

Uncle Sam wants YOU!

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The United States have been hit hard by the recession. Budget cuts do not spare internationalisation programmes. Foreign students willing to pay high tuition fees or postdocs with an own fellowship in the backpack are more than ever welcome.

Never ever did a candidate running for the Oval Office receive so much support by scientists as US President, Barack Obama, in the last election campaign. More than 60 US Nobel laureates including James Watson and Mario Capecchi signed an open letter, in which Obama was referred to as a visionary leader able to ensure the future of US science and technology.

Now, in the face of the re-election in November, Obama has released his Federal Budget Request for the year 2013. Overall, \$65 billion are foreseen for non-defense research and development. Cuts have been made across all entries and, therefore, the response of the scientific community is mixed. While funding for biomedical research has consolidated, as it is evident from the proposed \$31 billion budget for the National Institutes of Health, agencies fostering basic research such as the National Science Foundation may even see a significant raise. The National Science Foundation is also in the spotlight of this article. In addition, strategies and opportunities for foreign postdocs heading to the US are highlighted.

The National Science Foundation

The National Science Foundation (NSF) is the primary US funding organisation, when it comes to the support of basic science and education. The NSF is headquartered in Arlington, Virginia and is a federal agency with a workforce of more than 1,400 employees and an annual budget close to

€5.5 billion. The NSF funds about 20% of governmentally-supported basic research performed at US colleges and universities. It is in charge of all but medical sciences. In mathematics, computer science or social sciences the NSF is the dominant public grant provider but also engineering, technology, physics and biology receive significant support. Ninety percent of NSF funds for research are distributed competitively.

The NSF is headed by Subra Suresh, a former Dean of Engineering at the Massachusetts Institute of Technology. The 24-strong National Science Board is in charge of NSF policies and strategies, and acts as national advisory body. Members of the board are appointed by the US President for a six-year term. The NSF itself is structured in seven directorates representing various scientific and educational areas. Within the NSF the National Center for Science and Engineering Statistics was established in 2010 to collect data on US science.

The NSF also awards several prestigious prizes. For example, the Alan Waterman Award, named after the first NSF President, is a half-million dollar, three-year research grant for an outstanding scientist below the age of 35. Other awards are administered on behalf of the White House. The National Medal of Science is the highest accolade in the US. The Presidential Awards honour remarkable achievements by scientists, engineers and teachers. One of them, the Presidential Early Career Award for Scientists and Engineers, is allocated annually to about 100 outstanding early career scien-

tists and engineers, and comes along with an up to five-year research grant worth at least \$0.5 million. Nominations are made by governmental departments and agencies including the NSF, the National Institutes of Health (NIH) or the NASA.

NSF timeline

The NSF was founded in 1950 with the mission “to promote the progress of science, to advance the national health, prosperity and welfare, and to secure the national defense”. The first 100 research grants totalling \$1 million and 624 fellowships worth \$1.6 million were awarded in 1952. Among the awardees were also two future Noble laureates, the geneticist Max Delbrück and the physicist Burton Richter. Shortly thereafter, the launch of the first artificial satellite, Sputnik I, by the Soviets spurred a doubling of the hitherto meagre NSF budget.

The Cold War was waged not only in war zones or on sports fields. Races into space, to the poles or for the latest piece of technological discovery regularly filled the NSF coffers. In the eighties and nineties the NSF made major contributions to the development of the Internet and its budget crossed the \$1 billion threshold for the first time in 1983. The first non-commercial web browser NCSA Mosaic or research leading to the search engine Google was funded by the NSF. In 2000, the NSF became one of the major sponsors of the National Nanotechnology Initiative and its budget climbed to more than \$4 billion. The American Recovery and Reinvestment Act of 2009 made

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the NSF cash tills ring: it received \$3 billion on top of its regular budget. The mid-term NSF Strategic Plan 2011-16, "Empowering the Nation through Discovery and Innovation", was published last year, putting forward the vision of a nation that capitalises on new concepts in science and engineering, and providing global leadership in advancing research and education.

