New fund aims to draw young scientists

The National Research Foundation's new grant puts a lot of money in the hands of young scientists. Judith Tan and Lee Hui Chieh speak to researchers about its pull factor, what can result in casting such a wide net, and other grants available out there

CLINICIAN-SCIENTIST Allen Yeoh's study in projected cure in childhood leukemia is going well – and a cure rate of 80 per cent is possible.

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cure rate of 80 per cent is possible.

What he needs now to complement his study is "the technology that can apply the treatment to cure these kids", Associate Professor Yeoh, a senior consultant with the Children's Medical Institute at the National University Hospital, told The Straits Times.

He is banking on the National Research Foundation's (NRF) research fellowship grant of up to US\$1.5 million (S\$2.3 million) over three years to lure young scientists already looking into this technology to "parachute in and conduct their study here".

The new NRF research package is open to all nationalities and all areas of science and technology with no quota on specific disciplines.

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scientists aged 35 and under.

A spokesman for NRF said the scheme will generate good ideas from bottom under the search institution will give the research fellow and his team ample opportunities to interact and collaborate with local researchers and students," she said.

The generous budget is necessary to help young researchers link up with oversear institutions to help with the research, said Dr Eugene Soh, the National Healthcare Group's deputychief projects officer overseeing research and development.

He said: "Besearch is net."

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He said: "Research is getting more collaborative. You have to partner others if you want your work to make it internationally."

The size of the grant alone is a big pull factor for young scientists to apply for

based overseas, researchers say.

This is especially since the world's research powerhouse, the United States, is limiting finances in research. The budget for its largest source of funding for biomedical research, the National Institutes of Health (NIH), has stagnated at US\$2.8 billion or so since 2004.

US\$28 billion or so since 2004.
It is estimated that if this year's NIH budget remains at last year's US\$28.6 bil-lion, the agency will lose more than 9 per cent of its purchasing power compared to four years ago, due to in-flation.

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The new NRF grant works out to about \$750,000 a year, more than the \$200,000 to \$500,000 a year typically given to young scientists here.

In the US, young scientists here.

In the US, young scientists get probably just half of what the new grant awards, estimated Professor Barry Halliwell, the National University of Singapore's deputy president (research and technology).

He said "In the US, new investigators have been finding it more difficult to obtain funds. This grant might be attractive to them."

Professor Edison Liu, head of the Genome Institute of Singapore, told The Straits Times that such awards are similar to the prestigious Howard Hughes or Ludwig Foundation awards.

Noting that U\$\$500,000 a year for a junior researcher was a bit on the high side, he said: "I'd prefer this amount to be stretched over four to five years for junior individuals."

He cautioned that the NRF needs to pay attention to what happens to these individuals when they are done with the research and are still working at the universities.

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Also urging caution is Dr Ting Choon Meng, the chairman an and CEO of home-grown medical technology company, Health-STATS International. He said the grant is a good start as it is a big net which the Government is casting.

"But we must have the means to sieve through the pile and not throw away the pearl for the fish eye. It is a tedious process and we cannot assume we have all the expertise. There must be strong industrial input to balance off the academic spectacles. I hope the competition will be very tough," he said. Agreeing, Mr Steven Fang, Group CEO of CyGenicand past chairman of Bio-Singapore, said what might be more useful is a separate budget "to follow on with the successful candidates or fellowship into the next realm of translational research and perhaps even commercialisation".

Where the research money comes from

» Agency for Science, Technology and Research (A°Star)

(a) Clinician-Scientist Investigator Award:

— Jointly awarded by A*Star's Biomedical
Research Council (BMRC) and Ministry of
Health's National Medical Research Council.

— Given every year since 2004 to
clinician-scientists who are Singapore citizens
or permanent residents.

— Recipient must commit at least 60 per
cent of their time on research, which must be
conducted in Singapore.

— The award, over three to five years, funds
part of each doctor's salary to make up for
time lost in seeing patients. It also provides up
to \$200,000 for junior clinician-scientists to
fund their research projects.

(b) Singapore Bioimaging Consortium's second grant call on "Image Processing, Analysis and Storage in Relation to Human Disease":

Jointly awarded by BMRC and A'Star's Science and Engineering Research Council.

Research must be done in Singapore, and by collaboration between institutions.

Provides an average grant of \$500,000 over three years, up to \$1 million per grant.

» Ministry of Health's National Medical Research Council

Awards individual or collaborative grants twice a year. Grants believed to be about \$200,000 a year.

» National Healthcare Group (NHG)

For researchers employed by NHG. No restrictions on age or research area.

(a) Small Innovative Grant (SIG):

Started in 2005 to help doctors obtain initial results to give them a better chance of getting a national grant.
 Provides \$50,000 a year for two years.

(b) Small Innovative Grant Phase II (SIG II):

- Starting next month, doctors with successful SIG projects can apply for this grant to expand their studies.

- Provides up to \$200,000 a year, for three years.

(c) Researcher-Investigator-Scientist-Enabler (Rise):
— Started last year to fund a doctor's department with 20 to 40 per cent of the doctor's salary so that he or she can take this amount of time off for research.

» National University of Singapore

- Newly hired faculty members get start-up funds for research.

- Each faculty gets a sum, which it uses to fund the best proposals from its researchers. This typically provides for under \$180,000 per project.

- Hands out Young Investigator Award every year, to the best new researchers. This provides about \$500,000 over two to three years.

- The Ministry of Education provides funds for some research projects expected to need more than \$500,000.

– For researchers of any age employed by Sing-Health, looking preferably into three areas: on-cology, ophthalmic and vision sciences and the neurosciences.

– Gave out \$8.1 million in total grants last year. A grant for a start-up project can be up to \$50,000, while that for a regular project can be up to \$200,000.