

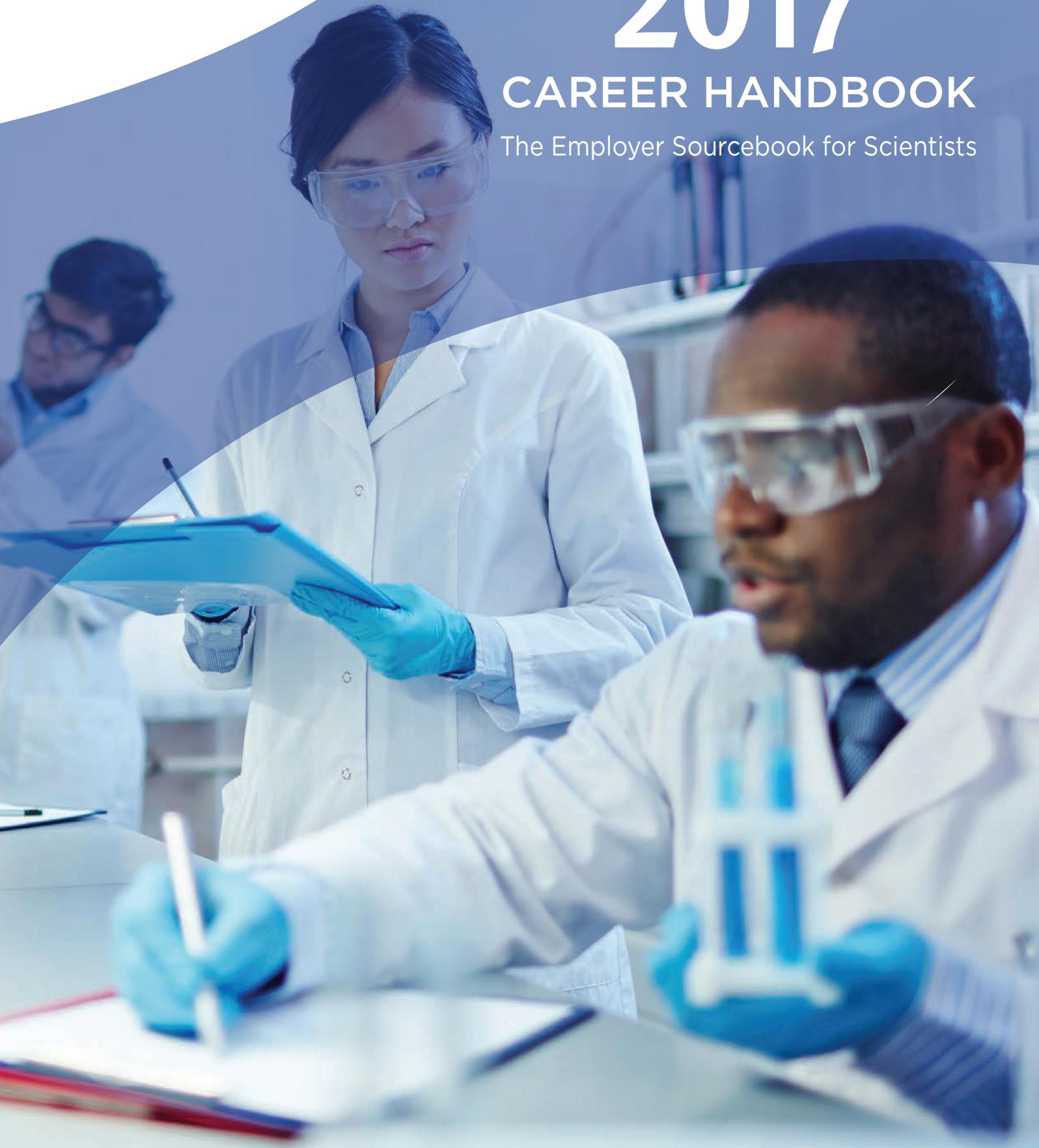
ScienceCareers

FROM THE JOURNAL SCIENCE  MAAAS

2017

CAREER HANDBOOK

The Employer Sourcebook for Scientists



INTRODUCTION

Thanks for picking up a copy of the 2017 Career Handbook. Our goal, with this booklet as well as all the career resources from *Science*, is to bring you useful, relevant information to help you navigate the job search process and manage your development in a way that leads you to a truly rewarding career.

To that end, we have teamed up with some great organizations to bring you information about the latest career opportunities in many different fields. The profiles shown here will give you a sense of the types of organizations that are recruiting and the kinds of positions they offer. We've also included some articles with some general tips and advice on job searching.

In addition to the companies featured in this booklet, you can search thousands of additional job postings on our website ScienceCareers.org—all for free.



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ACTIVATE YOUR “IT” FACTOR FOR JOB SEARCH SUCCESS

BY DAVID G. JENSEN
DECEMBER 14, 2016

It happens all the time—an employer makes a hiring decision that I don’t understand. I’m the one who set up the interviews, but the hiring manager can’t tell me the exact reasons why one candidate was hired and another turned down. They just can’t describe what it was that was so impressive. When pushed, their reasoning sounds really wishy-washy.

That missing piece is sometimes described as the “it” factor. A client will say, “Although Joe is a better fit technically for the role, I think that we need to hire Angela. She has *it*—you know, what we’re looking for.” This isn’t helpful. It just sounds like a vague, catch-all phrase, and I’m as much in the dark as I was before.

But, after 30 years as a recruiter, I’ve come to recognize some of the elements of the “it” factor—and how you can capitalize on them to optimize it for yourself.

INGREDIENTS OF THE “IT” FACTOR

Now, I interview managers in great detail to determine what they consider the “it” factor. But even with such upfront efforts, clarity on these intangible qualities that lead to success can be fleeting. Senior staff members say things like, “Well, I don’t know how to put it, but I’d say that Candidate A would do better here because he’s clearly more open and willing to fit in. I’m sure I’d enjoy working with him.” Or, “I’d say that Candidate B has more interest in the role; perhaps presence or charisma best describes the difference in her interview.”

Presence? Charisma? Both are important, but they don’t really describe all of what “it” is.

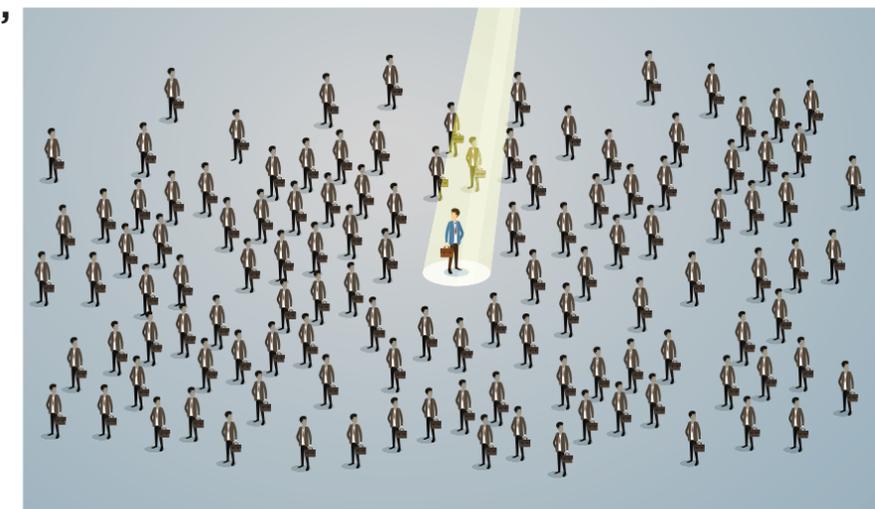
Another challenge is that you can’t teach charisma. It seems to me that people either have it or they don’t. But certain elements of charisma can be practiced by anyone. You don’t need to have a “rah-rah” salesperson personality. You don’t need to go into an interview with practiced lines right out of books with titles like *100 Snappy Answers to Tough Interview Questions*. Instead, you need to integrate certain elements of the charismatic personality, that interviewer with “presence,” into the way that you interview. When you break down the elements of what these hiring managers see that they like, it’s achievable—even for the introvert who is not naturally charismatic.

