CV

Franco Taroni
Current position(s): Full professor or similar
Academic age: 27 year(s) 7 month(s)

Education

Degree	Organisation	Duration
Further Advanced Studies: Visiting researcher supported by a SNF grant	Ca' Foscari University of Venice, IT Department of Economics (Statistical unit)	09.2010 - 02.2011 6 month(s)
MSc in statistics (with partial exams)	Université de Neuchâtel - NE, CH Faculty of Economics	09.1999 - 06.2000 10 month(s)
Further Advanced Studies: Post-doctoral research (two EU Marie Curie Fellowships), Prof. Colin G.G. Aitken	University of Edinburgh, GB Department of Mathematics and Statistics	05.1996 - 08.1998 2 year(s) 4 month(s)
PhD / Dr.: PhD research Prof. Pierre Margot	Université de Lausanne - LA, CH Ecole des sciences criminelles	11.1991 - 07.1996 4 year(s) 9 month(s)

Employment

Role	Organisation	Duration
Full professor or similar	Université de Lausanne - LA, CH School of Criminal Justice	09.2010 - Present 13 year(s) 5 month(s)
Associate professor or similar	Université de Lausanne - LA, CH School of Criminal Justice	09.2002 - 08.2010 8 year(s)

Role	Organisation	Duration
Group leader	Centre universitaire romand de médecine légale, CH Department of Legal Medicine	09.2000 - 08.2002 2 year(s)
Associate professor or similar	Université de Lausanne - LA, CH School of Criminal Justice	09.2000 - 08.2002 2 year(s)
Senior researcher	Centre universitaire romand de médecine légale, CH Department of Legal Medicine	09.1998 - 08.2000 2 year(s)
Senior researcher	Universität Zürich - ZH, CH Department of Legal Medicine	09.1998 - 08.2000 2 year(s)
Junior researcher / Postdoc Professor Colin G.G. Aitken	University of Edinburgh, GB Department of Mathematics and Statistics	05.1996 - 08.1998 2 year(s) 4 month(s)
Doctoral student / PhD student Professor Pierre Margot	Université de Lausanne - LA, CH School of Criminal Justice	11.1991 - 07.1996 4 year(s) 9 month(s)

Major achievements

Achievement 1

Generation of knowledge: The applicant, A, (www.unil.ch/unisciences/francotaroni) develops models for inference and decision-making under uncertainty. His research interests focus on original solutions for managing scientific information in forensic science and law and the criteria for supporting coherent decisions. A was awarded 27 grants from the Swiss National Science Foundation (SNSF). 13 PhD students have obtained their degrees with honors. Some of them have been appointed as professors in forensic science (Biedermann, Gittelson), statistics (Cereda) and criminal law (Vuille).
A has authored 8 books and more than 200 peer-reviewed articles and chapters in scientific and law books and journals. A is co-author of the leading book on forensic statistics (Aitken & Taroni 2004, Spanish translation in 2010, Aitken et al., 3rd ed. 2021) and the principal author of 3 books on the use of graphical probabilistic models (2006, 2nd ed. 2014) and on Bayesian decision data analysis (2010), respectively. In 2022, A co-authored a SNSF open-access book on the use of the Bayes factor for data analysis with R code. The books are references for academics and practitioners in the administration of evidence and show interdisciplinary collaboration amongst forensic science, statistics, and philosophy of science.

[1] book. Aitken, C., Taroni, F., & Bozza, S. (2021). Statistics and the evaluation of evidence for forensic scientists. John Wiley & Sons. https://serval.unil.ch/notice/serval:BIB_A1A3D9997C08.
[2] journal-article. Taroni, F., Garbolino, P., & Aitken, C. (2021). A generalised Bayes' factor formula for evidence evaluation under activity level propositions:variations around a fibres scenario. Forensic Science International. https://doi.org/10.1016/j.forsciint.2021.110750. https://serval.unil.ch/notice/serval:BIB_717A7F4763B8.
[3] journal-article. Taroni, F., Garbolino, P., Biedermann, A., Aitken, C., & Bozza, S. (2018). Reconciliation of subjective probabilities and frequencies in forensic science. Law, Probability and Risk, 17(3), 243–262. https://doi.org/10.1093/lpr/mgy014. https://serval.unil.ch/notice/serval:BIB_C88175D634BF.
[4] journal-article. Taroni, F., Juchli, P., & Aitken, C. (2021). A probabilistic account of the concept of cross-transfer and inferential interactions for trace materials. Law, Probability and Risk, 19(3–4), 221–233. https://doi.org/10.1093/lpr/mgaa015. https://serval.unil.ch/notice/serval:BIB_015A14D84A6F.

