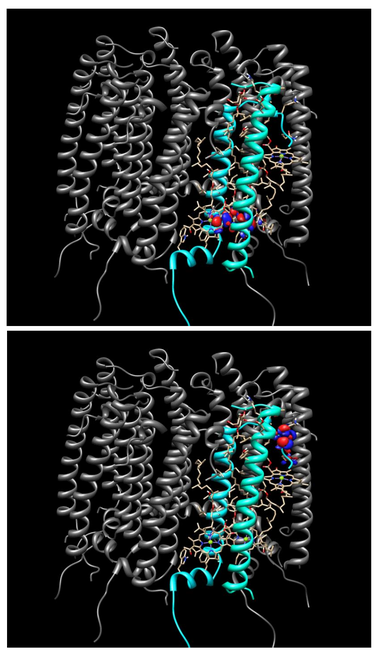
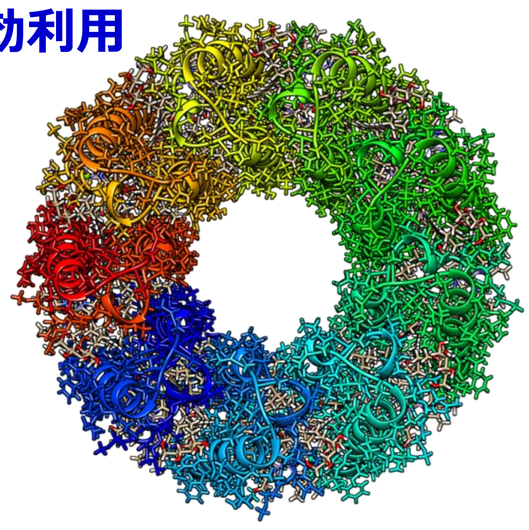
革新的シミュレーション研究センター
研究室紹介
バイオ・医療

