Highlights - AAMC Member Activities for Novel Coronavirus
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The nation’s medical schools and teaching hospitals are crucial contributors to protecting the health of the nation. The doctors, nurses, and health professionals who work there are vital parts of the first responder network, and they are prepared and ready to answer the call.

This document highlights some of the important work that the academic medicine community is performing in the face of the novel coronavirus. This is a compilation of press reports on and information from some AAMC member institutions.

This document will be updated periodically. If you would like to provide additional information, please contact Brian Lehman, AAMC director of public affairs at blehman@aamc.org.

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Front Lines/Facility Preparedness
University of Nebraska Medical Center
Nebraska has a 10-bed biocontainment unit, complete with concrete walls, filtered air and video links to the nursing station. This unit was used for Ebola back in 2014. Additionally, the hospital’s campus has the only federal quarantine unit in the country.

“What — heaven forbid — happens if an employee or staff member gets exposed to one of these agents, or even worse than that, gets infected, where are you going to put them? You can’t just call up a local hospital and say, ‘I’ve got somebody who has anthrax, make up a bed,’” said Dr. Jeffrey P. Gold, chancellor of the University of Nebraska Medical Center. “You need facilities that can do everything from air and water handling to the complexities of waste disposal.”


At least two of the more seriously ill evacuees were being monitored in the hospital’s biocontainment unit, a special ward on the seventh floor where the three Ebola patients were treated in 2014. It looks like a typical hospital ward, but is equipped with special technology, including doors that act like an airlock and a separate area for doctors and nurses to change and shower.

The other evacuees are being housed across the street in a 20-bed quarantine unit, which opened last year and is a joint venture with the University of Nebraska Medical Center. The rooms resemble something out of a college dorm: beige walls, a single bed, wooden furniture. But each room also comes with exercise equipment, like a stationary bike or a treadmill, to help patients stay active if they are feeling well enough.

To fight against isolation, patients in the biocontainment rooms also have access to video technology that attaches to a separate room, so they can virtually visit with loved ones without risk of infection.


Some of the [biocontainment] unit’s unique features include high-efficiency particulate air (HEPA) filtration system to ensure that micro-organisms do not spread beyond the patient rooms. There is a secured access main entrance featuring double doors that are pressure controlled. Staff have a separate, secured access entrance and exit. Dual "pass-through" autoclaves decontaminate waste, linens, and materials leaving the unit. Patient isolation rooms maintain negative air flow with 15 or more air exchanges per hour to assure that hazardous infections are contained. In addition, use of a secure telehealth communication system minimizes the number of staff needing to enter isolation rooms. Use of HEPA-filtered individual isolation units, sometimes called biopods or isopods, are available for safe transport and transfer of an infected patient to the unit. These are just some of the safety measures being taken to keep germs inside the unit and people safe on the outside.

Source: https://www.nebraskamed.com/biocontainment

Rhode Island Hospital
Leaders at Rhode Island Hospital in Providence have been planning for weeks for the arrival of the coronavirus. The virus appeared last week in one student and one staff member who traveled to Italy on a trip sponsored by a parochial high school in Pawtucket. As worry spread through the state, people who called the hospital in advance to seek a test were asked to remain in their cars until a doctor could go out to screen them.

“We have a physician in protective equipment go out to the car and put masks on anybody in the car, and take a history, and do a limited screening exam, and then do the testing, which in
most cases is a nasal swab,” said John B. Murphy, president of Rhode Island Hospital and Hasbro Children’s Hospital. In the two positive cases, the results were available in four hours. Rhode Island Hospital has 70 “negative-pressure” patient rooms — which means airborne particles cannot escape — that can be used to isolate people. The hospital’s engineers are analyzing how to turn entire floors of the hospital into isolation wards.

The hospital has about 25 patients on ventilators on an average day. It can treat more than 100 people on ventilators in a demand surge, Murphy said. Beyond that, he said, in the worst case, the hospital would be forced to work with state officials to find outside facilities to isolate and treat patients.”


