Research

The Office of the Dean of Research, Prof. Anat Barnea, deals with all issues related to research at the Open University through the Research Authority, which is entrusted with the organizational infrastructure and support of research at the OUI, and through its research centers.

New Research Centers

This year, three research centers were established at the Open University. A research center serves as a scientific, institutional and practical framework for research on theoretical, empirical and applied issues in a variety of areas and on the reciprocal relations among them. The centers help researchers to create new scientific knowledge, enable cross-fertilization and cooperation, joint study of various topics, and activities held with researchers and experts from Israel and abroad. Each center is run by a Steering Committee, headed by a director. The Steering Committee is composed of senior academic faculty members from several academic departments at the Open University as well as teaching staff and researchers from outside the University.

- **Research Institute for Policy, Political Economy and Society, headed by Dr. Aviad Bar-Haim**

The Open University Research Institute for Policy, Political Economy and Society is an interdisciplinary center. Its goal is to advance the study of subjects and issues – theoretical, empirical and applied – associated with the interrelationships between policy making and implementation, and social, political and economic processes and mechanisms. The theoretically informed examination of these relationships can produce new knowledge with potential practical benefits for policy makers and society. For instance, one major facet of policy making and implementation to be explored is the institutional interface of models of governance, the state, civil society, and international organizations. These complex configurations of relationships fundamentally affect the development and implementation of policy in many different domains, such as education, labor relations, macroeconomic management, mechanisms of intergenerational transfers, welfare, environment protection, military-civil relations, etc. The Institute encourages investigation of Israeli or other cases, focusing on comparative studies and studies that explore the global and international dimensions of policy making and implementation.

In order to provide a vibrant research environment to scholars from different disciplines, the Institute organizes international and local symposia and conferences, publishes a series of working papers, and provides research assistance to its members.

- **The Center for the Study of Relations between Jews, Christians and Muslims, headed by Prof. Bat-Zion Eraqi Klorman**

Relations between Christians and Muslims, between Christians and Jews, and between Jews and Muslims play a major role in the design of contemporary history in the making. Interreligious conflicts juxtaposed with productive interreligious dialog are evident across the globe. Contemporary interreligious interaction has aroused new interest in the historic and social roots of the dialog. Scholarly research is reexamining this field and inquiring into the societal role of religious faith. The study of religions considers the function of religion in the design and evolution of state institutions, the design of systems of inclusion, seclusion and control, and the tension between personal and public religion.

Research centers in Israel today study particular religions and the Jewish Diaspora. The Center for the Study of Relations between Jews, Christians and Muslims can serve as a focus for scholarly research on the historical development and current status of interreligious and intercultural relations. The Center will promote interdisciplinary and interdepartmental research, and initiate joint academic ventures with researchers at other universities and research institutes in Israel and throughout the world. Research will initially be conducted on the social, cultural and religious discourse between Jews, Christians and Muslims from antiquity to the present.

- **Research Center for Innovation in Learning Technologies, headed by Prof. Yoram Eshet**

As a university based on distance learning, the Open University is committed to the ongoing improvement of its teaching quality through the integration of innovative learning and teaching technologies. The Research Center for Innovation in Learning Technologies serves as the research division of the Open University for exploring emerging technologies and developing models and strategies for their integration in learning. The Center is composed of a consortium of about fifty faculty members from various Open University departments. It supports studies conducted by its members and their

students. The Center conducts a wide variety of academic activities such as symposia, workshops, conferences and research seminars. As the biggest and most active research center of its kind in Israel, the center's academic work provides a meeting ground for researchers from most academic institutes and organizations in Israel. The Research Center for Innovation in Learning Technologies operates in close collaboration with *Shoham* (the Center for Technology in Distance Education). It was founded in 2010, replacing the Chais Center, which was active from 2004.

Abstracts of several studies carried out by members of the Center are described below.

