## From Labs to Lives

## **How Research Funding Solves Real-World Problems**

## NIH-Funded Research Reveals How Cells Work and Why It Matters

What makes a healthy cell tick — and what goes wrong when disease is present? At UC Davis, Daniel Starr leads work to uncover how the internal architecture of cells helps them function properly. His NIH-funded lab discovered the LINC complex, a structure that helps anchor the cell's nucleus. When the connection breaks down, it can lead to diseases like cancer, ALS and muscular dystrophy. By studying how cells are structured and move, Starr's work could help unlock new ways of treating these conditions.

## **Helping Humanity**

When cells lose their structure, serious diseases may result. The research is on the verge of major insights into how cells work and how changes in their structure may contribute to diseases like muscular dystrophy and neurodegeneration. Starr's research helps us understand these changes at the most basic level, which could lead to early detection and better treatments. Without continued NIH funding, this vital research and the young scientists behind it are at risk and the momentum of pushing science toward real cures will be lost.

Without [federal funding], we risk losing an entire generation of diverse scientists. And that loss would ripple outward, not just for those students but for the future of science itself and for the public who would have benefited from their ideas."

- Daniel Starr, Ph.D.



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