Here are four ingredients of the “it” factor that everyone, regardless of personality type, can and should bring to the job interview:

Confidence. Do your best to leave your anxiety at home and be comfortable. Don’t try to guess what question you’ll be asked next. Just listen well, maintain friendly eye contact with the interviewer, and provide responses that align with the general mission you’ve set out with for the day—that is, to be seen as a problem solver. Don’t fixate on being “right” with your answers. Just ensure you tie them into the company’s needs as best you can.

Passion. No one hires people who are in the business of science without a core passion for some aspect of that science. The “tell me about yourself” section of an interview is a great place to show how passionate you are about your science.

Enthusiasm. Tied to passion in many ways, enthusiasm needs to be real. When you talk about your thesis work, visibly convey your excitement about it. Your questions about the company and its focus should be accompanied by sincere enthusiasm and appreciation for the opportunity to interview.



Authenticity. This element can only be achieved when you have relieved yourself of anxiety. Sure, it's an important day, so some anxiety will always exist in the background. But you'll do far better if you're a friendly version of yourself, not a nervous wreck. Remember that, as employers interview you, they are wondering, "What's it like to work with this person on a daily basis?" You want to leave them with the feeling that it will be a comfortable fit, which you can only convey if you are true to your authentic self.

HARNESS YOUR BODY LANGUAGE

Hitting all of these points might seem overwhelming, but you have a great tool at your disposal: your body. In a TED talk I really enjoyed, Harvard Business School social psychologist Amy Cuddy describes how important body language is to our interpersonal relationships—and how it can impact job interviews. (It isn't until considerably into the presentation that Cuddy discusses this aspect, so watch to the end.) Her research highlights how pre-interview exercises can help you feel at ease during an interview—a critical step toward achieving that elusive "it" factor.

Cuddy's work suggests that the postures you assume prior to walking in a potential employer's door actually affect your body's biochemistry. What struck me as most interesting is that the "power poses" she recommends are not used during the interview itself, but in the moments before it begins. There's been some discussion about whether these findings are robust, but regardless of whether you find her science overblown, it can't hurt you to try it yourself. And for me personally, I believe in it for a very good reason: because I've used it for years and it works.

Before giving a talk to a large audience, I have always stretched and assumed my own power pose for a few minutes prior to walking onstage—from the restroom or outside the meeting hall, of course! Picture the kind of arms outstretched overhead victory pose you'd see from a runner at the end of a 100-meter dash. Until listening to Cuddy's TED talk, I thought this was my own unique quirk and just the way my mental batteries recharged. Now, I realize that it could be based in my body's biochemistry.

"[O]ur bodies change our minds. And our minds can change our behavior," Cuddy says. "And our behavior can change our outcomes."

CARE LESS, WIN MORE

It's tough to address topics like the "it" factor when the elements seem so intangible. But, if you focus on those items above before you go into the big day, you'll do a much better interview than most.

Anxiety, in particular, is a job offer killer, so it's critical to do what you can to keep it to a minimum. As an anxious person myself, I know that, for many people, it's nearly impossible to go into an important event like a job interview and *not* be concerned and anxious about the results. After all, interviewing and anxiety just seem to go hand in hand.

But there could be a solution to your anxiety: Care a bit less about the outcome. It may not sound right to you at first, because the interview *is* such an important element in your job search, but you'll do better on the big day if you can shift your focus away from the end result and instead concentrate on making everyone around you comfortable. Concentrate on being authentic. Care just a bit less about winning, and more about being yourself and making others comfortable, and you'll emerge with some of that all-important "it" factor—which just may land you the job.

TOP FIRMS BRING OUT CREATIVITY, GROWTH IN THEIR SCIENTISTS

BY KENDALL POWELL
OCTOBER 28, 2016



Thriving biotechnology and pharmaceutical firms share philosophies when it comes to driving innovation, encouraging professional development, and respecting employees' work-life boundaries. These employers know that strategic alliances should serve to keep them on the cutting edge, and that scientists should be given the space, freedom, and resources to explore their riskiest and most creative ideas. They place a high priority on the professional growth of their scientists,

and provide them with opportunities to add technical skills and expand leadership responsibilities. And when a long day of pushing projects forward is over, these workplaces make sure they pamper their researchers with celebratory downtime and easy ways to stay active, healthy, and connected—and even ice cream trucks in the summertime.

Drug discovery is turning a corner in creativity—seeking to solve more unmet medical needs with approaches that come from biological rather than chemical solutions. These drugs include more sophisticated antibody therapeutics, but also encompass messenger RNA (mRNA)-based drugs; immuno-oncology therapeutics that fight cancers with designer, supercharged T cells; and truly personalized medicine, such as tumor vaccines designed to attack individual tumors. At the same time, applying big data bioinformatics to human genomes annotated with a lifetime of physicians' notes from each patient is revealing novel targets and helping tailor optimal treatments to patients.

The modern era of biopharmaceutical projects requires a level of creative thinking that goes far beyond traditional, chemistry-based drug discovery. So it's no surprise that scientists rank the highest satisfaction in industry jobs that let them flex their creative muscle, giving them the freedom to pursue risky ideas and the resources to test those ideas out at top speed. This year's *Science* Careers Top Employers—leaders in the biotech, biopharmaceutical, and pharmaceutical industries—excel at all three. They also share a dedication to innovation that is pushing biological boundaries, and they prioritize career development that stretches employees' skills and talents. Last but not least, they encourage healthy levels of work-life integration to keep employees productive and performing at their best.

THIS YEAR'S RESULTS

The top 20 employers of 2016 include companies with rich heritages in drug development that have embraced globalization, as well as relative newcomers with agile, fast-paced programs. Regeneron Pharmaceuticals (No. 1) returns to the top spot in a continued show of force, having been named No. 1 or No. 2 for the last six years. The 28-year-old company's fully humanized antibody technology has ripened into a pipeline of a dozen such candidates in clinical trials. Ranked No. 2 this year, Novo Nordisk builds on its tradition of more than 90 years of leading diabetes health care. Based in Bagsværd, Denmark, the firm has parlayed that experience into innovations that help patients deal with other chronic conditions: hemophilia, growth disorders, and obesity.

"Our vision focuses on three things: teamwork, innovation, and translation. We believe being committed to all three is the best way to do science."

George Yancopoulos, president of top-ranked Regeneron Pharmaceuticals

After its debut in the survey at No. 7 last year, Moderna Therapeutics has rapidly moved up the ranks into the No. 3 slot. Headquartered in Cambridge, Massachusetts, Moderna is just five years old and has about 460 employees. But it is a powerhouse of innovation that has quickly turned its mRNA technology platform into two infectious disease mRNA-based vaccines, which are already being tested in early clinical trials. Moderna expects several other internal and partnered candidates to be in human trials by the end of 2016.

Each year, leadership in innovation has been named one of the major drivers of the top firms. However, this year, survey respondents also chose “having a clear vision” as one of the strongest characteristics of the best employers. George Yancopoulos, president of Regeneron Pharmaceuticals, as well as its chief scientific officer and founding scientist, says Regeneron’s success is largely due to a vision that hasn’t changed since the company was founded by Leonard Schleifer in 1988.

“Our vision focuses on three things: teamwork, innovation, and translation. We believe being committed to all three is the best way to do science,” he says.