Tapping NSF money sources

The NSF publishes calls for grants and fellowships (www.nsf.gov/funding). In addition, unsolicited proposals are also welcome. You may look up funding opportunities for your career stage or for the scientific topic of your choice in FastLane, a NSF web-based platform. FastLane may also be used for submitting grants and letters of reference or for checking the status of an application. The NSF is proud of its merit review process, which claims to provide fair and transparent evaluations.

The two main criteria in the evaluation are "intellectual merit" and "broader impact". Proposals are scrutinised by at least three national experts not working at the NSF or the home institution of the applicant. Based on their reports and additional criteria, a NSF Programme Officer makes a funding recommendation. The Division Director has the final say on whether a proposal will be declined, in which case the reasons for failure are made available to the applicant, or awarded, in which case the proposal is forwarded to a NSF Grants and Agreements Officer, who conducts a review of business, finance and policy implications of the proposal before the award is finalised. The NSF just announced that at least

70% of all applicants are informed on the evaluation outcome within six months.

Of the 51,600 proposals submitted to the NSF last year, 22% were granted. A scientist receives NSF funding on the basis of a cooperation agreement between the NSF and his home institution. The NSF does not operate own research labs or institutes. Funding is provided to scientists as individuals or as members of smaller teams. Moreover, research centres and large equipment such as telescopes, oceanographic vessels and Antarctic research stations are supported. According to Lisa-Joy Zgorski from the National Science Foundation, the

NSF does not offer specific programmes to attract non-US students or postdocs. Their number in NSF-funded projects is significant but not known. An example for a typical NSF fellowship is the Postdoctoral Research Fellowship in Biology. In the last call, three areas were covered: (1) broadening participation in biology, (2) intersections of biology with mathematics and physics, and (3) participation in an already funded plant genomics initiative. Fifteen new fellowships in each area per year were announced. Applicants had to be US citizens or nationals or have a green card. No more than a 12-month work experience as postdoc was allowed. The fellowships had durations up to 36 months and ranged from \$60,000 in the first to \$66,000 in the third year. Included was an annual \$15,000 allowance covering research-related costs and health insurance.

Virtual internationalisation

The initiative SAVI, Science Across Virtual Institutes, started last year. The goal is to assemble virtual research and education platforms in STEM (science, technology, engineering and mathematics) disciplines, bringing together scientists with common interests and goals from NSF-funded institutions and foreign countries. Currently, three SAVI pilots are supported: Wi-Fi.US, a research platform between the US and Finland in the field of wireless networking, VI-MSS, a research platform between the

er contained more than 350 references to support the central message that a significant part of the NSF financial resources are squandered by mismanagement at the NSF itself. Coburn stressed the lack of control and post-evaluation of research projects, which would favour fraud and misspending. In addition, duplicate efforts with other agencies were scathed as a result of overlaps in thematic priorities and the funding of too many low-priority projects with no scientific output – or almost none. Coburn proposed that the taxpayer's money would be better spent on research into renewable energies and new antibiotics or used to reduce the public debt. The NSF responded only briefly, "While no agency is without flaws [...], we believe that no other funding agency in the world comes close to NSF for giving taxpayers the best return on their investment."

US postdocs: myths and realities

A postdoc may be defined as an ill-paid doctorate holder in a temporary and mostly dependent position, who has to work his butt off in order to have the slightest chance of an academic tenure in the future. For many, it has gone unnoticed that the number of tenure track positions in the US has dropped over the last decade. Part-timers and non-tenure-track faculty members currently constitute 73% of the academic workforce in the US. The "New Faculty Majority: The National Coalition for Adjunct and Contingent Equity" was recently established as a new advocate organisation. But not all scientists freely decide to enter the postdoc world. Many jobs in the private or public sector still require an additional training period and work experience abroad. In addition, poor pay, lack of research funds and clogged career pathways drive many foreign postdocs to the US, where they wait for a change for the better at home.

