

# Welcome

### Welcome to the spring newsletter of the OSHA Training Institute Education Center!

This edition features interesting and informative articles that provide insight into the world of occupational safety and health, both inside the classroom and on job sites.

### In this issue:

- Associated General Contractors of Mississippi Safety Director Rachel Rutland recounts how she has reaped the professional benefits of her OSHA training.
- Maynard Spence Scholarship Recipient Le Andra Holly explains how course instruction she received from the OSHA Training Institute has helped optimize her performance on the job.
- A new GTRI initiative targets new technology, Ergonomic Work Assessment System (EWAS), to track the positioning and arm movements of poultry workers with a view to identifying and avoiding factors leading to repetitive stress injuries.
- A listing of Georgia Tech Research Institute's OSHA Program Certificate Recipients.
- Upcoming Georgia Tech OSHA, Hazmat, and Environmental Safety and Health training courses.

Georgia Tech Research Institute is pleased to partner with your organization and you in setting the standard for safety in the workplace through our OSHA Training Institute Education Center. For more information and a complete listing of Georgia Tech's Occupational Safety and Health training courses, visit www.gatech-oshatraining.com.

Please share this newsletter with your colleagues. Forward this link: www.oshacourses.org/news. We look forward to seeing you in class!

#### Student Spotlight: Georgia Tech OSHA Program Primes AGC of Mississippi Safety Director for Her Role as Trainer

When Rachel Rutland joined Associated General Contractors of Mississippi, she was determined to establish herself as a well-informed, competent leader in her position as safety director.

Georgia Tech's OSHA Training Institute Education Center proved to be an invaluable tool.

At AGC of Mississippi, Rutland assesses the quality of existing safety programs of member companies, provides needed training, and makes referrals to outside agencies that offer safety training beyond her scope.

Through Georgia Tech, she supplemented her chemistry training and insurance background with comprehensive knowledge on the commercial building industry and OSHA regulations. She completed an OSHA training certificate and positioned herself as a credible expert.

Now, when AGC of Mississippi members need training, OSHA code interpretation, or accident investigation, they contact Rutland.

"These guys realize that I'm here to support them in whatever way I can," she said. "They understand that I am their voice, their representative. As safety director, it is my duty to make sure site supervisors have the training and knowledge needed to provide a safe job site for their employees and to be compliant with industry regulations."

Rutland credits Georgia Tech with providing her up-to-date training to make the industry better for contractors and the public.

The Mississippi chapter has more than 400 contracting firms with a variety of projects, including commercial buildings, shopping centers, factories, warehouses, multifamily housing, and city infrastructure.

Associated General Contractors of Mississippi provides job-site training for first aid and CPR, hazard communication, personal protective equipment, job safety analysis, accident investigations and job-site inspections.

"I would rank Georgia Tech training as among the best that is available to our industry," she said. "In fact working with Georgia Tech has become such a trusted partner for AGC of Mississippi that it has been like collaborating with good friends."

This collaboration between Georgia Tech and AGC of Mississippi was especially evident after Hurricane Katrina devastated the Gulf Coast.

In the aftermath, under the auspices of the OSHA Susan Harwood Grant, Georgia Tech OSHA instructors Michelle Dunham and Jim Howry volunteered to spend weeks in Mississippi working with AGC contractors, providing safety training and basic supplies, including safety glasses and gloves.

"They were down in the trenches, literally, with our contractors," Rutland said. "They gave up their personal comfort to show their support and concern for the victims of this devastating hurricane."

Rutland is so pleased with her Georgia Tech training she is now an enthusiastic advocate. In the AGC of Mississippi weekly publication, members are informed of upcoming Georgia Tech training programs.

"I advise all our new members to take advantage of Georgia Tech's OSHA training courses," Rutland said. "It has been a win-win situation for AGC of Mississippi and Georgia Tech. "Together, we have made a great team in accomplishing the goals of promoting safety education and providing training," Rutland said. "Georgia Tech has kept me abreast of the latest regulatory changes and technology advances in the construction industry, making me that much more effective in my capacity as safety director. This has ultimately resulted in safer job sites for construction workers in Mississippi."

