THE WISTAR INSTITUTE IBC 2nd Quarter Meeting Minutes

June 11, 2025 – Hybrid Meeting 11AM – 12PM

Members Present: (Quorum = 6 members)

Ami Patel, IBC Chair

Roma Maraj-Owen, Director of Laboratory Operations and Environmental Health and Safety

Denise DiFrancesco, WI Animal Facilities Director

Lauren Duffy, WI Associate Managing Director

Sonali Majumdar, WI PI

Paul Lieberman, WI PI

Yulia Nefedova, WI PI

Alice Lenthe, Non-Affiliated PI

Ronald Harty, Non-Affiliated PI

Dominic Salerno, Non-Affiliated Assistant Professor

Non-Voting Members Present:

Maurice Brandon, WI Science Administration Assistant

Members Absent:

Peter Scarpati, WI VP Operations Michelle Ho, WI Biosafety Officer

Guests Present:

Rebecca Spangenberg, Non-Affiliated Assistant Professor

1.0 Call to Order

- **1.1** The meeting was called to order at 11:00AM.
- 2.0 Welcome and introductions Wistar affiliated and non-affiliated members
 - **2.1** Dr. Patel recognized each member and thanked them for their participation. The members present constituted a quorum.
 - **2.2** Ms. Maraj-Owen introduced Rebecca Spangenberg to the IBC.
- 3.0 Review and Approval of 1st Quarter 2025 Meeting Minutes
 - **3.1** Motion to approve was made by Dr. Lieberman, seconded by Dr. Nefedova. 1st quarter meeting minutes were approved by those present at the meeting.
- 4.0 Ms. Maraj-Owen discussed the overview of updated NIH Guidelines issued on June 1, 2025.
 - **4.1** The committee discussed the potential impact on Wistar.
 - **4.2** Gain of Function/Dual Use Executive Order. Wistar currently does not have gain of function or dual use research.
- **5.0** Review of Approved IBC Registrations during the 2nd Quarter of 2025 (3/12/2025 06/10/2025)
 - **5.1** Mr. Brandon discussed the status of the five IBC Registrations submitted during the 2nd quarter.
- **<u>6.0</u>** For the registrations below, the committee discussed, where relevant, the characteristics of the agent, the types of manipulations planned, the source(s) of the nucleic acid sequences, host(s)

vector(s) to be used and whether there were attempts planned to obtain expression of a transgene, and if so, the function of the protein that would be produced.

6.1 22502646 - Weiner, David, Evaluation of DNA immunotherapies for Cancer Treatment

- The lab uses these replication incompetent, DNA plasmids (non-viral vectors) to express immunogens to elicit anti-tumor immune responses or to express Immune Cell Engagers (ICE, bispecific antibodies) to suppress tumor progression in mice.
- NIH Guidelines section III-E, BSL 1
- All required trainings are complete.
- The Committee voted unanimously to approve the registration.

6.2 22502647 - Zhang, Nan, Leveraging myeloid cell activation to treat tumor metastase

- Mouse bone marrow progenitor cells will be transduced by lentiviruses containing proteins that induce anti-tumor immune responses. These cells will be injected into mice. The backbone plasmids are pRSV-Rev, pMDLg/pRRE, and pMD.2G, and the recombinant products (the inserts) are listed in the table in Section #10.
- NIH Guidelines section III-D, BSL 2
- All required trainings are complete.
- The Committee voted unanimously to approve the registration.

6.3 22502648 - Weiner, David, Development and characterization of new cancer treatments using DNA technologies

- The lab will manufacture Chimeric Antigen Receptor T (CART) cells targeting murine and human Follicle Stimulating Hormone receptor (FSHR). We will use retroviral vectors encoding the CAR and transduce mouse or human T cells to manufacture the CART cells. These will be tested *in vitro* and in mice for their efficacy in killing FSHR expressing tumor cells. For a separate set of experiments, we will use replication incompetent, DNA plasmids (non-viral vectors) to express immunogens to elicit anti-tumor immune responses or to express Immune cell engagers (ICE, bispecific antibodies) to suppress tumor progression in mice.
- NIH Guidelines section III-F, BSL 2
- All required trainings are complete.
- The Committee voted unanimously to approve the registration.

6.4 22502649 - Herlyn, Meenhard, *Transcription Factor-Guided Differentiation of iPS Cells into Hematopoietic and Immune Lineages*

- This research involves the use of recombinant lentiviral vectors to deliver transcription factors (TFs) into human induced pluripotent stem cells (iPSCs) to study hematopoietic differentiation. A library of 107 human TFs will be cloned individually into a standardized lentiviral expression system and transduced into iPSCs under BSL-2 conditions. Modified cells will be characterized in vitro and injected into immunodeficient mice for in vivo analysis of lineage commitment and immune function.
- NIH Guidelines section III-D, BSL 2
- All required trainings are complete.
- The Committee voted unanimously to approve the registration.

- **6.5** 22502650 Xiaoyu, Zhou, *Understanding and manipulating immune system using functional genomics and immune engineering*
 - This study aims to design and test recombinant plasmids, viral vectors, and synthetic nucleic acids for immune cell engineering, in vivo tumor modeling. These experiments involve CRISPR-based gene editing and synthetic nucleic acids to optimize immune cell functions and enhance immune responses against tumors. These modifications are crucial for advancing immunotherapies and understanding tumor biology in vivo.
 - NIH Guidelines section III-D, BSL 2
 - All required trainings are complete.
 - The Committee voted unanimously to approve the registration.
- 7.0 Discussion of Scishield Implementation Strategy and Review Procedure
 7.1 Ms. Maraj-Owen notified committee members that individual training times will be scheduled to review the IBC module in Scishield.
- **8.0** Open Discussion
 - **8.1** Dr. Patel discussed the approval period of the IBC and how our "rolling" system allows flexibility for our researchers.
- **9.0** The meeting was adjourned at 11:32AM.
- **10.0** The next meeting will be September 10, 2025 at 11AM-12PM.

Ami Patel

Chair (or Designee) Signature: Ami Patel (Sep 12, 2025 09:58:00 EDT) Date: 9/12/2025