

THE DEPARTMENT OF MATHEMATICAL SCIENCES

Indiana University - Purdue University Fort Wayne

is pleased to present

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**Discovering Novel Genetic Factors that Influence the  
Vitiligo Pigmentation Disorder**

**Abstract**

Generalized vitiligo (GV) is an autoimmune disease in which white patches of skin and hair result from destruction of melanocytes. In previous studies, our group identified 27 susceptibility chromosome locations for GV. To identify additional chromosome locations, we carried out a new study, augmented two previous studies with additional public controls, carried out meta-analysis of all three vitiligo studies, and performed an independent replication study. The combined analyses, with 4,680 vitiligo cases and 39,586 controls, identified 25 novel chromosome locations associated with the disorder. In this talk I present some of the statistical analyses performed and some of the findings. I provide details on how we incorporated external public controls and how we combined three different studies with genotype imputation (statistical inference of unobserved genotypes).

10:00 – 11:00, Monday, Feb. 22, 2016. Location: KT 239

<http://ipfw.edu/departments/coas/depts/math/news/seminars.html>