There are only estimates for the total number of postdocs in the US. And maybe no one wants to know the details. Too great a number of postdocs may be interpreted as PhD overproduction – bad publicity for the US system, which is still driven by the motivation to hop onboard the tenure-track train. In the May 2011 Bulletin of the Howard Hughes Medical Institute facts and figures on postdocs from various sources were compiled. Their number in the States was estimated to range between 40,000 and 90,000. Close to 60% of all postdocs in the US were of foreign citizenship. They logged between 80 and 100 hours a week. The median length of a single postdoc

Internet Links

- ▶ National Science Foundation – www.nsf.gov
- ▶ National Postdoc Association – www.nationalpostdoc.org
- ▶ Euraxess Links USA – <http://ec.europa.eu/euraxess/links/usa>
- ▶ Fulbright Program – <http://fulbright.state.gov>
- ▶ Alfred P. Sloan Foundation – www.sloan.org
- ▶ GAIN – www.gain-network.org

US and India in the area of extraction and management of complex data and cybersecurity, and the Physics of Living Systems Student Research Network (PoLS SRN), which is a community-based network of graduate students and their faculty mentors from the US, Brazil, France, Germany, Israel, Singapore and the United Kingdom. The maximum budget on the US side is \$400,000 per year over a five-year period, whereas international partners have to be financed by their own resources.

The Republican senator, Tom Coburn, delivered a critical report last year entitled "NSF: under the microscope". The 73-pag-

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appointment in the Life Sciences was 26 months. A third of all postdocs needed at least one more postdoctoral stint. Ninety percent of postdocs had a health insurance and half of them received retirement benefits. Although foreign postdocs don't usually care too much about salaries and benefits, these issues become more important the longer they are stuck in the US. There are many surveys comparing postdoctoral salaries or suggesting the best place for doing a postdoc. Those are good reads but the main message is that conditions and salaries vary highly from location to location

and, sometimes, even within a single department or group. With respect to remuneration, many US institutions use the rates of the Ruth L. Kirschstein National Research Service Award (NRSA) provided by the National Institute of Health, as basis for their salary calculations. This year's entry level for a "fresh" postdoc without any experience is an annual salary of \$39,200.

Not left alone

Labour conditions for US postdocs in the 80s and 90s were very poor and urged the establishment of the National Postdoc

Association (NPA) in 2003. NPA advocates all sorts of improvements at the postdoctoral stage. Main points are the introduction of career development measures at the institutional level, the provision of a minimum wage above \$45,000 and raising the awareness that postdocs constitute a main pillar of the US research system. So far, more than 160 US institutions have installed at least parts of the NPA recommendations. For the postdoc from abroad the NPA International Postdoc Survival Guide, an introduction to the US tax system and a site on current VISA regulations are quite helpful. Other docu-

Interview

Home Sweet Home

Very early on, some countries have recognised that the best way to bring their talents back to home turf is to be present locally, to integrate the researchers into networks and to provide lots of useful information, in order to facilitate their way home. *Lab Times* talked to **Katja Simons**, who is in charge of the German Academic International Network, GAIN, since 2003, and to **Gerrit Rössler**, who recently joined GAIN as programme officer.

Lab Times: What are GAIN's main activities?

Katja Simons: GAIN is a networking tool for German researchers in North America with an office in New York City. We provide information and support for researchers seeking to return to Germany. Of course, we also connect with those researchers who have decided to stay in North America and help them stay abreast of current developments and opportunities in Germany. We offer a newsletter, conferences, career fairs, workshops and webinars. Our website provides a wealth of information for returning scholars. We also have an online researcher directory and we stay connected with our members through social media. There are over 30 local chapters that organise local events. Travel grants are also provided for researchers to attend our annual meeting and the European Career Fair in Boston. One of our signature events is the GAIN Annual Meeting that brings together more than 300 German researchers from North America and up to 150 representatives from Germany. The attendance has tripled in the past years and it has become one of the most respected transatlantic events to network, gather information on funding and employment opportunities. GAIN cooperates with GSO (German Scholars Organization), which acquires company representatives to our career fair. We have an advisory board with twelve scientists, who offer advice and whom we consult to receive first-hand information on the most pressing questions. Our board is focusing on topics like dual career, mentoring and entrepreneurship.



Photo: K. Simons

Katja Simons

What are the major accomplishments of GAIN, so far?

