



Community Update

OCTOBER 2009

Staying in Touch

GREETINGS AND WELCOME TO THE LATEST EDITION OF THE GNL COMMUNITY UPDATE.

Thanks to each of you who attended the Community Advisory Board (CAB) meeting on September 29.

Your input as CAB members continues to be invaluable to the success of the research work ongoing at UTMB. In fact, the GNL would not be possible without the support of community members like you, and we will continue to do our utmost to promote public participation and transparency regarding UTMB's biocontainment research programs. We hope you find the updates provided in this e-newsletter informative. As always, we welcome any thoughts you may have on ideas or topics you'd like discussed in future updates.



WELCOME TO OUR NEW COMMUNITY LIAISON COMMITTEE (CLC) MEMBERS

The work done here in UTMB laboratories has the potential to benefit society at large, and we do our best to keep our neighbors abreast of that work. Just as the CAB was formed in support of that communication effort in 2003, the CLC, a smaller group of our neighbors, was assembled in 2005 to facilitate transparency even further. Since 2005, the CLC has provided a forum in which UTMB can advise and receive feedback from public representatives in a detailed and timely manner about issues of possible public interest related to infectious disease research, particularly issues involving work performed in its biocontainment laboratories like the GNL. The individuals on the CLC give generously of their time and advice and we are sincerely grateful for their service. At the end of August, Joe Jaworski and Rosalinda Morales rotated off the CLC after three years of outstanding service – thank you Joe and Rosie! And, we're pleased to welcome our new CLC members Kerry Tillmon, Jerry Mohn, Carlos Pena, Gina Spagnola and Susie Green. They join current CLC members Jimmy Kessler, Gwen Wagner, Vic Pierson and Bowen Loftin.

EMERGING STARS IN INFECTIOUS DISEASE RESEARCH

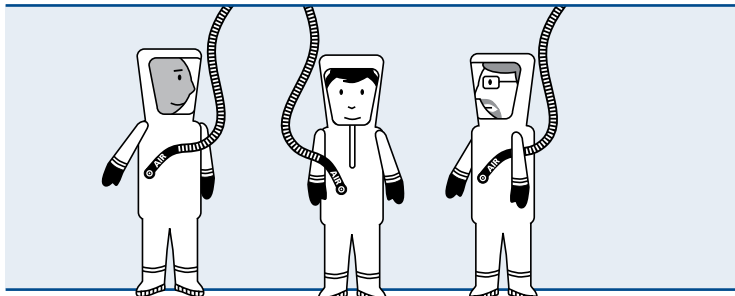


As we continue to highlight some of the important infectious disease research ongoing at UTMB, we'd like to introduce you to another one of our emerging stars. Rob Davey, Ph.D., is an associate professor in the Department of Microbiology & Immunology, the Center for Biodefense and Emerging Infectious Diseases, Center for Tropical Diseases.

Dr. Davey studies how certain viruses enter human cells and trigger infection. He has developed new techniques to identify the cellular factors required for virus entry, and a new, ultra-sensitive test that measures entry by emission of light. Dr. Davey's laboratory is working to identify novel human genes that are important for the entry of Ebola, HIV and other viruses that can cause serious disease. Small molecules that inhibit the entry of viruses into cells have recently been shown to be useful in treating virus-related diseases, and his research will help to build the foundation of knowledge necessary to develop new antiviral agents that target this aspect of the viral life cycle. Earlier this year, Dr. Davey published his research on the discovery of two biochemical pathways that the Ebola virus relies on to infect cells. Using substances that block the activation of those pathways, his team prevented Ebola infection in cell-culture experiments—potentially providing a critical early step in developing the first successful therapy for the deadly virus.

