Supplemental Communications

(Received between 12pm November 4 and 12pm November 5

Supplemental Communications

From:	Biolab Watch <biolabwatch2@humanebiotech.org>
Sent:	Monday, November 4, 2024 7:03 PM
To:	Planning Commission; All Council
Cc:	Jeremy Gruber; Perls, Dana; Darnovsky, Marcy; Jaydee Hanson; Berkeley Neighborhoods Council; bpeorg2024@gmail.com; INFO@sfbaypsr.org; info@biosafetynow.org
Subject:	Questions submitted for Nov 6, hearing RE Gilman Forge Project
Attachments:	Questions RE planned laboratory facilities 110624.pdf

Dear Berkeley Mayor, City Council, and Planning Commission:

Attached, please find questions regarding the siting of biolabs at the Gilman Gateway Project, submitted for the November 6 public hearing and relevant to the DEIR for the project. All questions are pertinent to any work performed by any organizations or individuals who use or will use biolab space at the Gilman Project site whether they be privately or publicly funded entities.

We look forward to receiving answers to the 31 questions.

Best Regards,

Biolab Watch
Contact: Jeremy Gruber, JD. biolabwatch@humanebiotech.org

DATE: November 4, 2024
TO: The Berkeley Mayor, Berkeley City Council, Berkeley Planning Commission.
ATTN: Planning Commission Secretary
FROM: Biolab Watch
RE: Gilman Gateway Rezone Project DEIR
CONTACT: biolabwatch@humanebiotech.org, ATTN: Jeremy Gruber, JD.

NOTE: *All questions are pertinent to any work performed by any organizations or individuals who use or will use biolab space at the Gilman Forge Project site whether they be privately or publicly funded entities. This includes any work conducted by any company or individual who uses the space who may or may not be officially part of UC Berkeley. If the answer to any of the questions is or will be part of a binding agreement with any Federal agency, please cite the provision.*

QUESTIONS:

1. Will ammonia or other hazardous non-biological materials be stored at the site. If so, is the area zoned for such material? How will changing the zoning to allow for the use of such materials be appropriate for a busy urban area where sheltering in place may not be practical for people visiting the area?

2. Will the labs be working with any microorganisms?

a. If so, at what biosafety level will the labs work?

b. Will any of those microorganisms be a health risk if they escaped the lab? If they did escape, what are the environmental implications if such an event occurred in a busy urban area?

3. Will the labs be working with any natural or select microorganisms?

a. Could any of the natural or select microorganisms be considered harmful or infectious to humans or animals?

b. Will there be public disclosure to the types of natural or select microorganisms used at any facilities and at what biosafety level of containment?

4. Will the labs be using or producing any genetically engineered (GE) microorganisms on its site? If so, Will there be public disclosure of the types of genetically engineered (GE)

microorganisms and to the general types of vectors used at facilities and at what biosafety level of containment?

5. Will the facility be using any replicative deficient GE microorganism that still has the capacity to enter inside a human or animal cell to transfer itself or any part of itself (i.e., its molecular components, nucleic acid, or GE vector) inside the cell's cytoplasm or nucleus?

6. Will the facility be using any GE microorganism that could be considered harmful to humans or animals?

7. Will any of those microorganisms be a health risk if they escaped the lab?

8. If they did escape what would be the environmental implications should it occur in a busy urban area?

9. Will the labs design, produce or work with genetically engineered viruses?

10. Will public health parameters in the area be monitored with transparency and disclosure to the public on a regular basis? How?

11. Will the facility have any labs or departments that will use, work, or manipulate human embryos?

12. Will there be any gain of function research performed in the facility?

13. Who will conduct the research? UC employees or corporate partners or affiliates?

14. Will companies commit to a binding agreement to prohibit any occupant of the lab from engaging in genetic manipulation of viral particles designed to enhance pathogenicity?

15. Will the facility house any labs that use, work with or manipulate human embryos?

16. Will companies commit to a binding agreement to prohibit any occupant of the lab from engaging in research aimed at creating “heritable alterations to the human germline” (i.e., to embryos, ova, or sperm)?

17. Will companies enter a legally binding agreement to prohibit any occupant of the lab to conduct Dual Use Research of Concern or work with select agents?

18. Who will conduct safety oversight and enforcement of any agreements between the city and companies regarding research in the buildings? What mechanisms will be in place to monitor and enforce violations of safety protocols and other violations of the terms and condition of conduct at the labs?

19. If the labs of non-university organizations will be housed at the buildings, what mechanisms will be in place to monitor violations by those organizations of safety protocols and other breaches of the terms and conditions of conduct at the labs?

20. In the case of environmental harm due to the release of dangerous pathogens and/or harmful chemicals into the environment what provisions are in place for members of the public to be compensated by the responsible parties for the harms they suffer as a result of such releases?

21. Will any lab work involve projects involving high risk vectors (e.g. lentivirus) or targets (e.g., random gRNA libraries or obvious tumor suppressor gene targets)?

22. Is gene editing, genome modification, or similar technology (CRISPR, TALENs, zinc fingers, etc.) being used in the protocol? If yes:

a. How will the gRNA and Cas9 be delivered to the cells or tissues?

b. How was/were the targeting sequence(s) designed?

c. How was/were off-target site/s evaluated?

23. Which organism(s) will be modified? Targeting of human cells presents additional risk to laboratory workers due to the potential for accidental ingestion, inhalation, injection or other routes of administration. Describe how these risks will be reduced in experiments.

24. Will CRISPR work be done in cell culture, in whole organisms, or both?

25. How will CRISPR-Cas9 be delivered (e.g., viral vector, plasmid, liposomes, nanoparticles, etc.)? If it is a viral delivery, will the Cas9 and gRNA be delivered together on a single transfer vector/plasmid or on separate transfer vectors/plasmids

26. Will labs use a CRISPR pooled library?

27. If animal work is involved, will syringes be used for injections?

28. Will the research involve the creation of a gene drive experiment (i.e., a system that greatly increases the probably that a trait will be passed on to offspring)?

29. Will the gene editing technology be used to target embryos/germ line cells? If so, the biosafety protocol must include an approved or submitted IACUC number.

30. Will the gene editing technology be used for human gene therapy research? If so, the biosafety protocol must include IRB submission information.

31. Will any lab work on projects involving high risk vectors (e.g. lentivirus) or targets (e.g., random gRNA libraries or obvious tumor suppressor gene targets)?