

RESEARCH NEWS

A challenge to help kids

A COLLABORATIVE APPROACH to sociology aims to target fundamental and perhaps overlooked issues to improve policies that affect the lives of disadvantaged children.

The effort, called the Fragile Families Challenge, brings together researchers from around the world, most of whom haven't met before, to ask them to analyze existing data and create models that can identify problems and lead to potential policy solutions.

"I am very excited about the idea of seeing what it is that we can all do together that none of us can really do alone," Matthew Salganik, a professor of sociology and one of the founders of the challenge, said. "Hundreds of biologists worked on the human genome project and thousands of physicists worked on the search for the Higgs boson, so what would happen if hundreds or thousands of social and data scientists work together on this problem?"

Analyses of data on families can inform sociologists about trends that affect children's well-being. For example, researchers might learn that "eviction is related to poor school performance," which can be useful for policy decisions.

To improve these analyses, Salganik and colleagues sent a request to researchers from across the globe to create predictive models using data from the Fragile Families and Child Wellbeing study, funded by the National Institutes of Health, which has been following nearly 5,000 U.S.-born children since their birth. The challenge for the scientists was to use data on children ranging from birth to age 9 to create models that would successfully predict the well-being of the families when the children reached age 15. Then Salganik and his team compared the predictions to how well the families were actually doing in terms of outcomes such as material hardship, eviction and layoffs.

Salganik and his colleagues combined the most accurate of these models — those that came closest to predicting the real conditions of the families — into a single community model that can be used by other researchers. They are now conducting interviews with the teenagers and their parents to discover important factors that even the best models didn't account for.

—By Yasemin Saplakoglu



PHOTO BY DENISE APPELWHITE

The new 22-acre Lewis Arts complex includes spaces for the creation and performance of dance, theater, music and more.

New arts complex opens

THE NEW multi-building Lewis Arts complex on the south edge of campus significantly expands the performance, rehearsal and teaching spaces for the arts at Princeton. The complex anchors a 22-acre development that includes two restaurants, a convenience store and the new Princeton train station, surrounded by a park-like setting with extensive landscaped plazas, pathways and green spaces.

The complex houses the Lewis Center for the Arts' programs in dance, theater, music theater and the Princeton Atelier — a unique academic program that brings together professional artists from different disciplines to create new work — as well as additional rehearsal and instructional facilities for the Department of Music. —By Catherine Zandonella

FOCUS ON UNDERGRADUATE RESEARCH

New journal highlights student research

THIS SPRING marked the debut of the *Princeton Undergraduate Research Journal*, a peer-reviewed publication where students can publish original research findings. "The entire goal of research is to communicate new discoveries to a larger academic community," said Daniel D. Liu, who co-founded the journal with fellow Class of 2018 student Yash M. Patel. "We felt that a lot of valuable independent work by Princeton undergraduates was going unnoticed." The journal, peer-reviewed by an executive board of undergraduates and by a faculty advisory board, is open access, meaning it is available for anyone to read online. Liu and Patel aimed to introduce undergraduates to the process of peer review and to implement a rigorous review process parallel to that of established academic journals.

The editorial board encourages submissions from a broad range of disciplines from the sciences to the humanities and arts. "I personally have learned a lot about what's going on in other disciplines by going through this process, and I'm hoping that other readers of the journal will also," said Liu, who is majoring in molecular biology. The team plans to distribute the publication to prospective students and alumni. Interested undergraduates can submit their original research findings at purj.org. —By Yasemin Saplakoglu