

1. Record Nr.	UNINA9911095787603321
Titolo	The infectious etiology of chronic diseases : defining the relationship, enhancing the research, and mitigating the effects : workshop summary // Stacey L. Knobler ... [et al.], editors
Pubbl/distr/stampa	Washington, D.C., : National Academies Press, c2004
ISBN	9786610179497 9780309165914 0309165911 9781280179495 128017949X 9780309526722 0309526728
Edizione	[1st ed.]
Descrizione fisica	1 online resource (xvii, 215 pages) : illustrations
Altri autori (Persone)	KnoblerStacey
Disciplina	616.07/1
Soggetti	Chronic diseases - Etiology Communicable diseases - Etiology Communicable diseases - Transmission Communicable diseases Chronic diseases Communicable Diseases Chronic Disease Communicable Diseases - transmission Chronic Disease - epidemiology Communicable Diseases - epidemiology Conference Proceedings.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Workshop held October 21-22, 2002. "Forum on Microbial Threats, Board on Global Health, Institute of Medicine of the National Academies."
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Defining the relationship: an examination of infectious agents associated with chronic diseases Endemic infectious diseases linked to

chronic diseases: implications for developing countries Obstacles and opportunities for framing future research Opportunities to prevent and mitigate the impact of chronic diseases caused by infectious agents

Sommario/riassunto

In recent years, a number of chronic diseases have been linked, in some cases definitively, to an infectious etiology: peptic ulcer disease with *Helicobacter pylori*, cervical cancer with several human papillomaviruses, Lyme arthritis and neuroborreliosis with *Borrelia burgdorferi*, AIDS with the human immunodeficiency virus, liver cancer and cirrhosis with hepatitis B and C viruses, to name a few. The proven and suspected roles of microbes does not stop with physical ailments; infections are increasingly being examined as associated causes of or possible contributors to a variety of serious, chronic neuropsychiatric disorders and to developmental problems, especially in children. The Infectious Etiology of Chronic Diseases: Defining the Relationship, Enhancing the Research, and Mitigating the Effects, summarizes a two-day workshop held by the Institute of Medicine (IOM)'s Forum on Microbial Threats to address this rapidly evolving field. Participants explored factors driving infectious etiologies of chronic diseases of prominence, identified difficulties in linking infectious agents with chronic outcomes, and discussed broad-based strategies and research programs to advance the field.

2. Record Nr.	UNINA9911139856803321
Titolo	C4 plant biology / / edited by Rowan F. Sage, Russell K. Monson
Pubbl/distr/stampa	San Diego, : Academic Press, c1999
ISBN	1-281-04690-6 9786611046903 0-08-052839-2
Edizione	[1st ed.]
Descrizione fisica	1 online resource (616 p.)
Collana	Physiological ecology series
Altri autori (Persone)	SageRowan Frederick MonsonR. K <1954-> (Russell K.)
Disciplina	572/.46
Soggetti	Photosynthesis - Regulation Photosynthesis - Molecular aspects
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; C4 Plant Biology; Copyright Page; Contents; Contributors; Preface; Part I: Perspectives; Chapter 1. Why C4 Photosynthesis?; I. Introduction; II. The Problem with Rubisco; III. How C4 Photosynthesis Solves the Rubisco Problem; IV. Significant Variations on the C4 Theme; V. The Consequences of the Evolution of C4 Photosynthesis; VI. C4 Photosynthesis in the Future; VII. Summary; References; Chapter 2. C4 Photosynthesis: A Historical Overview; I. Introduction; II. The Prediscovery Scene (Before 1965); III. Discovery: Radiotracer Evidence (1954-1967) IV. Mechanism, Functions, and Recognition (1965-1970)V. Selected Aspects of the C4 Story (1970-); VI. Summary; References; Part II: Structure-Function of the C4 Syndrome; Chapter 3. The Biochemistry of C4 Photosynthesis; I. Introduction; II. CO2 Concentration and Rubisco Activity in Bundle Sheath Cells; III. Energetics of C4 Photosynthesis; IV. Coordination of the Two Cell Types in C4 Photosynthesis; V. Intracellular Transport of Metabolites; VI. Summary; References; Chapter 4. Regulation of the C4 Pathway; I. Introduction; II. An Overview of the Regulation of the C4 Cycle III. Regulation of the C4 CycleIV. Interactions between the C4 Cycle and Mitochondrial Metabolism; V. Regulation of the Benson-Calvin Cycle in

C4 Plants; VI. Regulation of Product Synthesis in Leaves of C4 Plants; VII. Summary; References; Chapter 5. Leaf Structure and Development in C4 Plants; I. Introduction; II. Kranz Anatomy and Biochemical Compartmentation; III. Development of the C4 Syndrome; IV. Summary; References; Chapter 6. Modeling C4 Photosynthesis; I. Introduction; II. Basic Model Equations; III. Analysis of the Model; IV. Summary; References

Part III: Ecology of C4 PhotosynthesisChapter 7. Environmental Responses; I. Introduction; II. Light; III. Nitrogen; IV. Water; V. Temperature; VI. Summary; References; Chapter 8. Success of C4 Photosynthesis in the Field: Lessons from Communities Dominated by C4 Plants; I. Introduction; II. The C4-Dominated Tallgrass Prairies of North America; III. The C4-Dominated Neotropical Savannas; IV. Summary; References; Chapter 9. C4 Plants and Herbivory; I. Introduction; II. Unique Features of C4 Species That May Affect Herbivores and Plant Responses to Herbivory III. How Important Are C4 Characteristics to Herbivory Tolerance and Resistance?IV. Summary; References; Chapter 10. The Biogeography of C4 Photosynthesis: Patterns and Controlling Factors; I. Introduction; II. The Global Distribution of C4 Photosynthesis; III. Factors Controlling the Distribution of C4 Species; IV. C4 Plants in the Future; V. Summary; References; Part IV: The Evolution of C4 Photosynthesis; Chapter 11. The Origins of C4 Genes and Evolutionary Pattern in the C4 Metabolic Phenotype; I. Introduction; II. The Evolution of C4 Genes III. The Evolution of C4 Metabolism as Evidenced in C3-C4 Intermediates

Sommario/riassunto

Due to many issues related to long-term carbon dynamics, an improved understanding of the biology of C4 photosynthesis is required by more than the traditional audience of crop scientists, plant physiologists, and plant ecologists. This work synthesizes the latest developments in C4 biochemistry, physiology, systematics, and ecology. The book concludes with chapters discussing the role of C4 plants in the future development of the biosphere, particularly their interactive effects on soil, hydrological, and atmospheric processes.
