Greetings and welcome to the second edition of the GNL Community Update.

Thanks to each of you who have been in touch with us since the last e-newsletter in March. Your input as Community Advisory Board (CAB) members is sincerely appreciated. The GNL would not be possible without the support of the community, and we will continue to do our utmost to promote public participation and transparency regarding UTMB’s biocontainment research programs. We welcome any thoughts you may have on ideas or topics you’d like discussed in future updates.

UTMB researchers aid in swine flu diagnosis and analysis efforts

Infectious diseases respect no political or geographical boundaries. We were reminded of this fact with the recent emergence and quick spread of the H1N1 swine flu. Declared an official pandemic in early June by the World Health Organization (WHO), the H1N1 flu continues to spread around the globe. Infectious disease researchers at UTMB have been engaged in an effort to evaluate this unique strain. They have analyzed approximately 1500 human samples—most from the state of Texas, but also many from Mexico and Colombia. They are looking at these samples with a unique tool called the Ibis T5000. This cutting-edge diagnostic machine identifies pathogens in clinical and environmental samples faster and with more sensitivity than any other tool. UTMB’s T5000 is one of only a very few in the U.S. and it is providing a unique opportunity for our experts to assist state and international partners alike in quick diagnosis and analysis of flu samples. Through this work, we have also optimized work flow plans to maximize capacity in advance of the upcoming regular flu season and for future responses to other outbreaks.

Emerging stars in infectious disease research

In an effort to highlight some of the important infectious disease research ongoing at UTMB, we’d like to introduce you to some of our emerging stars. Erich Hoffman, Ph.D. associate professor in the Department of Microbiology & Immunology, is part of the team doing important work with influenza viruses.

Dr. Hoffman is one of the world’s leading authorities on the molecular biology of influenza viruses. His laboratory has constructed molecular clones of each of the eight genes of the swine flu that emerged during early 2009, and is working to establish an experimental system that will allow a meticulous dissection of the genetic features of this new pandemic virus. He is particularly interested in the molecular basis of interspecies transmission and the factors that cause some influenza viruses to emerge and be more virulent. The architect of what is known as the “eight plasmid reverse genetics system,” his laboratory has unique capabilities to manipulate each of the gene segments of influenza virus, thereby providing answers to questions that are fundamental to the development of new antiviral drugs and vaccines.
AN UPDATE FROM THE MAY COMMUNITY MEETING
On May 15, 2009, UTMB President David Callender hosted a community town hall meeting to discuss pending state legislation related to information about research and security in campus laboratories working with federally regulated select agents. You can view a replay of that meeting on the GNL’s website (www.utmb.edu/gnl/community/). On May 31, the Texas State Senate gave final approval to SB 1182, a conference report which contained language regarding select agents as revised and updated with input from the Galveston community. This language, signed into law by the governor on June 19, will affect all facilities housing select agents in Texas. The full text of that conference report and a review of related news articles can also be found on the GNL’s website. We have sincerely appreciated and valued your attention to and feedback on this legislation.

GNL COMMISSIONING/RESEARCH UPDATE
The GNL’s Associate Director for Research, Dr. Joan Nichols, reports that inspectors from the Centers for Disease Control and Prevention (CDC) visited the GNL in April to evaluate the lab’s ABSL3 (animal biosafety level three) space and certify it for work with select agents. UTMB recently received CDC’s final approval for select agent research to begin in the GNL ABSL3 facility, a significant milestone. Prior to this approval, studies with non-select agents were conducted to slowly ramp up research in the newly commissioned ABSL3 facility. This same process is going on now in the tested and commissioned BSL3-E (enhanced) laboratory, where researchers are working on a WHO collaborative project on swine flu, which is a BSL2 agent. This affords us the opportunity to both do valuable work for the WHO and, at the same time, slowly ramp up research in the BSL3-E suites prior to requesting another visit by the CDC to certify the space for select agent use. We refer to this as the “crawl, walk, run” approach to bringing the building fully online from a research perspective.

GNL WEBSITE UPDATES
Continue to stay up to date with the GNL by visiting our website regularly (www.utmb.edu/gnl).

We invite you to review recent website updates, including:

**Incident Report:** An update to the campus-wide listing of possible exposures in our research laboratories is now on the site. UTMB encourages faculty and students to routinely report any unusual event in the laboratory – and, in the interest of transparency, we make these reports available to you. This chart is updated quarterly.

**BSL4 Stickman:** The advance preparation it takes for a scientist to conduct research within a BSL4 laboratory at UTMB is understandably extensive and rigorous given the importance of the work and our commitment to safety. In an effort to better explain the pre-approval steps that a scientist undertakes before conducting research at this containment level, we have posted a “stickman” slide set to briefly detail the process.

**What a Scientist Must Do to Work in a BSL4 Laboratory**

1. Prior to six months prior to requested access to select agents (see “steps”), the facility will do extensive background checks on the scientists.
2. The scientist undergoes an initial health assessment.

**UPCOMING CAB MEETING DATES**

Remaining 2009 and new 2010 meeting dates for the Community Advisory Board have been set. Please plan to join us on the following dates from 8-10 a.m. in the Caduceus Room located on the 6th floor of the UTMB Administration Building: August 13, 2009; December 2, 2009; April 8, 2010; and August 4, 2010. Email reminders will also be sent out prior to each meeting.

**SPEAKER REQUESTS:** Do you know of a local civic or educational group that might enjoy hearing from one of our researchers? Our team is engaged in ground-breaking research across a variety of areas and we are happy to share news of that work with you. We can assemble guest speakers and interesting presentations for any age group. Send us a note at www.utmb.edu/gnl/contact for further information.

Dr. Joan Nichols recently spoke to high school students at Houston’s Westchester Academy regarding careers in research.