Opportunities for Veterans

The Twin Cities area is one of the leaders in the nation for research and development of 3D printing of biomaterials. Many biomedical companies in the Twins Cities are rapidly expanding their bioprinting initiatives and need qualified people to support these efforts. In order to provide this support, the 3D bioprinting thrust programs are required to train future workers with the skills needed.

The University of Minnesota 3D Bioprinting Facility and the Advanced Regenerative Manufacturing Institute (ARMI) with funding from the DOD are working together to offer veterans special opportunities to be trained in this new and exciting technology.

Register for Announcements

What is Bioprinting?

FAQ Questions

Point of Contact?

The University of Minnesota is offering courses and lab training on the latest 3D bioprinting techniques. Special one-on-one training sessions are planned for veterans to give them a head start in this new and exciting field of the future. **Please register so we can send you more information.**

armi Advanced Regenerative Manufacturing Institute

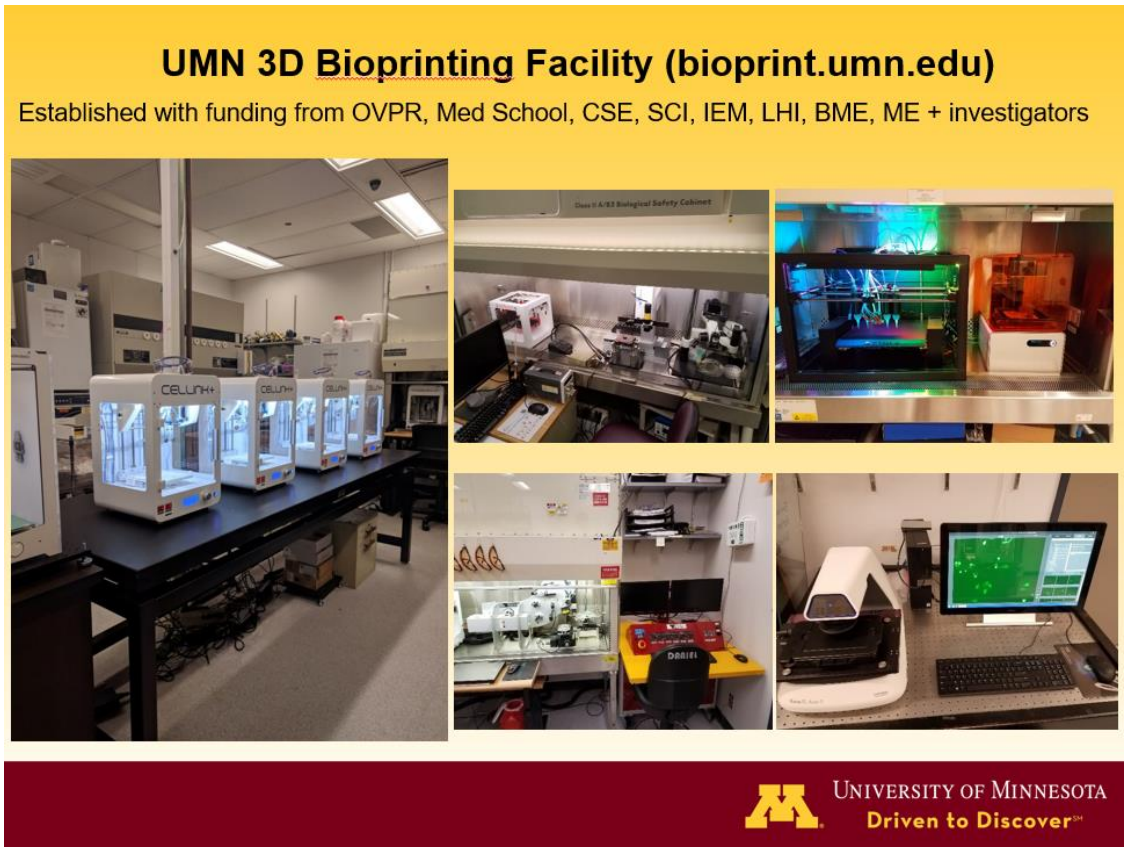
UNIVERSITY OF MINNESOTA Driven to Discover℠

What is Bioprinting?

Bioprinting is the ability to 3D print live human cells from various organs such as skin, muscle, veins and cartilage. Bioprinting will allow doctors to create custom tissues to replace damaged tissues and organs in the human body.

Bioprinting is a disruptive technology with the potential to transform healthcare as part of the revolution in the personalized medicine industry. The benefits of 3D bioprinting include the ability to print functional tissue constructs, as well as supports and guiding scaffolds, tailored to the patient's size, specification, and histocompatibility. In addition to the creation of implantable tissue constructs, the ability to build small, reproducible human tissue models brings an unprecedented capability to predict drug interactions and toxicities. This will allow researchers to study diseases in a context approximating the natural complexity of the body.

