

PUBBLICAZIONI 2010-2018 (peer reviewed international journals)

- Mason A, Engelen MP, Ivanov I, Toffolo GM, Deutz NE. A Four Compartments Compartmental Model to Assess Net Whole Body Protein Breakdown Using a Pulse of Phenylalanine and Tyrosine Stable Isotopes in Humans. *Am J Physiol Endocrinol Metab.* 313: E63–E74, 2017 doi: 10.1152/ajpendo.00362.2016.
- Casula E, Bertoldo A, Tarantino V, Maiella M, Koch G, Tothwell JC, Toffolo GM, Bisiacchi P. TMS-evoked long-lasting artefacts: a new adaptive algorithm for EEG signal correction *Clin Neurophysiol* 2017 doi 10.1016/j.clinph.2017.06.003
- Giaretta A, Rocca B, Di Camillo B, Toffolo GM, Patrono C. In Silico Modeling of the Antiplatelet Pharmacodynamics of Low-dose Aspirin in Health and Disease. *Clin Pharmacol Ther.* 2017 doi: 10.1002/cpt.694. [Epub ahead of print] PMID:28378909
- Grassi A, Di Camillo B, Ciccarese F, Agnusdei V, Zanovello P, Amadori A, Finesso L, Indraccolo S, Toffolo GM. Reconstruction of gene regulatory modules from RNA silencing of IFN- α modulators: experimental set-up and inference method. *BMC Genomics* 17:228, 2016 DOI:10.1186/s12864-016-2525-5.
- Di Camillo B, Carlon A, Eduati F, Toffolo GM. A rule-based model of insulin signalling pathway. *BMC Syst Biol.* 1;10(1):38, 2016 doi: 10.1186/s12918-016-0281-4.
- Rizza RA, Toffolo G, Cobelli C. Accurate Measurement of Postprandial Glucose Turnover: Why Is It Difficult and How Can It Be Done (Relatively) Simply? *Diabetes*, 65(5):1133-45, 2016 doi: 10.2337/db15-1166.
- Hill SM, Heiser LM, Cokelaer T, Unger M, Nesser NK, Carlin DE, Zhang Y, Sokolov A, Paull EO, Wong CK, Graitm K, Bivol A, Wang H, Zhu F, Afsari B, Danilova LV, Favorov AV, Lee WS, Taylor D, Hu CW, Long BL, Noren DP, Bisberg AJ; G.Toffolo in the HPN-DREAM Consortium, Mills GB, Gray JW, Kellen M, Norman T, Friend S, Qutub AA, Fertig EJ, Guan Y, Song M, Stuart JM, Spellman PT, Koeppl H, Stolovitzky G, Saez-Rodriguez J, Mukherjee S Inferring causal molecular networks: empirical assessment through a community-based effort. *Nat Methods.* 13(4):310-8, 2016 doi:10.1038/nmeth.3773
- Tessari P, Kiwanuka E, Barazzoni R, Toffolo G M, Vettore M, Cortella I, Manesso E, Pasqualetto G, Puricelli L, Gabelli C, Zanetti M Decreased VLDL-Apo B 100 Fractional Synthesis Rate Despite Hypertriglyceridemia in Subjects With Type 2 Diabetes and Nephropathy. *J Clin Endocrinol Metab*, 100(11):4098–4105, 2015 doi: 10.1210/jc.2015-2172
- Nasso S, Hartler J, Trajanoski Z, Di Camillo B, Mechtler K, Toffolo GM. 3DSpectra: A 3-dimensional quantification algorithm for LC-MS labeled profile data. *J Proteomics* 1:112:156, 2015 . doi: 10.1016/j.jprot.2014.08.017 PMID:25218586
- Cobelli C, Man CD, Pedersen MG, Bertoldo A, Toffolo G. Advancing our understanding of the glucose system via modeling: a perspective. *IEEE Trans Biomed Eng.* 2014 May;61(5):1577-92. doi: 10.1109/TBME.2014.2310514 PMID: 24759285
- Di Camillo B, Eduati F, Nair SK, Avogaro A, Toffolo GM. Leucine modulates dynamic phosphorylation events in insulin signaling pathway and enhances insulin-

