



Figure 4.42 Summary of steps in flagella biosynthesis. Synthesis begins with MS ring assembly in the membrane. This is followed by formation of the other rings, the hook and the cap. At this point, flagellin protein (approximately 20,000 copies are needed to make one filament) flows through the hook to form the filament. Flagellin molecules are guided into position by cap proteins to ensure that the growing filament develops evenly.