Top employers: Breakthroughs, impact, and purpose

The 17th annual Top Employers Survey features a surprise: Alnylam Pharmaceuticals, an RNA-interference therapeutics company headquartered in Cambridge, Massachusetts, earned the No. 1 spot in its first appearance in the survey rankings. Some responses from the biotechnology and pharmaceutical industry are similar to those in previous surveys, however. Respondents valued innovation above all, while noting industry changes around drug pricing, regulations, and policies as well as an increasing emphasis on artificial intelligence and machine learning. By Chris Tachibana

Followers of the annual Top Employers Survey from Science Careers will notice something new this year. The highest ratings in 2019 went to newcomer Alnylam Pharmaceuticals. The U.S.-based company of more than 1,200 employees develops RNA-interference (RNAi) therapies. In the three previous years, the top employer was Regeneron Pharmaceuticals in New York, which is No. 2 this year, followed by the Delaware-based pharmaceutical company Incyte. “We’re very excited,” says Alnylam CEO John Maraganore regarding the company’s Top Employer status. “We’ve grown a lot lately and our success depends on having a highly engaged team.”

Many other features of the survey remain unchanged, however. As happened in recent years, more than 7,500 people responded. About 95% reported working in the biotech and pharma industry, and 80% were age 30 years or older. This year, the proportion of survey respondents from North America increased to 72% from 63% in 2018. The proportion from Europe dropped from 24% to 19%, and the fraction from the Asia/Pacific Rim fell from 9% to 7%.

Innovation has been a leading driver of top employer status since the survey began in 2002, and this year was no exception. Other reasons for recognition as a top employer were treating employees with respect and having company values that align with theirs. Being socially responsible and having leadership that can make needed changes were also important characteristics of top companies.

Upcoming features
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The most noteworthy current and expected changes in the industry, based on open-ended comments from survey respondents, focused on cost-cutting, pressures around drug pricing, and the political environment, including drug regulation policies and changes at the U.S. Food and Drug Administration (FDA). Mergers and acquisitions, outsourcing, and the impact of artificial intelligence (AI) were noted, along with the rising pace of industry research.

Representatives of some top companies gave their perspectives on these and other issues. They discussed how their organization maintains an innovative edge and excels as a workplace, and how the increasing use of AI affects work and work culture.

The top five innovators: Breakthroughs in products and pricing
Alnylam joined the Top Employers list with a splash, reaching the top spot in its first year of inclusion in the survey. It’s been a year of breakthroughs for the company. In August 2018, Alnylam received the FDA’s first-ever approval for an RNAi therapy. Alnylam’s Onpattro treats neurological symptoms, such as numbness in patients with hereditary transthyretin-mediated amyloidosis. This rare, potentially fatal disease affects about 50,000 people worldwide.

Maraganore says that having the first RNAi therapy on the market is a clear sign that Alnylam is an innovative leader, which is what survey respondents valued most in a biotech or pharma company. “We are pioneers in bringing a whole new class of medicines to market,” he says. “And before that, we pioneered bringing this technology to clinical trials.”

Alnylam regularly conducts internal work culture surveys and develops improvement plans based on the results, Maraganore says: “We view feedback from employees as a big gift, and we harness that to continuously make our company better.” Employees notice innovations in benefits, Maraganore says, for example, an in-house diversity and inclusion team that works on issues such as equity in race, gender identity, and sexual orientation. This initiative aligns with the

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Top employers

The top twenty employers of 2019 and 2018:

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<th>2019 Rank</th>
<th>2018 Rank</th>
<th>Employer (global headquarters)</th>
<th>Innovative leader in the industry</th>
<th>Treats employees with respect</th>
<th>Is socially responsible</th>
<th>Work culture values aligned</th>
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The companies without a 2018 rank did not receive enough mentions to qualify or did not receive a high enough ranking from the 2018 survey.

The 10 companies with the best reputations as employers and the top three driving characteristics for each company, according to respondents in the 2019 survey undertaken for the Science/AAAS Custom Publishing Office.

The companies without a 2018 rank did not receive enough mentions to qualify or did not receive a high enough ranking from the 2018 survey.

The fifth attribute in the above table is “Has top leadership that successfully makes changes needed to keep the organization moving in the right direction.”

employee value of social responsibility, consistently rated in the survey as a characteristic of the best companies. Diversity is also a trending issue in the industry. Maranagone just stepped down after two years chairing the Biotechnology Innovation Organization (BIO) Board of Directors. At the last BIO International meeting, BIO launched the Right Mix Matters campaign to provide companies with resources to increase diversity in leadership positions.

Maranagone also notes employee work-life benefits, such as programs for working at home and for spending time on an exploratory project not directly related to Aplylam R&D. This opportunity can pay off for the company in a big way. “We recently figured out how to deliver our drugs to the central nervous system, which opens up our pipeline to a range of neurodegenerative diseases,” he says. “That opportunity happened because we gave a small group of employees the freedom to take 20% of their time to explore a new idea.”

Drug pricing is at the nexus of a number of topics—including access to medicines, cost-cutting, and politics—that survey takers raised when asked to name notable industry changes. Many companies with groundbreaking but high-cost drugs are developing novel pricing schemes. Maranagone mentions Onpattro pricing related to both innovation and social responsibility, saying that company representatives proactively met with health care payers (insurance companies and other health plan sponsors) to negotiate value-based reimbursement. In these plans, payments made by payers to the company are linked to patient response to drug therapy. “With other drugs,” he says, “you pay even if they don’t work. We believe in our product so we’re willing to put skin in the game with value-based reimbursement.”

At No. 4, Merck KGaA is a contrast to the newer companies in the top five: Merck KGaA celebrated its 350-year anniversary in 2018. (The company is legally independent from U.S.-based Merck & Company and has headquarters in Darmstadt, Germany.) Nonetheless, in common with other top employers, Merck KGaA prioritizes thinking ahead, adapting, and communicating. This strategy is how the company takes advantage of opportunities and innovations, said member of the Executive Board and CEO of Healthcare Belén Garjio. In an email, she said Merck KGaA’s long-term success centers around maintaining connections to all stakeholders, including employees, business leaders, and customers.

Spark Therapeutics, like Aplylam, celebrates its first year of survey inclusion by entering the survey at No. 5. Like Aplylam, Spark brought a groundbreaking therapy to market in 2018 with the first U.S. commercial sales for a gene therapy product. Luxturna treats vision loss from a rare, inherited retinal dystrophy disease.

Founded in 2013, Spark is headquartered in Philadelphia, Pennsylvania, and has more than 400 employees. Katherine High, president and head of R&D, says the company’s innovation is demonstrated by Luxturna and four other gene therapies in clinical trials, with more in the pipeline. High recently talked to an employee with a background in more traditional pharmaceutical work who noted the transformative effect of gene therapy. “A lot of drug programs are just trying to have a narrow margin of superiority over others,” High says. “With gene therapy, as long as the program is well thought out, we see very clear therapeutic effects.”

