**ENVIRONMENT, *DEVELOPMENT*, AND PHYSIOLOGY: A SYNTHESIS**

**Editors**

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**I . INTRODUCTION**

* Ch. 1: Current trends and perspectives (Benjamin Dubansky, Warren Burggren, University of North Texas, USA)
  + Pathology or Adaptation?

**II. EXPERIMENTAL APPROACHES**

* Section Introduction (1 page)
* Ch 2: Laboratory and Field Approaches: Opportunities and Limitations (Martin Grossel, Miami University, USA)
* Ch : Adverse Outcome Pathways – Cause and Effect (Aaron Roberts, University of North Texas, USA)
* Ch : “Real World” - Multi-variate experimental designs
* Data bases
* Ch : The Case Study: XXXXXXXXX

**III. MULTIPLE ENVIRONMENTAL STRESSORS, THEIR INTERACTIONS, AND THE COMPLEX RESPONSES THEY EVOKE**

* Section Introduction (1 page)
* Ch : Environment X Time (Chronological and Developmental)
  + Persistence, Acute, Chronic
* Ch : Multiple stressor interactions (Fern Galvez, Louisiana State University, USA; Andrew Whitehead, University of California, Davis, USA)
* Ch : Multiple system interactions (Sylvia Branum, University of North Texas, USA)
* Ch : Multiple responses: Molecular through Behavioral
* Ch : The Case Study: Development, Physiology and High Altitude

**IV. PLASTICITY IN DEVELOPMENT**

* Section Introduction (1 page)
* Ch : Resist or Modify? Cost/Benefits
* Ch : Developmental Plasticity (EUROPEANS ???????)
* Ch : Epigenetics
* Ch : Developmental Windows (Casey Mueller – McMaster University, Canada)
* Ch : Heterokairy (John Spicer, Plymouth University, UK)
* Ch : The Case Study: XXXXXXXXX

**V. DEVELOPMENTAL CHALLENGES FROM THE ENVIRONMENT: NATURAL AND ANTHROPOGENIC**

* Section Introduction (1 page)
* Ch : Development During Acute vs. Chronic Environmental Variation
* Ch : Immunology (Charles Rice, Clemeson, USA)
* Ch : Fitness and Reproductive Success
* Ch : Endocrine Disruption
* Ch : Toxicology (Duane Huggett - University of North Texas, USA)
* Ch : The Case Study: 2010 Gulf Oil Spill (John Incardona, NOAA-Seattle, USA)
* Steve McCormick

**VII. HUMAN HEALTH IMPACTS**

* Section Introduction (1 page)
* Ch : Epidemiology
* Ch : Human Epigenetic effects of environmental toxicants
* Ch : The Case Study: XXXXXXXXX

**VIII. A SYNTHESIS**

* Ch : Conclusions and Future Directions (Benjamin Dubansky and Warren Burggren, University of North Texas, USA)
  + Combating experimental variation
  + Resiliency and costs/tradeoffs
  + Predictive powers/tools

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QUESTIONS FOR PUBLISHER

1. Are short chapters and chapters of variable length OK?
2. Are Section Intros OK?