

Biography



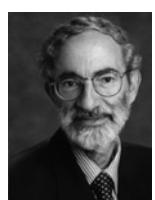
Hillel (Harry) Furstenberg is an Israeli mathematician. He is known for his application of probability theory and ergodic theory methods to other areas including number theory combinatorics, and Lie group theory. He was born in Berlin in 1935, and soon immigrated to the US. He concluded his BA and MSc studies at Yeshiva University, New York in 1955. He obtained his Ph.D. under Salomon Bochner at Princeton University in 1958. After several years at the University of Minnesota he became a professor of Mathematics at the Hebrew University of Jerusalem in 1965 and has taught at Bar Ilan University, Israel as well. He is a member of the Israel Academy of Sciences and Humanities and U.S. National Academy of Sciences. He is the recipient of several prizes: The Israel Prize in Mathematics, the Rothschild Prize, the Harvey Prize, the Emet Prize, and the Wolf Prize for Mathematics.

Biographies



Professor Joseph Seckbach is the initiator and chief editor of **Cellular Origins, Life in Extreme Habitats and Astrobiology (COLE)** series. www.springer.com/sereis/5775. He is the author of several chapters in this series. Dr. Seckbach earned his Ph.D. from the University of Chicago, Chicago, IL (1965). Recently he spent three months in Ludwig Maximilians University in Munich with a DAAD fellowship from the German service of exchange academicians, where several forward steps of this volume have been performed.

Among his publications are books, scientific articles concerning plant ferritin (phytoferritin), cellular evolution, acidothermophilic algae (mainly on *Cyanidium caldarium*), and life in extreme environments. He also edited and translated several popular books. Dr. Seckbach is the co-author (with R. Ikan) of the Chemistry Lexicon (1991, 1999) and other volumes, such as the *Proceedings of Endocytobiology VII Conference* (Freiburg, Germany, 1998) and the *Proceedings of Algae and Extreme Environments Meeting* (Trebon, Czech Republic, 2000) <http://www.schweizerbart.de/pubs/books/bo/novahedwig-051012300-desc.htm>). His recent interest is in the field of enigmatic microorganisms and life in extreme environments.



Professor Julian Chela-Flores was born in Caracas, República Bolivariana de Venezuela and studied in the University of London, England, where he obtained his Ph.D. in quantum mechanics (1969). He was a researcher at the Venezuelan Institute for Scientific Research (IVIC) and Professor at Simon Bolivar University (USB), Caracas until his retirement in 1990.

During his USB tenure he was Dean of Research for six years. He is a Fellow of The Latin American Academy of Sciences, The Academy of Sciences of the Developing World, the Academy of Creative Endeavors (Moscow) and a Corresponding Member of the Venezuelan "Academia de Fisica, Matematicas y Ciencias Naturales". His current positions are Staff Associate of the Abdus Salam International Center for Theoretical Physics (ICTP), Trieste, Research Associate, Dublin Institute for Advanced Studies (DIAS) and Profesor-Titular, Institute of Advanced Studies (IDEA), Caracas. His particular area of expertise is astrobiology, in which he is the author of numerous papers. He organized a series of Conferences on Chemical Evolution and the Origin of Life from 1992 till 2003. In 2001 he published the book: *The New Science of Astrobiology From Genesis of the Living Cell to Evolution of Intelligent Behavior in the Universe*.

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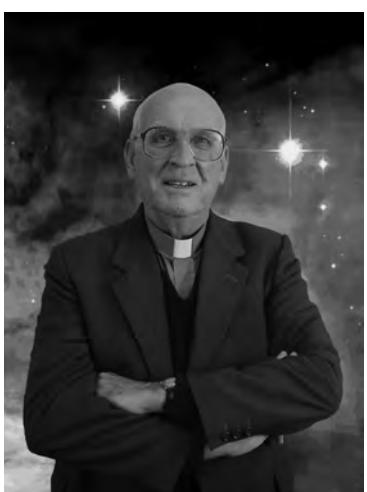
Dr. Richard Gordon is a theoretical biologist whose endeavors range from AIDS prevention to breast cancer imaging on the medical side and from the effects of microgravity on amphibian embryos to the delights of diatom motility and morphogenesis on the basic science side. He inadvertently wrote the first paper on diatom nanotechnology. He has a B.Sc. in Mathematics from the University of Chicago (1963) and a Ph.D. in Chemical Physics from the University of Oregon (1967), and is now a Professor of Radiology at the University of Manitoba, where he has also held appointments in Botany, Computer Science, Electrical & Computer Engineering, Pathology, Physics and Zoology, perhaps foretold by his 1981 Rh Institute Grant for Outstanding Contributions to Scholarship and Research in the Interdisciplinary Category. His forays into how people treat one another include articles on democratization of the science granting system, a proposal for world minimum wage, havatars (human, avatar pairs) for a new approach to understanding epidemics such as HIV/AIDS, and a campaign to get up to date books to medical schools in Afghanistan via Books With Wings (<http://www.bookswithwings.ca>). His varied mentors, to whom he is grateful, include James S. Dwyer, Susan Meschel, E. Peter Geiduschek, Edward Anders, Aaron Novick Terrell L. Hill, Theodore Puck, Stanislaw Ulam, Jack Carmichael, Antone G. Jacobson, Cyrus Levinthal, Robert Rosen, Conrad H. Waddington, James F. Danielli, Lewis Wolpert, Zim Hearon and Lewis Lipkin.

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Dr. Christian de Duve was born in England and educated in Belgium. He is emeritus professor at the Catholic University of Louvain (Belgium) and at the Rockefeller University in New York. He shared the Nobel Prize in Physiology or Medicine 1974 with Albert Claude and George Palade, “for their discoveries concerning the structural and functional organization of living cells.” He is known for the discovery of lysosomes and peroxisomes and has, in recent years, become interested in the origin and evolution of life. Dr. de Duve is the author of several books, including *“Life Evolving: Molecules, Mind, and Meaning”* (Oxford University Press, 2002) and *“Singularities: Landmarks on the Pathways of Life”* (Cambridge University Press, 2005).

