Dr. Ricardo L. Colasanti

CONTACT
INFORMATION

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Barry Island
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*WWW:*https://dl.dropboxusercontent.com/u/195824611/CV/index.html

EDUCATION

University of Sheffield, Sheffield,UK

Ph.D. 2001

- Dissertation Topic: "Individual based models in plant ecology"

University of Cardiff, Cardiff,UK

M.Sc. Computing Distinction, 2012

- Dissertation Topic: "A naive Bayesian classifier of bacterial Gram stain phenotypes from enzyme functional role"

University of Sussex, Brighton, Sussex UK

M.Sc. Evolutionary and Adaptive Systems (Computing), 1997

University of Cardiff, Cardiff,UK

Postgraduate Certificate in Education (PGCE) Post-Compulsory Education and Training (PCET, Level 7), Merit, 2015

Queen Elizabeth College, University of London, London UK

B.Sc. Microbiology, 1984

HONOURS AND
AWARDS

EPA's Science and Technology Achievement Award (STAA) for the paper "Changes in constructed Brassica communities treated with glyphosate drift" (2012)

USA National Research Council Research Associateship Award (2003-2005)

The Cyberlife Scholarship Evolutionary and Adaptive Systems MSc at the School of Cognitive Science, University of Sussex (1996)

British Council travel award AgResearch Palmerston North, New Zealand (1993)

Healthcare Diagnostic Solutions, Cardiff, Wales UK

Chief Programmer   **2015**

Computation Institute, University of Chicago, Chicago, Illinois USA

Sr. Computational Biology Research Assistant   **2012 - 2014**

Dept Surgery, University of Chicago, Chicago, Illinois USA

Post doctoral Researcher   **2010 - 2011**

Dept Surgery, Northwestern University, Chicago, Illinois USA

Post doctoral Researcher   **2009 - 2010**

Dept Mathematics, QUT, Brisbane, Queensland Australia

Post doctoral Researcher   **2007 - 2009**

CSIRO, Brisbane, Queensland Australia

Post doctoral Researcher   **2005 - 2007**

Environmental Protection Agency, Corvallis, Oregon USA

NRC Research fellow   **2003 - 2005**

University of South Wales, Cardiff,UK

Post doctoral Researcher   **2001 - 2003**

Momentum Healthcare , Cardiff,UK

Senior software engineer   **1998 - 2001**

MHA Productions, London UK

Multimedia Programmer   **1996 - 1998**

UCPE, University of Sheffield , Sheffield UK

Research Associate   **1991 - 1996**

UKAEA, Harwell UK

Research Associate   **1987 - 1991**

Dept Microbiology, University of Surrey, Guildford, Surry UK

Research Associate   **1984 - 1987**

RECENT PUBLICATIONS

Christopher Henry; Claudia Lerma-Ortiz; Svetlana Gerdes; Ric Colasanti; Jeffrey Mullen; Aleksey Zhukov; Oceane Frelin; Jennifer Thiaville; Remi Zallot; Ghulam Hasnain; Thomas Niehaus; Neal Conrad; Andrew Hanson; Valerie de Crecy-Lagard 2016 in press. Systematic identification and analysis of frequent gene fusion events in metabolic pathways. Genome Biology.

J.G. Jeffryes1, R. L.Colasanti, M. Elbadawi-Sidhu, T. Kind, T.D. Niehaus, L. J. Broadbelt, A D. Hanson, O. Fiehn, K. E. J. Tyo1, C.S. Henry 2015. MINEs: Open access databases of computationally predicted enzyme promiscuity products for untargeted metabolomics. Journal of Cheminformatics.

K.L. Olukogbon1, P. Thomas, R.L. Colasanti, B. Hope-Gill and E. M. Williams 2015. Breathing patterns and breathlessness in Idiopathic Pulmonary Fibrosis: An observational study. Respirology.