Spark was highly rated by survey participants for having a work culture that aligns with employee values. To describe the company’s culture, High uses the adjective “dynamic.” One employee, she says, noted that “there’s high speed, there’s warp speed, and there’s ‘Spark speed.’” Employees see their programs progressing, High explains, and watch their hard work move products from preclinical to clinical stages—and in Luxturna’s case, to commercial success. “All that is exciting,” she says.

On the topic of drug pricing, High lists factors that her company considers when setting prices. The diseases for which Spark is developing gene therapies, such as retinal dystrophy, have no available treatments or have high unmet needs. An example of the latter is hemophilia, which requires frequent infusions of clotting factor. A one-time gene therapy intervention could save money over treatments that...
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must be administered over a lifetime and may treat only symptoms, not causes. Pricing also needs to reflect the investments of developing a one-time therapy and should allow a company to be sustainable, High notes.

To provide patients access to needed therapies, Spark is pursuing several strategies in the United States focused on health care payers, High says. The strategies include installment plans for payments as well as outcome-based rebates derived from the same principles as Alnylam’s value-based reimbursements. For example, if patients don’t achieve expected outcomes based on Phase III clinical trial results, payers are eligible for a rebate from Spark. Because gene therapy is administered at only a few medical centers in the country that have specially trained personnel, agreements with payers ensure that no matter where patients are treated, they pay in-network rates, as though they received care in their home area.

In another novel approach called “buy and bill,” payers rather than medical centers purchase the therapy. This plan reduces the financial risks to medical centers—for example, from buying therapies that patients don’t end up using—and eliminates markup costs that payers might otherwise incur. Spark is also looking into installment plans for payments tied to therapy effectiveness, but because of U.S. health care complexities, this requires state-by-state arrangements.

With regard to survey participants’ comments about mergers and acquisitions, High has direct experience with employee concerns about this situation. Roche is in the process of buying Spark after the boards of both companies unanimously agreed to the acquisition. Employees are positive about the merger, High says. “We’ll have to see how it unfolds over time, but we see this as an opportunity to access additional financial resources to push our work forward. I personally think it’s exciting,” she adds. “Roche is a world-class drug developer.”

**Emphasizing persistence and purpose**

The acquisition would add Spark to the Roche group, which includes Genentech, this year at No. 8 in the survey. Founded in 1976, with headquarters in South San Francisco, the well-established Genentech is a contrast to Spark. While this is Spark’s first year in the survey, Genentech is the only company to have been one of the top employers since the survey started in 2002, setting the standard for the entire field.

While the term “speed” (along with “well thought out”) comes up in High’s description of the Spark culture, Mike Varney, Genentech’s executive vice president of research and early development, uses the word “patience” to describe his company’s scientific approach. The Roche group has room for both Spark and Genentech, however, because of a common overall culture. “We all value rigorous science,” Varney says, “but Genentech and others in the Roche group maintain their own subculture. We build the organization the way we want and create the kind of work culture that will facilitate our innovation.”

Genentech maintains its status as an innovative leader by harnessing technology to deeply understand the biology of disease, Varney says. Initially, the company’s founders used this principle to translate the technology of gene cloning into medicines such as hormones. Later, company researchers focused on converting the specificity and binding affinity of antibodies into immuno-oncology therapies.

“This business requires understanding complex biology,” Varney says, “so patience is a virtue and persistence is a huge component of success. We’re willing to put the time and resources into solving problems.” He notes that distinguishing features of the company are its high ratio of discovery biologists to other employees and the commitment of its researchers to use data to guide their projects.

Varney agrees with survey participants about the increasing pace required to move products through pipelines. “There’s no question that time matters,” he says, but emphasizes that the company’s approach is efficient and strategic in the end. Researchers don’t waste time pursuing medicines that their data do not support, but when their findings show promise, they continue. This is one reason so many of Genentech’s products are first-in-class therapies, Varney observes. “We believe in our biology so strongly that we stay in the game when others drop out.” An example, he says, is that company persistence resulted in their AKT (protein kinase B) inhibitor, now in clinical trials for cancer therapy.

One of Genentech’s strengths in the survey was quality research with talented employees. An experiment-focused company attracts action-oriented people interested in exploring the unknown, Varney says. “There’s no innovation without experimentation. In an innovative environment, you take action,” he says. “In a noninnovative environment, you analyze.” Genentech has long had programs that encourage researchers to explore avenues not always directly related to their company work. Currently, research leaders can apply for internal innovation funds or for a postdoc to work on an industry or academic project.

In the midst of a general emphasis on multidisciplinary teams and flat structures, Genentech also holds to a single decision-maker model for its research teams. “You can have a freewheeling team with freedom to explore,” Varney says, “but someone has to make the decisions and point the team members in the same direction.” The decision-maker’s goal is to choose based on data and input from the team. This model, Varney says, “provides organizational clarity.”
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At No. 9 this year was Eli Lilly, moving up from No. 16 in 2018. The company is headquartered in Indianapolis, Indiana, but has a presence around the world. In a report, Terri Grant, vice president for human resources at Lilly Research Laboratories and Lilly Oncology, noted several factors that are attractive to employees. These include a focus on transformational medicines and a collaborative approach involving scientists, physicians, academic researchers, and contributors from health care organizations. Like Alnylam, Lilly is also responding to employee feedback by working to increase diversity, including in management and leadership positions.

A strength of Lilly compared to companies with similar rankings in the survey is social responsibility. Grant points to two programs that make the company stand out in this area. On Lilly’s annual Global Day of Service, employees volunteer in their communities. Also, the company’s Connecting Hearts Abroad program sends about 100 employees a year on a two-week volunteer service assignment, for example to South Africa or Mexico. Participants help with health-related issues ranging from diabetes care to mobile community health screenings, gaining inspiration and experience that enhance their sense of purpose as employees.

**Syngenta**, an agriculture company headquartered in Basel, Switzerland, was No. 10 this year, moving up from No. 14 in 2018. Gusui Wu, head of seeds research, has been with the company for only a year, but says a reason for the rise in employer standing might be that after a period of change (including acquisition by ChemChina in 2017), Syngenta now has a clearer vision for the future. Both leadership and employees see a more definable role for Syngenta in the industry and in how it contributes to society. “Our industry is historically not seen as sustainable, but we have a vital role in food security,” Wu says, “so there’s now more emphasis on agricultural sustainability and meeting the challenge of climate change.”

In fact, a strength of Syngenta relative to companies with similar rankings is corporate responsibility. Wu observes that company goals of helping feed the world while protecting the planet through sustainable agriculture align with employees’ personal values. By working on products that help farmers address issues such as drought, changes in crop pests, and diseases that arise from the climate crisis, he says, “our scientists feel they’re doing good by coming to work every day.”

According to Wu, Syngenta is in a unique position to help developing economies by lifting their agricultural productivity—for example, with products for insect and disease control. Syngenta research sites, corporate offices, and production plants are held to sustainability and environmental health standards with periodic audits, which may be another responsible action noticed by employees.

