

BIRAX REGENERATIVE MEDICINE INITIATIVE

Matthew Gould MBE
Her Majesty's Ambassador to Israel

"Science is one of the cornerstones of the UK's partnership with Israel. Through BIRAX, we are supporting world leading scientists and institutions to find treatments for some of the world's most awful diseases"

The Rt Hon William Hague MP, First Secretary of State & Secretary of State for Foreign and Commonwealth Affairs

Britain and Israel are world leaders in science. Both have disproportionate numbers of world-class universities, laboratories and scientists and both win disproportionate numbers of Nobel prizes.

There is huge potential for our scientists to work together for the benefit of both countries, and of humanity. Yet the level of collaboration does not get anywhere close to the potential.

This is why one of the UK's goals in Israel in the last few years has been to put scientific collaboration at the heart of our relationship, and start to fulfil this potential.



Minister of Science (Israel), Yaakov Perry and Foreign Secretary (UK) William Hague. Signature of the Memorandum of Understanding between the UK and Israel on Science. ©Mati Milstein

It was clear from the start that this effort would succeed only on the basis of being driven by the science, not by the politics. To make sure what we did was focused on science, our first step was to launch the UK-Israel Life Sciences Council,

... four Nobel prize winners ...

which brings together 21 scientists, to direct our efforts and help us focus on the most important areas of scientific collaboration. We are privileged to have as Council members

four Nobel prize winners, as well as several distinguished Parliamentarians, including Lord Winston, Baroness Greenfield and Lord Patel. The Council meets annually, and is co-chaired by Professor Raymond Dwek, Professor of Glycobiology at Oxford University, and Professor Rivka Carmi, President of Ben Gurion University.

In its first meeting, the Council decided that we should focus on regenerative medicine, as a field in which both Britain and Israel are world leaders, and where we could do extraordinary things together. This is why we

launched the BIRAX Regenerative Medicine Initiative two years ago with the Pears Foundation and the British Council. BIRAX was the Britain Israel Academic and Research Exchange Partnership, and we converted it into a £10m fund to power major research projects in regenerative medicine.

We have raised over half our £10m target, from industry, philanthropy and the research councils of both countries. Following a stringent international peer review process run by the British Council, we selected seven proposals out of the fifty we received, and are now funding them – bringing British and



BIRAX grant recipients, Dr Sharon Even-Ram (Hadassah – Hebrew University Medical Centre) and Prof Kevin Shakesheff (University of Nottingham). ©Mati Milstein

Israeli scientists together to find regenerative therapies for some of the world's most awful diseases.

We have invested £2 million into new research in the following areas:

- creating stem cells that are genetically identical to particular patients;
- managing immune responses and transplant rejection;
- developing regenerative therapies for dreadful chronic diseases such as type 1 Diabetes, Parkinson's and Multiple Sclerosis; and

... three more priority areas ...

- working on the vascular environment needed for successful regeneration therapies and viable organ regeneration.

... international peer review ...

While we have so far funded pure research, we hope that future funding will include translation research, so that BIRAX will also be able to contribute to UK economic growth. Regenerative medicine offers huge economic potential – this is why the Minister for Universities and Science, Rt Hon David Willetts MP, included it as one of the “eight great technologies that will propel the UK to future growth”.

Our regenerative medicine programme is only the start. There is much more to do to develop the scientific partnership. The first thing that the Foreign Secretary did during

have ambitious plans, and we know where we want to get to – a partnership so strong that in a few years time it will no longer need to be primed by philanthropic funding.

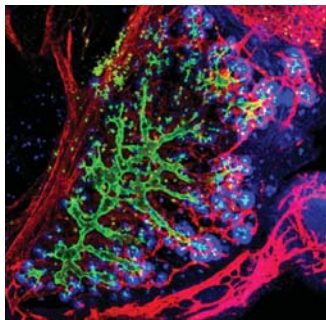
The relationship between our countries is a complicated one. We have real disagreements – for example over settlement

together than they can working apart. In doing so, it benefits both our countries, and holds out hope for the whole world.

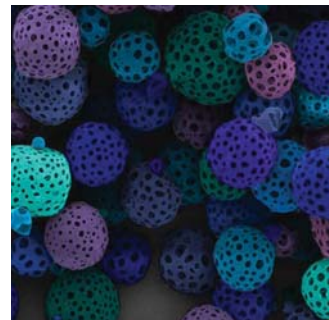
The next Call for Research Proposals will be announced at the Second BIRAX Regenerative Medicine Initiative Conference at the Technion Institute of Technology, Haifa, Israel on 25-26 March 2014.



BIRAX Regenerative Medicine Initiative grant recipient, Professor Tamir Ben-Hur (Hadassah – Hebrew University Medical Centre) with Her Majesty's Ambassador to Israel Matthew Gould. ©Mati Milstein



©Prof. Yuval Dor's lab, Hebrew University of Jerusalem



Nano-sized plastic particles ©Prof Kevin Shakesheff's, University of Nottingham

World-leading scientists from Oxford, Cambridge, Edinburgh and Nottingham Universities are working on each of these problems with their counterparts in Israel, through BIRAX.

All this makes the BIRAX programme one of the most ambitious bilateral medical research collaborations anywhere in the world. The scientists and projects funded by BIRAX are at the forefront of Regenerative Medicine; our hope is that the UK/Israel partnership will soon become known as one of the leading international drivers of progress in the field.

his recent visit to Israel was to sign a Memorandum of Understanding on Science between the UK and Israel. This document commits us to five more years of the BIRAX programme including new funding for short study-fellowships for early career researchers in both countries. It also outlines three more priority areas where we want to develop the scientific relationship – nano-technology, water and neuroscience.

The future of scientific collaboration between Britain and Israel is an exciting one. We

building, and the restrictions on Gaza. We are currently doing all we can to support the peace negotiations led by US Secretary of State John Kerry, and have applauded the leadership of both Prime Minister Netanyahu and President Abbas in leading their people into the negotiating room.

But fundamentally, Britain sees Israel as a friend, with shared values and wonderful potential for cooperation. The Foreign Secretary has said that Britain sees Israel as a strategic partner. The Prime Minister has said his faith in Israel is unbreakable. The British Government has taken a clear and firm stand against those calling for boycotts of Israel.

Our partnership in science is a model of what UK/Israel relations can be. It brings together brilliant people and institutions on both sides, who can achieve more working

Front cover pictures

- 1 Microscope image – mouse embryo day 6.5 with different protein markers. ©Dr Yaqub Hanna's lab, Weizmann Institute of Science
- 2 An embryonic pancreas, magnification x 10. ©Prof. Yuval Dor's lab, Hebrew University of Jerusalem
- 3 Professor the Lord Robert Winston speaking at the UK – Israel Life Sciences Council dinner. ©Mati Milstein
- 4 BIRAX Regenerative Medicine Initiative grant recipients with British Council Israel Director Alan Gemmell and Her Majesty's Ambassador to the UK Matthew Gould. ©Mati Milstein
- 5 BIRAX Regenerative Medicine Initiative grant recipients from the UK and Israel. ©Mati Milstein
- 6 And above extreme left ©Prof. Yuval Dor's lab, Hebrew University of Jerusalem
- 7 Participants at the first UK – Israel Regenerative Medicine Conference. ©Mati Milstein
- 8 Professor the Lord Naren Patel, UK – Israel Life Sciences Council member at a BIRAX grant recipients' workshop. ©Mati Milstein
- 9 Early nerve stem cells grown from human embryonic stem cells. ©Dr. Sharona Even – Ram's lab, Hadassah – Hebrew University Medical Centre