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Professor George V. Coyne, S.J. (Societas Jesu), obtained his PhD in Astronomy from Georgetown University (Washington, DC) in 1962 and the Licentiate in Theology from Woodstock College (Maryland) in 1966. In addition he has received PhD degrees *honoris causa* from St. Peter's University (New Jersey), Loyola University (Chicago), The University of Padua (Italy), the Jagellonian University (Krakow, Poland), Marquette University (Milwaukee) and Boston College (Chestnut Hill, Massachusetts). Since 1966 he has been associated with astronomy programs at the University of Arizona (Tucson) and from 1976 to 1980 he served in various capacities in the administration of the astronomical

observatories at that university. From 1978 to 2006 he was Director of the Vatican Observatory (Specola Vaticana), which has its headquarters at Castel Gandolfo (Rome, Italy) and a research branch at the University of Arizona in Tucson. His research interests have ranged from the study of the lunar surface to the birth of stars; and he pioneered a special technique, polarimetry, as a powerful tool in astronomical research. Currently he is studying cataclysmic variable stars, the interstellar dust in the Magellanic Clouds and the detection of protoplanetary disks. Parallel to his scientific research he has developed an interest in the history and philosophy of science and in the relationship between science and religion. In 2008 he received the Mendel Medal.[†] “The Mendel Medal is awarded to outstanding scientists who have done much by their painstaking work to advance the cause of science, and, by their lives and their standing before the world as scientists, have demonstrated that between true science and true religion there is no intrinsic conflict.”

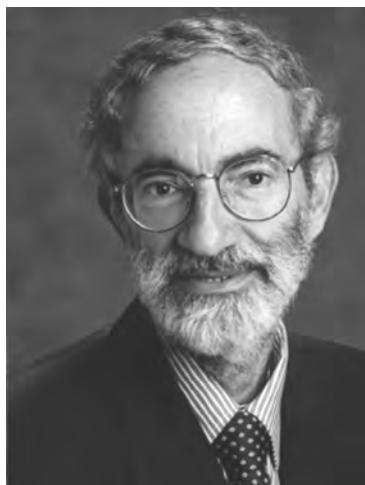
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Dr. Edward T. Oakes, S.J. teaches theology at the University of St. Mary of the Lake in Mundelein, Illinois. He earned his Ph.D. in Systematic Theology at Union Theological Seminary in New York City in 1988. He is the author of *Pattern of Redemption: The Theology of Hans Urs von Balthasar* (Continuum, 1997), editor of *German Essays on Religion* (Continuum, 1995), co-editor of *The Cambridge Companion to Hans Urs von Balthasar* (Cambridge, 2004), and the author of numerous articles on religion and science, especially on questions of teleology, evolution and original sin.

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Bruce Damer has been a pioneer of the medium of virtual worlds and avatars over the last dozen years, creating the first conferences, large scale experiments and writing about the medium including *Damer, B. (1997). Avatars: Exploring and Building Virtual Worlds on the Internet, Berkeley: Peachpit Press.* He is currently leading a team to build virtual worlds for the design of NASA missions. In 1996 he founded Biota.org (Barbalet 2007) which hosts the Biota conference series and podcast, now a leading community resource for artificial life developers. In 2008 he initiated the EvoGrid project to create a large scale evolutionary simulator in the Internet. Bruce also serves as curator and historian of one of the world's largest collections of artifacts of personal computers housed in his Digibarn Computer Museum. Here he is shown in real life and as his avatar in Second Life.

Biography



Tom Barbalet created the Noble Ape Simulation in 1996 and continues its development to this day. Noble Ape is used by Apple and INTEL as well as a number of universities to teach biodiversity, multi-media education, vector processing, real-time graphical interfaces and a number of other technologies. He has been the editor of Biota.org (since 2005), a leading community resource for artificial life developers. He is the host of the weekly Biota Live internet radio show where he discusses a variety of topics relating to artificial life, artificial intelligence and simulation philosophy with a variety of guests. He is also the co-chair of the International Game Developers' Association's Intellectual Property Rights Special Interest Group.

Biography



Stephen P. McGrew received a Master of Science degree in Physics from the University of Washington. Steve is an inventor/entrepreneur who developed many of the technologies used for making holograms; and he is co-founder and a board member of GenPrime Inc., a biotech firm specializing in high-speed, high-sensitivity microbial detection technologies. He developed Generator™, a genetic algorithm software package widely used in diverse fields; and initiated a successful project at Eastern Washington University to evolve bacteria to accumulate and concentrate zinc. His interests are evolutionary theory, geology, paleontology, philosophy of science, and science education.

Biography



Professor Ernan McMullin is Professor Emeritus of Philosophy and Director Emeritus of the Program in History and Philosophy of Science at the University of Notre Dame, U.S.A. He obtained his Ph.D. in philosophy from the University of Louvain, Belgium in 1954 and taught at the University of Notre Dame from 1954 until his retirement in 1994. His interests are in the philosophy of science, the history of the philosophy of science, and the relations between the natural sciences and theology.

Biography



Dr. Oren S. Harman is an Assistant Professor at the Interdisciplinary Program on Science, Technology and Society at Bar Ilan University. He received his doctorate from Oxford University in 2001, and was a Visiting Scholar and lecturer at Harvard University during 2000-2002. Harman is the author of *The Man Who Invented the Chromosome: A Life of Cyril Darlington* (Harvard University Press, 2004), and the co-editor of *Rebels, Mavericks and Heretics in Biology* (Yale University Press, 2008). He is a contributing science editor for The New Republic and is working on a book on altruism to be published by W.W. Norton.

Biography



Dr. Charles H. Lineweaver is currently a Associate Professor at the Planetary Science Institute in the Research School of Astronomy and Astrophysics and the Research School of Earth Sciences at the Australian National University, Canberra, Australia. He obtained his Ph.D. from the University of California at Berkeley in 1994 and continued his studies and research at Strasbourg Observatory and the University of New South Wales. Dr. Lineweaver's scientific interests are in the areas of: planetology, cosmology and astrobiology.

Biography



Dov Berger is currently lecturer in the Lifshitz College of Jewish Education, Jerusalem, Israel. He also serves as a Rabbi in the Hameiry Yeshiva, Jerusalem. Mr. Berger is a graduate student working towards his Ph.D in Bar Ilan University, Ramat Gan, Israel. His scientific interests are in the areas of Theory of Evolution; the Philosophy of Rabbi Kook, and the relationship between sciences and faith.

