

# Research and Development

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



The University has made major progress in advancing cutting-edge research, which has resulted in a significant increase in the overall research output. This is a result of a proactive policy to enhance research infrastructure, distribute resources according to performance criteria and improve service for research activities.

A concerted strategy of enhancing applied research – in conjunction with B.G. Negev Technologies – has resulted in a major breakthrough in amplifying high-profile scientific opportunities. The establishment of the Advanced Technologies Park adjacent to the University is expected to increase University exposure.

BGU has implemented an active policy of recruiting the most promising scientists and scholars. Outside funding sources, such as the Rich Initiative for Excellence in

the Negev, the *Morasha* (Legacy) program of the Israel Science Foundation and the Converging Technologies program, have been essential in attracting top talent to the region. Furthermore, the University has received significant support from the Wolfson Foundation to upgrade its research infrastructure.

Interdisciplinary institutes have become a focal point for providing scientific leadership. Two highly active research centers were elevated to the status of institutes: the Ilse Katz Institute for Meso- and Nanoscale Science and Technology, supported by the Negev Foundation and the Israel National Nanotechnology Initiative amongst others, and *Heksherim*: the Institute for Jewish and Israeli Literature and Culture, partially funded by the Casearea Foundation. In Sede Boqer, three institutes are taking shape under the umbrella of the Jacob Blaustein Institutes for Desert Research: the Zuckerberg Institute for Water Research, the French Associates Institute for Drylands Agriculture and the Institute for Energy and Environment of Drylands Research.

The University is proud of the accomplishments of its researchers, reflected in the quantity and quality of prestigious competitive grants received this year. Highlights include:

- A major European Union grant, awarded to a European consortium that includes a group of young BGU researchers from Biotechnology Engineering, "Glycans in Body Fluids – Potential for Disease Diagnostics." The leader and coordinator is a researcher from the Department of Microbiology and Immunology who is active in a number of high-profile projects.
- A grant from the *BIKURA* program of the Israel Science Foundation, awarded to researchers from the Departments of Chemical Engineering and Clinical Biochemistry to explore "Carrier-mediated ultrasound-enhanced sub-cellular delivery of phosphoinositides."

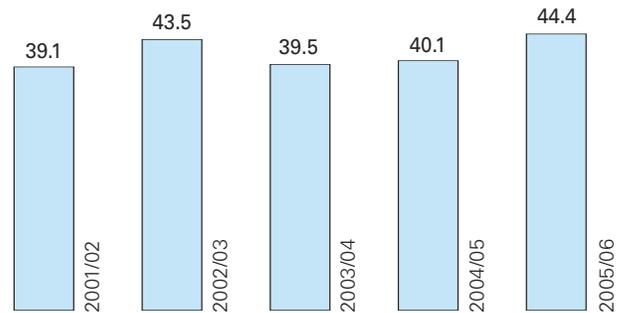
- Four grants specifically for young researchers, reflecting the quality of newly-recruited faculty members: a grant from the Morasha Fund to a researcher in the Department of Life Sciences; a grant from the Ministry of Science to a researcher in the Electro-Optics Engineering Unit; a grant from the Cancer Association to a researcher from the Department of Chemical Engineering; and a grant from the Juvenile Diabetes Research Foundation was awarded to a researcher from the Department of Clinical Biochemistry.
- An important grant from AFSOR – U.S. Air Force, awarded to a researcher from the Department of Life Sciences to study “Protein Glycosylation in Archaea: A Post-Transitional Modification to Enhance Extremophilic Protein Stability.”
- A consortium led by a senior researcher from the Department of Behavioral Sciences, was awarded a grant from the Ministry of Education, titled “Impact of Neuro and Cognitive Sciences on the Education System.”

### B.G. Negev Technologies

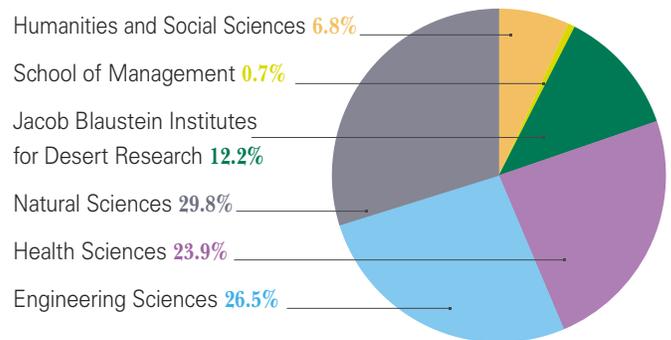
BGN Technologies is the University’s technology transfer company. Last year, BGU showed a 60 percent increase in annual revenue from research and royalties. In parallel, B.G. Negev played an important business role in the stages leading to the establishment of the Deutsche Telekom Laboratories at BGU.

A number of promising license agreements were signed based on the start-up potential of new technologies. In 2006, BGN founded a number of new start-ups, including the following companies: Protea Vaccines Tech in the field of pharmaceuticals; Zenith in solar energy; MultiPon in communication hardware; Polyrizon in biotechnology; EIMinda in medical devices; BotanoCap in environment and green agrochemicals; and Amorfical in biotechnology.

### New Grants & Contracts (\$USm)



### Percent of Grants by Faculty 2005/06



### Total Investment in Research (\$USm)

