VERA IRB Kit for Academic Researchers (For July 2026 Open Beta Release)

Version 1.0 (June 29 2026)

1. Purpose of This IRB Kit

This IRB Kit is intended to help researchers using the **VERA platform** prepare complete and accurate Institutional Review Board (IRB) applications for studies involving **remote virtual reality (VR) experiments**.

The kit:

- Explains how VERA functions from an IRB perspective
- Clarifies roles and responsibilities (researcher vs. platform)
- Provides **recommended protocol language**
- Identifies **common IRB concerns** specific to remote VR research

Researchers should always adapt this material to:

- Their institution's IRB requirements
- The specific risks and procedures of their study

2. Overview of the VERA Platform (IRB-Ready Description)

Suggested protocol language:

VERA is a research platform designed to support remote virtual reality (VR) human-subjects research. The platform includes (1) a web-based researcher interface for study configuration, management, and data access, and (2) a Unity-based plug-in that integrates experimental logic and data collection into VR applications. VERA enables participants to complete experiments remotely using compatible VR hardware in non-laboratory settings.

Key characteristics relevant to IRB review:

- Depending on the study protocol, some participants might be **remote and others might** be **in-person**.

    - **In-person research** takes place in a defined laboratory space, like a researcher's VR lab location on an academic campus, typically under direct oversight of the research team.
    - **Remote research** takes place in a participant's own local environment, with the researcher and/or research team offering asynchronous or digitally-mediated oversight.
- All experimental stimuli and tasks on VERA are delivered through **a browser**.
- Data are recorded digitally and transmitted to secure servers for researcher access.
- VERA is a **research infrastructure platform**, not the investigator, for the purpose of IRB determination.

3. Roles and Responsibilities

3.1 Principal Investigator (PI) and Research Team

The PI is responsible for ethical and responsible oversight of the research including:

- Study design and scientific justification
- Determining risk level and eligibility criteria
- Obtaining informed consent
- Monitoring participant safety and adverse events
- Ensuring compliance with IRB approval and institutional policy

3.2 VERA Administrative and Operations Team

Suggested protocol language:

The VERA Administrative and Operations Team provides technical infrastructure (e.g., hosting), and platform-level data governance. The VERA team does not design studies, recruit participants, interact with participants, or analyze research data.

VERA:

- Acts as a **service provider / research support platform**
- Does **not** serve as an investigator or collaborator
- Does **not** make determinations about consent, inclusion/exclusion, or risk

4. Study Design and Procedures (Guidance for IRB Applications)

When completing IRB sections such as *Study Procedures* or *Research Plan*, researchers should clearly address:

4.1 Remote Participation Context

IRBs often focus on:

- Lack of in-person monitoring
- Environmental variability
- Participant safety while using VR

Suggested protocol language:

Participation occurs remotely without direct researcher supervision. Participants are instructed to complete the study in a safe environment free of physical hazards. Written and visual instructions are provided prior to beginning the VR task. Research team contact information is provided to participants who have questions or concerns, alongside required IRB contact information.

4.2 VR-Specific Risks

Risks for VR research tend to be minimal but should be carefully evaluated and transparently announced to participants. Include:

- Clear withdrawal procedures
- Exclusion criteria (e.g., history of severe motion sickness, seizures, or photosensitivity if applicable)
- Any more-than-minimal potential risks or benefits to participants

Suggested protocol language:

Common VR-related risks are minimal but may include:

- Motion sickness or nausea
- Eye strain or discomfort
- Temporary disorientation
- Mild psychological discomfort depending on stimuli

5. Informed Consent Considerations

5.1 Consent Delivery

VERA studies obtain consent digitally.

Suggested protocol language:

Informed consent is obtained electronically prior to participation. Participants must review the consent document and affirm consent before accessing any VR study content.

Best practices:

- Use clear, non-technical language
- Explicitly state that participation is remote
- Describe VR equipment requirements

5.2 Key Elements to Highlight in Consent Forms

IRBs expect the consent form to address:

- Remote participation
- Nature of VR exposure
- Data collection and storage
- Voluntary participation and withdrawal

Suggested consent clause:

Participation involves completing tasks in a virtual reality environment using compatible VR hardware. You may stop at any time by exiting the application.

6. Data Collection, Storage, and Confidentiality

This is often the **most scrutinized IRB section** for platform-based research.

6.1 Types of Data Collected

Depending on the study, VERA may support:

- Behavioral responses (e.g., task performance)
- Interaction data (e.g., timing, selections)
- Survey responses
- Device-generated metadata (e.g., timestamps)
- Motion tracking data (e.g. head rotation)

Researchers should:

- Specify exactly what data *their study* collects
    - VERA will automatically collect some standardized data throughout the experiment, including:
        - The time the participant started and ended the experiment
        - The participant's headset transforms (position, rotation, and scale)
        - The participant's controller transforms (position, rotation, and scale)
        - The participant's triggered input actions (button presses, thumbstick movements, etc.)

