

Seminar September 29, 4:00 PM in 604 SCEN
Refreshments at 3:30 PM in 502 SCEN

Aquaporins in the intestine and kidney of fish: A role in osmoregulation and water transport

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Euryhaline fish display a high degree of plasticity in their osmoregulatory epithelia, where a complete reversal of ion- and water fluxes occur during acclimation to hypo- and hyperosmotic conditions. Whereas mechanisms of ion-translocation are relatively well described in fish, the molecular mechanism of water transport in fish osmoregulatory epithelia is largely unknown. Recently aquaporins have been discovered in multiple organs of fishes thus implying a role of these proteins in water transport as known in mammals. In the euryhaline Atlantic salmon and rainbow trout, several aquaporins are expressed and these are suspected to play an important part in hypo- and hyper-osmoregulation. This seminar will contain a short presentation of aquaporins in fish and show recent findings of aquaporin function and localization in the intestinal tract and kidney of two salmonids

