

Inspiring the Next Generation



To solve the industry's biggest challenges, healthcare companies need to attract and engage the brightest talent.

workforce in 2020, they are no longer “the next generation.” Enter Gen Z, born between 1995 and 2010; they comprise 25% of the U.S. population.

This next gen workforce is macro-aware, realistic, flexible, and extremely sophisticated in its approach toward technology and innovation — after all they grew up using smart screens and real-time response. They are creative and private, but appreciate mentorship. They are motivated by money and security, but demand respect for diversity and social fairness. They are optimistic about their future. According to Partnership Employment,

FAST FACT

MILLENNIALS WILL FORM 50% OF THE GLOBAL WORKFORCE IN 2020.

Source: Telappliant

they are impatient with feedback, competitive, less team-oriented and more entrepreneurial, and look for quick advancement. They are brand and reputation-oriented.

Gen Tech, Gen Wii, Net Gen, Digital Natives — these are some of the descriptors used to identify the next generation of the workforce. While Millennials will account for 50% of the global

Attracting the Workforce of the Future



RON GARROW
Executive VP and
Chief Human Resource
Officer,
PPD

We're fortunate to work in an industry that is universally relevant in its mission: to improve health. No matter your job within the clinical research industry, we are united by a common desire for continuous improvement and to get therapies to patients faster. We are constantly bending the time and cost curve of drug development, while remaining committed to quality and patient safety.

This perspective matches the mindset of Generation Z, which is a group of individuals who are fiercely socially conscious and committed to challenging the status quo to pursue their ethical ideals. The opportunities are endless for this type of game-changing attitude within an industry like ours. I have no doubt this next generation will be motivated by the opportunity to be connected to this critical mission, while being encouraged to pursue solutions through bold new strategies.

One unique characteristic of Gen Z is that they have had the benefit of growing up as digital natives. They are literally wired, or maybe it's better to say they are wireless, with the technical inclinations required to support the growing needs of our customers and sustain the level of success our industry has had in discovering and developing new life-altering therapies. Skills that have been ingrained in this generation seemingly from birth through their participation in social media communities, the constant influx of new smartphone apps, and the belief that one person can change the world, will help them flourish in a workplace that requires interconnectivity and a nimble attitude.

Every generation has surpassed the generation preceding it — and this next generation will undoubtedly do the same. The clinical research industry is one that offers the ability to feel personal pride in your individual role, while knowing that you are making a real impact in people's lives around the world.

LAURIE BARTOLOMEO
Executive VP, Creative Director, Dudnyk



Despite the bad rap that millennials get in the business world, I, for one, am often surprised and inspired by their desire to do good things. They are not interested in doing work for the sake of work. Although they want to be adequately compensated, and as early in their career as possible, what

seems to drive their interest in one industry over another is the meaning behind the work. It is our job as industry veterans to encourage that interest by showing them the tremendous impact our work can have on people's lives. Whether it is advocating for the approval of life-changing therapies, helping to find and treat patients who may otherwise be missed, or educating physicians about the many unknown challenges patients face and their role in overcoming those challenges — there is quite a bit of meaning and fulfillment to be found in healthcare marketing and communications. We can draw more of the next generation into our workforce when we help them connect what we do to the big- ▶

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► ger picture, which can be easy to lose sight of on a daily basis. We have to look beyond the dollars and cents to the things that are fueled by the dollars and cents: the research, the science, the progress. We also have to look toward our ability to help patients learn to advocate for themselves and for their health; to help physicians stay abreast of the latest treatments and methodologies; and ultimately, to help people live longer, happier, healthier lives. It is these types of reminders that young people need not only to consider joining our field, but also to stay motivated and engaged once they've become a part of it. That, and a heck of a lot of promotions and salary increases.



