

Contents

Front Matter

The Douglas M. Lucas Medal Awardee: Joseph Almog, Ph.D.—MICHAEL A. PEAT

1227

Commentary

Forensic Science Does Not Start in the Lab: The Concept of Diagnostic Field Tests—JOSEPH ALMOG

1228

Anthropology

Papers

Differences Among Species in Compact Bone Tissue Microstructure of Mammalian Skeleton: Use of a Discriminant Function Analysis for Species Identification—MONIKA MARTINIAKOVÁ, BIRGIT GROSSKOPF, RADOSLAV OMELKA, MÁRIA VONDRAKOVÁ, AND MÁRIA BAUEROVÁ

1235

Ontogeny of Femur Subtrochanteric Shape in Native Americans and American Blacks and Whites—DANIEL J. WEScott

1240

Criminalistics

Papers

Interoperator Test for Anatomical Annotation of Earprints—IVO B. ALBERINK, ARNOUT C. C. RUIFROK, AND HARTMUT KIECKHOEFER

1246

Computation of Likelihood Ratios in Fingerprint Identification for Configurations of Three Minutiæ—CEDRIC NEUMANN, CHRISTOPHE CHAMPOD, ROBERTO PUCH-SOLIS, NICOLE EGli, ALEXANDRE ANTHONIOZ, DIDIER MEUWLY, AND ANDIE BROMAGE-GRIFFITHS

1255

Amino Acid Alanine Reactivity with the Fingerprint Reagent Ninhydrin. A Detailed *Ab Initio* Computational Study—NICHOLAS D. K. PETRACO, GLORIA PRONI, JENNIFER J. JACKIW, AND ANNE-MARIE SAPSE

1267

Bank Security Dye Packs: Synthesis, Isolation, and Characterization of Chlorinated Products of Bleached 1-(methylamino)anthraquinone—JAMES M. EGAN, MICHAEL RICKENBACH, KIM E. MOONEY, CHRIS S. PALENIK, REBECCA GOLOMBECK, AND KARL T. MUELLER

1276

Least-Square Deconvolution: A Framework for Interpreting Short Tandem Repeat Mixtures—TSEWEI WANG, NING XUE, AND J. DOUGLAS BIRDWELL

1284

Testing and Evaluation of 43 “Noncore” Y Chromosome Markers for Forensic Casework Applications—ERIN K. HANSON, PAULINA N. BERDOS, AND JACK BALLANTYNE

1298

Microbial Metagenome Profiling Using Amplicon Length Heterogeneity-Polymerase Chain Reaction Proves More Effective Than Elemental Analysis in Discriminating Soil Specimens—LILLIANA I. MORENO, DEETTA K. MILLS, JAMES ENTRY, ROBERT T. SAUTTER, AND KALAI MATHEE

1315

A Mechanistic Model for the Superglue Fuming of Latent Fingerprints—PATRICK CZEKANSKI, MICHAEL FASOLA, AND JOHN ALLISON

1323

Technical Notes

Development of a GC-MS Method for the Simultaneous Analysis of Latent Fingerprint Components—RUTH S. CROXTON, MARK G. BARON, DAVID BUTLER, TERRY KENT, AND VAUGHN G. SEARS

1329

Analytical Methods Used for the Discrimination of Substances Suspected to be Bar Soap: A Preliminary Study—MARLO ARREDONDO, GERALD M. LAPORTE, JEFFREY D. WILSON, TYRA MCCONNELL, DOUGLAS K. SHAFFER, AND MARIANNE STAM

1334

The Utility of Whole Genome Amplification for Typing Compromised Forensic Samples—AMY L. BARBER AND DAVID R. FORAN

1344

General*Papers*

- Two Items of Evidence, No Putative Source: An Inference Problem in Forensic Intelligence—FRANCO TARONI, SILVIA BOZZA,
AND ALEX BIEDERMANN 1350

- Serial Murder by Healthcare Professionals—BEATRICE CROFTS YORKER, KENNETH W. KIZER, PAULA LAMPE, A. R. W. FORREST,
JACQUETTA M. LANNAN, AND DONNA A. RUSSELL 1362

Odontology*Papers*

- Digital Analysis of Experimental Human Bitemarks: Application of Two New Methods—NAZAR AL-TALABANI, NOORI D.
AL-MOUSSAWY, FAIK A. BAKER, AND HAITHAM ABDULLAH MOHAMMED 1372

- Sex Determination Using Nonmetric Characteristics of the Mandible in Koreans—KYUNG-SEOK HU, KI-SEOK KOH, SEUNG-HO
HAN, KYOUNG-JIN SHIN, AND HEE-JIN KIM 1376