Biography



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Dr. Florence Raulin Cerceau is a senior Lecturer at the National Museum of Natural History of Paris (France). She obtained her Ph.D. in Astronomy and Space Techniques from the University of Paris (Pierre et Marie Curie – Paris VI) in 1983. From 1988 to 1994, she was involved in the preparation of the Grande Galerie de l'Evolution (Museum, Paris), devoted to biological evolution. She was also co-designer of two temporary exhibitions (“Météorites!” and “L'aventure Polaire”), which were held in Paris respectively in 1996 and 1997. Since 1997, her researches take place at the Centre Alexandre Koyré (Center of History of Sciences) and are entirely consecrated to Epistemology and History of Astrobiology. More specifically, her scientific interests deal with the spontaneous generation debate during the second part of the nineteenth century, the forerunners of interplanetary communication during this same period, and the beginnings of interstellar communication with the birth of SETI (Search for Extraterrestrial Intelligence).

Biography



Dr. Peter R. Bahn is currently Chief Scientist, Patent Attorney, and President of Bahn Biotechnology Company, located in Mount Vernon, Illinois, USA. He received a B.S. in chemistry from Haverford College in 1972, a Ph.D. in molecular biophysics and biochemistry from Yale University in 1978, and a J.D. from the University of Miami School of Law in 1984. Dr. Bahn's main scientific interests are molecular evolution, the origin of life, and astrobiology.

Biography



Harun Yahya is a pen name used by Mr. **Adnan Oktar**. He is a prominent Turkish intellectual, who studied at Mimar Sinan University's Academy of Fine Arts and at the Philosophy Department of Istanbul University. He has written more than 200 books which are published in 57 languages all over the world. Mr. Yahya is completely devoted to moral values and dedicated to communicating the sacred values he cherishes to other people. He started his intellectual struggle in 1979 during his education at Mimar Sinan University. During his university years, he carried out detailed research into the prevalent materialistic philosophies and ideologies around him, to the extent of becoming even more knowledgeable about them than their advocates. He has written various books against the theory of evolution and dedicated intellectual effort opposing the lines of evolution and materialism that have grown out to be a worldwide phenomenon.

Biography



Dr. Oktar Babuna is a medical doctor specialized in Neurosurgery, graduated from Istanbul University Medical School in 1987. Until 1991 he did research on molecular biology of the nervous system at the University of California San Francisco Medical School, Department of Neurosurgery and Neurology, and at the University of California Berkeley Donner Lawrence Laboratories and Health Sciences Center. Until 1996 he specialized in neurosurgery in the New York University Medical School Department of Neurosurgery. He has many publications in major international medical and scientific journals. He has done research since more than 10 years into the Theory of Evolution and Creation. Dr. Babuna has lectured at more than 500 conferences internationally on “The Collapse of Theory of Evolution and the Fact of Creation”.

Biography



Dr. Richard Gordon is a theoretical biologist whose endeavors range from AIDS prevention to breast cancer imaging on the medical side and from the effects of microgravity on amphibian embryos to the delights of diatom motility and morphogenesis on the basic science side. He inadvertently wrote the first paper on diatom nanotechnology. He has a B.Sc. in Mathematics from the University of Chicago (1963) and a Ph.D. in Chemical Physics from the University of Oregon (1967), and is now a Professor of Radiology at the University of Manitoba, where he has also held appointments in Botany, Computer Science, Electrical & Computer Engineering, Pathology, Physics and Zoology, perhaps foretold by his 1981 Rh Institute Grant for Outstanding Contributions to Scholarship and Research in the Interdisciplinary Category. His forays into how people treat one another include articles on democratization of the science granting system, a proposal for world minimum wage, havatars (human, avatar pairs) for a new approach to understanding epidemics such as HIV/AIDS, and a campaign to get up to date books to medical schools in Afghanistan via Books With Wings (<http://www.bookswithwings.ca>). His varied mentors, to whom he is grateful, include James S. Dwyer, Susan Meschel, E. Peter Geiduschek, Edward Anders, Aaron Novick Terrell L. Hill, Theodore Puck, Stanislaw Ulam, Jack Carmichael, Antone G. Jacobson, Cyrus Levinthal, Robert Rosen, Conrad H. Waddington, James F. Danielli, Lewis Wolpert, Zim Hearon and Lewis Lipkin.

Biography



Dr. Mordechai Halperin is currently the Chief Officer of Medical Ethics at the Ministry of Health, and the director of the Schlesinger Institute for Medical-Halachic Research, Jerusalem, Israel. He obtained his Mathematics & Physics B.Sc. degree at the Hebrew University of Jerusalem in 1974, his LL.B. degree at Uno Academic Campus in 2005 and his MD degree at the Hebrew University and Hadassah Medical School in 1987. Between 1986 and 2000, he had professional, medical experience at various medical centers throughout Israel, and was the director of the Jerusalem Medical Center for Impotence & Infertility. In the field of medical ethics, he is a Founding Member of the Israeli Society for Medical Ethics, and a member of numerous other ethics committees. Dr. Halperin is the chief editor of *Assia*, the Hebrew quarterly review of medical ethics and Jewish law, the *ASSIA Books series*, the *JME Books series* and various professional books on Jewish medical ethics and halacha [Jewish law]. For 18 Years, until 2004, he was the chief editor of the English international journal *Jewish Medical Ethics*. Dr. Halperin has both lectured and chaired at over 250 international academic conferences in Israel and abroad. In 1989, 1991 and 1994, he was awarded prizes for his dissertations on various medical & ethical topics. Dr. Halperin has authored more than 180 original articles.

Biography



Dr. Frits Bienfait obtained his Ph.D. in biochemistry from the University of Amsterdam in 1975, and after a short stay in the Johnson Foundation in Philadelphia, he set up a research group on iron metabolism of plants in the Laboratory of Plant Physiology in Amsterdam. In 1986 he joined the Laboratory of Genetics in Ghent, and in 1987 he moved to the Institute for Nuclear Chemistry in Agriculture in Wageningen. Since 1989 he studies the fundamental forces underneath the Left – Right polarity in politics, in collaboration with the political scientist Prof. Meindert Fennema and the anthropologist Dr. Wouter van Beek.

Biography



K. Tahir Shah is the Managing Editor of the *African Physical Review* and the Moderator for International Open Access Archive at the Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy. He divides his time between editorial activities, research and practice of yoga. His current research interest includes evolution and theories of intelligence, cognitive philosophy and foundation of mathematics. He studied physics at Karachi, Pakistan (undergraduate 1960-64) and graduate studies in theoretical physics at Bologna, Italy (1964-67) and at Stevens Institute of Technology, Hoboken, USA (1969-71). He was invited to become reviewer for *Mathematical Reviews* in 1975 and took chair of mathematics at Tripoli, Libya, in 1976. After designing intelligent systems for industry in North America for seven years, he returned in 1988 to pursue academic life in Trieste, at ICTP and the University of Trieste. He is also on international editorial council of “Problem of Theory and Methods of Education” (in Russian) and “Revista Cubana de Informatica Medica.”

