

IBN

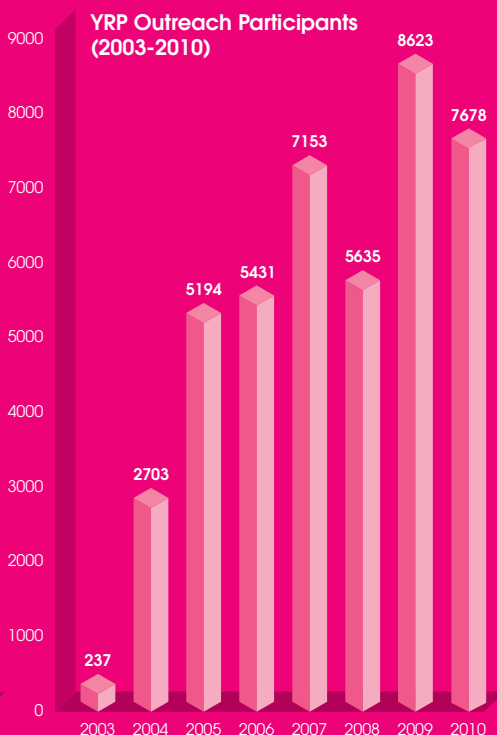
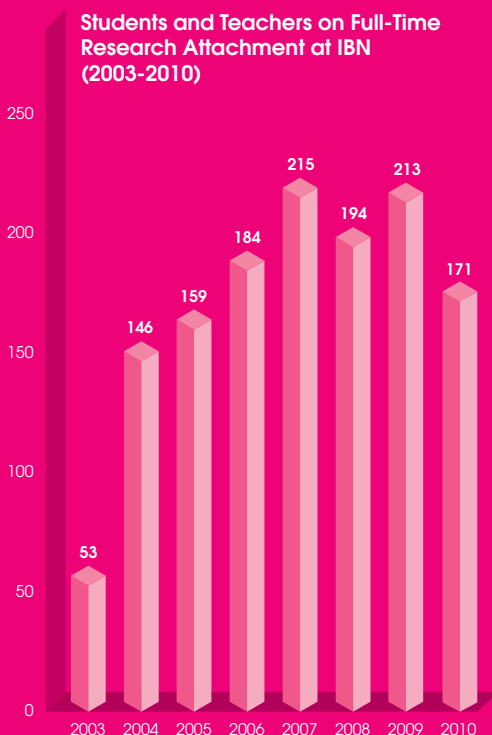
INSTITUTE OF BIOENGINEERING
AND NANOTECHNOLOGY



IBN offers students and teachers a **hands-on and enriching research experience** through its Youth Research Program.

IBN

YRP HIGHLIGHTS



YRP ACCOLADES

Since the YRP was established, 122 of our YRP students have moved on to further studies with national scholarships. Our YRP students have also won 46 international and local awards for their research projects conducted at IBN. These honors were awarded by:

- Singapore Science and Engineering Fair (SSEF)
- Intel International Science and Engineering Fair (ISEF)
- International Society for Pharmaceutical Engineering (ISPE)
- Taiwan International Science Fair
- Agency for Science, Technology and Research (A*STAR) Talent Search
- Nanyang Technological University (NTU) College of Engineering (CoE) Tech-Fair
- National University of Singapore (NUS) Science Research Program

YRP ACTIVITIES

IBN is committed to promoting an active research culture for our youths through a broad array of activities:



OPEN HOUSES

Open House for Schools from Primary to Tertiary Levels.



SCIENCE CAMPS

Science Camp for Students and Parents.



YOUNG RESEARCHERS' NITE

Annual Awards Ceremony to Celebrate the Achievements of IBN's YRP Students and Mentors.



WORKSHOPS

Workshop for Science Teachers.



RESEARCH ATTACHMENTS

IBN's Research Attachment Students Hail from Many Countries.



CAREER TALKS

Talk at Educational Institutions on Careers in Biomedical Sciences.

