

Climate, age studies will aid policy, forum hears

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Fri, Sep 11, 2009

RESEARCH INTO our aging population and climate change should be prioritised if RD investment is to be spent on areas of greatest societal need, Intel's annual research and innovation conference in Leixlip heard this week.

Research scientists who attended the three-day event in Co Kildare heard two Irish academics describe huge challenges that governments and society will face.

Prof Rose Anne Kenny heads up the gerontology department in Trinity College which studies psychological, biological and social aspects of aging. She detailed how a rapid growth in over-65 year olds will outstrip the ability of care services to support them. "Life expectancy is increasing at about 2½ years every decade," she said. "The burden of disease in older age groups will put huge pressure on society."

A whole new vista of research is emerging to address the problem, according to Prof Kenny, that will encourage "active aging" through better social engagement and home monitoring. "There are big opportunities for technology to impact not just on social inclusion but on debilitating pathologies."

She is actively involved in Tril (Technology Research for Independent Living), a collaborative project involving Intel, Trinity, UCD, NUI Galway and the IDA. It develops assistive technologies to enable elderly people to live longer in their homes, improving the quality of life and relieving the burden on the healthcare system.

In a separate demonstration room, Tril technology showcased devices and software designed to keep the aged socially engaged, along with home sensors that monitor their physiological status.

"In Ireland, we have embraced technology and new ways of detecting behavioural changes – early markers of aging – so we can intervene early and prevent disability, the principal burden of healthcare costs," she explained. "If we are going to live to 80, 90 or 100, we don't want to spend the last 10 or 20 years in a nursing home." She is helping to start a 10-year longitudinal study which she believes will help the country get to grips with the changing age demographic and better inform policymakers.

Detailed research over time is at the core of Prof John Sweeney's work. He is the director of Icarus, the Irish climate change analysis unit at NUI Maynooth, and his team uses sophisticated computational models to make forecasts about the effects of climate change

that could make a significant contribution to Ireland's social and economic plans. If even the more modest predictions about climate change come true, areas of the island will have to rethink their economic business models. Less rainfall in the east and along the south, for example, will make it difficult to grow certain crops like potatoes.

When it comes to reducing carbon emission, Ireland has a big battle on its hands, according to Prof Sweeney. "The UK government has committed to cutting carbon emission by 80 per cent by 2050. To achieve that in Ireland, we would have to reduce our national emissions to less than the emissions of the agriculture sector alone," he said. "It will be a task that the IT industry will be centrally involved in. In many key areas there will be money to be made in the green economy."

The two academics weighted their arguments with data that would suggest action was required to avoid long-term consequences. But how easy was it to convince politicians, who are often more focused on election wins?

"There is a medium-term blinkered view that if it doesn't affect them in the next five years they are not going to worry about it," said Prof Sweeney. "Many aspects of environmental policy in Ireland are driven by directives from the EU which politicians have to react to. It is important to get these directives enshrined supernationally rather than nationally."

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