

## Recent patent applications in systems biology

Patent #	Subject	Assignee	Inventor(s)	Priority application date	Publication date
EP 1507216	A tool providing interactive capabilities for user involvement in extracting and disambiguating biological information in text; useful in generating a biological diagram.	Agilent Technologies (Palo Alto, CA, USA); Bluvas P, Kuchinsky AJ; Moh D; Vailaya A	Bluvas P, Kuchinsky AJ; Moh D; Vailaya A	8/14/2003	2/16/2005
WO 200447020	A method of constructing a gene network comprising creating a gene expression matrix from a library of quantitative time course data, generating network relationships between the genes, determining at least one group of genes expressed differently and minimizing dynamic Bayesian nonparametric regression criterion; decreases the time needed to identify drug targets and time needed to develop new treatments, and optimizes network structure.	GNI USA (San Jose, CA, USA); Imoto S; Kim SY; Miyano S; GNI KK (Tokyo)	Imoto S, Kim SY, Miyano S	11/18/2003	6/3/2004
WO 200377062	A biological network model constructed by providing a biological system, each comprising a biological network having biochemical species with activities, and perturbing the activity of at least one of the species, thus causing a response in the network, allowing the network to reach a steady state, determining the response of at least one of the species in the network and estimating parameters of the model.	Boston University (Boston, MA, USA)	Collins JJ, Di Bernardo D, Gardner TS, Tegner J, Yeung MKS	1/21/2003	9/18/2003
EP 1318472	A joint analysis method for molecular expression data such as gene expression data, protein expression data or metabolite abundances, and biological networks related to gene, gene products and protein complexes.	Fraunhofer-Gesellschaft (Munich)	Hanisch D, Zien A	12/10/2001	6/11/2003
US 20030023388	A method of determining all direct and indirect genetic interactions of a genetic network of an organism, involving obtaining an accessibility list for the genetic network from appropriate genetic perturbation data.	University of New Mexico (Albuquerque, NM, USA); Santa Fe Institute (Santa Fe, NM, USA)	Wagner A	5/7/2001	1/30/2003
WO 2002103608	A network of biological relationships from a data set having biological objects, determined by optimally expanding an inputted core biological network with a portion of the objects through the addition of additional data set object(s) to the biological network to obtain an expanded core biological network, and issuing a report describing the network of biological relationships.	RAMOT University Authority for Applied Research & Industrial Development (Tel Aviv, Israel)	Shamir R, Tanay A	6/14/2001	12/27/2002
WO 200265119	A method of identifying the probability of a molecular interaction within a biological network, involving representing molecules as sets of conserved features, computing the attraction probabilities between the features, and using the computation step to identify the probability of molecular interaction within a biological network.	Columbia University (New York); Gomez SM; Lo S; Rzhetsky A	Gomez SM, Lo S, Rzhetsky A	9/20/2001	8/22/2002
WO 200169244	A method for labeling individual cells for monitoring a physiological process, involving propelling a particle coated with a dye towards a target cell to cause the particle to contact and label the cell, and detecting the presence of dye. Combined with high-density labeling, the method is potentially useful in studying neuronal connections in complicated biological networks and provides distinct advantages for medical diagnosis and research purposes.	University of Washington (Seattle, WA, USA); Gan W; Grutzendler J; Lichtman JW; Wong R; Wong WT	Gan W, Grutzendler J, Lichtman JW, Wong R, Wong WT	3/10/2000	9/20/2001
WO 9622574	A system for simulating the operation of biochemical systems, comprising a central processing unit with computer memory that stores data as objects representing biochemical mechanisms in genetic networks.	Stanford University (Palo Alto, CA, USA)	Arkin AP, McAdams HH, Shapiro L	1/20/1995	7/25/1996

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