



FORGE

FROM PROTOTYPE TO IMPACT

FORGE Success Story: Biobot Analytics



FORGE
BIOBOT ANALYTICS

Using data in new ways to solve our community health crisis

BIOBOT

FORGE IMPACT: SCALING UP
Facing barriers to scale, Biobot convinced FORGE.

Was tackling the latest crisis, and today, they are piloting efforts to help identify and stem the tide of the COVID-19 surge. They're collecting and analyzing biological data from sensors to provide real-time, crucial information about how the virus is spreading and to assess the scope of an outbreak in specific areas, making resource allocation and response more effective.

18. The Biobot team tested over 30 prototypes of their sewage sampling device. Their device must integrate with wastewater treatment plant infrastructure, and during a pilot in partnership with a North Carolina municipality, Biobot needed help convincing their device to enter the market, beginning with a... Biobot needed help convincing their device for manufacturing at scale.

Wastewater can provide valuable information about the health of communities when collected and analyzed. Unlike Biobot, this powerful database has been largely ignored by companies and municipalities alike. The current COVID-19 pandemic is an example of how overwhelmed health systems only have the most severely affected, and fail to contain the issue until the scope of the problem is not contained and it is too late. Biobot is changing that, developing cutting-edge technology to transform sewers into public health observatories and help our partners proactively make decisions for the health and well-being of our communities before it gets to that point.

WasteWater: Effective SARS-CoV-2 Virus Concentration (copies / mL of sewage)

19. We're able to advise Biobot's chapters, and right to the top between Biobot and our prevention and health surveillance efforts, it's design. After the initial testing with Biobot being on operations.

20. We, FORGE helped a very successful work with Biobot centers to test their high-powered technology to stem the tide. As they're successful in so many ways.

IMPACT BY THE NUMBERS

- 40% Reduction in avoidable deaths
- 50 Gamma prototypes in production
- 7 Communities with Biobot pilots

INNOVATION IN AN UNREALIZED SECTOR

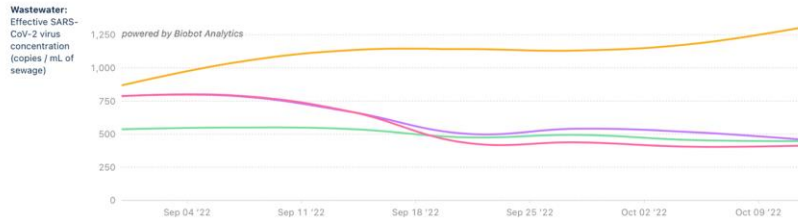
Tackling wellness through wastewater epidemiology

With an ever-growing population, worsening climate change, and emerging public health threats, innovation in the human health and well-being sector is increasingly needed. Biobot Analytics, a startup born out of MIT, is working to transform how we collect and use data from an unexplored part of the public health landscape: wastewater (that's right, sewage).

Engineering through FORGE's connection has been a game-changer. I would recommend that any startup in need of hardware, software, and support that FORGE offers."

FORGE Innovation Headquarters @ 444 Somerville Ave., Somerville, MA 02143

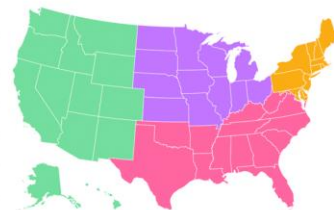
email: Laura Teicher at laura@forgemass.org



Omicron Variant Overview

Sequencing for variants takes longer than detecting SARS-CoV-2 so the data shown in the variant overview reflects samples from the week of September 28, 2022.

Region	BA.2*	BA.4**	BA.5	Other
Nationwide	4.3%	5.3%	88.9%	1.4%
Midwest	7.2%	5.8%	85.2%	1.9%
Northeast	2.7%	8.5%	87.3%	1.5%
South	5.4%	4.3%	88.9%	1.4%
West	3.6%	1.3%	94.3%	0.8%



"FORGE's connections have been transformative to our work. I would recommend that any startup in need of hardware, look for and leverage the type of support that FORGE offers."

- Mariana Matus, CEO and Co-founder, **BIOBOT**

FORGE Mission

We are a 501c(3) nonprofit on a mission to help innovators navigate the journey from physical prototype to commercialization and impact at scale.

