

Reshaping the Landscape

MOTORISTS TRAVELING THIS SPRING THROUGH ASHBURN, Virginia, on Leesburg Pike might think that construction of HHMI's Janelia Farm Research Campus had just commenced, particularly if they happened to see numerous tractors crawling over the landscape moving massive dirt piles. No laboratory building is in plain sight and, after 4 years of furious activity, the most visible changes on the property are four squat, cylindrical towers sheathed in corrugated metal.

Appearances are deceptive. In fact, Janelia Farm is poised to begin operation, with the first group of neuroscientists, physicists, and computer scientists expected to move into their laboratories by midsummer. Some will aim to trace neuronal circuits responsible for complex behavior while their colleagues invent new microscopes for functional imaging to blaze the trail.

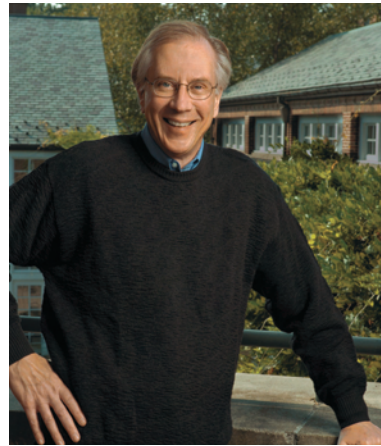
Inside the low-profile, terraced structure that looks out toward the Potomac River, the atmosphere has been anything but calm. Equipment, laboratory cabinets, and furniture have been pouring in for months, and are being installed by several hundred workmen.

A reshaped landscape is forming around the research building. More than 100 different types of plants and trees are being put in place, drawn from sources around the country and the world. They range from Little Bluestem prairie grasses (native to North America) and Dawn Redwood trees (presumed extinct until rediscovered in China) to three century-old spreading yews that once formed part of a maze in the State of Washington.

It's hard to believe that 7 years have passed since David Clayton, Gerry Rubin, and I first began discussing a possible new direction within HHMI's science program. After the initial scientific planning, Bob McGhee's steady vision and guidance as Institute architect have kept the project on track. He organized the writing of the initial program document we used to select Rafael Viñoly as the architect for the campus, and he consistently provides a mix of hard-edged project management and visionary ideas for laboratory design.

This issue of the *HHMI Bulletin* offers a behind-the-scenes glimpse at what it takes to equip a facility like Janelia Farm—as well as a look at the operational team, led by Cheryl Moore, that is charged with getting the campus up and running. Moore, the chief operating officer for Janelia Farm, has assembled an extraordinary team of experts in the areas of scientific support, information technology, facilities, conference services, finance, and human resources. Each team member is focused on creating an environment that will support the novel research culture at Janelia Farm.

As Moore has focused on the myriad operational details, Director Gerry Rubin and Kevin Moses, the associate director for science and training, have continued their recruiting efforts. To add to the eight group leaders who will move into Janelia Farm later this year, they have identified a new crop of candidate group leaders and fellows. Meanwhile, Moses has begun to shape a



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THOMAS CECH

graduate program with our international partners, the University of Chicago and the University of Cambridge.

Participation by HHMI's university-based investigators has been—and will continue to be—essential to the success of our fledgling campus. They have worked with Rubin and outside scientists to shape the research program. They have spent countless hours helping review and evaluate candidates. We also expect them to be among the first—and most enthusiastic—visitors to Janelia Farm this coming fall when we hold a series of scientific meetings at the campus. In addition, as new microscopes and computational methods begin to emerge from the laboratories at Janelia Farm, our investigators will be among the first to have the opportunity to work with these tools and, we hope, will play a critical role in their development.

Janelia Farm represents a mix of the historical and the experimental. We've drawn inspiration from some long-famous institutions, including Bell Labs in Murray Hill, New Jersey, and the MRC Laboratory of Molecular Biology in Cambridge, England. Indeed, many of the physicists and biologists we have recruited have ties to Bell Labs or the MRC and are eager to return to an environment that supports small, highly interactive research groups. Yet Janelia Farm differs from its historical models and is based on what Gerry Rubin likes to describe as a working hypothesis, that its distinctive culture will foster unusually creative research.

We won't know for many years whether Janelia Farm will succeed in generating discoveries that will alter the scientific landscape. As in the literal landscape that's growing up around it, we do believe that the constituent parts will combine in surprising ways.