Great science forms the building blocks of any quality R&D-based company. But superb internal communication serves as the glue that binds those building blocks together and makes for a top employer, say managers with the top companies recognized by Science this year. The top employers in this year’s survey all take pains to hear employees’ concerns, recognize everyone’s contribution toward overall goals, and keep staff informed of how external events—like last year’s global financial crisis and climate of mergers and acquisitions—will or won’t affect them.

Only two of the 2010 top 10 didn’t make the list last year—Millennium: The Takeda Oncology Company and Vertex Pharmaceuticals Incorporated (see list on page 250). However, Millennium made the list in 2007 and 2008. Over the last five years the composition has changed from less Big Pharma to include more Big Biotech—including perennial leader Genentech, a member of the Roche group, which has held the number one spot eight out of nine years (the exception was 2007, when Boehringer-Ingelheim claimed the lead).

In first place again this year, Genentech has consistently ranked high, as well as being recognized as a great employer by Fortune, Forbes, and other publications because it has a research focus emphasizing patients’ needs combined with treating employees with respect, says Marc Tessier-Lavigne, executive vice present for research and chief scientific officer of Genentech. “Robert Swanson, one of the company’s founders, always said, ‘Our most important asset goes home every night in sneakers,’” says Tessier-Lavigne.

Research innovation and respect for employees remain the most important criteria for being a top employer, according to survey respondents. And, the top employers report that open communication is the best strategy for gaining employees’ respect, fostering creativity, and navigating tough times.

RESPECT AND LISTENING
Creating a culture of respect requires true two-way communication between employees and managers. This year’s top employers use a variety of communication strategies—from “town halls” to employee feedback about managers—to ensure that workers’ concerns are heard. To be truly effective, the style of communication must reflect the culture of the company.

As Vertex approaches the commercialization of its first drug, the company faces many new communication challenges, including the tremendous growth across the organization. “We’re establishing the company’s first commercial function, which includes the hiring of our first sales force,” says Lisa Kelly-Croswell, senior vice president, human resources. With currently more than 150 openings globally and having hired more than 200 employees in 2009, Vertex works on providing transparent communication during this rapid growth period by holding monthly town hall meetings and offering a two-day course on “The Business of Vertex,” which helps employees understand business principles and addresses the many internal and external issues of being a public company, says Kelly-Croswell.

No question is “out of bounds” at town hall meetings, says Steve Gansler, senior vice president, human resources at Millennium: The Takeda Oncology Company, which holds the number four spot this year. They, too, encourage employees to share their opinions openly during monthly meetings, and afterward attendees receive surveys that ask whether the presentations met their needs, says Gansler. People keep returning to the non-mandatory meetings; Gansler suspects that their efforts for real two-way communication explain the high attendance. Cont. on p. 250

UPCOMING FEATURES
Developing a Career Plan (online only)—December 3
Diversity: Barriers for Women Scientists—January 21
Faculty: Moving Up The Academic Ladder—February 11
### TOP TWENTY EMPLOYERS

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<th>Rank</th>
<th>Employer (Global Headquarters)</th>
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<td>1</td>
<td>Genentech (South San Francisco, CA)</td>
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<td>2</td>
<td>Monsanto Company (Creve Coeur, MO)</td>
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<td>3</td>
<td>Vertex Pharmaceuticals Incorporated (Cambridge, MA)</td>
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<td>4</td>
<td>Millennium: The Takeda Oncology Company (Cambridge, MA)</td>
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<td>5</td>
<td>Roche (Basel, Switzerland)</td>
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<td>6</td>
<td>Boehringer Ingelheim (Ingelheim, Germany)</td>
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<td>7</td>
<td>Syngenta (Basel, Switzerland)</td>
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<td>Genzyme Corp. (Cambridge, MA)</td>
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<td>9</td>
<td>Merck KGaA/Merck Serono/EMD Serono (Darmstadt, Germany)</td>
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<td>10</td>
<td>Amgen (Thousand Oaks, CA)</td>
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<td>12</td>
<td>Johnson &amp; Johnson (New Brunswick, NJ)</td>
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<td>Abbott (Abbott Park, IL)</td>
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<td>Biogen Idec (Weston, MA)</td>
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<td>Merck (Whitehouse Station, NJ)</td>
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<td>20</td>
<td>AstraZeneca PLC (London, UK)</td>
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The top companies were identified through a web-based survey, conducted from April 13–30 by Brighton Consulting Group and Cell Associates. Fifty-seven percent of the total qualified survey respondents came from the initial e-mail invitation to 80,000 individuals worldwide. An additional 1,000 e-mails sent specifically to human resource contacts from the Science Careers sales database, comprised the remaining 43 percent of the qualified respondents.