Syngenta has made recent outreach efforts to the public and especially customers. “We believe people have misperceptions about what we do,” Wu says. To be clearer about the benefits of agricultural technology, this year Syngenta conducted a 90-day initiative consisting of listening sessions with, for example, consumers and farmer groups. One result was a long-term partnership with The Nature Conservancy, which got positive feedback from employees. Another initiative, focusing on soil health, aims to develop technologies that reduce nutrient loss in soil.

Earlier this year, Syngenta began a project to facilitate R&D collaborations with farms, which has connected more than 100 Syngenta scientists with large agricultural operations, Wu says. The project’s goals are sharing data, demonstrating technology, and collecting information on product performance. “Farmers get to see the technology we’re working on,” he explains, “and scientists get direct input and feedback from farmers who will be using our products.” Also, like Alnylam, Genentech, and other companies, Syngenta has a competitive internal funding program for researchers to explore high-risk, high-return, creative projects separate from their product-development work.

Since agribusiness is going through a period of consolidation, Wu has insights about employee management during mergers and acquisitions. The 2017 acquisition of Syngenta by ChemChina was for the purpose of expansion and growth, and to help China increase agricultural productivity, he says, not for cost-cutting and reductions. Still, when two companies come together, regardless of the reason, processes, procedures, and cultures will change. Recognizing the inevitable disruption that Syngenta faced, the company instituted change management programs so employees understood the business rationale for the acquisition and what it meant to them. “The worst situation is leaving employees and the organization in uncertainty,” Wu says. “The ambiguity can be unsettling.”

Communication is critical; it’s especially important to ensure that employees hear frequently from corporate leaders and their own supervisors, Wu says. “Even if we don’t... cont.>
have answers, we explain that we’re trying to get clarity on questions. We report progress and keep employees as informed as possible.”

Bringing in AI and ML

In addition to pressures related to drug pricing and mergers and acquisitions, survey participants consistently note industry changes, including the rising use of automation, AI, and machine learning (ML) in research. At Alnylam, for example, Maraganore says AI and ML are enhancing effectiveness in multiple ways, from identifying sequences for designing RNAi drugs to locating patients who might benefit from Onpattro.

At Merck KGaA, Garijo says AI tools are expected to increase efficiency and effectiveness. The company has several AI-related agreements, including with AI drug-design company Iktoos and proteome-screening company Cyclicla. Merck KGaA also received a U.S. patent for a system that uses AI to protect supply-chain integrity. The system links physical objects, such as equipment parts or pills, with digital signatures that are securely stored with blockchain technology. This process ensures the authenticity of medicines but could also be used for products such as food and electronic devices, Garijo explains.

AI tools fit the Genentech commitment to understanding the biology behind diseases, says Varney. He sees drug discovery as a sorting exercise, narrowing targets and candidates from a large pool down to the most promising. The company integrates data scientists within research teams to apply AI where it can make sorting more efficient. One example is an application that rejects small-molecule drug candidates when data indicate they are likely to be quickly metabolized. Another applies data to identify tumor-associated proteins that will be antigenic and easily displayed to the immune system for personalized cancer vaccines. By making sorting more efficient, “AI frees up scientists’ time so they can think and be creative and do other work that machines can’t do,” Varney says.

GSK (GlaxoSmithKline), headquartered in Brentford, United Kingdom and at No. 16 this year, has long been a leader in AI and ML. GSK has used AI for traditional R&D, such as small-molecule drug discovery. Recently, the global pharmaceutical company stepped up its AI-ML game.

In 2018, Hal Barron became GSK’s chief scientific officer and president of R&D. He is directing new investments in R&D, particularly in immunology, human genetics, and advanced technologies. GSK is focusing its technology development on the intersection of human genetics data, functional genomics, and AI and ML to help understand human disease on a cellular level. Barron explains two points driving GSK R&D: (1) Less than 10% of drugs that enter clinical testing go to market, and (2) genetic validation increases the likelihood a medicine will succeed. This is why GSK developed partnerships with human genetics organizations such as 23andMe and Open Targets to use data to help identify new drug targets.

To validate targets, GSK plans to incorporate CRISPR gene-editing technology for functional genomics through a partnership with the University of California. Researchers will use CRISPR to test how altering candidate genes or their expression affects human cells in vitro. Functional genomics generates “trillions of datapoints,” Barron says, so ML is essential for the next step—integrating the data and helping to understand relationships between genes and how mutations relate to disease. To support this work, GSK is building infrastructure, including an in-house data science group, a platform for integrating large datasets, and automated tools for data analysis. Barron expects these innovations to increase R&D speed from discovery to clinical trials to market.

The bottom line: Having an impact

The addition of AI and ML to drug development and marketing is speeding breakthroughs across the industry. More mergers, acquisitions, and consolidations are expected by survey participants, who also noted Brexit and upcoming U.S. elections as changes expected to affect the industry.

The bottom line for pharma and biotech companies, however, is that employees need to feel that their company supports them in doing high-quality, rigorous, impactful work, Maraganore notes. “I believe our employees are invigorated to work for a company that is bringing innovative medicine to patients,” he says. “They’re generating something brand-new and transformative, which creates a sense of pride and a sense of purpose.”

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Chris Tachibana is a freelance writer who specializes in life sciences.
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WILMOT CANCER INSTITUTE

Aging/Cancer Biology Faculty Position

The Wilmot Cancer Institute (WCI) at the University of Rochester Medical Center is currently recruiting tenure-track faculty as part of a major expansion of its translational and basic science research base. The biology of aging is an area of expanding interest at the WCI and the University as a whole. The successful candidate will join a growing multidisciplinary research community with an overarching focus on aging and its complex interaction with cancer. Scientists studying aging in relation to cancer cell metabolism, cancer stem cell biology, RNA biology, DNA repair, cancer (epi)genomics and systems biology, microenvironment influences on tumor behavior/immunology, and therapeutic resistance among other topics would be well suited for this position. The Wilmot Cancer Institute is the hub of cancer research at the University of Rochester, attracting more than $20M in cancer-directed funding annually. Formal research programs exist in Cancer Biology, Tumor Microenvironment and Immunology, and Cancer Control and Survivorship. The Wilmot Cancer Institute and UR Medicine are the major providers of comprehensive, multidisciplinary cancer care in central New York State and the Finger Lakes region, with >6000 new patients every year and an extensive clinical trials program providing opportunity for innovative translational research.

Candidates should hold a PhD and/or MD degree and have a demonstrated track-record of research accomplishment in an area relevant to aging and cancer biology. Scientists making use of genomic/epigenomic approaches, bioinformatics, model organisms, tumor model systems and/or human specimens to address problems of translational relevance are strongly encouraged. New faculty will benefit from vibrant graduate/professional training programs and state of the art infrastructure and core facilities, as well as a strong Institutional commitment to career development. Appointments will be made at the Assistant Professor level although outstanding candidates at other levels will be considered, with commensurate expectations of research and funding accomplishment. Departmental affiliation will be determined according to best fit. Interested Individuals should submit a CV, statement of research interests/plans, pdfs of two key publications, and three letters of recommendation to the Search committee chairs Vera Gorbunova, PhD and Dirk Bohmann, PhD c/o Jaycee Bristol at Jaycee_Bristol@urmc.rochester.edu. Review of candidates will start December 1, 2019. The University of Rochester is an Equal Opportunity Employer and has a strong commitment to diversity and actively encourages applications from candidates from groups underrepresented in higher education.
Focus on Jiangsu, China

One of the most open, prosperous and innovative regions in the Yangtze River Delta economic circle of China

We welcome excellent scholars interested in applying for talent programs to contact us through AcadBridge (consultant@aca-bridge.edu.cn), which provides one-on-one consultations.

