scientific endeavors

Discoveries making news

Nowhere is growth in the College of Medicine's research program more obvious than in the publications choosing to carry the news of its scientific breakthroughs.

In recent months, Akash Gunjan, Yoichi Kato and Choogon Lee, assistant professors of biomedical sciences at the medical school, all recently published articles in prestigious scientific journals.

In March, Developmental Cell carried an article Kato and his lab developed outlining a key mechanism in the way congenital disorders occur.

"We discovered that the interaction between two major oncogenes, whose abnormalities lead to cancer formation, plays a crucial role for positioning of internal organs in an embryo," Kato explained. He added that the revelation also could contribute to developing a diagnostic method and treatment of congenital disorders.

Nature Cell Biology published Gunjan's article about the role proteins play in the transfer of the human genetic code from one cell to another. His work solved a century-old mystery regarding the role of histones in that process and could lead to better ways of fighting cancer.

Proceedings of the National Academy of Sciences and the Cell Press journal both carried articles by Lee regarding important discoveries about human circadian rhythms. Lee's findings could lead to improved treatments for disorders associated with circadian clock malfunction, including manic depression, seasonal affective disorder and chronic sleep problems in the elderly and shift workers.

"All of these publications are top-notch, high-impact journals in the world of science," said Myra Hurt, senior associate dean for research and graduate programs. "That these journals have examined, and chosen to publish, articles detailing important work by our faculty is an important indicator of the value of the research taking place here."