

FROM THE EDITOR...

To introduce this issue that focuses on bias and human factors in handwriting identifications, the Editor interviewed Bryan Found, Chief Forensic Scientist for one of the largest forensic science laboratories in the world located in Victoria, Australia. Dr. Found leads much of the current direction of the laboratory to address bias and human factors in forensic science, areas that are part of the growing science of cognitive forensics. Dr. Found has been an adamant proponent of the science of handwriting identification since starting his training as a Questioned Document Examiner in 1987. He realized early on that context information that is irrelevant to casework should be restricted. However, it was not until the 2009 National Academy of Science report on strengthening forensic sciences that the stage was set to make the issue of bias and human factors central to the training and work of Forensic Handwriting Examiners (FHEs). Six years after the NAS report, the National Institute of Standards and Testing (NIST) held the first national seminar in the United States on human factors in July 2015. The NIST conference addressed fields of forensic science expertise that involve pattern recognition where human factors are more likely to surface. Dr. Found was invited to be one of the plenary speakers for the conference and continues to participate on the NIST Expert Working Group on Human Factors in Handwriting Examination Committee.

Dr. Found's responses to the interviewer's questions challenge FHEs in both the public sector and private sectors internationally to become aware of how bias and human factors may play a role in case work and to learn how his laboratory is attempting to address these issues by educating the staff and utilizing best practices to reduce bias and error in the laboratory.

Another laboratory that has conducted scientific research on bias and handwriting identification is the document laboratory at the Forensic Laboratory of Netherlands Forensic Institute (NFI). Corresponding author Alewijnse, et al. in the paper, "Minimizing Bias in Forensic Handwriting Examinations," provides a description and overview of how different types of bias impact the work of FHEs. The authors discuss

their attempts to do a follow-up study to the Larry S. Miller, Ph.D. study, "Bias among forensic document examiners: a need for procedural change," published in 1984 in the *Police Science and Administration Journal*. Most importantly, Alewijnse, et al. discuss how laboratories can minimize bias in the casework of FHEs.

Dr. Tonya Trubshoe who recently received her Ph.D. from LaTrobe University in Melbourne, Australia, conducts one of the first, if not the first, scientific study, "Investigating the Potential for Training Context Effects to Influence Forensic Document Examiners Relative Skill at Writer Individualization and Exclusion," to see how bias comes into play during training for FHEs. Practitioners traditionally learn by working on cases where ground truth is not known resulting in examinations that are potentially skewed towards opinions of individualization rather than exclusion. This skewing is also the result of FHEs working in police laboratories who form the majority of opinions on questioned writings of suspects already vetted by investigators and prosecutors as being guilty. Based on Dr. Trubshoe's findings, this skewing leads FHEs to more frequently confirm that the suspect's writing matches the questioned writing. To balance individualization and exclusion cases during training, Dr. Trubshoe suggests that training must include false cases where the ground truth is known so that the trainee is faced with equal numbers of individualization and exclusion cases.

The Pilot Study co-authored by Susanta Mukherjee and S.K. Mondal from the State Forensic Science Laboratory in Kolkata, India demonstrates an experimental method to reduce human factors by conducting a scientific experiment to assist FHEs reduce the subjectivity of opinions. The authors believe that reducing the subjectivity in handwriting examinations will assist FHEs become more credible expert witnesses. Their research is one of many attempts by FHEs worldwide to experiment with methods to make forensic handwriting examinations more objective and increase the reliance on scientific principles.

On a technical note, Joseph G. Barabe, Senior Microscopist with Barabe and Associates, recently retired from McCrone Associates in Westmont, Illinois, provides a step by step process of using a scale

micrometer for inserting scales in the microscopic images. By placing accurate scales into microscopic images used for exhibits, the forensic document examiner is taking one more step towards putting best scientific practices into place.

Additions to the Editorial and Scientific Advisory Boards

Starting with this issue, the JFDE welcomes new Editorial Board members Linda Alewijnse, MSc of the Netherlands and Carolyne Bird, Ph.D. of Australia. New members of the Scientific Advisory Board are Danish Bhatti, M.D. and Richard Guest, Ph.D. Dr. Bhatti, an Assistant Professor in the Department of Neurological Sciences at the University of Nebraska in Omaha, specializes in movement disorders. Richard Guest, Ph.D., at the University of Kent in the UK, specializes in biometric systems from a computer perspective and has been a frequent peer reviewer for and the author of a paper published in the JFDE. Bryan Found, Ph.D. is now on the Scientific Advisory Board. A separate category under the Scientific Advisory Board has been established with this issue, Scientific Imaging. Joseph G. Barabe is the Chair based on his extensive experience with microscopy, scientific imaging, and his ongoing contributions to the JFDE.

Pat Girouard

It is with special sadness that we learned that Pat Girouard, the former editor of the JFDE from 1991-2004, who lived in Toronto, Canada, recently died after a long battle with cancer. Pat Girouard was one of the founding members of the Association of Forensic Document Examiner in 1987. She was instrumental in developing the JFDE into an international scientific journal. In 2007, Ms. Girouard retired as an FDE and devoted her time to the nonprofit Rescuing our African Daughters (ROAD). She was also on ROAD's Board of Directors. ROAD provides education and security for teenage girls in Burkina Fasa, West Africa, one of the poorest regions in the world. More information about ROAD can be found at <http://www.ourafricandaughters.com>.

M. Patricia Fisher
Editor