Faculty Positions at China Pharmaceutical University: Nanjing, China

We Are Hunting for

a) High-Level Talents selected in one of the national talent plans, including:
   - “Chang Jiang Scholars Program of Ministry of Education of China”
   - “Distinguished Young Scholars Program of the National Natural Science Foundation of China”
   - “Young Talents” selected in one of the national talent plans, including:
     - “Chang Jiang Young Scholars Program of Ministry of Education of China”
     - “Excellent Young Scholars of the Ten Thousand Plan”
     - “Excellent Young Scholars of the Ten Thousand Plan”
     - “Excellent Young Scholars Program of the National Natural Science Foundation of China”
   c) Specially-Appointed Professors or Associated Professors

Requirements:

- a) Have gained PhD degree from world top university/institute and under 40/35 yrs old.
- b) Good publication record in leading journals

Areas

a) Life sciences: Neuroscience, Microbiology, Botany, Biophysics, Biochemistry and Molecular Biology, Genetics and Bioinformatics, Cell Biology, Immunology, Biomechanics and Tissue Engineering, Physiology and Integrated Biology, Synthetic Biology, Food Science

b) Medical Science: Respiratory System, Circulatory System, Digestive System, Urinary System, Endocrine System/Metabolism and Nutrition Support, Blood System, Nervous System and Mental Diseases, Pharmacology, Traditional Chinese Medicine

c) Information Science: Medical Information Monitoring and Processing, Big Data Processing

d) Other related disciplines

What We Offer

- a) High-Level Talents: Salary no less than 1.000,000 RMB per year; Housing/setting allowance 500,000 RMB; Start-up funds 2,000,000 RMB.
- b) Young Talents: Salary no less than 500,000 RMB per year; Housing/setting allowance 400,000 RMB; Start-up funds 4,000,000 RMB; The laboratory space no less than 1500m2.
- c) Specially-appointed Professors: Salary 400,000 RMB per year; Housing/setting allowance 500,000 RMB; Start-up funds 2,000,000 RMB.

How to Apply:

- a) CV with degree certifications attached;
- b) A research plan for the next 5–10 years (no more than 1000 words);
- c) PLEASE TITLE YOUR EMAIL AS “Your Name+GCC+Your Research Areas”.

Contact Us

Application materials mentioned above should be sent to:
Personnel Department, China Pharmaceutical University

Contact: Fan Wang
Tel: +86-25-86185090
Email: rcb@cpu.edu.cn

Address: #639 Longmian Avenue, Nanjing, 211198, P.R.China.

Home page of China Pharmaceutical University: www.cpu.edu.cn
The School of Electronic Science and Engineering (ESE) in Nanjing University, established in 2009, can be traced back to the radio-physics program and semiconductor physics program from the 1950s. It is a truly inter-disciplinary program covering the research topics spanning from semiconductor physics, superconductor electronics, advanced devices, integrated circuits, to system applications. From the beginning, the mission of the School is to innovate information technologies through first-class research and education.

History and Development
In 2009, the School of ESE was established as part of the Nanjing University’s initiative to strengthen engineering research. It currently hosts 175 faculties, including 55 professors and 44 associate professors. Among them are 2 academicians of Chinese Academy of Sciences, 3 academicians of Chinese Academy of Engineering, 1 IEEE Fellow, 2 chief scientists of the national 973 Program, 8 distinguished Changjiang professors and 8 recipients of the NSFC Distinguished Young Scientists. The School always tries its best effort to offer the most favorable environment for faculty development to construct a first-class team of faculty that facilitates its sustainable development.

The School has established more than 15 national and provincial research platforms, including Jiangsu Provincial Key Laboratory of Functional Materials for Information Optoelectronics, Jiangsu Provincial Key Laboratory of Advanced Manipulating Techniques of Electromagnetic Waves, Jiangsu Provincial Engineering Center of Semiconductor Energy-Saving Technology, National Laboratory of Solid-State Microstructures, and Collaborative Innovation Center of Advanced Microstructures. With the support from these laboratories and research centers, the School of ESE has made remarkable achievements. It has undertaken a large number of national scientific and technological research projects, including national 973 Program, 863 Program, and key projects funded by the NSFC. Over the last three years, the average annual research funding exceeds 120 million RMB in total.

In 2016, the School of ESE established its Micro Fabrication and Integration Technology Center as part of the national platform. The facility has four floor space of approximately 5500 m² cleanroom space. It hosts a large number of class 1 clean-processing and testing equipments, compatible with 6-inch wafer process, such as optical and electron beam lithography, metal andthin film deposition, etching, and metrology analysis. Recently, a new femtosecond, extreme ultra-violet, Time Resolved Spin-Angle Resolved Photo-Emission Spectroscopy (TR-Spin-ARPES) beamline was constructed. This 50-fs laser-driven, table-top beamline is integrated with material growth systems, with photon energy ranging from 10 eV to 100 eV to enable surface sensitive studies of the electronic structure dynamics of novel materials.

The School of ESE also establishes international collaboration with top universities, academic institutions and enterprises. Until 2019, many collaborative institutes with government, industry, and universities have been established, some notable examples include: NJU-Yangzhou Institute of Optoelectronic Technology, NJU-Zhenjiang Institute of High and New Technology and York-Nanjing Joint Center for Spintronics and Nanoengineering.

Research Highlights
The research program of the School of ESE spans a wide range in electrical engineering and information technology. Here we highlight several research directions.

The Key Laboratory of Advanced Photonic & Electronic Materials (LAPEM) is focusing on the research and development of photonic and electronic devices based on wide band-gap semiconductors. The laboratory now has 58 permanent staff, and has built two R&D centers for material growth and characterization platform, and micro-fabrication process lines for Si and compound semiconductor devices. The laboratory received second prize National Technological Innovation Award.

Group of nano-electronics has made several major breakthroughs in two-dimensional electronics, flexible electronics and neuromorphic computing over the past few years. Many papers have been published in Nature Nanotechnology, Nature Electronics and Nature Communications. The group received second prize National Natural Science Award and first prize of Jiangsu Provincial Science and Technology Advancement Award.

Research Institute of Superconductor Electronics (RISE) has been devoting itself for several decades to developing novel superconductor electronic devices and exploring their practical applications. The recent works include several kinds of extremely sensitive detectors from microwave to visible light, quantum computing and quantum microwave circuits. Especially, superconducting nanowire single photon detectors have been used in space communication, space debris detection and biological monitoring. In addition, RISE also develops tunable THz metamaterial based on superconductor, liquid crystal and vanadium oxide for THz spectroscopic and imaging system, with future applications in wireless communication and biomedicine.