Biography



Professor Benjamin Fain is currently on the faculty (Professor Emeritus) of School of Chemistry, Tel Aviv University. He obtained his Ph.D. from the Gorky University (USSR) in 1956. Professor Fain's scientific interests are in quantum electronics (he published the first book in this field, together with Ya. Khanin in 1965), solid state physics, chemical physics and foundations of quantum mechanics. Recently his interests shifted to the problems of science and religion.

Biography



Dr. Yehuda (Jerome) Gellman is professor of philosophy at Ben-Gurion University of the Negev, Beer Sheva, Israel, specializing in philosophy of religion and in Jewish thought. He received his Ph.D. in 1969 from Wayne State University, in Detroit, Michigan, and taught at Yeshiva University before taking up residence in Israel. He is the author of four books and over ninety articles. His latest book is: *Abraham! Abraham! Kierkegaard and the Hasidim on the Binding of Isaac*, Ashgate Publishers, 2004. He is the recipient of the Alvin Plantinga Distinguished Fellowship at the Center for Philosophy of Religion at University of Notre Dame, for 2006-2007.

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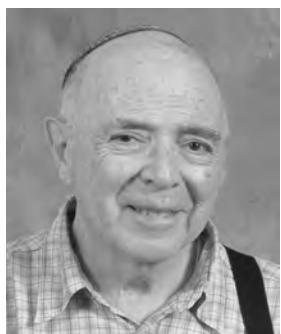
Dr. Stephen M. Barr is Professor of Physics at the Bartol Research Institute and the Department of Physics and Astronomy of the University of Delaware. He received his Ph.D. from Princeton University in 1978, and has held positions at the University of Pennsylvania, the University of Washington, and Brookhaven National Laboratory. His field of research is theoretical particle physics, and he specializes in theories of grand unification, CP violation [http://en.wikipedia.org/wiki/Cp_Violation], theories of the origin and spectrum of quark and lepton masses, and the cosmology of the early universe. He has written over 120 papers in refereed journals, as well as the articles on Grand Unified Theories for the second and third editions of *The Encyclopedia of Physics* published by the American Institute of Physics. He writes extensively on science and religion, primarily for the journal *First Things*, on whose editorial advisory board he sits.

Biography



Dr. Donald R. Prothero is Professor of Geology at Occidental College in Los Angeles, and Lecturer in Geobiology at the California Institute of Technology in Pasadena. He earned his Ph.D. degree in geological sciences from Columbia University in 1982. He is currently the author, co-author, editor, or co-editor of 22 books and over 200 scientific papers, including five leading geology textbooks and three trade books as well as edited symposium volumes and other technical works. Dr. Prothero is on the editorial board of *Skeptic* magazine, and in the past has served as an associate or technical editor for *Geology*, *Paleobiology* and the *Journal of Paleontology*. He is a Fellow of the Geological Society of America, the Paleontological Society, and the Linnaean Society of London, and has also received fellowships from the Guggenheim Foundation and the National Science Foundation. Dr. Prothero has served as the Vice President of the Pacific Section of SEPM (Society of Sedimentary Geology), and five years as the Program Chair for the Society of Vertebrate Paleontology. In 1991, he received the Schuchert Award of the Paleontological Society for the outstanding paleontologist under the age of 40. He has also been featured on several television documentaries, including episodes of *Paleoworld* and *Walking with Prehistoric Beasts*.

Biography



Dr. Malcolm E. Schrader was born in New York City in 1925. After serving in the US Army during World War II, with award of the Purple Heart and Combat Infantry Badge, he received his PhD (1956) in Physical Chemistry from Brooklyn Polytechnic Institute. He subsequently performed fundamental and applied research for the US Navy, largely in the field of surface chemistry and nano-surface science. He pioneered in the application of radioisotopes to the study of the interface between fiber and matrix in

composite materials, and was the first to use ultra-high vacuum techniques in the study of wettability. Some highlights of the achievements of his experimental research are the solving of the famous controversy on the wettability of gold by water, obtaining of a previously elusive result for water-wettability of graphite, and determination of the nano-locus of hydrolytically induced failure of the glass-resin bond in glass-reinforced plastics.

Dr. Schrader served for four years as Meeting Secretary (program manager) of the Division of Colloid and Surface Chemistry of the American Chemical Society, and as long-range coordinator of symposia on fluid-solid surface interaction of that Division. He served on the Board of Directors of the Society for Plastic Industries, and was involved with surface chemistry applications as a member of the American Vacuum Society and the American Society for Testing Materials.

On retiring as senior scientist from the U.S. Navy, he was appointed professor on the research staff of the Hebrew University of Jerusalem. In the theoretical area, he subsequently revised the thermodynamic approach to wettability, and showed that, contrary to previously accepted concepts, the adsorption of a nano-layer of its own vapor does not necessarily impede spreading of a given liquid on a solid surface. He is presently pursuing an interest in chemical evolution as Guest Scientist with the Department of Inorganic and Analytical Chemistry at Hebrew University.

Biography



Dr. Taner Edis is associate professor of physics at Truman State University, Kirksville, MO, USA. He received his Ph.D. from The Johns Hopkins University in 1994. Trained as a theoretical condensed matter physicist, his research interests have been diverse, from atmospheric modeling with collaborators at Lawrence Livermore National Laboratory to the philosophy of machine intelligence. Lately his focus has been questions relating to science and religion, and he has written a number of books on such topics. *The Ghost in The Universe: God in Light of Modern Science* (2002), presents a comprehensive naturalistic picture of the world, based on the best of modern knowledge. *Why Intelligent Design Fails: A Scientific Critique of the New Creationism* (2004), co-edited with Matt Young, presents the scientific case against intelligent design. *Science and Nonbelief* (2006) explores the relationship between modern science and religious nonbelief. *An Illusion of Harmony: Science and Religion in Islam* appeared in 2007.