Top twenty employers		The 20 companies with the best reputations as employers and the top three driving characteristics for each company, according to respondents in the 2016 survey undertaken for the <i>Science</i> /AAAS Custom Publishing Office. The companies without a 2015 rank did not receive enough mentions to qualify or did not receive a high enough ranking during the 2015 survey.						
2016 Rank	2015 Rank	Employer (Global headquarters)	Innovative leader in the industry	Treats employees with respect	Has loyal employees	Work culture values aligned	Is socially responsible	Has clear vision
1	2	Regeneron Pharmaceuticals (Tarrytown, NY)	✓				✓	✓
2	3	Novo Nordisk (Bagsvaerd, Denmark)	✓		✓			✓
3	7	Moderna Therapeutics (Cambridge, MA)	✓	✓				✓
4	11	Eli Lilly and Company (Indianapolis, IN)		✓	✓		✓	
5	4	Vertex Pharmaceuticals (Boston, MA)	✓	✓		✓		
6	1	Novozymes (Bagsvaerd, Denmark)	✓		✓	✓		
7	6	Genentech (South San Francisco, CA)	✓	✓				✓
8	5	Alexion Pharmaceuticals (New Haven, CT)	✓				✓	✓
9	13	Biocon (Bangalore, India)	✓				✓	✓
10	8	Roche—excluding Genentech (Basel, Switzerland)		✓		✓		✓
11	17	Merck KGaA (Darmstadt, Germany)		✓	✓	✓		
12	10	AbbVie (North Chicago, IL)	✓	✓	✓			
13	9	Monsanto Company (Creve Coeur, MO)			✓	✓		✓
14	–	Syngenta (Basel, Switzerland)			✓	✓	✓	
15	14	Abbott (Abbott Park, IL)		✓	✓	✓		
16	15	Boehringer Ingelheim (Ingelheim, Germany)		✓		✓		✓
17	12	Celgene Corporation (Summit, NJ)			✓	✓	✓	
18	16	Bayer (Leverkusen, Germany)	✓			✓		✓
19	–	Novartis (Basel, Switzerland)	✓	✓				✓
20	–	Johnson & Johnson (New Brunswick, NJ)	✓	✓	✓			

The 20 companies with the best reputations as employers and the top three driving characteristics for each company, according to respondents in the 2016 survey undertaken for the *Science*/AAAS Custom Publishing Office. The companies without a 2015 rank did not receive enough mentions to qualify or did not receive a high enough ranking during the 2015 survey.

The company’s 5,000 employees are encouraged to contribute ideas from any level—but they can’t be shy, because rigorous critique is considered the company sport. “Twenty or thirty or forty of us will develop an idea together in a room by arguing it out,” says Yancopoulos. “That’s going to give us the best chance for success.”

The other part of Regeneron’s ethos is speed—it is a company of fast talkers and fast doers. “How fast things are happening around here makes Regeneron a great place to work,” says Christos Kyratsous, associate director of both the Infectious Diseases and the Viral Vector Technologies group. “I’ve been here only five years, and I’ve seen four molecules progress to development and some even to approval.” This is a rare and lucky thing in the pharmaceutical industry, he says. Regeneron boasts one of the highest percentages of revenue going back into R&D in the industry, at just over 39% in 2015.

Several of the other top employers are big pharmaceutical names that have stayed nimble by looking outward to partnerships, expanding their global footprints, and of course, betting big on biology. Indianapolis-based Eli Lilly and Company (Lilly) charged up in the ranks to No. 4 from the No. 11 spot last year. Founded 140 years ago, Lilly spent US\$4.7 billion last year on R&D—nearly one-quarter of its sales revenue—and employs 9,000 R&D workers in six countries.

Similarly, the German giant Merck KGaA (Merck—not to be confused with the U.S. pharmaceutical firm Merck & Co.) climbed six spots to No. 11 this year.

Belén Garijo, chief executive officer of the Merck Healthcare sector and executive board member, says a major transformation has taken place at Merck over the last five years. The company has deep German roots, being founded nearly 350 years ago, but as Garijo explains, it has turned outward from its Eurocentric approach. It has grown through acquisitions that bring a diversity of cultures, such as the recent US\$17 billion acquisition of life science and technology giant Sigma-Aldrich.

After not being ranked in 2015, Novartis reemerged to claim the No. 19 slot with new scientific leadership at the helm—former Harvard oncologist James Bradner took over as president of the company’s research arm, the Novartis Institutes for BioMedical Research (NIBR) in March 2016. The company, which employees say has always had a strong pipeline, has 137 pharmaceutical projects underway in areas such as oncology, cardiovascular disease, ophthalmology, and neuroscience.

Above all, creative, cutting-edge science with the potential to improve or save patient lives draws bright, ambitious researchers to these companies. “Ultimately, we want to be the one company to defeat the global burden of diabetes,” says Mads Krogsgaard Thomsen, Novo Nordisk chief scientific officer and executive vice president.

2016 SCIENCE CAREERS TOP EMPLOYERS SURVEY METHODOLOGY

This annual web-based survey was conducted from March 15 to April 18, 2016. A mixed methodology was again used to recruit participants for this year’s survey.

The first part of this methodology included emailed invitations to roughly 25,000 individuals who were located worldwide. These individuals were AAAS members, *Science* website registrants, *Science* Careers registrants, and past survey respondents who opted in last year to take this year’s survey.

The second part of the methodology included an email blast to a list of approximately 400 human resource contacts at industry firms pulled from the *Science* Careers sales database.

The total number of surveys submitted this year was similar to last year’s total. This report is based on a total sample of 5,984 completed surveys.

Demographics

Gender
52% Male, 43% Female, 5% No response

Experience:
66% have 10 or more years work experience

Highest degree earned:
33% Doctorate, 33% Master’s, 27% Bachelor’s, 7% Other

Company type:
38% Pharma, 29% Biotech, 26% Biopharma, 3% University, 4% Other; More than 9 out of 10 work in private industry

Nature of work:
27% Development, 18% Applied Research, 15% Basic Research, 9% Administration/Executive, 10% QA/QC/Regulatory Affairs, 7% Production, 11% Other (respondents were able to choose more than one response)

Geography:
56% from North America, 28% from Europe, 12% from Asia/Pacific Rim, 4% from rest of world

Thomsen says the company is tackling risk factors for the disease by searching for novel targets that could prevent or slow the progression of type 2 diabetes. In addition, they are pursuing what he calls “holy grail scenarios” for diabetes, including a US\$2 billion investment in transforming injectable protein-based drugs into oral tablets, and also developing stem cell therapies that will regenerate or replace insulin-secreting beta cells in the pancreas.

INGREDIENTS FOR A TOP EMPLOYER

Every year, *Science Careers* surveys employees in the biotechnology, pharmaceutical, and biopharmaceutical industries to find out which companies are the top employers and to define the characteristics that make them so. In 2016, 5,984 respondents took the web-based survey deployed via email (see Survey Methodology).

The bulk of respondents reported being 30 years of age or older (85%) and lived in North America or Europe (84%). Two-thirds of respondents have an advanced degree and 10 years or more of work experience, and 60% report working in R&D positions (see Demographics box).

This year, as in the past, employees chose “innovative leader” as the top-driving characteristic of a top employer. Other company characteristics that drove the rankings were “treats employees with respect,” having “loyal employees,” having “work culture values aligned” with employees’ values, being “socially responsible,” and having a “clear vision” (see Driving Characteristics table).

The 2016 survey also asked respondents to define what makes companies the worst of the worst. Companies got low marks for ineffective leadership; having too much hierarchy, politics, or bureaucracy; and poor ethics that resulted in harm to patients or the environment. Respondents also dinged companies for profit-driven priorities and weak research-project pipelines.

When asked what makes the best companies the best, employees noted that the top firms operate as meritocracies, possess adequate resources, have trusted brands, and are responsive to stakeholders. Companies exhibiting these qualities include the rest of this year’s top 10 employers: Vertex Pharmaceuticals (No. 5), Novozymes (No. 6), Genentech (No. 7), Alexion Pharmaceuticals (No. 8), Biocon (No. 9), and Roche (No. 10) (see chart for full top 20 list).

When asked what makes the best companies the best, employees noted that the top firms operate as meritocracies, possess adequate resources, have trusted brands, and are responsive to stakeholders.

INNOVATE BIG, GO CREATIVE

For the last 14 years, companies that lead in innovative solutions to health care and biotechnology dominate the list of top employers. This year, the leading companies take innovation even further, seeking creative biological solutions that will take their therapies for cancer, diabetes, and Alzheimer’s disease truly outside of the box—or rather, the pill bottle. Not surprisingly, the companies that cultivate scientific creativity and encourage researchers to follow where their curiosity leads attract and retain the best scientific workforces.