Pathology and Biology*Papers*

- Accidental Deaths Caused by Electricity in Sweden, 1975–2000—RICHARD LINDSTRÖM, PER-OLOF BYLUND, AND ANDERS ERIKSSON 1383

Case Reports

- α -Amylase Kinetic Test in Bodily Single and Mixed Stains—FILIPPO BARNI, ANDREA BERTI, CESARE RAPONE, AND GIAMPIETRO LAGO 1389

Questioned Documents*Papers*

- Visual Attention and Expertise for Forensic Signature Analysis—ADRIAN G. DYER, BRYAN FOUND, AND DOUG ROGERS 1397

Correspondence

- Commentary on: Datwyler SL, Weiblen GD. Genetic Variation in Hemp and Marijuana (*Cannabis sativa* L.) According to
Amplified Fragment Length Polymorphisms. *J Forensic Sci* 2006;51:371–5—JOHN M. MCPARTLAND 1405

- Author's Response—GEORGE D. WEIBLEN 1406

- Letter to the Editor—CYRIL A. WECHT 1407

For the Records

- Genetic Analysis of 15 STR Loci of Chinese Ewenki Ethnic Population—LIPING CHEN, YONGFENG HE, AND SHENGBIN LI 1408

- Minnesota Population Data on 15 STR Loci Using the Identifiler® Kit—ANN MARIE GROSS AND BRUCE BUDOWLE 1410

- Genetic Data of 16 Y-Chromosomal Short Tandem Repeat Loci in Africans from South Africa—AKIRA KIDO, NOBORU
FUJITANI, MASAAKI HARA, AND HIROSHI KIMURA 1414

- Genetic Analysis for Y Chromosome Short Tandem Repeat Haplotypes of Chinese Han Population Residing in the Ningxia
Province of China—BOFENG ZHU, YAJUN DENG, FEIXIONG ZHANG, WUJUN WEI, LIPING CHEN, JIE ZHAO, YONGFENG HE,
YINGFANG TIAN, YONGCHENG XU, RONGJUN YU, JUNBANG FANG, AND YAO LIU 1417

- Analysis of Short Tandem Repeat Polymorphisms in the Southwest Chinese Population—WEIJUAN ZHANG AND JIEJIE XU 1421

- Distribution of D6S1041, D10S1426, and GATA168F06 Alleles in a Chinese Population Sample—YI YE, LI LIU, HAI BO LUO,
SHUANG GAO, LIN ZHANG, GUO HUA MIAO, SHI JIANG, JI ZHANG, YI PING HOU, AND YINGBI LI 1422

- Y-STR Concordance Study Between Y-Plex™5, Y-Plex™6, Y-Plex™12, Powerplex®Y, Y-Filer™, MPI, and MPII—ANN
MARIE GROSS, PAULINA BERDOS, AND JACK BALLANTYNE 1423

- Population Genetics of Five Y-Chromosomal Short Tandem Repeat Haplotypes in the Chinese Han Population—JUNPING
XING, BOFENG ZHU, XIANFENG CUI, JIANHUA SUN, JUNBANG FANG, AND SHUDONG QIU 1429

Y Chromosomal Short Tandem Repeat Haplotypes in the Japanese Population—AKIYOSHI TAMURA, MISA IWATA, IZUMI TAKASE, TOKIKO MIYAZAKI, SHINYA FUKUNISHI, HAJIME NISHIO, AND KOICHI SUZUKI	1431
Haplotype Diversity at 20 Y-Chromosome Microsatellites in an Indo-Caucasian Population of Bengal, India—ANAMIKA SINGH, R. TRIVEDI, AND V. K. KASHYAP	1434
Book Reviews	
Review of: <i>Forensic Nursing: A Handbook for Practice</i> —BEATRICE CROFTS YORKER	1438
Review of: <i>Reforming Punishment: Psychological Limits to the Pains of Imprisonment</i> —HOLLY A. MILLER	1440
Review of: <i>The Archaeology of Disease, 3rd Edition</i> —DOUGLAS H. UBELAKER	1442
Review of: <i>Spitz and Fisher's Medicolegal Investigation of Death: Guidelines for the Application of Pathology to Crime Investigation, 4th Edition</i> —VICTOR WEEDN	1443
Review of: <i>Practical Analysis and Reconstruction of Shooting Incidents</i> —W. JERRY CHISUM	1445
Review of: <i>Forensic Evidence: Science and the Criminal Law, 2nd edition</i> —MICHAEL J. SAKS	1446
Review of: <i>Forensic Medicine of the Lower Extremity</i> —GREGORY G. DAVIS	1448
Review of: <i>Forensic Recovery of Human Remains: Archaeological Approaches</i> —H. GILL-KING	1449
Author Index	
Subject Index	