Survey takers then rated the companies they had chosen on 23 driving characteristics. The top 20 companies were selected using a statistical process that calculates a unique ranking score for each company. Only companies that were rated by 30 or more respondents were eligible to become part of the top 20 employers.

### ACCOUNTABILITY

To engender respect, there needs to be accountability, but respect is an abstract quality. However, Vertex—which makes its first appearance on the top employer list this year at number three—turns it into a reality by evaluating employees not only on their performance, but also on how they measure up to the company’s values. Those values include treating employees with respect—of which a large component is how to communicate with different kinds of personalities throughout the company, says Kelly-Croswell. To help employees meet this goal, Vertex requires all employees to complete a course called “The Art of Speed-Reading People,” based on the Myers-Briggs Type Indicator test. The course teaches people to… cont. on p. 252 »

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“...and to a minimum,” Genentech’s Tessier-Lavigne says. That means maintaining a true “open-door” policy to both hear employee opinions and explain the company’s direction. “Not everyone’s first choice will be the choice we go with,” explains Tessier-Lavigne. “But we try to explain the rationale when we go in a particular direction, and how and why the decision was made.”

The level of candor tends to be higher in smaller group settings, posits Alan Smith, senior vice president of Genzyme, which holds the eighth position. He “gauges the temperature” of employees through weekly lunches with six people from all around the company. Smith says Genzyme also holds town hall meetings, but “it’s different from when it’s six people at lunch.” He and his lunch mates chat for about 90 minutes about company issues, and he goes through his decision-making process. “At lunch they feel freer to say what they like,” explains Smith. This type of honesty fosters respect in an organization, he says. Constructive criticism of science is also a part of that honesty and openness. The company holds weekly “Science Peer Review Group” meetings, with that aim. “We remind the scientists that we are critiquing the data, not criticizing them,” Smith says. Syngenta, which moved up 13 places since last year’s survey to seventh, recruits employee input for more than science and business. They aim to make two-way communication concrete—literally, says Michiel van Lookeren Campagne, Syngenta’s head of global biotechnology. “When we moved into a new building in April this year, our employees helped with the design. Employees also help design our processes,” he explains.

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**TOP EMPLOYERS SURVEY**

**SURVEY METHODOLOGY**

The top companies were identified through a web-based survey, conducted from April 13–30 by Brighton Consulting Group and Cell Associates. Fifty-seven percent of the total qualified survey respondents came from the initial e-mail invitation to 80,000 individuals worldwide. An additional 1,000 e-mails sent specifically to human resource contacts from the Science Careers sales database, comprised the remaining 43 percent of the qualified respondents.

Survey takers then rated the companies they had chosen on 23 driving characteristics. The top 20 companies were selected using a statistical process that calculates a unique ranking score for each company. Only companies that were rated by 30 or more respondents were eligible to become part of the top 20 employers.
They are not attached to “pipeline” projects; rather, they are free to do basic research. Their goal is to do cutting-edge work that will merit publication in a top-tier journal. “It brings creative and energetic individuals into the organization,” says Tessier-Lavigne. “They challenge the status quo.” These types of positions allow scientists to follow their noses in more basic research areas, which might yield findings that the company can later capitalize on.

Challenging the status quo, for Genzyme, means seeking treatments for unmet medical needs. “We don’t do ‘me too [drugs],’” says Smith. The company recognizes that ideas will fail more often than succeed—what looks like a good idea on paper is not always a good idea in patients. “We’re forgiving as an organization,” Smith says. “We don’t kill ourselves with angst over things that don’t work.” However, having high goals is a key component of being an innovation leader, says Roger Perlmutter, executive vice president of research and development at Amgen, which placed tenth this year. “We focus on grievous illness,” Perlmutter says. “You could say ‘of course you do.’ But many companies seek modest improvements in existing therapies. We focus almost exclusively on programs where there have been few or no drugs developed.”

Another way companies encourage innovation is by offering incentives. Several of the top employers use contests to up the ante. Monsanto Company, which rose to number two this year after appearing fourth last year, has employees rate their managers in an annual survey called “leadership 180.” This helps managers gauge their own performance through the eyes of their team, says Robb Fraley, Monsanto’s executive vice president and chief technology officer.

