IMPORTANT: The following tactical action plan has been developed for research continuity at Alcorn State University post COVID 19. Approval to move from one phase to another will be issued by the President and will be based on guidance provided by county and state health officials. (The team recognizes that components of Phase I begin in May 2020)

Note: This document refers only to research that must be conducted in university research and office spaces, such as the physical campus, field stations, agricultural lands, field operation at non-university-owned facilities or requiring direct contact with individuals (human subjects). On-campus research includes physical presence in campus libraries and archives to access any university material that cannot be accessed remotely, as well as performance work (arts) or other studio access that must be done on campus.

If you are a research employee who is returning to work and you are not feeling well and/or are experiencing any symptoms of illness, please remain at home, do not report to work, and contact your supervisor immediately.

If you are experiencing COVID-19 symptoms (e.g., fever, dry cough, body aches, loss of smell or taste, headache), you may wish to contact your personal physician for further guidance and then contact your supervisor. If you are experiencing symptoms, you should not report to work unless cleared by a physician to do so and you may be asked to wait until at least one week or longer has passed since the onset of symptoms, symptoms have improved, and you have been free of fever without any fever-reducing medications for at least 72 hours.

THERE ARE THREE KEY CONSIDERATIONS FOR THE POST-COVID-19 RESEARCH ENVIRONMENT:

Leverage data for space planning and social distancing

Labs are already well-equipped to meet enhanced safety requirements, as they typically operate with strict guidelines for hygiene (handwashing) and PPE (lab coats, gloves, eyewear, etc.) Research labs also tend to be less dense than traditional office space, which is a positive for limiting contamination. Like all workplaces, social distancing within the lab environment will become a necessity. Understanding utilization rates of each component of the lab space is key to deploying resources efficiently.

Given that many scientists typically work side by side, this will require some logistical ingenuity. Rotational staffing is currently in use across many labs, but it has natural limits with respect to productivity. Strategic occupancy or space plans, prioritized based on business impact, will become essential.
Appropriate social distancing floorplans that reflect employee space demand will be required before a vaccine is widely available. Research Labs should create space plans with utilization data that balances epidemiological guidelines and employee comfort levels. On the other side of the spectrum, social distancing measures could increase space requirements for Alcorn State University in a position to expand.

**Add new protocols for heightened quality and safety**

The post-COVID lab will require a dramatic increase in focus on security, clean and safe working environments. Each department must develop new standard operating procedures (SOPs) and policies to optimize safety, security, productivity and wellness. This will require staff training to adjust to new standards, communicate expectations and ensure adherence to new protocols. Janitorial resources will need to be efficiently and effectively deployed multiple times each day. Air quality and heating, ventilation, and air conditioning (HVAC) operations will need to be monitored and run to limit contagion risk. Accurate and detailed floorplan utilization data will be essential to maintain safety standards. Temperature checks at entry points may also be required to prevent contagion from entering the workspace, and a plan of action in case an employee is diagnosed with COVID-19 will need to be determined.

**Technology can be a great tool to operationalize a post-COVID-19 workplace**

Occupancy planning tools can be used to efficiently manage workforce deployment using real-time Wi-Fi login and security badge data, as well as data from heat and motion sensors. This data can interpret space utilization activity to assess future needs and monitor building activity to ensure adherence to post-pandemic capacity limits. Smart building technology and wireless equipment sensors can continuously monitor and manage indoor air quality to support employee health, wellbeing and productivity. Smart building systems automatically self-adjust without the need for on-site engineers, improving building efficiency and reducing energy costs, which in turn contributes to reductions in overall operating expenses.

As Alcorn State University consider return to work, departments should take a holistic view of their portfolio and consider a variety of ways to reduce Covid 19 Related Exposure without compromising lab functionality. In addition to more comprehensive facilities management protocols, training the University workforce to function effectively independent of location (on vs. off-site) will define the most successful labs. Alcorn State University should investigate how to best deploy technologies, space planning measures and facilities management (FM) outsourcing in order to reduce overall spend and contractually obligate providers to deliver a defined level of service.

**Goal:** To enable all Alcorn State University research to resume while ensuring safety and while maintaining public health requirements.
Special Considerations

- The following guidelines may not apply to persons currently identified as high risk groups.

- As the possibility remains that a new phase of public health emergency may create a renewed need to shelter-in-place, animal researchers should consider the ramifications on their animal subjects of another rapid ramp-down before resuming research.