Achievement 2

Support of research community: A was invited professor at the Universities of Strasbourg and Beijing and is currently at the Dept. of Law of the Universities of Roma Tre and Bologna and at the Dept. of Medicine, University of Roma Tor Vergata. The experience gained in lecturing since 2002 to forensic and law BSc and MSc students was further developed in a unique long-distance education project (e-learning). In February 2010, A promoted and participated to the realization of an 18 months e-learning course entitled 'Statistics and the evaluation of forensic evidence' (www.formation-continue-unil-epfl.ch/). Three supplementary e-learning courses on specific scientific topics supported by the scientific international societies (e.g Internationl Society of Forensic Genetics) have been developed in 2012. A MOOC course entitled 'Challenging forensic science: how science should speak to court' is freely available on www.coursera.org for a wider audience (English and French versions).
Besides being a member of scientific societies (e.g. Royal Statistical Society, UK, since 2014), A is a member of the scientific committee of the International Conferences on Forensic Inference and Statistics, one of which was held in Lausanne (2008), and of the European Academy of Forensic Science. He is regularly invited as speaker. On an editorial level, A co-founded and since 2002 has been associate editor of Law, Probability and Risk, Oxford University Press, a journal that engages in the challenge of providing guidance in reasoning under uncertainty for readers, in particular criminal lawyers. A has acted as guest associate editor for Frontiers in Statistical Genetics and Methodology and since 2011 as referee for the US Office of Justice Programs National Institute of Justice, the Netherlands Organization for Scientific Research, the ETH Zürich Weiss Fellowship and the Czech Science Foundations. Since 2009 he is a reviewer for John Wiley & Sons book proposals and since 1996, referee for forensic and statistical journals (e.g. Forensic Science International, Journal of the American Statistical Association, Encyclopedia of Forensic Science).

[1] book. Taroni, F., Biedermann, A., Bozza, S., Garbolino, P., & Aitken, C. (2014). Bayesian Networks for Probabilistic Inference and Decision Analysis in Forensic Science (2nd ed.). Wiley. https://serval.unil.ch/notice/serval:BIB_0F30DFF15E4C.
[2] book-chapter. Taroni, F., Bozza, S., & Biedermann, A. (2020). Decision theory. In D. L. Banks, K. Kafadar, D. H. Kaye, & M. Tackett (Eds.), Handbook of Forensic Statistics (1st Edition, pp. 103–130). Chapman & Hall/CRC. https://serval.unil.ch/notice/serval:BIB_88B6C7A2AA05.
[3] book. Taroni, F., Bozza, S., Biedermann, A., Garbolino, P., & Aitken, C. (2010). Data analysis in forensic science: a Bayesian decision perspective. J. Wiley & Sons. https://serval.unil.ch/notice/serval:BIB_F55F48F53A1D.
[4] book. Bozza, S., Taroni, F., & Biedermann, A. (2022). Bayes Factors for Forensic Decision Analyses with R. Springer International Publishing. https://doi.org/10.1007/978-3-031-09839-0. https://serval.unil.ch/notice/serval:BIB_2AB34119FC9E.

Achievement 3

Engagement for society: At institutional level, the applicant is vice-director of the School of Criminal Justice and from 2022 the representative of the Faculty in the University Council. He is a member of the University commission for research and was a member of the SNSF University commission for research (2004-2010). The A offers pro bono forensic consulting services for international institutions (e.g. Innocence Project New York). He has provided training workshops and tailor-made instruction to forensic scientists for forensic organisations throughout Europe (Sweden, Belgium, Italy, France) and abroad (USA, Canada, China).
He contributes to guidance documents for evidence evaluation (e.g., European Guidelines on evaluative reporting).
He was an advisor on the use of DNA evidence in investigation and evaluation for the French (2001) and Swiss (2022) Parliaments.

[1] book-chapter. Taroni, F., Bozza, S., & Vuille, J. (2022). La probabilità come strumento per una coerente valutazione della prova scientifica. In G. Canzio, L. Luparia (Eds), Prova scientifica e processo penale (2e édition, pp. 21–76). Wolters Kluwer CEDAM. https://serval.unil.ch/notice/serval:BIB_7ADA37787249.
[2] book-chapter. Vuille, J., Biedermann, A., & Taroni, F. (2015). Accounting for the potential of error in the evaluation of the weight of scientific evidence. In L. Luparia (Ed.), Understanding Wrongful Conviction: the protection of the innocent across Europe and America (pp. 39–55). Wolters Kluwer, CEDAM. https://serval.unil.ch/notice/serval:BIB_C9571F815B19.