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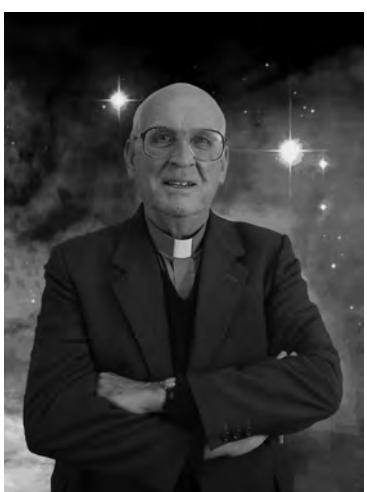
Dr. Josef Svoboda is a Professor Emeritus at the Department of Biology, University of Toronto at Mississauga, Canada. He studied Philosophy and Biology in Czechoslovakia but in 1949 he was arrested and sentenced by the communistic regime. He spent almost 9 years in prisons and uranium mines' labour camps. After immigrating to Canada in 1968, he graduated at the University of Western Ontario, Canada. In 1974 he obtained his PhD from the University of Alberta, Canada for a study of productivity processes in polar semi-deserts. For more than 30 years, together with his students, he conducted research in the High Arctic focusing on plant colonization following deglaciation of polar landscapes and responses of arctic plant communities to global warming. He also published papers on the origin of life and evolution. Honours: Northern Science Award by the Government of Canada and Honorary doctorate from the Masaryk University, the Czech Republic.

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Dr. Edward T. Oakes, S.J. teaches theology at the University of St. Mary of the Lake in Mundelein, Illinois. He earned his Ph.D. in Systematic Theology at Union Theological Seminary in New York City in 1988. He is the author of *Pattern of Redemption: The Theology of Hans Urs von Balthasar* (Continuum, 1997), editor of *German Essays on Religion* (Continuum, 1995), co-editor of *The Cambridge Companion to Hans Urs von Balthasar* (Cambridge, 2004), and the author of numerous articles on religion and science, especially on questions of teleology, evolution and original sin.

Biography



Professor Julian Chela-Flores was born in Caracas, República Bolivariana de Venezuela and studied in the University of London, England, where he obtained his Ph.D. in quantum mechanics (1969). He was a researcher at the Venezuelan Institute for Scientific Research (IVIC) and Professor at Simon Bolivar University (USB), Caracas until his retirement in 1990. During his USB tenure he was Dean of Research for six years. He is a Fellow of The Latin American Academy of Sciences, The Academy of Sciences of the Developing World, the Academy of Creative Endeavors (Moscow) and a Corresponding Member of the Venezuelan “Academia de Fisica, Matematicas y Ciencias Naturales”. His current positions are Staff Associate of the Abdus Salam International Center for Theoretical Physics (ICTP), Trieste, Research Associate, Dublin Institute for Advanced Studies (DIAS) and Profesor-Titular, Institute of Advanced Studies (IDEA), Caracas. His particular area of expertise is astrobiology, in which he is the author of numerous papers. He organized a series of Conferences on Chemical Evolution and the Origin of Life from 1992 till 2003. In 2001 he published the book: *The New Science of Astrobiology From Genesis of the Living Cell to Evolution of Intelligent Behavior in the Universe*.

Biography



Bruce Damer has been a pioneer of the medium of virtual worlds and avatars over the last dozen years, creating the first conferences, large scale experiments and writing about the medium including *Damer, B. (1997). Avatars: Exploring and Building Virtual Worlds on the Internet, Berkeley: Peachpit Press.* He is currently leading a team to build virtual worlds for the design of NASA missions. In 1996 he founded Biota.org (Barbalet 2007) which hosts the Biota conference series and podcast, now a leading community resource for artificial life developers. In 2008 he initiated the EvoGrid project to create a large scale evolutionary simulator in the Internet. Bruce also serves as curator and historian of one of the world's largest collections of artifacts of personal computers housed in his Digibarn Computer Museum. Here he is shown in real life and as his avatar in Second Life.

Biography



Tom Barbalet created the Noble Ape Simulation in 1996 and continues its development to this day. Noble Ape is used by Apple and INTEL as well as a number of universities to teach biodiversity, multi-media education, vector processing, real-time graphical interfaces and a number of other technologies. He has been the editor of Biota.org (since 2005), a leading community resource for artificial life developers. He is the host of the weekly Biota Live internet radio show where he discusses a variety of topics relating to artificial life, artificial intelligence and simulation philosophy with a variety of guests. He is also the co-chair of the International Game Developers' Association's Intellectual Property Rights Special Interest Group.

Biography



Stephen P. McGrew received a Master of Science degree in Physics from the University of Washington. Steve is an inventor/entrepreneur who developed many of the technologies used for making holograms; and he is co-founder and a board member of GenPrime Inc., a biotech firm specializing in high-speed, high-sensitivity microbial detection technologies. He developed Generator™, a genetic algorithm software package widely used in diverse fields; and initiated a successful project at Eastern Washington University to evolve bacteria to accumulate and concentrate zinc. His interests are evolutionary theory, geology, paleontology, philosophy of science, and science education.

Biography



Professor Ernan McMullin is Professor Emeritus of Philosophy and Director Emeritus of the Program in History and Philosophy of Science at the University of Notre Dame, U.S.A. He obtained his Ph.D. in philosophy from the University of Louvain, Belgium in 1954 and taught at the University of Notre Dame from 1954 until his retirement in 1994. His interests are in the philosophy of science, the history of the philosophy of science, and the relations between the natural sciences and theology.

Biography



Dr. Oren S. Harman is an Assistant Professor at the Interdisciplinary Program on Science, Technology and Society at Bar Ilan University. He received his doctorate from Oxford University in 2001, and was a Visiting Scholar and lecturer at Harvard University during 2000-2002. Harman is the author of *The Man Who Invented the Chromosome: A Life of Cyril Darlington* (Harvard University Press, 2004), and the co-editor of *Rebels, Mavericks and Heretics in Biology* (Yale University Press, 2008). He is a contributing science editor for The New Republic and is working on a book on altruism to be published by W.W. Norton.

Biography



Dr. Charles H. Lineweaver is currently a Associate Professor at the Planetary Science Institute in the Research School of Astronomy and Astrophysics and the Research School of Earth Sciences at the Australian National University, Canberra, Australia. He obtained his Ph.D. from the University of California at Berkeley in 1994 and continued his studies and research at Strasbourg Observatory and the University of New South Wales. Dr. Lineweaver's scientific interests are in the areas of: planetology, cosmology and astrobiology.

Biography



Dov Berger is currently lecturer in the Lifshitz College of Jewish Education, Jerusalem, Israel. He also serves as a Rabbi in the Hameiry Yeshiva, Jerusalem. Mr. Berger is a graduate student working towards his Ph.D in Bar Ilan University, Ramat Gan, Israel. His scientific interests are in the areas of Theory of Evolution; the Philosophy of Rabbi Kook, and the relationship between sciences and faith.