Simons: The launch of GAIN almost nine years ago signalled that German scholars abroad constitute a huge asset for Germany and that Germany wants to stay in touch and bring them back; and GAIN's success has proven that there is a remarkable demand to receive information on all aspects of career opportunities. Our network is growing from day to day, our events always draw large crowds and we receive a lot of positive feedback from our members. Currently, we have about 4,000 members. At our various events we provide advice and information to almost 1,000 researchers per year interested in continuing their scientific careers in Germany. We give advice on careers at universities and non-university institutions, on how to become a young investigator, on careers in industry, on alternative careers for scientists, on start-up companies, on all the tools for collaboration and cooperation, on dual career and family services, etc. Whilst helping many researchers to return to Germany, GAIN has also sparked the universities' interest in actively recruiting young researchers at our career fairs. Many presidents and vice-presidents personally attend our annual meeting and advise participants on careers in Germany.

Does the current recession in the US affect your work?

Simons: The current situation in the US makes it harder to find a job after the postdoc. There is a decline in tenure track positions. Tenure track has always been a competitive advantage for universities in the US. A study by *Science* shows that despite tighter budgets, the aspects contributing to a successful postdoc experience, such as communication and mentoring, remain crucial. Postdoc supervisors say it is all the more important for postdocs to carefully plan their career moves ahead of time. In this context, GAIN's work becomes more relevant than ever: we help researchers to make the right move. While universities in the US have to operate with a tighter budget, Germany has demonstrated a huge commitment for young researchers and for research in general. The Excellence Initiative, for instance, has created a lot of dynamics in academia; jobs have been created and money has been invested.

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ments give advice on topics, such as finding the perfect lab or making the right career choices. It is up to each of us to decide whether the national postdoc appreciation week, which will take place for the fourth time this year, is a must-have. Nevertheless, the NPA also provides a toolkit for that and the Happy Hour or barbecue that you have to organise at your institution during this week to ensure success.

Other associations and initiatives take care of postdocs, too. For example, the 6,000 postdocs at the University of California got associated with the powerful labour

union UAW (United Auto Workers) to fight for their rights. Almost any major research institution has set up offices for postdocs, in the meantime. There, you might get some advice on how to catch the next fellowship or how to become integrated into the local postdoc community and find some drinking mates. More details on the daily routine of a postdoc in the US are posted in various blogs and forums. Just to name one: the PostDoc Forum at www.postdocsforum.com. In addition, many high profile journals including *Science*, with its careers section at <http://sciencecareers.sciencemag.org>, have

recognised the value of their future customers and regularly run stories on the postdoc experience.

One-way or round trip ticket?

A typical postdoc for a US scientist still takes about five years. During this period the road has to pave the way to a real job at a company or, preferentially, to a tenure track faculty position. Postdocs from abroad usually have a different schedule in mind. They think that a stay in the US will do no harm, try to get a decent first-author publication and decide usually in year two

Gerrit Rössler: Similar to the situation in Germany, the US is experiencing an increasing shortage of highly trained specialists in research and innovation. In response, Congress has moved to loosen immigration regulations for foreign postdocs working in areas with the highest demand. Thus far, this has not had an impact on our work but there is clearly growing recognition that the US, too, has to compete internationally for young talent.

Did you notice a change in the attitude or motivation of German postdocs over the last years?

Rössler: Yes, there has been a big change in the attitude and motivation of German postdocs in returning home. Ten years ago, we noticed a lot of frustration at our events with regard to the situation in Germany. Many postdocs, even if they wanted to go back, felt it was not a viable career choice. In the meantime, Germany's reputation has much improved. Young researchers recognise that there is a strong political will to hear their concerns, change their situation for the better, and, ultimately, bring them back. Accordingly, postdocs are less worried about funding and the quality of research in Germany than they are about soft factors, like institutional support with the transition, childcare and dual career.

In many European countries programmes to foster young talents and scientific excellence have been introduced. So, it seems that there is no longer the pressure to leave Europe in order to do good science.

Simons: We think that it is essential for scientists to be mobile and to gain experience in other countries and working cultures. It is a tremendously important experience. You do not only gain access to an invaluable international network abroad, you also learn new techniques and you gain a lot of flexibility. Science is international and labs are international. Most of all, science is about collaboration. If you have been abroad and have been able to adapt to a new lab or office, you will eventually have the soft and also hard skills needed to succeed.

Do German postdocs also contact you, if they encounter problems in the lab or daily life?