**Johns Hopkins Medicine/Health System**

*Based on the current information available, patients diagnosed with COVID-19 should be cared for in a designated isolated area away from other patients using infection control practices outlined by the CDC. We have several areas in the hospital that can safely provide care for patients with respiratory viral diseases.*

One area, the Johns Hopkins Biocontainment Unit (BCU), is the only one like it in the Mid-Atlantic region, and it is equipped to isolate and treat patients during an outbreak of a contagious virus. Such units are not necessary to care for patients with COVID-19; however, the BCU’s capabilities make it a great resource for isolating patients when necessary.

*Teams of Johns Hopkins specialists in infectious disease, critical care, emergency medicine and public health work at the same location here in Baltimore. Many Johns Hopkins doctors and staff members work with colleagues at the CDC, the National Institutes of Health and the World Health Organization, as well as our local health department. We can confer with one another to make the best use of new information about COVID-19, clarify confusion among the public and help patients.*

Source: [https://www.hopkinsmedicine.org/coronavirus/ask-the-expert.html](https://www.hopkinsmedicine.org/coronavirus/ask-the-expert.html) - Q&A with Brian Garibaldi, Director of the Johns Hopkins Biocontainment Unit

**NYU Langone Hospital**

*Currently, there is one confirmed case of COVID-19 in New York City. If number of cases in New York City were to significantly increase and NYU Langone were to receive a large number of COVID-19 patients, Dr. Michael Phillips, Chief Epidemiologist at NYU Langone Hospital said they would escalate precautions to what he called a Level 3. In this situation, “we would open our surge units, which are designated respiratory isolation units, where we cohort patients with the same respiratory infections.”*
At NYU Langone they are adopting previous preparedness protocols for the flu with some changes. "The basic principles are the same but we are placing more preventative emphasis on airborne transmission," said Phillips, which means patients with flu or pneumonia-like symptoms that test negative for these illnesses and other common respiratory illnesses are immediately placed under isolation for caution. Anyone coming in contact with these patients is required to wear a surgical mask and eye protection. He describes this change as a "big shift."


Montefiore Hospital
"Our emerging infectious disease unit is an additional space that could be utilized if needed for this virus. We have taken extra steps to prepare this unit should we need to use it," said Dr. Theresa Madaline, epidemiologist at Montefiore Hospital.


Northwell Health
Dr. Mark Jarrett, the chief quality officer for Northwell Health says that across all 23 sites they are "working on screening, triage and identification so that any places of entry are included and addressed."


University Hospital (Rutgers)
At Rutgers, the negative pressure rooms for airborne isolation have been checked and stand ready for use. "If there is a large surge of patients, we may have to consider cohorting on separate wards," said Dr. David Cennimo, Assistant Professor of Medicine-Pediatrics Infectious Disease at Rutgers New Jersey Medical School.

Brigham and Women’s Hospital
The Brigham has substantial experience evaluating and caring for patients with possible MERS, another type of coronavirus. A multidisciplinary team is collaborating to ensure the hospital is ready to respond if there is a need to test or provide care for patients with possible 2019-nCoV infection. Recent activities include:

- Updating screening protocols to rapidly detect patients with possible 2019-nCoV infections
- Partnering with Massachusetts General Hospital to add a Best Practice Advisory into Epic to flag patients with possible 2019-nCoV
- Educating providers about what to do if they are concerned a patient may have 2019-nCoV
- Updating the Brigham’s Infection Control plan for Emerging Respiratory Viruses to include 2019-nCoV
- Working with Materials Management to ensure adequate stock of personal protective equipment and laboratory supplies


University of Washington Medical Center
All of the UW Medicine hospitals have protocols in place to assess the risk for someone presenting to an emergency department or clinic with this infection. People with cold- or flu-like symptoms are being asked to wear a mask and about travel history in the prior 14 days. People who we feel might have the virus are moved out of public spaces and into rooms where they can be taken care of safely. UW School of Medicine faculty and researchers are working on learning more about the virus, creating new tests, and developing possible treatments and even vaccines.

