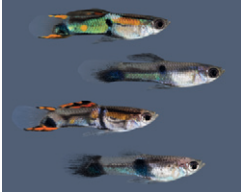


Contents

Vol. 194 No. 3 July 2013



Cover photo: Guppies are exceptionally beautiful fish. The genetics underlying their ornamentation has fascinated researchers for almost a century. Two essential genes for guppy pigment pattern development are *blue* and *golden*, which correspond to *csf1ra* and *kita*. *Blue golden* double mutant guppies have a ghostlike appearance (see Kottler *et al.*, pp. 631–646). Image courtesy of Verena Kottler.

- PERSPECTIVES**
- 529–537 **Robert Heath Lock and His Textbook of Genetics, 1906**
Edwards, A. W. F.
- REVIEW**
- 539–555 **To Grow or Not to Grow: Nutritional Control of Development During *Caenorhabditis elegans* L1 Arrest**
Baugh, L. Ryan
- COMMENTARY**
- 557–559 **Exegeses on Maximum Genetic Differentiation**
Rousset, François
- INVESTIGATIONS**
- METHODS, TECHNOLOGY, AND RESOURCES
- 561–572 **Is Structural Equation Modeling Advantageous for the Genetic Improvement of Multiple Traits?**
Valente, Bruno D., Guilherme J. M. Rosa, Daniel Gianola, Xiao-Lin Wu, and Kent Weigel
- 573–596 **Priors in Whole-Genome Regression: The Bayesian Alphabet Returns**
Gianola, Daniel
- 597–607 **Genomic BLUP Decoded: A Look into the Black Box of Genomic Prediction**
Habier, David, Rohan L. Fernando, and Dorian J. Garrick
- GENE EXPRESSION
- 609–618 **Chromatin-Associated Proteins HP1 and Mod(mdg4) Modify Y-Linked Regulatory Variation in the *Drosophila* Testis**
Branco, Alan T., Daniel L. Hartl, and Bernardo Lemos
- DEVELOPMENTAL AND BEHAVIORAL GENETICS
- 619–629 **Unexpected Role for Dosage Compensation in the Control of Dauer Arrest, Insulin-Like Signaling, and FoxO Transcription Factor Activity in *Caenorhabditis elegans***
Dumas, Kathleen J., Colin E. Delaney, Stephane Flibotte, Donald G. Moerman, Gyorgyi Csankovszki, and Patrick J. Hu
- 631–646 **Pigment Pattern Formation in the Guppy, *Poecilia reticulata*, Involves the Kita and Csf1ra Receptor Tyrosine Kinases**
Kottler, Verena A., Andrey Fadeev, Detlef Weigel, and Christine Dreyer
- POPULATION AND EVOLUTIONARY GENETICS
- 647–662 **Estimating Variable Effective Population Sizes from Multiple Genomes: A Sequentially Markov Conditional Sampling Distribution Approach**
Sheehan, Sara, Kelley Harris, and Yun S. Song

- 663–672** **Testing for the Footprint of Sexually Antagonistic Polymorphisms in the Pseudoautosomal Region of a Plant Sex Chromosome Pair**
Qiu, Suo, Roberta Bergero, and Deborah Charlesworth
- 673–686** **Expansion of the Pseudo-autosomal Region and Ongoing Recombination Suppression in the *Silene latifolia* Sex Chromosomes**
Bergero, Roberta, Suo Qiu, Alan Forrest, Helen Borthwick, and Deborah Charlesworth
- 687–696** **A Continuous Method for Gene Flow**
Palczewski, Michal and Peter Beerli
- 697–708** **Investigating Incipient Speciation in *Arabidopsis lyrata* from Patterns of Transmission Ratio Distortion**
Leppälä, Johanna, Folmer Bokma, and Outi Savolainen
- 709–719** **Competition Between the Sperm of a Single Male Can Increase the Evolutionary Rate of Haploid Expressed Genes**
Ezawa, Kiyoshi and Hideki Innan
- 721–736** **Asymptotic Distributions of Coalescence Times and Ancestral Lineage Numbers for Populations with Temporally Varying Size**
Chen, Hua and Kun Chen
- 737–752** **Computational Inference Methods for Selective Sweeps Arising in Acute HIV Infection**
Leviyang, Sivan
- GENETICS OF COMPLEX TRAITS
- 753–767** **Dissecting High-Dimensional Phenotypes with Bayesian Sparse Factor Analysis of Genetic Covariance Matrices**
Runcie, Daniel E. and Sayan Mukherjee
- 769–779** **Rare Variant Association Testing Under Low-Coverage Sequencing**
Navon, Oron, Jae Hoon Sul, Buhm Han, Lucia Conde, Paige M. Bracci, Jacques Riby, Christine F. Skibola, Eleazar Eskin, and Eran Halperin
- NOTES**
- METHODS, TECHNOLOGY, AND RESOURCES
- 781–783** **Assessing Genome-Wide Statistical Significance for Large p Small n Problems**
Diao, Guoqing and Anand N. Vidyashankar
- GENOME INTEGRITY AND TRANSMISSION
- 785–789** **The Aurora B Kinase Promotes Inner and Outer Kinetochores Interactions in Budding Yeast**
Akiyoshi, Bungo, Christian R. Nelson, and Sue Biggins