Creating this culture of respectful two-way communication is taken seriously, says Bernd Kirschbaum, head of Global R&D, Merck Serono (Merck Serono and EMD Serono are part of Merck KGaA, which is ranked ninth). The company emphasizes the team over the individual, which means taking action when respect for either individuals or the team are lacking, he says. “We have discontinued contracts of people who have not embraced our values—for instance, managers who were rude or abusive to the employees they supervised,” explains Kirschbaum. “If you ignore this as an organization and as a leader, you completely lose credibility. You need to say, ‘This is unacceptable. You need to follow up.’

ENCOURAGING INNOVATION

Open communication builds respect and a harmonious work place, but letting employees know that their role in the company is meaningful, their research is cutting-edge, and that creativity is valued is how many of these top companies stay positioned at the forefront of scientific discovery and at the top of Science’s survey.

With the look and feel of a university campus, Genentech has consistently created such a culture. But that culture is more than superficial. For instance, the popular postdoc program at Genentech fuels the innovative environment, both directly and indirectly. Postdocs make up about 10 percent of the company’s research community.
North Carolina site and was recently approved by the FDA for use in the United States in 2011. Next year, Syngenta will launch a project to find ways to grow crops with less water. The knowledge that they are making a difference serves as excellent motivation. “People feel that we are contributing to making the world a better place,” says Campagne.

TRANSPARENCY

It’s easy to keep employees happy in periods of prosperity and stability—when products cruise through the pipeline, the stock market soars, and the company finds itself flush with capital. 2009 was not that time. But this year’s top employers excel at keeping attitudes and innovation high in the face of adversity. The global financial crisis, mergers and acquisitions, uncertainties about the U.S. health care policy, and ongoing controversies about genetically modified organisms (GMOs) were all factors that impacted which employers were rated highly in Science’s survey. As with fostering an environment of innovation and creating an atmosphere of respect, these top companies also find communication key for heading off these challenges.

• THE FINANCIAL CRISIS

The global blows that the stock market took in 2009 meant that some companies had less to spend on R&D and salaries. But communicating the problem and asking colleagues to help in the solution bolstered spirits at both Merck KGaA and Genzyme last year. Merck KGaA’s Kirschbaum says the company prides itself in putting 20 percent or more of its total revenue back into R&D. But last year, with revenues down, that goal was threatened. The company had to either to stop some development projects or come up with $80 million from somewhere else. “There was great solidarity from our commercial colleagues in the sales, marketing, and PR side of the company, who helped us find and invest money from their budget,” Kirschbaum says. They decided that R&D was important for the long term health of the company and in the short term it should trump marketing, business development, and other commercial activities. “The support from the commercial side was very rewarding for the self-confidence of the R&D people.”

Last year, Genzyme had to slow down its rate of recruitment, says Smith. “That is not something that anyone wants to hear; for junior faculty and junior staff, it’s not welcome news,” says Smith. Working to keep the lines of communication open, Smith had to let employees know that, “we simply can’t afford to hire new people right now.” However, he also reminds employees that there are ways to get the required staff if they are at a key point in a project. “If we decide that position is necessary, we try to transfer people to that project, or if someone has recently left the company then we may be able to hire a new staff member.”

• MERGERS AND ACQUISITIONS

There are multiple ways of dealing with a merger, whether you are the acquirer or the acquiree. Companies can become part of a new seamless entity, retain their independence, or just be mined for their scientific pipeline or technological tools. There are no right ways, but establishing a new culture or reinforcing an existing one is key, as is making the process as transparent as possible, so employees know how any realignment will affect them.

Roche’s Ayyoubi says transparency, as well as fast and reliable information, help build trust and keep employees committed—especially in times of change such as during the merger with Genentech. “We tried to be very clear about the terms and conditions, and which sites would be affected.” The company used an extranet, multiple town halls, and lunches with senior management to spread information.

When Roche made its bid in July 2008 to fully acquire Genentech, facilitated by a financial stake in the company since the early ‘90s, it announced that priority number one was to preserve the Genentech culture, says Tessier-Lavigne. As a result, both Genentech and Roche have their own autonomous research and early clinical discovery tracks. The head of Genentech Research and Early Development, executive vice president Richard Scheller, reports directly to Roche CEO Severin Schwan, not through Roche Research. Genentech’s academic atmosphere, work hard/play hard culture, and strong postdoc program have all been preserved following the March 2009 acquisition. For these reasons, Science chose to list Genentech and Roche separately in this year’s survey. “As a result of that pledge to allow Genentech to remain independent, not a single scientist has left the organization because of the merger,” says Tessier-Lavigne. “And we have been able to recruit additional senior leadership through the merger.” One exception, however, is Tessier-Lavigne himself, who will be moving to Rockefeller University in March 2011.

