Fatty acid metabolism

Sections/problems listed with an asterisk (*) do not discuss the exact reaction indicated, but do discuss a closely related reaction.

Fatty acid degradation

- Acyl CoA synthetase (EC 6.2.1.1) Section 12.3B*
- Carnitine acyltransferase (EC 2.3.1.21) Section 12.3C*
- Acyl CoA dehydrogenase (eg. EC 1.3.99.13) Section 16.5C, Section 17.3C
- Enoyl CoA hydratase (E.C. 4.2.1.74) Section 14.1B
- 3-hydroxyacyl CoA dehydrogenase (EC 1.1.1.35) Section 16.4B*
- *beta*-keto thiolase (EC 2.3.1.16) Section 13.4B
- *cis*-Enoyl-CoA isomerase (eg. EC 5.3.3.8) Section 13.2C
- 2,4-Dienoyl CoA reductase (EC 1.3.1.34) Section 16.5D
- Glycerol phosphate dehydrogenase (EC 1.1.1.8) Section 16.4D

Fatty acid biosynthesis

- acetyl CoA carboxylase (EC 6.4.1.2) P13.2
- acyl CoA synthetase(EC 6.2.1.1) Section 12.3B
- ACP transacylase (EC 2.3.1.38) Section 12.3D
- *beta*-ketoacyl-ACP synthase (EC 2.3.1.41) Section 13.5C
- *beta*-ketoacyl-ACP hydrogenase (EC 1.1.1.35) Section 16.4B*
- 3-hydroxyacyl dehydratase (EC 4.2.1.58) Section 14.1B
- enoyl-ACP reductase (EC 1.3.1.10) Section 16.5A

- acyl-CoA dehydrogenase (EC 1.3.99.3) Section 16.5A,B,C
- monoacylglycerolacyltransferase (EC 2.3.1.22) Section 12.3C

Organic Chemistry With a Biological Emphasis by Tim Soderberg (University of Minnesota, Morris)