patients enroll in CCTs. Low participation can be attributed, in part, to poor communication as well as a lack of awareness and understanding about CCTs. In order to increase participation rates, interventions should foster meaningful communication about cancer prevention and CCTs, especially between medical professionals and members of the community. Community forums provide a channel to communicate about cancer with members public and to educate prospective participants about CCTs. Thus, our goal was to evaluate the efficacy of hosting community forums about cancer in order to educate the public and influence perceptions of CCT participation.

METHODS/STUDY POPULATION: During the Spring of 2016, participants (n = 51) who attended a community forum about CCTs completed a pretest and post-test survey assessing their understanding and perceptions of CCTs. RESULTS/APTICIPATED RESULTS: Results from the pretest to post-test survey revealed a significant positive increase (p = 0.01) in participants’ attitudes toward cancer clinical research as well as marginally significant increases in participants’ perceived subjective norms (p = 0.06) about participating in CCTs and the perceived personal relevance (p = 0.06) of clinical research participation pretest and post-test. DISCUSSION/SIGNIFICANCE OF IMPACT: Findings suggest that community forums about cancer and CCTs could lead to an increased awareness and understanding of CCTs among members of the population and could be useful channels for cancer interventions.

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Creating a comprehensive municipal inventory of common ragweed (Ambrosia artemisiifolia) to predict allergenic pollen exposures

Daniel S. W. Katz and Stuart Batterner
University of Michigan School of Medicine

OBJECTIVES/SPECIFIC AIMS: One of the key difficulties in predicting allergenic pollen exposures has been a lack of information on source plant location and abundance. However, the increasing availability of spatially explicit data from remote sensing offers new opportunities to create comprehensive inventories of allergenic pollen producing plants. METHODS/STUDY POPULATION: In this study, we use a spatially oriented field survey to map common ragweed (Ambrosia artemisiifolia) in Detroit, MI, USA. We then combine this with remote sensing imagery and LiDAR to predict ragweed presence and potential pollen production across 344 km² of Detroit. Finally, we compare this with measurements of airborne pollen concentrations collected throughout the city. RESULTS/APTICIPATED RESULTS: Our initial results show that ragweed is present in ~2% of the city, and its presence and abundance are strongly associated with demolished buildings (p < 0.001). The uneven distribution of ragweed plants across the city leads to substantially higher pollen concentrations in neighborhoods where more buildings have been recently demolished. DISCUSSION/SIGNIFICANCE OF IMPACT: Our approach offers an effective way to quantify allergenic pollen production, airborne concentrations, and exposures across a large metropolitan area. This in turn provides insights on how to best reduce airborne pollen concentrations: in this case, by changing post-demolition land management practices.

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Cutaneous lupus erythematosus patients have increased circulating myeloid-derived suppressor cells with immunosuppressive properties

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Department of Dermatology, University of Texas Southwestern Medical Center, Dallas, TX, USA

OBJECTIVES/SPECIFIC AIMS: MDSCs are potent suppressors of T cell function, and have been recently found to be implicated in skin diseases driven by T cell dysregulation. However, the function of MDSCs in CLE is poorly understood. We sought to characterize the MDSC population in the peripheral blood of DLE patients and evaluate their ability to suppress autologous T cells. METHODS/STUDY POPULATION: In this study, we use a spatially oriented field survey to map common ragweed (Ambrosia artemisiifolia) in Detroit, MI, USA. We then combine this with remote sensing imagery and LiDAR to predict ragweed presence and potential pollen production across 344 km² of Detroit. Finally, we compare this with measurements of airborne pollen concentrations collected throughout the city. RESULTS/APTICIPATED RESULTS: Our initial results show that ragweed is present in ~2% of the city, and its presence and abundance are strongly associated with demolished buildings (p < 0.001). The uneven distribution of ragweed plants across the city leads to substantially higher pollen concentrations in neighborhoods where more buildings have been recently demolished. DISCUSSION/SIGNIFICANCE OF IMPACT: Our approach offers an effective way to quantify allergenic pollen production, airborne concentrations, and exposures across a large metropolitan area. This in turn provides insights on how to best reduce airborne pollen concentrations: in this case, by changing post-demolition land management practices.

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