FORGE Impact to Date

540+

Innovators
Supported

>90%

Startup Survival Rate

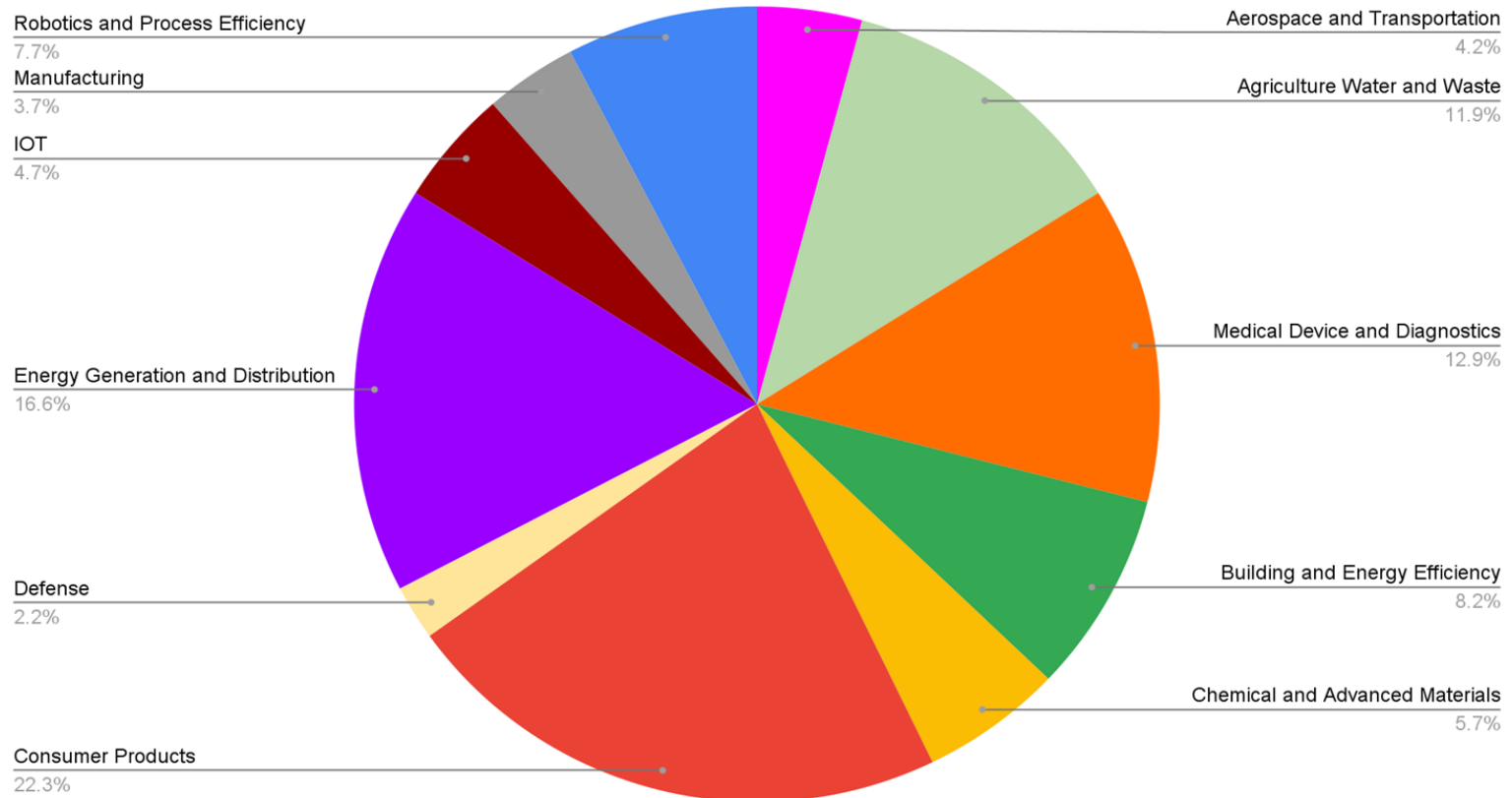
40%

Minority
Led

\$34M

Known Contracts and POs
to make innovative products
locally

FORGE Innovation Sector Mix To Date







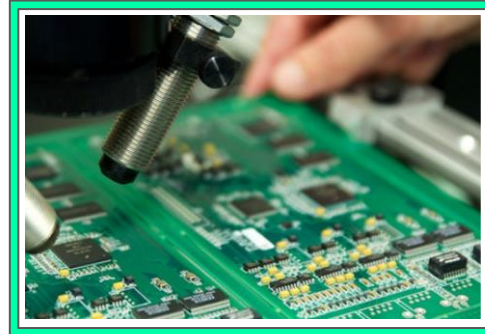
Educational programming and manufacturing readiness offerings include:

