

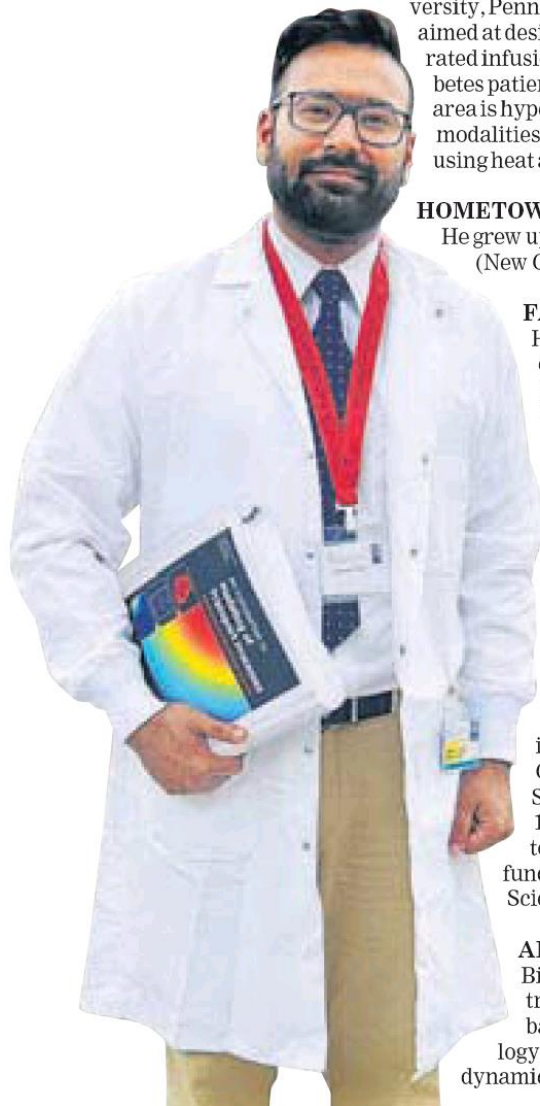
MADE IN CHANDIGARH

MANPREET SINGH, RESEARCHER, CANCER TREATMENT, US

'It was in this city that I learnt the four pillars of education'

PERSISTENT

Having spent years researching in the US, helping cancer patients in Punjab is still the dream that keeps Manpreet Singh going



WORK

Manpreet Singh is currently pursuing a doctorate in mechanical engineering at the Bio-heat Transfer Laboratory at the University of Maryland, Baltimore County (UMBC), US. A summer research intern at Maryland Proton Treatment Centre, University of Maryland School of Medicine, he is also a key contributor to the National Science Foundation on an interdisciplinary PhD research project on mild hyperthermia to enhance delivery of therapeutic nanocarriers in tumours. Prior to joining UMBC, he had worked on a project funded by the National Institute of Health (NIH), US, in association with Rowan University, New Jersey, and Thomas Jefferson University, Pennsylvania. The project was aimed at designing novel multi-perforated infusion catheters for type-1 diabetes patients. His major research area is hyperthermia treatment modalities for cancer, which entails using heat as a source to treat cancer.

HOMETOWN

He grew up in Mullanpur Garibdass (New Chandigarh) in Mohali.

FAMILY

His father is a retired official from Punjab government's labour department, while mother is a homemaker. He has an elder brother.

EDUCATION

I completed my bachelors in mechanical engineering from Guru Nanak Dev Engineering College, Ludhiana, and masters in thermal engineering from Thapar University, Patiala. My initial schooling was from Government Model Senior Secondary School, Sector 16, Chandigarh. My doctoral studies are fully funded through the National Science Foundation, US.

AREA OF EXPERTISE

Biological heat and mass transfer, medical imaging-based computational oncology, computational fluid dynamics and hyperthermia treat-

ment planning.

MY SECRET SAUCE

Conscientiously maintain higher work ethics and remain persistent in your efforts to achieve educational and professional goals. Strong determination and perseverance are the important traits one should possess in order to achieve greater heights while maintaining a balance between work, life and family.

THE MANTRA OF SUCCESS IN YOUR PROFESSION?

Sincerity, hard work, passion, dedication and determination. I still remember my daily school prayers "Arise, awake and stop not until your goal is achieved". One must meditate to maintain inner peace, which is proportional to external worldly happiness. One must invest in knowledge and education as they pay off huge interests.

THE TURNING POINT

In 2016, after completing my masters, I was looking for better doctorate opportunities at universities working on the same research topic. My aim was on doing something for the cancer patients in Punjab. This is when Dr Thomas L Merrill from Rowan University hired me as a research associate. After working with two parallel research projects of the National Institute of Health, US, for one year, I was hired by D Liang Zhu, from UMBC, who saw my work and offered me a PhD fellowship from National Science Foundation, USA. These two meetings were turning points in my life, as one helped me move to the US and the other is helping me work towards my dream of helping cancer patients in Punjab.

WHAT I OWE TO CHANDIGARH

It was in Chandigarh that I learnt the four pillars of education that helped me work as an engineering scientist in the US.

THINGS I LIKE TO DO WHEN I VISIT CHANDIGARH

I miss my home town, as I visited it two years ago. At Chandigarh, I like to spend time at Sukhna Lake and Sector 17.

HOW HAS THE CITY CHANGED OVER THE YEARS?

Chandigarh has become smarter over the years. There has been a tremendous change in terms of shopping with introduction of high-end malls. But at the same time, traffic has spiralled out of control.