Pursuing knowledge for the prosperity of Singapore

Odyssey 2001-2002
MUCH of space is unexplored. It's out there, waiting to be charted by daring, Can-Do guys. We're talking scientific space here. Our Galaxy has 100,000 million stars. There is also the Scientific Universe. It has countless points to explore and discover. The Agency for Science, Technology and Research has embarked on this mission and our homebase is Singapore. Our spaceship: the Singapore Scienceship A*STAR. Travellers through scientific space know her well. The SS A*STAR. Her call sign: Charlie Oscar Echo.
Our Odyssey

THIS IS A*STAR’s NAVIGATOR ... YES, this is Charlie Oscar Echo. Why the call sign COE for SS A*STAR? Because, for us, the letters stand for Create, Own, Exploit. When we discover, we Create new knowledge. What we create, we Own. With knowledge, we invent things and devise smarter ways of doing things. We Exploit the creations. So we can help people stay healthy, live longer and enjoy life. That also benefits our homebase. We earn money to have a good life, do more exploration, create fresh openings for young explorers. So come on board. Join our Science and Technology Odyssey and be part of this daring new team!
FIVE. Four. Three. Two. One. Engage! SS A*STAR goes into warp drive. The Ensign watches the pilot’s screen. But he also keeps glancing outside. The cosmos is irresistibly beautiful. The Officer of the Watch smiles. She remembers her own younger years. Then she speaks into her communicator: “Dr Venki, we’re nearing Bemrick!”

Advances in Science and Technology

While every effort has been taken to carry out instruction to customers' satisfaction, no responsibility or liability will be accepted for errors. Customers are therefore urged to check thoroughly before authorizing print runs.
On SS A*STAR, the real action takes place off the Bridge. Inside BMRC Bay, the Biomedical guys are getting up to speed. They have done their homework. Dr Venki is fully briefed. He and his landing party know what to expect. But in space exploration you never know what you actually find. That’s why Biomedical explorers are well prepared. Their research weapons are the very latest. Some are so powerful that they pull explorers over from other ships. Even veterans of many successful voyages want to join A*STAR. Because they want to get their hands on the new “toys”. But it’s not just what great explorers carry on them. It’s what is inside them that makes the difference, their talent, experience and dedication.
When compared with the genome of humans, the DNA sequence of Fugu can help uncover new human genes and the elements that regulate the activity of genes.

While awaiting the scientists to further study their findings, Dr Venki leaves the planet for more faraway discoveries. But he vows to return.

Inside the research centre, Dr Venki examines the intriguing creature...

Man's genetic make-up can be better understood using FUGU! Want to contact Dr Venki? Call him on

And earthlings thought they’re only good for sashimi!

THE END

BMRC explorers have the passion to seek and the power to find. What are they looking for? Anything that will improve human health. So they are interested in all lifeforms, in what's inside their bodies, how cells work. BMRC's primary mission is to command the sciencebases. In old-world talk, the research institutes. The sciencebases specialise and do great work. They report discoveries that wow them all at meetings of interplanetary councils. They believe in the best of "bench to bed." From sciencebases to people in sickbays, they bring medicines that work like magic. Yet BMRC guys know that flying together can be faster. So they go on joint expeditions with other star explorers. Like Dr Venki's pufferfish voyage. High five!
Hope lies on board the outer-space laboratory. Its researchers, headed by eminent scientist Professor Chua, have developed an advanced laser beam, called the micro-UV laser, which could be the boy’s saviour.

In the hospital a few minutes later…

Back on earth, the young son of a prominent explorer lies unconscious in hospital.

Glad you made it, guys. We’ve got a task ahead, and time is not our friend.

His brain tumour is too advanced… we don’t have the technology to remove it.

Right away. I will teleport three of our people to assist you.

Your technology could save a precious life, Professor.

Oh… wait! I know someone who may be able to help.

Is there nothing else you can do?

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Advances in Science and Engineering

Inside SERC, it’s high-five time twice over. The Science and Engineering guys in the Nano Project report, “Mission accomplished. They have tamed some electrons. The teeny-weeny things are now doing what they are told to do. It’s a big deal, OK? Nanotechnology enables scientists to work with dimensions and tolerances of less than 100 nanometres. Using nanotech we can manipulate individual atoms and molecules. Then there is this Blue Laser advance. Sure, vaporising people with lasers is old hat. But the laser’s special features, especially its narrow beam, are still challenging human ingenuity. There is so much more we can do with lasers. Exploring all over are five other promising fields: Bioengineered materials, Magnetic recording systems, Spectroscopy, Nanotechnology and the new Laser Team reports another hit!”