- dependent glycogen synthesis in human skeletal muscle cells. *BMC Cell Biol.* 2014 Mar 20;15:9. doi: 10.1186/1471-2121-15-9.PMID: 24646332
- Cobelli C, Dalla Man C, Toffolo G, Basu R, Vella A, Rizza R. The oral minimal model method. *Diabetes.* 2014 Apr;63(4):1203-13. doi: 10.2337/db13-1198. PMID: 24651807
 - Costello JC, Heiser LM, Georgii E, Gönen M, Menden MP, Wang NJ, Bansal M, Ammad-Ud-Din M, Hintsanen P, Khan SA, Mpindi JP, Kallioniemi O, Honkela A, Aittokallio T, Wennerberg K; NCI DREAM Community, Collins JJ, Gallahan D, Singer D, Saez-Rodriguez J, Kaski S, Gray JW, Stolovitzky G. A community effort to assess and improve drug sensitivity prediction algorithms. *Nat Biotechnol.* 2014 Jun 1. doi: 10.1038/nbt.287 PMID: 24880487
 - Sambo F, Malovini A, Sandholm N, Stavarachi M, Forsblom C, Mäkinen VP, Harjutsalo V, Lithovius R, Gordin D, Parkkonen M, Saraheimo M, Thorn LM, Tolonen N, Wadén J, He B, Osterholm AM, Tuomilehto J, Lajer M, Salem RM, McKnight AJ; The GENIE Consortium, Tarnow L, Panduru NM, Barbarini N, Di Camillo B, Toffolo GM, Tryggvason K, Bellazzi R, Cobelli C; The FinnDiane Study Group, Groop PH. Novel genetic susceptibility loci for diabetic end-stage renal disease identified through robust naive Bayes classification. *Diabetologia.* 2014 May 29. [Epub ahead of print] PMID:24871321
 - Bansal M, Yang J, Karan C, Menden MP, Costello JC, Tang H, Xiao G, Li Y, Allen J, Zhong R, Chen B, Kim M, Wang T, Heiser LM, Realubit R, Mattioli M, Alvarez MJ, Shen Y; NCI-DREAM Community, Gallahan D, Singer D, Saez-Rodriguez J, Xie Y, Stolovitzky G, Califano A; NCI-DREAM Community. A community computational challenge to predict the activity of pairs of compounds. *Nat Biotechnol.* 32:1213-22, 2014. doi: 10.1038/nbt.3052. Epub 2014 Nov 17. PubMed PMID:25419740.
 - Casula EP, Tarantino V, Basso D, Arcara G, Marino , Toffolo GM, Rothwell JC, Bisiacchi PS. Low frequency rTMS inhibitory effects in the primary motor cortex: Insights from TMS-evoked potentials, *NeuroImage* 98 225–232, 2014
 - Sambo F, Di Camillo B, Toffolo G, Cobelli C Compression and fast retrieval of SNP data. *Bioinformatics.* 21:3078-85, 2014 doi: 10.1093/bioinformatics/btu495 PMID:250645649
 - Zanatta P, Toffolo GM, Sartori E, Bet A, Baldanzi F, Agarwal N, Golanov E. The human brain pacemaker: Synchronized infra-slow neurovascular coupling in patients undergoing non-pulsatile cardiopulmonary bypass. *Neuroimage.* 2013 doi:pii: S1053-8119(13)00080-3. 10.1016/j.neuroimage.2013.01.033. [Epub ahead of print]
 - Formaggio E, Storti S, Tramontano V, Casarin A, Bertoldo A, Fiaschi A, Talacchi A, Sala F, Toffolo G, Manganotti P. Frequency and time-frequency analysis of intraoperative ECoG during awake brain stimulation *Frontiers in Neuroengineering,* 6:1-doi: 10.3389/fneng.2013
 - Di Camillo B, Falda M, Toffolo G, Cobelli C. SIMBIONET : a simulator of biological network topology *IEEE/ACM Trans Comput Biol Bioinform.* 2012
 - Manganotti P, Formaggio E, Storti SF, De Massari D, Zamboni A, Bertoldo A, Fiaschi A, Toffolo GM. Time-frequency analysis of short-lasting modulation of EEG induced by intracortical and transcallosal paired TMS over motor areas , *Journal of Neurophysiology* 107:2475-2484, 2012
 - Martínez MR, Corradin A, Klein U, Alvarez MJ, Toffolo GM, di Camillo B, Califano A, Stolovitzky GA Quantitative modeling of the terminal differentiation of B cells and mechanisms of lymphomagenesis. *New York Academy of Science* 29 (7) 2672-77,