Source: [https://www.washington.edu/coronavirus/#uwmedicine](https://www.washington.edu/coronavirus/#uwmedicine) – From FAQ “What is UW Medicine doing about coronavirus?”

UCSF Health
UCSF Health has 46 airborne infection isolation rooms that can safely isolate patients with COVID-19. It can adapt additional rooms and hospital areas to care for larger numbers of patients if needed. In addition, UCSF Health’s Hospital Incident Command System team is working on surge planning in the event of broader community spread.

Source: [https://www.ucsf.edu/coronavirus#prepare](https://www.ucsf.edu/coronavirus#prepare)
University of Texas Dell Medical School
“I think actually Austin is uniquely prepared,” said Dr. Coburn Allen an infectious disease specialist at the University of Texas Dell Medical School.

“We've learned from previous epidemics around the world like MERS and SARS and Ebola that we want to be ready. We don’t want to wait for this to come and surprise us,” said Dr. Allen. That means cross-training between Austin hospitals, so the city is better prepared to detect, track and isolate infected patients.

“It’s very similar to what we do with a tuberculosis patient and we have tuberculosis patients and patients with possible measles and things like that who will come through Austin not infrequently. So, it's the same sort of process, just potentially on a much larger scale,” said Dr. Allen.


Icahn School of Medicine at Mount Sinai
The Mount Sinai Health System has been preparing for the arrival of the novel coronavirus, now known as COVID-19, in the New York area. Our infectious disease specialists are trained and equipped to care for patients with complex diseases such as COVID-19.

Source: https://www.mountsinai.org/about/preparedness/novel-coronavirus?_ga=2.248382407.1500982182.1583187338-921331066.1583187338
https://www.mountsinai.org/about/preparedness/novel-coronavirus/faqs

University of Chicago Medicine
We’re also instructing our clinical teams to follow standard infection control protocols. So our doctors, nurses and other clinical staff will wear gear like gowns, gloves, masks and eye shields. That’s what they’d do with anyone who has something like the flu and it’s the same steps we followed during the SARS and MERS outbreaks. We’re also reminding everyone to make sure to wash their hands regularly and avoid touching their faces — that’s good practice any time of the year, but especially during flu season.

Source: https://www.uchicagomedicine.org/forefront/prevention-and-screening-articles/wuhan-coronavirus - Transcript of video with Emily Landon, MD

Virginia Commonwealth University
With the deaths of the head of Wuhan’s Hospital and several clinical workers due to the coronavirus infection, a VCU Health doctor says the hospital is well equipped to deal with this or any other threat.
“It starts from a point of entry, whether it’s a clinic or an emergency department, with appropriate and rapid isolation of a patient at the point of care,” said Dr. Gonzalo Bearman, Chair of the Division of Infectious Diseases at VCU Health.

Bearman told VPM that they would make all stakeholders and health care workers aware of the presence of the case to ensure safe protocols were followed.


**Clinical Care**

**Johns Hopkins Medicine/Health System**

Teams throughout the Johns Hopkins Health System are focusing on caring for patients. We are prepared to identify, isolate and inform our state health department about any potential cases of COVID-19. Our health system has set up appropriate screenings at all entry points, and we are providing guidance to our staff members on how to deal with the possibility of COVID-19 cases.

All our affiliated hospitals are preparing to provide care for patients with COVID-19 using current guidance from the Centers for Disease Control and Prevention (CDC) and our health system infection prevention team. We also stand ready as a resource to our state and regional partners to provide assistance to care for patients with confirmed COVID-19 who might require a higher level of care.

