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Bruce Ward, Councilman  
City of Atlantic City

**SENT BY EMAIL TO: [Gbwlawoffices@aol.com](mailto:Gbwlawoffices@aol.com) and [ward@cityofatlanticcity.org](mailto:ward@cityofatlanticcity.org)**

Dear Mr. Ward:

I am writing to you as a researcher who has conducted research on smoke-free policies in Canada and throughout the world. We have been following the progress of the proposed bylaw for smoke-free casinos in Atlantic City with great interest because our research team has recently conducted a study of the impact of the Smoke-Free Ontario Act (SFOA), which made casinos in Ontario 100% smoke-free beginning on May 31, 2006. We feel that our results may be of value in the current debate over 100% smoke-free vs. partial smoke-free (75-25) in Atlantic City.

Our research team is comprised of research staff here at the University of Waterloo, in Waterloo, Ontario, Canada, as well as world-leading experts in smoke-free environments at the Roswell Park Cancer Institute, in Buffalo, New York (Dr. Mark Travers and Dr. Andrew Hyland) and in biomarkers for exposure to tobacco smoke (Dr. Stephen S. Hecht at the University of Minnesota). Our field team of research assistants were 14 trained staff and students from the University of Waterloo. We used established methods and state-of-the-art equipment to measure the level of tobacco smoke pollution in an Ontario casino and in a New York casino in May (before the SFOA) and in September (when the SFOA was in effect). The technical details can be found in the presentation we refer to below.

### **Summary of our Findings**

1. In our analyses of the differences between smoking and non-smoking sections before the SFOA, the level of reduction we observed in the Ontario casino did not eliminate the hazard to patrons and to casino workers. In contrast, our analyses after the SFOA demonstrated that 100% smoke-free casinos eliminated that hazard.
2. We also measured levels of biomarkers for exposure to tobacco smoke among our 14 research assistants, including a biomarker for a very hazardous carcinogen that is specific to tobacco smoke. We found that the level of this carcinogen biomarker was high before the SFOA and substantially reduced after the 100% smoke-free law was implemented. Importantly, the high levels of these biomarkers were not significantly lower for those research assistants who stayed in the non-smoking section compared to those who stayed in the smoking section. Again, the

presence of non-smoking sections would still leave patrons and employees exposed to the hazards of tobacco smoke, including the potent carcinogen whose biomarker we measured.

3. The actual levels of tobacco smoke or of biomarkers measured in our visits depend, of course, on the number of smoking patrons. The New York casino had more smoking patrons during the second visit, and therefore the levels of tobacco smoke pollution were higher. But the point should be made that when the casino environments is mixed—that is, when there exists smoking and non-smoking sections—the level of hazard within that casino (even in the non-smoking section) will depend on the number of smokers, which is of course tied directly to how busy the casino is.

4. The City Council of Atlantic City is in the position of being able to create a law that will eliminate the hazards associated with smoking in casinos. If the City Council decides to have a mixed environment, the level of exposure to tobacco smoke pollution will be potentially substantial, but importantly, this hazard will vary as a function of how busy the casino is.

The results of this study were presented at the Ontario Conference on Tobacco Control in December 2006. This is a peer-reviewed conference. The entire presentation can be downloaded at the following website:

<http://www.arts.uwaterloo.ca/~gfong/smokefree/>

The reference citation for this study is:

Fong GT, Sendzik T, Kennedy RD, Elton-Marshall T, Jahn S, Travers MJ, Hyland A, Higbee C, Hecht SS. *The impact of the Smoke-Free Ontario Act on air quality and biomarkers of exposure in casinos: A quasi-experimental study*. Oral presentation given at the Ontario Tobacco Control Conference, Niagara Falls, Ontario. December 2006.

There are a number of other research papers and presentations at this website on smoke-free environments and policy evaluation.

If you have any questions about this letter or about our study, please feel free to contact me, either by phone (519-888-4567, x35811; cell: 519-503-4820) or by email (gfong@uwaterloo.ca)

Sincerely,



Geoffrey T. Fong, Ph.D.  
Associate Professor of Psychology  
Chief Principal Investigator, International Tobacco Control Policy Evaluation Project

On behalf of the Ontario Casino Study Research Team