Group of VLSI design works on analog and digital circuits for signal process, 3D NNAD memory and wireless communication. Many breakthroughs have been achieved in the areas of VLSI for High-Speed Communications, Multi-Core Signal Processing, Energy-Efficient AI Processor, and High-Performance Image, Charge, and Acoustic Sensors. Members of the group has been awarded Fellow of IEEE and Best Paper Awards for IEEE VLSI transactions for their outstanding contributions in the field.

Group of Sensing and Imaging Technology focuses on “Big Video System”, ranging from spectral video camera, gigapixel imaging, learning-based video/image processing, to gigapixel video streaming. The lab holds a world-class research track record of publications in the top IEEE journals and conferences.

Finally, the School of ESE warmly welcomes global talents to join us. We offer competitive start-up funding, lab space, salaries and housing subsidy in accordance with the Nanjing University recruiting policy. Outstanding candidates can negotiate case-by-case. For more information please visit the School website: https://ese.nju.edu.cn. Contact: Mr. Jianhong Min (jhmmin@nju.edu.cn).
Jiangsu University is a key comprehensive university founded in August 2001 by merging the former Jiangsu University of Science and Technology, Zhenjiang Medical College and Zhenjiang Teachers’ College with the approval of the Chinese Ministry of Education. Jointly supported by Jiangsu Provincial People’s Government and the Chinese Ministry of Agriculture and Rural Affairs, Jiangsu University is ranked among the first batch of Jiangsu High-level Universities under Construction, holds the honorary title of National Outstanding Universities in Undergraduate Teaching, and is ranked among the first 50 Sample Universities in China for High Employment of Graduates, one of the first National Sample Universities for Innovation and Entrepreneurship, and one of the first Pilot Universities with Quality Accreditation for International Students Education in China.

Jiangsu University now employs more than 2,600 full-time teachers, featuring a high-level faculty comprising Distinguished Academicians, as well as experts and scholars sponsored respectively by “Changjiang Scholars Program”, and “The National Science Fund for Distinguished Young Scholars”. Currently we have more than 37,600 students, comprising more than 23,000 undergraduates, more than 12,000 graduates and nearly 2,000 international degree students.

Work and Life Treatment
(1) Competitive remuneration and welfare benefits;
(2) Adequate Start-up Fund and Settling-in Allowance;
(3) Efficient health service provided from campus staff hospital and affiliated hospitals;
(4) Kindergarten and affiliated schools for children of pre-school and compulsory education age;
(5) Furnished interim apartment provided with low-cost rental.

Application Materials
(1) Cover letter for the position that you are applying for;
(2) CV (with publication list);
(3) No less than 3 representative papers;
(4) Expertise and academic results.

How to Apply
All the materials needed for application should be integrated into a PDF document named “name-position-department/school/discipline”, to be sent to the email of Human Resources Department (rsk@ujs.edu.cn).

More details for the Jiangsu University Forum for High-level Overseas Talents
Tel: 0086-511-88789658
Email: hr@ujs.edu.cn
Recruitment website: http://rcb.ujs.edu.cn
The First International Young Scholars Forum of
Guizhou Medical University
January 3-4, 2020

School Profile
Guizhou Medical University is located in the forest city of Guiyang, the summer capital of the Southwest China. The school was then one of the 9 national medical colleges attached to the Ministry of Education, formerly known as the National Guiyang Medical College, which was founded in 1938. Numerous well-known domestic experts and scholars such as Yang Chongrui, Zhu Zhangyu and Tang Peisong gathered here under the leadership of the first dean, Dr. Li Zongen from Peking Union Medical College and earned it the reputation of“Second Union Medical College in China”. The school was renamed Guiyang Medical College in 1950, and renamed Guizhou Medical University in 2015. The school boasts 2 first-level doctoral degree authorization units and 1 professional doctoral degree authorization unit. It is the only provincial key university that has a complete medical talents training system of Bachelor’s, Master’s and Doctor’s degree in Guiyang Province.

The school features in medicine, with coordinate development of science and social sciences (law and education) and literature, engineering and management to support. There are 1 national key laboratory, 2 key laboratories of the Ministry of Education, 2 national experimental teaching demonstration centers and 7 provincial experimental teaching demonstration centers. There are also research platforms of national-level for 2, provincial-level for 25, department-level for 18, and 34 research and innovation teams at all levels. The school has undertaken more than 350 national research projects like the National Natural Science Foundation Program, the National Science and Technology Support Program, the Ministry of Science and Technology Special Fund, the International Science and Technology Cooperation Project for Ministry of Science and Technology, and the National Natural Science Foundation. In 2019, the school made a historic breakthrough for the National Natural Science Foundation declaration work, in which 80 projects got approval, second only to Guizhou University in the province. The clinical medicine discipline has entered the top 1% ranking of ESI worldwide.

We have carried out a comprehensive reform of excellent medical talents training under the full support of the Chinese Academy of Medical Sciences and Peking Union Medical College. The reform is designed to launch several characterized projects like clinical medical innovation class (referred as “Peking Union Class”), small class enrollment, joint training, and full-time tutor system. The school has obvious characteristics and outstanding achievements in the fields of endemic diseases research (Fluorosis disease, Arsenic disease), traditional Chinese medicine ethnic medicine production and research cooperation, pathogenic biology research, stem cell for tissue engineering biomedicine research, and scientific research achievements transformation.

Introduction to the Forum
The first International Youth Scholars Forum of Guizhou Medical University aims to build a platform for exchanges and cooperation among outstanding young talents at home and abroad. It is to promote exchanges and discussions in the field of international leading-edge science and technology research, to advance interdisciplinary and academic innovation. The forum also helps to deepen people’s comprehensive understanding of Guiyang and this 80-year-old medical university. Moreover, this forum seeks to bring together and accurately introduce medical talents with lofty ideals who agree with the educational goals, school philosophy, school culture and job demand of Guizhou Medical University.

The forum covers medical-related research fields such as basic medicine, clinical medicine, pharmacy, public health and preventive medicine. This forum is held for the first time, given great concern from the provincial government and relevant departments of Guizhou Province. Excellent young scholars at home and abroad are sincerely invited.

Registration Conditions
1. Excellent overseas talents: under the age of 40; with a doctorate degree from a well-known overseas university.
2. Excellent domestic talents:
   a. Under the age of 45; selected into national talent planning, or outstanding young talents with considerable development potential of the same level.
   b. With a doctorate degree, under the age of 40, with more than one year of overseas study experience and overseas work experience.
3. If you have a willingness to work full-time, or you want to rely on our school to apply for national talent projects and provincial-level talent projects, you are welcome to cooperate internationally with our school through projects.

Schedule
• Registration: January 2, 2020
• Forum: January 3-4, 2020
1. Opening ceremony and special report meeting;
2. Sub-forum academic seminar;
3. Exchange forum, talent project declaration on-site guidance;
4. Visit School History Museum, related platform labs;
5. On-site contract signing.