- Weekly Product Development Sessions (PDS)
- Factory Tours
- Educational & Training Events
- Annual Manufacturing & Innovation Showcase
- Supplier & Investor Office Hours
- Access to Grant Opportunities



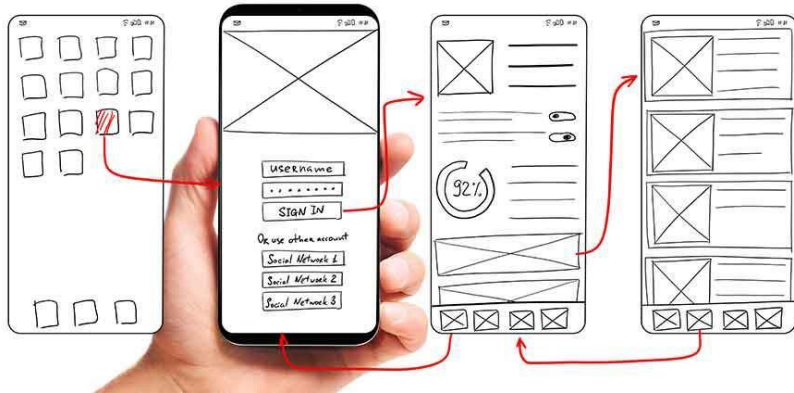
FORGE provides curated connections to regional, innovation-friendly contract manufacturers and suppliers, with capabilities such as:

- Plastics & Additive Manufacturing
- Machining & Forming
- Electromechanics
- Sheet Metal Fabrication
- National/ International Testing & Certification
- Engineering & Design
- Assembly, Logistics, & Packaging



Our Professional Network

- Product design firms
- Design for manufacturing
- User interface (UI) and usability experts
- Computer aided design (CAD)
- IP protection resources
- Third party logistics



Engineered Consumer Products on the cutting edge of IoT technology



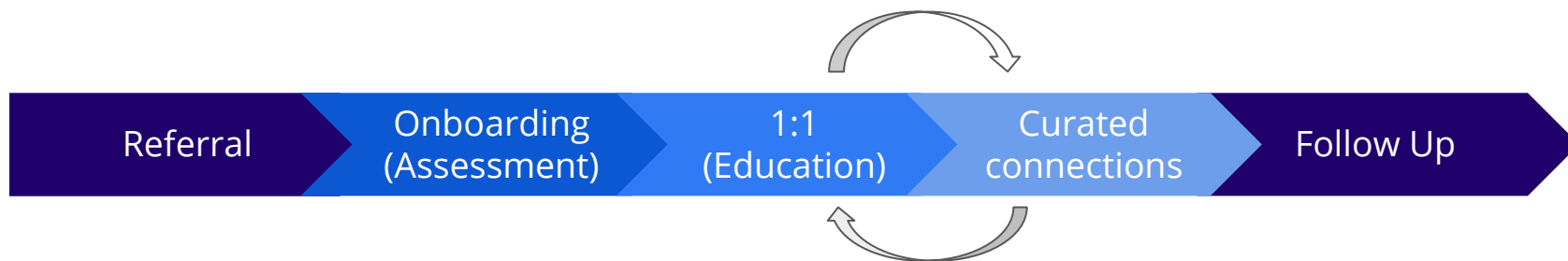
Engineered Medical Devices exceeding FDA and 60601 expectations



Bayard Design provides Product Design and Mechanical Engineering services to our clients.



Pathway for Startups at FORGE



75% of startups return to FORGE for future support



If you can invent it locally, you should be empowered to make it locally.

Proof: 75% of startups return to FORGE for future support



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