National Institutes of Health
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TO: Horizon 2020 SC1-BHC-11-2020 Call Applicants

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SUBJECT: Engagement of the Division of the National Toxicology Program, National Institute of Environmental Health Sciences in European Commission SC1-BHC-11-2020 Call for Proposals

As a likely consequence of the Horizon 2020 Framework Programme (H2020) efforts to ensure world-class science and remove barriers to innovation, the National Toxicology Program Division (DNTP) within the National Institute of Environmental Health Sciences (NIEHS) has received requests to partner in consortia intending to submit proposals to the Horizon 2020 Framework Programme (H2020) entitled, "Advancing the safety assessment of chemicals without the use of animal testing" (call identifier SC1-BHC-11-2020). The purpose of this memorandum is to announce that the DNTP does not intend to engage in proposals for this call as a formal bidding partner (i.e., beneficiary), but instead will consider collaborating or participating in an advisory capacity with successful consortia following selection and award of a grant by the European Commission. This decision is being made ultimately to foster international collaboration, innovation, and world-class science. The DNTP hereby summarizes its considerations for collaborating with successful H2020 applicants, recognizing that there are multiple potential paths to success in predictive chemical safety testing.

The DNTP's potential considerations for future engagement with H2020 SC1-BHC-11-2020 awardees are the following:

- Use of chemicals that overlap with the Tox21 libraries in order to leverage diverse data streams in predicting toxicity and toxicokinetics.
- Development and deployment of *in vitro* assays that complement the existing toxicological space and technologies covered by the Tox21 program.

- Development and application of in silico methods in predicting toxicity and toxicokinetics.
- Development and deployment of approaches to link chemical induced in vitro effects to human pathological outcomes.
- Incorporation of assays, platforms, or approaches that allow efficient evaluation of hundreds or thousands of chemicals in concentration-response format or are of lower throughput but provide additional complementary information to the high-throughput assays in the ToxCast/Tox21 program (e.g., organotypic cell models).
- Address the primary uncertainties in biokinetics and toxicokinetics associated with translation of in vitro concentrations to in vivo administered dose.
- Ability to frame laboratory experimental results in the context of relevant human exposures.
- Public release of the data.
- Relevance and complementarity to existing computational toxicology efforts within the DNTP and Tox21 efforts.

This memorandum and listed considerations for engagement will be posted publicly on the DNTP's website, and will be communicated to the European Commission.

cc:
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