

RESOLUTION AUTHORIZING SUPPORT FOR CENTER OF GRAVITY PROGRAM

WHEREAS, the Tech Valley Center of Gravity (COG) provides nascent entrepreneurs with opportunities for activities associated with the utilization of advanced manufacturing equipment and technology commercialization practices, and

WHEREAS, the equipment and assistance provided by the COG allows local, innovative startup businesses to begin initial production runs within the COG Prototyping Center, and

WHEREAS, short-run manufacturing needs of local entrepreneurs is a significant part of the COG mission, and successful outcomes can result in job creation in the community, and

WHEREAS, ongoing education and training outreach initiatives of the COG encourage local students to become engaged in COG sponsored activities – including gaining hands-on experience with leading edge manufacturing equipment; and, developing experiential programs for technology commercialization, and

WHEREAS, the Rensselaer County Industrial Development Agency (the Agency) is desirous of encouraging and supporting the workforce training and job creating programs of the COG, and

WHEREAS, the COG has indicated a need for specialized equipment as described in the attached request, to support the development of current and future manufacturing enterprises in Rensselaer County, now, therefore, be it

RESOLVED, that the Agency does hereby agree to support the industrial development and employment growth efforts of the COG by providing an amount not to exceed Fifty-five Thousand Dollars to be used toward procurement of a mechanical tensile tester and a BIO X 3D Printer for use by members of the COG, and the Executive Director is authorized to enter into an agreement with the COG with respect to the receipt and use of those funds by the COG.

Resolution ADOPTED by the following vote:

Ayes: 4

Nays: 0

Abstain: 0

April 8, 2021

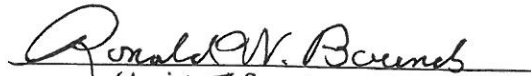
STATE OF NEW YORK)
) SS.:
COUNTY OF RENSSELAER)

I, the undersigned (Assistant) Secretary of Rensselaer County Industrial Development Agency (the "Agency"), DO HEREBY CERTIFY that I have compared the foregoing annexed extract of the minutes of the meeting of the members of the Agency, including the Resolution contained therein, held on April 8, 2021 with the original thereof on file in my office, and that the same is a true and correct copy of said original and of such Resolution contained therein and of the whole of said original so far as the same relates to the subject matters therein referred to.

I FURTHER CERTIFY that (A) all members of the Agency had due notice of said meeting; (B) said meeting was in all respects duly held; (C) pursuant to Article 7 of the Public Officers Law (the "Open Meetings Law"), said meeting was open to the general public, and due notice of the time and place of said meeting was duly given in accordance with such Open Meetings Law; and (D) there was a quorum of the members of the Agency present throughout said meeting.

I FURTHER CERTIFY that, as of the date hereof, the attached Resolution is in full force and effect and has not been amended, repealed or rescinded.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Agency this 8th day of April, 2021.



(Assistant) Secretary

(SEAL)



April 2, 2021

Mr. Robert Pasinella
Executive Director
Rensselaer County Industrial Development Agency
1600 7th Avenue
Troy, New York 12180

Dear Robert,

I am writing with a request to the Rensselaer County Industrial Development Agency to support capital equipment purchases for the Tech Valley Center of Gravity which would support the growth and expansion of Uncaged Innovations, a biotech company reimagining leather by using 3D bio-printing to create replicas of exotic leather for the fashion industry.

Our request of \$54,449 would allow us to procure a mechanical tensile tester and a BIO X 3D printer to support the business members of Tech Valley Center of Gravity and would be immediately utilized by Uncaged. The tensile tester will be used to test material samples for durability to identify feedstocks that have similar tensile properties as leather. They are currently doing testing by hand which is less accurate and time consuming; other companies in our space have lost valuable development time due to our lack of this specialized equipment. The addition of the tensile tester in-house at TVCOG will enable our product development businesses to obtain and chart specific data points that will speed up and improve prototyping development.

The procurement of the bioprinter is crucial to Uncaged developing prototype samples which will be presented to potential brand partners who have already expressed interest in their innovation including Gucci, Chanel, Hermes and Stella McCartney. The development of a prototype is also the next major milestone to securing their second round of venture capital funding (estimated at \$3 to 5 million). Uncaged has recently hired three staff, and anticipate their Seed raise to support the hiring of 8-10 additional people before the end of 2022 and expansion of their facility in Troy.

