

## Special Issue

# Genetic Basis of Phenotypic Variation in *Drosophila* and Other Insects

### Message from the Guest Editors

How sequences generate the observed diversity of living forms remains largely unanswered. The diversity in coding sequences is responsible some of this diversity, but the degree to which it contributes is unclear. Coding and non-coding sequences are involved in a network of interactions which can change the level of expression and change the timing of that expression, creating further diversity.

Tools to untangle the sources of diversity have been developed. Most rely upon comparisons of the sequence and phenotypic differences among strains and species. Frequently, these tools take advantage of the sequence quality of the *Drosophila* genome, the local and global variety of generated *Drosophila melanogaster* strains, and the even greater range of phenotypes among species in the genus. Adding to this are studies that compare the *Drosophila* genomic sequence to that of insects with unique phenotypic adaptations. The multiple authors of the Special Issue are among the leaders in this effort, and share their contributions towards generating a road map connecting the gene networks and phenotypic diversity created by genetic and environmental change.

---

### Guest Editors

Prof. J. Spencer Johnston

Department of Entomology, Texas A&M University, College Station, TX 77843, USA

Dr. Carl E. Hjelmen

Department of Biology, Texas A&M University, College Station, TX 77843, USA

---

### Deadline for manuscript submissions

closed (29 February 2020)

G C A T  
T A C G  
G C A T

## Genes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5  
Indexed in PubMed



[mdpi.com/si/28760](https://mdpi.com/si/28760)

*Genes*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[genes@mdpi.com](mailto:genes@mdpi.com)

[mdpi.com/journal/  
genes](https://mdpi.com/journal/genes)



G C A T  
T A C G  
G C A T

# Genes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5  
Indexed in PubMed



[mdpi.com/journal/  
genes](https://mdpi.com/journal/genes)



## About the Journal

### Message from the Editor-in-Chief

*Genes* is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

---

### Editor-in-Chief

Prof. Dr. Selvarangan Ponnazhagan  
Experimental Cancer Therapeutics, The University of Alabama at  
Birmingham, 1825 University Blvd., SHEL 814, Birmingham, AL 35294-  
2182, USA

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, and other databases.

#### Journal Rank:

JCR - Q2 (Genetics and Heredity) / CiteScore - Q2 (Genetics (clinical))