-Barbara Keely

### Maynard Spence Scholarship: Recipient Uses OSHA Training to Better Serve Clients

As claims account executive at McGriff, Siebel, and Williams, an Atlanta insurance brokerage firm, Le Andra Holly sees more than a few claims for construction site accidents and injuries.

A liaison between construction companies and insurance carriers, she is responsible for monitoring and auditing the adjudication of claims.

To augment her construction knowledge base, a colleague recommended Holly enroll in a Georgia Tech OSHA Safety Course and encouraged her to apply for the Maynard Spence Foundation Scholarship.

"My group was processing quite a few workers' compensation claims originating in construction," Holly said. "I agreed with my colleague that it would be helpful to take a course that would provide me with greater insight into the construction industry. To facilitate that, I applied for the Maynard Spence Scholarship.

"If I had a better understanding of the day-to-day operations of construction sites and the hazards that exist there, I could help my company's loss control division develop accident prevention strategies," Holly said. "These ideas could then be communicated to construction companies by our clients with a view to better protecting workers and reducing the number of claims being filed, which in turn will result in lower premiums."

The scholarship was established to honor and continue the legacy of Maynard Spence, a construction safety consultant committed to promoting safety on construction worksites, who was killed in the Sept. 11, 2001, terrorist attacks in New York City. It has two categories, the Maynard Spence Scholarship for Construction Safety Education and the Maynard Spence Safety First Scholarship Award.

The Maynard Spence Scholarship for Construction Safety Education (Certificate in Construction Safety and Health) consists of the OTI 500: Trainer Course in Occupational Safety and Health Standards for the Construction Industry, the qualifying course for teaching Occupational Safety and Health Administration 10-hour and 30-hour courses, two additional core classes, and three elective classes.

The Maynard Spence Safety First Scholarship provides for the enrollment in OTI 510: Occupational Safety and Health Standard Course for the Construction Industry, a weeklong construction safety and health course.

Awarded the Safety First scholarship in January 2007, Holly completed the training course in February 2008.

"The instructor was really well-informed, and made the information interesting," she said. "As a result of the Maynard Spence Scholarship and Georgia Tech's safety training, I believe I am even more effective in executing my duties."

Learn more about the Maynard Spence Foundation Scholarship.

-Barbara Keely

# Ergonomic Work Assessment System (EWAS): Taking Aim at Worker Injuries

New technology is positioning an old injury prevention program at the cutting edge of the poultry industry.

Nearly 10 years ago, GTRI collaborated with Georgia Tech's School of Applied Physiology to create an Ergonomic Work Assessment System (EWAS) to track the positioning and arm movements of workers as they deboned poultry.

The idea was to identify and then avoid the factors leading to repetitive stress injuries.

The improved EWAS, developed in cooperation with the poultry industry, provides a more accurate and detailed assessment by taking advantage of technology that wasn't available in the '90s—namely position-tracking technology typically used to create computer animation.

"It measures arm position in three dimensions," said GTRI research engineer Jonathan Holmes. "You strap the system onto your arm and move your arm around, and you can watch it moving on a screen beside you."

The system measures forearm and wrist orientation, as well as upper arm and shoulder activity. Separate modules provide a global reference for the position sensors.

Muscle response is monitored through electromyography, a procedure for determining the level of electrical activity in muscles. Grip force on the knife is calculated by a technique developed by Liberty Mutual Research Institute for Safety, which is teaming up with the Georgia Tech design team for that part of the system's development.

The aggregate data of shoulder and arm position, muscle response and grip force of a worker cutting poultry are transmitted wirelessly to a computer for analysis. EWAS will be

used in field studies to assess the dynamics of muscle group interactions in job rotation schemes designed to reduce repetitive motion disorders such as carpal tunnel syndrome.

"By monitoring these forces and positions, you can put numbers to physical motions and get a better idea of what is good and what is risky," Holmes said. "You can hopefully determine if someone is using certain muscles too often, or if they are bending their wrists too far.

"This opens the door for studies that can eventually help us determine which risk factors are more likely to lead to injuries," Holmes said.

The group is also investigating the development of a second system to monitor the back. It ultimately hopes to pursue studies that can help reduce back injuries resulting from back instability conditions.

