

UNIVERSITY OF TORONTO SCHOOL OF CONTINUING STUDIES

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Profiling the Serial Killers: Cardiovascular Diseases, Cancers, and Neurological Disorders (SCS 2368-01)

Course Objective:

To describe and understand the underlying causes of the three deadliest diseases on earth and how to delay or prevent disease onset.

This is new, informative online health course tackles individual wellbeing by focusing on disease. In the vein of preventive health, important problems cannot be solved unless they can first be understood by individuals. As a frontline knowledge transfer expert in pathology and health care, Dr. Sheldon M. Joseph uses his unique teaching style to provide an up-to-the-minute understanding of the world's deadliest diseases that are most often in the News - Cardiovascular Disease, Cancers, and Neurological Disorders - by summarizing current treatments, risk factors (tobacco, obesity, diabetes), and how changing our lifestyle can help us beat them.

Number of sessions: 8 | Sep 28, 2009 - Nov 16, 2009 | Flat fee \$290.00 + GST

Week 1: Introduction and Course Overview

Weeks 2 and 3: Module A - Dying of a Broken Heart. The instructor will summarize dysfunctions that cause heart disease, global killer number #1. For example, students will learn how, when, and why high blood pressure (hypertension), high cholesterol (hypercholesterolemia), and/or hardening of the arteries (atherosclerosis) and genetic predisposition (DNA) can lead to cardiovascular diseases (heart attacks, strokes, embolisms, P.A.D.). Students will learn how diet (salt, phytosterols), exercise (cardiac tone), and stress-reduction can delay or prevent cardiovascular diseases.

Weeks 4 and 5: Module B - Cells Gone Wild - What are cancers and how do they 'spread'? Students will learn the underlying causes of the cancers, global killer #2. The instructor will define the term 'cancer', providing an overview of the genetic, immune, and cellular changes that lead to the development and spread of tumors. The module summarizes known familial (DNA), environmental (pollution), behavioral (smoking), and pathological (viral) causes of the top 10 cancers, in alphabetical order: Blood/Bone, Brain, Breast, Cervical, Colon, Lung, Pancreatic, Prostate, Skin, and Testicular. Students will understand difficulties involved in curing cancers and will learn about state-of-the-art cancer research, treatments, as well as preventive medicine and nutrition. Special case: Kaposi's Sarcoma due to AIDS.

Weeks 6 and 7: Module C - A Not-So-Beautiful Mind - What are neuronal disorders and how do we 'get' them? The instructor will introduce students to dysfunctions of the nervous system that collectively represent global killer #3. The how, when, and why of the major disorders of the central nervous system (brain and spinal cord) and the peripheral nervous system will be assessed. The module will cover Alzheimer's disease, Attention Deficit Hyperactivity Disorder (ADHD), Bipolar Disorder, Congenital Disorders (Autism, Down Syndrome), Depression, Multiple Sclerosis, Muscular Dystrophy, Paralysis, Parkinson's disease, and Senility. Students will become familiar with the jargon such as 'action potentials', 'blood-brain-barrier', 'onset of dementia', 'neurofibrillary tangles, tau protein, amyloid plaques', and 'de-myelinated axons'. The contribution of neurotransmitters (acetylcholine, dopamine, serotonin) will be summarized.

Week 8: Summary, Conclusion, and Question & Answer Session

Course Creator and Instructor: Sheldon M. Joseph, Hons. B.S., Ph.D. is President and CEO of Rejuven8Labs.com, an Innovative Green Life Sciences Company specializing in education, research, and product development. A vibrant, multiple award-winning educator, Sheldon effortlessly and naturally engages his students using analogies, visual aids, animations, and discussions of real-world examples.

Learn more. Live more. Lead more. Create more. Relate more. Achieve more. Earn more.