6.2 Data Storage and Access

Suggested protocol language:

Research data are stored on secure servers provided through the VERA platform. Specifically, participant metadata is stored on a secure MongoDB database. Files recorded for participant sessions are stored on a secure AWS server. Identifiable or sensitive information is encrypted and cannot be decrypted without use of secure VERA environmental credentials. Data is able to be held long-term indefinitely so long as funds persist to support the server structure. Access to raw study data is restricted to the approved research team. The research team is able to download research data to local lab systems. The VERA Administrative and Operations Team does not access or analyze study data except as required for system maintenance, troubleshooting, or compliance purposes. At the end of the study, anonymized aggregated data will be added to the VERA repository for future secondary-use research. Researchers and participants may opt out of this community data sharing.

Clarify:

- Encryption and access controls (high-level, non-technical is acceptable)
- How long data are retained
- Whether data are downloaded to local lab systems

6.3 Identifiability

If applicable, state whether:

- Data are anonymous
- Data are coded with a participant ID
- A key linking identifiers is stored separately

7. Recruitment and Compensation (If Applicable)

Since VERA supports but does not control recruitment:

Suggested protocol language:

Recruitment methods are determined by the research team and may include institutional participant pools or third-party recruitment services. VERA does not recruit participants on behalf of researchers. VERA does provide integration with a separate platform, Prolific, which is typically used for remote research in university settings.

Compensation details should:

- Be clearly disclosed in consent materials
- Be proportional to time and effort
- Not be managed by VERA

8. Adverse Events and Participant Support

IRBs expect a plan for handling issues remotely.

Suggested protocol language:

Participants are provided with contact information for the research team and instructed to discontinue participation if they experience discomfort. Any unanticipated problems involving risks to participants will be reported to the IRB in accordance with institutional policy.

9. Determining Level of IRB Review

VERA studies commonly qualify for:

- **Exempt** (e.g., benign behavioral tasks, anonymous surveys)
- **Expedited** review (minimal risk behavioral research)

Researchers should:

- Justify minimal risk clearly
- Reference everyday VR use where appropriate
- Avoid claiming exemption without IRB confirmation

10. Use of This Kit in Practice

Researchers are encouraged to:

- Copy model language into IRB templates
- Modify wording to reflect study specifics
- Attach this IRB Kit as a **supplemental document** if permitted

For institutions with additional requirements (e.g., data transfer agreements, vendor attestations), the VERA Administrative and Operations Team can provide platform-level documentation separately.

Document 1: VERA Platform Overview Appendix (For IRB Submission)

Appendix Title

Overview of the VERA Research Platform

1. Purpose of This Appendix

This appendix provides IRB reviewers with background information about the VERA platform, which is used as technical infrastructure to support remote virtual reality research studies.

2. What Is VERA?

VERA (Virtual Experiment Research Architecture) is a research platform designed to support the deployment and management of remote virtual reality (VR) experiments. It provides technical tools for researchers to configure studies, deliver VR-based tasks, and access study data.

VERA consists of:

- A web-based researcher interface
- A Unity-compatible plug-in for integrating experimental logic and data collection into VR applications

3. Role of VERA in Research Studies

The VERA platform provides infrastructure only. The VERA Administrative and Operations Team does not design studies, recruit participants, obtain consent, analyze data, or interact directly with research participants.

The Principal Investigator retains full responsibility for:

- Study design
- Ethical conduct of research
- Informed consent
- Participant safety
- IRB compliance

4. Participant Interaction with VERA

Participants may:

- Access consent materials
- Complete VR-based tasks
- Submit responses and survey data

Participants do **not**:

- Communicate with VERA staff
- Receive study instructions from anyone other than the research team

5. Data Handling and Access

Study data are stored on secure servers provided through the VERA platform. Access to raw study data is limited to authorized members of the research team. The VERA Administrative and Operations Team may access data only as necessary for system maintenance, troubleshooting, or compliance purposes.

The platform supports:

- Role-based access controls
- Segregation of studies and datasets
- Secure data transmission

6. Identifiability and Privacy

- VERA does not require the collection of direct personal identifiers unless specified by the research design.
- Researchers determine what identifiable information, if any, is collected.
- Researchers are responsible for compliance with institutional privacy requirements.

7. Remote Research Considerations

VERA enables remote participation, meaning studies are completed outside of controlled laboratory settings. Researchers are encouraged to provide clear safety instructions and screening criteria appropriate to their study design and IRB requirements.

8. Regulatory Positioning

VERA functions as a research support platform and technology provider. It is not an investigator, sponsor, or regulatory decision-maker.

End of Appendix