Source: https://www.hopkinsmedicine.org/coronavirus/ask-the-expert.html - Q&A with Brian Garibaldi, Director of the Johns Hopkins Biocontainment Unit

**UC Davis Medical Center**

Today [Feb. 26, 2020] we learned a patient we are treating here at UC Davis Medical Center for the novel coronavirus (COVID-19) is being investigated by the CDC as possibly the first patient to have received the infection from exposure in the community.

As we regularly handle patients with infectious diseases, we have robust infection control protocols in place to handle this patient and others with more frequently seen infectious diseases. In this case, we are dedicated to providing the best care possible for this patient and continuing to protect the health of our employees who care for them.

Brigham and Women's Hospital

“We are conducting drills on the identification, transport, rooming and safe care of patients,” said Brigham and Women's Hospital spokesperson, on how they are optimizing efficiency and responsiveness to a potential COVID-19 patient.


Patients with a fever or symptoms of a lower-respiratory illness, such as coughing or difficulty breathing, and who have recently traveled in China are considered at risk for 2019-nCoV infection. For these patients, clinicians have been advised to institute strict isolation precautions (airborne, contact and eye protection) immediately and page the Biothreats attending physician on call.


Dartmouth-Hitchcock Medical Center

D-H is prepared to care for patients with COVID-19, as well as patients who are suspected of having the virus. Our hospitals, clinics and departments are open and are safe for patients. A High Threat Infection Team (HTI), comprised of doctors, nurses, laboratory technicians, and respiratory therapists, is on hand to care for any patient suspected of having a high-threat infection who arrives at D-H.

Upon arrival to our D-HH ambulatory clinics, urgent care clinics, and emergency departments, patients are screened for cough, fever or international travel. Similar screenings are occurring for patients being transferred to our facilities from other institutions. This allows for early isolation of patients with potential COVID-19 symptoms.

Source: https://www.dartmouth-hitchcock.org/patient-education/coronavirus.html

UCSF Health

Teams are working to ensure the campus and UCSF Health are prepared and that faculty, staff, students, patients and visitors are informed about the outbreak. The health and safety of our UCSF community, and our patients and visitors, is among our most important priorities. UCSF remains focused on three primary goals:

- providing compassionate and safe care for patients with COVID-19
- providing support and training to keep our health care workers and other employees safe while caring for these patients, and
- communicating regularly with and offering guidance to the UCSF community during this fluid situation.
**UCSF Health** has a proven track record of protecting and safely caring for patients with infectious diseases and severe illnesses and was among the first hospitals to start preparing for a large influx of patients. As a result, UCSF Health has the facilities and protocols in place to enable us to care for these patients, while protecting the health of our faculty, staff, students, patients and visitors.

Source: [https://www.ucsf.edu/coronavirus#prepare](https://www.ucsf.edu/coronavirus#prepare)

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**Research and Testing**

**University of Pittsburgh School of Medicine/UPMC**

Thanks to the efforts of its Center for Vaccine Research and its high-tech, highly secure biocontainment lab, the University of Pittsburgh is one of the select few institutions around the world that are racing to find a vaccine to stop the spread of the deadly new coronavirus strain.

Earlier this month, Pitt's Regional Biocontainment Lab received two vials containing about 500,000 ml of the SARS-CoV-2 virus from the U.S. Centers for Disease Control, which had been gathered from someone in the United States who had the Covid-19 disease. Pitt had requested the sample of the virus in an effort to study it and develop a potential vaccine against it, which has killed more than 2,600 people and sickened nearly 80,000 worldwide.

There is, of course, no guarantee of success of finding a vaccine for this particular strain of coronavirus. But in an interview earlier this month, Paul Duprex, director of the Center for Vaccine Research and a professor of microbiology and molecular genetics at the University of Pittsburgh, said that it would take months to develop a potential vaccine. And that doesn't include clinical trials to determine safety and efficacy, as well as manufacturing time.

"Whenever we talk about vaccines, we're in it for the long haul and months of work," Duprex said.