Biography



Dr. Richard Gordon is a theoretical biologist whose endeavors range from AIDS prevention to breast cancer imaging on the medical side and from the effects of microgravity on amphibian embryos to the delights of diatom motility and morphogenesis on the basic science side. He inadvertently wrote the first paper on diatom nanotechnology. He has a B.Sc. in Mathematics from the University of Chicago (1963) and a Ph.D. in Chemical Physics from the University of Oregon (1967), and is now a Professor of Radiology at the University of Manitoba, where he has also held appointments in Botany, Computer Science, Electrical & Computer Engineering, Pathology, Physics and Zoology, perhaps foretold by his 1981 Rh Institute Grant for Outstanding Contributions to Scholarship and Research in the Interdisciplinary Category. His forays into how people treat one another include articles on democratization of the science granting system, a proposal for world minimum wage, havatars (human, avatar pairs) for a new approach to understanding epidemics such as HIV/AIDS, and a campaign to get up to date books to medical schools in Afghanistan via Books With Wings (<http://www.bookswithwings.ca>). His varied mentors, to whom he is grateful, include James S. Dwyer, Susan Meschel, E. Peter Geiduschek, Edward Anders, Aaron Novick Terrell L. Hill, Theodore Puck, Stanislaw Ulam, Jack Carmichael, Antone G. Jacobson, Cyrus Levinthal, Robert Rosen, Conrad H. Waddington, James F. Danielli, Lewis Wolpert, Zim Hearon and Lewis Lipkin.

Biography



Dr. Florence Raulin Cerceau is a senior Lecturer at the National Museum of Natural History of Paris (France). She obtained her Ph.D. in Astronomy and Space Techniques from the University of Paris (Pierre et Marie Curie – Paris VI) in 1983. From 1988 to 1994, she was involved in the preparation of the Grande Galerie de l'Evolution (Museum, Paris), devoted to biological evolution. She was also co-designer of two temporary exhibitions (“Météorites!” and “L'aventure Polaire”), which were held in Paris respectively in 1996 and 1997. Since 1997, her researches take place at the Centre Alexandre Koyré (Center of History of Sciences) and are entirely consecrated to Epistemology and History of Astrobiology. More specifically, her scientific interests deal with the spontaneous generation debate during the second part of the nineteenth century, the forerunners of interplanetary communication during this same period, and the beginnings of interstellar communication with the birth of SETI (Search for Extraterrestrial Intelligence).

Biography



Dr. Peter R. Bahn is currently Chief Scientist, Patent Attorney, and President of Bahn Biotechnology Company, located in Mount Vernon, Illinois, USA. He received a B.S. in chemistry from Haverford College in 1972, a Ph.D. in molecular biophysics and biochemistry from Yale University in 1978, and a J.D. from the University of Miami School of Law in 1984. Dr. Bahn's main scientific interests are molecular evolution, the origin of life, and astrobiology.

Biography



Harun Yahya is a pen name used by Mr. **Adnan Oktar**. He is a prominent Turkish intellectual, who studied at Mimar Sinan University's Academy of Fine Arts and at the Philosophy Department of Istanbul University. He has written more than 200 books which are published in 57 languages all over the world. Mr. Yahya is completely devoted to moral values and dedicated to communicating the sacred values he cherishes to other people. He started his intellectual struggle in 1979 during his education at Mimar Sinan University. During his university years, he carried out detailed research into the prevalent materialistic philosophies and ideologies around him, to the extent of becoming even more knowledgeable about them than their advocates. He has written various books against the theory of evolution and dedicated intellectual effort opposing the lines of evolution and materialism that have grown out to be a worldwide phenomenon.

Biography



Dr. Oktar Babuna is a medical doctor specialized in Neurosurgery, graduated from Istanbul University Medical School in 1987. Until 1991 he did research on molecular biology of the nervous system at the University of California San Francisco Medical School, Department of Neurosurgery and Neurology, and at the University of California Berkeley Donner Lawrence Laboratories and Health Sciences Center. Until 1996 he specialized in neurosurgery in the New York University Medical School Department of Neurosurgery. He has many publications in major international medical and scientific journals. He has done research since more than 10 years into the Theory of Evolution and Creation. Dr. Babuna has lectured at more than 500 conferences internationally on “The Collapse of Theory of Evolution and the Fact of Creation”.

Biography



Dr. Richard Gordon is a theoretical biologist whose endeavors range from AIDS prevention to breast cancer imaging on the medical side and from the effects of microgravity on amphibian embryos to the delights of diatom motility and morphogenesis on the basic science side. He inadvertently wrote the first paper on diatom nanotechnology. He has a B.Sc. in Mathematics from the University of Chicago (1963) and a Ph.D. in Chemical Physics from the University of Oregon (1967), and is now a Professor of Radiology at the University of Manitoba, where he has also held appointments in Botany, Computer Science, Electrical & Computer Engineering, Pathology, Physics and Zoology, perhaps foretold by his 1981 Rh Institute Grant for Outstanding Contributions to Scholarship and Research in the Interdisciplinary Category. His forays into how people treat one another include articles on democratization of the science granting system, a proposal for world minimum wage, havatars (human, avatar pairs) for a new approach to understanding epidemics such as HIV/AIDS, and a campaign to get up to date books to medical schools in Afghanistan via Books With Wings (<http://www.bookswithwings.ca>). His varied mentors, to whom he is grateful, include James S. Dwyer, Susan Meschel, E. Peter Geiduschek, Edward Anders, Aaron Novick Terrell L. Hill, Theodore Puck, Stanislaw Ulam, Jack Carmichael, Antone G. Jacobson, Cyrus Levinthal, Robert Rosen, Conrad H. Waddington, James F. Danielli, Lewis Wolpert, Zim Hearon and Lewis Lipkin.

Biography



Dr. Mordechai Halperin is currently the Chief Officer of Medical Ethics at the Ministry of Health, and the director of the Schlesinger Institute for Medical-Halachic Research, Jerusalem, Israel. He obtained his Mathematics & Physics B.Sc. degree at the Hebrew University of Jerusalem in 1974, his LL.B. degree at Uno Academic Campus in 2005 and his MD degree at the Hebrew University and Hadassah Medical School in 1987. Between 1986 and 2000, he had professional, medical experience at various medical centers throughout Israel, and was the director of the Jerusalem Medical Center for Impotence & Infertility. In the field of medical ethics, he is a Founding Member of the Israeli Society for Medical Ethics, and a member of numerous other ethics committees. Dr. Halperin is the chief editor of *Assia*, the Hebrew quarterly review of medical ethics and Jewish law, the *ASSIA Books series*, the *JME Books series* and various professional books on Jewish medical ethics and halacha [Jewish law]. For 18 Years, until 2004, he was the chief editor of the English international journal *Jewish Medical Ethics*. Dr. Halperin has both lectured and chaired at over 250 international academic conferences in Israel and abroad. In 1989, 1991 and 1994, he was awarded prizes for his dissertations on various medical & ethical topics. Dr. Halperin has authored more than 180 original articles.

