

# JOURNAL OF FORENSIC SCIENCES

## 2020 Noteworthy Articles



### Anthropology

#### A Review of Bomb Pulse Dating and Its Use in the Investigation of Unidentified Human Remains

Eden Centaine Johnstone-Belford M.F.Sc.; Soren Blau Ph.D.

### Criminalistics

#### Fentanyl Detection Using Eosin Y Paper Assays

Jeremy R. Canfield B.S.; Sandip Agarwal Ph.D.;  
Samuel K. Fortener B.S.; Jon E. Sprague Ph.D.

#### The Utility of Expanded Conclusion Scales During Latent Print Examinations

Kelly E. Carter B.A.; Macgregor D. Vogelsang B.S.;  
John Vanderkolk B.A.; Thomas Busey Ph.D.

#### Validating TrueAllele® Interpretation of DNA Mixtures Containing up to Ten Unknown Contributors

David W. Bauer Ph.D.; Nasir Butt Ph.D.;  
Jennifer M. Hornyak M.S.; Mark W. Perlin Ph.D., M.D.

### Digital & Multimedia Sciences

#### Quantifying and Ranking Quality for Acquired Recordings on Digital Video Recorders

Walter E. Bruehs M.S.E.E.; Dorothy Stout M.S.F.S.

### General

#### The 2018 California Wildfires: Integration of Rapid DNA to Dramatically Accelerate Victim Identification

Kim Gin M.S.; Jason Tovar M.D.; Eric J. Bartelink Ph.D.;  
Ashley Kendell Ph.D.; Colleen Milligan Ph.D.;  
P. Willey Ph.D.; James Wood D.D.S.; Eugene Tan Ph.D.;  
Rosemary S. Turingan Ph.D.; Richard F. Selden M.D., Ph.D.

### Jurisprudence

#### Error Rates, Likelihood Ratios, and Jury Evaluation of Forensic Evidence

Brandon L. Garrett J.D.; William E. Crozier Ph.D.; Rebecca Grady Ph.D.

**This collection of articles will be available via free access for the months of February and March 2021.**

### Odontology

#### Effect of Lower Third Molar Segmentations on Automated Tooth Development Staging Using a Convolutional Neural Network

Rizky Merdieto Boedi D.M.D., M.Sc.; Nikolay Banar M.Sc.;  
Jannick De Tobel Ph.D., M.D., D.M.D., M.Sc.;  
Jeroen Bertels M.Sc.; Dirk Vandermeulen Ph.D., M.Sc.;  
Patrick Werner Thevissen Ph.D., D.M.D., M.Sc.

### Pathology/Biology

#### Cold Case Experiment Demonstrates the Potential Utility of Aquatic Microbial Community Assembly in Estimating a Postmortem Submersion Interval

Sierra F. Kaszubinski B.Sc.; Joseph P. Receveur B.Sc.;  
Breanna Wydra M.Sc.; Katelyn Smiles;  
John R. Wallace Ph.D.; Nicholas J. Babcock M.Sc.;  
Courtney R. Weatherbee M.Sc.; Mark Eric Benbow Ph.D.

#### The Death of Freddie Gray and Its Impact on Homicides in Baltimore and Maryland

Sarah Sweet; Gabriel Alexander; Russell Alexander M.D.

### Psychiatry & Behavioral Science

#### Homicidal Ideation and Forensic Psychopathology: Evidence From the 2016 Nationwide Emergency Department Sample (NEDS)

Jason T. Carbone Ph.D.; Katherine J. Holzer M.S.W.;  
Michael G. Vaughn Ph.D.; Matthew DeLisi Ph.D.

### Questioned Documents

#### Use of an Automated System to Evaluate Feature Dissimilarities in Handwriting Under a Two-Stage Evaluative Process

Cami Fuglsby M.S.; Christopher Saunders Ph.D.;  
Danica M. Ommen Ph.D.; Michael P. Caligiuri Ph.D.

### Toxicology

#### A Census of Medicolegal Death Investigation in the United States: A Need to Determine the State of our Nation's Toxicology Laboratories and Their Preparedness for the Current Drug Overdose Epidemic

Jeri D. Roper-Miller Ph.D.;  
Hope M. Smiley-McDonald Ph.D.;  
Stephanie A. Zimmer Ph.D.; Katherine M. Bollinger M.S.