Moderna’s scientists are motivated by the company’s mission to use mRNA science to deliver transformative medicines, including medicines that can replace missing or flawed intracellular proteins. Moderna’s mRNA therapeutics, made with proprietary nucleotide analogs, have the potential to generate any conceivable protein using the body’s own cellular machinery.

Kerry Benenato, associate director of chemistry at Moderna, was hooked by “the challenges we were going to face, knowing that what’s in the literature is not quite good enough, so we were going to have to do some pretty inventive discovery.” Her enthusiasm for the science she’s doing is catching—she’s recruited six friends and colleagues to work for Moderna in her two years there.

Regeneron believes that “innovation can be taught to the next generation,” says Yancopoulos. He notes that many of the company’s top technology innovators are “still in the conference room every day helping nurture the next great scientists.”

Yancopoulos cites Praluent, Regeneron’s new cholesterol-lowering drug, as an example of the next generation of drugs developed by leveraging the wealth of human genetics data. The Regeneron Genetics Center, which opened in 2014, already houses the sequences of more than 100,000 human exomes—the parts of the genome that encode proteins—linked to patient electronic medical records from the Geisinger Health System and other collaborators.

Last year, Novartis invested US\$8.9 billion in R&D, supporting more than 11,000 R&D employees worldwide. Ann Taylor, global head of the program office for NIBR, says the company has cultivated a culture that listens to everyone and looks to multiple sources for the next great idea—from external collaborators to postdocs.

As a group leader at the NIBR Biologics Center in Basel, Switzerland, Darko Skegrog engineers bispecific antibodies to target cancer and modifies antibodies to overcome cancer resistance. “Normally antibodies against cancer recruit natural killer cells, but can we switch up the antibody in a way that it suddenly recruits other cell types to come and kill the cancer cells?” he asks. When his group shared this risky idea with colleagues in Basel and Cambridge, they were immediately given the green light to try it. “This is why Novartis is a great place to work—I have the freedom to explore things and innovate—and with the support of many other groups.”

ALLIANCES STRENGTHEN INNOVATION

Whether it’s through mergers and acquisitions, partnerships, or academic collaborations, top employers find strategic ways to make alliances work to their portfolio’s advantage. Both Regeneron and Moderna represent relatively small but lightning-fast companies whose platform technologies have matured into clinical programs advancing at a rapid clip. A key to both companies’ success has been identifying the appropriate partners for drug development projects.

Driving characteristics of top employers	
2016	2015
1. Innovative leader in the industry	1. Innovative leader in the industry
2. Treats employees with respect	2. Treats employees with respect
3. Loyal employees	3. Loyal employees
4. Work culture values aligned	4. Socially responsible
5. Socially responsible	5. Work culture values aligned
6. Clear vision	

Driving characteristics are listed in descending order of impact on overall employer rankings. The colored backgrounds indicate the characteristics in common for the two years.

PHOTO: © PESHKOVA/SHUTTERSTOCK.COM

This summer, Moderna announced two major deals with pharmaceutical partners to advance projects in oncology and cystic fibrosis. A US\$200 million deal with U.S.-based Merck & Co. would pair Merck & Co.’s immuno-oncology drug Keytruda with mRNA-based personalized cancer vaccines made by Moderna. Moderna has also paired with Vertex Pharmaceuticals (ranked No. 5 in this year’s list), to discover and develop mRNA therapies for cystic fibrosis patients who have a dysfunctional cystic fibrosis transmembrane conductance regulator (CFTR) protein or are missing it altogether.

Both of these collaborations combine the deep disease expertise and experience of a partner with Moderna’s core technology to try to develop breakthrough treatments, says Stephen Hoge, president of Moderna. “We know our technology. But we also understand that we need help from others who know the most about a given disease. So we look to partner wherever we believe it can improve our chance of getting medicines to patients.”

Moderna's leaders like to point out that although the company feels cozy and young like a startup, it has the resources of a much larger operation. As of September, Moderna had US\$1.4 billion in cash assets on hand—due in no small part to these alliances—to invest in its large and diverse pipeline for drug development. “We don't have to limit ourselves. The financial backing we have enables us to move fast and do the right experiments,” says Benenato. “That's unique about Moderna.”

Likewise, Yancopoulos calls Regeneron's alliance with Geisinger Health Systems “a perfect marriage.” Regeneron gains access to high-quality medical records and patient DNA, and in return, Geisinger gets detailed genetic information that helps them improve and anticipate health care for patients.

STRETCHING KEEPS CAREERS LIMBER

Overall, job satisfaction is high among R&D industry workers. Only one-fifth of survey respondents said they were likely to search for a new position in the next year. But more than half of those (54%) gave “career advancement,” “professional growth,” or “seeking new experiences” as the reason behind their potential move. Top employer firms keep employees engaged and challenged by catering to researchers' restless minds.

“All scientists love learning new things, and people learn in different ways,” notes Adam Kievman, head of talent management for Moderna. And so Moderna University, the company's professional development program, increases its offerings by the day. This fall, employees can choose between a 30-hour clinical lecture series on genome evolution, workshops on building a professional brand, and talks on leading group members through change.

Lilly caters to scientists who want to climb the career ladder without becoming the dreaded “M” word—management. The technical ladder track allows researchers to take on more leadership within the company and be promoted for their technical expertise.

Distinguished research fellow Henry Bryant, an immunologist, has hit the pinnacle of the technical ladder at Lilly, with a position equivalent to a senior vice president. He can influence company direction and strategy, he says, but still spends most of his time “dreaming up experiments to unravel a key question, seeing the results, and redesigning.”

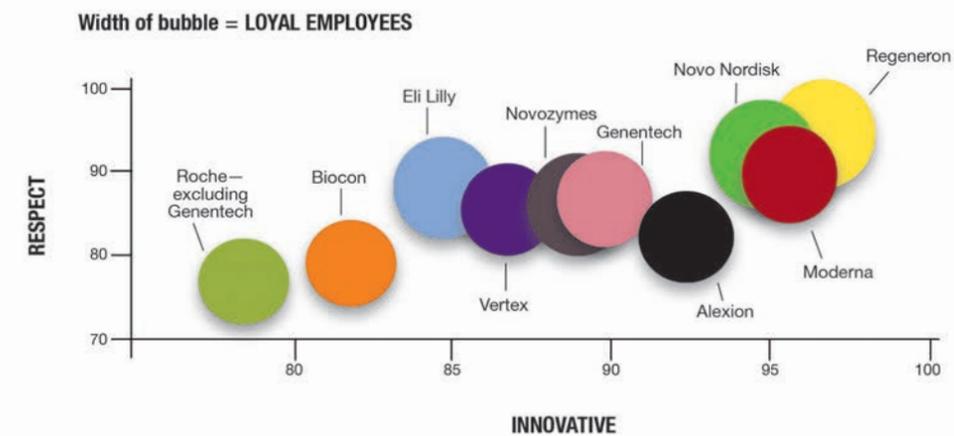
He also says that Lilly's breadth allows employees to make lateral or geographic moves that advance their professional growth. Employees can do work exchanges for six months to two years at another R&D site such as New York, San Diego, Shanghai, the United Kingdom, or Spain. “Working on diabetes in China, employees get to see that it's a very different disease there than it is in the United States,” Bryant says.

Merck employees have opportunities to work across the company's three business sectors, Healthcare, Life Science, and the company's Performance Materials, says Kai Beckmann, chief administration officer. For example, the materials and health care teams are collaborating on the LicriEye project, which aims to develop a cataract treatment using a liquid crystal-based lens.

Merck's globalization means that the company puts a high priority on diversity and inclusiveness among its employees, who are drawn from 122 different nationalities. Merck sees gender, age, and cultural diversity as a source of competitive advantage that brings the right set of people to the conference table to meet challenges, says Garijo. Women make up 41% of the Merck workforce and hold 27% of the company's upper management positions.

“Our talent pool has grown to match the dynamics of our business,” says Garijo. Keeping that talent pool engaged and productive while preventing burnout and stress are key to retaining the best scientists. “We are not only a family-owned company, but a family-oriented company. Work-life balance is one of our top priorities and one of the most important factors bringing people to Merck today.”