The lab, and the Center for Vaccine Research, are uniquely suited for work on the coronavirus. The Regional Biocontainment Lab is one of 13 around the country that are funded by the National Institutes of Health and at the third of four levels of biocontainment. It's designed to handle all but the most deadly pathogens like Ebola, and Biosafety Level 3 is more than enough to safely study the virus and create potential vaccines.

University of Nebraska Medical Center
UNMC researchers announced that they had begun the first clinical trial in the United States of an experimental treatment for the coronavirus, sponsored by an arm of the National Institutes of Health. The first patient to enroll in the trial is one of the Americans from the cruise ship.

Source: https://www.omaha.com/livewellnebraska/health/the-week-in-coronavirus-nebraska-starts-clinical-trial-schools-update/article_efff6f06-be4f-5782-88a6-ec14a5d75073.html#1

Harvard Medical School
Through a five-year collaborative research initiative, Harvard University and Guangzhou Institute for Respiratory Health will share $115 million in research funding provided by China Evergrande Group, a Fortune Global 500 company in China.

While formal details of the collaboration are being finalized, the overarching goal of the effort is to elucidate the basic biology of the virus and its behavior and to inform disease detection and therapeutic design. The main areas of investigation will include:

- Rapid, more accurate diagnostic tests, including point-of-care testing
- Understanding the body’s immune response and host-pathogen interaction, including identification of biomarkers that can help monitor the infection course and disease progression and forecast the onset of critical illness and life-threatening complications among infected patients
- Vaccines to prevent infection
- Antiviral therapies that shorten the duration of the illness and mitigate symptoms among those infected
- Treatments for those with severe disease

Source: https://hms.harvard.edu/news/tackling-coronavirus

University of Washington School of Medicine
The lab of Dr. Alex Greninger, in the virology division of Laboratory Medicine at the University of Washington School of Medicine, is studying the latest genomic information about this emerging virus, and its possible implications for the clinical virology laboratory.


The University of Washington School of Medicine is moving forward with a new clinical lab test for the COVID-19 coronavirus, and plans to be able to test up to 1,500 samples per day by the end of the week.

UC San Francisco
An infectious disease expert at UCSF is working on a quick diagnostic test for the deadly coronavirus that has rapidly spread from Wuhan, China, to spark global concern and prompt public health preparations in at least two Bay Area counties.


Emory University
An antiviral compound discovered at Emory University could potentially be used to treat the new coronavirus associated with the outbreak in China and spreading around the globe. Drug Innovation Ventures at Emory (DRIVE), a non-profit LLC wholly owned by Emory, is developing the compound, designated EIDD-2801.

Source: https://news.emory.edu/stories/2020/02/coronavirus_eidd/index.html

University of Alabama School of Medicine
The investigational drug remdesivir, developed through research conducted through the Antiviral Drug Discovery and Development Center, or AD3C, and centered at the University of Alabama at Birmingham, is being used to treat select infected patients in the United States and in China who have been affected by the outbreak of novel coronavirus (2019-nCoV).


University of Maryland School of Medicine
The novel coronavirus at the center of a widening global public health emergency arrived here last Friday in two thumb-size vials, nested in dry ice and multiple layers of protective packaging. The samples, from the Centers for Disease Control and Prevention in Atlanta, remained in deep freeze until Monday afternoon, when virologist Matthew Frieman at the University of Maryland School of Medicine got clearance from an internal biosafety committee to open the tubes in his secure laboratory and begin experiments.

Frieman plans to test two dozen drugs that showed promise against two previous lethal coronaviruses, severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS), to see if they work against the new coronavirus. Because those drugs have already been tested in humans and approved for other conditions, such as cancer, they could be rapidly put into use. He’s also partnering with companies that need the expertise of a laboratory that works directly with the virus to test new therapeutics or vaccines.