■ **Dr. Yoram Kalman** and **Zvia Elgali**, "Three decades of national ICT programs"

In the last thirty years we have witnessed the announcement of a dozen national information and communication technology (ICT) programs for the Israeli K-12 education system. This study reviews these national programs, seeking to identify trends in the perception of the role of ICTs in the education system. The study identifies spiral trends, the revival of past goals and the emergence of new goals. It lays the foundation for a study of the relationships between the national ICT programs in the Israeli education system, and social, political and technological factors.

■ **Dr. Tal Hassner**, "Viewing the viewers: How adults with attention deficits watch videos"

The study examines how adult students interact with online educational video lessons that enable them to pause or re-watch the video. Its findings show that students with ADHD utilize these options in ways which are significantly different from the control group, pausing playback after shorter periods of time, skipping back to previously watched parts of the videos more often, etc. These suggest that the presence of ADHD can be measured by analyzing how adults watch videos. This information may therefore be applied to better understanding how adults cope with attention deficits and assist in designing novel ADHD screening techniques for this population.

■ **Dr. Sigal Eden**, "The influence of oral language of deaf and hard-of-hearing children on sequential time perception"

In the current study, an intervention was conducted aiming to enhance sequential time perception by training young children with HL to arrange episodes of a story's sequence and to enhance their ability to tell the story they created.

■ **Dr. Rica Gonen and Dr. Nitza Geri**, "Improving Internet sponsored search pricing scheme to reduce free exposures"

The study investigates the sponsored search auction pricing mechanism, the Generalized Second Price (GSP) scheme. This scheme charges advertisers only for clicks. GSP's predilection for free exposures has led impression-seeking advertisers to game the current scheme for free advertising. We present a solution that extends the GSP to charge for clicks as well as exposures. The new scheme allows advertisers to participate without an expected loss and is proved to exhibit a Symmetric Nash Equilibrium.

Selected Conferences and Academic Workshops

"Learning in the Technological Era" – 2011 Chais Conference: The annual Chais conference, "Learning in the Technological Era," was held with the cooperation of EDEN, the European Distance and E-Learning Network. This was the sixth in the series of national conferences on learning technologies. The conference contributes to guiding the Israeli research community in the use of instructional technologies and reinforcing the Open University's prominent research status and the assimilation of technologies in this area.

International workshop in Political Science: The "Ethnicity and Politics" research group of the International Political Science Association held a workshop at the Open University on "Democracy, Ethnicity and the State." Some 30 researchers from Israel, Russia, Australia, India, Northern Ireland, the US and France attended. The workshop focused on democratic dilemmas arising from the link between the state, the political system, and majority and minority ethnic groups.

Annual conference of the Israel Musicological Society: The annual conference of the Israel Musicological Society was held this year at the Open University and included eight sessions and a concert.

Philosophy club: The Department of History, Philosophy and Judaic Studies held two meetings of the Philosophy Club.

The Research Authority

The Open University Research Authority (RA) supports research activities by locating external funding sources and assisting in submitting proposals to external funds, and provides direct support by allocating resources from the internal research fund. A Steering Committee, composed of senior faculty members from various disciplines, operates alongside the RA and is responsible for overseeing its academic activity, allocating resources and assessing applications for funding.

Annual Research Day

This year's annual Research Day was devoted to the presentation of OUI faculty research activities and focused on the topic of "Behavior." It included interactive games with university staff as voluntary players, in order to clarify the principle of "sharing a secret" in game theory.

As in previous years, there was an active exhibition of many research topics addressed by university researchers. Research materials were demonstrated along with the different research methods. Students who participated in the research projects also took part in the exhibition.

Post-doctoral grants

The OUI offers post-doctoral grants to reinforce research at the Open University. This year there were many candidates from a range of research fields on a high scientific level, from whom a specially appointed committee selected four recipients. The grant recipients will conduct their studies in cooperation with OUI faculty.

Patents

This year, four patents were registered by the Open University, either on its own or through cooperative ventures with other universities.

Accessibility of faculty publications

This year, free versions of publications by university researchers were made available and posted on personal websites. In addition, an editing tool for personal websites for faculty members was introduced.

