

ISSN 0972-3757

International Journal of
HUMAN GENETICS

 © Kamla-Raj 2017

Int J Hum Genet, 17(1): 38-42 (2017)
DOI:10.31901/24566330.2017/17.01.06

**Comparative Study on Gene Expression for Detecting Diseases
Using Optimized Algorithm**

J. Sumitha¹, T. Devi² and D. Ravi³

^{1,2}*Department of Computer App, Bharathiar University, Coimbatore 641 046,
Tamil Nadu, India*

³*PG and Research Department of Botany, Govt Arts College, Coimbatore 641 018,
Tamil Nadu, India*

*E-mail: ¹<sumivenkat2006@gmail.com>, ²<tdevi5@gmail.com>,
³<dravi_botany@hotmail.com>*

KEYWORDS Breast Cancer. Classification. Confusion Matrix. Micro-array Gene Expression Data

ABSTRACT The main objective is to detect the disease-causing gene from microarray data and predict the results from the gene expression value. Many computer-assisted algorithms developed to predict the characteristic of a gene is done using machine learning and other bio-inspired algorithms. In this paper, seven works are proposed and compared to estimate the efficiency. The Support Vector Machine (SVM) optimized neuro-expert algorithm is developed to optimize these predictive results of both machine learning and bio-inspired algorithms and proven its effectiveness and efficiency in detecting the disease-causing gene than ever before.