Preface

In many countries, an aging population, increasing obesity and more people with mobility impairments are bringing new challenges to the management of routine and emergency people movement. These population challenges, coupled with the innovative designs being suggested for both the built environment and other commonly used structures (e.g., transportation systems) and the increasingly complex incident scenarios of fire, terrorism, and large-scale community disasters provide even greater challenges to population management and safety. Key to effective management procedures is a better understanding of human performance in a variety of incident scenarios, tools that assess human performance in these scenarios, and the proper use of such tools. The Fifth International Conference on Pedestrian and Evacuation Dynamics (PED 2010), held at the National Institute of Standards and Technology in Gaithersburg Maryland On March 8-10 2010, addressed both pedestrian and evacuation dynamics and associated human behavior to provide answers for policy makers, designers, and emergency management to solve real world problems in this rapidly developing field.

PED 2010 was quite an amazing three days where a phenomenal amount of information was shared by participants from more than 20 countries around the world. On the first day, we had 20 presentations on data and data collection methods and noted the lifelong contributions of two giants in the field, Professor John Bryan and Dr. John Fruin. On the second day, we reflected on the recent loss of a preeminent researcher Dr. Guylène Proulx and saw nearly 30 papers on modeling, including some new models. On the last day, we looked at emergency events and the technology and human factors of elevators.

As we reflect on the conference, a few observations were apparent. We are deeply impressed with the passion and commitment of the work presented at the conference. Everyone is clearly committed to excellence and moving our field forward. We should be proud.

At the same time, as a multi-disciplinary community of professionals, we have a long way to go to get where we want to go. Our discipline requires a stronger technical foundation of data and theory to support the application and use of models. Such data will establish the bedrock upon which a strong foundation for our discipline can be based.

Our third observation is a rhetorical challenge provoked by a comment by Professor Bryan at the conference dinner. He recalled with great pride how he challenged his undergraduate students to work on more difficult, graduate level problems. So we ask our academics if we are asking enough of our students in the projects we design for them. Are our consultants demanding from the modelers solutions which answer the questions that need to be answered rather than accepting what we are given? Are our modelers expending enough effort serving the end-users or confining their problems to fit the available resources?

As conference organizers, we find ourselves energized by the presentations; walking away with a thousand new ideas and suspect that many of the attendees felt the same way. As you consider which of these many ideas you wish to work on nest, we should also remember to work on high-impact, challenging problems that will make real contributions. We have the opportunity to truly improve the world we live in and that is what makes this discipline truly satisfying.

Gaithersburg, Maryland
September 2010

Jason D. Averill
Erica D. Kuligowski
Richard D. Peacock

http://www.springer.com/978-1-4419-9724-1

Pedestrian and Evacuation Dynamics
Peacock, R.D.; Erica D., E.D.; Averill, J.D. (Eds.)
2011, XVIII, 910 p., Hardcover
ISBN: 978-1-4419-9724-1