The University of Minnesota has established a state of the art 3D bioprinting facility. This facility is available for veterans to train in and learn the latest bioprinting technologies.

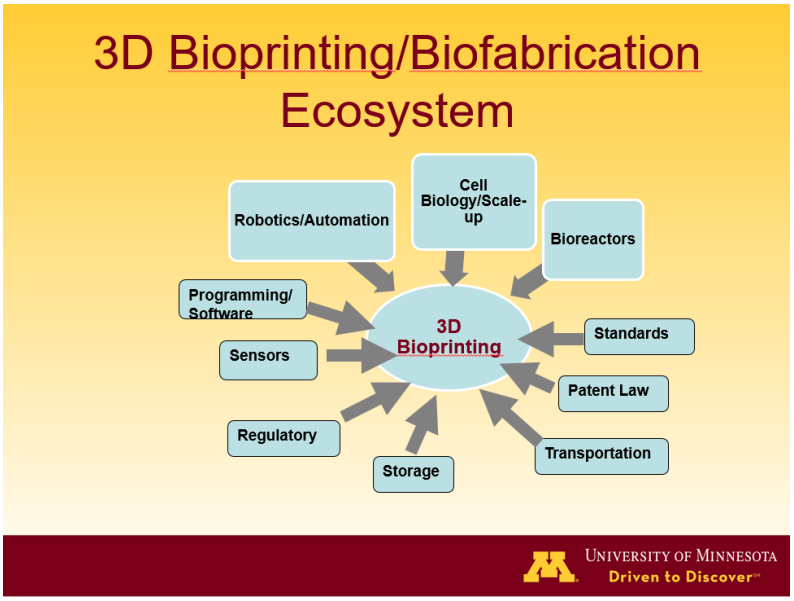


University of Minnesota State-of-the Art Bioprinting Facilities

The ability to successfully 3D print human tissue requires a multiple of disciplines to work together. All these disciplines are shown below. They include expertise from:

- Robotics/Automation
- Sensors
- Regulatory
- Programming / Software
- Cell biology / Scale Up
- Bioreactors
- Industry Standards
- Patent law
- Transportation

The bioprinting industry is expected to expand greatly in the near future and as it does the job opportunities will significantly increase. Therefore to be prepared for the job opportunities in bioprinting the University of Minnesota is offering training programs. Please register to get information on how you can take advantage of this bioprinting opportunity for veterans.



Bioprinting Skill Base Needed for Future Workers

Upcoming Events

Contact us for the latest information.

Recently Held Events

Medtronic, AMRI and the University of Minnesota hosted a “Manufacturing Needs for Biofabrication of Engineered Tissues and Organs” portion on April 9th. ARMI | BioFabUSA was pleased to be a part of this year’s event in which Becky Robinson-Zeigler, Deputy Chief Regulatory Officer at ARMI, addressed the audience on biofabrication technologies.

Becky Robinson-Zeigler, Deputy Chief Regulatory Officer at ARMI

Century College Symposium on 3D Bioprinting held Friday, April 27. College Staff, College Students, High School & Middle school Students & Staff, and local area industry

Keynote: Angela Panoskaltsis-Mortari, PhD

Industry Panel

Frequently Asked Questions about Bioprinting

I am working fulltime, can I get training while on the job and who will pay for it?
The Veteran Engagement program is free for all U.S. military veterans. It will be a two-day workshop giving an overview of the bioprinting field. Times will be scheduled around the availability of the veterans (nights and weekends are possible).

How do I find out more about Bioprinting Training?
Click the link for registration on the main page (bioprint.umn.edu) so we can send you emails regarding upcoming classes and demonstration.

I would like to have the University of Minnesota present at my company, will you come to my company, school or engineering society meeting and make a presentation on your program?
Please email the point of contact about your request. We would be glad to present at your company at no cost.

Is the University of Minnesota Bioprinting lab open to the public and tours?
Yes! If you or your company would like a demonstration please email the point of contact about your request.

Is the University of Minnesota willing to partner with industry on research and development of bioprinting?
Yes! The University of Minnesota welcomes industry partnerships and has done this successfully in the past.

What are the type of classes I will be taking if I am interested in Bioprinting?
The classes making up the core skills are cell biology, mechanical engineering, programming, robotics, regulatory, sensors and standards.

Is the University of Minnesota offering a 4 year degree in Bioprinting?
Not at this time, but keep checking!

Are there two year programs available for interested students who are not interested in a 4 year program?

Yes, The University has teamed with Century College to develop the first bioprinting certificate curriculum, which will be a two year commitment.