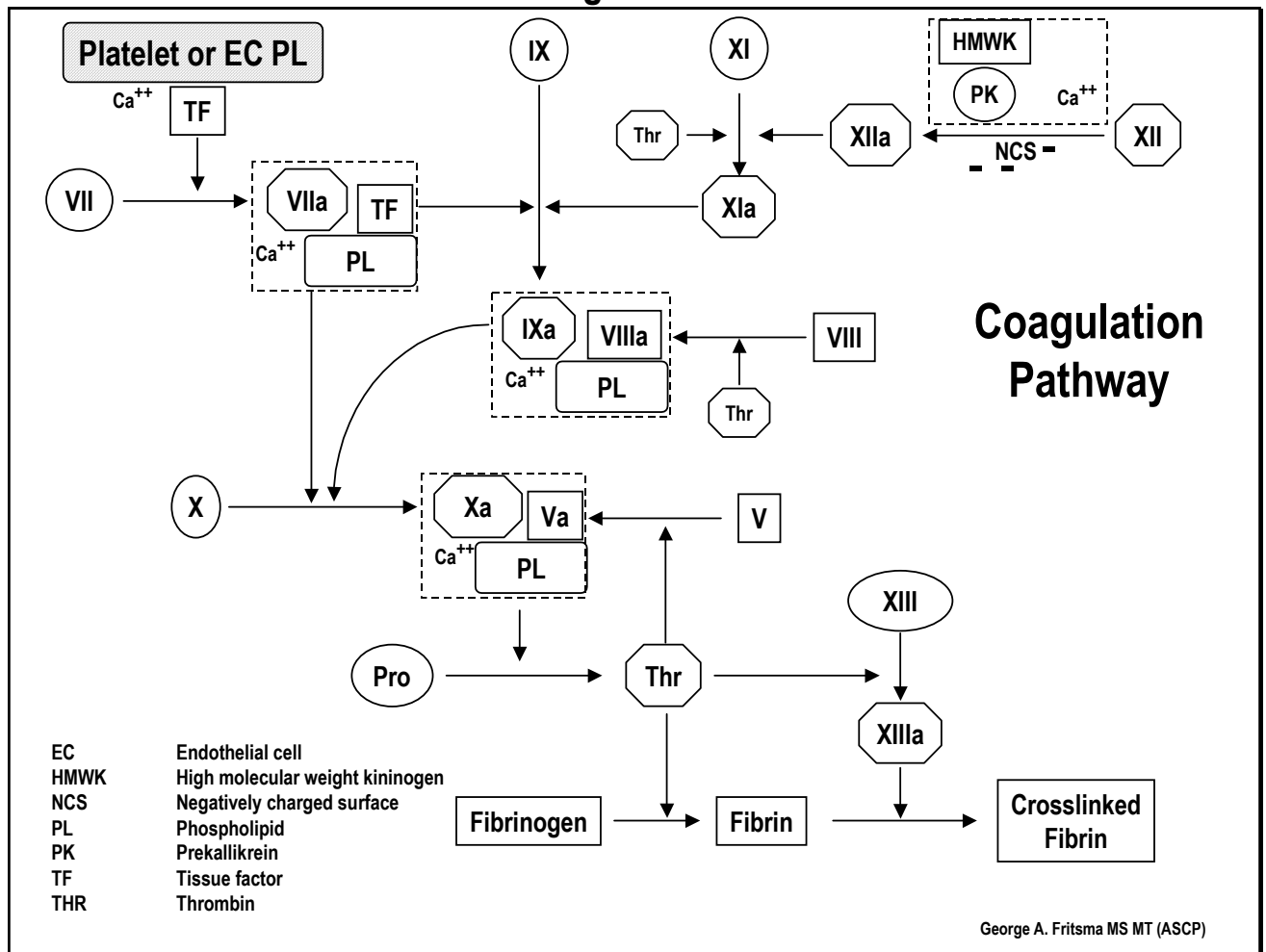


Overview of the Coagulation Cascade



The Extrinsic System

- Release of tissue factor from injured subendothelial tissue activates factor VII.
- Activated factor VII combines with tissue factor, phospholipid, and calcium to activate factor X.

The Common System

- Activated factor X combines with factor V, phospholipid, and calcium to activate prothrombin and to activate factor IX.
- Thrombin converts fibrinogen to fibrin which forms a loose clot.
- Fibrin becomes crosslinked by activated factor XIII to form a firm clot.

The Intrinsic System

- Factor XII is activated in vitro by negatively charged particles.
- Activated factor XII combines with high molecular weight kininogen (Fitzgerald factor) and prekallikrein (Fletcher factor) to activate factor XI.
- Activated factor XI activates factor IX.
- Activated factor IX combines with factor VIII, phospholipid, and calcium to activate factor X.

Thrombin

- Cleaves fibrinogen to form fibrin, activates XIII, XI, VIII, and V.