Postdoctoral Research Fellow in Computational Social Science

Kindergarten Societies, Child Behavior, and Health

The University of Michigan Computational Social Science Initiative and the Center for the Study of Complex Systems announces a Postdoctoral Research Fellow position to conduct research on the social structure of kindergarten classrooms and the implications of this structure for both children's decisions about who to interact with and children's health and well-being. The project is a collaboration between Elizabeth Bruch (Sociology and Complex Systems, UM) and Tom Boyce (Pediatrics and Psychiatry, UCSF). It will combine expertise in social interaction, decision-making, and social structure with expertise in child development, gene-environment interactions, and child health. The position is for 2 years, and has a target start date of September 1, 2021, but can start as early as July 2021 or as late as January 2022.

Salary: Competitive salary with a generous benefits package, opportunities to supervise one or more paid undergraduate or master's research assistants, and funds for conferences and travel.

To apply:

Email your CV, names of two references, and a summary of your relevant interests and qualifications to Elizabeth Bruch at ebruch@umich.edu. Review of applications will begin immediately and continue until the position is filled.

Position Description

Social rank and connectedness affect physical and mental health in humans and a wide variety of other animals. But little is known about the social structure of young children, how young children (mis)perceive their own position within that structure, and the implications of both perceptions and structure for physical and mental health. This project draws on a unique and rich dataset documenting interactions among children in kindergarten classrooms, as well as family demographics for the children and a host of measures reporting their physical and mental health over multiple periods of time. The data include information about social connections measured from multiple vantage points, including field observations, children's reports about themselves and others, and teachers' reports of the children in their classroom. The data are suitable for many interesting projects, including studies of social hierarchy and community structure; divergent perceptions of social position among child, observers, and teachers; and understanding how actual structure and children's perceptions of that structure shape children's decisions about who to interact with or dominate.

This position is perfect for someone with strong skills in network science and statistics who is interested in quantifying social structure and its implications for human behavior and health. Our intent is that the Fellow will take the lead on projects of high priority to the research team; they will also have the opportunity to propose new projects. Depending on interest, the Fellow will also have the opportunity to participate in writing grant proposals. They will be treated as valued colleagues, mentored and supported, and launched into the next phase of their careers.

Candidates should have the following qualifications:

Required Qualifications:

- A PhD in quantitative Social Science (Sociology, Economics, Political Science, Management, or related), Network Science, or the Computational Sciences (e.g., Computer Science, Information Science, Engineering) by the start date
- A strong quantitative background and training in statistics
- Programming experience (R, Python) and comfort handling large, complex datasets
- Demonstrated ability to independently plan, conduct, and lead research projects
- Motivation and initiative, excellent communication skills, and the ability to work independently as well as in a team
- Enthusiasm about interdisciplinary work and eagerness to develop skills in this area

Desired Qualifications:

- Training in network science and familiarity with methods for community detection, ranking, multiplex networks, and various other whole-network measures

Additional Information:
The Fellow will have office space at the University of Michigan Center for the Study of Complex Systems and will be integrated into the intellectual and social life of the Center.

Background Screening:
The University of Michigan conducts background checks on all job candidates upon acceptance of a contingent offer and may use a third-party administrator to conduct background checks. Background checks will be performed in compliance with the Fair Credit Reporting Act.

UM EEO/AA Statement:
The University of Michigan is an equal opportunity/affirmative action employer.