Rössler: Most Germans contact us with regard to career opportunities. But we also receive practical questions regarding filing taxes or visa problems. In these cases we help with finding the right experts. With regard to problems in the lab or daily life they mostly consult each other. This is why our "Stammtische" are so popular.

In your own view, what needs to be done to make Germany more attractive to expat scientists?

Simons: Germany has achieved a lot in the past decade. When GAIN started, the junior professor had just been invented and different programmes to support young investigators were just being introduced. The importance of giving young researchers more independence was understood. And now, ten years later, we have an exciting array of different opportunities in academia and at non-university institutions. And data speaks for itself: many returning scientists are really taking advantage of the programmes for young investigators. But we still don't have enough junior professors to make it an alternative to the Habilitation. We definitely need more junior professor positions on tenure-track. This would also improve their standing. Also, first impressions count. It is, therefore, very important to continue improving the hiring culture at universities – not only with regard to expats but also to international scientists.

What are the future goals of GAIN?

Rössler: GAIN will continue to build on its successful programme with a close ear to our membership base. GAIN is not just a means to its own end but works to meet the concrete needs of young researchers and scientists here in North America. Our short-term goals are, therefore, to provide more concrete and individually tailored information to more people with workshops, webinars and conferences. A long-term goal is to reach out to researchers in other countries, as well. We are already doing that with our online offers. The response shows, there is a need for GAIN beyond the US and Canada, too.



Photo: G. Rössler

Gerrit Rössler

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or three whether to stay or move on. Many European funding organisations have recognised that at this point it is necessary to provide worthwhile options for those who want to return home. They offer reintegration grants, which may cover a postdoc salary for the first six to 12 months at home or even more advanced positions leading to scientific independence. Smaller funding programmes are in place to secure at least the travel costs for job interviews in your home country.

Some initiatives have gone a step further and have built up large networks with postdocs and alumni using social media channels or own platforms. Discussion forums, regular newsletters and job postings are provided. Some organisations have even set up local offices in the US as, for example, the Hellenic Bioscientific Association in Boston and the Austrian Office of Science in Washington. Germany is even represented with two major initiatives, both launched in 2003: the German Scholars Organization (GSO) and the German Academic International Network (GAIN). GSO was set up by members from the business sector and the scientific community with the Alfried Krupp von Bohlen and Halbach Foundation as one of the main supporters. A funding programme managed by the GSO was instrumental in bringing back about 50 professors to Germany. GAIN, on the other hand, is a joint effort of the Alexander von Humboldt Foundation, the German Academic Exchange Service and the German Research Foundation DFG (see interview at www.labtimes.org).

Spoilt for choice

There are many, many funding programmes supporting a stay in the US. Digging up the details will keep you well occupied. For many scientists the application for a postdoctoral fellowship is the first time they have to write and fight for their own money. To bet on the right horse and not to lose too much time between the doctorate and the next career step becomes important. Many factors including your own schedule, your track record or the reputation of the future host lab need to be balanced against the prestige and competitiveness of the programme under scrutiny. The hurdles for a stipend funded by your home country are often not too high. Hav-

ing generated one or two good publications as a PhD student may even qualify you for more advanced international fellowships as awarded, for example, by the Human Frontier Science Program, EMBO and others.

Help from portals and databases

Commercial and non-commercial databases and mobility portals assist you in making the right choice. Examples include the Life Science Mobility Portal of EMBO. GrantsNet, a service of the careers section of *Science*, which was in operation for more than a decade, is no longer available. On the US side, Grants.gov is the source to find and apply for Federal grants. If you want to ransack the funding database of the National Institutes of Health (NIH), you first need to have a basic understanding of the NIH funding system. Earlier this year, EURAXESS Links US, a networking tool for European scientists in the US, published an informative 169-page booklet entitled "Guide for Europe/USA Opportunities in Research

publications. Get some help from your future group leader in the US. He knows all the local possibilities and may even put you on his own research grant, if he thinks that you are a decent catch. This means that you may start immediately and do not have to worry about funding issues in the beginning. He may also be quite familiar with the possibilities that exist in frame of private foundations or professional academies and societies. For life scientists or biomedical researchers some foundations focusing on particular diseases such as epilepsy, multiple sclerosis or juvenile diabetes, the Leukemia and Lymphoma Society or the American Heart Association may be worth a second look. Three arbitrarily-selected funding opportunities are introduced below.

