

Publications

PUBLICATIONS (excluding abstracts):

Journals:

- 2007 Salazar-Ciudad, I. Tooth morphogenesis in vivo, in vitro and in silico. *Current Topics in Developmental Biology*.
- 2007 Salazar-Ciudad, I On the origins of morphological variation, canalization, robustness and evolvability. *Integrative and Comparative Biology*.
- 2007 Veitia, R and Salazar-Ciudad, I. A theoretical perspective about patterning of the developing pituitary gland. *Trends in endocrinology and metabolism. Trends in Metabolism and Endocrinology*.
- 2006 Elina Järvinen, Isaac Salazar-Ciudad, Walter Birchmeier, Makoto M. Taketo , Jukka Jernvall, and Irma Thesleff. Increased epithelial β -catenin unlocks renewal of mouse teeth. *Proceedings of the National Academy of Sciences, USA. Dec 5;103(49):18627-32*
- 2006 Salazar-Ciudad. I. On the origins of novelty: phenotypic disparity and its diverse developmental basis. *Bioessays. 2006. 2006 Nov;28(11):1112-22.*
- 2006 Salazar-Ciudad. I. Developmental constraints versus variational properties: how pattern formation can help to understand evolution and development. *Journal of Experimental Zoology Part B: Molecular and Developmental Evolution. 2006. Volume 306B, Issue 2. p 107-125*
- 2005 Salazar-Ciudad I. and Jernvall J. Graduality and innovation in the evolution of complex phenotypes: insights from development. *Journal of Experimental Zoology Part B: Molecular and Developmental Evolution. 2005. vol 304B No 6: 619-631*
- 2004 Salazar-Ciudad, I. & Jernvall, J. — How different types of pattern formation mechanisms affect the evolution of form and development. *Evolution and Development Jan-Feb;(1):6-16 2004*
- 2003 Salazar-Ciudad, I., Jernvall, J. & Newman, S. A. — Mechanisms of pattern formation in development and evolution. *Development 130: 2027-2037.*
- 2002 Salazar-Ciudad, I. & Jernvall, J. — A gene network model accounting for development and evolution of mammalian teeth. *Proceedings of the National Academy of Sciences, USA 99: 8116-8120.*
- 2002 Solé, R.V., Salazar-Ciudad, I. and García-Fernandez, J. Common Pattern Formation, Modularity and Phase Transitions in a Gene Network Model of Morphogenesis. *Physica A 305, 640-647*
- 2001 Salazar-Ciudad, I., Newman, S.A. and Solé R.V. — Phenotypic and dynamical transitions in model genetic networks I: Emergence of patterns and genotype-phenotype relationships. *Evolution and Development. Mar-Apr;3(2):84-94.*
- 2001 Salazar-Ciudad, I., Solé, R.V. and Newman, S.A. — Phenotypic and dynamical transitions in model genetic networks II: Application to the evolution of segmentation mechanisms. *Evolution and Development, Mar-Apr;3(2):95-103.*
- 2000 Solé, R.V., Salazar-Ciudad, I. and Newman, S.A. Gene network dynamics and the evolution of development. *Trends in Ecology and Evolution 15, 479-480.*
- 2000 Salazar-Ciudad, I., García-Fernandez, J. and Solé, R.V. Gene networks capable of pattern formation: from induction to reaction-diffusion. *Journal of Theoretical Biology 205, 587-603.*
- 1999 Solé, R.V., Salazar-Ciudad, I. and García-Fernandez, J. Landscapes, Gene Networks and Pattern Formation: on the Cambrian Explosion. *Advances in Complex Systems 2, 313-337*

Chapters in books:

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2007 Jernvall, J. & Salazar-Ciudad, I. 2007 The economy of tinkering mammalian teeth. In: Tinkering: Mechanisms of Microevolution, Novartis Foundation, London, pp. in press.

2007 Salazar-Ciudad, I.

- 2007 Making evolutionary predictions about the structure of development and morphology: beyond the neo-Darwinian and constraints paradigm. In: (eds. Minelli A. and Fusco G.). Evolutionary Developmental Biology. Cambridge University Press. in press

Book review:

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2007 Jernvall, J. & Salazar-Ciudad, I. Where the genes meet the road. Review of Biological Physics of the Developing Embryo (G. Forgacs & S. A. Newman). BioEssays 29: in press.