Virtual Town Hall - 3D Printed Swabs

US Food and Drug Administration

National Institutes of Health

Department of Veterans Affairs

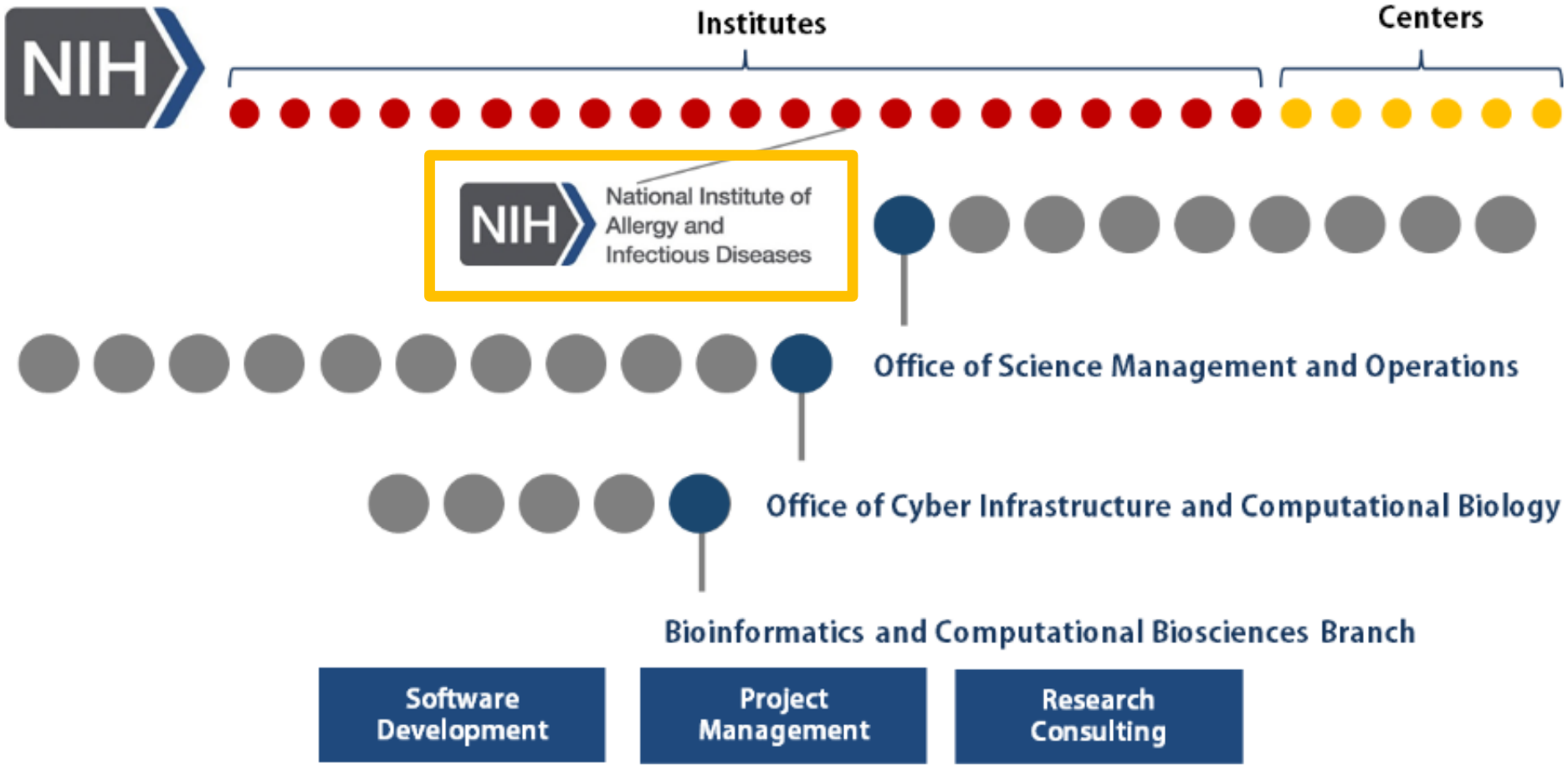
May 15, 2020

COVID-19 Supply Chain Response Partnership

FDA Virtual Town Hall:
May 15, 2020

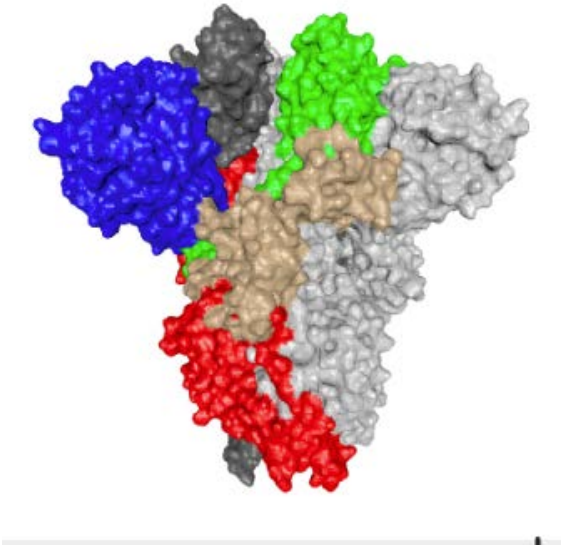
Phil Cruz, Ph.D.
Computational and Structural Biologist
NIH 3D Print Exchange

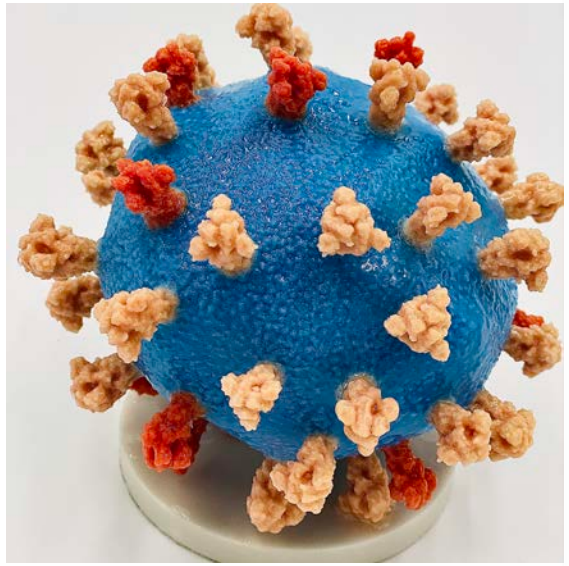
Bioinformatics and Computational Biosciences Branch
Office of Cyber Infrastructure and Computational Biology
Office of Science Management and Operations, Office of the Director
National Institute of Allergy and Infectious Diseases
National Institutes of Health, Bethesda, Maryland

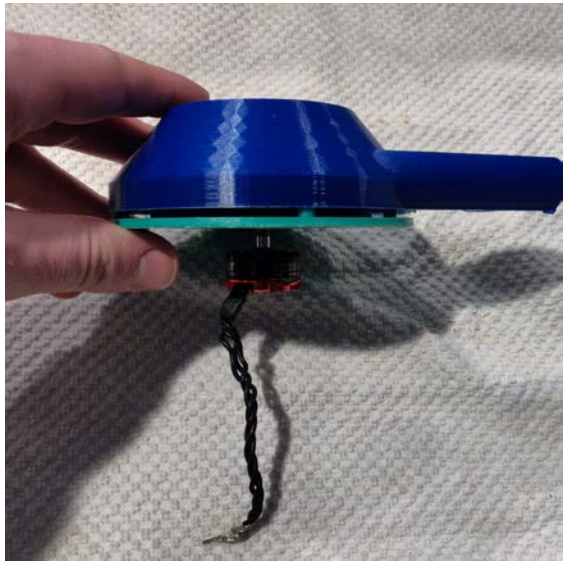

NIH
Institutes
Centers
NIH
National Institute of Allergy and Infectious Diseases
Office of Science Management and Operations
Office of Cyber Infrastructure and Computational Biology
Bioinformatics and Computational Biosciences Branch
Software Development
Project Management
Research Consulting

NIH 3D PRINT EXCHANGE

https://3Dprint.nih.gov







https://3dprint.nih.gov/niaid/sars-cov-2

SARS-CoV-2 virion modeled on cryoelectron microscopy data. A. Athman, K. Browne, and P. Cruz (NIH/NIAID) 3DPX-013323
Visible Human Male Skull. K. Browne (NIH/NIAID) 3DPX-012260
Centrifugal Compressor by user sjwentwo 3DPX-012426

https://3Dprint.nih.gov/collections/covid-19-response

https://3dprint.nih.gov/discover/3dpx-014168

https://3dprint.nih.gov/discover/3dpx-013306

https://3dprint.nih.gov/builds/bdsearle/3dverkstan-headband-face-shield

COVID-19 Response Collection Page

https://3dprint.nih.gov/collections/covid-19-response

Image credits: Dr. Beth Ripley and Timothy Prestero.

