The BioMADE mission is to enable domestic bioindustrial manufacturing at all scales, develop technologies to enhance U.S. bioindustrial competitiveness, derisk investment in relevant infrastructure, and expand the biomanufacturing workforce to realize the economic promise of industrial biotechnology.

- Newest DoD-led Manufacturing USA Institute
- An independent nonprofit, public-private partnership sponsored by the U.S Department of Defense.
- **Initial investment of $275M**, including $87M from the Department of Defense.
- A vision to build a **sustainable, domestic end-to-end bioindustrial manufacturing ecosystem**.
- HQ & forthcoming **state-of-the-art pilot R&D facility** on the campus of the University of Minnesota. Satellites at UC Berkeley & MIT.
- Established by the EBRC and a nearly **100 organization proposal team** across industry, academia, and nonprofits.

*Learn more and subscribe to updates at: [www.BioMADE.org](http://www.BioMADE.org)*
Network will Focus on Manufacturing Readiness Level (MRL) 4-7 and serve as a reliable bridge from MRL 1-3 to MRL 8-10.

The BioMADE VISION: To propel R&D products towards commercial viability by providing a trajectory over the Valley of Death.

BioMADE creates an end-to-end Operational EcoSystem (OES) that integrates industrial strain design, scale-up production (SUP) and downstream processing (DSP) to drive industry-relevant innovations and coordinate the infrastructure necessary for reliable production of bioproducts at scale.
Leverage diversity and partnerships for the strongest, purpose-built teams from across the network to perform and support the work of the Institute.
Will use four core functions to propel engineered strains from the lab to manufacturing scale:

- **Manipulate** reimagines strain engineering with a focus on production needs.
- **Accumulate** drives into scale-up production for testable amounts of bioproducts.
- **De-risk** innovates in downstream processing producing at pre-manufacturing scale.
- **Execute** wraps the production package for transition, including supply chain, ethical/legal considerations, and workforce.
Innovating EWD and ELS²I

Education & Workforce Development (EWD)

BioMADE will augment its technological advances with strong EWD to advance America’s biomanufacturing workforce.

- Close and consistent **engagement with industry** to ensure that the training meets the need.
- Develop concepts, essential knowledge, and project specific **educational modules and materials** for use in a variety of training environments.
- **Outreach and communications** activities to promote understanding and awareness of careers and opportunities in bioindustrial manufacturing.
- **Coordination** with a national network of educational entities to maximize impact and minimize redundancy.

Ethical, Legal, Social, and Security Implications (ELS²I)

ELS²I will be incorporated as an integral part of BioMADE’s innovation plan, and integrated into EWD efforts.

- Foster engagement between technical, social science, and policy communities.
- Considered at the BioMADE roadmapping, call development, and project execution phases.

**Biosecurity**
- Biosecurity Advisor as a voting member of committees.
- Biosecurity innovation in manufacturing as a priority.

**Bioethics**
- Bioethics Advisor as a voting member of committees.
- Representation on and incorporation into Technical Committee.
- Resource for DoD and Members.

**Policy Engagement**
- Identify regulatory and other challenges facing bioindustrial manufacturing.
- Develop relationships with relevant USG regulators and policy makers.
- Policy development activities as defined by the Leadership Council.
Membership Engagement

**Membership Principles**

**For Industry, Small Business and FFRDC:**

- provide an opportunity for companies of all sizes to participate
- provide IP rights and governance roles to organizations based on their membership tier
- ensure cross-sectoral representation in governance
- lead to a sustainable innovation institute.

**For Academic & Non-Profit Institutions:**

- be inclusive to leverage our national innovation ecosystem
- maintain a fair, transparent, and predictable cost-share structure
- play a role in institute governance
- value diversity of institution type, size, region, and focus.

**Member Benefits**

The following tables outline the benefits for a given level including:

- Representation in Leadership Committees, and development of Technology Roadmap process and priority setting
- Access to BioMADE’s Network and Approach to Innovation
- Engagement with the U.S. Government, FFRDCs, and other MIIs
- Institute Projects: include U.S. Government funding and are guided by the BioMADE Roadmap,
- Directed Projects: provide a mechanism by which large companies may fund projects directly though the institute.
- Access rights to BioMADE’s IP portfolio: C-NERF = Commercial Non-exclusive, royalty free license | NERF (R&D) = Non-exclusive, royalty-free license for R&D purposes only Project-based = IP rights associated with projects in which the entity leads.

**Industry: Top tier (platinum) members** will have access to a monthly CEO’s Roundtable for frequent, direct engagement with BioMADE.

**Academic/ Non-Profit: “Preferred Site” member** designation may be given for institutes meeting criteria for certain types of projects. These sites will be given additional points and some project calls may be open only to teams with a Preferred Site member, increasing collaborative opportunities.