



LSI'S

CORONAVIRUS JOURNEY



THE UNIVERSITY OF BRITISH COLUMBIA
Life Sciences Institute

SAVING GRACES OF CURTAILMENT

LSI's Wing Managers

When LSI closed its doors March 24 due to the pandemic, implementing plans and provisions for urgent COVID-19 research – as well as the safety and continuity of research programs on temporary hiatus – fell to a small group of people whose excellence is felt by all, but largely unseen.

Interviews with five of LSI's wing managers about the curtailment and its impacts revolved around a two common themes: technology, particularly freezers, failed at a surprising rate; and for staff who are accustomed to walking through the quiet facility doing weekend checks, it was both lonely and eerie in a half-million square foot building, with only a handful of people present.

“It was certainly eerie patrolling the LSC during curtailment,” says **Scott Meixner**, manager of the 4W sector in the LSI. “Usually there was only one or two other people in the entire building as I walked through. Most lights were off, and the ventilation system was quietly running on holiday mode, leading to a buildup of chemical odour in some labs. Strangest of all, I was wearing gloves...in the hallways. I found I was talking to myself a lot for some company, and to break up the silence.”

Travis Webber, manager of 5W and 5C, says he noticed the white noise of the labs “in a way I haven't since iPods were invented, because I was listening for alarms, and couldn't wear headphones.”

Alarms turned out to be plentiful. “During a three-month span, we probably lost between six to eight ultralow freezers,” says **John Nomellini**, manager of 1E, 2C, 2E & 3E, also known as Nomo. “It was a constant battle, making sure people knew about it, moving things. We also lost three -20s and one refrigerator just for flammables.”

“I think all of us were gobsmacked by how many of the -80Cs or -20Cs actually died, or had significant moments of distress during the shutdown,” adds **Sarah Baldry**, manager of 5E.

The -80C freezers on each floor hold cell lysates, tissue samples, plasmid stocks and many more expensive reagents, samples and solutions. When one broke

down, all hands available were needed to relocate the contents from a broken freezer to a backup. “We ran into issues, because we didn’t have enough backup freezers available at the time,” says **Bharat Joshi**, manager of 3W and 3C.

Filling up liquid nitrogen storage tanks was also critical for preserving cell lines and live samples. “It’s really dangerous,” remarks Nomo. You hook up a big hose, liquid nitrogen is shooting out, and you’re wearing a face shield and gloves. It’s done every two-to-three weeks for people that have them. There was no one in my department coming in to do that for five or six weeks.”

Communication was crucial

The wing manager team, led by **Ivona Kozieradzki**, director of LSI’s research facility, was in constant contact via email, as well as via on-the-fly notes left on a clipboard used in inspections. “Everyone did a great job cataloging each alarm, clicking sounds in the ceiling, water drips and suspicious smells,” according to Meixner.

“We mostly communicated by email, and we had a lot of Zoom meetings to keep everyone engaged,” adds Nomo. “We decided for wing managers to only go through the whole building Monday, Wednesday and Friday on a rotating schedule.”

“They did a wonderful job,” agrees Kozieradzki. “The wing managers worked together to save many labs.”

Lessons Learned

Maintaining space within -80C backup freezers was on everyone’s list of curtailment lessons learned among the wing managers interviewed. More comprehensive maintenance of this crucial equipment and identifying a point person for each backup ultralow will be important going forward. Tracking what goes into freezers and when, and who it belongs to, as well as what should be done with materials will also be significant, observes Nomo. “We’re keeping it all running, making sure we maintain the proper conditions, so that when we do go back, we make sure it all happened as it should. We had a great team, we all had the same attitude and mentality.”

Other insights included fresh knowledge of the many nooks and crannies in the building where equipment is tucked away. “Having poked my head into every room in the LSC, I now know where all the equipment lives for future collaboration requests,” says Meixner.

“The LSI is really an interesting place, when you wander outside of your own wing,” concludes Baldry. “I really loved Travis’ fish tank. That was my favourite thing to visit in 5W.”