IBN'S NANO-BIO KITS



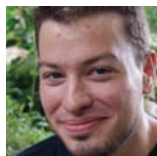
Developed by IBN researchers, the award-winning Nano-Bio Kits help teachers to convey complex scientific concepts to secondary and tertiary students through hands-on experiments.

IBN's Nano-Bio Kits have been selected for exhibition at The Museum of Modern Art (MoMa) in New York and the National Museum for Emerging Science and Innovation (Miraikan) in Tokyo for their innovative design and unique approach to scientific education. These educational toolboxes also received the 2008 Award

of Excellence (Packaging Series) at the 49th Annual Design Exhibition organized by *Communication Arts*, a leading international visual communications magazine.

There are three kits in IBN's Nano-Bio Kit series – Biological Fuel Cell Kit, Thermo-Responsive Hydrogel Kit and Dielectrophoresis Chip Kit. Each contains experiment components, teaching resources, and videos for teachers to plan and conduct their science lessons. More than 21 secondary schools and tertiary institutions have already incorporated the use of the IBN Nano-Bio Kits in their curriculum.

YRP REFLECTIONS



"I joined IBN's Youth Research Program because I wanted to experience what it was like to work in a research lab. Compared to the "abstract" university lab courses, I found scientific research to be rewarding and challenging. I am very thankful for this opportunity and I would recommend this program to anyone who is interested in science."

FRIEDRICH SACHS 26 UNIVERSITY OF MUNICH, GERMANY

"I have benefited enormously from my first-hand experience with research at IBN, which provided me with a very lively and interesting perspective of life as a researcher. I truly enjoyed the warm camaraderie of the lab I was attached to, where we thrived under the guidance of our mentors who were passionate about research."

GOH JIA YING 18 NUS HIGH SCHOOL OF MATHEMATICS AND SCIENCE, SINGAPORE



"This experience at IBN has been an opportunity to renew my love for research. My experience at IBN allowed me to learn about new breakthroughs in the field of biomedical research, as well as the latest technologies. As my students are doing similar research attachment programs at IBN, there is now a greater synergy in our scientific discussions. This was indeed a most enriching experience from a grateful educator."

EUGENE PANCRATIUS YEOW BIOLOGY SUBJECT HEAD, CATHOLIC JUNIOR COLLEGE, SINGAPORE

YOUTH RESEARCH PROGRAM

The Institute of Bioengineering and Nanotechnology (IBN) has been actively reaching out to the young since October 2003 through its Youth Research Program (YRP). Spearheaded by IBN Director and YRP Chair, Noreena AbuBakar, the YRP introduces cutting-edge scientific research to students and teachers through various activities such as open houses, career talks, workshops, science camps and research attachments.

By providing students and teachers with first-hand experience in research, the YRP hopes to expose more young people to research experiences beyond their academic curriculum. The Program aims to nurture young minds in scientific research and inspire them to pursue careers in biomedical sciences.

As of February 2011, the YRP has reached out to over 44,000 students and teachers from 235 primary and secondary schools, junior colleges, polytechnics, as well as the universities. This includes over 1,300 students and teachers who have participated in full-time research attachments at IBN over a period of at least one month, during which they received valuable research experience under the guidance of an IBN researcher.

YRP COMMITTEE

ADVISOR	PROF. JACKIE Y. YING (IBN EXECUTIVE DIRECTOR)
CHAIR	NOREENA ABUBAKAR (IBN DIRECTOR)
CO-CHAIR	NIDYAH SANI (HEAD, CORPORATE COMMUNICATIONS)
COMMITTEE MEMBERS	DR. MOTOICHI KURISAWA (TEAM LEADER AND PRINCIPAL RESEARCH SCIENTIST) DR. ANDREW WAN (TEAM LEADER AND PRINCIPAL RESEARCH SCIENTIST)
OUTREACH COORDINATORS	JOY NG, WANYING CHEN

WWW.IBN.A-STAR.
EDU.SG

For more information on YRP activities,
please visit yrp.ibn.a-star.edu.sg or **Club YRP on Facebook**.



Institute of
Bioengineering and
Nanotechnology

Innovations for Tomorrow

www.ibn.a-star.edu.sg