In Millennium’s case, being acquired has meant more resources. Takeda Pharmaceuticals bought the company in

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2008, but like Roche with Genentech, kept the company’s culture intact. Since being acquired, Millennium has added more than 300 positions because the parent company recognized the Millennium’s strength in cancer treatment R&D. “Takeda transferred its entire oncology program to us,” Gansler says.

Unlike Genentech, Millennium has been more fully integrated, making researchers more likely to work with their counterparts at the parent company. “By being part of a larger organization, we have been the beneficiary of significant investment that perhaps wouldn’t have happened had the acquisition not occurred,” explains Gansler.

Other companies that have acquired smaller ones must work hard to ensure a seamless transition, while also reassuring their employees that they won’t, in turn, be acquired. Merck KGaA, which recently completed its acquisition of Millipore, reminds its own employees that they will never be a part of an acquisition since the Merck family, which founded the company over 300 years ago, still owns 70 percent of it. “This gives employees a sense of stability,” says Merck KGaA’s Kirschbaum. Instead, Merck KGaA looks for complements to its existing R&D strategy. “The Millipore acquisition helps both the chemistry and pharmaceutical divisions,” Kirschbaum says. He feels that acquisitions made when a company’s pipeline dries up or blockbuster products go off patent are bad for morale. This appears to reflect a failure on the parent company’s long-term R&D strategy. “We don’t want to be put in that position where we have to buy another company because we have nothing in our own pipeline; it makes employees nervous.”

Genzyme, too, has a history of making acquisitions to augment its own research efforts. “We have a way of embracing new ideas, new technology, and new staff;” says Smith. Since his own position at Genzyme came about due to an acquisition, Smith can empathize with employees brought in when a company goes shopping for new technology. “I, myself, was at another company for four years (Integrated Genetics) when Genzyme acquired them;” says Smith. “So I can say ‘I know how you feel.’”

**GENETICALLY MODIFIED ORGANISMS**

AgBio companies, three of which made the 2010 top 20 employer list including DuPont, Monsanto, and Syngenta, use genetically modified organism (GMO) technology to improve crop yield and decrease dependence on irrigation and pesticides. However, because some public skepticism remains about the use of GMOs, the company puts a lot effort into communicating, to both the public and their employees, why such techniques are both safe and necessary, says Fraley at Monsanto. Acceptance of GMO technology begins with the scientists in-house, says Campagne, at Syngenta, “Everyone who works in science knows that we have created safe and very good products that help sustainable agriculture,” Campagne says. “The scientists working for us are 100 percent convinced that this is the right thing to do,” he says.

The company also works to share this technology with parts of the world that are unable to afford it through partnerships with nonprofits. In 2008, Monsanto partnered with the African Agricultural Technology Foundation, CIMMYT (the international maize and wheat development center), and the Bill & Melinda Gates and Howard G. Buffett foundations for the Water Efficient Maize for Africa (WEMA) project. The goal is to help make drought-tolerant corn available to farmers in sub-Saharan Africa at approximately the same time as its commercial launch in the United States.

**HEALTHCARE REFORM**

The exact cost of health care reform in the United States remains unclear—for both companies and consumers. Rather than worrying about it, some companies have taken an active role in advocating for it—letting both employees and customers know that the company cares about access to health care. “We took a leadership position on health care reform,” says Amgen’s Perlmutter. “It really is important that Americans have access to health care. We say this not because it will be a big profit center for us, but because it’s the right thing to do.”

Merck KGaA, too, became involved with health care reform. The company wanted to help shape the legislation, rather than just have to react to it, and contributed its global perspective to the dialogue, says Kirschbaum. “Different countries have different dynamics. We try to engage in a dialogue despite the challenges,” explains Kirschbaum. “We have an ethical obligation to bring compounds to the market to help people with very serious diseases. But we need to make sure that this endeavor remains sustainable.”

Effective communication, both in times of success and adversity, generates another kind of sustainability—quality employees who stick around and produce the innovative scientific discoveries that define top employers. Treating employees with respect and keeping two-way communication open during triumphs and challenges is perhaps the best way for employers to be respected—both by their employees and by their peers.

Paul Smaglik is a freelance writer living in Milwaukee, Wisconsin.

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