機能性タンパク質と高性能化設計

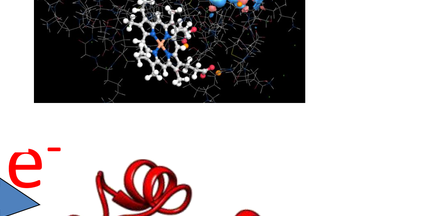
【佐藤研究室】

集光機能
太陽エネルギー有効利用



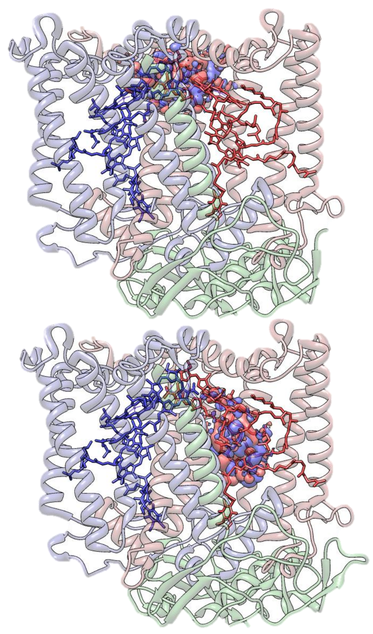


アンテナタンパク質

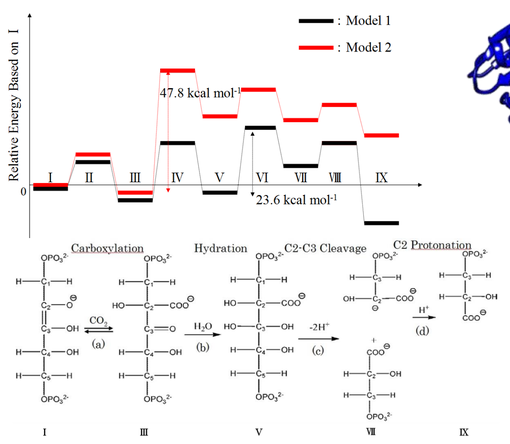


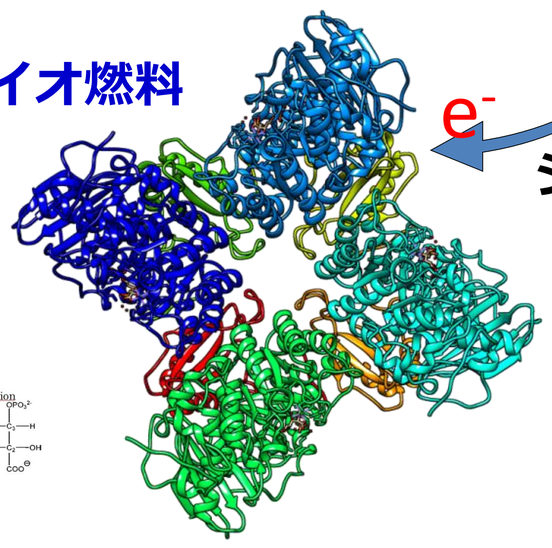
光合成反応中心
タンパク質

光電変換機能
高効率バイオ発電



CO_2固定機能
CO_2削減、食糧・バイオ燃料





ルビスコ

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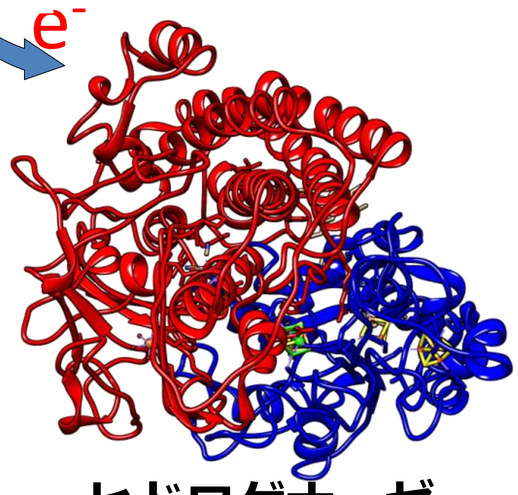
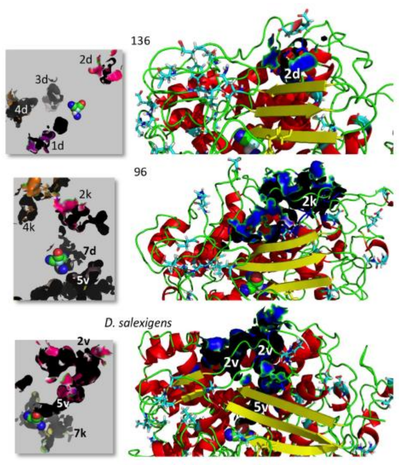
シトクロム