COVID-19 Supply Chain Response

Curated by NIH/NIAID in collaboration with the U.S. Food and Drug Administration, the Veterans Healthcare Administration, and America Makes

START HERE | SEARCH THE COLLECTION | PARTNERS & CONTRIBUTORS | FREQUENTLY ASKED QUESTIONS | ASSESSMENT CRITERIA

This collection represents a coordinated effort among the NIH/NIAID, FDA, VA, and America Makes to support the manufacturing of personal protective equipment (PPE) or other necessary medical devices that are in short supply due to the COVID-19 pandemic. While many devices can be printed with a 3D printer at home or your local Maker space, the NIH, FDA, VA, America Makes, and the contributing creators cannot ensure the quality, safety, and efficacy of these designs when manufactured without proper quality controls and processes. Before submitting designs or producing PPE, please read the starter guide for essential information.

On Friday, May 15th, 2020, the FDA will host a virtual Town Hall meeting with representatives from the FDA, NIH, and the VA. We will discuss the COVID-19 Supply Chain Response collection partnership and considerations for design, manufacturing, and use of 3D printed swabs during the COVID-19 public health emergency.

Visit the FDA event website for additional information.

Reviewed for Clinical Use

SEARCH THE COLLECTION

3DPX-014168	3DPX-013887	3DPX-013884	3DPX-013883	3DPX-013830
Stopgap Surgical Face Mask (SFM) Revision B	MADE - Injection Moldable Face Shield	Face Shield - PNWS - Short	Face Shield - PNWS - Full	DtM-v4.0 Face Shield PPE, Design for...
VHA Innovation ...	govoss	jonny_flowers	jonny_flowers	tprestero

National Institutes of Health
Turning Discovery Into Health

National Institute of Allergy and Infectious Diseases

Image credits: Dr. Beth Ripley and Timothy Prestero.

COVID-19 Supply Chain Response

Curated by NIH/NIAID in collaboration with the U.S. Food and Drug Administration, the Veterans Healthcare Administration, and America Makes

https://3Dprint.nih.gov/collections/covid-19-response

420,000+ unique site visitors since MOU announcement

1,390% increase from previous period (2/10/20 – 3/26/20)