BILL BYROM
VP Product Strategy
and Innovation,
Signant Health

The next generation can be inspired by looking ahead. From a technology perspective, this is a really exciting time to join the industry. We are seeing new, exciting sensors and wearables being developed to diagnose, detect, and measure more aspects of health and disease. This brings huge potential in how we leverage these technologies to make better measurements, or to measure things we previously couldn't. Ultimately, this provides deeper insights in understanding the effects of new treatments. We also see innovation and invention in the way that existing technologies are being used to provide novel health outcomes. For example, the accelerometer in a smartphone — used to flip display between portrait and landscape when the phone is rotated — can also be used to measure the degree of tremor a Parkinson's patient is exhibiting. Another example is with video games. Traditionally used for entertainment, video games can also be used to derive measurements of cognitive processing in ADHD and Alzheimer's disease. In fact, motion-based computer game platforms like the X-Box enable applications to be designed that track the movement of limb joints in order to monitor progress in stroke rehabilitation. But that's not all. There is also a drive to leverage

technology to make participating in a clinical trial more convenient, from FaceTime-like applications for patients to have virtual visits with their site, to transportation services to aid their access to the study site. This innovative environment makes it an exciting time to join the industry as a technologist, with an exciting future ahead.



MELISSA MAURIBER
VP, Clinical Operations
Quality and Talent
Development, Advanced
Clinical

We believe that the next generation is already inspired to join the clinical research industry. We are seeing interest in the growing number of colleges and universities offering programs in clinical research and regulatory compliance today versus 10 years ago. Students are learning about drug development and clinical research as a career choice before they graduate. Even before university level, early education is investing in STEM programs to stimulate interest in the areas that we are targeting. As hiring organizations, we need to empower these graduates and give them the opportunity to innovate. They are the resources for the future who will be working to cure diseases and ensure that research is conducted safely. We collectively have to do a better job of providing the opportunities for more entry-level jobs based on competencies and skills so they can break into our industry. Today's generation of young adults has experienced the value of safe and effective treatments for various diseases and illnesses. Realizing the benefits they have received from drug development, this generation will be able to enhance and develop new tools and technologies to take our industry to the next level. Scientist Albert Szent-Gyorgyi said, "Research is to see what everybody else has seen, and to think what nobody else has thought." We look to this bright generation as the momentum we need to improve lives and provide hope.



CAROLYN MORGAN
President,
precisioneffect

Natural forces within us are the true healers of disease — Hippocrates. To play a part,

whether direct or indirect, in helping make better the lives of patients is a true mission. And the next generation will be like those before it — unwilling to settle, undeterred by difficulty, and determined to make living better. Our industry offers this hope today more than ever before thanks to great scientific breakthroughs. As we continue to unpack the miracles associated with the human genome project and next gen sequencing, we are seeing discoveries and results like never before. Diseases previously considered permanent or fatal are being reversed and managed. This is just the tip of the iceberg; with discovery accelerating we see more and more examples of tailored medicines for smaller patient subtypes within larger disease categories. Gone are the days of one for all and all for one drugs. The noise today around pharma and its pricing is overshadowing the results and impact it has made on lives. We need to change the dialogue, and while PhRMA's #GOBOLDLY is a start, we need more support and examples for people to grasp. We need grassroots and social media efforts that display the good of the industry while acknowledging the business that it is. The next generation will accept business needs too, but they need all the cards on the table. Once done, they then will pick up this mission and find the force within to help us heal more diseases.



CRAIG RAYNER
Senior VP and Co-lead
Certara Global Health,
Certara

People intrinsically want to create a meaningful difference in the universe. They also want to learn and develop professionally and be trusted and empowered. We are ambitious about finding the right balance between business performance and autonomy, mastery and purpose; the key engagement drivers for our talent. My purpose has always been to make a difference in patients' lives. Since I co-founded Certara Global Health in July, my focus has been on applying our talented people and technological horsepower to help achieve equity in health for all people worldwide. We are endeavoring to ►

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► promote mastery in our field by creating programs that teach precisely the skills that new scientists embarking on a career in model-informed integrated drug development will need. We teach online classes and in-person workshops through Certara University and the Certara Professional Certification Program. We have established Certara New Investigator Awards, fellowships with Monash University in Australia, a professorship at the University of Florida, and eight centers of excellence around the world. Supporting autonomy requires commitment from management to mentoring and development of employees at all levels. Once employees have mastered the requisite skills, meaningful contribution to virtual drug development teams, where colleagues are recruited for their expertise regardless of their location globally, is a tangible reality.