Comparison of top ten's top characteristics



Comparison of the top 10 companies on the basis of the top three drivers (scored out of 100):

- Innovative leader in the industry (x-axis),
- Treats employees with respect (y-axis),
- Has loyal employees (bubble width).

PROMOTING BETTER BALANCE

The fact that a growing portion of the industry's workforce comes from the Millennial generation means that many employees grew up with a smartphone in their hands and are used to maintaining a constant connection to their work colleagues, family, and friends. That connectivity can be both a boon to productivity and a fast track to burnout. Top employers have figured out how to help their researchers integrate their work and home lives so that projects proceed and time off is protected and restful.

At Regeneron and Novo Nordisk, leaders recognize that fast-paced work carries a higher risk for employee exhaustion, so they encourage taking personal time and working from home when possible. They also carve out a hard boundary around weekends and vacation time.

Two years ago, Novartis introduced some forced downtime into its yearly calendar, reserving two weeks in the middle of summer for a company-wide break from formal meetings. This “Rejuvenation Period” gives employees a window to pursue a backburner project, dive into a literature search, or simply catch up with colleagues over lunch. Skegro used his time this summer to “dig into intellectual property, look at what our competition is doing, and see what we can do to be a strong competitor.”

Lilly, like many top employers, offers traditional work-life balance options for flexible scheduling, part-time weeks, job shares, and on-site daycare to support working parents. But, says Terri Grant, vice president of human resources for global R&D, it's the on-campus amenities that employees take advantage of the most for relieving stress. Indianapolis employees jog on the track, play a pickup soccer game, or grab a beer on the REVelI pub's patio; and San Diego employees have space to store their surfboards. “When you're really chewing on a problem, there's nothing better than to be able to go out and run for 15 minutes,” to literally jog an idea to the surface, says Lilly research scientist Jennifer Howell.

Other ways employers help workers stay balanced include providing backup caregiving for sick children or aging relatives (Novartis), weekly deliveries of fresh fruit (Novo Nordisk), and on-site counseling when employees feel overwhelmed by life's pressures (Merck). With its headquarters in Denmark, Novo Nordisk has some work-life balance supported by national policy: The company offers yearlong, fully paid maternity leave for new mothers (or split with new fathers) and a 37-hour workweek. When senior scientist Shan Ren took her maternity leave for her second child, she naturally worried that she might lose her place on her team as her project moved ahead. Instead, she says, her group helped her transition and briefed her on new aspects that had developed. “Looking back, I didn't feel like I lost anything. It was a year of joy” to be at home with a new baby, she says.

IT'S THE LITTLE THINGS

Respecting employees' time, supporting working parents, and encouraging healthy, active lifestyles are par for the course for top employers. It's a recipe shown to attract loyal employees who want to work for socially responsible companies. But it's also the little things that companies provide as perks or fun benefits that keep employees happy and motivate them to recruit their colleagues.

Both Novartis and Lilly have employee networking groups that bring together people with common interests, goals, or backgrounds. Distinguished research fellow Jirong Lu is part of the 700-member Chinese Culture Network at Lilly: "It is one of the things that makes you feel like Lilly is a family."

There's also a family feel to the ice cream truck that pulls up in Cambridge each Tuesday in the summer to treat Novartis employees. Moderna's catered daily lunches with selections like aloo mutter, Brazilian chorizo, and quinoa beet salad keep workers breaking bread together and trading ideas. And lucky Regeneron raffle winners can enjoy prime seats at a New York Yankees or Mets baseball game with their kids.

All top employers offer ways to give back to the community, whether it's building a community lab space for local middle- and high-school students (Novartis) or sending employees on two-week global service projects (Lilly). Lu is typical of survey respondents who seek companies with values that reflect their own: "Integrity, respect for people, and excellence—I'm really proud to work for a company that shares those values."

For researchers, of course, the most important "bonus" their jobs provide is feeling that their science is making a real difference.

At Novo Nordisk, senior scientist Ren works on the company's oral formulation project in Måløv, Denmark. She was attracted by the groundbreaking challenge of putting large peptides or proteins stably into a tablet form that could be safely absorbed—but not degraded—by the gut. Either GLP-1 (glucagon-like peptide-1)—which stimulates insulin secretion—or insulin in tablet form would revolutionize treatment for patients who need multiple injections per day, she says.

Ren admits that many people are skeptical about whether peptide drugs can be made into tablets. Her team not only believes it will work, but that they will be the ones to deliver the first successful formulation. "We are systematically and seriously working on this concept," she says, and people frequently ask her when the first tablets might be approved. "To know that I am doing something that will bring a big change to so many patients makes me feel really proud."

For researchers, of course, the most important "bonus" their jobs provide is feeling that their science is making a real difference.



A TRANSITION FROM POSTDOC TO INDUSTRY

BY DAVID G. JENSEN
NOVEMBER 9, 2016

I recently had the chance to catch up with neuroscientist Ana Mingorance after she spoke to postdocs about her experience transitioning from academia to industry. After earning her Ph.D. and doing a postdoc, Ana went on to work in discovery research at UCB, a global biopharma company,

and later founded Dracaena Consulting, a company that helps find better therapies for neurological and rare diseases. She is also the scientific director of the Dravet Syndrome Foundation, a nonprofit patient organization focused on research into the rare disease for which it is named.

In her talk, Ana zeroed in on several lessons that are critical for postdocs to think about so that they can make the best use of their time in academia and set themselves up to make the move to industry as smoothly and successfully as possible. Here are some of her pointers.

Choose the right adviser. When Ana was deciding on a postdoc, she knew that there were a number of things she should do during that time to make the future transition to industry as easy as possible. She also knew that doing these things would be much harder if she didn't have the support of her principal investigator (PI). Rather than leaving this to chance, she took the bull by the horns with her new prospective PI. "The day I first met my postdoc PI, I asked him a question that turned out to be decisive for my future career," she said. "'I want to move to industry after my postdoc,' I told him. ... 'Would you support me?' This question was important to me and I didn't want any surprises later."

"Interviews are a two-way street, so you need to use them to get a feeling of whether that PI will help you succeed," she said. "Perhaps some readers will find my direct question too straightforward. If that's the case, they might ask the prospective PI instead about her connections and collaborations with industry, and how she feels about her trainees going to work for a company after they graduate."

Too many newly graduated Ph.D.s will grab up the first postdoc they can find, only thinking about their interest in the work involved and not focusing enough on how that PI's attitudes will fit within their career plan. But choosing a supportive PI is one of the best investments you can make in your career.

Choose a project that is of interest to industry employers. If you are interested in a research position in industry, you will probably be hired for one of two types of knowledge: either because you know a disease very well or because you know a useful technique. "Ideally you'll have both," Ana told me. "And when you do, you're able to package it all up into a great job talk—something that gets the attention of employers. You should be thinking about that job talk from the day you select your project."

If you are already years into your project and it is too late to change, don't despair. Try conducting some informational interviews with industry scientists and asking them to help you identify where your expertise will be useful within industry. After a couple of conversations with industry professionals, you'll find out what they see in your CV and you can focus on that.

Use your university's resources. Ana tells me that one of her best experiences from her postdoc was joining the postdoc association and getting involved in organizing a career seminar series. "This helped me learn about other people's career choices and their motivations, get a feeling for what I might like personally, and gave me a great network of informal advisers," she told me. Listening to what others did and the mistakes they'd avoid if they could do it again is always an eye-opening experience.

Job Search Essentials

Questions

More broadly, Ana recommends making sure that you get the most out of what your university has to offer. For instance, she says, “I also worked closely with our technology transfer office and got to draft two patents—an experience I didn’t enjoy at first, but that later became important to industry hiring managers.” If opportunities like Ana’s are not available in your area of interest, volunteer to make them happen! Of course, that is so much easier when you have a supportive PI.

Network to uncover opportunities. No “Tooling Up” reader needs to be reminded that networking is important. Still, when you think about how many positions are not seen publicly, you begin to realize why this is. “Positions are often created for you by people who have met you and want to bring you on board—that’s such a large percentage of Ph.D. hires,” Ana says. I would agree with her.