Application and Registration
Application accepted from the date of announcement.
Deadline for application: November 30, 2019.
Qualified interested candidates should apply through the “Special Registration Channel for the First International Young Scholars Forum of Guizhou Medical University”. scan the QR code below to register in advance:

Activity consultation: Teacher Zhang
Tel: 13810239853 (WeChat) Contact
E-mail: zhangxinyi@eol.cn

Travel and Accommodation
After receiving the formal invitation letter, the invited scholars should order the air ticket or train ticket by themselves. The school will provide the reimbursement according to relevant standards (aircraft: economy class; high-speed train: second-level seat; normal train: hard sleeper). Please keep relevant bills (air ticket invoice, boarding pass, passport copy, ticket, etc.) and hand over to the conference contact person. Room and board during the forum will be arranged by the school.

Contacts: Geng Yan, Li Bingfu, Zhang Xing
Tel: +86-851-88416215
E-mail: fgc@gmc.edu.cn
Hangzhou Innovation Research Institute of Beihang University

Hangzhou Innovation Research Institute, Beihang University is a new high-level research institute jointly established by Beihang University and the Zhejiang Province, Hangzhou City and Binjiang District governments. With the mission of “building a world-class technological innovation platform and innovative talent training platform in the field of information”, and focusing on the multidisciplinary intersection of information technology, life and health, cognitive science and new materials, Hangzhou Innovation Research Institute actively explores new mechanisms and gathers global innovative resources, and is committed to achieving a number of major original innovations and key technological breakthroughs and applications, striving to become a talent and innovation center that is rooted into Zhejiang Province while looking to the world’s first-class.

In March 2018, Hangzhou Innovation Research Institute of Beihang University officially settled in Binjiang District of Hangzhou, meaning the entering of the second 985 university in Hangzhou. The construction of its graduate school launched in September 2019 at Baima Lake of Binjiang District. The construction of hardware facilities is expected to be completed in about two years, and the scale of graduate students is expected to be 2,000. More importantly, Hangzhou Innovation Research Institute has undertaken the construction work of Sino-French Aviation University, providing teachers reserve for the university. On January 9, 2018, under the testimony of President of PRC Xi Jinping and French President Macron, Beihang University signed the memorandum of cooperation with Ecole Nationale de l’Aviation Civile (the French National Civil Aviation University) and agreed to jointly establish Sino-French Aviation University. The site of the university will be in the town of Pingyao, Yuhang District, Hangzhou, covering an area of 1,500 mu (10,000 acres).

I. Recruitment Positions and Salaries
1. Laboratory Director (with an attractive salary)
2. Qianjiang Excellent Post doctor (annual salary and local comprehensive subsidies totaling 1.07-1.12 million RMB)

II. Recruitment Majors
Computer Science and Technology, Instrumentation Science and Technology, Optical Engineering, Electronic Science and Technology, Control Science and Engineering, Material Science and Engineering, Information and Communication Engineering, Mechanical Engineering, Physics, Mathematics, Medical Imaging and other related majors.

III. Delivery
This announcement is a long-term recruitment. For details, please refer to the official website of Hangzhou Innovation Institute, Beihang University – recruitment (http://bzi.buaa.edu.cn/zyz/ zpgz.htm). Please send your resume to buaa_hr@buaa.edu.cn (email: “intended position + name”).

Contact: Ms. Tian, Mr. Chen
Tel: +86-571-85367569 / 19957809995
E-mail: buaahz_hr@buaa.edu.cn
HOWARD HUGHES MEDICAL INSTITUTE

Investigator Competition

The Howard Hughes Medical Institute invites applications to its flagship Investigator Program from eligible scientists who have demonstrated originality and creativity in biological and biomedical research and show exceptional promise for future achievement and leadership in research. HHMI seeks to appoint approximately 20 new HHMI Investigators.

Eligibility

- PhD and/or MD (or the equivalent)
- Tenured or tenure-track position as an assistant professor or higher academic rank (or the equivalent) at an eligible US institution
- More than five but no more than 15 years of post-training, professional experience
- Principal investigator on one or more active, national, peer-reviewed research grants with an initial duration of at least three years
- No nomination or institutional endorsement is required or accepted

This competition is open to basic researchers and physician scientists across the nation who catalyze discovery research in basic and biomedical sciences, plant biology, evolutionary biology, biophysics, chemical biology, biomedical engineering, and computational biology. HHMI seeks a broad application pool and welcomes applications from individuals with diverse backgrounds and perspectives.

Additional information: hhmi.org/investigator2021

Deadline to submit application:
March 18, 2020, 3:00 p.m. EDT

The Howard Hughes Medical Institute is an equal opportunity employer

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FACULTY POSITION in CANCER GENETICS and THERAPEUTICS

The Department of Molecular and Human Genetics and the Dan L. Duncan Comprehensive Cancer Center at Baylor College of Medicine invites applications for a tenure-track Assistant Professor, Associate Professor, or Professor position in cancer research. Applicants’ research programs may focus on broad ranging topics in cancer genetic research including cancer genomics, mechanisms of cancer therapeutics, cancer model organisms, genome instability, epigenetics and gene expression, and others. Applicants with expertise in computational biology, in combination with basic and/or translational cancer research, are strongly encouraged to apply. Candidates will join a team of multidisciplinary research investigators studying cancer stem cell biology, genomics, epigenetics, and metabolic aberrations in cancer.

The Department of Molecular and Human Genetics (https://www.bcm.edu/departments/molecular-and-human-genetics/) ranks #1 among all U.S. genetics departments in funding from the National Institutes of Health. The Department provides a bridging environment for physicians and basic scientists, promoting a cross-species and multidisciplinary approach to cancer research. Investigators in the Department study disease mechanisms in many organismal contexts including bacteria, yeast, Drosophila, C. elegans, mouse, and humans.

The Department is committed to translation of basic science into clinical implementation and fosters technology transfer for faculty discoveries. Activities within the Department include basic and translational research, clinical genetics, a joint venture diagnostic laboratory, a long-standing NIH large-scale human genome sequencing center (https://www.hsge.bcm.edu/), and an exceptional Ph.D. graduate program. More broadly, Baylor College of Medicine is the premier medical school of Texas, home to the NCI-designated Dan L. Duncan Comprehensive Cancer Center (https://www.bcm.edu/centers/cancer-center), and centered in the Texas Medical Center, the world’s largest biomedical research complex.

The Department has a total research funding of over $80 million and 70 primary tenured and tenure-track research faculty members who are engaged in a variety of approaches to tackling cancer and other diseases. The Department and BCM offer premier recruitment packages and resources to enhance the candidate’s research program. Qualified applicants should email a PDF of their curriculum vitae and a two-page summary of past accomplishments and research plans to the address below. Applicants should also request three letters of reference to be emailed directly from recommenders to mhgfacultyrecruits@bcm.edu. Applications received by November 15, 2019 will receive priority. Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor College of Medicine, ABBR Room R830, Houston, TX 77030; Phone: 713-798-5443; Email: mhgfacultyrecruits@bcm.edu

Review of qualified applicants will begin December 1, 2019.

