

## Cryptology, identity, ethics, security and privacy, forensic science foundations

*Introducing the PN FDCA member*

**Prof. David-Olivier JAQUET-CHIFFELLE**

**P**rof. David-Olivier Jaquet-Chiffelle is full professor at the School of Criminal Justice, University of Lausanne, where he also serves as the head of the Master program in forensic science, orientation digital investigation and identification. Jaquet-Chiffelle accomplished his PhD thesis in Mathematics at the University of Neuchâtel and holds a post-doc from Harvard University (Boston, USA), where he also lectured at the Department of Mathematics. Jaquet-Chiffelle is also co-founder of VIP Research & Consulting Sàrl.

He has a long experience in cryptology, identity, security and privacy and is the conceiver of the system for medical statistics, which is used by all Swiss hospitals to transfer their data to the Swiss Federal Statistical Office.



Moreover, Jaquet-Chiffelle is the inventor of one patent related to authentication processes, and co-inventor of two other patent applications linked to biometric pseudonyms. He regularly acts as an expert both in Switzerland and internationally, and is active in standardization bodies (NIST, ISO). His current research covers forensic science foundations, cybercrime, ethics and cybersecurity, privacy, new forms of identities in the information society, anonymization, identification and authentication processes, especially in the digital world, as well as blockchain technologies to support authentication and integrity.

Recent and current projects include the CANVAS H2020 EU project (Constructing an Alliance for Value-driven Cybersecurity, as workpackage leader), "Creating an ethical and legal governance framework for trustworthy cybersecurity in Switzerland" (as co-PI), a Swiss Digital Transformation NRP 77 project, as well as Horodocs (as PI), a project that develops a prototype to timestamp any digital document using blockchain technologies with a concern for privacy by design, scalability, automation, cost and energy saving.

**Latest publications**

JAQUET-CHIFFELLE David-Olivier, *Continuité de la preuve (numérique) de la scène de crime au tribunal*, in : *Cimes et Châtiments, Mélanges en l'honneur du Professeur Laurent Moreillon* (Camille PERRIER DEPEURSINGE/Nathalie DONGOIS/Andrew M. GARBARSKI/Carlo LOMBARDINI/Alain MACALUSO, édit.), Berne 2022, p. 193-204.

JAQUET-CHIFFELLE David-Olivier, *L'ère du numérique*, in : *Traité de médecine légale et criminalistique* (Jean-Pol BEAUTHIER, édit.) 3<sup>e</sup> éd., Louvain-la-Neuve 2022, p. 1111-1120.

JAQUET-CHIFFELLE DAVID-OLIVIER/EOGHAN Casey, *A formalized model of the Trace*, in : *Forensic Science International* 2021 n° 327, p. 110941 ss.

*Full list [here](#).*