Research Grants Awarded by External Funds

Twenty-three studies conducted by OUI faculty were awarded funding from external funds this year, among them 16 grants from the Israel Science Foundation and binational funds.

Grants from the Israel Science Foundation

- **Dr. Niv Buchbinder**, Dept. of Mathematics and Computer Science (with Prof. Joseph Naor, Technion) for research on "A Primal-Dual Approach to Online Algorithms: New Challenges and Perspectives"
- **Prof. Daphna Ephrat**, Dept. of History, Philosophy and Judaic Studies, for research on "In the Footsteps of the Prophet: Spiritual Leadership in a Medieval Islamic Setting"
- **Dr. Idit Gil**, Dept. of Sociology, Political Science and Communication, for research on "The 'Radom Transport' – Natzweiler #III: A Case Study of the Experiences of Jewish Forced Labor"
- **Dr. Nurit Gronau**, Dept. of Education and Psychology, for research on "Effects of Attention and Visual Context on Perception and Memory of Real-World Objects"
- **Dr. Dafna Hirsch**, Dept. of Sociology, Political Science and Communication, for research on "Hummus: The Socio-Cultural Life of an Israeli Food Icon"
- **Prof. Amir Horowitz**, Dept. of History, Philosophy and Judaic Studies, for research on "The Possibility of Thinking about the World in a Naturalistic Framework"

- **Dr. Hayah Katz**, Dept. of History, Philosophy and Judaic Studies (with Prof. Avraham Faust, Bar-Ilan University) for research on "The Birth, Life and Death of a Four Room House at Tel 'Eton"
- **Dr. Nurit Melnik**, Dept. of Literature, Language and the Arts (with Dr. Shuly Wintner, Haifa University) for research on "Grammar Engineering and Collaborative Grammar Development"
- **Prof. Manor Mendel**, Dept. of Mathematics and Computer Science, for research on "Geometric Aspects of Metric Spaces and Their Algorithmic Applications"
- **Dr. Doron Ravid**, Dept. of Education and Psychology (with Prof. Moshe Rehavi, Tel-Aviv University) for research on "Novel Herbal Treatment for Anxiety Disorders"

Grants from other external funds
- **Dr. Niv Buchbinder**, Dept. of Mathematics and Computer Science (with Prof. Joseph Naor, Technion; Dr. Bansal Nikhil, IBM Watson Research Center; and Prof. Gupta Anupam, Carnegie Mellon University) received a grant from the US-Israel Binational Science Foundation (BSF) for research on "The k-Server Problem"
- **Dr. Michael Langberg**, Dept. of Mathematics and Computer Science (with Prof. Jehoshua Bruck, California Institute of Technology; Prof. Anxiao Jiang, Texas Engineering Experiment Station Services; and Dr. Moshe Schwartz, Ben-Gurion University) received a grant from the US-Israel Binational Science Foundation (BSF) for research on "Coding for Flash Memory"
- **Prof. Manor Mendel**, Dept. of Mathematics and Computer Science (with Prof. Assaf Naor, NYU) received a grant from the US-Israel Binational Science Foundation (BSF) for research on "Metric Invariants and Nonlinear Spectral Gaps"
- **Dr. Gal Ben-Yehudah**, Dept. of Education and Psychology, received a grant from the German-Israeli Foundation for Scientific Research and Development (GIF) for research on "The Word Inversion Effect in Developmental Dyslexia"
- **Prof. Sonia Roccas**, Dept. of Education and Psychology (with Prof. Klaus Boehnke, Jacobs Universität) received a grant from the German-Israeli Foundation for Scientific Research and Development (GIF) for research on "Conceiving one's National Group as a Trans-Generational Entity"
- **Dr. Noam Shental**, Dept. of Mathematics and Computer Science, received a grant from the US-Israel Binational Agricultural Research and Development Fund (BARD) for research on "Efficient Allele Mining in a Model Sequenced Crop via the Compressed Sequencing Approach"
- **Dr. Tal Hassner**, Dept. of Mathematics and Computer Science, received a grant from the General Motors Foundation for research on "Pose Estimation using 3D models"
- **Dr. Ronit Weisman**, Dept. of Natural Sciences, received a grant from the American Institute for Cancer Research (AICR) for research on "TORC2 in DNA Replication Stress and Chromatin-Mediated Functions"
- **Dr. Noam Shental**, Dept. of Mathematics and Computer Science, received a grant from the Tauber Foundation for research on "Validation of an Autoantibody Microarray Signature of Systematic Lupus Erythematosus"
- **Dr. Yuval Eylon, Prof. Amir Horowitz** and **Dr. Levi Spectre** , Dept. of History, Philosophy and Judaic Studies (with researchers from other institutions), received a grant from the Van Leer Jerusalem Institute for their research on "Theory of Knowledge"
- **Dr. Doron Ravid**, Dept. of Education and Psychology, received a grant from the National Institute of Psychobiology in Israel (NIPI) for research on "Efficiency and Toxicity of a Novel Herbal Treatment for Anxiety Disorders and Depression"
- **Dr. Tali Heiman**, **Dr. Sigal Eden, and Dr. Dorit Olenik-Shemesh**, Dept. of Education and Psychology, received a grant from the Chief Scientist, Israel Ministry of Education for research on "Violence and Vulnerability in the Internet: Characteristics, Patterns, Risk and Protective Factors in Children and Adolescents"
- **Dr. EdnaTal-Elhasid**, **Dr. Tsily Raz-Liebermann** and **Amir Winer**, of *Shoham*, received a grant from the Inter-University Center for E-learning (MEITAL) for research on "Integrating Mobile e-Books into OUI Studies: Vision or Fantasy?"

