

Development, Environment, and Physiology: A

Volume I.

Section I. Introduction

The Utility of Developmental Biology in Environmental Science	Ben Dubansky, Warren Burggren	Benjamin.Dubansky@unt.edu Warren.Burggren@unt.edu
---	-------------------------------------	--

Section II. Plasticity in Developmental Time and Space

Chapter 1	Active and Passive Responses to the Environment in Developing Animals: Costs and Benefits	Berndt Pelster	Bernd.Pelster@uibk.ac.at
Chapter 2	Epigenetics in Environmental Developmental Physiology	David Crews	david.cruzs@utexas.edu
Chapter 3	Developmental Windows	Casey Mueller	caseyamuel@gmail.com
Chapter 4	Developmental Plasticity and Heterokairy	John Spicer	j.i.spicer@plymouth.ac.uk
Chapter 5	Case Study: Larval Development in Fishes.	Collin Brauner	brauner@zoology.ubc.ca

Section II. Experimental Approaches

Chapter 6	The Opportunities and Limitations of Laboratory versus Field Approaches	Martin Gossel	mgrosell@rsmas.miami.edu
Chapter 7	Adverse Outcome Pathways and Systems Integration	<i>Pending</i>	
Chapter 8	Multivariate Experimental Designs in Environmental Developmental Physiology	<i>Pending</i>	
Chapter 10	Emerging Data Bases and Data Management Plans	James Gibeaut	james.gibeaut@tamucc.edu
Chapter 11	Case Study: Research Consortia and the Art of Collaboration in Developmental Biology	<i>Pending</i>	

Section IV. Insights into Developmental Biology

Chapter 12	Extrapolating Population-level Impacts of Environmental Transformation	Morgan Kelly	morgankelly@lsu.edu
Chapter 13	The Genomics Age and Beyond	<i>Pending</i>	
Chapter 14	The Modern Synthesis and Soft Inheritance	Thomas Dickens and Benjamin Dickins	Tom.Dickins@gmail.com
Chapter 15	The Physical Science of Environmental Biology – Contributions from Forensic Science	Guido Verbeck	gverbeck@unt.edu

Section V. Conclusion

A Synthesis - Development in a Changing World

Ben Dubansky, Benjamin.Dubansky@unt.edu
Warren
Burggren

Warren.Burggren@unt.edu

Development, Environment, and Physiology: A

Volume II.

Section I. Introduction

Current Trends and Perspectives in Environmental Developmental Physiology

Ben Dubansky, Benjamin.Dubansky@unt.edu
Warren
Burggren

Warren.Burggren@unt.edu

Section II. Multiple Environmental Stressors, Their Interactions, and the Complex Re

Chapter 1 Multiple Stressor Interactions

Fernando Galvez galvezf@lsu.edu

Chapter 2 Multiple System Interactions

Sylvia Branum and Warren Burggren Warren.Burggren@unt.edu

Chapter 3 Responding to Environmental Challenges with Integrated Responses from Molecular to the Population Levels *Pending*

Chapter 4 Case Study: Developmental Physiology at High Altitude

Joseph Vincent Joseph.Vincent@crchudequebec.ulaval.ca

Section III. Developmental Challenges

Chapter 5 Developmental Challenges of Xenoestrogens on Cardiac Development

Daniel Schlenk daniel.schlenk@ucr.edu

Chapter 6 The Interaction of Environment and Chronological and Developmental Time

Ben Dubansky Benjamin.Dubansky@unt.edu

Chapter 7 The Implications of the Ontogeny of Immunity

Charles D. Rice cdrice@clermson.edu

Chapter 8 Early Developmental Exposure to Stressors Related to Individual Fitness in Aquatic Organisms and the Subsequent Reproductive Success and Failure on Populations.

Keith R. Cooper cooper@aesop.rutgers.edu

Chapter 9 Toxicity in Aquatic Environments – The Cocktail Effect *Pending*

Section IV. Human Health Impacts

Chapter 11 The Embryo and It's Environment – *In utero* Toxicity and Physiological Outcomes

Damian Hutter damian.hutter@insel.ch

Chapter 12 Developmental Neurotoxicology in Children

Pending

Chapter 13 Transgenerational Transfer of the Response to Environmental Stress

Rachel Yehuda rachel.yehuda@mssm.edu

Chapter 14 Case Study: Prenatal Exposure to Environmental Toxicants

Pending

Section V. Conclusion

A Synthesis - Development in a Changing World

Ben Dubansky, Benjamin.Dubansky@unt.edu
Warren
Burggren

Warren.Burggren@unt.edu

A Synthesis

University of North Texas, Department of
Biological Sciences, Denton, TX, USA

University of Innsbruck, Institute of Zoology,
Innsbruck, Austria

University of Texas, Department of Integrative
Biology, Austin, TX, USA

McMaster University, Department of Biology,
Hamilton, ON, Canada

University of Plymouth, Marine Biology and
Ecology Research Centre, Devon, UK

University of British Columbia, Department of
Zoology, Vancouver, BC, Canada

University of Miami, Rosenstiel School of
Marine and Atmospheric Science, Miami, FL,
USA

Abstract

Texas A&M University, Department of Physical
& Environmental Sciences, Corpus Christi, TX,
USA

Louisiana State University, Department of
Biological Sciences, Baton Rouge, LA, USA

Abstract

Middlesex University, School of Science and
Technology, London, UK. Nottingham Trent
University, School of Science and Technology,
Nottingham, UK.

Abstract

University of North Texas, Department of
Chemistry, Denton, TX, USA

University of North Texas, Department of
Biological Sciences, Denton, TX, USA

^ Synthesis

University of North Texas, Department of
Biological Sciences, Denton, TX, USA

sponsors They Invoke

Louisiana State University, Department of
Biological Sciences, Baton Rouge, LA, USA

University of North Texas, Department of
Biological Sciences, Denton, TX, USA

Laval University, Department of Pediatrics,
Laval, QC, Canada

University of California, Riverside, Department
of Environmental Science, Riverside, CA, USA

Abstract

Outline

University of North Texas, Department of
Biological Sciences, Denton, TX, USA

Clemson University, Department of Biological
Sciences, Clemson, SC, USA

Rutgers University, Department of
Biochemistry and Microbiology, New
Brunswick, NJ, USA

Abstract

National Oceanic and Atmospheric
Administration, Northwest Fisheries Science
Center, Seattle, WA, USAS

University Children's Hospital of Bern,
Department of Cardiology, Bern, Switzerland.

Abstract

Icahn School of Medicine at Mount Sinai
Hospital, Department of Psychiatry, Traumatic
Stress Studies Division, New York, NY, USA

University of North Texas, Department of
Biological Sciences, Denton, TX, USA