-Gary Goettling

### Certificates: Georgia Tech Research Institute's OSHA Program Certificate Recipients

Congratulations to the following OSHA certificate recipients:

#### Certificate Recipients from October 2007 through May 2008

# **Occupational Safety and Health Premier Certificate**

Larry Gene Godbee Charles H. Smith

### Industrial Safety and Health Advanced Certificate

Patricia Cipov Larry Gene Godbee Charles H. Smith

#### **Construction Safety and Health Advanced Certificate**

Patricia Cipov Larry Gene Godbee Charles H. Smith Frank B. Wampol

#### Industrial Safety and Health Certificate

Dion Baker Thomas E. Benner William E. Berbube Daniel A. Brady Cathy S. Brannon Gary Campbell Luis Moreno John W. Morris Doug Nissley Kenneth Rieger Michael W. Smeltzer Thomas "Walter" Simms Scott Blair Worth B. Bowman, III Loretha Bradford Jenna Gillis Deborah McClanahan

David A. Smith R. Fernando Vazquez Stacey L. Williams Rebecca Winters Gene Wylie

#### **Construction Safety and Health Certificate**

John Barlew Worth B. Bowman, III Loretha Bradford Daniel A Brady Cathy S. Brannon Wes Capwell Larry Joe Dennis Charlie Foreman April Grant Danny Harris Lewis Heath Julio L. Martinez Andre' Marvray I. Michael T. Milam Daniel Morales Luis Moreno John W. Morris George Riggs Nathan K. Sauls Michael W. Smeltzer David A. Smith David E. Swartz Peter M. Tyson R. Fernando Vazquez Kimberly L. S. Watson Dan Way Mark A. Willcutt Stacey L. Williams

#### Hazardous Materials Management Certificate

Patricia Cipov D. Scott Coburn Deborah McClanahan Stacey Williams

#### Safety and Health Program Management Certificate

Loretha Bradford Patricia Cipov Andrew J. Kitchen

# **Course Information: Upcoming Courses**

OTI 511: Occupational Safety and Health Standards for the General Industry

- June 2-6 Atlanta
- July 7-11 Birmingham, Ala.
- Aug. 4-8 Atlanta

HAZ 1000: 24-Hour Hazmat Technician-Level Emergency Response Course: Industrial Spill and Disaster Response

• June 3-5 • Smyrna, Ga.

OTI 500: Trainer Course in Occupational Safety and Health for the Construction Industry

- June 9-13 Nashville, Tenn.
- July 7-11 Fort Lauderdale, Fla.
- August 11-15 Atlanta

OTI 501: Trainer Course in Occupational Safety and Health for the General Industry

- June 9-13 Nashville, Tenn.
- Aug. 11-15 Atlanta

HAZ 1002: 8-Hour Annual HAZWOPER Refresher

• June 10 • Smyrna, Ga.

OTI 7505: Introduction to Accident Investigation

• June 16 • Atlanta

OTI 2264: Permit-Required Confined Space Entry

• June 17-20 • Atlanta

OTI 2015: Hazardous Materials

• Aug. 18-22 • Atlanta

OTI 2045: Machinery and Machine Guarding Standards

• Aug. 18-22 • Atlanta

OTI 502: Update for Construction Industry Outreach Trainers

• July 8-10 • Atlanta

OTI 503: Update for General Industry Outreach Trainers

- July 8-10 Atlanta
- Aug. 26-28 Raleigh, N.C.

OTI 3010: Excavation, Trenching, and Soil Mechanics

• July 22-25 • Atlanta

OTI 510: Occupational Safety and Health Standards for the Construction Industry

- July 7-11 Birmingham, Ala.
- July 14-18 Raleigh, N.C.
- Aug. 4-8 Atlanta

OTI 521: OSHA Guide to Industrial Hygiene

• July 28-Aug. 1 • Atlanta

OTI 7500: Introduction to Safety and Health Program Management

• July 1-21 • Online

OTI 7845: OSHA Recordkeeping Rule Course

• Aug. 15 • Atlanta

# EST 7000: Scaffolding Safety

• July 21 • Atlanta

EST 7003: Instructional Technology for Occupational Safety and Health Professionals

• June 17-20 • Atlanta

HAZ 1006: Advanced Hazmat School

• Sept. 15-19 • Smyrna, Ga.

### HAZ 1010: Incident Command System (ICS) 300 Level Course

• Aug. 12-14 • Atlanta