



WASHINGTON STATE UNIVERSITY

**Elson S. Floyd
College of Medicine**

NEED TO KNOW

LIPIDS 3

Describe the structure, synthesis, and degradation of phospholipids and explain their importance in biological functions.

- Phosphatidylinositol in cell signaling
- Phospholipase A₂
- Phospholipase C
- Platelet activating factor
- Ceramide

Describe the structure, synthesis, and degradation of sphingolipids and explain their importance in biological functions.

- Niemann-Pick disease
- Sphingolipidosis
- Tay-Sachs disease
- Gaucher Disease
- Metachromatic leukodystrophy
- Sandhoff disease
- Sphingomyelinase
- Degradation of glycosphingolipids
- Degradation of sphingolipids
- Ceramide synthesis and use



WASHINGTON STATE UNIVERSITY

**Elson S. Floyd
College of Medicine**

Describe the synthesis of prostaglandins, thromboxanes, and leukotrienes and explain their importance in biological functions.

- Cyclooxygenase 1 and 2 (Cox 1 and Cox2)
- 5-Lipoxygenase
- Eicosanoids - Prostaglandins, Leukotrienes and Thromboxanes
- Prostaglandins in platelet homeostasis