**NIH Blueprint Neurotherapeutics Network (BPN)**

https://neuroscienceblueprint.nih.gov/neurotherapeutics/blueprint-neurotherapeutics-bpn-network

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**WHO WE ARE**

“Grand Challenge to Provide Grant Funding and Resources to Facilitate Small Molecule Drug Discovery and Development to Treat CNS Disorders”

In 2011, the NIH Blueprint for Neuroscience Research, a consortium of 15 NIH Institutes and Centers that support neuroscience research, launched the Blueprint Neurotherapeutics Network (BPN).

The BPN serves as a pipeline between the typical endpoint of NIH-funded research and the beginning of industry drug development. The BPN provides neuroscience researchers with funding and access to a full range of industry-style drug development services and expertise. The program is intended for projects requiring medicinal chemistry optimization and CRO support through phase I clinical testing. Each project is directed by a Lead Development Team composed of the principal investigator, industry consultants hired by NIH, and NIH staff.

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**PROGRAM GOALS**

- To de-risk potential therapeutics to the point that industry will invest in them allowing potential new drugs to reach patients efficiently.
- To provide grant funding and necessary resources (contracts, consultants, etc.) that are typically lacking in our research community.

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**WHAT WE OFFER**

- BPN provides non-dilutive funding to investigators from academia and industry.
- Investigators retain rights to intellectual property.
- Access to CRO’s under contract to NIH.
- Access to consultants and staff with extensive industry experience covering the major needs: assay development expertise, pharmacology, medicinal chemistry, pharmacokinetics, toxicology, process research, chemical/formulation development, and Phase I clinical testing.
- Fast track SBIR U44 grants for small businesses.

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**ENTRY CRITERIA**

**Discovery**

- Novel target for the disease
- Strong biological validation
- Feasible path to the clinic
- Robust in-vitro assay for optimization
- Strong confirmatory assays
- Project must require medicinal chemistry
- Amenable to chemistry
- IP free of obvious roadblocks

**Development**

- Strong data linking target to disease
- Biological & ADMET activity appropriate for intended clinical use
- Efficacy/PD when delivered by clinically intended route
- Fully profiled, defensible ADMET results
- Feasible path to the clinic
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**ENTRY STAGES AND MECHANISMS**

All Projects Begin with Preparatory Phase

- Complete entry criteria for SAR or IND-enabling studies
- Conduct due diligence

**Preparatory Phase**

**Discovery**

- Exploratory
- Hit to Lead
- Lead Optimization
- IND Enabling

- UG3/UH3 project: 2-3 yrs (UH3) or 3-4 yrs (UG3)

**Development**

- Exploratory: 6-12 months
- Hit to Lead: 12 months
- Lead Optimization: 12 months
- IND enabling: 12 months
- Phase I AD: 8 months

**MILESTONE PROGRESSION BY STAGE**

**BPN PROJECTS IN THE NEWS**

**INFRASTRUCTURE, EXPERTISE, & FUNDING**

- Lead/Product Development Team
  - Principal Investigator
  - Industry-seasoned consultants
  - NIH staff

- NIH Grant
  - Medicinal Chemistry
  - PK/Tox
  - Data Management
  - Clinical Trials

- NIH Contracts
  - Bioactivity/Efficacy Studies
  - Manufacturing & Formulation

**CONTACT INFORMATION**

Charles Cywin, PhD
Program Director
charles.cywin@nih.gov

BPN@ninds.nih.gov

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