Fulbright Program

The Fulbright Program is the US flagship programme for international exchange in education. Based on a law bill by US Senator William Fulbright it was established in 1946. The programme was initially funded by a clearance sale of no longer needed World War II equipment. A wide variety of programmes for inbound and outbound students, teachers and academics are on the menu; grants for studying, teaching and scientific research in almost any discipline except clinical sciences are offered. More than 300,000 people have been engaged in exchange measures so far, whereby incoming folks have outnumbered those outgoing by 100 percent. More than 150 countries have bilateral agreements with the Fulbright Program. The conditions, participation criteria and number as

well as the kind of fellowships may vary from country to country. The programme is funded by a Congressional appropriation, amounting to roughly \$240 million last year – a couple of million short in comparison to previous years due to a budget cut. Foreign governments or the private sector also contribute to the programme: roughly \$90 million were raised in 2010, the leading payers being Chile, Germany, Brazil and Japan. About 7,000 new and renewal grants are made available per year. Preferred locations for foreign grantees are New York, California and Massachusetts, as expected.

I want to mention just two Fulbright programmes: the Fulbright Visiting Schol-



Photo: Fotolia/Katrina Brown

Science, too, can be a gambling game...

and Career Development", where many links to funding resources of individual EU countries as well as to those of international and US origin are listed. EURAXESS Links also provides access to the LINK2US database, which specifies funding programmes within the US Federal Government that are open to European Union researchers.

Many US grants and fellowships are not restricted to US nationals or permanent US citizens. Those targeting exclusively scientists from abroad are scarce. Therefore, you have to outpace a large crowd of national and international competitors. This might be difficult, if you are not a native speaker or not experienced with fellowship ap-

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ar Program and the International Fulbright Science and Technology Award (S&T). The Fulbright Visiting Scholar Program offers opportunities for foreign scholars, artists and professionals to do postdoctoral research and/or lecture. About 850 fellows a year receive support for a period between an academic semester and a full academic year (i.e. ten months). The S&T Award is for foreign students wishing to pursue PhD level study at a leading US research university. About 45 awards have been granted per year in the past. A bachelor degree is required and awardees have to return to their home countries after their PhD studies. Fields covered include biology, chemistry and neuroscience. Students receive support by Fulbright for the initial three years, after which the US host lab has to take over until completion. On top of various allowances for living, tuition and insurance \$5,000 are added for research and up to \$4,500 to attend meetings for the whole three-year period. Whereas the 2012/2013 awardees have already been announced, the recruitment of candidates for the academic year 2013/14 has been suspended due to budget constraints.

Alfred P. Sloan Foundation

Based on US Foundation Center data, the Sloan Foundation is among the top 40 foundations in the States. Its assets are in the range of \$1.7 billion. It was founded in 1934 by Alfred P. Sloan, a former President of General Motors, but is nowadays independent and supports many activities in basic research, education and public understanding of science and technology. For example, the Sloan Digital Sky Survey investigates the evolution of the universe with a specialised telescope, the Census of Marine Life helped to identify more than 5,000 new marine species and in the online Encyclopedia of Life all known species on earth should light up in future.

The oldest initiative of the foundation is the Sloan Research Fellowship, which has been awarded annually for more than half a century. Awards are made in eight fields including evolutionary and computational molecular biology, neuroscience and marine science. A fifth of all applications were successful in the last competition and 126 fellowships worth \$50,000 each were granted. The funds are transferred to the institution of the Sloan Fellow and have to

be used over a two-year period for research purposes and not for enhancements of full salaries or overhead costs. Applications are by nomination only. Senior scientists or department heads suggest early-career scientists, who have received their PhD not longer than six years before and have already taken a step into scientific independence and excellence.