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Syracuse University
BioInspired Institute

The BioInspired Institute at Syracuse University seeks to fill eight (8) new positions as part of an ambitious Invest Syracuse Cluster Hire Initiative in the broad area of bioinspired science and technology. As an integral part of this investment, Syracuse University is actively recruiting candidates for open rank and tenure-track faculty positions in Mathematical Analysis, Drug Delivery, Functional Materials, Organoid Culture, Computational and Medicinal Chemistry, and Bio-Inspired Physics. Faculty hired into these positions will build on our existing strengths in three focus areas: Drug Discovery, Mechanics of Development and Disease, and Smart Materials. These hires will affiliate with the multidisciplinary BioInspired Institute, which spans multiple departments in the College of Arts and Sciences and the College of Engineering and Computer Science. We seek candidates who will foster diversity and build an inclusive climate in research and teaching while promoting world-class, interdisciplinary research to address grand challenges in health, medicine, and materials innovation.

For links to full position descriptions, see http://bioinspired.syr.edu/jobs. Syracuse University is an equal opportunity/affirmative action employer with a strong commitment to equality of opportunity and a diverse work force. Members of groups traditionally underrepresented in higher education broadly, and in science, specifically, are strongly encouraged to apply. All applications will be held in strict confidence. Review of applications will begin November 1, 2019 and will continue until positions are filled.
The University of New Mexico Comprehensive Cancer Center (UNMCCC) is the Official Cancer Center of New Mexico and the only National Cancer Institute (NCI) designated comprehensive cancer center in a 500-mile radius. Our 134 oncology physicians, 122 cancer research scientists, and staff focus on discovering the causes and cures for cancers disproportionately affecting the people of the American Southwest — primarily Hispanic, American Indian, and Non-Hispanic White — with strikingly different patterns of cancer incidence, mortality, and disparity. In the past year, our center cared for 12,000 patients; 12 percent participated in therapeutic interventional studies and 35 percent in interventional studies. UNMCCC has outstanding programs in Cancer Control and Population Sciences, Cellular and Molecular Oncology, and Cancer Therapeutics. Our research houses national centers: The Molecular Discovery and High Throughput Target Screening Center (nmmlsc.health.unm.edu), one of six Chemical Biology Consortium Centers of Excellence in The NCI NExT Program; Spatiotemporal Modeling of Cell Signaling (stm.unm.edu), one of 13 NIH National Centers for Systems Biology; and a NIH Clinical and Translational Sciences Center. We enrich our endeavors by collaborating with Sandia and Los Alamos National Labs and Lovelace Respiratory Research Institute. Benefit from our Shared Resources, which include biospecimen collection and tissue analysis, genomics, bioinformatics, cancer population science and behavioral interventions, and the conduct of clinical interventions. UNMCCC is the center of our statewide cancer clinical trials and health delivery research network — partly funded by a NCI NCORP Grant and is an Oncology Research Information Exchange Network (ORIEnCancer.org) member. Our center has conducted 60+ statewide community-based cancer education, prevention, screening, and behavioral intervention studies involving more than 10,000 New Mexicans. Learn more at cancer.unm.edu.

**Associate Director for Cancer Population Sciences**  
**Endowed Chair and Senior Leadership Role**  
The UNM Comprehensive Cancer Center is searching for a national leader in cancer population sciences. Seeking candidates with a track record of outstanding scholarly achievement reflected in peer-reviewed funding (preferably NCI and NIH), high quality publications, and collaborative interdisciplinary research with a scientific focus in either cancer epidemiology, cancer prevention and control, health services research, behavioral intervention, or cancer health disparities. **Search Chairs:** Marianne Berwick and Chuck Wiggins

**Cancer Molecular & Genetic Epidemiology**  
**Endowed Chair and Senior Leadership Role**  
Seeking cancer population scientists with expertise in population-based molecular and/or genetic epidemiology. Looking for epidemiologists engaged in biomarkers of risk and prognosis, genomics, epigenetics, gene-environment interactions, genetic ancestry, and genetic risk assessment. **Search chairs:** Marianne Berwick and Linda Cook

**Cancer Control, Health Services & Behavioral Intervention**  
**Endowed Faculty and Leadership Role**  
Seeking established population scientists focused on cancer control, health services research, and behavioral intervention research to lead programmatic efforts. Looking for mid-career to senior faculty with outstanding scholarly achievement, including peer-reviewed funding (preferably NCI and NIH) and impactful publications. **Search chairs:** Linda Cook and Shiraz Mishra

**Biostatisticians**  
Seeking PhD biostatisticians to join an outstanding team engaged in statistical methodology relevant to cancer and in biostatistical applications integrated with basic, translational, clinical, and population science research. **Search chairs:** Shane Pankratz and Linda Cook

**Cancer Immunology & Tumor Microenvironment**  
**Two Positions: Basic or Translational Scientist**  
Seeking established mid-career or senior scientists focused on analysis and modeling of pathways that mediate response or resistance to immune therapies, and on signaling perturbations in the context of the tumor microenvironment that enhance or inhibit the immune response to cancer cells. **Search chairs:** Eric Prossnitz and Sarah Adams

**Cancer Cell Signaling**  
Seeking cancer cell biology, signaling, and systems biology experts with interests in dissecting mechanisms of perturbed signaling in cancer cells, on analysis and modeling of pathways mediating response or resistance to targeted therapies. **Search chairs:** Diane Lidke and Eric Prossnitz

**RNA Biologist**  
Seeking highly interactive basic and translational scientists focused on gene expression, transcriptional regulatory and alternative splicing mechanisms relevant to cancer; the biology and role of noncoding RNAs in cancer development and/or progression; and functional genomics (including investigators employing CRISPR/CAS or other functional genomic screening technologies). **Search chair:** Scott Ness

For details and to apply, visit cancer.unm.edu/JoinTheBest  
Questions? Contact Search Coordinator Amanda Leigh at ALeigh@salud.unm.edu, (505) 272-2201.

UNM is an Equal Opportunity/Affirmative Action Employer and Educator

Endowed Chairs and Professorships, significant resources, leadership roles, and comprehensive start-up packages available.

Photo: Bill Tondreau, “River Edge”, panoramic photographic, courtesy of sumnerdene.com
University of Pittsburgh Tenure-track Faculty Positions in the Department of Structural Biology

The University of Pittsburgh is conducting a broad faculty candidate search for creative individuals who use structural and biophysical methods to address fundamental biomedical questions. The ideal candidate will be motivated to explore applications of his or her structural expertise to disease related questions. We particularly encourage individuals with research activities in cryo-electron tomography for in situ structural biology and solid-state NMR spectroscopy to apply. At present, the cryo-EM facility in the Department comprises 3 Thermo Fisher (FEI) microscopes – a Titan Krios 3Giq equipped with a Falcon 3ee direct electron detector; a TF20 equipped with a TVIPS XF416 camera and Gatan cryoholders; and a T12 equipped with Gatan US 1000 and Orius CCD cameras. The University has committed funding for a Bioquantum/K2 to extend the Krios, and an Aquilos cryoFIB mill, and both will be installed in the spring of 2020. Additional accessory instrumentation is also available. The NMR facility comprises seven Bruker NMR spectrometers ranging from 600-900MHz. Two of them have 89mm bore magnets at 600 and 750MHz, fully dedicated to state-of-the-art solid-state experiments. The facility is overseen by a full-time manager. The department also possesses dedicated computing resources suitable for processing and storing large datasets.

