DISCUSSION

Session Chairperson: Kenneth A. Johnson
Scribe: F. Jon Kull

KENNETH JOHNSON: Just as a point of clarification, your 50/s ATPase rate would be 25/s/head?

MING YA JIANG: No, it would be a higher number, because I am assuming that all the beads are actually moving.

JOHNSON: But that is movement based upon a two-headed kinesin dimer.

JIANG: This is all squid optic lobe kinesin, which has two heads and light chains.

JEFF GELLES: Do I understand correctly that the ATPase experiments are done with free microtubules in solution?

JIANG: Yes.

GELLES: Is the microtubule concentration a saturating concentration for the ATPase?

JIANG: We used only one concentration of microtubules. Our approach is to measure the fraction of beads that are bound and moving rather than assume that at saturating microtubule concentrations 100% of the beads will be bound.