

# UNIVERSITA' DEGLI STUDI DI TORINO

DIPARTIMENTO DI CULTURE, POLITICA E SOCIETÀ

DIPARTIMENTO DI INFORMATICA

DIPARTIMENTO DI MATEMATICA "GIUSEPPE PEANO"

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## MASTER DI I LIVELLO IN ANALISI DATI PER LA BUSINESS INTELLIGENCE E DATA SCIENCE

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**Epidemiological analysis of cancer incidence worldwide**

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**Abstract.**

This article presents my experience at the ICrES-CNR (Research Institute on Suitable Economic Growth – Consiglio Nazionale delle Ricerche) in collaboration with Yale University. During this period, a database was established with the aim to explain the distribution of different types of cancer between nations. In our work are shown some of its potentialities to explore cancer incidence performing a cluster analysis of the phenomena at play. This goal was firstly accomplished with simple correlations of the GLOBOCAN database from international association of cancer registries related to the cancer incidence and analysing the cluster results.

Secondly, three partial correlations on cancer incidence were performed using like control variable tobacco smoke 2003-2012 means and HIV incidence 2003 separately and then in a single partial correlation. Eventually the results were compared with the previous analysis and what is found is that these factors reduce the incidence difference among cancers without affecting to much the group were found in the first analysis.

**Keywords:**

Cancer; Lung; Kidney; Breast; Liver; Colon; Stomach; Brain; Melanoma; Stress;

Correlations, Global Analysis.