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### **Building a Cryogen Efficient Low Temperature Lab**

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Over the past few years we have built a new low temperature laboratory at the University of Alberta to study quantum optomechanics and superfluids in confined geometries. With liquid helium at \$11/liter in Alberta, helium consumption was a top concern, but so was vibration for optomechanics experiments and magnet stability for ultra-low temperature experiments. I will describe the wet system we have constructed, along with our automated helium recovery and delivery system. Currently our system runs, fully loaded with a sensitive optomechanics experiment at 9 mK, with a waste of one liquid liter equivalent per day of operation - with room for improvement. This may provide a model for both new laboratories and upgrades to existing wet systems.