

Research and Development

Prof. Moti Herskowitz | Vice-President and Dean for R & D

The University has made considerable strides in advancing its research agenda. The process was accelerated this year as part of the comprehensive plan to complete our transformation into a top-tier research university, with total grants, contracts and funding approaching \$60 million, a significant increase over past years.

This increase is a result of our investments – direct and indirect – in support of research, including the completion of a number of major physical infrastructure projects and improved administrative services for researchers. Together, this has had a major impact on the University's ability to compete for peer-reviewed research funding.

This was facilitated by the University's ability to offer competitive start-up packages based on scientific merit, strengthening existing research groups while also creating a number of excellent new groups in emerging fields. Of note is the newly-created Safra Center for the Design and Engineering of Functional Biopolymers based on an exceptional group of researchers from the Faculties of Natural and Engineering Sciences. This Center will specialize in pure "biomimetic" approaches and tools for the design of functional materials.

The available start-up funding for new researchers was increased considerably over the past four years. This was accomplished through extensive use of external funding – such as the Rich Initiative for Excellence in the Negev, the Converging Technologies Fund, the *Morasha* (Legacy) Fund of the Israel Science Foundation and the Wolfson Foundation of the United Kingdom, together

with generous donations from our friends around the world – which was invested in our advanced research infrastructure.

There was a significant increase in the number of grants from highly-competitive foundations such as the Israel Science Foundation; the German Science Foundation for Scientific Research and Development; Germany-Israel Binational Fund; and the U.S.-Israel Binational Science Foundation; as well as successful grant submissions to the EC Seventh Framework Programme for Research and Technological Developments (FP7).

Interdisciplinary institutes and centers are one of the most important tools for advancing research. The National Institute for Biotechnology in the Negev research activities have been reviewed in preparation for undertaking a \$90 million investment over the next nine years. The Ilse Katz Institute for Nanoscale Science and Technology, supported by the Israel National Nanotechnology Initiative, continues to develop and provide the critical infrastructure for conducting high level research.

The establishment of the Zuckerberg Institute for Water Research, the French Associates Institute for Agriculture and Biotechnology of Drylands and the Institute for Energy and Environment of Drylands Research at the Jacob Blaustein Institutes for Desert Research has positively impacted on the Institutes' development.

The Ben-Gurion Research Institute for the Study of Israel and Zionism and *Heksherim*: The Institute for Jewish and Israeli Literature and Culture, which has



also received generous support from the Caesarea Foundation in Israel, serve as engines that advance research in the Humanities.

In addition to our more established frameworks of research, new initiatives based on our proven expertise are being promoted in the fields of renewable, green energy and homeland security. The former concentrates on solar energy, renewable fuels, fuel cells and energy crops. The latter will deal with, among other fields, information technology, sensing threats, protective technologies, and medical treatment in mass disasters.

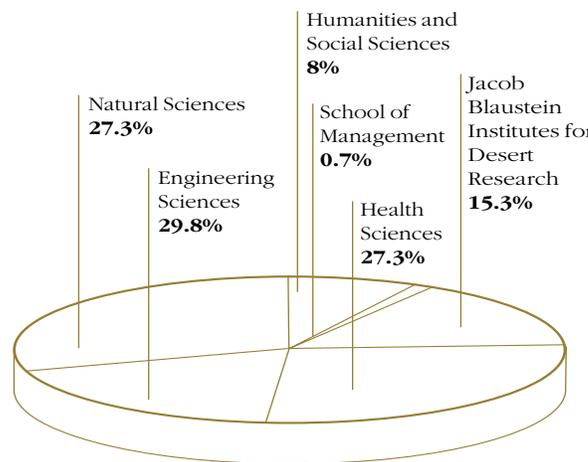
B.G. Negev Technologies

BGN Technologies is the technology transfer company of Ben-Gurion University of the Negev, responsible for the commercialization of know-how, technologies and inventions of the University's researchers.

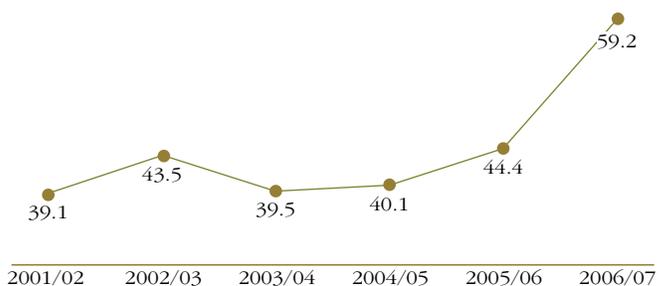
In 2007, BGN showed 200% higher annual revenue from research and royalties than in 2004. During those three years, BGN signed research and licensing agreements with more than 130 companies in Israel and worldwide. The number of yearly patent applications has also more than doubled.

In 2007, BGN continued the previous years' process of founding promising start-ups based on BGU technologies, such as PixelScan Ltd. for camera resolution improvement or Thulium Ltd. which developed a beta-gamma radiation source for cancer therapy.

Percent of Grants by Faculty 2006/07



New Grants & Contracts (\$USm)



Total Investment in Research (\$USm)