- Many human, animal, plant, and microbial research studies are longitudinal and entail regular follow up of well-characterized cohorts. Delays in regular follow up may lead to data loss, loss of the cohort, and in some instances a failed study (i.e., lack of requisite data to address specific aims) after many years of investment. These efforts are included in the “time-sensitive” categories in this draft.

- Resource availability, procurement management, funding responsibilities, and other related issues are important, but not covered in this document. If the required protective gear cannot be provided at any point, not only can research not be ramped up to the next level, but it may also have to be ramped down, until required protective gear is available. Labs, research programs, or research areas must have the appropriate PPE and cleaning supplies onsite before resuming research. A process is in place to assist faculty with obtaining masks, gloves, hand sanitizers, and disinfectants needed to return to work spaces. Ordering of PPE and lab specific cleaning supplies is not sufficient to return to the labs. Research staff and personnel are not permitted to return to labs or resume research activities if the necessary PPEs and cleaning supplies are not onsite.

- Various units of campus may elect to introduce and enforce stricter guidelines as needed. Guidelines stated here have to be adopted as the minimum level of compliance.

- Issues related to human resource policies and funding of research are not included in this document.

- It is important to recognize that health care systems, including Alcorn State University Health Center, have developed procedures for mitigating risk to minimal levels and these procedures can and should be incorporated into clinical research and human subject studies.

**CONTINGENCIES:** If and when the County or State health officials provide limiting/restrictive guidance, research efforts will drop back to lower phases as appropriate and will be ramped up when the guidance changes. Additionally, we will leverage the learnings in earlier phases to make necessary updates in guidelines for the later phases.
Guiding principles:

- **Principle #1:** Follow local, State, and National Public Health Authority directives to safer-at-home and maintain physical distancing. Mississippi Coronavirus Hotline (7 days a week, 7 a.m.–7 p.m.): 877-978-6453; Hard of hearing? Dial 711 for assistance. [https://msdh.ms.gov/msdhsite/static/14,0,420.html](https://msdh.ms.gov/msdhsite/static/14,0,420.html)
  - Decisions on when Alcorn State University will begin to ramp up research (or if needed, to ramp down research due to guidance from public health officials), and at which phase research can be conducted (more on phases below), are guided by the State Governor and the County Public Health Officer. The transitions to different phases will be communicated by the President.
  - Some research projects have successfully and safely transitioned to being fully remote, requiring infrequent or no access to university spaces. While also considered important and essential, they are not considered in the priority tiers discussed below. Those activities could continue at home until Phase 4.

- **Principle #2:** Protect the mental and physical health and safety of the research workforce, clinical patients and human research subjects.
  - No personnel will be allowed in shared workspaces if they are exhibiting any symptoms of respiratory illness that the CDC associates with COVID-19 (cough not associated with seasonal allergies and shortness of breath, with any two of the following: fever, chills, repeated shaking with chills, muscle pain, headache, sore throat, or new loss of taste or smell.)
  - No researcher should feel they are being compelled to work on campus or in the field during periods of safer-at-home directives.
  - Safe practices within laboratories must be rigorously maintained, with adequate access to PPE and other safety related supplies.
  - When we are able to gradually scale up on-campus activities, it is clear that there will be many months ahead of us with the very real possibility of a resurgence of Covid-19 cases. Therefore, our ability to gradually and sustainably return all of our research and scholarly activities to ‘normal’ will depend on the discipline and dedication of everyone on our campus staff to remain committed to physical distancing and other safety measures at work and in our personal lives, to protect ourselves and all of those we care about at home and at work.

- **Principle #3:** To ramp up research activities in a way that ensures safety of all employees and compliance with public health guidelines, we highlight the following strategies.
  1. The PI/Faculty member for the lab, research program, or research area is responsible for implementing, monitoring, and ensuring lab compliance with their
COVID-19 Safety Plan and University requirements. We recommend including lab personnel and graduate students in developing lab specific safety plans as this will allow for greater flexibility and opportunity to address individual needs and concerns.

2. Each lab, research program, or research area MUST maintain a daily log of employees on premise to support contact tracing. A standard log template will be used that includes the employee name, time in, time out, and affirmation that the employee is not experiencing symptoms of illness. The daily logs must be reviewed and signed off weekly by the PI/Program Director/Faculty or their designee. Electronic signatures are not permitted.

3. The number of people in a workspace must be limited. We could permit 7-day/24-hour lab access wherever feasible, with workers using the lab in different work shifts or on staggered workdays. While physical distancing and low occupancy are critical, regulations regarding working alone must be adhered to, and the safety of all lab personnel must be ensured. Assuring that no single individual is working in a lab alone with potentially hazardous materials. General lab safety standards still apply.

