light, organic matter in water produces chemicals that help break down pollutants. The research team developed a new method to measure these chemicals and found that certain types of UV light increase the amount of chemicals produced.
  - Li W, Shaik M, Rau AV, et al. <u>Effect of pyrolysis atmosphere on the microstructure of polymer-derived SiOC monolithic ceramics.</u> *Ceram Int.* In press.
  - o Ozbakir Y, Jun Min H, Zheng Q, et al. <u>Atomically dispersed palladium supported on graphene oxide for</u> advanced electrochemical biosensing of dopamine. *Electrochim Acta*. 2025;532:146414.

- o Parafati M, Shenoy TS, Thwin Z, et al. <u>Tomatidine attenuates inflammatory responses to exercise-like</u> stimulation in donor-derived skeletal muscle myobundles. *Med Res Arch*. 2025;13(4):1-15.
- Parafati M, Thwin Z, Malany LK, et al. <u>Microgravity accelerates skeletal muscle degeneration: Functional and transcriptomic insights from an ISS muscle lab-on-chip model.</u> Stem Cell Rep. 2025;20(7):102550.
- o Rau AV, Lu K. <u>Self-etching Ti3C2Tx-SiOC ceramics: effects of MXene surface terminations on high-temperature ceramic nanocomposites</u>. *Adv Compos Hybrid Mater*. 2025;8:253.
- o Rau AV, Lu K. <u>Twice-functionalized montmorillonite nanosheets for polymer-derived MMT-SiOC nanocomposites</u>: Phase formation and porosity. *Small*. 2025;21:2408218.
  - This publication in the top-tier journal Small discusses the creation of a novel ceramic composite material reinforced with 2D montmorillonite (MMT) nanosheets. The composite material, which is porous and stable at high temperatures, has potential applications in areas like electrical systems, heat exchangers, energy storage, and nanodevices.
- Wallen D, Yan L, Dunlap C, et al. <u>Unsupervised machine learning framework for non-destructive acoustic emission sensing of flow condensation</u>. *Al Therm Fluid*. 2025;2-3:100010.
- Wiegand L, Arzt M, Mozneb M, et al. <u>Human induced pluripotent stem cells for advancing Regenerative medicine in space</u>. *Curr Stem Cell Rep.* 2025;11(3):1-8.
- o Zhao Z, Fu H, Ling L, Westerhoff P. <u>Advancing light-driven reactions with surface-modified optical fibers.</u> *Acc Chem Res.* 2025;58:1596-1606.
- Three patents related to ISS National Lab-sponsored research were filed in Q2:
  - Two were from projects awarded through an NSF/CASIS Transport Phenomena solicitation:
    - Researchers from the New Jersey Institute of Technology filed a patent on a method and apparatus
      to fabricate complex reflective structures called Bragg gratings that can be used in optical
      applications such as improving the performance of lasers.
    - A team at Rensselaer Polytechnic Institute filed a patent for software capable of processing more than 100,000 images at a time and extracting important data. The software can be used for many research applications, such as examining mixtures that aren't evenly mixed and determining how much of each part of the mixture is present.
  - o <u>Biotechnology startup MicroQuin</u> filed a patent for a new peptide therapeutic to treat cancer. This patent is related to an investigation awarded through the Technology in Space Prize.
  - Researchers at the Massachusetts Institute of Technology filed a patent for a <u>novel spacecraft material</u> with built-in sensors that can detect things like impacts, electrical charge, temperature changes, and radiation.
- One product related to an ISS National Lab-sponsored project was released in Q3:
  - Using a 4K camera mounted to the ISS, the company Sen offers a <u>livestream of Earth and space</u> on its website. The livestream is free with advertising, or users can purchase an ad-free subscription. Sen's SpaceTV-1 camera system is hosted on the <u>ArgUS plate</u> attached to Airbus' Bartolomeo platform on the ISS.

