

November 14, 2018

To: UAF Vice Chancellors
From: Daniel M. White, Chancellor
Subject: Fab Labs: New and Existing



President Johnsen has requested \$2M in strategic funding in the UA FY20 budget for fabrication laboratory (fab lab) space and equipment. The request is based on the thinking that a university system can assemble a network, or architecture, of fabrication laboratories that together are greater than the sum of the parts. In his book Designing Reality (ISBN:978-0-465-09347-2), Neil Gershenfeld describes a fabrication revolution that leads to our ability to fabricate at the atomic level. Unfortunately the machines that can fabricate molecules from atoms do not exist. Gershenfeld's vision is that it takes a suite of connected fab labs at all levels of technology to be able to fabricate the machines that will assemble atomic structure.

As we think about our various machine shops, 3-D printing labs, and maker spaces across UAF's campuses from Dillingham to CTC to the Troth Yeddha campus, we are being challenged to think about how these spaces build on each other, and on similar facilities across the UA system and beyond to make advances in areas where we can make a difference. In order to get a jump on this thinking, I am hoping to better understand the current assemblage of fab lab space across UAF campuses and put together a task force to propose a path forward. To this end, I am requesting ideas for improving existing space/equipment or ideas for creation of new fab lab space should we receive President Johnsen's proposed legislative funding.

Please distribute this memo widely and request that units or individuals email UAF Executive Officer Nickole Conley at nlconley@alaska.edu with descriptions of current fab lab space, ideas for new facilities or equipment, and nominees for the task force. Submissions are kindly requested by COB on December 5, 2018.

**New space ideas or renovation request should be limited to 1 to 2 paragraphs per idea and should include the opportunities it would create.

DMW:jdp

cc: Nickole Conley, Executive Officer