So, she continues, “if you are only following online advertised positions, you are only seeing the tip of the iceberg. I made sure I would talk to people from industry at every conference I attended. Because I’m rather shy, I tricked myself into talking to them by reviewing the attendees list for the conferences before the meeting and sending them an email asking them to meet over coffee. That way I was sure I wouldn’t shy away at the very last minute.”

Sure, it takes guts, but even the introvert can accomplish this. It can help to think of networking as a necessary tool for your long-term career goals, and not just in the job market.

Start looking for a job before you need one. Ana’s transition didn’t happen overnight. In fact, there were 13 months between the time she sent her first job application to the time that she received an offer. “All of my interview invitations seem to have been bunched up at the very end, so it was a very stressful process,” she says. “And a complicating factor for me is that I was doing my postdoc in Canada but looking for a job back in Europe.”

“You might find out that you can get your ideal job much sooner than I did, or perhaps you are geographically restricted so that it ends up taking you even longer. But my main lesson here was not to underestimate the unpredictability of the whole job search process. I had to learn that frustration and stress are always with you. My recommendation is that you start very early and that you have back up plans in place.”

Create luck. If luck is about being in the right place at the right time, Ana is proof that you can create luck by “getting busy,” as she calls it—in other words, by getting involved in extracurricular activities, attending conferences, and meeting people. That’s how Ana created the circumstances that led to her job offer.

“At the end, the way I got my first job in industry was very unexpected,” she says. “I reached out to a scientist that I had met just once at a conference and asked him to help get me in touch with someone at his company to ask about potential positions. Instead, he asked an external recruiter to phone interview me for an opening—one that I was not qualified for. What my contact had done was to get me on the radar of the recruiter, even if it was for the wrong position, and that paid off.”

“A month later, that recruiter contacted me again. My target department was expanding and this person had told them that she already knew the ideal candidate. It all moved very fast. ... I went from phone interview to an interview in Europe to an offer within weeks. They didn’t even wait to look for other candidates. I had landed in the hidden job market!”

In my discussion with Ana, what stood out to me is that she learned early on that people are more important to your career than techniques or specific scientific knowledge. She closed our conversation with this advice: “As scientists, we risk overestimating the importance of one more paper or a higher impact factor to our career, and underestimate the importance of having a supportive manager or casting a wide network of contacts through extracurricular activities. So my advice to make your career as easy as possible is to surround yourself with people that want to see you succeed. And, get busy to get lucky!”

Questions to Ask Yourself

- What do you like to do? What energizes you?
- Do you want to do lab work/research?
- Where do you want to work?
- What do you want to wear to work?
- How often do you want to change projects?
- What sorts of hours do you want to work?
- Are you willing to travel?
- What sort of funding situation do you want to be in?
- What nonscience interests or skills do you want to use?
- How important is your income level? Job security?
- What sort of stress levels do you want to deal with?
- Would you like to work independently or as part of a team?

Questions to Ask in an Informational Interview

- What attracted you to this field?
- What do you like most or least about this position or field?
- Describe a typical day or week.
- What steps did you take to break into this field?
- What skills are most helpful in your job? How can I develop them?
- To what professional associations do you belong?
- What advice would you give somebody interested in your line of work?

Questions You Might Be Asked at an Interview

- Tell me about yourself.
- What are your strengths?
- What are your weaknesses?
- Why this organization? Why this job?
- What can you do for us?
- Why are you leaving research? (if applicable)

Questions to Ask at an Interview

- What does the job entail?
- What are the opportunities for advancement?
- How will you help with my professional development?
- What are the future goals for the organization?
- What are the roles of different team members?
- Tell me about the culture of the organization.



Check out the job listings at
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FROM THE JOURNAL SCIENCE 

AAAS Mass Media Science and Engineering Fellows Program

www.aaas.org/mmfellowship

Write for the
Los Angeles Times

Publish in
WIRED

Work with teams at
NPR

Join the science desk at
National Geographic

The AAAS Mass Media Science & Engineering Fellows Program seeks to increase communication skills in students and scientists. From grant writing to interacting with their community, these skills will benefit a student's career path and increase public understanding of science and technology.

The Fellowship places advanced undergraduate, graduate, and postgraduate scientists, engineers, and mathematicians at media sites nationwide to work as science reporters for 10 weeks. Past sites have included the *Los Angeles Times*, *WIRED*, *National Geographic*, and NPR. Fellows use their academic training in the sciences as they research, write, and report today's headlines, sharpening their abilities to communicate complex scientific and technical issues to the public.

Spanish Language Fellow(s) Initiative

AAAS initiated the Spanish Language Fellowship in 2014 to focus on serving the growing Latino populations of the U.S. by supporting science communication and education in the language of those communities and by addressing issues of importance to them. Once again, we are recruiting Spanish language Fellow(s) who will be able to expand the work with mainstream Spanish news outlets to bring science news to Spanish-speaking communities.



✉ MMFellowship@aaas.org

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🐦 @AAASMassMedia



WWW.AAAS.ORG/MMFELLOWSHIP

LOCATION

Various cities across the United States

PRIMARY CONTACT DETAILS:

AAAS Mass Media Science & Engineering Fellows Program
1200 New York Ave, NW | Washington, DC 20005

Email: MMFellowship@aaas.org | Phone: 202.326.6700

ABOUT US

This highly competitive program strengthens the connections between scientists and journalists by placing advanced undergraduate, graduate, and postgraduate level scientists, engineers and mathematicians at media organizations nationwide for 10 weeks during the summer. Fellows have worked as reporters, editors, researchers, and production assistants at such media outlets as the *Los Angeles Times*, *WIRED*, National Public Radio, *National Geographic* and *Scientific American*. The AAAS Mass Media Fellows use their academic training in the sciences as they research, write and report today's headlines, sharpening their abilities to communicate complex scientific issues to nonspecialists. Participants come in knowing the importance of translating their work for the public, but they leave with the tools and the know-how to accomplish this important goal. Over its 40 year history, the program has supported 650 Fellows.

Criteria:

1. Applicants must be enrolled as students (upper-level undergraduate or graduate) or postdoctoral trainees at a university—or be within one year of a completed degree—in the life, physical, health, engineering, computer, social sciences or mathematics and related fields. If you have questions about your eligibility, email rcorlew@aaas.org.
2. Students enrolled in English, journalism, science journalism, or other nontechnical fields are not eligible for the AAAS Mass Media Fellowship, BUT these students may be eligible for the Minority Science Writers Internship.
3. Applicants must be U.S. citizens or already hold visas that allow them to receive payment for work during the summer. AAAS cannot assist in obtaining/retaining visas.
4. Successful applicants are required to attend an orientation at AAAS headquarters at the beginning of the summer (early June) and a wrap-up session at the end of the summer (late August). They will prepare reports on the progress of their fellowships throughout their placement.

KEY RECRUITING AREAS

- Agriculture
- Animal Studies
- Anthropology
- Applied Mathematics
- Astronomy and Planetary Sciences
- Atmospheric Science
- Biochemistry
- Biology (Cell, Molecular, Developmental)
- Chemistry
- Climate Science
- Computer Sciences
- Ecology
- Engineering
- Environmental Sciences
- Genetics
- Geosciences/Earth Sciences
- Material Sciences
- Mathematics
- Medical Studies
- Microbiology/Immunology/Virology
- Nanoscience
- Neuroscience
- Oceanography/Marine Sciences
- Pharmacology/Toxicology
- Physical Chemistry
- Physics
- Physiology
- Plant Biology/Physiology
- Statistics
- Any Scientific Field



Science & Technology Policy Fellowships

GO.STPF-AAAS.ORG/SC

LOCATION

Washington, DC

PRIMARY CONTACT DETAILS:

AAAS Science & Technology Fellowships
 1200 New York Ave, NW | Washington, DC 20005
 Email: fellowships@aaas.org | Phone: 202.326.6700

ABOUT US

Enhancing Policy, Transforming Careers

AAAS Science & Technology Policy Fellowships (STPF) pursue a vision of public policy informed by science and technology for the benefit of society. Fellows bring a common interest in learning about science policy and willingness to apply their training in new arenas while contributing to policy at the national and international levels. Fellows serve yearlong assignments in one of the three branches of the federal government. Learn how you can contribute to public service while developing valuable career-enhancing skills and networks!