FEDERAL LEGISLATIVE UPDATE

As a National Biocontainment Laboratory dedicated to creating tomorrow's solutions to emerging infectious diseases, the GNL's researchers study myriad infectious agents, including those which are federally regulated. Several public laws shape the oversight of this type of research, but primary regulatory focus stems from laws that govern a particular group of infectious agents termed "select agents." A select agent is defined in law as a pathogen or biological toxin determined to have the "potential to pose a severe threat to public health and safety." Infectious disease researchers throughout the industry are following bills currently being considered in the U.S. Congress regarding select agents. This legislation is publicly available and we've updated the GNL website with a brief on federal activities. Also included are links to the legislation and recent federal reports issued on this topic. You can find that brief on the website's "Community" tab, or by [clicking here](#).



GNL COMMISSIONING/RESEARCH UPDATE

Dr. Joan Nichols, the GNL's associate director for research, reports that the commissioning, inspection and registration for select agents by CDC for the GNL laboratories remains on schedule. Great strides have been made since the GNL's Nov. 11, 2008, dedication to get the facility up and running, both to fulfill the lab's commitment to local and global health, and to serve the UTMB campus as a much-needed research resource in the wake of Hurricane Ike. Just within the last 10 months, the animal biosafety facilities of the GNL were certified by UTMB's Institutional Animal Care and Use Committee (IACUC), with the Animal Biosafety Level 2 (ABSL2) opening in late December 2008. Earlier this year, inspection and registration for select agents by CDC of ABSL3 research space was granted. The inspection and approval of these areas afforded researchers, many whose labs on other parts of the campus were damaged by Hurricane Ike, to meet their agreements for contract and grant work; this also afforded students the ability to complete research projects and attain requirements necessary for graduation. Continuing our careful step-by-step commissioning process, federal inspectors were again onsite in September to evaluate the GNL's BSL4 laboratory. That inspection went well, keeping GNL efforts on track to begin using those areas by the end of the year. Once that process is complete, only the commissioning and select agent inspection of the GNL's BSL3 areas will remain before the facility is fully operational.

THE GNL TURNS 1!

On Nov. 11, 2009 the GNL will celebrate the one-year anniversary of its dedication. This past year had indeed been a busy one, and though the GNL's doors have been open for only a short time, our distinctions and accomplishments have been plentiful. In the highly specialized world of infectious diseases, the GNL at UTMB stands alone as the global leader in the study of highly pathogenic microbes. This unique national resource is setting the standard for academic research in the field of emerging and reemerging infectious diseases.

HIGHLIGHTS FROM THE PAST YEAR:

- A part of UTMB's Institute for Human Infections and Immunity (IHII), the GNL is currently the only functional national laboratory dedicated to the study of infectious diseases – and the only national laboratory of any kind located in Texas.
- The Robert E. Shope BSL4 Laboratory was the first and is currently the only full-suit maximum containment lab in operation on a U.S. university campus.
- UTMB is the country's only academic center to serve as home to a National Biocontainment Laboratory (the GNL) and a National Institutes of Health (NIH)-funded Regional Center of Excellence (RCE) for Biodefense and Emerging Infectious Diseases Research. The NIH-sponsored RCE, which includes more than 40 participating institutions in the western region, is one of only 11 such centers in the nation.
- The GNL is home to the National Biodefense Training Center – a unique U.S. Department of Defense-funded program training tomorrow's infectious disease researchers and biocontainment facilities personnel. The NBTC will administer a one-of-a-kind fellowship program for biocontainment facility engineers.
- GNL researchers' unique know-how led to them being asked by the World Health Organization to participate in influenza preparedness efforts. Today, they are hard at work producing influenza strain H1N1 antigens for use in test kits for health care professionals worldwide in evaluation of flu outbreaks.

Want to read more of these "highlights?" [Just click here](#).

UPCOMING CAB MEETING DATES

2010 meeting dates for the Community Advisory Board have been set. Please plan to join us on the following dates from 8-10a.m. in the Caduceus Room located on the 6th floor of the UTMB Administration Building:

DECEMBER 2, 2009
APRIL 8, 2010 and AUGUST 4, 2010

Email reminders will also be sent out prior to each meeting.