Biography



Dr. Frits Bienfait obtained his Ph.D. in biochemistry from the University of Amsterdam in 1975, and after a short stay in the Johnson Foundation in Philadelphia, he set up a research group on iron metabolism of plants in the Laboratory of Plant Physiology in Amsterdam. In 1986 he joined the Laboratory of Genetics in Ghent, and in 1987 he moved to the Institute for Nuclear Chemistry in Agriculture in Wageningen. Since 1989 he studies the fundamental forces underneath the Left – Right polarity in politics, in collaboration with the political scientist Prof. Meindert Fennema and the anthropologist Dr. Wouter van Beek.

Biography



K. Tahir Shah is the Managing Editor of the *African Physical Review* and the Moderator for International Open Access Archive at the Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy. He divides his time between editorial activities, research and practice of yoga. His current research interest includes evolution and theories of intelligence, cognitive philosophy and foundation of mathematics. He studied physics at Karachi, Pakistan (undergraduate 1960-64) and graduate studies in theoretical physics at Bologna, Italy (1964-67) and at Stevens Institute of Technology, Hoboken, USA (1969-71). He was invited to become reviewer for *Mathematical Reviews* in 1975 and took chair of mathematics at Tripoli, Libya, in 1976. After designing intelligent systems for industry in North America for seven years, he returned in 1988 to pursue academic life in Trieste, at ICTP and the University of Trieste. He is also on international editorial council of “Problem of Theory and Methods of Education” (in Russian) and “Revista Cubana de Informatica Medica.”

Biography



Professor Benjamin Fain is currently on the faculty (Professor Emeritus) of School of Chemistry, Tel Aviv University. He obtained his Ph.D. from the Gorky University (USSR) in 1956. Professor Fain's scientific interests are in quantum electronics (he published the first book in this field, together with Ya. Khanin in 1965), solid state physics, chemical physics and foundations of quantum mechanics. Recently his interests shifted to the problems of science and religion.

Biography



Dr. Yehuda (Jerome) Gellman is professor of philosophy at Ben-Gurion University of the Negev, Beer Sheva, Israel, specializing in philosophy of religion and in Jewish thought. He received his Ph.D. in 1969 from Wayne State University, in Detroit, Michigan, and taught at Yeshiva University before taking up residence in Israel. He is the author of four books and over ninety articles. His latest book is: *Abraham! Abraham! Kierkegaard and the Hasidim on the Binding of Isaac*, Ashgate Publishers, 2004. He is the recipient of the Alvin Plantinga Distinguished Fellowship at the Center for Philosophy of Religion at University of Notre Dame, for 2006-2007.

Biography



Dr. Stephen M. Barr is Professor of Physics at the Bartol Research Institute and the Department of Physics and Astronomy of the University of Delaware. He received his Ph.D. from Princeton University in 1978, and has held positions at the University of Pennsylvania, the University of Washington, and Brookhaven National Laboratory. His field of research is theoretical particle physics, and he specializes in theories of grand unification, CP violation [http://en.wikipedia.org/wiki/Cp_Violation], theories of the origin and spectrum of quark and lepton masses, and the cosmology of the early universe. He has written over 120 papers in refereed journals, as well as the articles on Grand Unified Theories for the second and third editions of *The Encyclopedia of Physics* published by the American Institute of Physics. He writes extensively on science and religion, primarily for the journal *First Things*, on whose editorial advisory board he sits.

Biography



Dr. Donald R. Prothero is Professor of Geology at Occidental College in Los Angeles, and Lecturer in Geobiology at the California Institute of Technology in Pasadena. He earned his Ph.D. degree in geological sciences from Columbia University in 1982. He is currently the author, co-author, editor, or co-editor of 22 books and over 200 scientific papers, including five leading geology textbooks and three trade books as well as edited symposium volumes and other technical works. Dr. Prothero is on the editorial board of *Skeptic* magazine, and in the past has served as an associate or technical editor for *Geology*, *Paleobiology* and the *Journal of Paleontology*. He is a Fellow of the Geological Society of America, the Paleontological Society, and the Linnaean Society of London, and has also received fellowships from the Guggenheim Foundation and the National Science Foundation. Dr. Prothero has served as the Vice President of the Pacific Section of SEPM (Society of Sedimentary Geology), and five years as the Program Chair for the Society of Vertebrate Paleontology. In 1991, he received the Schuchert Award of the Paleontological Society for the outstanding paleontologist under the age of 40. He has also been featured on several television documentaries, including episodes of *Paleoworld* and *Walking with Prehistoric Beasts*.

Biography



Dr. Taner Edis is associate professor of physics at Truman State University, Kirksville, MO, USA. He received his Ph.D. from The Johns Hopkins University in 1994. Trained as a theoretical condensed matter physicist, his research interests have been diverse, from atmospheric modeling with collaborators at Lawrence Livermore National Laboratory to the philosophy of machine intelligence. Lately his focus has been questions relating to science and religion, and he has written a number of books on such topics. *The Ghost in The Universe: God in Light of Modern Science* (2002), presents a comprehensive naturalistic picture of the world, based on the best of modern knowledge. *Why Intelligent Design Fails: A Scientific Critique of the New Creationism* (2004), co-edited with Matt Young, presents the scientific case against intelligent design. *Science and Nonbelief* (2006) explores the relationship between modern science and religious nonbelief. *An Illusion of Harmony: Science and Religion in Islam* appeared in 2007.

Biography



Dr. Josef Svoboda is a Professor Emeritus at the Department of Biology, University of Toronto at Mississauga, Canada. He studied Philosophy and Biology in Czechoslovakia but in 1949 he was arrested and sentenced by the communistic regime. He spent almost 9 years in prisons and uranium mines' labour camps. After immigrating to Canada in 1968, he graduated at the University of Western Ontario, Canada. In 1974 he obtained his PhD from the University of Alberta, Canada for a study of productivity processes in polar semi-deserts. For more than 30 years, together with his students, he conducted research in the High Arctic focusing on plant colonization following deglaciation of polar landscapes and responses of arctic plant communities to global warming. He also published papers on the origin of life and evolution. Honours: Northern Science Award by the Government of Canada and Honorary doctorate from the Masaryk University, the Czech Republic.