Two of the studies awarded ISF grants are briefly described below.

- **Dr. Idit Gil**, The 'Radom Transport' – Natzweiler #III: A Case Study of the Experiences of Jewish Forced Labor

The 'Radom Transport' is the name given to 2,187 Jewish laborers transported from Radom in Poland in August 1944 to the Vaihingen labor camp in Germany, via Auschwitz. Their various work experiences during World War II provide an important case study for understanding the trajectory of development of Jewish forced labor during the war and examining Jewish labor in the context of Nazi policy toward the Jews. The research focuses on a group of laborers and not on one work place as do most studies on Jewish labor during the Holocaust, thus providing a new viewpoint from which to understand the intricate relations, which were modified over time and place, between Nazi economic considerations and ideological views.

The study is based on written documents, complemented by oral testimonies. Written documents include Nazi reports and lists (many from the newly opened for research International Tracing Service (ITS) archive), SS, military and civil administrative records, Judenrat documents, as well as diaries and interviews with survivors, perpetrators, and bystanders. By examining these documents and testimonies, the research provides new perspectives on the ways Jewish workers contended with the Nazi system in order to survive.

- **Prof. Amir Horowitz**, The Possibility of Thinking about the World in a Naturalistic Framework

The main purpose of the project is to develop an irrealistic meta-theory of intentionality. I will argue that the idea of "hooking up" makes no sense within a naturalistic approach to semantics (which is the only viable approach). The idea that some natural relation between a thought and its intentional object "captures" this object founders on there being *many* word-world or thought-world relations; it will be shown that there is no sense to singling out any of them as the intentional relation. It will be suggested that this irrealistic idea does *not* entail that reductionist-naturalistic theories of intentionality are all false or empty, since such theories should be viewed as theories of second-order linguistic (or mental) behavior. What makes a certain content ascription true is nothing beyond conformity to the practice of content ascriptions. The distinction between intrinsic, derived and as-if intentionality and the distinction between real (or psychological) content and ascribed (or social) content will be challenged. The question of the priority of language over thought or *vice versa* – and the related question of the role of *conscious* intentionality - will be shown to be an empirical question regarding the practice of content ascriptions. Re-drawing the map of approaches will lead to the development of "quasi (intentional) realism" (in the sense borrowed from Blackburn).