PETER SANDFORD
Executive VP, NXLevel
Solutions

The pharmaceutical industry holds the potential to be a desired career for generations to come. Few jobs offer the self-fulfillment of knowing that one's daily work beneficially affects the lives of up to millions of people. The first step in inspiring the next generation is to raise awareness of those opportunities as early and consistently as possible. Smart, motivated young people want to work and contribute to organizations that they know make a difference in their world.

Colleges, universities, and even high schools need access to the information and tools for them to serve as "life-sciences champions." Partnerships with educational institutions create opportunities for students to learn first-hand of the rewards of a career in pharmaceutical research, manufacturing, marketing, and sales. It is a tremendously rewarding and fulfilling career, but young people need to be informed of those rewards. The next generation is anxious to share their gifts in a meaningful way, it is the responsibility of the pharmaceutical industry to point the way.

On a broader level, to attract top talent from the next generation, the industry must find ways

to demonstrate its commitment to conducting business in an ethical and compliant manner. The headlines announcing the latest settlements involving opioids, kickbacks, or off-label promotion only serve to further damage the industry's reputation, particularly among young people seeking opportunities to make their world a better place.



SRINIVAS (SRINI) SHANKAR
VP and Head, Life Sciences
Business Unit,
Cognizant

There is no better way to analyze what will inspire the next generation to join our industry than to look at one of the foremost theories in psychology — Maslow's hierarchy of needs — and attempt to contextualize it for the next generation. According to Maslow, inspiration is a function of need. Once the basic physiological needs of food, water, clothing, warmth, and rest — updated with battery charge and WiFi access — are obtained, psychological needs become the focus; and once those are met, self-fulfillment needs can be pursued. The upcoming generation has had their psychological needs such as esteem addressed more thoroughly than previous generations, and so they are more focused at a younger age on pursuing self-fulfillment and having a sense of purpose. Consumer brand choices are increasingly determined by purpose and values systems, and inadvertent social media blunders that violate this sense of purpose and values are swiftly punished. Remember the \$1 billion valuation impact to Snapchat with the "would you rather" episode involving Rihanna. As a result, new entrants into the workforce are increasingly making choices driven by their ability to make meaningful contributions to the social causes about which they are passionate. This is where our industry needs to step up. Focusing on bringing therapies to market is important, but creating opportunities to visibly impact public health is powerfully motivational. Countless examples include hackathons to leverage AI to predict infectious disease progression, leveraging social media and event platforms for disease awareness, and company-funded programs to engage public health agencies and non-governmental organizations (NGOs). These coupled with thoughtful

programs and policies to drive diversity, inclusion, fairness and integrity in the workplace should serve as strong magnets for the NextGen workforce. To quote George W. Merck, "We try never to forget that medicine is for the people. It is not for the profits. The profits follow, and if we have remembered that, they have never failed to appear."

ARMON SHAREI
CEO, SQZ Biotech

Based on my experience as a scientist, I believe there are three important factors that can influence a young scientist to join the biotech industry: a desire to make a broad impact, knowledge of how industry work can positively affect millions of patients, and lastly, peer support and motivation. Many young and promising scientists are unaware of the different ways they can use their experience to contribute to the industry, as well as the career options that are available to them in biotech. Additionally, it is common for advisors to encourage careers in academia, in a desire for their students to follow in their own well-trodden paths. Before being inspired by my Ph.D. advisors, Dr. Bob Langer and Dr. Klavs Jensen, to take the technology we developed during my time in graduate school and turn it into the foundation of SQZ Biotech, I was firmly on the path of pursuing a career as an academic scientist and professor. I am grateful that together we saw the potential of the work I was doing in the lab to develop therapies that could be impactful for many patients. It has become one of my missions, and the mission of many scientists here to reach young scientists during their training and show them not only that opportunities in the biotech industry are available to them, but also how their experience and motivation is necessary for the advancement of therapies. We are committed to paying it forward. I frequently go back to my alma mater, MIT, to speak about the work we're doing, and many of our scientists do the same at their alma maters. It is essential for those of us in the industry to remain connected and encourage the next generation to look outside the academic bubble and, if they want, pursue a career where they can remain true to their scientific roots while having an impact on patient lives. **PV**