

On Review

PEOPLE NOT PROJECTS—THAT'S A SHORTHAND DESCRIPTION for HHMI's approach to supporting scientific research. We strive to identify creative scientists and set them free to explore challenging questions. They don't need anyone's permission if that search moves their work into unexpected directions and fields of inquiry. They have considerable latitude to decide how best to use their resources. They do not submit detailed research plans or annual progress reports.

Given our approach, we invest a considerable amount of time, thought, and energy in identifying promising scientists to join the HHMI investigator community. It is a task that has become more interesting and challenging since we switched to letting candidates submit applications directly to HHMI, rather than requesting nominations from invited institutions. We make a similar investment in the review of their work, which customarily occurs at the five-year mark.

The Institute's scientific leadership makes the final decisions about investigator appointment and renewal, but our decisions are guided and informed by the advice of dozens of scientists outside HHMI who serve on our review panels. They bring vigor and enthusiasm—as well as a high degree of thoughtfulness and fairness—to a process that is essential to the continued vitality of our effort. Like our investigator program, it is people intensive and we couldn't do it without them.

Each year, upward of 60 scientists participate in reviewing the work of our current investigators; this number increases when we hold a competition. Our reviewers include members of our Medical Advisory Board (MAB), who also advise me and my colleagues on everything from our undergraduate education programs to opportunities in international research. By participating in most reviews, even those outside their specific field, the MAB provides a consistent perspective. Scientific Review Board members are chosen for their more specialized expertise, and others may participate on an ad hoc basis to ensure that we fully understand an investigator's work in an emerging field.

Assembling a review panel is analogous to finding the ingredients for a batch of minestrone soup that takes a pinch of this and a spoonful of that to taste just right—complicated by the fact that some “ingredients” are off limits since investigators can't be reviewed by anyone who is a direct competitor or collaborator or from the same institution. HHMI's scientific staff is constantly foraging for fresh talent—scientists with the right mix of knowledge, skill, and temperament, who are comfortable in a collegial, interactive process, and who demonstrate an ability to hear what others have to say. We're also looking for diversity of expertise, geographical distribution, and gender.

You will be able to read more about the results of our competition for investigators engaged in patient-oriented research in the February 2008 issue of the *HHMI Bulletin*. Many of those who participated in the deliberations found the process electrifying. Why? To use lingo borrowed from the world of diplomacy, our 39 reviewers—brought to the Janelia Farm Research Campus for



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a two-day meeting—engaged in a full and frank discussion about what constitutes true patient-oriented research and the scientific merits of each candidate. The discussions focused on 40 finalists, selected from 242 applications through previous rounds of review. Fifteen will be named HHMI investigators.

We meet individually with each of our investigators at the five-year mark for a highly focused discussion about their work to determine whether their HHMI appointment will be renewed. We ask that HHMI investigators demonstrate—at a superlative level—one or more of the following attributes: that they identify and pursue significant biological questions in a deep and rigorous manner, push their chosen field in new directions, develop new tools and methods that enable creative experimental approaches to biological research, forge links between basic biology and medicine, and demonstrate great promise of innovative and original contributions.

The assessments are challenging all around and, once again, our reviewers play a vital role. Investigators submit materials in advance but also make a 35-minute presentation and have an opportunity to answer questions about their work. One size doesn't fit all, and our reviewers take a broad view of the variety of styles and approaches that contribute to scientific discovery.

We delight in giving our investigators the spotlight at HHMI. But that acclaim needs to be shared with those other scientists who, through their insight and judicious advice, help guide our choices.