Job description	**Subnetwork module construction for improved diagnostic classification and subtyping** CWI and the Netherlands Cancer Institute (NKI), both located in Amsterdam, invite applications for a jointly advised PhD position. CWI is the national research institute for mathematics and computer science in the Netherlands. CWI performs frontier research in mathematics and computer science and transfers new knowledge in these fields to society in general and trade and industry in particular. The newly established Life Sciences group develops algorithms, theory, and models, and performs simulations for a wide range of biological topics with a strong focus on systems biology. The Netherlands Cancer Institute is the only dedicated cancer center in the Netherlands and maintains an important role as a national and international center of scientific and clinical expertise, development and training. Research within the Netherlands Cancer Institute covers all major areas of cancer research, with a strong emphasis on translational research. The Bioinformatics and Statistics group closely collaborates with basic scientists and clinicians and conducts research on a wide range of topics, focusing on integrative bioinformatics. The opening is a research position within the field of bioinformatics/computational biology and will be a joint appointment between the two institutes. The research will be carried out in close collaboration of the involved partners. The successful candidate will contribute to building better predictors of disease outcome based on functional interaction network modules, which are predictive of a specified phenotype, e.g., outcome in cancer. To this end, development of new algorithms to detect these modules given a complex interaction graph has to be combined with protocols for building predictive classifiers given the activation patterns of the retrieved modules. Subnetwork module construction for improved diagnostic classification and subtyping.
Hours on a weekly basis	38
Level	
Competences	The ideal candidate has a background in bioinformatics, computer science, statistics, physics, or biology, strong algorithmic and/or machine learning skills, and experience with the analysis of high-throughput data.
Offer	
Information	Applications consisting of motivation letter, Curriculum Vitae, a list of publications, and a list of references should be send by email before 15 March 2009 to Dr. G.W. Klau, email: gunnar.klau@cwi.nl, or Dr. L.F.A. Wessels, email: l.wessels@nki.nl, who can also supply further information about this position. Please see the website www.cwi.nl/en/node/961.