Application Deadline: November 1, 2017

Fellowship Year: September 1, 2018–August 31, 2019

KEY RECRUITING AREAS

Doctoral-level degree (Ph.D., M.D., D.V.M., D.Sc., etc.) in any of the following:
 Social and Behavioral Sciences
 Medical and Health Sciences
 Biological, Physical and Earth Sciences
 Computational Sciences and Mathematics
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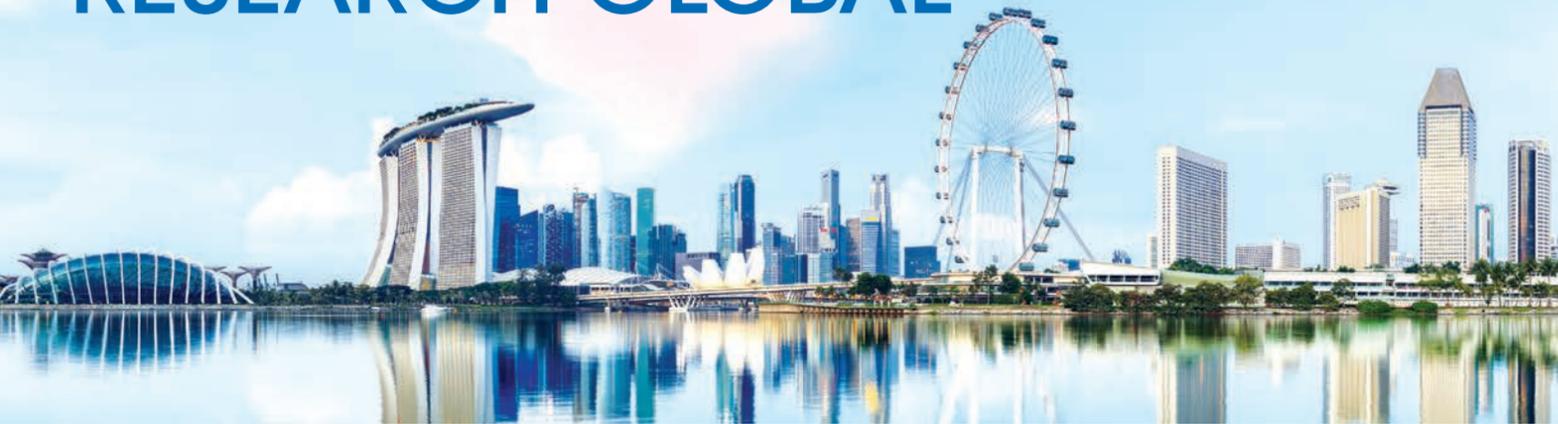
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Key Areas and Career Opportunities

With HBMS as a key research priority of Singapore, there are numerous career opportunities available. Clinician scientists, academic clinicians and researchers in the following areas are currently highly sought after:

- Diabetes, Metabolic Disorders
- Infectious diseases, Immunology
- Neuro-degenerative Disorders

Leading research institutes and companies in Singapore are seeking quality faculty members and researchers, as well as clinician scientists to transform Singapore into a strong and sustainable biotech cluster. They include:

- A*STAR research institutes such as Singapore Immunology Network (SIgN)
- NUS Saw Swee Hock School of Public Health
- NUS Yong Loo Lin School of Medicine
- National University Health System (NUHS)
- SingHealth and Duke-NUS Academic Medicine partnership

Commercial research outfits including:

- MSD Translational Medicine Research Unit
- Chugai Pharmabody

Access to Funding Programmes

To raise HBMS benchmarks in Asia, competitive research funding and award platforms have been set up to recognise outstanding talent. Here are two key awards:

- **The Singapore Translational Research (STAR) Investigator Award**

Administered by the National Medical Research Council (NMRC), this prestigious award includes a five-year research grant of up to S\$8 million (US\$5.6 million).

- **The Clinician Scientist Award (CSA)**

This award provides up to five years of salary and strong funding support for selected outstanding clinician scientists to enable them to carry out internationally competitive translational and clinical research.



Let Contact Singapore link you up with leading research institutes and companies in Singapore.

Speak to our Contact Singapore representatives onsite at the fair. See you!



You can also connect with Ms Kelly Tan, Area Director, North America, via LinkedIn at www.linkedin.com/in/kellytancs

Contact Singapore 
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WWW.CONTACTSINGAPORE.SG

LOCATION

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ABOUT US

Contact Singapore is an alliance of the Singapore Economic Development Board and Ministry of Manpower. We engage overseas Singaporeans and global talent to work, invest, and live in Singapore.

Contact Singapore actively links Singapore-based employers with professionals to support the growth of our key industries. We work with investors to realize their business and investment interests.

For information on working, investing, and living in Singapore, please visit www.contactsingapore.sg or contact our worldwide offices.

KEY RECRUITING AREAS

Singapore has numerous opportunities available for Clinician Scientists, Faculty, and Researchers in the following areas:

Bioinformatics

Health Services Research, including Geriatrics

Translational Research in:

- Cancers
- Cardiovascular Diseases
- Diabetes/Metabolic Disorders
- Infectious Diseases
- Neurological and Sense Disorders

To start your search for career opportunities in Singapore, visit www.contactsingapore.sg/jobs
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YOUNG INVESTIGATORS AWARDS AND POSTDOC



opportunities in Brazil

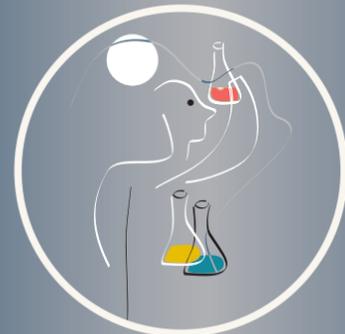
The São Paulo Research Foundation (FAPESP), one of the leading Brazilian agencies dedicated to the support of research, has ongoing programs and support mechanisms to bring researchers from abroad to excellence centers in São Paulo:

The Young Investigators Awards selects scientists who have had a few years of post-doctoral experience and demonstrated research leadership capabilities to lead the creation of new researchers groups in São Paulo, Brazil. The selected candidates will start and lead their own research groups working in internationally competitive themes – www.fapesp.br/yia

FAPESP Post-Doctoral Fellowship is aimed at distinguished researchers with a recent doctorate degree and a successful research track record. Postdoc fellowships are available when calls for applications are issued internationally, or as individual fellowships requested on demand.

In the first case, positions are advertised at www.fapesp.br/opportunidades and candidates are selected through international competition. In the second, the proposal must represent an addition to a pre-existent research group and should be developed in association with faculty in higher education and research institutions in São Paulo.

MORE INFORMATION
www.fapesp.br/yia
www.fapesp.br/en/postdoc



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PHONE: +55-11-3838-4000 • WWW.FAPESP.BR



WWW.FAPESP.BR/EN

LOCATION

São Paulo, SP, Brazil

PRIMARY CONTACT DETAILS:

Rua Pio XI, 1500 | Alto da Lapa
CEP 05468-901 | São Paulo, SP – Brazil
Phone: +55-11-3838-4000

ABOUT US

The São Paulo Research Foundation (FAPESP) is a public taxpayer-funded foundation that has the mission of supporting research in all fields of knowledge within the State of São Paulo, Brazil.

The State of São Paulo has a population of 44 million and generates 32% of Brazil's GDP. Under the state constitution, 1% of all state taxes are appropriated to fund FAPESP. The stability of the funding and the autonomy of the foundation allow for an efficient management of resources, which has had a sizable impact.

The effectiveness of research carried out in São Paulo is the combined result of several factors that include the quality of the state's universities and institutes, the extraordinary productivity of its researchers, high rates of participation by private, São Paulo-based companies that function within the state's R&D outlays, São Paulo's outstanding infrastructure, and the existence of FAPESP, a well-designed state research-sponsoring agency governed and maintained by its directors with excellence and autonomy during its 54-year history.