## **LEO ECONOMY**

#### Demand

- In Q3, one award was made for an unfunded partnership agreement with Vast Space.
- One solicitation opened in Q3: the inaugural <u>Orbital Edge Accelerator program</u> solicitation. CASIS partnered with TechConnect to deliver the program and received a robust response, with 193 concept summary submissions.
- For the following solicitations, notification letters were issued to all offerors stating that no awards would be made due to significant budget and allocation constraints:
  - NLRA 2025-5: Technology Advancement and Applied Research Leveraging the ISS National Lab

- o NLRA 2025-6: Leveraging the ISS National Lab for STEM Education and Workforce Development
- NLRA 2024-9: Igniting Innovation: Science in Space to Cure Diseases on Earth

#### Supply

- Aegis Aerospace was awarded a grant of up to \$10 million from the Texas Space Commission's SEARF program to develop an in-space manufacturing platform for advanced materials.
- Axiom announced that its chief revenue officer, Tejpaul Bhatia, will be the company's new CEO.
- BioServe Space Technologies, based at the University of Colorado Boulder, supported its 100th space mission as part of SpaceX CRS-32, marking more than three decades of enabling ISS-based research.
- Redwire Chief Scientist Kenneth Savin was named to TIME's 2025 Health 100 list for his leadership in pharmaceutical innovation and space biotech research to improve health on Earth. Redwire also added a new leadership role to head up global expansion and appointed Mike Gold as president of civil and international space business.
- Sierra Space was awarded a \$3.6 million contract from NASA to examine how its commercial space station inflatable habitat technology could be reconfigured for use in future bases on the Moon. The company also announced the formal launch of the Sierra Space Defense division, which will focus on national security.
- Sierra Space and Tec-Masters are partnering with Honda to test a renewable energy system on the ISS designed to use solar energy and water to provide continuous power and breathable oxygen in space.
- Vast, which is working to complete production of the primary structure for its Haven-1 space station, signed an agreement with CASIS to become an ISS National Lab Commercial Service Provider.
- Voyager Technologies went public in June, raising \$382.8 million and reaching a peak valuation of \$3.8 billion. The company also announced plans to acquire LEOcloud, a space-based cloud computing startup. LEOcloud is preparing to install and test its Space Edge micro datacenter on the space station as part of an ISS National Lab-sponsored investigation.

#### Investment

- In Q3, there was modest continued funding activity in the ISS National Lab's startup ecosystem in an environment where the U.S. non-AI venture capital deal count declined from the prior quarters, but defense tech investment interest remained strong. However, planned budgetary cutbacks for NASA remained a significant headwind for the sentiment in our ecosystem.
- Based on publicly available data, a total of \$28.5 million in private capital and grant funding was raised during
  the quarter by startups that completed a flight project with the ISS National Lab. To date, more than \$2.4
  billion of such funding has been raised by startups following their ISS National Lab flight projects.
  - o Funding activity included capital raises or grant awards for EnduroSat, Eascra Biotech, iXpressGenes, and others.
- The ISS National Lab investor network includes more than 320 participants across financial and corporate investment organizations. Continued engagement with this community will depend heavily on available funding and access to ISS flight resources to support early-stage companies planning R&D on the space station.
- The ISS National Lab launched the <u>Orbital Edge Accelerator program</u>, which includes \$3 million in private investment (being provided by global investors and co-founders of the accelerator Cook Inlet Region, Inc. (CIRI), E2MC, and Stellar Ventures) to be allocated across six selected startups. Each startup will receive up to \$500,000 in funding along with mentorship and the opportunity to propose ISS-sponsored flight projects. TechConnect is serving as an operating partner for the accelerator.
- The ISS National Lab saw an exceptionally robust response to its recently launched Orbital Edge Accelerator program. This highlights the growing interest in leveraging space station capabilities in combination with

- access to private capital to deliver groundbreaking research and technology advancements in LEO to unlock new space business opportunities.
- As a part of the launch of the Orbital Edge Accelerator program, the ISS National Lab, alongside with its accelerator partners, held networking events in Boston and San Francisco to engage the startup community around LEO research and commercialization opportunities.

