
Brian Druker, Now Director of a Cancer Institute, on His Bold Plan to Make Oregon’s Cancer Mortality Rate the Lowest in the Nation

By Andrew Holtz, MPH

O R T L A N D, O R— On July 1, Brian Druker, MD, became Director of Oregon Health & Science University’s Cancer Institute, only the second director in the institute’s history.

Druker has a runner’s thin build and an unassuming manner. But this “nice guy” researcher, known best for leading the development of Gleevec, has high ambitions. The OHSU news release announcing his appointment included this bold pronouncement from him: “If we work together, we could lower mortality rates from cancer by about a third if we implemented what we know. Implementing what we know encompasses a lot of things. It encompasses both screening and prevention, as well as optimizing therapy,” he said.

No one would doubt Dr. Druker’s credentials in drug discovery. In collaboration with researchers at Novartis, he developed what is now known as imatinib (Gleevec), a specific inhibitor of the ABL protein tyrosine kinase, which has dramatically changed the treatment and prognoses of many patients with chronic myelogenous leukemia (CML).

He knows his way around cancer biology; but changing clinical practice and public health means altering human habits. Although he concedes he’ll have to demonstrate that he can manage people and institutions as well as he manages molecules, Dr. Druker sees his new role as Cancer Institute Director as an extension of his work in the lab and clinic to reshape cancer treatment.

“The best treatments are going to be the best molecular targeted therapies we can identify, but it’s also, how do you deliver the highest quality of care in terms of customer service, excellence with compassion—how do you impact a health care system in order to decrease mortality rates from cancer by implementing what we know and having that infrastructure in place statewide?” he said.

2 Statewide Networks

From his new perch atop the OHSU Cancer Institute, Dr. Druker wants to build up two statewide networks—one of oncologists, the second involving primary care providers. He says he would use the oncologist network to find out about how care is being provided in local communities and then provide support, including education on best practices. The primary care network would focus on prevention and cancer screening.

“First and foremost that means recruiting a leader for this public health outreach position. Obviously, it’s not my own background, but certainly it’s an area that I feel quite passionately about; so my goal is to recruit a nationally recognized leader who has experience in putting together this kind of a network and wants to do something on a big level here in Oregon,” he said.

Jon F. Kerner, PhD, the NCI’s Deputy Director for Research Dissemination and Diffusion for the Division of Cancer Control and Population Sciences, applauds Dr. Druker’s attention to translating research into practice, but warns that Dr. Druker will be entering a world very different from his background in clinical trials and specialty clinics.

“If you think of a clinical trial as a carefully constructed dinner in a very fancy restaurant that’s quite expensive and presentation is everything, in fact the bulk of the practice settings are more like McDonald’s or Applebee’s or something, where you have to routinize the delivery, because there’s limited resources to be able to present everything exactly the way you would like to do it,” Dr. Kerner said.

Lab Cred

It’s Friday; so Brian Druker’s lunch menu includes rice, vegetables, and a presentation on the role of FLT3 tyrosine kinase in acute myeloid leukemia (AML) by postdoc Jeffrey Tyner, PhD. Then he walks from the conference room back to his office in OHSU’s Basic...
Science Building to meet individually with two of his postdocs. Assistant Professor Marc Loriaux, MD, PhD, is about to send off a journal article. “The paper’s done. I think they’ll like it. I hope they like it,” he tells Dr. Druker.

After Dr. Loriaux returns to his work, Lisa Wood, MD, PhD, enters with good news: Out of four recent grant applications she submitted, three have been funded. An Assistant Professor in OHSU’s School of Nursing, Dr. Wood is trying to tie together the worlds of basic research and patient care by investigating a possible molecular basis for the chronic fatigue that often drags at cancer patients during and after treatment.

Brian Druker’s “lab cred” is unquestioned. And he says he intends to keep one foot in the trenches of basic science even as he takes on his new responsibilities. But of course being a great scientist is not all that’s needed to become a great institute director.

“No, no,” agrees retiring director Grover C. Bagby, MD. He says his successor is a good doctor, a good teacher, able to work with policy makers at the highest levels, a good person, and yet fearless in the pursuit of his goals.

“So he’s got all those things working for him; many investigators who are wonderful don’t have any of that. He’s got five times more attributes than just being a good investigator,” Dr. Bagby said.

