UVic Retirees Association (UVRA) Elder Academy

Series topic:

*Bacterial Colonists of the Human Gut: Current Views on their Impact on Human Health*

We are once again fortunate to have Dr. Ed Ishiguro offer another fascinating series. This is a series you will not want to miss, and could be crucial to your health. He has received numerous awards for his teaching and his ability to make difficult concepts easy to understand and to apply to our daily living.

**Biography:** Ed Ishiguro, is Professor Emeritus, Department of Biochemistry and Microbiology, University of Victoria, and is a member of the UVic Speakers Bureau.

**Dates:** September 16th, 23rd, and 30th, and October 7th – Saturdays, 10 am – noon.

**Cost:** $20 for all four sessions, or $6/session

**Location:** UVic campus – see below.

**Overview of Series:**

The fact that the human digestive tract is densely populated by bacteria has been known for over a century. Early studies revealed that the colonization of the gut by these bacteria, collectively referred to as the gut microbiota, is a process that starts at birth. Preliminary observations also indicated that the gut microbiota played a crucial role in the normal development of various immunological and physiological functions. However, until recently, the complexity of the gut microbiota precluded attempts to determine the precise mechanistic roles of these bacteria in human health and disease.

Our current understanding of the impact on the role of our gut microbiota on selected aspects of health and disease will be presented in the following four sessions.
1. **September 16\(^{th}\) (Bob Wright Building, A104) - Introduction to the Gut Microbiota**
   - The stages in bacterial colonization of the digestive tract over the human lifespan, and conditions that influence the colonization process.
   - The composition of the human microbiota (general characteristics of the bacteria present) and factors that account for variability of this composition from person to person.
   - Special focus on what is known about diet and the development of the microbiota.
   - The essential roles of the microbiota in maintaining good health and preliminary comments on what can go wrong.

2. **September 23\(^{rd}\) (Bob Wright Building, A104) - Interactions of the Gut microbiota with the immune and nervous systems**
   - Introduction of gut immune (mucosal) system.
   - Introduction to the enteric nervous system (gut-brain axis).
   - Interactions of the microbiota with the gut immune system and the enteric nervous system, and an overview of how these microbial activities may influence one’s health.

3. **Session 3 (DSB C118, September 30\(^{th}\)) & session 4 (Bob Wright A104, October 4\(^{th}\)) - Impact of the gut microbiota on human health and the promise of interventions.**
   - Common features exhibited by major foodborne pathogens such as Salmonella, Campylobacter, enterotoxigenic Escherichia coli, and Listeria
   - Clostridium difficile and Norovirus, two significant infectious diarrhea pathogens that are frequently connected to outbreaks in institutions: what have we learned?
   - Discussion of recent studies suggesting involvement of gut microbiota in complex diseases such as (to name a few) inflammatory bowel disease, asthma and other allergies, metabolic syndrome and obesity, cardiovascular disease, and brain-related diseases like autism spectrum and Parkinson’s Disease.
   - A critical look at the status of interventions such as probiotics, fecal microbiota transplantation.
   - Final comments: can we define a “healthy” (i.e., “good bacteria”) and an “unhealthy” (i.e., “bad bacteria”) microbiota?
Registration procedures:

Please email the name(s) of the person(s) attending; the session(s) wanted; and method of payment to uvra@uvic.ca (If registering by phone or in person, please also provide your email address.)

Payment options:

1. Interac e-transfer sent by email to “uvra@uvic.ca”


3. Campus mail: addressed to UVRA, R-Hut, Room 108

4. In person: Office hours are 1:30pm to 3:30pm work days, when a volunteer is available. When not, payments can be left in the tray outside the door, or with the Institute on Aging and Lifetime Health (IALH) Reception, which is open 8:30 am to 4:30 pm on weekdays.

5. At the door: BY CHEQUE ONLY made out to UVic Retirees Association. We regret that, due to the need to give receipts (for accounting purposes) and the inconvenience of making change, we will no longer be able to accept cash at the door. The preferred option is that attendees pre-book and pay at the time of booking, so that we know exactly how many attendees to expect.

Parking: For the presentations in the Bob Wright Building, use Parking Lot 1 opposite the Bob Wright Centre. For the David Strong Building (C118) use Parking Lot 4. If you are unfamiliar with UVic Campus, you may wish to check the locations of the parking lots and buildings on the map:

www.uvic.ca/home/about/campus-info/maps/pdf/parking-map.pdf

You will need to buy a parking ticket ($3.00) from one of the machines. Effective on September 1, you will enter your license-plate number when you buy a ticket – there will not be a ticket that needs to be placed in your vehicle.

Bus routes to UVic: please check:

www.uvic.ca/home/about/campus-info/maps/maps/busroutes.php