THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

SEBLAB Research Pilot Grant RFA

Purpose:

The Southeastern Biosafety Laboratory Alabama Birmingham (SEBLAB) Research Pilot Grant seeks to foster innovative research on Risk Group-3 (RG3) pathogens that require Biosafety Level -3 containment (BSL-3). With recent NIAID investments of > $20 million dollars, the SEBLAB team has worked hard to lower the barrier for PIs that have never worked on RG3 pathogens, to safely and effectively investigate hypotheses and generate data within high containment. To take full advantage of SEBLAB's cutting-edge resources and scientific equipment (see page 3) within this world class state-of-the art research facility, we will issue 3 pilot grants in the amount of $25,000 each.

Eligibility:

Eligible applicants must hold a full-time UAB faculty appointment at any rank and have no current research program requiring BSL-3 containment. Candidates currently supported by research training grants or intramural funding may apply. Successful awardees will have the full support of highly trained research personnel to help execute proposed experiments and generate preliminary data for publication and grant submissions. We encourage microbiologists, immunologists, and other research scientists to take full advantage of this unique opportunity to explore new hypotheses and expand current lines of investigation towards the evaluation of RG3 pathogens in SEBLAB. Priority will be given to applications designed to address a specific hypothesis and generate preliminary data for grant submission.

Research Scope:

Proposed research must focus on RG3/BSL-3 pathogens. The following pathogens are currently being studied in SEBLAB: SARS-CoV-2, Highly pathogenic Avian Influenza, *Mycobacterium tuberculosis*, Poliovirus, *Candida auris, Histoplasma*, and *Coccidiodes.* Additional RG3/BSL-3 pathogens within the scope of this RFA are outlined in pages 4-5. *NOTE: Investigators seeking to work with Select Agents including Tier -1 Select Agents should anticipate a 6-10 month wait until the project can be initiated. This enables enough time for the SEBLAB team to complete additional regulatory requirements. All proposed research projects undergo rigorous review by SEBLAB management, as well as, the Institutional Biosafety Committee (IBC), Institutional Animal Care and Use Committee (IACUC), Institutional Review Board (IRB) and Institutional Review Entity (IRE). The project start date and 1 year window to utilize funds will be adjusted accordingly.*

Submission Requirements

Letter of Intent: Submit a two-page letter of intent (LOI) through InfoReady by 5:00 PM CST on **April 1, 2026.** The LOI should include; names/titles of the principal investigator and co-investigators, a brief summary of the study aims, plans for subsequent application for extramural funding, and the PI's NIH biosketch (excluded from page limit).

Complete application:

After review of the LOI, selected applicants will be invited to submit a full proposal. Consultation with a biostatistician as well as the SEBLAB core research team is required for input on study design prior to submission of the full application. The complete application (single PDF file) should be submitted through InfoReady by 5:00 PM CST on **June 1, 2026.** T he submission should include the following, and any missing documents will result in rejection of the application.

- Specific aims (one page)
- Research plan (3 pages)
- Bibliography (excluded from page limit)
- Candidate statement (300 words)
- Biosketches of PI and collaborators
- Budget
- Budget justification
- IRB and/or IACUC protocol approval prior to the funding start date (as applicable)
- Letter of support from the Department Chair.

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

SEBLAB Research Pilot Grant RFA

The Research Plan should include sections on significance, innovation, approach, and project timeline. Preliminary data is encouraged but is not necessary. For all documents, page margins must measure at least 0.5 inch (top, bottom, and sides) on pages formatted to be no larger than 8.5" x 11". Font size must be at least 11 points. Smaller text of at least 8 points in above is permissible for figure legends, graphs and diagrams. Fonts recommended are one of Arial, Georgia, Helvetica, and Palatino Linotype (per NIH guidance). The type density must be no more than 15 characters per linear inch (including characters and spaces). The line spacing must be no more than six lines per vertical inch.

Duration and Effort:
Funding up to $25,000 will be provided and we anticipate funding three awards. The project's 1-year funding window will initiate at the onset of the first experiment and the timelines outlined below will be adjusted accordingly. A progress report is due at 6 months. This report should include a 1-page summary of research progress and expenditure report. Continued funding is dependent on successful research progress.

Allowable Costs:
The pilot grant will provide one year of support. Costs allowed are salary support for research staff, supplies and/or equipment directly relevant to the proposed research.

