

Subject: CBD Online Forum Update

From: Benjamin Robinson <Ben@emergingag.com>

Date: 7/12/2017 11:42 AM

To: "npiediab@gmail.com" <npiediab@gmail.com>, "ana.atanassova@bayer.com" <ana.atanassova@bayer.com>, "a.drcrianti@imperial.ac.uk" <a.drcrianti@imperial.ac.uk>, "l.collyns@imperial.ac.uk" <l.collyns@imperial.ac.uk>, "toni.j.piaggio@aphis.usda.gov" <toni.j.piaggio@aphis.usda.gov>, "bdass@fnih.org" <bdass@fnih.org>, "a.badolo@gmail.com" <a.badolo@gmail.com>, "a.burt@imperial.ac.uk" <a.burt@imperial.ac.uk>, "cbloss@ucsd.edu" <cbloss@ucsd.edu>, "dtompkins@landcareresearch.co.nz" <dtompkins@landcareresearch.co.nz>, "dobrocht@umd.edu" <dobrocht@umd.edu>, "d.thizy@imperial.ac.uk" <d.thizy@imperial.ac.uk>, "dwatuku@yahoo.com" <dwatuku@yahoo.com>, "ebier@ucsd.edu" <ebier@ucsd.edu>, "fred_gould@ncsu.edu" <fred_gould@ncsu.edu>, "f.tripet@keele.ac.uk" <f.tripet@keele.ac.uk>, "fredros@ihi.or.tz" <fredros@ihi.or.tz>, "gregg.howald@islandconservation.org" <gregg.howald@islandconservation.org>, "g.immobile@pologgb.com" <g.immobile@pologgb.com>, "heath.packard@islandconservation.org" <heath.packard@islandconservation.org>, "hquemada@danforthcenter.org" <hquemada@danforthcenter.org>, "jadelbor@ncsu.edu" <jadelbor@ncsu.edu>, "Jeff.Chertack@gatesfoundation.org" <Jeff.Chertack@gatesfoundation.org>, "j.mumford@imperial.ac.uk" <j.mumford@imperial.ac.uk>, "jkayondo@uvri.go.ug" <jkayondo@uvri.go.ug>, "jkayondo@gmail.com" <jkayondo@gmail.com>, "karl.campbell@islandconservation.org" <karl.campbell@islandconservation.org>, "kele.lekoape@bayer.com" <kele.lekoape@bayer.com>, "kent@archipelagoconsulting.com" <kent@archipelagoconsulting.com>, "l.cinti@pologgb.com" <l.cinti@pologgb.com>, "luciadesouza100@gmail.com" <luciadesouza100@gmail.com>, "lydia.slobodian@iucn.org" <lydia.slobodian@iucn.org>, "doudou@icermali.org" <doudou@icermali.org>, "margret.engelhard@bfm.de" <margret.engelhard@bfm.de>, "mrbenites2002@yahoo.es" <mrbenites2002@yahoo.es>, "mqbenedict@yahoo.com" <mqbenedict@yahoo.com>, "michael.bonsall@zoo.ox.ac.uk" <michael.bonsall@zoo.ox.ac.uk>, "nachee@nd.edu" <nachee@nd.edu>, "nbesansk@nd.edu" <nbesansk@nd.edu>, "p.freemont@imperial.ac.uk" <p.freemont@imperial.ac.uk>, "adrade@ufpe.br" <adrade@ufpe.br>, "filipposaris.papathanos@unipg.it" <filipposaris.papathanos@unipg.it>, "pietvandermeer@gmail.com" <pietvandermeer@gmail.com>, "monnat@uw.edu" <monnat@uw.edu>, "renee.wegrzyn@darpa.mil" <renee.wegrzyn@darpa.mil>, "rfriedman@jcv.org" <rfriedman@jcv.org>, "roberta.spaccapelo@unipg.it" <roberta.spaccapelo@unipg.it>, "royden.saah@islandconservation.org" <royden.saah@islandconservation.org>, "r.muller@pologgb.com" <r.muller@pologgb.com>, "ryan@longnow.org" <ryan@longnow.org>, "slwerner@UCSD.EDU" <slwerner@UCSD.EDU>, "carter@sciencepolicyconsulting.com" <carter@sciencepolicyconsulting.com>, "sarah.lukie@croplife.org" <sarah.lukie@croplife.org>, "scott@shorebiotech.com" <scott@shorebiotech.com>, "sjames@fnih.org" <sjames@fnih.org>, "s.russel@gen.cam.ac.uk" <s.russel@gen.cam.ac.uk>, "ssubramani@ucsd.edu" <ssubramani@ucsd.edu>, "tkuiken@ncsu.edu" <tkuiken@ncsu.edu>, "aajames@uci.edu" <aajames@uci.edu>, "t.nolan@imperial.ac.uk" <t.nolan@imperial.ac.uk>, "zachadel@tamu.edu" <zachadel@tamu.edu>, "sentelle@uci.edu" <sentelle@uci.edu>

CC: Morgane Danielou <Morgane@emergingag.com>

Hi all,

Please see below for the latest developments in the CBD online forum. The rate of posting has dropped off somewhat since last week, but please be advised that the forum will close on **July 17th** and there may be a flurry of activity right at the end.

Points you may wish to address:

- Christoph Then, Testbiotech: <https://bch.cbd.int/synbio/open-ended/discussion/?threadid=8365#8495>
 - Identifies gene drives inserted into mosquitoes and other organisms as technologies that are particularly susceptible to producing unforeseeable effects when released in the field, due to environmental stressors not present under laboratory conditions.
 - Suggests that risk-assessment cut-off criteria and regulatory boundaries be instituted in cases where projects may cause technically inserted genetic information to persist in wild populations, and where sound risk-assessment is not possible due to the unknowns outlined above.
- Carlos Bravo, Columbia: <https://bch.cbd.int/synbio/open-ended/discussion/?threadid=8384#8499>
 - Refers to unspecified negative effects which could result from transfer of artificial genetic material to wild populations via vertical gene transfer and introgression.
 - Mentions that vector suppression may lead to the emergence of new threats as other disease vectors replace those that are suppressed.
 - Please note that the above concern is not specifically related to synthbio and may be beyond the scope of the forum's activities.

Summary of new developments:

There has been substantial discussion of the potential off-target effects associated with current CRISPR-Cas9 methods (<https://bch.cbd.int/synbio/open-ended/discussion/?threadid=8384#8498>; <https://bch.cbd.int/synbio/open-ended/discussion/?threadid=8384#8504>), with some referring to a recent publication by Schaefer et al on CRISPR-Cas9 editing and unexpected mutations in mice in *Nature Methods* (<https://www.nature.com/nmeth/journal/v14/n6/full/nmeth.4293.html>). However, some have called into question this interpretation of the study due to limitations in the experimental design, and presented evidence of Cas9 specificity being increased (<https://bch.cbd.int/synbio/open-ended/discussion/?threadid=8384#8506>).

Regards,
Ben



Ben Robinson
Policy Coordinator
+39 334 994 2405
ben@emergingag.com
www.emergingag.com
[Follow Emerging ag on LinkedIn](#)

CBD Online Forum on Synthetic Biology will take place soon! Experts should [register online](#) to participate. Contact us if you require assistance. Supporter of the Manyinga orphan schools project – find out more at www.manyinga.org