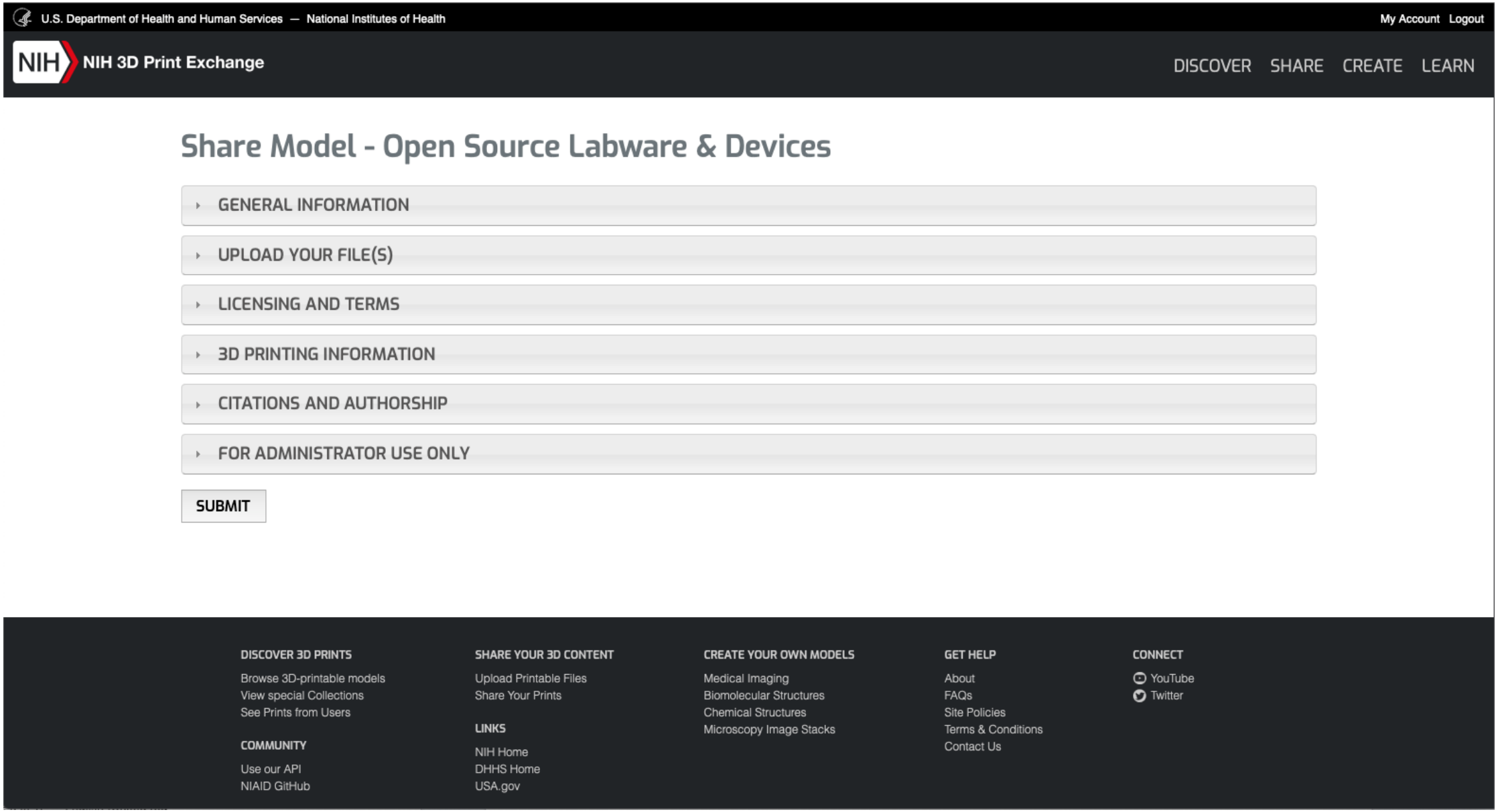
200,000+ views of collection home page | **1 million+** total views of designs in the collection