Source: https://www.washingtonpost.com/science/2020/02/14/inside-lab-where-scientists-are-working-urgently-fight-coronavirus-outbreak/
Columbia University Irving Medical Center

Four research teams at Columbia University will share a $2.1 million grant to mount an aggressive effort to identify potential antiviral drugs and antibodies for use against the new coronavirus, 2019-nCoV. The funding was awarded by the Jack Ma Foundation, based in Hangzhou City, Zhejiang Province, China. As part of the project, the Columbia scientists will collaborate with academic researchers in China who are fighting to control the outbreak.

The Columbia teams will pursue four different approaches to develop drugs or antibodies that prevent the virus from replicating. Each approach will draw on prior knowledge and expertise the scientists gained while working on successful antiviral therapies against HIV and hepatitis C.


Baylor College of Medicine

Doctors at the Baylor College of Medicine are working around the clock to bring out a preliminary vaccine to combat the coronavirus, or COVID-19, according to The Associated Press. However, a previously frozen vaccine could effectively protect people.

Dr. Peter Hotez, dean for the National School of Tropical Medicine at Baylor College of Medicine told The AP he recalled finding a vaccine that was meant to combat a previous virus from 2003, SARS. But it was developed well after the virus had diminished.

That vaccine became eventually frozen, and with coronavirus cases rising by the day, they are pushing Chinese and U.S. authorities to give it a try this time.

“Ours is already manufactured, and could take off pretty quickly,” he said.

Hotez worked with his colleague, Dr. Maria Elena Bottazzi on the SARS vaccine. Using the virus’ genetic code called messenger RNA, it instructs cells to make particular proteins.

“We’re also engineering a potentially new vaccine that will be much more specific against the COVID-19,” Bottazzi said.

Researchers are still working on a vaccine entirely from scratch that will take them several years to develop.

Source: https://www.click2houston.com/health/2020/02/28/these-texas-doctors-are-working-on-a-vaccine-for-the-coronavirus/
Internal Planning:
**Rutgers New Jersey Medical School**
"We are utilizing or modifying plans that have been in place for pandemic influenza and SARS. We are prioritizing the travel questions but this is not much different than we were doing during the Ebola outbreaks,” said Dr. David Cennimo, Assistant Professor of Medicine-Pediatrics Infectious Disease at Rutgers New Jersey Medical School.


**University of Alabama School of Medicine**
*In a media conference Thursday, UAB infectious disease physicians Jeanne Marrazzo, M.D., and Rachael Lee, M.D., discussed the latest trends of the virus and its threat to Alabamians, their roles nationally and internationally, UAB Hospital’s extensive expertise in infectious diseases, and the systems in place to monitor and address them. Wesley Willeford, M.D., medical director of Disease Control with the Jefferson County Department of Health, also discussed coordinating coronavirus testing with the CDC and the role the JCDH will play in the event of a confirmed case in central Alabama.*


**Florida Atlantic University Schmidt College of Medicine**
*Medical students from Florida Atlantic University took part in an intense, realistic drill to prepare for a surge of coronavirus patients at one time.*

"Doing it hands on, it really is the best training," said Daniel Parks, a third year emergency medicine physician resident at FAU's Schmidt College of Medicine.

Source: [https://www.wflx.com/2020/03/03/fau-medical-students-prepare-coronavirus/](https://www.wflx.com/2020/03/03/fau-medical-students-prepare-coronavirus/)

**George Washington University**
*Op-ed from James P. Phillips, MD, an assistant professor of emergency medicine at the George Washington University and chief of the Section of Disaster and Operational Medicine. He discusses how to protect health care workers, telehealth’s role, and capacity issues in ERs across the country.*

“As an emergency physician at an urban hospital in Washington, DC, this is personal. My colleagues and I will be on the front lines as American emergency agencies will soon likely experience a large and sustained surge of patients with Covid-19 concerns. The public should find comfort that health experts have been preparing for weeks.”