

# GETTING OUT OF DODGE

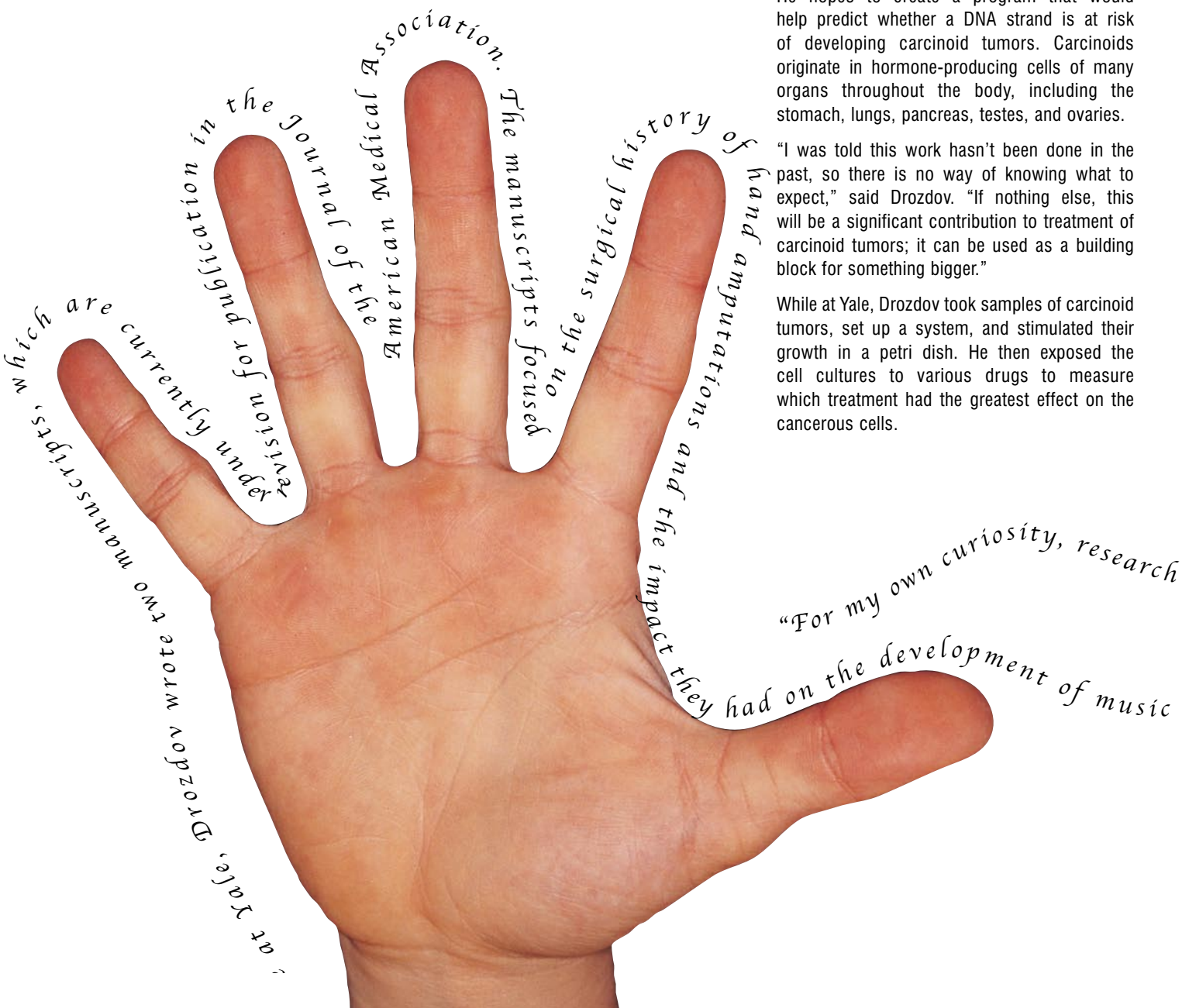
By Haifa Al-Mubarek, broadcast journalism '08

**W**HEN PEOPLE FIND OUT THAT **IGNAT DROZDOV (CAP '06)** is a physics and music major, they rarely expect him to talk about work on cancer research. Drozdov studied DNA and cancer risks while at Yale University last summer.

He said that his end goal is always “cur[ing] cancer, or at least lowering the cost of treatment by introducing drugs rather than doing surgery.” He hopes to create a program that would help predict whether a DNA strand is at risk of developing carcinoid tumors. Carcinoids originate in hormone-producing cells of many organs throughout the body, including the stomach, lungs, pancreas, testes, and ovaries.

“I was told this work hasn’t been done in the past, so there is no way of knowing what to expect,” said Drozdov. “If nothing else, this will be a significant contribution to treatment of carcinoid tumors; it can be used as a building block for something bigger.”

While at Yale, Drozdov took samples of carcinoid tumors, set up a system, and stimulated their growth in a petri dish. He then exposed the cell cultures to various drugs to measure which treatment had the greatest effect on the cancerous cells.



His interests in both art and sciences have allowed Drozdov “to develop a more abstract way of thinking, recognizing patterns” and predicting results before computing problems, he said. “For my own curiosity, research I’ve done in music, creativity, trauma, and mental illness is most satisfying . . . This research made me go outside the textbook and push forth my own ideas.” Because of this, he has expanded his knowledge in the history of medicine, philosophy, and ethics.

While at Yale, Drozdov wrote two manuscripts, which are currently under revision for publication in the *Journal of the American Medical Association*. The manuscripts focused on the surgical history of hand amputations and the impact they had on the development of music for people with one hand. He has also authored an analysis of

musical compositions written for people born with extra fingers.

As a part of his cancer research at Yale, Drozdov researched transcription factors and target gene algorithms. Researchers hope this avenue of inquiry will lead to a better understanding so that they may use various gene signals to predict the risk of cancer in the gastrointestinal tract.

At the same time, he continues to research the impact of physical trauma and mental illness on creativity. In fact, it was his unique ideas on the neurological origins of creativity and the impact of severe trauma on creative behavior that led him to work at the Yale School of Medicine. He says that he would like to “establish a new area of exploration to explain where creativity came from and how it is underlined.” The National Institutes of Health in Washington, D.C., is funding both his studies on cancer and creativity.

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*for people with one hand.*

## NOT YOUR AVERAGE MUSIC MAJOR