

University of North Alabama**Industrial Hygiene Program****TPG Annual Report****SECTION I: TPG Summary and Relevance**

The University of North Alabama (UNA) Industrial Hygiene (IH) Program is one of four baccalaureate programs in IH accredited by the Applied Science Accreditation Commission (ASAC) of ABET in the U.S. The UNA IH Program has earned a reputation for graduating a pool of qualified industrial hygienists who are providing valuable services to workers and employers in this geographical region and beyond. During this cycle, the objectives of the NIOSH-TPG were threefold: (i) support the efforts of continuous academic improvement; (ii) promote recruitment of qualified students into the occupational health and safety (OH&S) field; and (iii) expand the educational opportunities and services of the IH Program.

After completing a national search, Dr. Leshan J. Elliott was appointed the new Program Director of IH, following the retirement of Dr. Crescente Figueroa in July 2015. Dr. Elliott has eight years' experience in the OH&S field, most recently as Sr. Vice President of Environmental, Health and Safety at Constellium (formerly, Wise Metals). She has been an adjunct instructor at both UNA and the University of Alabama. Dr. Elliott holds a Ph.D. in Environmental Health Sciences and a Master's Degree in Public Health, both with concentrations in accelerated industrial hygiene and both from the University of Alabama-Birmingham. She is a 2003 graduate of UNA's IH Program where she was awarded the prestigious Keller Key for the graduate with the highest grade point average. She is a member of Phi Kappa Phi, and holds the top two industry certifications in this field: Certified Industrial Hygienist (CIH) and Certified Safety Professional (CSP).

The UNA IH program completed an evaluation for re-accreditation under ASAC of ABET in 2014-2015. The IH Program will continue its accreditation pending the submission of an interim report (deadline July 1, 2016) that documents additional assessment of a learning outcome that was deemed by this evaluation to be incomplete.

Fifty-three IH students were enrolled in the academic program in the fall semester of 2014 and fifty-six in the spring semester of 2015. Two students graduated in the fall semester of 2014 and five in the spring semester of 2015. All graduates but one are currently employed practicing in the field of OH&S or enrolled in graduate programs. The UNA NIOSH TPG funds a number of academic scholarships that offset, partially, the cost of tuition fees. Twelve scholarships were awarded in the fall 2014 and spring 2015 semesters. Program recruitment efforts have been directed to the campus community and high schools of the region.

The description of the UNA IH Program, objectives and outcomes can be found at the UNA Chemistry and Industrial Hygiene Department (<http://www.una.edu/chem-ih/industrial-hygiene.html>). The principal investigator, Leshan Elliott, Ph.D., CIH, CSP, can be reached at lelliott1@una.edu or (256) 765-4652.

SECTION II: Program Highlights of High Impact Outcomes

The enrollment of students in the UNA IH Program continues to be excellent with figures not seen in at least 20 years. The number of graduates in the academic year 2014-2015 also exceeded the records of previous years. Graduates have been successful obtaining employment, receiving job offers before or soon after graduation. A diverse group of companies have offered employment to this academic year's graduates. These companies are: 3M; United Launch Alliance; Dal-Tile, Littlejohn Engineering; Qualitest; Cherokee Nitrogen; and Magotteaux. One graduate from this group has enrolled in graduate studies in Chemistry. Opportunities for pre-professionals internships have also been abundant and varied. Eleven students completed summer (2015) internships in companies representing the manufacturing, service, research and government sectors.

Three curriculum changes were introduced to the program as a result of the self-study completed for ABET re-accreditation. To expand the array of possible projects, the course requirements of IH 496, Capstone Project were modified to accept pre-professional internships as an acceptable capstone experience. Senior students who choose to use the internship option must obtain approval from faculty who assesses if the proposed plan is comprehensive and uses knowledge from multiple courses. At the completion of this experience, student must generate a report and direct supervisors must provide an evaluation of student's performance. The elimination of the pre-requisite CH 311, Organic Chemistry I from IH 311, Industrial Safety and CH 465, Environmental Regulations was adopted after comparing success rates of students who completed these courses with and without the organic chemistry pre-requisite with no significant differences found.

A major institutional milestone was the grand opening of the Science and Technology Building in the fall semester of 2015. The Department of Chemistry and Industrial Hygiene, formerly housed in Floyd Science Building (FSB) which served as a teaching facility at UNA for more than 50 years, is now located on the fourth floor of the 163,824-square-foot, four-story, \$39.7 million, teaching and research facility. A space of 2,700-square-feet for three laboratories, a classroom, equipment storage, and office space is allocated to the UNA IH program. The IH program recently purchased \$18,000 of new equipment for teaching and research including a portable photoionization detector, multi-gas detector, noise dosimeters and a vibration meter.

Three students from the UNA IH Program received recognition for their leadership and scholastic achievements during the academic year 2014-2015. Under a new scholarship program implemented by AIHA providing funding for the attendance of five IH students (graduate or

undergraduate) to the AIHce, one student was selected from the UNA IH program. This is the third student selected from the UNA IH program, a remarkable accomplishment, considering this award has been in existence for only two years. In addition, the president of the UNA IH Student Association (UNA IHSA) represented the program at the AIHA National Leadership Workshop (Washington, DC, February 2015). Lastly, the work of a senior student, titled Exposure Assessment and Control of Ultra Violet Radiation in Photo-Reactive Curing Processes, was selected for presentation at the Fall Conference of the Tennessee Valley Section (TVS) of the AIHA (Knoxville, TN, October 2015).