



### Consulting Services for Lab Development and Renovation

In order for a tissue digester to function optimally, it must be installed properly. The installation is a complicated process that involves many factors customers might not initially take into account. Considerations include animal handling procedures, air handling, plumbing, waste disposal, mechanical operation, and building design. Every installation must ensure reliability, barrier integrity, serviceability, and environmental compliance. Escalating costs, legal issues, and/or ongoing delays can result if a waste stream is not designed properly from the beginning.

#### An Engineer's Best Friend

Due to the unique nature of this area of design, many engineers are ill-equipped to determine how to create an appropriate environment in Level 2, Level 3, and Level 4 labs. Scott Crowdis, an engineer who works for Stantec Engineering and was involved with the University of Calgary Veterinary Clinical Skills Medicine building, says, "You really need an expert in the field before you start throwing around millions of dollars." Gyver Industries brings such expertise to the process, partnering with engineering firms to create the best installation solutions for their customers. They provide input that is key to making decisions most engineers are not used to dealing with on a daily basis. Crowdis says, "Having a consultant who knows the procedures required to operate a digester and dispose of the waste is of great benefit to any engineer."

#### Group Effort

Though Gyver can step in at any point in the process, they strongly urge customers to consult with them at the beginning stages of lab design. Their process includes meeting with all the parties involved to develop design recommendations:

- Architect and engineering firms – to discuss the dimensions and configuration required for the digester to fit in the facility, and animal handling needs
- Mechanical engineers – to determine the equipment requirements, and best waste holding and venting solutions (key for managing odors)
- Municipalities – to learn what discharge permits are required, if any
- Scientific staff – to understand the waste composition and volume generated by the lab
- Operations and maintenance personnel – to discuss maintenance issues
- Agronomy farm personnel – to find out the best ways to convert discharge into compost

Dr. Lee Thompson, a biosafety consultant, notes, "Gyver is well versed in obtaining the pertinent information to enable them to make design recommendations, develop the appropriate system for the project, and create the necessary training programs."

#### The Go-to Company

Once a design is created, Gyver stays involved in every aspect of the lab development and digester installation, including overseeing contractors, and custom designing a compatible computer system to meet the unique needs of each customer. Mark Muth, owner of Gyver, says, "We are there from the cradle to the grave, finding creative solutions for fitting components, working out any problems, and making sure each customer has a well-running piece of equipment to meet their needs into the future." The development of a lab usually takes about two years, so this is no trivial commitment.



This level of service has earned Gyver “an international reputation for their equipment, and also the ability to repair, upgrade, and increase reliability of competitors’ equipment,” says Thompson. He adds: “Gyver is known as the go-to company for situations in which the original supplier is unable to maintain or repair their own equipment,” which happens all too often.

Muth notes, “We combine a real-life understanding of the unique challenges of biocontainment with mechanical know-how. We have not yet found a broken lab we couldn’t fix.”

Crowdis agrees: “The digester installation and operation in our lab would not have been completed without Gyver’s involvement. They came in after the work was already installed incorrectly and have done a great job making this difficult process work. Gyver is a great team, and they saved the day for us.”

**To learn more about Gyver Industries,**  
please visit [www.gyverindustries.com](http://www.gyverindustries.com), or call (970) 567-7249 or (970) 568-4220.