Adaptation in genes, duplicates, families, functional modules and genomes

François Serra

October 2011

Contents

Part I

Introduction

Contents

Chapter 1

Adaptive changes to evolutionary speed

hola

Chapter 2

Evolution, and the detection at molecular level

Chapter 3

Grouping genes and finding evolutionary patterns

Chapter 4

What is DNA?How genes rose?

Chapter 5

Life in DNA, from genes to repetitive elements.

Darwin blabliblo

[1]

Part II

Comparative genomics and adaptation

Contents

(TeX-add-style-hook "content$_example$" ($lambda$()($LaTeX-add-labels$ "$chap:one$" "" "$fig:jws$" "" "$tab:asdfasdf$")))

Chapter 6

Random-like structure of DNA

Part III

Structure and dynamics of genomes

Chapter 7

Life inside genomes, dynamics and predictions

Chapter 8

Rethinking evolutionary pipelines.

Part IV

Conclusion

Bibliography

[1] François Serra, Leonardo Arbiza, Joaquín Dopazo, and Hernán Dopazo. Natural selection on functional modules, a genome-wide analysis. *PLoS computational biology*, 7(3):e1001093, March 2011.

List of Figures

List of Tables