

Humanity's at the crossroads

FIRST PERSON

Oxford Martin School director
IAN GOLDIN
on the legacy of its late founder



James Martin believed that humanity is at a crossroads. He saw the potential for immense progress. But he also became increasingly aware that the world faced some critical challenges and that the decisions made now would make or break our prospects and the wellbeing of future generations.

Jim's passion led him in 2005 to found the James Martin 21st Century School, or Oxford Martin School for short, to tackle these critical global challenges. Jim remains the University of Oxford's most generous benefactor, providing \$150m.

With the support of an additional 40 donors and foundations the school has become the leading global centre for forward-looking interdisciplinary research.

More than 300 leading academics from more than two dozen disciplines work in research teams in the school to find innovative solutions to pressing global issues. These include food security, climate change, biodiversity, the challenges of ageing, migration and demographic change, new energy systems and the application of new technologies, including nano and quantum.

The school's teams are working in new ways to try to stop pandemics, prevent financial crises, develop cybersecurity and end conflict. The Oxford Martin School is unique in the depth and breadth of interdisciplinary scholarship it brings to solving practical problems.

Climate change is a good example of an issue that benefits from this approach. We



The late James Martin

are funding climate physicists, applied mathematicians, engineers, demographers, economists, anthropologists and others to look at increasing the reliability of climate prediction and to develop insights to assist with climate mitigation, adaptation and understanding the potential and dangers of geoengineering.

Through supporting new approaches to solar and tidal power, as well as new approaches to transport systems, we are able to provide a holistic view of the energy

problem and offer practical solutions.

Another example is our innovative work on nano-medicine. Although progress has been made in developing targeted cancer therapies, these remain highly invasive and surgery, chemotherapy and radiation are accompanied by severe side effects.

We are supporting researchers at the interface of biology, physics, chemistry and engineering to create the tools to facilitate novel strategies for new treatments using nanostructures that target disease and

promote healing. The aim is to develop a new drug delivery system that selectively targets cancer cells, improves drug stabilisation and avoids damage of healthy tissues.

These are just two examples out of our many exciting projects.

Our academics share an increasing concern about perceived gridlock in many of the critical global challenges.

Despite the gravity of these global challenges, too many governments, businesses and organisations are preoccupied by short-term priorities.

Governments are distracted by election cycles; businesses place too much emphasis on short-term profit at the expense of longer-term impact. As a result, too little consideration is given to how decisions implemented now will affect not only this generation but future generations too.

This gap between knowledge and action has prompted us to establish the Oxford Martin Commission for Future Generations. Chaired by Pascal Lamy, outgoing director general of the World Trade Organisation, the commission will report in October this year and aims to provide some practical pathways to action on many longer-term challenges.

In an increasingly integrated world, countries need to embrace international co-operation and re-energise national priorities that aim to address global issues. This is not easy, particularly when countries face urgent domestic problems.

The gridlock of modern politics needs to be broken to deal with key economic, social, climate, trade, cyber, security and other challenges of our time.

Failure to do so heightens the risk that our societies will increasingly look inward, turning their back on the needs of others and of future generations.

We need urgently to focus on the sustainability of the legacy we are leaving.

Advancing our knowledge and bridging the gap between knowledge and action is an ambitious goal but at the Oxford Martin School we are doing our best to contribute to addressing this urgent challenge.