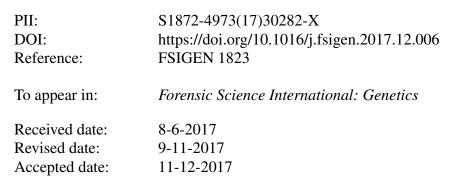
### Accepted Manuscript

Title: A template for constructing Bayesian networks in forensic biology cases when considering activity level propositions

Authors: Duncan Taylor, Alex Biedermann, Tacha Hicks, Christophe Champod



Please cite this article as: Duncan Taylor, Alex Biedermann, Tacha Hicks, Christophe Champod, A template for constructing Bayesian networks in forensic biology cases when considering activity level propositions, Forensic Science International: Genetics https://doi.org/10.1016/j.fsigen.2017.12.006

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



## ACCEPTED MANUSCRIPT

#### TITLE:

A template for constructing Bayesian networks in forensic biology cases when considering activity level propositions

#### **AUTHOR:**

Duncan Taylor<sup>1,2</sup>, Alex Biedermann<sup>3</sup>, Tacha Hicks<sup>3,4</sup>, and Christophe Champod<sup>3</sup>

- 1. Forensic Science SA, PO Box 2790, Adelaide, SA 5000, Australia
- School of Biological Sciences, Flinders University, GPO Box 2100 Adelaide SA, Australia 5001
- 3. Faculty of Law, Criminal Justice and Public Administration, School of Criminal Justice, University of Lausanne, Lausanne-Dorigny, Switzerland
- 4. Faculty of Law, Criminal Justice and Public Administration, School of Criminal Justice and Fondation pour la formation continue UNIL-EPFL, University of Lausanne, Lausanne-Dorigny, Switzerland

#### **CORRESPONDING AUTHOR:**

Duncan A. Taylor, PhD Forensic Science SA GPO Box 2790 Adelaide SA 5001 Australia Phone: +61-8 8226 7700 Fax: +61-8 8226 7777 Email: <u>Duncan.Taylor@sa.gov.au</u>

#### **HIGHLIGHTS:**

- We provide a Bayesian network construction methodology for forensic DNA results
- The methodology features evaluation given competing activity propositions
- Our modelling approach leads to network architectures containing standard elements
- We demonstrate the process on a mock case scenario

#### **ABSTRACT:**

Download English Version:

# https://daneshyari.com/en/article/6553325

Download Persian Version:

https://daneshyari.com/article/6553325

Daneshyari.com