2025 Deadlines

Letter of intent: April 1, 2026
Notification on decision to submit full application: May 1, 2026
Full application: June 1, 2026
Notification of award: August 1, 2026
Earliest start date: October 1, 2026
Research progress summary: Six-month progress report due May 1, 2027
End of funding: September 30, 2027

For questions or additional information, please contact:
The SEBLAB Research Operations Manager Dr. Doug Fox at foxdm@uab.edu

Cutting-Edge Scientific Equipment

Figure 1. Equipment- *In vitro* Core A. Echo Revolve Upright/Inverted Fluorescence Microscope. **B.** Zeiss Lattice Lightsheet Microscope. **C.** Sartorius Incucyte live cell imaging system. **D.** Agilent BioSpa8 for Cytation 10 system. **E.** Agilent MultiFlo FX liquid handler for high throughput screening **F.** ThermoFisher MX Micro-ultracentrifuge.

Figure 2. Equipment- *In vivo* Core A. DSI Buxco Nose-Only Inhalation Tower System. **B.** SciReq FlexiVent Pulmonary Function Testing System. **C.** MiLabs µCTUHROIFLT In Vivo Imaging System. **D.** BIOMTECH β-Eye SPECT Imaging System **E.** BIOMTECH γ-Eye PET Imaging System. **F.** SomnoFlo Isoflurane anesthesia system. **G.** Somnosuite Isoflurane anesthesia system. **H.** Qiagen TissueLyser II.

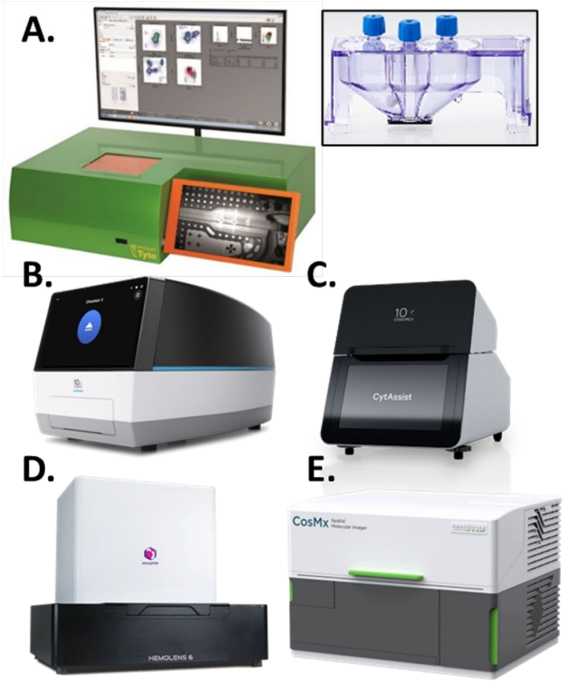

Figure 3. Equipment- Single Cell Core A. Miltenyi MACSQuant Tyto Flow Cytometer and Cell Sorter. **B.** 10X Genomics Chromium X Single Cell Sequencing System. **C.** 10X CytAssist. **D.** Morphle Hemolens. **E.** CosMx Spatial Imager

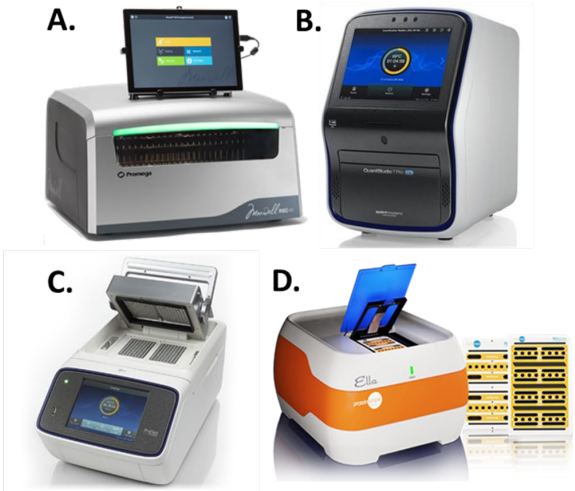

Figure 4. Equipment- Pandemic Preparedness Core. A. ProMega Maxwell RSC 48 Nucleic Acid Extraction System. **B.** Applied Biosystems QuantStudio 7 Dx Pro RT-PCR. **C.** ABS ProFlex PCR. **D.** Biotechne Protein Simple Ella Next Generation ELISA system.