The University of Pittsburgh is the fifth most highly ranked domestic institution of higher education in terms of NIH funding, and a very wide spectrum of collaborative opportunities exists. The research resources in the Department of Structural Biology and the intellectual environment at the University are truly extraordinary, from state-of-the-art instrumentation to expert support and creative investigators. Applications at any rank are invited. Successful applicants are expected to develop and lead independent research programs that address important problems in biomolecular systems of wide scientific and medical interest. Competitive salaries and start-up packages will be offered. Applicants should hold PhD and/or MD or equivalent degrees and have demonstrable expertise and scholarly achievement in structural biology or biophysics. The proposed starting date is September 1, 2020 or thereafter. In order to ensure full consideration, applications must be received by December 31, 2019.

Application materials including the candidate’s curriculum vitae, the names and contact information for three references, and a brief statement of research interests should be emailed to dxd@pitt.edu or sent to:

Dean Duncan
Administrator, Department of Structural Biology
1050 BST3
3501 5th Avenue
Pittsburgh, PA 15260

EEO/AA/M/F/Vets/Disabled.

POSTDOCTORAL FELLOWSHIP IN IMMUNOLOGY

Postdoctoral fellowship is available to pursue research supported by NIH grants. Studies will address the epigenomic and microbiomic effects of plant products such as resveratrol, indoles and cannabinoids on inflammation, autoimmunity and cancer. Other projects include studies on the role of dioxins, estrogens and CD44 on immune response. Ph.D. in any biomedical sciences is required with preference given to experience in Immunology.

Apply to Dr. Mitzi Nagarkatti, Chair, Department of Pathology, Microbiology and Immunology, University of South Carolina School of Medicine at this link [link provided].

UoS/C Columbia is an EOAA Employer and encourages applications from women and minorities.

Purdue University

Assistant Professor Position - Biochemistry

Department of Chemistry

The Department of Chemistry in the College of Science at Purdue University invites applications for a tenure-track faculty position at the Assistant Professor level in Chemistry - Biochemistry. Successful candidates may have interests in biochemistry as related to human health-relevant biological processes, especially those related to neuroscience or similar fields. If appropriate, the successful candidate will be offered affiliation with Purdue’s new Institute for Integrative Neuroscience (PINN), established as part of the University’s strategic investment in the life sciences.

Qualifications: Candidates must have a PhD in biochemistry, or a related field, with outstanding credentials in research, an excellent track record of or potential for leading publications and a strong commitment to excellence in teaching. Successful candidates are expected to develop a vibrant research program supported by extramural funding and to display excellence in teaching at the graduate and undergraduate levels.

The Department and College: With 50 full-time faculty, 350 PhD students, and over 300 outstanding undergraduates, Purdue’s highly ranked chemistry department is one of the largest and most diverse in the country. The wide-ranging expertise of the faculty enables fast and effective responses to interdisciplinary research opportunities, positioning it as a key partner in many university-wide centers, institutes, and initiatives. For more information, see [link provided].

Application Procedure: Applicants should submit a cover letter, a curriculum vita, a teaching statement, and a description of proposed research electronically at this site: [link provided]. Applicants should arrange for three letters of reference to be e-mailed to the Department Head at biochemsearch@purdue.edu specifically indicating the position for which the applicant is applying. Applications will be held in strict confidence and will be reviewed beginning December 15, 2019. Applications will remain in consideration until the position is filled.

A background check will be required for employment in this position. Purdue University’s Department of Statistics is committed to advancing diversity in all areas of faculty effort, including scholarship, instruction, and engagement. Candidates should address at least one of these areas in their cover letter, indicating their past experiences, current interests or activities, and/or future goals to promote a climate that values diversity and inclusion.

Purdue University is an EOE/AA Employer. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply.

Inviting Applications and Nominations for the DEAN OF NATURAL SCIENCES at the University of Puerto Rico, Rio Piedras campus

The University of University of Puerto Rico (UPR), Rio Piedras, one of the three preeminent research universities designated by the commonwealth of Puerto Rico, is accepting application for the position of Dean of the College of Natural Sciences (Carnegie R2 classification). Candidates should meet the following minimum criteria: Ph.D. in a Natural Science or related discipline; demonstrated competence in research; demonstrated excellence in teaching; proven administrative experience; proficiency in Spanish and English. For additional information and requirements contact (alberto.sabat1@upr.edu).

Please, submit a cover letter articulating your vision for the position; a complete curriculum vitae, and at least three references with full contact information to (deansearch@ upr.edu).

UPR is an Equal Opportunity, Equal Access Academic Institution that embraces diversity in the workplace.
Ohio State’s Pelotonia Institute for Immuno-Oncology Seeks Multiple Tenure-Track Faculty Positions

The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James) is seeking experienced tenure-track faculty (basic as well as clinical researchers) to work in the recently announced Pelotonia Institute for Immuno-Oncology (PIIO) in the following research areas:

- T-cell biology
- Innate immunity and inflammation
- Immune regulation and tolerance
- Cell therapy, synthetic immunology, immunogenomics and cancer vaccines
- Translational and clinical immuno-oncology (IO)
- Immune monitoring and discovery

Led by founding director and renowned immunologist Zhai Li, MD, PhD, the PIIO (cancer.osu.edu/PIIO) is a comprehensive bench-to-bedside research initiative and represents Ohio State’s commitment to grow the exciting area of immuno-oncology.

The OSUCCC – James (cancer.osu.edu) is a National Cancer Institute (NCI)-designated comprehensive cancer center and is rated “Exceptional,” the highest rating given to cancer centers by the NCI, is one of only a few centers funded by the NCI to conduct phase I and II clinical trials on novel anticancer drugs, and includes the third-largest freestanding cancer hospital in the country.

Candidates will have access to state-of-the-art laboratory spaces, cutting-edge core research facilities, a competitive salary and start-up funding. Applicants must hold advanced degrees, such as an MD, DVM, PharmD, PhD or MD/PhD. The successful candidate is expected to maintain an extramurally funded research program, perform collaborative research, participate in graduate and medical education, be board-certified and meet medical licensure requirements in Ohio if also pursuing a clinical position. Located in Columbus, Ohio (go.osu.edu/whyColumbus), The Ohio State University is an EOE/AA/M/F/D/V employer.

Send cover letter, CV, 2-3 page description of current and future research interests and contact information for three references via email to Tamra Brooks at tamra.brooks@osumc.edu.

Applications will be accepted until the positions are filled.

The James
THE OHIO STATE UNIVERSITY
COMPREHENSIVE CANCER CENTER