(https://lbbe.univ-lyon1.fr/sites/default/files/styles/img__1280x768__image_scale__crop_main/public/media/images/arton3078.jpg?itok=cdxweGUF)

Society of Toxicology Award

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A paper* co-authored by [Marie-Laure Delignette-Muller->http://lbbe.univ-lyon1.fr/-Delignette-Muller-Marie-Laure-.html](team) and Régis Pouillot (FDA, USA) has been awarded as the '{[Best Published Paper Demonstrating an Application of Risk Assessment-> http://www.toxicology.org/ISOT/SS/RiskAssess/winners.asp]}'.

Quantitative risk assessment has emerged as a valuable tool to enhance the scientific basis of regulatory decisions in the food safety domain. In this article, two new computing resources (R packages) specifically developed to help risk assessors in their projects are presented. The first package, "fitdistrplus", gathers tools for choosing and fitting a parametric univariate distribution to a given dataset; the data may be continuous or discrete. The second package, "mc2d", helps to build and study two dimensional (or second-order) Monte-Carlo simulations in which the estimation of variability and uncertainty in the risk estimates is separated. This package easily allows the transfer of separated variability and uncertainty along a chain of conditional mathematical and probabilistic models.

*Pouillot R, Delignette-Muller ML. 2010. Evaluating variability and uncertainty separately in microbial quantitative risk assessment using two R packages. International Journal of Food Microbiology 142(3):330-40.