February 2, 2021

Dearest makers,

The renovation is now behind us, and I love seeing all the new spaces and new (albeit mask-covered) faces. Have you seen just how much stained glass is in our repository? I had no idea when it was stashed in a cabinet behind greenway’s tables. I also didn’t know how many makers come in on their own to quietly work on stained glass and jewelry projects. The blacksmiths have probably always been doing two-color resin-
stabilization to produce knife handles resembling the galaxy, but nobody knew about it before we had dedicated benches for composite work in the back of the Studio. The managers of Northern Virginia probably shouldn’t come by mid-afternoon, because the lathes and saws of the woodshop regularly spin up about that time. An exciting new group of George Washington University students used our tools to build a plane (read the Design. Build. Fly. article below), our rookie FIRST Robotics Challenge team is busy building a big robot, and we even signed a new startup, Spydar, to the Innovation Center.

At Nova Labs, as we begin the month of February and a period of reflection on the history of Black leaders, scientists, and inventors, we should take note not just of historic names like George Washington Carver and Elijah McCoy, we should also look within our own community and our many talented makers of color.

We have an imperative to create an environment where everyone feels safe, included, and supported in their individual makerquest. Nova Labs has always been a place where you can begin or extend your skill sets. We still have to mask up and stay calm, and distancing won’t go out of fashion this spring. There is a small group of members coming every Friday for making. Reservations are still required, and I will be launching a Zoom session for Fireside Chats every Friday from 7:00-9:00pm again. We’d love to see you all, in person or online.

Joyously,

Karen Shumway
Executive Director | Nova Labs, Inc
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Board Updates

by Patrick Marstall and Kathryn Schiller

Read Updates
February Articles

Design. Build. Fly
by George Washington University's Design, Build, Fly team

Read Article
A belated Secret Santa gift for a Texans fan
by Scott Smith

Some mistakes in the 3D print (I sanded too hard) were filled with white epoxy with some pearlescent mica

Read Article

Show Us What You Got
M31, The Andromeda Galaxy taken by Daniel Vrolijk

M31, our closest neighboring Galaxy, is a very large and well known target in the constellation Andromeda. Andromeda is very close to us at 2.5 million light years and it's so large and bright that in the right conditions and in places with little light pollution you can see it with the naked eye. I have taken a photo here with my Canon t3i at prime focus with my Explore Scientific 102mm FCD100 refractor mounted on my Losmandy G11 Equatorial mount. I took about 10 photos 80 seconds long each. I was using a process called autoguiding which does small corrections to keep the object in the field of view. This in turn makes your stars very sharp over the 80 second exposure. Without auto guiding and tracking you would be limited to 30 seconds of exposure depending on the mount. After the photos were all taken I headed home and then started processing. I stacked, aligned, and background calibrated all the photos using a program called Astro Pixel Processor. The whole process to start to finish took 3 or 4 days from data acquisition to processed photo. This was my first ever photo and I am pretty proud of it. Tell me what you think. If you have any more questions let me know via slack or email. More photos to come as the weather gets warmer.
Mountain range I made out of walnut, cherry and maple! Finished with shellac and some paste wax.

Maker: Nicholas Davis
My first attempt at a stained glass 3D box-like object with a hinge door.
Maker: Gwen Bausmith
I had awesome supervision and help from Chris Sexton while I made this little awl as my first wood lathe project. Wood: Padauk.

Maker: Gari Jimenez-Lugo
One of the strengths of Nova Labs is that it is a family space. Our youth policy is simple and straightforward, and clearly outlines what tools minors can use and the training and supervision they need to make safely.

If you are ever in question, details are on the Wiki! Nova Labs Minor Policy

Safety Team Lead Gari Jimenez-Lugo reminds everyone that while it is fun to give the Reston Fire Department and HazMat team the full tour of Nova Labs, we really do need everyone to remember their Laser Cutting 101 training when choosing what materials to put in Mongo and Rabbit.

Contact support@nova-labs.org to report any of the following:

- Incident reports (e.g., safety, accident, or code of conduct incidents), add time, date, witnesses, relevant details
- Equipment malfunction/breakage (add photos)
- Supplies needed (add size, color, Amazon link if possible)