PROJECT NARRATIVE

Physical methods for designing small molecule therapeutics are poised for a breakthrough, allowing molecular design for targeted treatment of diseases, personalized medicine, and rapid drug development. However, careful stress testing and improvement of these methods is necessary to make them sufficiently reliable and robust for the enormous range of problems they can potentially solve. Here, we will generate new experimental data on carefully selected and tailored systems, using it to drive a series of blind community challenges which will engage the community in testing and improving these methods, preparing the methods to have the dramatic impacts on human health that they promise.