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

SEBLAB Research Pilot Grant RFA

Select Agents
****Tier -1 Select Agents**
RG3 Agents that can be used at BSL2+

Risk Group 3 (RG3) - Bacterial Agents Including Rickettsia

- **Bacillus anthracis**** (technically RG2, but biosecurity restrictions require SEBLAB facility)
- **Burkholderia mallei**, B. pseudomallei ****
- Brucella including B. abortus, B. canis, B. suis
- Coxiella burnetii (except the Phase II, Nine Mile strain listed in Appendix B-II-A, Risk Group 2 (RG2) - Bacterial Agents Including Chlamydia)
- Clostridium botulinum toxin-producing strains
- **Francisella tularensis**** (except those strains listed in Appendix B-II-A, Risk Group 2 (RG2) - Bacterial Agents Including Chlamydia)
- Mycobacterium bovis (except BCG strain, see Appendix B-II-A, Risk Group 2 (RG2) - Bacterial Agents Including Chlamydia), M. tuberculosis Page 44 - NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (April 2024)
- **Mycoplasma capriocolum** and M. mycoides****
- Orientia tsutsugamushi (was R. tsutsugamushi)
- Pasteurella multocida type B -"buffalo" and other virulent strains
- Rickettsia prowazekii
- Rickettsia akari, R. australis, R. canada, R. conorii, , R. rickettsii, R, siberica, R. typhi (R. mooseri)
- **Yersinia pestis**** (except those strains listed in Appendix B-II-A, Risk Group 2 (RG2) - Bacterial Agents Including Chlamydia)

Risk Group 3 (RG3) - Fungal Agents

- Coccidioides immitis (sporulating cultures; contaminated soil)
- Histoplasma capsulatum, H. capsulatum var. duboisii Appendix B-III-C. None Appendix B-III-D.

Risk Group 3 (RG3) - Parasitic Agents

- *Naegleria fowleri* (technically RG2, but given its brain-eating nature work to be done in SEBLAB

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

SEBLAB Research Pilot Grant RFA

Select Agents
****Tier -1 Select Agents**
RG3 Agents that can be used at BSL2+

Risk Group 3 (RG3) - Viruses and Prions

Alphaviruses (Togaviruses) - Group A Arboviruses

- Chikungunya virus (except the vaccine strain 181/25 listed in Appendix B-II-D Risk Group2 (RG2) – Viruses)
- Semliki Forest virus
- West Nile virus
- Western equine encephalitis virus
- **Eastern equine encephalitis virus**
- **Venezuelan equine encephalomyelitis virus** (except the vaccine strains TC-83 and V3526, see Appendix B-II-D (RG2) – Viruses)

Arboviruses

- Japanese encephalitis virus (except those strains listed in Appendix B-II-D Risk Group2 (RG2) - Viruses)
- Yellow fever virus
  Powassan virus/Deer tick virus
- Murray valley encephalitis

Arenaviruses

- Flexal virus
- Lymphocytic choriomeningitis virus (LCM) (neurotropic strains)

Bunyaviruses

- Hantaviruses including Hantaan virus, Sin nombre virus
- Rift Valley fever virus
- Heartland virus

Coronaviruses

- SARS-associated coronavirus (SARS-CoV)
- Middle East respiratory syndrome coronavirus (MERS-CoV) Flaviviruses - Group B

Orthomyxoviruses

- Influenza viruses 1918-1919 H1N1 (1918 H1N1), human H2N2 (1957-1968), and highly pathogenic avian influenza H5N1 strains within the Goose/Guangdong/96-like H5 lineage (HPAI H5N1).

Poxviruses

- Monkeypox virus Clade I
- Monkeypox virus Clade II

Prions

- Transmissible spongiform encephalopathies (TSE) agents (Creutzfeldt-Jacob disease and kuru agents)(see Section V-C, Footnotes and References of Sections I through IV, for containment Page 45 - NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (April 2024) instruction)

Retroviruses **(BSL2+ can be appropriate)**

- Human immunodeficiency virus (HIV) types 1 and 2
- Human T cell lymphotropic virus (HTLV) types 1 and 2
- Simian immunodeficiency virus (SIV)

Rhabdoviruses

- Vesicular stomatitis virus (except those strains listed in Appendix B-II-D Risk Group2 (RG2) - Viruses)