The 3D printer requested in this grant will be used not only to develop their prototype, but also to begin developing their manufacturing process for their pilot facility. Uncaged has also agreed to let other incubator clients use the equipment, and to run a workshop for TVCOG members on bioprinting.

About Uncaged Innovations

Uncaged Innovations was formed after an unlikely encounter between an RPI professor specializing in 3D printing of human skin grafts and a social entrepreneur from the plant-based meat industry. In response to tremendous pressure in the fashion industry to lower its environmental impact, Uncaged Innovations is reimagining leather by using biotechnology to create replicas of exotic leather. Leather is one of the most environmentally damaging materials, but alternatives are either underperforming, too expensive, or made of plastic. Over 70 percent of a brand's environmental footprint comes from the raw

MECHANICAL TENSILE TESTER

Purpose: As part of their prototype development, Uncaged needs to test material samples for durability to identify feedstocks that have similar tensile properties as leather. Currently, they are doing testing by hand. Having this piece of equipment inhouse will enable them to obtain and chart specific data points that will speed up and improve prototype development. This equipment would serve similar purposes for other members at Tech Valley Center of Gravity.

Equipment Details: The system is capable of tension, compression, and bending testing at forces up to 200N. A wide range of grips and fixtures are available to accommodate different specimens and testing modes.

<https://www.celsscale.com/products/univert/>

Purchase Cost: \$12,200



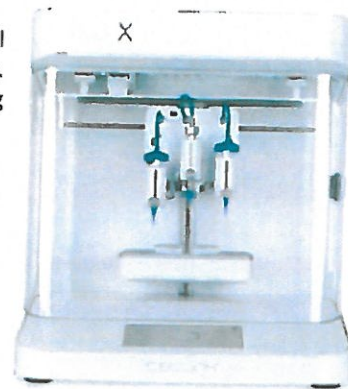
3D BIO-PRINTER

Purpose: Uncaged's current prototype development work is through manual processing and layering of formulations which is less accurate and time consuming. The purchase of a 3D bioprinter will assist them in developing prototypes by allowing precise layer-by-layer construction.

Equipment Details: The BIO X's compatibility with virtually any material makes it the bioprinter of choice for industry leaders at the forefront of today's biggest scientific breakthroughs. Whether you are automating 3D cell cultures, developing complex tissue constructs or testing new drug compounds, the BIO X has the advanced functionality and versatility to streamline workflows in a wide range of application areas.

<https://www.celsscale.com/bioprinting/bio-x-3d-bioprinter/>

Purchase Cost: \$42,249



materials they source. Because of this, global brands are aggressively looking for more sustainable materials. Providing a true replica of these high-quality hides is an opportunity to redefine leather in luxury fashion while removing risks in the supply chain and making it more humane and sustainable. Uncaged isn't just creating an alternative; Uncaged is printing exotic skins.

Transformational Technology

Over 2.5 million crocodiles, alligators, pythons and other exotic animals are slaughtered annually for the fashion industry, and an estimated 1 billion additional animals are used as food in the raising of these carnivores. The exotic skins industry is plagued with issues including environmental damage through toxic tanning chemicals, significant waste, illegal smuggling, human rights violations, animal welfare, and potential viral outbreaks from wild animal confinement. Public awareness of the issues surrounding animal material production has put significant pressure on the fashion industry. Well-known fashion brands have banned exotic skins entirely from their product lines. The fashion industry is aggressively looking for sustainable solutions to address the issues they are facing.

For the past year I have observed the work of Uncaged as they have secured potential partners, attracted talented staff from outside of New York State, and closed a round of pre-seed funding for \$650,000 from sources outside of the Capital Region; their cutting-edge work is unlike any in our region and is assured to be a feather in the cap of the programs that support their success. However, this important work cannot move forward without assistance.

Thank you for your consideration. We look forward to answering any questions or appearing at your next meeting to explain our proposal with any additional details you request.

Best Regards,



Cheryl Kennedy
Executive Director, Tech Valley Center of Gravity