

**BOOK REVIEW**

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## Review of: *Forensic Podiatry: Principles and Methods*

**REFERENCE:** DiMaggio JA, Vernon W. *Forensic podiatry: principles and methods*. New York, NY: Humana Press c/o Springer Science+Business Media, LLC, 2011, 186 pp.

*Forensic Podiatry: Principles and Methods* fills a void in an area of expertise often overlooked and undervalued, that being pedal evidence. The 186 page text is divided into four parts. Part I is titled “General Forensic Concerns” and briefly discusses, among other things, the recognition, enhancement, and collection of bare footprint evidence while deferring to other resources, which cover these tasks in a more comprehensive manner. The authors readily admit that forensic podiatrists seldom recover evidence from the scene of a crime but stress the importance of understanding the process for contextual reasons and to maintain the integrity of the pedal evidence if and when received. Also contained within Part I is an overview of the principles of identification, which include class versus individual characteristics, and criteria with which to evaluate physical evidence as usable and valuable. The authors acknowledge that although pedal evidence exists exclusively at a class level, the evidential weight of an item can differ considerably and may represent high levels of individuality. The relevance of a feature can be determined by its prevalence in the population and likelihood ratios or basic probability estimates. Part I concludes with a mention of expert opinion standards and qualifications and the ACE-V (R) methodology.

Part II is titled “Podiatric Forensic Concerns” and begins with a detailed chapter on photographic techniques, which includes both hardware and software equipment requirements to effectively capture and manage images. This is followed by two very informative and well laid-out chapters titled “Bare Footprint Identification” and “Footwear Examination and Analysis,” undoubtedly the most significant and insightful contributions of the text. Various techniques used to obtain, assess, and measure suitable comparative items, as well as interpretative considerations and evaluation for deriving conclusions, are described. Photographs and diagrams are present throughout, which aid in illustrating select points. The examination of footwear is primarily restricted to the request for a podiatrist to associate or disassociate a person to footwear already linked to a crime scene and not to link a shoe to a crime scene, which would be performed by a footwear or marks examiner. According to the authors, this question of ownership centers around the relationship between the foot and the shoe as represented by wear factors on

the footwear and exemplifies the most frequent involvement of podiatrists in forensic identification.

The remaining chapters contained within Part II cover forensic gait analysis and human identification from podiatric records. The brief chapter on forensic gait analysis defines this most recent subspecialty of forensic podiatry, which involves the recognition and comparison of gait features to assist in identification. This is accomplished by comparing unknown or questioned footage, usually captured on closed-circuit television, to known footage made of a known person. The simple methodology involved in the comparison of footage, coupled with obvious considerations such as a body position, clothing, level of detail, lighting, speed of motion, and frame rate, barely warrants a dedicated chapter. Part II concludes with a chapter on podiatry records and discusses the matching of features between what is contemporaneously observed with what has been previously recorded, as well as potential sources of error or discrepancies among the two.

Part III is titled “Pedal Case Work” and presents a number of case studies, although admittedly in a limited range of scenarios, aimed at providing the reader with an insight and understanding of the application of podiatric knowledge to forensic situations. Part IV is titled “Medicolegal Concerns.” This section covers standards of practice, professional conduct, and quality assurance requirements to operate as a forensic podiatry expert.

Overall, *Forensic Podiatry: Principles and Methods* is a valuable text and most impressive when it shares specific insights into the expertise and knowledge base held by the forensic podiatrist. It may, however, leave the reader wanting more, especially regarding the individuality, stability, and prevalence of specific bare footprint features, both morphological and pathological. However, at the time of writing, the authors state that the American Society of Forensic Podiatry was in the process of establishing a library of bare footprint data, which would be available to all professionals in relation to case needs. The authors stress the importance of a multidisciplinary approach, collaboration, other evidential considerations, ethical obligations of the forensic podiatrist, and limitations of the pedal evidence. This text will serve as a useful reference for investigators and forensic scientists, specifically those involved in footwear examinations, podiatrists interested in forensics, or as an addition to a library collection, especially considering the lack of resources in the subject area.

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