

Lonza opens collaborative innovation centre in Israel

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New centre will be a hub to identify and accelerate fresh solutions to rethink drug development and manufacturing.

Lonza Pharma & Biotech officially opens its Collaborative Innovation centre (CIC) in the Haifa Life Science Park, Israel. The CIC acts as a hub for partnerships to identify and accelerate new solutions for biopharma manufacturing.

The 1,000 mt sq (10,764 ft sq) facility, including lab space equipped with cutting-edge bioprocessing and analytical equipment, is being made available to collaborating partners as a test bed for new ideas and technology. In addition to infrastructure, Lonza will make funding and in-house expertise available for collaborative research into strategic areas of application relevant to a variety of biopharma development needs.

"Israel has established itself as a point of convergence for digital technologies, engineering and life sciences, providing new solutions for healthcare in particular," said Marc Funk, COO Lonza Pharma & Biotech. "We want to expand this potential to reimagine the development and manufacturing of future medicines by working with academic institutions, teaching hospitals and startups."

The CIC is open to ideas that might benefit Lonza customers and has already signed up with leading institutions in Israel on research projects in three key focus areas:

- Expression systems and synthetic biology to enable efficient scale up of the increasingly complex protein-based constructs currently in early stage pipelines. Lonza is expanding on its successful GS System® to develop a novel toolbox of solutions for hard-to-express proteins and new molecular formats.
- Increasing numbers of cell and gene therapies are advancing towards commercialization but manufacturing technology remains relatively immature. Lonza hopes to combine its in house knowledge and technology with local expertise and proximity to teaching hospitals and academic institutions, driving reliable and repeatable processes and enabling more patients to access these therapies.
- Data acquisition and analytics are essential to driving efficiency and consistency in manufacturing processes. Lonza's CIC will tap into the wealth of expertise in sensor technology and big data handling to develop better in-line testing and

predictive analytics to optimize and control bioprocesses.

Several projects are currently underway including with the centre for Regenerative Medicine, Stem Cell and Tissue Engineering at the Chaim Sheba Medical centre, a leader in the field of CAR-T therapies. Lonza and Sheba will be working together to evaluate and test the Cocoon™ manufacturing technology, a patient-scale, closed and automated cell-therapy manufacturing system.

"Advanced autologous cell therapies are growing to become a major part of future medicine. High-quality manufacturing at point-of-care, is a key challenge in making these applicable," said Dr. Elad Jacoby, Sheba Medical centre.

"We have treated more than 60 children and young adults with leukemia and lymphoma with CAR-T cells, which makes Sheba Medical centre the ideal place to help drive new technologies that could extend treatment to even more young people," he added. "The collaboration with Lonza will enable us to develop a growing platform for production of CAR-T and other cell therapies."

The CIC sits at the interface of Lonza's extensive R&D network, with eight sites globally, and the Israeli innovation community. It will be run by Dr Frida Grynspan- Gotlieb, who brings her extensive R&D experience in the Israeli biotech and life sciences sectors.