

Title: **Making Scientific Research Accessible: Urban Teens Conducting Field Research in the Chicago Metropolitan Area**

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Abstract: As human populations' transition to urban and suburban environments, there can be an evident disconnect from the natural world. Interactive programs can introduce youth to scientific methods with the hope of invoking an interest in nature. A majority of these programs, however, are brief and do not revisit key concepts after the data collection process is complete. To address this, the Hurvis Center for Learning Innovation and Collaboration designed programs primarily for underserved Chicago-area high school youth to work as "student field researchers." The Partners in Fieldwork program contains 9 schools with 577 students collecting wildlife data throughout the school year using camera traps, bird surveys, giving-up density (GUD) studies, and acoustic bat monitors for our Urban Wildlife Institute (UWI) scientists. Cognitive gains and affective impact of participating students were analyzed by administering pre- and post-knowledge questionnaires, post-program surveys (0, 6, and 12 months after the program), and focus group discussions. Another program, the Research Apprenticeship Program (RAP) allows four teen youth to shadow both the UWI and the Davee Center for Epidemiology and Endocrinology at Lincoln Park Zoo. Youth collected data over the course of eight weeks ranging from butterfly and dragonfly surveys to evaluating stress hormones in Bactrian Camels. RAP youth compiled and analyzed their data into scientific posters and a formal presentation. An extension of the RAP program allows youth to continue their experience once a month during the school year by strengthening their career building skills and designing a custom field trip for their peers. Further evaluation of both programs is currently underway.