



Edited by
Anna Barbaro

Manual of

Forensic Science

An International Survey

Manual of Forensic Science: An International Survey

Edited by
Anna Barbaro



CRC Press
Taylor & Francis Group
Boca Raton London New York

CRC Press is an imprint of the
Taylor & Francis Group, an informa business

R
HV

8073

2018

CRC Press
Taylor & Francis Group
6000 Broken Sound Parkway NW, Suite 300
Boca Raton, FL 33487-2742

© 2018 by Taylor & Francis Group, LLC
CRC Press is an imprint of Taylor & Francis Group, an Informa business

No claim to original U.S. Government works

Printed and bound in India by Replika Press Pvt. Ltd.

Printed on acid-free paper

International Standard Book Number-13: 978-1-4987-6630-2 (Hardback)

This book contains information obtained from authentic and highly regarded sources. Reasonable efforts have been made to publish reliable data and information, but the author and publisher cannot assume responsibility for the validity of all materials or the consequences of their use. The authors and publishers have attempted to trace the copyright holders of all material reproduced in this publication and apologize to copyright holders if permission to publish in this form has not been obtained. If any copyright material has not been acknowledged please write and let us know so we may rectify in any future reprint.

Except as permitted under U.S. Copyright Law, no part of this book may be reprinted, reproduced, transmitted, or utilized in any form by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying, microfilming, and recording, or in any information storage or retrieval system, without written permission from the publishers.

For permission to photocopy or use material electronically from this work, please access www.copyright.com (<http://www.copyright.com/>) or contact the Copyright Clearance Center, Inc. (CCC), 222 Rosewood Drive, Danvers, MA 01923, 978-750-8400. CCC is a not-for-profit organization that provides licenses and registration for a variety of users. For organizations that have been granted a photocopy license by the CCC, a separate system of payment has been arranged.

Trademark Notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

Library of Congress Cataloging-in-Publication Data

Names: Barbaro, Anna, editor.
Title: Manual of forensic science : an international survey / edited by Anna Barbaro.
Description: 1 Edition. | Boca Raton : CRC Press, [2018] | Includes bibliographical references and index.
Identifiers: LCCN 2017015348 | ISBN 9781498766302 (hardback : alk. paper) | ISBN 9781315181424 (ebook)
Subjects: LCSH: Forensic sciences—Handbooks, manuals, etc. | Criminal investigation—Handbooks, manuals, etc.
Classification: LCC HV8073 M25545 2017 | DDC 363.25—dc23
LC record available at <https://lccn.loc.gov/2017015348>

00077818

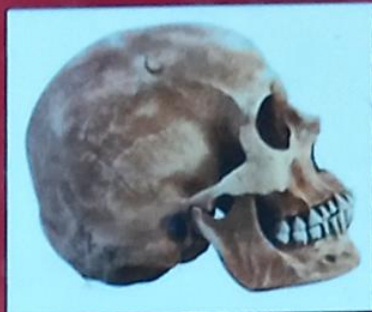
Visit the Taylor & Francis Web site at
<http://www.taylorandfrancis.com>

and the CRC Press Web site at
<http://www.crcpress.com>

Contents

	Editor	vii
	Contributors	ix
Chapter 1	Crime Scene Investigation <i>Anita Zamin and Linda Huber</i>	1
Chapter 2	Crime Scene Investigation in the Underwater Environment: Underwater Forensics <i>Mack S. House, Jr.</i>	21
Chapter 3	Bloodstain Pattern Analysis <i>Anita Zamin</i>	35
Chapter 4	Latent Print Examination <i>Andrew R. Reitmaner</i>	59
Chapter 5	Forensic Biology <i>Samar Ahmed and Amarnath Mishra</i>	79
Chapter 6	Forensic Genetics <i>Anna Barbaro</i>	89
Chapter 7	Forensic Facial Recognition <i>Shelina Khalid Jilani and Stephen Driver</i>	111
Chapter 8	Forensic Odontology <i>Alan Diego Briem Stamm, and María Cecilia Pastor Carson</i>	135
Chapter 9	An Introduction to Digital Audio Forensics <i>Michael Dixon</i>	159
Chapter 10	Forensic Toxicology <i>Amarnath Mishra and Nino Nardareshvili</i>	167
Chapter 11	Clinical Forensic Medicine: Child Sexual Abuse <i>Dalia M. Al-Saif and Lori D. Frasier</i>	179
Chapter 12	Forensic Entomology <i>Adrienne Brundage, Jason Byrd, and Lerah Sutton</i>	211
Chapter 13	Forensic Veterinary Science and Medicine <i>Víctor Toledo González and Francisco Carvallo Chaigneau</i>	235

Chapter 14	Ethics in Forensics <i>Ghada Hasabo</i>	255
Chapter 15	Forensic Digital Imaging <i>Michael Dixon, Mark Wood, and Stephen Cole</i>	263
Appendix	Ethical, Legal, and Professional Aspects: The Art of Cross-Examination <i>Filomena Paciello and Kay Michiels</i>	279
Index		283



Manual of Forensic Science

An International Survey

A truly international and multidisciplinary compendium of current best practices authored by top practitioners from around the world, the book covers current trends and technology advances in the following disciplines within forensic science: bloodstain pattern analysis, forensic photography, ballistics, latent prints, forensic genetics and DNA, questioned documents, forensic toxicology, forensic clinical medicine, forensic pathology, forensic odontology, forensic anthropology, forensic entomology, forensic biometry, forensic psychology and profiling, law comparison and ethics, and much more. The book serves as an invaluable resource and handbook for forensic professionals throughout the world.

Features

- Presents global best practices in a variety of forensic areas
- Provides a detailed account of methodologies and procedures for a wide variety of forensic disciplines
- Offers a handy, single-source compendium for professionals both in the field and in the lab on forensic-legal investigations
- Highly illustrated with several hundred full-color diagrams and photographs

K29137

 **CRC Press**
Taylor & Francis Group
an informa business
www.crcpress.com

6000 Broken Sound Parkway, NW
Suite 300, Boca Raton, FL 33487
211 Third Avenue
New York, NY 10017
2 Park Square, Milton Park
Abingdon, Oxon OX14 4RN, UK



www.crcpress.com