

University of Maryland School of Medicine

Case for Support

Faculty Interviews

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Interview Questions

1. The new capital campaign for the University of Maryland School of Medicine has the working title of "Transforming Medicine Beyond Imagination."

- If you were to see this phrase in a brochure, what would the words, "transforming medicine," mean to you?

Dr. Civin: *"To me, 'transforming' means making big change, big positive change. 'Transforming medicine,' then, means making big changes to the diagnosis, treatment, cure, and prevention of disease. In other words, 'transforming medicine' means improving the general health of, and making a big difference in the lives of, real people on the local, regional, and national levels."*

- Where are these "transformations" taking place? Within your specialty or areas of interest, such as pediatric oncology and leukemia? Within the Department of Pediatrics, or the Center for Stem Cell Biology and Regenerative Medicine?

Dr. Civin: *"In our area, the transformations are occurring in the diagnosis and treatment of cancer. We are beginning to understand the process of how mutations in genes cause cancers -- what makes the 'machine' of cancer work, in other words, what goes wrong in the normal cell processes. So, at the same time as we discover causes of cancer, we are learning how normal cells work. That's how we understand how disease occurs and how to prevent it. Right now we are working on 'targeted' treatments -- these attack the mutated cells only and not the normal cells.*

"For example, I had a patient, a teenager, come to the ER with several common symptoms, bleeding, fatigue, etc. My fellow saw him first and described his findings to me. When I heard the results, I thought, 'I know what this is.' I could have made the diagnosis 25 years ago. Now, though, we know what goes on at the molecular level, too, what change occurs in the cell. We can tell exactly what is going on with this disease, through a simple test. That's the real transformation.

"For years, we have had to start treatment based on the idea that we 'probably know what it is.' That's standard. Very recently, through the use of a new targeted treatment, we are able to treat this disease with accuracy. And we can start right away. So, I was able to tell this patient, this teenager, 'The good news is, I know what the disease is and I can start your treatment right

away. The bad news is, you have to go back to school tomorrow.' The targeted treatment comes in pill form, so there's no need for hospitalization. And because the drug is "targeted" against the Achilles heel of the cancer, there's no hair loss, no nausea. Patients can resume a normal existence almost immediately. That's a real transformation in their lives.

"There are similar transformations occurring here, at the School of Medicine, with new molecularly-based targeted treatments being developed for use with other cancers. That's a current goal in cancer research: to replace good drugs with better ones.

"We are moving from an empiric, or 'trial-and-error,' treatment mode, to an understanding of treatment. Transformation, then, is understanding the disease in the laboratory, developing a potential treatment, testing it in the lab, and then wondering, 'How can I make this better?'"

2. The capital campaign will provide new funding to help us find solutions to today's most important biomedical challenges, advance clinical care, and bring together the world's leading experts and the best students to support collaboration and innovation.

- What do you think would be possible in, say, the next 5-10 years, in terms of research and discovery, if we had more funding?

Dr. Civin: *"Having more funding creates more freedom. Two of the most exciting areas of medicine today are stem cell research and personalized medicine. I am working in both areas, but leading in stem cell research. Using stem cells to model human disease is very exciting to me. Allow me to explain why.*

"In addition to working with cells inside the body, we are attempting to manipulate cells outside the body, to grow them to be what we want or need them to be—for therapeutic purposes, for instance, to help in organ donations. Imagine if we could grow a patient his own kidney rather than waiting for a donor, or undergo a transplant that is rejected.

*"The end game is using stem cells for therapy. The end **END** game is knowing enough -- at the molecular level of each cell -- to prevent kidney disease, or kidney failure, altogether."*

- In what ways do you think increased financial support would transform clinical care?

Dr. Civin: *"We need the freedom to test crazy ideas, the kinds of ideas that, as any researcher knows, will not succeed 9 times out of 10. We want the power to test all 10 to make 1 work. We need the freedom to say, 'What if?' To do something very different. That's how new fields open. It's so delicious when we say, 'What if?' and then we tear something apart and do it differently."*

"Risk-taking is where philanthropy is so important. Philanthropy can allow us to go after crazy ideas that allow us to accomplish great things."

- How would more scholarships and professorships transform medical education?

Dr. Civin: *“Having more scholarships will allow us to do things to help develop young people that we just can’t do now. Suppose I meet a rising star, someone whom I know has the ability to do great things. But if this person lacks the necessary experience, simply because she or he is too young to have had the experience, I cannot bring her or him on board. Philanthropy will allow us the freedom to take a chance on this young person, to hire exciting new blood whenever possible.*

“Philanthropy creates greater freedom and the ability to take the risks -- measured risks, mind you -- but the exciting and often necessary risks needed to do great things.”

3. We believe that, without the generous support of our donors, the School of Medicine could not continue to have an impact on the lives of today and transform the health of generations to come.

- How would you say “thanks” to our donors for their support?
- What have you been able to accomplish due the generosity of donors?

Dr. Civin: *“We in medicine today, and at the School of Medicine in particular, are poised at a wonderful time: we have the power to transform our world -- by taking risks and pursuing crazy ideas that turn out to be correct -- but we can’t do it without support. In other words, without the generous support of donors, we are stuck making incremental change. Whereas transformation requires philanthropic support. We have proved this again and again, and we are ready to prove it once more.*

“We are attempting to discover, understand and attack the Achilles heel of every disease -- to diagnose, cure, and prevent them. That’s what we do, and we are going to do it -- with our donors’ support.”