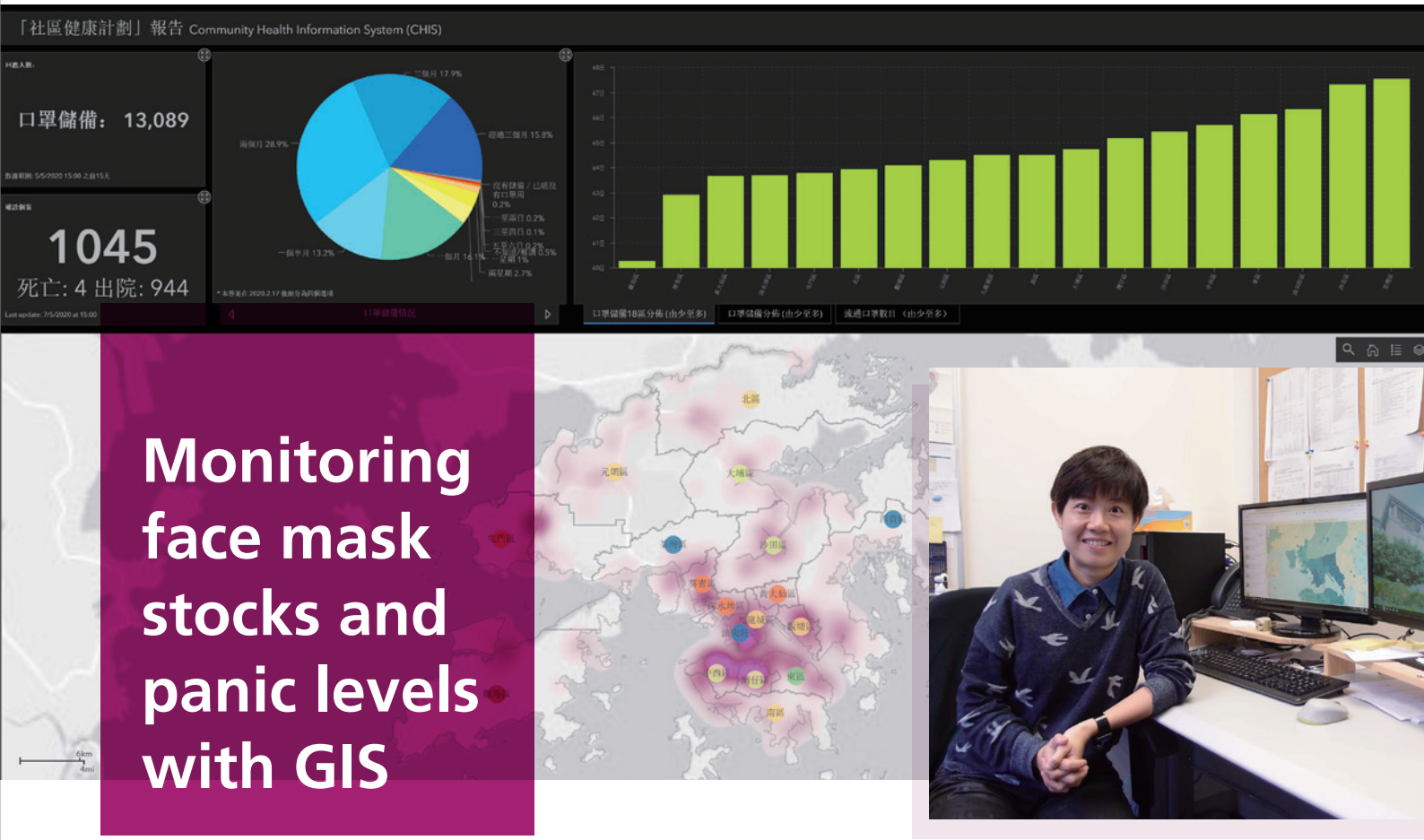

Monitoring face mask stocks and panic levels with GIS

Six days after the first COVID-19 case in Hong Kong in January 2020, **Prof Paulina WONG, Assistant Professor of Science Unit** and the Hong Kong Public Opinion Research Institute (HKPORI) launched a web-based **Geographic Information Systems (GIS)** dashboard for the public, showing not only near real-time COVID-19 information and public health risk in local communities, but also citizens' stress levels and where there was the most urgent demand for anti-pandemic commodities.

Using data from HKPORI's online survey covering time-sensitive questions such as "How would you rate your chance of being infected by COVID-19 this month?" and concerning the use and stock levels of face masks, the regularly updated dashboard is proving very useful to decision makers, District Council members, NGOs and social workers in targeting high-risk and deprived areas and offering immediate attention and support for local residents, in particular the elderly and the needy.

The project and mapping also provide indications up to a macro level of how public opinion and sentiment sway in certain circumstances. "In March, when overseas students began to return to Hong Kong and Wuhan reopened its borders, there were dynamic changes in face mask stocks and panic levels," Prof Wong said.

While the project is similar to Prof Wong's "Fine particulate matter pollution from incense burning at temples in Hong Kong" and others concerning public health, wellbeing and social policy with GIS, the project is special as "it really helps people in near real time, and the impact is immediate and measurable. The collaborative efforts of all parties involved in the project are encouraging and inspiring. I hope these on-going initiatives continue to generate **positive social impact** to local communities of Hong Kong."