Within this context, in 2016 FAPESP applied around \$PPP 630 million in scholarships and grants.

In accordance with the Foundation's funding objectives, 39% of expenditure was earmarked for advancing knowledge, 8% was dedicated to supporting research infrastructure, and 53% was allocated to supporting application-driven research.

FAPESP works in close contact with the scientific community: All proposals are peer reviewed with the help of panels composed of active researchers from each specific area.

Many times scientists in São Paulo submit proposals which are carefully analyzed and, if deemed strong in academic terms, are shaped by the foundation into research programs that will constitute a set of related research projects in a given area.

Since FAPESP's mandate is to foster research and scientific and technological development in the state, ideas for programs that couple world-class research with contributions that will impact social problems are welcome.

FAPESP encourages researchers from throughout the world to take advantage of the opportunities for the Young Investigators Awards (www.fapesp.br/en/yia) and for postdoctoral fellowship (www.fapesp.br/opportunidades and www.fapesp.br/en/postdoc).

KEY RECRUITING AREAS

Earth Sciences
Engineering
Exact Sciences
Life Sciences
Physical Sciences
Social Sciences

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WWW.JOUNCETX.COM

LOCATION

Cambridge, MA

PRIMARY CONTACT DETAILS:

1030 Massachusetts Avenue | Cambridge, MA 02138

ABOUT US

Jounce Therapeutics, Inc. is a clinical-stage immunotherapy company dedicated to transforming the treatment of cancer by developing therapies that enable the immune system to attack tumors and provide long-lasting benefits to patients. Through the use of our Translational Science Platform, we first focus on specific cell types within tumors to prioritize targets, and then identify related biomarkers designed to match the right therapy to the right patient. Jounce was launched in 2013 with funding from leading life sciences investor Third Rock Ventures. In July 2016, Jounce announced a global strategic collaboration with Celgene Corporation. This partnership, which included a \$225 million upfront payment and a \$36.1 million equity investment, is primarily focused on co-developing and co-commercializing innovative biologic immunotherapy treatments for patients with cancer.

KEY RECRUITING AREAS

Research & Development
Cancer Immunotherapy



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WWW.MODERNATX.COM/CAREERS

LOCATION

Cambridge, MA and Norwood, MA

PRIMARY CONTACT DETAILS:

Corporate Headquarters
320 Bent Street
Cambridge, MA 02141

Email: careers@modernatx.com

Phone: 617-714-6500

ABOUT US

Moderna is a clinical stage pioneer of messenger RNA Therapeutics™, an entirely new in vivo drug technology that directs the body's cells to produce human proteins, antibodies and novel protein constructs, which are in turn secreted or active intracellularly. With its breakthrough platform, Moderna is developing mRNA vaccines and therapeutics to address currently undruggable targets and deliver a new class of medicines for a wide range of diseases and conditions. Moderna is developing and plans to commercialize its innovative mRNA medicines for infectious diseases, cancer (immunooncology), rare diseases, cardiovascular disease and pulmonary disease, through its ecosystem of internal ventures and strategic partners.

Headquartered in Cambridge, Mass., privately held Moderna currently has strategic agreements with AstraZeneca, Merck, Alexion Pharmaceuticals and Vertex Pharmaceuticals, as well as the Defense Advanced Research Projects Agency (DARPA), an agency of the U.S. Department of Defense; the Biomedical Advanced Research and Development Authority (BARDA), a division of the Office of the Assistant Secretary for Preparedness and Response (ASPR) within the U.S. Department of Health and Human Services (HHS); and the Bill & Melinda Gates Foundation. To learn more visit www.modernatx.com.

KEY RECRUITING AREAS

Research
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LOCATIONS

Basel/Kaiseraugst (Headquarters), Rotkreuz, Schlieren, and Reinach in Switzerland, affiliates in more than 100 countries.

PRIMARY CONTACT DETAILS:

F. Hoffmann-La Roche Ltd.
Grenzacherstrasse 124 | CH-4070 Basel | Switzerland

ABOUT US

Roche is a global pioneer in pharmaceuticals and diagnostics focused on advancing science to improve people's lives.

Roche is the world's largest biotech company, with truly differentiated medicines in oncology, immunology, infectious diseases, ophthalmology, and diseases of the central nervous system. Roche is also the world leader in in vitro diagnostics and tissue-based cancer diagnostics, and a front-runner in diabetes management. The combined strengths of pharmaceuticals and diagnostics under one roof have made Roche the leader in personalized healthcare—a strategy that aims to fit the right treatment to each patient in the best way possible.

Founded in 1896, Roche continues to search for better ways to prevent, diagnose, and treat diseases and make a sustainable contribution to society. Twenty-nine medicines developed by Roche are included in the World Health Organization Model Lists of Essential Medicines, among them life-saving antibiotics, antimalarials, and cancer medicines. Roche has been recognized as the Group Leader in sustainability within the Pharmaceuticals, Biotechnology & Life Sciences Industry eight years in a row by the Dow Jones Sustainability Indices.

The Roche Group, headquartered in Basel, Switzerland, is active in over 100 countries and in 2016 employed more than 94,000 people worldwide. In 2016, Roche invested CHF9.9 billion in R&D and posted sales of CHF50.6 billion. Genentech, in the United States, is a wholly owned member of the Roche Group. Roche is the majority shareholder in Chugai Pharmaceutical, Japan. For more information, please visit www.roche.com.

KEY RECRUITING AREAS

Biochemistry
Bioinformatics
Biology
Biostatistics
Biotechnology
Chemical Engineering
Chemistry
Life Sciences
Medicine
Molecular Biology
Pharmacy
Pharmacology
Physics
Regulatory Affairs
Stem Cell Research
Toxicology

DISEASE AREAS

Immunology
Infectious Disease
Inflammation
Molecular Information
Neuroscience
Oncology
Ophthalmology
Translational Medicine



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TÜBİTAK

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LOCATION

The **Turkish Research Area** welcomes all researchers from universities, research institutes, businesses, and other nonacademic research-performing organizations, including civil society organizations from all countries.

PRIMARY CONTACT DETAILS:

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ABOUT US

As the main funding body in Turkey, TÜBİTAK aims to inform potential researchers about the various funding opportunities in Turkey. Our focus is on European and Turkish funding opportunities for studying brain circulation and on researchers' career development including the following funding schemes:

The European Research Council (ERC) Grants: Scientific excellence is the sole criterion on the basis of which ERC frontier research grants are awarded. Applications can be made in any field of research. Individual research teams led by a single Principal Investigator (PI) can apply for funding. PIs from anywhere in the world can apply for an ERC grant.

Marie Skłodowska Curie Individual Fellowships (MSCA-IF): The Marie Skłodowska Curie Actions (MSCA) provide grants for all stages of research careers and encourage transnational, intersectoral, and interdisciplinary mobility. IFs fund researchers looking to enhance their career development and prospects by working abroad. All research areas can be funded.

Bilateral S&T Cooperation Schemes between Turkey and the United States: Turkey and the United States have engaged in bilateral cooperation in science and technology (S&T) since 1996. Because of the two countries' efforts to improve their existing S&T cooperation, opportunities are provided for working with the following organizations:

- National Science Foundation (NSF)
- National Cancer Institute (NCI)
- Department of Energy (DOE)

National Funding Opportunities—TÜBİTAK Science Fellowships and Grant Programs (BİDEB): TÜBİTAK has been providing support for scientific and technological research with the aim of assisting national development by providing many kinds of fellowships and grants through BİDEB. These grants involve creating opportunities for developing the capacities of scientists and researchers, rewarding outstanding success, and granting national and international scholarships:

- Research Fellowship Programme for International Researchers
- Fellowships for Visiting Scientists and Scientists on Sabbatical Leave
- Reintegration Research Fellowship Programme

KEY RECRUITING AREAS

Open to all scientific areas—
bottom-up approach

Open for all experienced researchers who
have a Ph.D. or at least four years full-
time equivalent research experience

Recruitment in both academic and
nonacademic host organizations
located in Turkey

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