Craig Nichols

Dr. Druker acknowledges that stepping into his new role as the cancer institute’s director has included some growing pains, including the departure of a prominent colleague: Craig R. Nichols, MD, who was the Associate Director of Clinical Research at the OHSU Cancer Institute (and widely known for treating Lance Armstrong’s testicular cancer). Nichols also puts a positive spin on their relationship.

“Both independently and in collaboration, I believe we are going to raise

...how we can collaborate and cooperate; and we will,” Dr. Druker promises.

“The truth is that he has,” Dr. Bagby said. “He could be a cancer center director anywhere. He’s had a number of job offers. People want him to be their cancer center director.”

So then why stay at OHSU? It is certainly not the biggest fish in the pond.

“No, it’s not,” Dr. Druker concedes. But he says OHSU has a strong commitment to the growth of his institute. “Other institutions that I’ve looked at have very robust cancer programs and cancer institutes that they are ready to take to another level, and that’d be a fantastic opportunity; but it’s not the ability to take a program from a good level to a great level. To me, that’s a huge opportunity and a challenge; and I like challenge. But part of it is also just giving back to the institution that supported me through my early career.”

Street Cred

On the same day that Dr. Druker was meeting with his lab staff and preparing to give his commencement speech, there was a gathering across town of people committed to fighting cancer around the state. The Oregon Partnership for Cancer Control (OPCC) held its second Cancer Summit.

Along with anticipation for what Dr. Druker could accomplish in his new position, there were also some blunt assessments of the challenges he will face.

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“I have some fairly strong opinions,” said OPCC Co-Chair Member David W. Cook, MD. Dr. Cook also represents the American College of Surgeons as the Oregon state chair of its Commission on Cancer. “I think for years the university has been kind of isolated from the community. Now they are doing a much better job in the last few years of connecting with the community.

“But I can tell you, being in private practice here in town, that there’s always kind of been this “Town-Gown” thing. There hasn’t been much collaboration that I see. There’s more now than there has been. I think it’s great if he would take that to the next step.”

Later, Dr. Druker acknowledges that he will have to build “street cred” among some cancer clinicians and others who are spread across Oregon.

“We’ll have to negotiate that political minefield,” he said. He wants to demonstrate that he will build infrastructure to benefit the entire state, not just OHSU.

OPCC Co-Chairs Sue Cook, RN, OCN, RN Coordinator for Providence Health System’s Breast Center, and...
controlled in the study are now essentially out of control. There’s tremendous variability for example, in a cancer patient with respect to preexisting conditions that might limit the ability to use some new drug.”

**Homegrown Organization Central to Outreach**

Dr. Druker says a homegrown organization will be central to his outreach: OHSU’s Oregon Rural Practice-Based Research Network (ORPRN) is a five-year-old network that connects 37 practices in 31 rural communities around the state with both OHSU’s medical education and research.

The Network’s Director, Lyle Fagnan, MD, welcomes the attention, yet warns against underestimating the challenge of working with local practices.

“We have this balance, this tug of war, that exists between the rigor of scientific investigation and the need to make things happen in the real world, where things are chaotic and you can’t control all the variables. But the answers that come from conducting research in those kinds of real-world settings is often more valuable and applicable to other settings, though you have to be aware of the variables you are not controlling. We are all trying to get at the truth. And I don’t think you always get at the truth by just doing research in academic medical centers.”

Dr. Fagnan stresses that the relationship between OHSU and clinicians must work both ways, with the university also learning from the community.

Dr. Druker says he understands that some clinicians suspect that university researchers see themselves as

Sue Frymark, RN, Executive Director of Cancer Care Resources, a local nonprofit patient support service organization, are eager to see Dr. Druker become an ally in their efforts to improve cancer prevention, detection, and care across the state.

“I do think he has some advantage in that, you know, health care is so political, but there’s such great respect for his work that I believe, especially other practicing physicians, they would certainly recognize that,” Cook said.

“I think, and this is from many years of experience, I really think it’s all about relationships,” Ms. Frymark added, including building relationships among people at institutions who are competitors in the health care marketplace. “That’s exactly what we are trying to work on here.”

They noted that while a number of people from OHSU participate in the OPCC, they are waiting to see who will fill an opening being held for the university on the partnership’s Coordinating Committee. When asked later about that opportunity to engage, Dr. Druker says, “I’d be happy to step in; or if not me, then our Deputy Director for Public Health and Prevention—either one of us or both of us, if there’s room.”