Odyssey 2001-2002

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
This could be what you need. Let’s get to work straightaway.

Packing four times the capacity of current lasers bears, the micro-UV laser makes a more precise and effective surgical tool.

Within two hours, the boy’s tumor is removed, and the cherished signs of life return once again.

And the technology will go on to save the lives of many in the years to come. The End

The Famous Explorer from the US Scienceship California looks again at an SERC invention. “This is a basic breakthrough! Only Singapore has it.”

SERC’s sciencebases are keeping up with the best explorers. They also overtake. The force that propels them comes from their collective knowledge. Yet they know that flying in formation with other starships often helps. Top explorers can compare notes, divide up search patterns, help each other nurture cadets. The physical sciences and technology guys also work with the Biomeds. The two teams need each other. For example, you can’t talk to a tiny cell in the human body. But SERC can build you an interrogator. Even in outer space, we need to keep in touch with what’s inside our body.
Sciencefleet Cadetship

THEY are the Cadets of the Singapore Sciencefleet. Their Academy is not in just one location. They go to campus in Singapore or some other country. Wherever the location, it is a renowned university. The cadets also serve internships in various sciencebases. Again, they get to go to only the best. They specialise in the Biomedical Sciences or in Science and Technology.

In parent-talk, they are National Science Scholars. A full scholarship runs from undergraduate to PhD level. The Scholar gets tuition fees paid, allowances to live on, and a trip home each year if studying abroad. During their overseas PhD course, they get the overseas allowance in lieu of salary. The allowance paid to PhD scholars matches top salaries paid to fresh graduates. A*STAR’s Scholars should not suffer years of poverty and come back as poor as a church mouse.

If an aspiring scientific explorer is not on scholarship, A*STAR may want to beam her or him on board. It offers Fellowships to postgraduate and postdoctoral researchers. When the Scholars and Fellows complete their studies and research projects, they get to work in public sector research institutes. Their scientific talent is treasured.
WHERE A CAREER IN SCIENCE CAN TAKE YOU

EVEN the most fearless of explorers navigate with charts. But they will not be stopped when no map is available. They will venture into the unknown, charting it for those who follow. Going towards a career in Science, Technology and Research is not going into the unknown. A*STAR, the Agency has good maps to take you to exciting and rewarding prospects. Serve your Cadetship with A*STAR. Get fully prepared to explore the Scientific Frontiers.
Medals for Our Stars

YOU don’t have to fight a war, or tackle a typhoon, or rescue people from a disaster to be a hero or heroine. You can be acknowledged and admired for outstanding achievements in scientific research. A*STAR’s annual National Science and Technology Awards are Singapore’s highest scientific accolades. They recognise outstanding research scientists and engineers. They are the National Science and Technology Medal, National Science Award and National Technology Award.

Each year, too, the Singapore National Academy of Science bestows the Young Scientist Award, with support from A*STAR.

Also every year A*STAR, together with the Ministry of Education and the Singapore Science Centre, conducts the National Science Talent Search (NSTS). Winners get scholarships all the way to a PhD.
Designing the Future

THERE was a song with the line: “The future’s not ours to see”. Hardly anyone sings that anymore. Because the Future is here, we can see it. Men and women are gearing up to explore outer space, living and working in spacestations. In Scientific Space, A*STAR has sciencebases, its Research Institutes. They are in different locations. There are big advantages in clustering them. Hence the move to bring them together.

SOME of the best scientists, engineers, architects as well as interior and systems designers got together to conceptualise the scope, scale, function and form of Biopolis. The main specification is: enable close interaction and effective communication, yet provide lots of space for the research scientists to do their own thing. Also provide facilities that will lure them out of their laboratories to relax and socialise.
Scientific research is about exploration and discovery. That needs good communication and close interaction. A*STAR’s science clusters of the Future will provide that togetherness. We can see that future now, in the shape of Biopolis. Biopolis will be the launchpad for exploration of the Biomedical Sciences. Biopolis is under construction. It will be operational from 2003.
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A*STAR! CREW LIST

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