

Institute of Forensic Medicine

Chair of Forensic Medicine

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Research focus

Comparison of laser and mercury-arc lamp for the detection of body fluids on different substrates

Structure of the Institute

Professorship: 1
Personnel: 17
• Scientists: 6 (thereof funded externally: 0)

Research

Comparison of laser and mercury-arc lamp for the detection of body fluids on different substrates

PI: Prof. Dr. S. Seidl

The performance of two detection techniques for body fluids, the Spectra-Physics Reveal portable forensic laser system and the mercury-arc lamp Lumatec Superlite 400, was evaluated with various biological stains on different substrates. Serial dilutions of neat, 1/10, 1/100, and 1/1,000 using fluid semen, saliva, urine, and blood were applied on glazed tiles, glass, PVC, wood, metal, stone, formica, carpet, and cotton.

Apart from the fact that blood traces were not detectable with the laser, both light sources showed comparable results regarding their detection capability. Clear advantages of the Lumatec Superlite 400, however, are its lower size, weight, and purchase costs as well as the possibility to operate this light source by battery.

Teaching

In addition to the education of the students of the degree program Medicine according to the Statutes of the Medical Act (ÄAppO), courses are held for students of the Faculty of Business, Economics, and Law, and the Faculty of Sci-

ences as well as for medical students from the University of Regensburg. Students are welcome during the whole year to sit in autopsies, court trials, and practical courses in the field of forensic analytic.

Selected publication

Moeller S, Lücke C, Struffert T, Schwarze B, Gerner ST, Schwab S, Köhrmann M, Machold K, Philipsen A, Müller HH. Ischemic stroke associated with the use of a synthetic cannabinoid (spice). *Asian J Psychiatr.* 2017 Feb;25:127-130