
Contents

VII Preface

1 Coevolution within and between Genes

Galtier, N.; Duthiel, J. (Montpellier)

13 Evolution of Protein-Protein Interaction Network

Makino, T. (Mishima/Shizuoka/Dublin); Gojobori, T. (Mishima/Tokyo)

30 Bacterial Flagella and Type III Secretion: Case Studies in the Evolution of Complexity

Pallen, M.J. (Birmingham); Gophna, U. (Tel-Aviv)

48 Comparative Genomics and Evolutionary Trajectories of Viral ATP Dependent DNA-Packaging Systems

Burroughs, A.M. (Bethesda, Md./Boston, Mass.); Iyer, L.M.; Aravind, L. (Bethesda, Md.)

66 General Trends in the Evolution of Prokaryotic Transcriptional Regulatory Networks

Madan Babu, M. (Bethesda, Md./Cambridge); Balaji, S.; Aravind, L. (Bethesda, Md.)

81 Divergence of Regulatory Sequences in Duplicated Fish Genes

Van Hellemon, R. (Leuven); Blomme, T.; Van de Peer, Y. (Ghent); Marchal, K. (Leuven)

101 Evolution of Gene Function on the X Chromosome Versus the Autosomes

Singh, N.D.; Petrov, D.A. (Stanford, Calif.)

- 119 Amino Acid Repeats and the Structure and Evolution of Proteins**
Albà, M.M. (Barcelona); Tompa, P. (Budapest); Veitia, R.A. (Paris)
- 131 Origination of Chimeric Genes through DNA-Level Recombination**
Arguello, J.R.; Fan, C. (Chicago, Ill.); Wang, W. (Kunming); Long, M. (Chicago, Ill.)
- 147 Exaptation of Protein Coding Sequences from Transposable Elements**
Bowen, N.J.; Jordan, I.K. (Atlanta, Ga.)
- 163 Modulation of Host Genes by Mammalian Transposable Elements**
Makalowski, W. (University Park, Ill.); Toda, Y. (Tokyo)
- 175 Modern Genomes with Retro-Look: Retrotransposed Elements, Retroposition and the Origin of New Genes**
Volf, J.-N. (Lyon); Brosius, J. (Münster)
- 191 Author Index**
- 192 Subject Index**