ヒドロゲナーゼ

H_2発生機能
水素大量製造

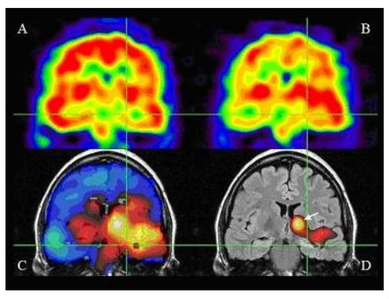


器官・組織・細胞　マルチスケール・マルチフィジックスシミュレーション

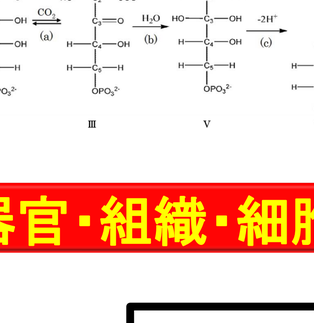
【大島研究室】

Multi Modality

CT

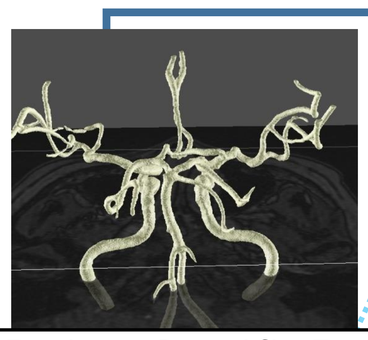


SPECT



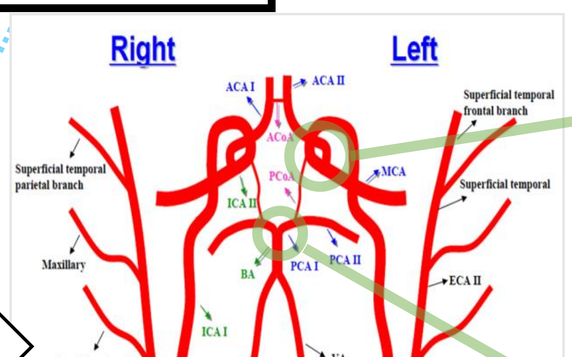
MRI

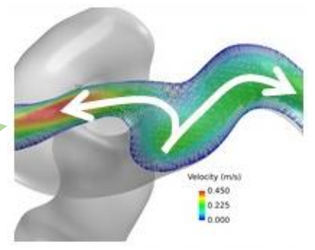
Fluorescent



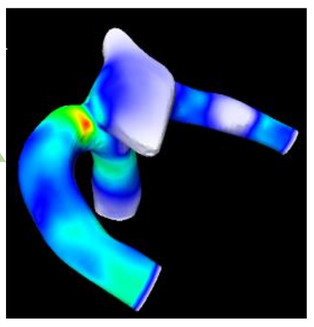
Patient-Specific Data
from Medical Data

Simulation

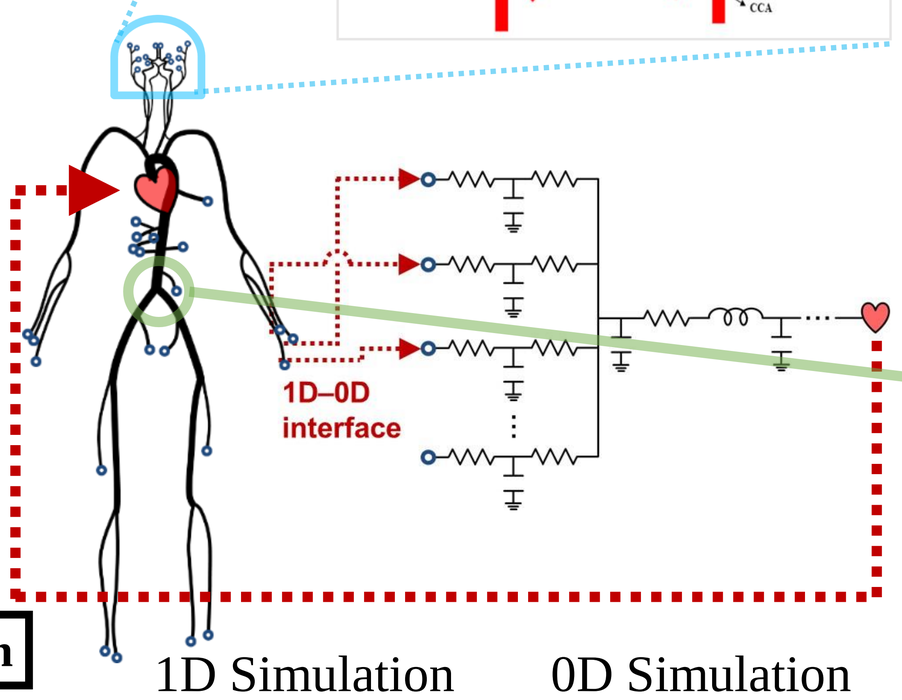




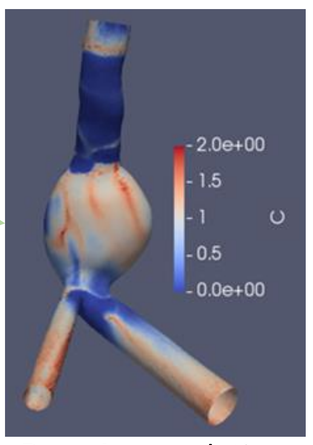
3D Flow



Fluid-Structure Interaction



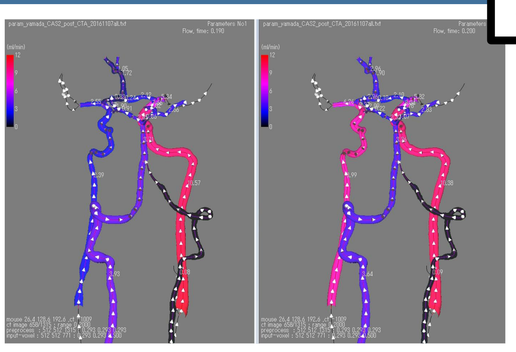
1D Simulation　0D Simulation



Drug Accumulation

3D Simulation

Interface



Visualization

マルチスケール・フィジックスシミュレーションの概要