S1 | Method for the overlay of neuroeconomics publications on the map of science

We collected a set of papers in neuroeconomics by searching for “neuroeconomics” and derived terms (neuroeco*, neuro-economics, neuro-eco*), in ISI Web of Knowledge’s Science Citation Index Expanded and Social Sciences Citation Index. The search covered both titles and abstracts, to best describe research documents. The search was restricted to 2003-2011 in order to be symmetrically centered on the time of creation of the global map of journals (2007). As is standard practice, the search was further restricted to documents in English and to three types of documents: articles, reviews and letters.

This procedure returns a set of 336 papers making explicit mention of the term “neuroeconomics”, designated as the “seed set”. To capture papers on the same topic, but not explicitly mentioning the term “neuroeconomics”, we iterated in two directions to add papers to the corpus: papers that cited at least 10 papers from the seed set, and papers cited by at least 10 papers in the seed set. This increased the total corpus to 516 papers.

Each paper was assigned to a “subject category”, depending on the discipline(s) of the journal in which it is published. (Note: subject categories are defined by the scientific information provider ISI Web of Knowledge). For instance, the subject category “Neurosciences” has a count of 210, meaning that 210 of the 516 papers were published in journals belonging to the category “Neurosciences”. Importantly, the total count of papers per subject categories can be greater than the number of documents, since each document can belong to multiple subject categories.