

## Illinois Wesleyan University Digital Commons @ IWU

John Wesley Powell Student Research Conference

1990, 1st Annual JWP Conference

Apr 6th, 6:30 PM - 8:00 PM

## An Improved Method for Analysis of Nicotine in Urine by High Performance Liquid Chromatography

Christopher J. Dunlap Illinois Wesleyan University

David Bailey, Faculty Advisor Illinois Wesleyan University

Follow this and additional works at: http://digitalcommons.iwu.edu/jwprc

Christopher J. Dunlap and David Bailey, Faculty Advisor, "An Improved Method for Analysis of Nicotine in Urine by High Performance Liquid Chromatography" (April 6, 1990). *John Wesley Powell Student Research Conference*. Paper 6. http://digitalcommons.iwu.edu/jwprc/1990/posters/6

This Event is brought to you for free and open access by The Ames Library, the Andrew W. Mellon Center for Curricular and Faculty Development, the Office of the Provost and the Office of the President. It has been accepted for inclusion in Digital Commons @ IWU by the faculty at Illinois Wesleyan University. For more information, please contact digitalcommons@iwu.edu. ©Copyright is owned by the author of this document.

## AN IMPROVED METHOD FOR ANALYSIS OF NICOTINE IN URINE BY HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

Christopher J. Dunlap, Dept. of Chemistry, IWU, David Bailey\*

The problem of an interfacial emulsion in the methylene chloride extraction of nicotine from urine for analysis by high performance liquid chromatography (HPLC) was investigated. A change in the extraction solvent was examined as a possible solution to this problem. The extraction efficiency, solvent interference and solvent expense were considered. The solvent that best fit these parameters and did not form an emulsion was chloroform.