524 published designs | Builds: **130+**

National Institutes of Health
Turning Discovery Into Health

National Institute of Allergy and Infectious Diseases

Usage analytics and published design counts up to date as of May 13, 2020


U.S. Department of Health and Human Services — National Institutes of Health
My Account Logout
NIH 3D Print Exchange
DISCOVER SHARE CREATE LEARN
Share Model - Open Source Labware & Devices
GENERAL INFORMATION
UPLOAD YOUR FILE(S)
LICENSING AND TERMS
3D PRINTING INFORMATION
CITATIONS AND AUTHORSHIP
FOR ADMINISTRATOR USE ONLY
SUBMIT
DISCOVER 3D PRINTS
Browse 3D-printable models
View special Collections
See Prints from Users
COMMUNITY
Use our API
NIAID GitHub
SHARE YOUR 3D CONTENT
Upload Printable Files
Share Your Prints
LINKS
NIH Home
DHHS Home
USA.gov
CREATE YOUR OWN MODELS
Medical Imaging
Biomolecular Structures
Chemical Structures
Microscopy Image Stacks
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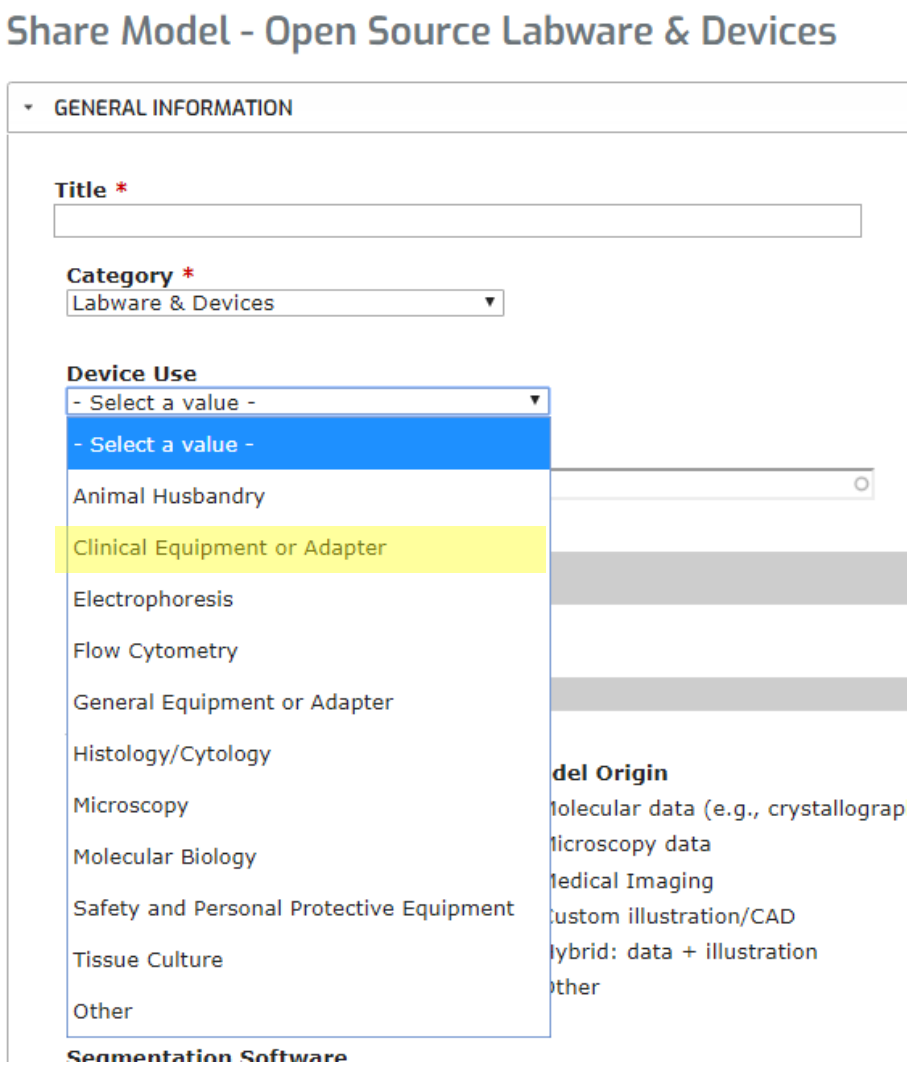

https://3dprint.nih.gov/share

Current thinking on clinical considerations for swabs, on the site

https://3dprint.nih.gov/collections/covid -19-response/nasal -swabs

Acknowledgements

James Coburn, FDA
Phil Cruz, NIH/NIAID
Matthew DiPrima, FDA
Meghan McCarthy, NIH/NIAID
Brandon Ribic, America Makes
Beth Ripley, VA
Joe Veranese, America Makes
John Wilczynski, America Makes

Thank you to the designers, manufacturers, and users for your contributions to the website
and
the NIH 3D Print Exchange development team at NIH/NIAID

This project has been funded in part with Federal funds from the National Institute of Allergy and Infectious Diseases, National Institutes of Health, under the NIAID BCBB Support Services Contract HHSN316201300006W/HHSN27200002. Mention of trade names, commercial products, or organizations does not imply endorsement by the U.S. Government.

Questions and feedback can be directed to 3Dprint@nih.gov

We encourage you to visit the resources available at these sites:

Department of Veterans Affairs (VA) Innovation Ecosystem

- https://www.va.gov/INNOVATIONECOSYSTEM/3d-print-covid19.html

National Institutes of Health (NIH) 3D Print Exchange

- https://3dprint.nih.gov/

FDA-NIH-VA MoU on 3D printing and additive manufacturing

- https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/fda-efforts-connect-manufacturers-and-health-care-entities-fda-department-veterans-affairs-national