Research Grants and Scholarships from the Internal Fund

The Open University places funds at the disposal of researchers to leverage their research projects so they can be submitted to external funds. During the 2010-2011 academic year, 120 applications were submitted to the RA for funding from the internal fund, of which the Steering Committee approved 99 (82.5%).

Appointments and Promotions

- **Dr. Mustafa Kabha**, Dept. of History, Philosophy and Judaic Studies, was promoted to the rank of Associate Professor
- **Dr. Manor Mendel**, Dept. of Mathematics and Computer Science, was promoted to the rank of Associate Professor
- **Dr. Yosef Verbin**, Dept. of Natural Sciences, was promoted to the rank of Associate Professor
- **Dr. Mordechai Schwarz**, Dept. of Management and Economics, was promoted to the rank of Senior Lecturer
- **Dr. Galia Benziman**, Dept. of Literature, Language and the Arts, joined the Senior Faculty with the rank of Senior Lecturer.
- **Dr. Yishai Maoz**, Dept. of Management and Economics, joined the Senior Faculty with the rank of Senior Lecturer
- **Dr. Ronit Weisman**, Dept. of Natural Sciences, joined the Senior Faculty with the rank of Senior Lecturer
- **Dr. Diamanta Benson-Karhi**, Dept. of Management and Economics, joined the Senior Faculty with the rank of Lecturer

New Faculty at the Open University

- **Dr. Niv Buchbinder** joined the Dept. of Mathematics and Computer Science
- **Dr. Oren Livio** joined the Dept. of Sociology, Political Science and Communication
- **Dr. Tammy Amiel-Houser** joined the Dept. of Literature, Language and the Arts
- **Dr. Elad Paran** joined the Dept. of Mathematics and Computer Science
- **Prof. Ohad Parnes** joined the Dept. of Natural Sciences
- **Dr. Igor Rahinov** joined the Dept. of Natural Sciences

Allon Fellowship

The prestigious Allon Fellowship for excellent young researchers guarantees the best candidates tenure-track positions in Israel's universities. **Dr. Galia Benziman** of the Dept. of Literature, Language and the Arts was awarded an Allon Fellowship this year.

Honors and Awards

- **Dr. Roni Beer-Marx**, Dept. of History, Philosophy and Judaic Studies, was awarded the 2010 Bernard and Naomi Pridan Prize by the Institute of Contemporary Jewry, Hebrew University of Jerusalem, for her doctoral dissertation, "Between Seclusion and Adaptation: *Halevanon* and how Orthodox Society in Eastern Europe Copes with the Challenges of Modernity"
- **Prof. Haggai Erlich**, Dept. of History, Philosophy and Judaic Studies was awarded the 2010 Landau Prize for Science and Research, for his work in Humanities and African Studies.
- **Dr. Idit Gil**, Dept. of Sociology, Political Science and Communication, was awarded the Phyllis Greenberg Heideman and Richard D. Heideman Fellowship for 2010-2011 at the Center for Advanced Holocaust Studies, United States Holocaust Memorial Museum, for work on her project, "The 'Radom Transport' – Natzweiler #III: A Case Study about the Experience of Jewish Forced Labor"
- **Dr. Oren Livio**, Dept. of Sociology, Political Science and Communication, was awarded the Best Paper award from the American Sociological Association's Communication and Information Technologies Section, for K. N. Hampton, **O. Livio**, and L. Sessions Goulet, "The Social Life of Wireless Urban Spaces: Internet Use, Social Networks, and the Public Realm," *Journal of Communication, 60*(4), 701-722 (2010)
- **Dr. Inbal Ofer**, Dept. of History, Philosophy and Judaic Studies, is a member of an international research group (PI: Prof. Ismael Saz, University of Valencia), funded by the Spanish Ministry of Science and Technology, on "From a Nationalist Dictatorship to a Democratic Spain of the Autonomies: Politics, Culture, Collective Identities"