

The Learning and Research Fair Poster Competition April 23, 2014 – SUNY Potsdam

Congratulations to **Matthew Mehlenbacher** (an undergraduate research student in Dr. Fadi Bou-Abdallah's research group) for winning the 1st place of the Fredrick B. Kilmer Undergraduate Research Award during the Learning and Research Fair Poster Competition at SUNY Postdam, April 23, 2014. Matthew's research project "**Calorimetric Studies of Ternary Complexes of Ni(II) and Cu(II) Nitrilotriacetic Acid and N-acetyloligohistidines**" has been submitted for publication.

Matthew also presented a poster at the 22nd Annual CSTEP Statewide Student Conference which took place on April 11-13, 2014 at the Sagamore Resort in Bolton Landing, NY and was awarded the 1st prize of the poster competition. The research project he presented "**The Antimalarial Drug Atovaquone Binds to Saposin B with Comparable Affinity to Coenzyme Q10**" was published in the journal of Medicinal Chemistry Communication.

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The antimalarial drug atovaquone binds to saposin B with comparable affinity to coenzyme Q10

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B. P. Huta,^{†a} A. M. Roberts,^a E. S. Waters,^a V. Y. Yu,^a R. P. Doyle,^{*a}
M. R. Mehlenbacher^{†b} and F. Bou-Abdallah^{*b}

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Atovaquone is a front-line antimalarial drug that functions by competitively inhibiting binding of coenzyme Q10 to the cytochrome *bc*₁ complex. Atovaquone is administered orally, but has low solubility and is poorly absorbed with high variability in bioavailability. *In vivo* binding of human serum albumin has been cited as the major transporter of atovaquone in plasma. The research presented herein demonstrates that saposin B, a known binder/transporter of coenzyme Q10, also binds to atovaquone in a 1 : 1 ratio and with comparably high affinity at pH 5.5.

