	DAY 4: Thursday, June 9, 2016	
	Symposium III	
	 Small Molecule Inhibitors and New <u>Approaches</u>	
8:00 - 8:15	Breakfast	
8:15 - 8:30	Welcome speeches by Dr. John DiBattista Session Chair	
8:30 - 9:15	Dr. Yves Pommier, National Cancer Institute, USA Laying a trap to kill cancer cells: PARP inhibitors and their mechanisms of action	
9:15 - 10:00	Dr. Mildred Duncan-Avecedo, University of South Florida, USA Atypical Protein Kinase C Inhibition in Prostate Cancer Cells	Anti-cancer
10:00 - 10:30	Dr. Nathanael Gray, Harvard Medical School, USA Targeting cancer with covalent inhibitors	drugs and Antibiotics
10:30 - 12:00	Dr. Karine Auclair, McGill University, Canada Drug Design against antimicrobial resistance	

1	2:00 – 12:30	Panel Discussion	
1	3:30 - 16:30	Poster Session & Commercial exhibitor show	
1	6:30-19:00	Award Cocktail Reception	

Symposium III Small molecules inhibitors and new approaches

Dr. Yves Pommier, Chief, Developmental Therapeutics Branch and Laboratory of Molecular Pharmacology, National Cancer Institute, USA



Dr. Pommier has been at the National Institute of Health (NIH), USA, since 1981. He is the Chief of the Developmental Therapeutics Branch and Laboratory of Molecular Pharmacology, co-Chair of the Discovery Committee of the NCI Experimental Therapeutics Program (NExT) and member of the Molecular Target steering committee at the NCI-Center for Cancer Research. Dr. Pommier is also Honorary Professor of the Shanghai Institute

Materia Medica, Chinese Academy of Sciences. Dr. Pommier has received an NIH Merit Award for his role in elucidating the function of topoisomerases as targets for anticancer drugs and several Federal Technology Transfer Awards for his discoveries of DNA topoisomerase, HIV-1 integrase and cell cycle checkpoint inhibitors. Three of his drugs are in clinical trial. Dr. Pommier serves as Senior Editor for Cancer Research, Therapeutics, Targets, and Chemical Biology section. He also served as Chair for 2004-2005 Gordon conferences on the Molecular Therapeutics of Cancer and was founding organizer of the "International conferences on retroviral integrase: molecular biology and pharmacology" in 1995, 2001, 2008 and 2014. Dr. Pommier has been nominated as Chair of for the 2016 and 2018 Gordon conferences on DNA Topoisomerases in Biology & Medicine. Dr. Pommier received the "Paul Ehrlich lecture award" from the French Society of Therapeutic Chemistry in 2005 based on his discovery of the Interfacial inhibition concept. He has authored over 600 publications and holds over 30 patents for inhibitors of DNA topoisomerases, Tyrosyl-DNA phosphodiesterase, checkpoint inhibitors and HIV-1 integrase inhibitors. Dr. Pommier has mentored over 40 M.D. and Ph.D. post-doctoral fellows, multiple Howard Hughes Medical Insitute trainees. Ph.D. graduate students, and summer students who went into medical and scientific academic positions, pharmaceutical and editorial careers.

Dr. Nathanael Gray Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, USA



Nathanael Gray spent his childhood in Zambia, Yemen, India and Sudan before returning to the US to attend high school at Berkeley High in California. Nathanael Gray received his PhD in organic chemistry from the University of California at Berkeley in 1999 where he discovered Purvalanol, one of the first selective inhibitors of cyclin-dependent kinases. He then moved to the Genomics Institute of the Novartis Research Foundation in San Diego, where after serving as a staff scientist and group leader of kinase inhibitor chemistry, he was named director of

biological chemistry in 2001. Dr. Gray's research team was responsible for the development of several clinical candidates, including BAF312 which is currently

undergoing phase III clinical trials for the treatment of Multiple Sclerosis. Dr. Gray joined the faculty of Harvard Medical School and the Dana Farber Cancer Institute in 2006 to continue his research using synthetic chemistry and functional small molecule discovery to modulate biological pathways important in cancer. His research group has been responsible for the discovery of novel inhibitors of wild-type and mutant forms of EGFR (WZ4002), mTor (Torin1 and Torin 2), Bcr-Abl (GNF-2, GNF-5, HG-7-85-01), Mps1 (Mps1-IN-1 Mps1-IN-2), Erk5 (XMD8-92), b-Raf, LRRK2 (LRRK2-IN-1), Jnk1,2,3 (JNK-IN-7) and Ephrin kinases which have become widely used research tools and have inspired several drug discovery programs.

Dr. Karine Auclair, Department of Chemistry, McGill University, Canada



Native of Jonquière (Saguenay), Québec, K. Auclair graduated from Université du Québec à Chicoutimi with an Honours Bachelor's degree in Chemistry. As a graduate student (1994-1999) in the lab of Prof. J. C. Vederas at the University of Alberta (Edmonton, Canada), K. Auclair studied the biosynthesis of the cholesterol-lowering drug lovastatin (Mevacor). Amongst a number of thesis achievements, K. Auclair reported the first purified natural Diels-Alderase. Next, K. Auclair moved to the University of California at San Francisco (USA) to pursue post-doctoral studies with Prof. P. Ortiz de Montellano (1999-2001). Her research

results contributed to the mechanistic understanding of heme proteins such as human heme oxygenases and P450 enzymes. In 2002, K. Auclair started an independent career as an Assistant Professor of Chemistry at McGill. Auclair was promoted Associate Professor of Chemistry with Tenure in 2006, and Full Professor in 2016. She was a visiting Professor at Boehringer Ingelheim (Laval, Canada) in 2010. Among the honors that she has received, of note are the Leo Yaffe Award for excellence in teaching (McGill, 2014), the Fessenden Professorship (McGill, 2013) and the Enantioselective Synthetic Chemistry Research Award from the Canadian Society of Chemistry. K. Auclair's current research at McGill covers the areas of antibiotic resistance and P450 enzymes.