4. If the required PPE is not available and physical distancing cannot be maintained, the research cannot ramp up. Supply chain issues on restart could be a bottleneck. Ordering of items ahead of time may be prudent. Under no circumstances can safety be sacrificed due to lack of adequate supplies, type, and quality of PPE. For smooth ramp-up and acceleration of research activity, Deans, Department Chairs, PIs and their teams should plan for supply chain issues and prepare core and fabrication lines in advance of need.

5. Ensure Core Facilities, Shops, Wet Labs, and Fabrication Lines are engaged and ready to support work ramp up. Facilities will develop Standard Operating Procedures (SOPs) for lab access dependent on the Phase of Ramp-Up and will determine supply (including PPE) needs ahead of time.

Phases of Ramp Up (or Ramp Down):

Any personnel returning from out of state or who has been exposed to COVID-19 must follow current guidance on 14-day self-quarantine prior to reporting to campus – these individuals should work from their place of quarantine to the greatest extent possible if they are asymptomatic.

Non-critical research that generates large volumes of hazardous waste and/or necessarily involves chemical, biological, radiation or other hazardous should not restart until Phase 4 at the earliest.
**PHASE 1:** Current “Safer-at-Home” phase. Only critical research activities may occur.

- Research that must be maintained for the health and safety of human and animal subjects
- Research for which discontinuation would cause effectively irreplaceable data and sample loss. Prioritize research for completion of grants with end dates within 3 months ~July 31, 2020 (where funding agency has not granted leniency).
- Maintenance of critical equipment and a safe standby mode of laboratories.
- Maintenance of critical animal populations and/or ensuring the ethical care and conduct of research with animal subjects.
- Maintenance and care of plant populations (includes immortal populations of trees, strawberries, etc.) that are hard to recreate and represent decades of research.
- COVID-19 research with a timeline relevant to the current pandemic.
- Core facilities can stay at a level of operational status that is adequate just for the ongoing research activities in this phase.
- Exception granted by Deans, Directors, and the President.

**PHASE 2:** Time-sensitive research activities (no more than ~30% of research personnel on-site at any time). With permission from the President, the following may occur:

- Seasonal data collection such as field and agricultural work, time-sensitive human subject research studies, experiments close to completion, or deadline driven, whose pause or deferral would lead to long delays or loss of research results.
- Generation-driven animal and plant experimentation must be carried out or the value of the animal colony or plant varieties for research will be lost.
- Necessary core facilities should be staffed and operational to support only the ongoing research activities during this phase. Research activities dependent on core facilities may thus be having a gradual ramp-up during this phase and will be vetted through a process defined by the core facilities directors and the concerned Dean.

Working remotely, the following should occur:

- PI/Lab manager should be creating list of necessary supplies, including proper PPE and those necessary for proper decontamination of surfaces in order to move to Phase III; due June 12, 2020 to respective Dean’s Office
- PI’s/Lab managers working remotely should be developing their protocols/guidelines for their field/lab; due June 19, 2020 to their respective Dean’s.
PI’s/Lab managers should be sending their approved protocols to any graduate students with a signature line for them stating that they comply with the set guidelines.

**PHASE 3:** Gradual restart of research (no more than ~60% of research personnel on-site at any time):

- Lab and studio access for graduate students close to completing their degree. Research that is critical to meet thesis requirements, or requirements before a graduating student can start a new position that has already been accepted.
- Core research and fabrication facilities that cannot be operated remotely such as, agriculture or lab work could expand their operations. Individual facilities should adhere to additional safety procedures imposed by the facility directors and follow their SOPs.
- In-person research where physical distancing may be maintained or risk mitigated to a minimal risk level. In general, this research can begin when clinical care settings open up and follow similar procedures.
- Field research can be resumed adhering to the relevant requirements and local guidelines.
- Gradual expansion on all research activities, while following the requirements and suggestions outlined in the next section. Public health will always be our top priority.

**PHASE 4:** Restart a return to full research operations. The return to the new normalcy may be gradual and, in some cases, it may require additional sub-phases, which can be locally defined under the guidance of Deans and Directors.

- Incorporate undergraduate students back into the field/lab

**REQUIREMENTS FOR PHASES 1 – 3:** All research activities must maintain the following:

1. Only personnel with a need to access physical locations to advance research should be on-site. Even those personnel should minimize time on campus. All others should remain “safer-at-home” and/or off-site to help maintain physical distancing until those Executive Orders are removed. Meetings should be conducted remotely.
2. Labs may not be authorized for access unless the following are defined and ready to be produced upon request by the Deans and/or President:
   1. How many individuals can be in a space at any given time
   2. A clear process to ensure work shifts do not accidentally overlap
3. A listing of supplies provided to maintain safety and their storage location: face coverings, soap, hand sanitizers, cleaning materials, first aid kits.

