



## **Work Environment Alumni Survey 2020: Main Findings**

### **Administered by the Work Environment Training Program Grant (TPG) Project of the University of Massachusetts Lowell during November – December 2020**

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## EXECUTIVE SUMMARY

### Background

During November-December 2020, the U.S. NIOSH-funded Training Program Grant (TPG) Project administered the 2020 Work Environment Alumni Survey online. The survey findings summarized in this report show the valuable legacy of the University of Massachusetts Lowell (UML) Department of Work Environment, which offered occupational safety and health (OSH) graduate education in four academic concentrations from 1987 to 2016. Graduates have become successful practitioners and researchers, designing, and promoting production and service systems that are safe, healthy, environmentally sound, and rewarding for workers and communities. The technical capacities, skills, and achievements of the Work Environment alumni demonstrate the variety of professional responsibilities that they took on and how they are solving real-life public health and engineering challenges for the greater good of the larger society.

Since 1990, the UML Work Environment traineeship programs have been continuously supported by NIOSH funding, and consequently, more than 350 students have graduated with masters or doctorate degrees. From the very beginning, the mission of these traineeship programs has been to educate professionals in the recognition, evaluation, prevention, and control of OSH and environmental hazards as well as in the management of OSH programs.

In 2016, the Department of Work Environment was merged with the Department of Community Health and Sustainability to form a new academic Department of Public Health. The Master of Science (MSc) degree in Work Environment was closed to new students in 2017 and the Doctor of Science (ScD) degree in Work Environment closed in 2020. Currently, two OSH masters-level traineeship programs continue to be supported by NIOSH TPG funding at UML: (i) a Master in Public Health (MPH) in occupational epidemiology, in the Department of Public Health; and (ii) a Master of Science (MSc) in occupational safety and ergonomics in the Department of Mechanical Engineering, through its Industrial Engineering program. These programs continue core training in these two critical fields, with extra-curricular activities that bring together students from both departments for multi-disciplinary networking and career development. The results of the current survey will inform continued programming and networking, with a continuing commitment to the TPG mission stated above.

### The Goals of the 2020 Alumni Survey

The Qualtrics-based *Work Environment Alumni Survey 2020* (Appendix 1) was developed in collaboration with the UML TPG Advisory Board. The primary goals of the survey were to:

1. Inform the UML department chairs and UML administration on the (a) societal needs for work environment professionals, and (b) societal benefits offered by the Work Environment academic programs at UML; and
2. Guide the TPG Team and its Advisory Board members on how to further develop and refine the educational curricula to impact the modern workplace and identify supportive resources for the two programs where students are currently funded.

The survey will also help the TPG Team to better track and support the UML Work Environment alumni and their OSH careers.

## **Key Findings**

The survey was distributed to 334 graduates of the Department of Work Environment whose current email information was available. A total of 159 survey responses were received, yielding a response rate of about 48%. The vast majority of graduates are currently employed in academia, government organizations, non-government organizations and a variety of industry sectors. Alumni have become certified in various OSH fields, published their work, presented in numerous OSH and environmental conferences, served in leadership positions of professional organizations and on standard-setting committees.

The vast majority (98%, n=153) of respondents think that their Work Environment degree program was a worthwhile investment. The majority reported that the program prepared them very well to:

- Develop technical competence in the recognition, evaluation, prevention, and control of occupational and environmental hazards (n=135, 86%);
- Develop analytical skills for complex problem solving through observation, using the literature, critical analysis, and interpretation of data (n=129, 83%);
- Understand the importance of the moral, ethical, legal and professional responsibilities of occupational and environmental health and safety (n=109, 70%);
- Apply new skills to address emerging issues in health, safety and well-being in the workplace and general environment? (n=103, 67%);
- Work in collaborative teams to analyze and solve complex occupational and environmental health and safety problems (n=100, 64%); and
- Use effective oral and written communications to interact with technical and lay audiences around occupational and environmental health issues (n=85, 54%).

## **Conclusions**

Training of future OSH professionals must continue. Work Environment traineeships at UML have resulted in numerous remarkable OSH career pathways to protect the workforce in the United States and other countries. Networking within the Work Environment alumni community is an essential, on-going resource for current trainees and those who are thinking of embarking on the OSH career path. While the current Work Environment training program is evolving into new forms, the qualities and value of the Work Environment legacy still exist in its alumni community network to support new members and students moving forward as OSH professionals.

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