# **Course Description**

We are announcing the ABCs of Lipoprotein Metabolism Workshop jointly organized by the Dietetics Program of Universiti Kebangsaan Malaysia and Wayne State University. Assoc Prof Dr Pramod Khosla, our Lead Faculty will share his expertise on lipoprotein metabolism and its impact and role in nutrition and health.

Lipoproteins are soluble complexes of lipids and specialized proteins, called apoproteins. The science of cardiovascular risk reduction has long focused on total cholesterol (TC) management with specific cholesterol laden molecules such as LDL-C, HDL-C, and

Lipoprotein

VLDL as well as triglycerides playing key roles in risk reduction. Nutrition science today is converging to evaluate the dietary effects of fatty acids and carbohydrates on

lipoprotein concentration and their particle sizes.

# Who will benefit?

The Workshop aims to get lecturers, researchers, dietitians, nutritionists and postgraduate students familiar with the language of lipoprotein metabolism.

The Workshop covers the lipoproteins in human metabolism, presents an overview of methodologies to study lipoprotein particle size and density, describes exogenous (chylomicron and chylomicron remnant), endogenous (VLDL, IDL and LDL) lipoprotein and reverse cholesterol transport (HDL) pathways involved in lipoprotein metabolism and the interplay with diet factors leading to cardiovascular disease.

# **Registration Fees\***

Participant	Early Bird (by 8 <sup>th</sup> Feb)	Normal Price (9th Feb onwards)
UKM	MYR 280	MYR 350
Group registration (3 persons)	-	MYR 800
Non-UKM	MYR 480	MYR 600
Group registration (3 persons)	-	MYR 1500
UKM-student	MYR 250	MYR 300
Group registration (3 persons)	-	MYR 800

<sup>\*</sup>Inclusive of GST, lunch, snacks and course materials.

# **Registration Form**

Name	
Designation	
Institution	
Contact No.	
Email address	
Mailing address	
Register for:	☐ Early Bird ☐ Post Early Bird
□ UKM (Staff / Student) □ Non-UKM □ Group registration : U (*delete where unnecessary. I	
Payment by cheque* T Made payable to 'Bendaho registration	otal Amount : RM ari UKM' after confirmation of

#### **Course Coordinator:**

Assoc. Prof. Dr. Tilakavati Karupaiah, APD, AN

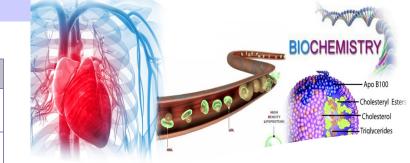
#### Secretaria

Mr. Ng See Hoe, Mr. Se Chee Hee, Mr. Chuah Khun Aik, Mr. Khor Ban Hock, Ms. Sharmela Sahathevan, Mdm. Gaiyal Villy Subramanian, Mr. Yeak Zu Wei, Ms. Tan Shy Pyng

Dietetics Program, School of Healthcare Sciences, Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Jalan Raja Muda Abdul Aziz, 50300 Kuala Lumpur.

019-2731400 (Mobile) 03-92897245 (Office) 03-26947621 (Fax)

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# ABCs of Lipoprotein Metabolisms Impact & Role in Nutrition and Health

# 08 - 10 March 2016

Centre for Extension Education (PKP)
Tun Syed Nasir Residential College
Universiti Kebangsaan Malaysia
Kuala Lumpur Campus

Jointly organized by:







# **Lead Faculty**

### Pramod Khosla, PhD

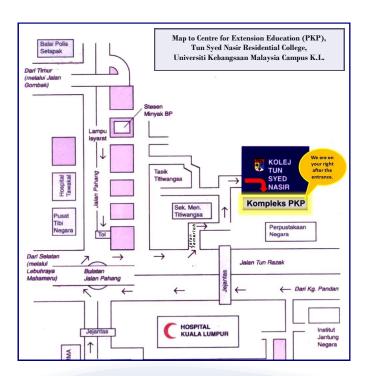
Associate Professor and Graduate Officer.

Department of Nutrition & Food Science, Wayne State University, MI, USA.

#### Current research projects:

- Conducting dietary interventions to decrease oxidative stress and inflammation in chronic kidney disease patients.
- 2) Evaluating the effects of dietary fatty acids on plasma lipoprotein metabolism
- Assessing the nutritional properties of palm oil and its constituents (carotenoids, tocotrienols)





# Workshop Schedule Tuesday

Opening ceremony
Welcoming Speech by A.P. Dr Tilakavati Karupaiah

#### Session 1

Introduction. Pre-course assessment. Review on lipid and lipoproteins

#### Session 2

Chylomicron & VLDL metabolism (triglyceridemia, post-prandial metabolism, hepatic lipoprotein assembly)

#### Session 3

LDL metabolism (LDL receptor pathway, SREBP pathway, cholesterol metabolism, statins, PCSK9 inhibitors, LDL receptor mutations, cholesterol absorption)

#### Session 4

HDL metabolism (reverse cholesterol transport, CETP, LCAT, ABCA1, SR-B1, cholesterol efflux, dysfunctional HDL particles)



## Wednesday

#### Session 1

Overview of methodologies to study lipoproteins (ultracentrifugation, lipoprotein isolation, characterization, purifications, assessment of apoproteins)

#### Session 2

Lipoproteins in chronic disease (CVD, CHD, diabetes, clinical relevance, diagnostics)

#### Session 3a

Lipoprotein kinetics (steady-state kinetics) apo B cascades, VLDL, IDL, LDL, precursor-product relationships, apo A1 kinetics)

#### Session 3b

Lipoprotein kinetics (steady-state kinetics) apo B cascades, VLDL, IDL, LDL, precursor-product relationships, apo A1 kinetics)



# **Thursday**

#### Session 1

Dietary fat and lipoproteins – effects of saturated, unsaturated and trans fats

#### Session 2

Diet and lipoproteins – effects of carbohydrates

#### Session 3

Diet and lipoproteins – relationship to cardiovascular disease

#### Session 4

Final review. Post course assessment