Childs Memorial Fund

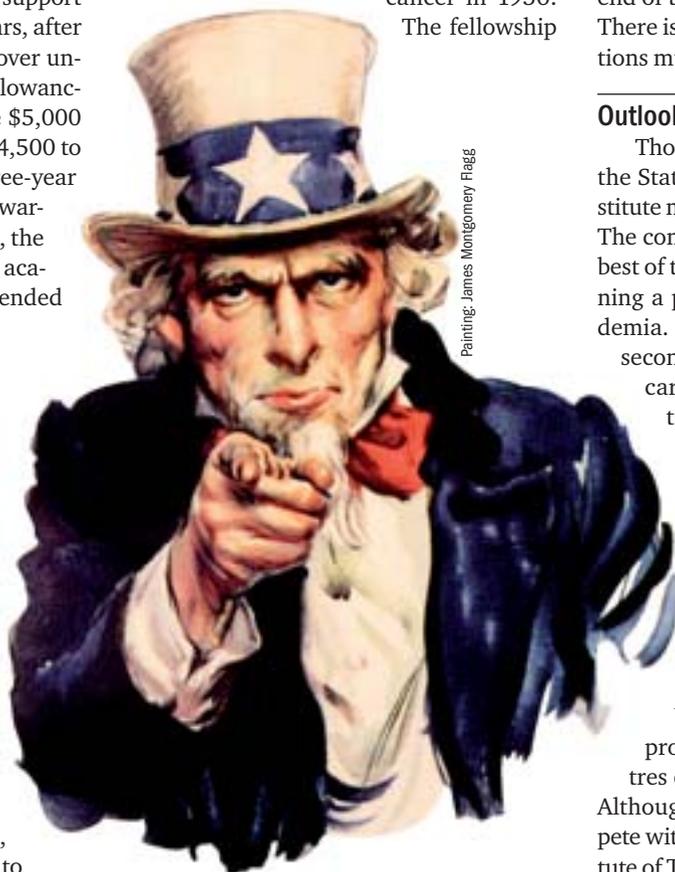
Another prestigious organisation is the Jane Coffin Childs Memorial Fund for Medical Research. It was established at Yale University by the family of Jane Coffin Childs, who died of cancer in 1936. The fellowship

Medical Institute jumped in and the number of new fellows climbed to 26 last year. In order to apply for the three-year fellowship you must have, at the most, one year postdoctoral experience. Applications are open to all nationalities and encompass the names of three scientists familiar with your previous work, a letter of acceptance by the host lab and a description of research. The basic fellowship rate is \$45,000 in the first year and \$48,000 in the third. For each dependent child \$1,000 is added. The host lab receives \$1,500 a year for research-related costs but no indirect costs are paid. A one-way ticket to the host lab is provided, whereas a refund of travel costs at the end of the fellowship has to be negotiated. There is one deadline per year and applications must be received no later than Feb 1.

Outlook

Thousands of foreign postdocs rush into the States each year. At present, they constitute more than half of the postdoc crowd. The competition is two-fisted and only the best of the best have a slight chance of winning a permanent position in the US academia. The less successful have to take a second and third round on the postdoc carousel in order to become attractive for academic and non-academic employers. After years of hard work, many finally have to accept that science is not where they belong. Many European and Asian countries have learned how to get a piece of the action. They have not only started to invest more money into science and the promotion of young talents but also to take a more focused approach at establishing scientific centres of excellence in certain disciplines. Although these might not be able to compete with Harvard, the Massachusetts Institute of Technology or Rockefeller University they provide a scientific and international environment that may push a postdoctoral career. So, before following blindly the flock of postdocs heading to the land of opportunities, try to explore your career options – also in non-US countries.

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programme was initiated in 1944 and more than 1,500 postdocs have benefited to-date. A hallmark of the fellowship programme is its distinguished Scientific Advisory Board. It is headed by cell biologist and former editor-in-chief of *PNAS*, Randy Schekman, and many Nobel laureates including David Baltimore, Elizabeth Blackburn or Thomas Steitz have served on it. The fund has recently lost some of its assets on the stock market. Thus, the number of awarded fellowships dropped to 18 in 2009. Companies including Genentech and Merck or funding organisations such as the Howard Hughes

If you are interested in reading more about scientific careers in the United States, please read the accompanying Lab Times editorial at www.labtimes.org or visit us on Facebook at www.facebook.com/Labtimes.