Even as he reaches out to connect with clinicians and others to improve detection and care at the community level, Dr. Druker says he will remain rooted in his native scientific discipline. It’s the kind of translational research connection that NCI’s Dr. Kerner wants to see more of.

“The challenge in taking the lessons learned from science and adapting them to the real world is actually something that can be studied; but we haven’t done a lot of that in most of our cancer centers,” he said.

Yet Dr. Kerner emphasizes the differences between community-based research and working in a university lab or doing a conventional trial in an academic medical center clinic.

“The problem is that then when you want to translate that into practice, the very things that you’ve carefully

**Dr. Druker says he will follow the science, even when it conflicts with business interests. And he says he’s ready to wade into politics to defend the funding of tobacco control and other public health programs.**

**WARNING:** MORE THAN 50% OF CHEMOTHERAPY-INDUCED FEBRILE NEUTROPENIA OCCURS IN THE FIRST CYCLE
descending from the heights with superior knowledge to bestow on the lowly. "I'm sure I’ll have to overcome some of that," he says.

Room for Improvement

There is certainly room for improvement in routine clinical care. The former Administrator of the Office of Oregon Health Policy and Research, John Santa, MD, MPH, who was also a hospital system Medical Director before taking the state position, notes that it can often take 15 years or longer to get new knowledge into routine practice and that reviews indicate common practice matches evidence-based recommendations barely more than half the time.

"I think anybody in the business world, if you told them, 'Well, we have a business that's struggling and taking 15 years to implement new ideas and only getting right 56 percent of the time,' they would say, 'Wow, what an incredible opportunity.' That's an enormous amount of room to accomplish things," Dr. Santa says.

He says financial incentives and other factors distort care, though oncology benefits from a body of head-to-head comparisons of treatment approaches. After Dr. Santa left his health policy position with the state, he provided medical direction to the Drug Effectiveness Review Project (DERP) at OHSU’s Center for Evidence-Based Policy. DERP performs systematic reviews comparing the effectiveness and safety of drugs within a class, such as statins or long-acting angiotensin-converting enzyme inhibitors.

The reports are then used by policy makers at more than a dozen state Medicaid programs. The project and its reports have been criticized by representatives of the pharmaceutical industry. In some states, lobbyists have tried to eliminate state budget support for DERP reviews.

"I think he will run into some of the same challenges that we did," Dr. Santa predicts. "He will likely find it difficult to structure a credible, neutral, transparent effort that somebody out there won’t say is aligned with or biased to one side or the other."

Cost-Effectiveness

Dr. Santa says he wonders what role cost-effectiveness will play in Dr. Druker’s practice recommendations. For instance, he notes a recent report by OHSU researchers and others that determined that computer-aided detection appears to reduce, not improve, the accuracy of screening mammography interpretations. (Fenton JJ, Taplin SH, Carney PA, et al: Influence of computer-aided detection on performance of screening mammography. NEJM 2007; 356:1399-1409.) Despite that report, some health care institutions continue to tout computer-aided detection.

Dr. Druker says he will follow the science, even when it conflicts with business interests. And he says he’s ready to wage into politics to defend the funding of tobacco control and other public health programs.

"You have to educate the legislators. This is in the best interests of the people who live in your districts: When we cut smoking rates, we cut cancer, we cut heart disease, we cut lots of health problems, COPD, emphysema. This is in the best interest of the people who live in your districts," he said.

Dr. Santa says he looks forward to seeing more public health and policy advocacy from a leader in oncology. "When you think about it, oncologists are to some degree curiously absent from the front lines of those struggles.

He says that rather than focusing on the downstream treatment of disease, Dr. Druker has an opportunity to tackle the upstream sources of cancer.

"He could really do some very interesting things that could be of benefit to the whole population," Dr. Santa said.

Dr. Druker begins his new task buoyed by good wishes and respect from many corners.

"For years people asked, 'After Gleevec, what are you going to do next?' To me it was always, 'What's the next Gleevec?' Can you develop another Gleevec?' I’ve realized over the last couple of years that was the wrong question. The right question was, 'What are you going to do next?' But thinking about the next Gleevec was probably the wrong way to be thinking about it. Now that I have some clarity about what's next, I'm embracing the opportunity."