#### STEM EDUCATION AND WORKFORCE DEVELOPMENT

- Space Tango donated 50 do-it-yourself STEM education kits to the Living Arts and Science Center in Lexington, Kentucky. Designed to inspire curiosity and STEM learning, the kits—available to visitors free of charge—include three engaging science and engineering activities.
- ISS National Lab STEM representatives participated in the 2025 Space Symposium in Colorado Springs and presented at the Teacher Liaison Workshop, highlighting ISS National Lab education programs and resources for educators.
- The ISS National Lab participated in the 2025 Spaceport Area Conference for Educators (SPACE), sponsoring four teachers and exhibiting ISS National Lab education resources.
- The STEM Education team hosted a virtual semi-annual meeting of ISS National Lab education partners, with 22 participants attending for updates on current initiatives.
- A \$200 memorial gift from Michael Hebb funded an ISS Above STEM kit for South Shore Elementary in honor of William Creighton, supporting real-time ISS tracking and STEM engagement for students.

#### **OUTREACH AND STAKEHOLDER ENGAGEMENT**

- The podcast <u>Between a Rocket and a Hard Space</u> continued to release episodes this quarter, including interviews with CNN's Jackie Wattles on the business of space and stem cell researcher Arun Sharma, who has sent multiple cardiac stem cell experiments to the ISS over the past decade. Additional episodes were recorded and are planned for release in Q4.
- A new content segment, *Space News Updates*, was launched to spotlight key partner announcements through dedicated stories on the ISS National Lab website.
- ISS National Lab media coverage during Q3 includes:
  - The Verge highlighted ISS National Lab-sponsored experiments using space-grown crystals to support the development of more effective pharmaceuticals.
  - Space.com covered ISS testing of a novel 3D microscope designed to explore how life adapts to extreme environments.
  - Space News covered ISS National Lab-sponsored experiments launching on SpaceX CRS-32.
  - Space Daily highlighted a new agreement with Vast to expand research and technology development opportunities on the ISS through the ISS National Lab.
  - An ISS National Lab science team member was featured on <u>The Ex Terra Podcast</u> discussing ISS research.
- The ISS National Lab partnered with NASA at the Meltwater Summit, where astronaut Jonny Kim shared insights into life in space and communication in extreme environments. The ISS National Lab also led a panel with users like NVIDIA and longtime partners such as Cobra Puma Golf to highlight the value and excitement of space-based R&D.
- The ISS National Lab held a media webinar highlighting investigations launching on SpaceX CRS-32.
- ISS National Lab staff participated in numerous speaking engagements and organized events to advance space-related research and collaboration:
  - The ISS National Lab's deputy chief scientist led a symposium with the Air Force Office of Scientific Research to expand collaborative research opportunities. The symposium featured talks by the ISS

- National Lab science team on biological and physical sciences research onboard the ISS and future commercial platforms.
- ISS National Lab science team members co-chaired the 2025 SelectBIO Space Summit, featuring presentations on funding opportunities and advancements in space biotech.
- Other notable engagements included panel discussions at the Space Symposium, the MassChallenge Awards Ceremony (where recipients of the 2024 Technology in Space Prize were announced), and lectures at Penn State University.
- Additional presentations and panels by ISS National Lab team members were held at key industry and academic events, including the Polaris Dawn Research Day; HEALinc Summit; NSF Directorate for Technology, Innovation and Partnerships (TIP) meeting; Aerospace Medical Association Annual Meeting; AURP Annual Meeting; and the In-Orbit Servicing, Assembly, and Manufacturing (ISAM) Conference (virtual participation).
- o ISS National Lab science team members delivered multiple presentations on regenerative medicine, semiconductor R&D, advanced manufacturing, and materials science at institutions such as the Wake Forest Institute for Regenerative Medicine, Emory University, the University of Central Florida, and the Defense Advanced Research Projects Agency (DARPA).

# Full Project Pipeline Details

Visit our <u>project pipeline database</u> for a complete list of ISS National Lab-sponsored projects, including flight status.