4. Procedures to clean/wipe down shared items, equipment, cars, and work surfaces prior to usage by others.

5. A process to maintain access and activity logs in order to trace contact should someone become sick with coronavirus.

3. Physical distance between people should be maintained at all times unless other safety precautions are adopted.

   1. Maintain a distance of at least 6 feet between people unless PPE appropriate for the context is used. Laboratories and facilities with limited space that cannot ensure that personnel will meet these public health requirements must remain off-limits. Some locations may choose to reconfigure interior space to relieve bottlenecks and maintain space between research personnel.

   2. Do not gather in groups of size more than what is limited by the county officials. Research ramp-up should not result in crowded spaces or mass gatherings.

   3. Cover your mouth and nose with a face cover when around others and when moving through common spaces.

   4. Wash your hands often with soap and water for at least 20 seconds. Routinely and regularly disinfect common contact sites (keyboards, door handles, multi-user equipment, etc.).

**Additional guidance for restoration of clinical research:**

*To a large extent, clinical research should resume along the same timeline and phases as outlined earlier.* With regards to risks to participants, research staff and investigators, clinical research involving human subjects can best be categorized by the nature of the research procedures in relation to the available risk mitigation approaches. Indeed, a basic principle of human subjects’ protection is to compare risk to that encountered in the conduct of everyday life, which defines minimal risk.

**Phase 1: Observational and clinical research that can be conducted at a distance.**

Clinical research often involves record review, interviewing, psychological and cognitive testing or even the delivery of interventions much of which can be conducted without physical proximity using mailed surveys, and telephone or videoconferencing technology. Such studies can resume immediately.

**Phase 2: In person research in which risk can be mitigated to a minimal risk level through physical distancing or the use of appropriate PPE.**

In person clinical research must be conducted if remote assessment has not been developed or the nature of research protocol requires face-to-face interaction to be valid and interpretable. To reduce risk to minimal risk levels, the following precautions should be taken:
• maintaining 6 feet between assessors and participants or
• the use of PPE (surgical masks and gloves for both participants and assessors, and
• rigorous hygiene for testing materials, equipment, and waiting and testing rooms.

In some types of clinical research, physical distancing may not be possible, such as some types of behavioral assessments, some forms of imaging, EEG, or blood sampling or restraint of animal subjects. Such procedures will require appropriate mitigation procedures by participants and staff who will be required to

• complete questionnaires about their travel and health,
• have their temperatures taken upon entering the research site.
• In addition, we suggest that the investigator submit a plan for risk mitigation to their Dean for approval in advance.

**Phase 3: In person research in which risk cannot be mitigated to minimal risk levels.**
In some cases, the clinical research may require face-to-face visit and it is not possible or practical to use physical distancing or PPE in ways that ensure valid and interpretable data.

• In general, these studies will not be permitted until risk is naturally reduced to minimal levels, later in the post-pandemic process.
• However, permission for such studies may be considered on a case-by-case basis in consultation with the investigator as study circumstances maybe be idiosyncratic and not applicable to generalized categories of research.
• Such circumstances must undergo IRB review and approval for the research to be conducted.

In summary, restoration of the clinical research involving human subjects will occur in a step wise fashion in accordance with the overarching principles and phases as provided in the overall guidance provided by the Office of Compliance.
<table>
<thead>
<tr>
<th>For these study designs:</th>
<th>Research Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Phase 1</td>
</tr>
<tr>
<td></td>
<td>Shelter-in-Place</td>
</tr>
<tr>
<td>Therapeutic clinical trial (drug, device, or behavioral) where there is <strong>potential for direct benefit</strong> to the participant and risk of viral exposure can be minimized</td>
<td>Allowed</td>
</tr>
<tr>
<td>Observational and clinical research that can be conducted remotely <strong>regardless of potential for direct benefit</strong></td>
<td>Allowed*</td>
</tr>
<tr>
<td>In person research where physical distancing may be maintained and risk mitigated to a minimal risk level <strong>regardless of potential for direct benefit</strong></td>
<td>Not allowed</td>
</tr>
<tr>
<td>In person research in which risk cannot be mitigated to minimal risk levels and <strong>no potential for direct benefit</strong></td>
<td>Not Allowed</td>
</tr>
</tbody>
</table>

*Only if research personnel safety can be maintained with adherence to shelter-in-place*
Timeline of Events:

Per the memo released from Dr. Nave on 05/28/2020 all employees will be expected to be at work on Wednesday July 1, 2020. PI’s/lab managers should be working on moving from Phase I to Phase II while working remotely. Beginning July 1, 2020 PI’s/lab managers should begin to move to Phase III.

