Rachel King speaking at the 2014 BIO International Convention



A Conversation with Rachel King and Nola Masterson

Rachel King is CEO of GlycoMimetics, a Gaithersburg, Maryland biotherapeutics company, which she cofounded in 2003. She was recently elected to a second term as chair of the Biotechnology Industry Organization (BIO). Before starting GlycoMimetics, King was an executive-in-residence at the venture capital firm New Enterprise Associates. She began her career in the life sciences industry by serving in a series of executive positions at ALZA Corporation, Genetic Therapy Inc., and Novartis. King holds a BA from Dartmouth University and an MBA from the Harvard Business School.

Nola Masterson is the managing director of Science Futures, a venture investment firm in Woodside, California. She has nearly forty years of varied experience in the life sciences industry—as a sales manager, stock analyst, entrepreneur, C-level executive, consultant, publisher, financier, and company director.

Rachel and Nola spoke in June, in advance of the 2014 BIO International Convention.

Nola Masterson: Rachel, over the course of your career, you've viewed the life sciences industry from various perspectives. Can you sum up what you've learned?

Rachel King: I've learned that it's a very risky business! We know it's risky, and we say it's risky, but eventually, you have to live through it. That's when you realize just how true it is. Last year at GlycoMimetics, we completed a phase 2 clinical trial on the sickle cell drug we're developing. We braced ourselves to learn whether we were going on to phase 3 or maybe shutting down the company. For me, the experience of locking the database and waiting

to get the statistical analysis crystallized just how risky this business really is. Binary events that lead to either tremendous success or catastrophic failure are rare in most businesses, but they're common in ours. Of course, we all hope to make good decisions, but we also need to be lucky. It's an incredible rollercoaster.

NM: How do you deal with it?

RK: Well, I think you have to persevere, and you have to let the data drive your decisions. In our case, we haven't finished the phase 3 trial, so we don't know if the drug will be effective, but so far,

Nola Masterson



letting the data drive our decisions has been the right thing to do. When we started in this area, it was extremely difficult to obtain financing. Many people warned us not to try to develop a treatment for sickle cell disease. For that matter, they told us not to try the chemistry we're using, but we believed we had good reason to do both. But you can't fantasize about these things. You really have to be data-driven. If you follow the science, chances are good you're going in the right direction.

NM: Earlier this year, GlycoMimetics completed a successful IPO. What's next for the company?

RK: We're entering a new phase with resources to do some of the things we've been dreaming about for years. Obviously, we're very pleased with the promising phase 2 data on Rivipansel, our sickle cell treatment, and we're appreciative of the good help we've received from Pfizer, our partner on the project.

We're excited about moving into phase 3 clinical trials. We're also about to start clinical studies on our second drug candidate, a treatment for hematological malignancies and, in the first instance, acute myeloid leukemia. We're following some very interesting scientific data.

NM: You've reached the highest levels of leadership and responsibility in the life sciences industry. You've chaired the Biotechnology Industry Organization. You've become a leading authority in the field.

RK: It doesn't really feel like that, but thank you.

NM: Can you name some of the people who have influenced your leadership style?

RK: First, I have to mention Jim Barrett. Jim was our lead investor at GlycoMimetics. After going public earlier this year, he's still our lead investor and chairman of the board. He has been a long-term professional mentor and guide for me. A number of my fellow CEOs have also become good friends over the years. Comparing notes with them has been invaluable. I have an uncle, Robert Mahley, who recently retired from running the Gladstone Institutes at the University of California, San Francisco. He has always inspired me as a scientist. Finally, I've learned a lot from many outstanding colleagues at GlycoMimetics. In so many respects, at so many turns, having the right people with you is critical. I've learned that it's important to be working with people who are different than you. That sometimes causes tension—we're all much more comfortable around people who are like ourselves-but I think having a diversity of backgrounds and approaches is likely to lead to better outcomes.

NM: What is on your agenda as chair of BIO? What do you hope to achieve?

RK: Every year, the BIO staff and board do a great job of prioritizing a very complex set of public policy issues. A pressing issue on my personal radar is working with the FDA to smooth the drug approval process. I think we've seen great progress—a new accelerated approval pathway, for example. We need a strong but flexible agency in order to ensure that safe and effective drugs are approved and get to people who need them as quickly as possible. Secondly, I am thinking broadly about capital formation, and ways in which the industry can support it. We've seen

many IPOs this year, but our projects often take ten years or more to complete, and they're enormously expensive. Financing them is one of the biggest challenges we have to face. A third matter of great import, for me, is communication with those we serve. The industry needs to communicate the value it delivers to patients and payers. We need to tell our story in a way that's meaningful to people. I also think we should remind ourselves periodically why we do this work. It's really hard, but there are many good reasons to do it. The science is beautiful and exciting, and we also have the opportunity to affect people's lives, which is extraordinary. Even if we're not successful, we will contribute to knowledge in an important way.

NM: What do you see in the future of the biotech industry over the next ten years, from 2014 to 2024?

RK: I see a number of problems that we need to address. I mentioned financing. That's a perennial problem. We must also ensure that our products are not so expensive to develop and so expensive to buy that they are not, in the end, available to the people who need them. There is growing pressure on us to deliver products that are genuinely innovative, and to do it in ways that are less expensive. This is immensely important and something I feel really passionate about. We, as an industry, need to focus on it. Whether it will happen remains to be seen, but I have faith that collectively we'll come up with ways to do it. I think we used to be a little naïve in biotech. We used to assume that if a drug worked, it would get to the market and be paid for, and often that was true. But nobody thinks this way anymore. We have to be much more proactive about demonstrating the value of our products, and we need to do it much earlier in the development process. These are the biggest challenges I see on the horizon.

NM: What are the chances these challenges will be met, from your point of view?

RK: I think we'll see greater regulatory flexibility around programs that both address significant unmet needs and are truly innovative—I mean, not marginal innovation, but breakthrough innovation. We've started to see some of that now, with some of the ways the FDA is dealing with breakthrough therapies. This will become more and more important because greater regulatory flexibility changes the economics of drug development. We're also going to see more partnerships with



patient groups and that's a very good thing. We've already seen the power of these relationships—for example, when patient groups help to register patients for clinical trials or help to finance innovative research. The Cystic Fibrosis Foundation has been a model of excellence in these areas. I think patient groups are going to become even more important. Overall, I think we'll make progress, and I think we're going to get more help. The work we do is at the core of what we value as a society. We affect people's lives, their health, their productivity. It won't be easy, but I think we'll be able to make the case to policymakers and the public that we need policies that will enable us to do our work. We're going to have plenty of battles ahead, but I think we'll have some success fighting them.

NM: Thank you, Rachel.

RK: My pleasure, Nola. Thank you for your interest.