Introduction to Cancer Concepts: A Guidebook for the Non-Oncologist

Richard S. Pieters  
*University of Massachusetts Medical School, Richard.Pieters@umassmemorial.org*

Maryann Bishop-Jodoin  
*University of Massachusetts Medical School, Maryann.Bishop-Jodoin@umassmed.edu*

James Liebmann  
*University of Massachusetts Medical School, James.Liebmann@umassmemorial.org*

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**Recommended Citation**  
The University of Massachusetts Medical School (UMMS), in the process of revising its undergraduate medical school curriculum, devised a new course, Cancer Concepts, to introduce the general principles of oncology to first year students. In preparing the material for the class, the course co-directors (JL & RSP) realized that handouts would have to be generated at an appropriate level for medical students. Currently an oncology textbook is not available at that level. As so often happens, handouts intended for Cancer Concepts evolved into this guidebook. The course is interdisciplinary, so chapters on all the services serving oncology patients are included. Coverage of specific tumor types is also included. At the UMMS, instruction on specific cancers is incorporated in the appropriate system blocks throughout the curriculum.

The goal of the Cancer Concepts course is to begin to prepare students to care for oncology patients in whatever specialty they ultimately choose, and the text provides a foundational guidebook of oncology for non-oncologists. The book was designed from conception as an e-book, to take full advantage of the capabilities of the web. Chapters can be read online or downloaded. Content is searchable, interactive and enables self-monitoring of learning progress. Glossary links provide immediate access to definitions; image thumbnail links offer larger versions of images, such as radiographs, CTs, and MRIs; charts, graphs; movies and virtual microscopy slides; and reference links provide access to PubMed abstracts, manuscripts in PubMed Central and publisher websites; and, if logged on to the UMMS library, complete manuscript access. Interactivity for self-assessment is built into the format to provide the reader with opportunity to answer thought questions and compare to expert answers. White space is available on each page for note-taking.

The book is divided into two sections: I). Biological Basis of Oncology & Principles of Multidisciplinary Therapy and II). Organ-Specific Cancers. The first section provides a general introduction to oncology at the cellular, tissue, organ and organism levels, including history and basic principles of the available treatment modalities for malignancies. The second section provides an overview of common malignancies and selected other cancers, either because they are interesting, or because they are examples used in courses at UMMS. Most of the chapters have been authored by members of the oncologic faculty at UMMS and each chapter has been peer reviewed by at least one other oncologist, and reviewed for readability by a non-oncologist attending physician and a medical student.

The book is designed to create a framework for a common oncology thread through the entire undergraduate and graduate medical curriculum at the University of Massachusetts Medical School. It is also hoped that practicing physicians in non-oncologic specialties will find it a useful guide when oncologic questions arise.
online format allows chapters to be posted as they are completed, and to be readily revised as necessary. The first site posting is on the Lamar Souter Library eScholarship site at the University of Massachusetts Medical School.

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