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday June 11, 2020</td>
<td>● All PI’s and lab managers are emailed a list of required materials/supplies that will be needed in order for their lab to re-open.</td>
</tr>
<tr>
<td>Friday June 12, 2020</td>
<td>● A list of all supplies that each PI and lab manager requires should be sent to their Dean’s office for ordering by 4:00 pm.</td>
</tr>
<tr>
<td>Monday June 15, 2020</td>
<td>● All requisitions for PI’s and lab managers should be submitted by the Deans offices no later than 5:00 pm.</td>
</tr>
</tbody>
</table>
| Friday June 19, 2020     | ● All PI’s and lab managers are to have developed and returned their protocols related to the “section of requirements for phases 1-3” 2.1 -2.5 to their Deans  
                          | ● Deans must sign off on these protocols and send copies of the signed protocols back to the PI’s, lab managers, and the Provost’s Office  
                          | ● Work can not begin in any lab until the protocols have been reviewed and signed off on                                                                                                                   |
| Monday June 22, 2020     | ● Signed protocols should be returned to the PI’s, lab managers and the Provost Office or declined protocols should be returned to PI’s and lab managers to revise                                      |
| Tuesday June 23, 2020    | ● PI’s/lab managers send out their field/lab protocols to their graduate students to review and sign; agreeing to comply with the guidelines.                                                        |
| Wednesday July 1, 2020   | ● All employees return to work                                                                                                                                                                         |
| Wednesday July 1, 2020-  | ● PI’s and lab managers pick up their ordered supplies  
                          | ● PI’s and lab managers organize their labs for their specific protocols in order to comply with safety guidelines                                                                                      |
| Friday July 3, 2020      |                                                                                                                                                                                                          |
| Monday July 6, 2020      | ● Graduate students may return to lab work  
                          | ● PI’s and lab managers are required to follow their protocols to ensure student and staff health safety                                                                                                  |
REQUIREMENTS FOR GRADUATE STUDENTS TO RETURN AND WORK IN RESEARCH FIELD/LABS

1. Graduate students must report any travel with the Office of Health and Disability Services (601-877-6460) prior to returning to the lab
   a. Graduate students must provide written confirmation that they have registered themselves with the Office of Health and Disability Services to their PI/lab manager.
   b. If students have travelled/reside outside of the state of MS or have been caring for sick family members, they must comply with the instructions provided by the Office of Health and Disability Services prior to returning to campus.

2. There will be no dormitories opened for students to stay on campus. If graduate students are returning to work in the field/lab they must have a residence outside the campus.

3. All graduate students will be required to have their temperature taken each time they come on campus at the main gate and they are to follow all safety guidelines set forth by the University; for example masks being worn and practicing social distancing.

4. Graduate students must have returned a signed copy of their PI’s/lab managers field/lab protocols and be in agreement to comply with the set guidelines. For example, if the PI/lab manager requires another temperature check, the student is expected to comply. A failure to comply with any protocols set forth by the PI/lab manager will result in the automatic removal of the graduate student from the field/lab.
   a. Graduate students who fail to comply with the laboratory protocols of their PI/lab manager will be issued a letter from their PI/lab manager stating the reason for their removal and what would need to occur (if anything) for them to return to the field/lab. This letter will also be sent to the Dean’s Office of the PI/lab manager.
   b. The Human Subjects Division (IRB) responses and IACUC reviews will continue; however, anticipate longer than review times given our current situation. For human subjects research, no human subjects should be tested unless there are very special circumstances. This includes on campus and field work. Exceptions to testing human subjects are:
      - testing or interviewing subjects who have already begun to be tested and for whom testing or interviewing is essential to avoid an irretrievable loss of data
COMPLIANCE

1. Faculty/PIs are responsible for ensuring their lab and lab personnel are compliant with the safety protocols and daily health monitoring logs.

2. The Office of University Compliance will monitor lab/researcher compliance with safety protocols.

3. Individuals who do not follow safety protocols will not be allowed access to labs and research spaces—No Exceptions. Labs that are noncompliant will have sanctions imposed including and up to immediate shutdown of the laboratory.

4. All labs must be prepared to immediately ramp down or shut down research activities if instructed to do so. Labs should maintain a ramp down checklist to ensure they can safely stop/ramp down research immediately if required.