Ric Colasanti, Janaka N. Edirisinghe, Tahmineh Khazaei, Jos P. Faria, Sam Seaver, Fangfang Xia and Christopher Henry 2014. Tapping the Wealth of Microbial Data in High-Throughput Metabolic Model Reconstruction.. Metabolic Flux Analysis, Methods in Molecular Biology Volume 1191, 2014, pp 19-45.

Williams, E. M., Powell, T., Eriksen, M., Neill, P., Colasanti, R. 2014. A pilot study quantifying the shape of tidal breathing waveforms using centroids in health and COPD. Journal of clinical monitoring and computing, 28(1), 67-74.

Ricardo L Colasanti1, Janaka N Edirisinghe, Christopher S Henry 2013 A Naive Bayesian Classifier of Gram Stain Phenotypes From Genotype Functional Roles. In Proceedings of the AIChE

MOST CITED PUBLICATIONS	Wimpenny JWT, Colasanti RL. 1997 A unifying hypothesis for the structure of microbial biofilms based on cellular automaton models FEMS Microbiology Ecology, 1997, Vol.22, No.1, pp.1-16 359 Citations
	Colasanti RL. Grime JP. 1993. Resource dynamics and vegetation processes: A deterministic model using two dimensional cellular automata. Functional Ecology 7: 169-177. 116 Citations
	RL Colasanti, MAD Collins, JR Shaw, 2004,Method and system for interpreting and validating experimental data with automated reasoning,US Patent 6,813,615, 55 Citations
	Colasanti RL. 1992. Discussions of the possible use of neural network algorithms in ecological modelling. Binary 3: 13-15 . 45 Citations
	Colasanti RL, Hunt R. 1997. Resource dynamics and plant growth: a self-assembling model for individuals, populations and communities. Functional Ecology 11:133-145. 38 Citations
	Colasanti RL, Hunt R. and Askew A.P. 2001 A self-assembling model of resource dynamics and plant growth incorporating plant functional types. Functional Ecology 15: 676-687. 34 Citations
	Colasanti RL. 1992. Cellular automata models of microbial colonies. Binary 24: 19-22. 24 Citations
	Watrud,L.S,King,G.,Londo,J.P, Colasanti,R.L.,Smith,B.S, Waschmann,R.S, and Henry Lee H.E, 2011.Changes in constructed Brassica communities treated with glyphosate drift Ecological Applications 21:2, 525-538 359 citations 20 Citations
	Colasanti RL, Hunt R, Watrud L. 2007 A simple cellular automaton model for high-level vegetation dynamics Ecological modelling 203, 363-374. 20 Citations
PATENTS	Patent Application, Serial No. 09/656,372 (Sept 6, 2000), USA - Method and system for interpreting and validating experimental data with automated reasoning. Case number 00.693. Inventors: Ricardo L Colasanti, Mark A D Collins, John R Shaw
	Patent Application, Serial No. 09/655,677 (Sept 6, 2000), USA - Method and system for obtaining knowledge based recommendations. Case number 00.692. Inventors: Mark A D Collins, John R Shaw, Ricardo L Colasanti
	Patent Application, Serial No. 09/656,400 (Sept 6, 2000), USA - Method and system for creating and using knowledge patterns. Case number 00694. Inventors: Mark A D Collins, Ricardo L Colasanti
COMPUTER SKILLS	Current frequent use:

- Languages: Java, Python, Javascript (libraries AngularJS, JQuery, NodeJS, D3).
- Data mining libraries: WEKA, Mahout (Apache) scikit-learn.
- Agent Based Model IDE: NetLogo
- Database: MySql,SqLite,MongoDB
- Statistical/Mathematical Packages: IPython notebook (matplotlib numpy SciPy).
- VC: Git
- Web Framework: Django, Spark
- Build automation tool: Maven

Previous frequent use:
- Statistical/Mathematical Packages: R, Octave(Matlab).
- Languages: C,C++, C # , Fortran,Prolog,Perl,Visual Basic
- Database: Access

Operating Systems: Unix/Linux, OSX,Windows.