2012

- Eduati F, di Camillo B, Karbiener M, Scheideler M, Corà D, Caselle M, Toffolo G. Dynamic Modeling of miRNA-mediated Feed-Forward Loops. *J Comput Biol* 19(2):188-99, 2012
- Sambo, F.; Montes de Oca, M.; Di Camillo, B.; Toffolo, G.; Stutzle, T. MORE: Mixed Optimization for Reverse Engineering. An application to modeling biological networks response via sparse systems of nonlinear differential equations. *IEEE/ACM Trans Comput Biol Bioinform*, DOI: 10.1109/TCBB.2012.56, 2012
- Denti P, Toffolo G, Cobelli C. The Disposition Index: from Individual to Population Approach, *Am J Physiol Endocrinol Metab.* 303: E576–E586, 2012. doi:10.1152/ajpendo.00139.2011
- Di Camillo B, Sanavia T, Martini M, Jurman G, Sambo F, Barla A, Squillario M, Furlanello C, Toffolo G, Cobelli C. Effect of size and heterogeneity of samples on biomarker discovery: synthetic and real data assessment. *PLoS One* 2012 7(3):e32200 Epub 2012 Mar 5.
- Eduati F, De Las Rivas J, Di Camillo B, Toffolo G, Saez-Rodriguez J., Integrating literature-constrained and data-driven inference of signalling networks., *Bioinformatics.* 28 (18), 2311–2317, 2012 doi:10.1093/bioinformatics/bts3632012
- Sambo F, Trifoglio E, Di Camillo B, Toffolo GM, Cobelli C. Bag of Naïve Bayes: biomarker selection and classification from genome-wide SNP data. *BMC Bioinformatics.* 2012;13 Suppl 14:S2. doi: 10.1186/1471-2105-13-S14-S2. Epub 2012 Sep 7.
- Marchetti P, D'Avanzo C, Orsato R, Montagnese S, Schiff S, Kaplan PW, Piccione F, Merkel C, Gatta A, Sparacino G, Toffolo GM, Amodio P. Electroencephalography Alterations in Patients with Cirrhosis., *Gastroenterology.*141(5):1680-9, 2011
- De Palo G, Eduati F, Zampieri M, Di Camillo B, Toffolo G, Altafini C. Adaptation as a genome-wide autoregulatory principle in the stress response of yeast. *IET Syst Biol.* 5(4):269-79, 2011
- Manesso, E; Toffolo, GM; Basu, R; et al. Modeling Nonsteady-State Metabolism From Arteriovenous Data *IEEE Trans BME*, 58 (5): 1253-1259 2011
- Formaggio E, Storti SF, Bertoldo A, Manganotti P, Fiaschi A, Toffolo GM. Integrating EEG and fMRI in epilepsy. *Neuroimage.* 54(4):2719-31, 2011
- Manesso E, Toffolo GM, Butler AE, Butler PC, Cobelli C. Shortened Beta Cell Lifespan Leads to Beta Cell Deficit in a Rodent Model of Type 2 Diabetes *Am J Physiol Endocrinol Metab*, 300 (5): E933-E938 2011
- Rende F, Cavallari I, Corradin A, Silic-Benussi M, Toulza F, Toffolo GM, Tanaka Y, Jacobson S, Taylor GP, D'Agostino DM, Bangham CR, Ciminale V. Kinetics and intracellular compartmentalization of HTLV-1 gene expression: nuclear retention of HBZ mRNA., *Blood.* 2011
- Corradin A, Di Camillo B, Ciminale V, Toffolo G, Cobelli C. Sensitivity analysis of retrovirus HTLV-1 transactivation. *J Comput Biol.*18(2):183-93, 2011
- Bock G, Man CD, Micheletto F, Basu R, Rn PD, Laugen J, Deacon CF, Holst JJ, Toffolo G, Cobelli C, Rizza RA, Vella A. The effect of DPP-4 inhibition with

sitagliptin on incretin secretion and on fasting and postprandial glucose turnover in subjects with impaired fasting glucose. *J Clin Endocrinol* 73 (2): 189-196, 2010

- Pedersen MG, Toffolo GM, Cobelli C. Cellular modeling: insight into oral minimal models of insulin secretion. *Am J Physiol Endocrinol Metab.* 298 E597-E601, 2010
- Van der Heijden GJ, Wang ZJ, Chu Z, Toffolo G, Manesso E, Sauer PJ, Sunehag AL. Strength Exercise Improves Muscle Mass and Hepatic Insulin Sensitivity in Obese Youth. *Med Sci Sports Exerc.* 2010
- Nasso S, Silvestri F, Tisiot F, Di Camillo B, Pietracaprina A, Toffolo GM. An optimized data structure for high-throughput 3D proteomics data: mzRTree. *J Proteomics.* 18;73(6):1176-82, 2010
- Saisho, Y; Manesso, E; Butler, AE; et al. Sustained beta cell turnover in adult non human primates is predominantly derived from beta cell neogenesis, but this is not adaptively increased in streptozotocin-induced diabetes *Endocrine Journal*, 57: S323-S323 Suppl. 2, 2010
- Sathananthan, A; Man, CD; Micheletto, F; et al. Common Genetic Variation in GLP1R and Insulin Secretion in Response to Exogenous GLP-1 in Nondiabetic Subjects A pilot study *Diabetes Care*, 33 (9): 2074-2076, 2010
- Eduati, F; Corradin, A; Di Camillo, B; G Toffolo A Boolean Approach to Linear Prediction for Signaling Network Modeling *PLOS ONE*, 5 (9), 2010
- Lavezzo, E; Toppo, S; Barzon, L; et al. Draft Genome Sequences of Two *Neisseria meningitidis* Serogroup C Clinical Isolates *Journal of Bacteriology*, 192 (19): 5270-5271. 2010
- Di Camillo B, Sanavia T, Iori E, Bronte V, Roncaglia E, Maran A, Avogaro A, Toffolo G, Cobelli C. The transcriptional response in human umbilical vein endothelial cells exposed to insulin: a dynamic gene expression approach. *PLoS One*, 5(12):e14390, 2010