Overview/Summary

Geisel students and faculty have noted overlap and redundancies in our current curriculum on major health issues including obesity, metabolic syndrome and diabetes. Some of this redundancy is intentional and builds on important themes. However, there are also examples where consistency and vertical integration can be improved. A subgroup of faculty met to discuss how to better integrate coverage of important topics and agreed that a constructive step would be to assemble an inventory on specific topics across the curriculum. As an example, the topic of obesity was discussed and an inventory composed through the Geisel-Ilios curriculum inspector and student and faculty input. Better awareness of session content and objectives should allow instructors to optimize overlap. An inventory and supporting lecture materials for a given topic could be distributed to the involved faculty instructors followed by a meeting for discussion on how to strengthen coverage.

Inventory of Session Titles and Objectives on Obesity - 2015 Academic Year

**YEAR 1:**

**BIOC112-Metabolic Basis of Disease (winter term)**

**Title:** Engaging in the obesity epidemic – Richard Rothstein (1 hr)

**Objectives:**
1. Introduce obesity epidemic, facts, myths and concept of health at any weight

**Title:** Obesity, metabolic syndrome and treatments – Henry Higgs, Richard Rothstein (3 hrs)

**Objectives:**
1. Define pathways by which excess fuel sources are converted to triglyceride.
2. Explain current theories by which excess triglyceride leads to insulin resistance in muscle.
3. Combine knowledge of energy balance in liver and insulin resistance in explaining progression of hepatic steatosis
4. Combine knowledge of glucose sensing by pancreatic beta cells with knowledge of uncoupling proteins to explain decreased insulin secretion in some cases of type II diabetics
5. Discuss the mechanism of action of the drugs orlistat and sulfonoureas.
6. Describe current treatments for obesity and metabolic syndrome
7. Explain limitations of current treatments for obesity and metabolic syndrome

**MDED115- Neuroscience (spring term)**

**Title:** The homeostatic brain – Leslie Henderson (1 hr)

**Objectives:**
1. Describe the challenges associated with alternative therapeutic approaches to obesity (drugs and devices)
2. Describe the potential contribution of genetics and environment to both obesity and anorexia nervosa

**YEAR 2:**

**PHAR217- Organ Based Pharmacology**

**Title:** Pharmacology of Obesity – Sarah Freemantle (online)

**Objectives:**
1. Discuss the epidemiology and cost of obesity
2. Explain the pathophysiology of obesity
3. Describe non-pharmacologic approaches to treatment of obesity and their use in concert with pharmacological interventions
4. Describe the mechanism of action, side-effects, realistic therapeutic aims and therapeutic plan that goes with the drug treatment for currently approved FDA drugs for obesity including orlistat and phentermine.
5. Describe the main mechanisms of action and current FDA status of potential future drugs for obesity including lorcaserin, phenteramine/topiramate, bupropion/topiramate, bupropion/zonisamide.

**SBM201- Respiration (term 1)**

**Title:** Sleep and Case conference

**Objectives:**
1. Describe how life style factors, such as obesity and alcohol use, affect the development and clinical course of obstructive sleep apnea

*Note: Hal Manning can provide more information on content.*
SBM204 - Psychiatry (term 2)
Title: Eating Disorders – Margit Berman (1 hr)
Objectives:
1. Distinguish obesity for eating disorders

SBM207 - Endocrinology (term 3)
Title: Obesity and its Management – Kathleen BelBruno (1 hr)
Objectives:
1. Be able to define obesity, know how current measurements are made and their limitations
2. Understand that obesity is a multifactorial problem
3. Know medical complications of obesity
4. Identify treatment options for obesity

Note: Bill Kinlaw (course director for SBM207) indicates this session not planned for 2016

Title: PBL nutrition
Objectives:
1. Review the diseases and risk factors related to obesity
2. List the medical conditions related to morbid obesity for which there is evidence for reversal with significant (>50 lbs) weight loss

Note: Obesity only one component of this PBL, Rich Comi can provide more information on content.

YEAR 3

CFM306 - Family Medicine Clerkship
Title: Annual exam 55 yr male
Objectives:
1. Discuss the significance of nutrition and obesity in health promotion and disease prevention

PEDS305 - Pediatrics Clerkship
Title: Ambulatory Practice Setting – Adam Weinstein
Objectives:
1. Perform a nutritional assessment on an infant or toddler, or older child presenting with a nutrition concern (e.g. failure to thrive, won’t eat anything, obesity). Advise the parent about appropriate feeding practices.

Title: CLIPP case – Health Maintenance in School Age Child
Objectives:
1. Discussion and management of nutrition and obesity in school age child

Note: Faculty have mentioned some coverage in Medicine Clerkship (Inpatient, Hilary Ryder) and in Surgery Clerkship (Bariatric surgery/complications, Gina Adrales).

YEAR 4

PHAR405 - Clinical Pharmacology and Therapeutics short course
Title: Weighing medical risks against benefits in use of atypical antipsychotics – Steve Bartels
Objectives:
1. Diagram the relationship between antipsychotic use and the development of weight gain, obesity, glucose intolerance and increased cardiovascular risk.
2. Describe strategies to encourage psychiatric patients to engage in healthier life styles

Note: Faculty mentioned some coverage in Geriatric and Ambulatory Medicine (Rosh Pinto-Powell)