Biography



Dr. Attila Grandpierre is currently a senior scientific researcher at the Konkoly Observatory of Hungarian Academy of Sciences. He obtained his degree of University Doctor in 1977 from the Eötvös Lóránd University, his academic degree candidate of physical sciences in 1984 from the Hungarian Academy of Sciences and continued his research at the Konkoly Observatory.

Dr. Grandpierre's scientific interests are in the areas of: origin of solar activity, the Sun as a self-organizing system and as a system showing lifelike activities, non-protein based life forms in the Universe, first principles of physics and biology.

Biography



Rabbi Natan Slifkin directs “**Zoo Torah**,” <http://www.zootorah.com/>, an educational enterprise that teaches about the relationship between Judaism and the animal kingdom. He is the author of numerous works on this theme, most recently *The Challenge of Creation: Judaism’s Encounter with Science, Cosmology and Evolution*.

Biography



Galina Leonidovna Muravnik is a Vice-Rector in St. Andrew's Biblical theological institute. She graduated the Biological faculty of the Moscow State University (Russia) in 1979 and specialized at the Department of Genetics. In 1985 she finished a post-graduate course at the Institute of Genetics and Selection of Microorganisms (Moscow). At the same time she attended lectures in various fields of theology at Father Alexandre Men's Open Orthodox University. In 1998 she graduated the course on orthodox pedagogy and pedagogical skill. In 1992 Muravnik turned to teaching at an Orthodox Lyceum of Moscow. She created a program with the purpose of implementing a harmonious synthesis of modern evolutionary biology and Christian divinity. As a result she has been teaching a course called "Introduction to Christian natural sciences" all these years. Nowadays she leads the Educational Department of St. Andrew's Biblical Theological Institute and gives there a number of courses — "Science and religion", "Theology of evolutionary biology", "Bioethics" — as well.

Biography



Dr. Hermann Josef Roth, is a Studiendirektor, biologist, Roman-Catholic Priest and Cistercian-Monk; manager of the “Naturhistorischer Verein der Rheinlande und Westfalens.” He has a seat at the University of Bonn, whose foundation was assisted by Carl Fuhlrott (1843). Dr. Roth obtained his Ph.D. from the University of Nijmegen (Netherlands) in 1990. Dr. Roth published many books and articles on natural history of the Rhineland, and history of botany and zoology in Middle-Ages and during the 18th/19th centuries. His main interest is in Monastic Medicine including ethnobotany in the Portuguese world. He worked on the project “Klostermedizin” at the University of Würzburg.

Biography



Karol Sabath was recently popularizing evolution in two major museums of Warsaw: the Geological Museum of the Polish Geological Institute and the Museum of Evolution of the Institute of Paleobiology, Polish Academy of Sciences. He died October 10, 2007, so this is a posthumous chapter, perhaps his last. He was a member of the Committee of Evolutionary and Theoretical Biology, Polish Academy of Sciences. He coauthored biology textbooks for secondary schools and was a member of the editorial board of *Biologia w Szkole* (a journal for biology teachers). As an active popular science writer he engaged in debates with creationists since the late 1980s, and later co-founded the website <http://www.ewolucja.org/> intended to provide resources addressing creationist claims. His research interests were in vertebrate paleontology: dinosaur eggs, tyrannosaurid theropods and dinosaur tracks; he was assistant editor of the *Acta Palaeontologica Polonica*. As an amateur paleoartist, he depicted extinct animals (now using digital media).

See:

Kielan-Jaworowska, Z. (2007). In memoriam: Karol Sabath (1963–2007). *Acta Palaeontologica Polonica* **52**(4), 828–829.

<http://www.app.pan.pl/acta52/app52-828.pdf/>

Biography



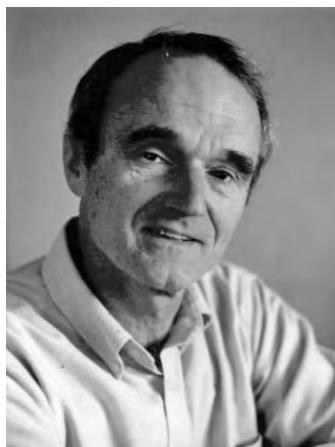
Dr. Doron Aurbach is a Professor in the Department of Chemistry in Bar Ilan University (BIU), Ramat Gan, Israel. He obtained his Ph.D. in physical-organic chemistry from Bar Ilan University in 1983 and received also B.Sc in chemical engineering from the Israel Institute of Technology (Technion), Haifa, Israel in 1981. Dr. Aurbach is the founder of the electrochemistry group of BIU at the beginning of 1986. He teaches basic and advanced courses in physical chemistry and electrochemistry and works in the field of energy storage and conversion. He has more than 320 publications in leading journals of electrochemistry, physical chemistry, materials and surface science, and 11 chapters in different books, 12 patents, and a book ("*Nonaqueous Electrochemistry*", 1999 published by Marcel Dekker N.Y.). Dr. Aurbach is an associate editor of the *Electrochemical & Solid State Letters Journal* and the *Journal of Solid State Electrochemistry*. Currently he is leading one of the biggest research groups in Israel (working in electrochemistry, energy, water desalination and materials science).

Biography



Professor Michael J. Behe is in the Department of Biological Sciences at Lehigh University in Bethlehem, Pennsylvania. He obtained his Ph.D. in biochemistry from the University of Pennsylvania in 1978. He is the author of *Darwin's Black Box: The Biochemical Challenge to Evolution* (Free Press 1996), which argues that the functional complexity discovered in the molecular machinery of the cell is best explained as the result of deliberate intelligent design.

Biography



Dr. Gerald Schroeder currently teaches at the Aish HaTorah College of Jewish Studies in Jerusalem and does research in environmental radioactivity. He obtained his PhD (in 1964) at the Massachusetts Institute of Technology in two fields (in Earth and Planetary Science, and in Nuclear Physics). He served seven years on the staff of the M.I.T. Physics Department prior to moving to Israel where he joined the Weizmann Institute of Science, and then the Volcani Research Institute, and the Hebrew University of Jerusalem Isotope Separation Mass Spectrometer Facility. He also witnessed the detonation of six atomic bombs.

His formal theological training includes twenty years of study under the late Rabbi Herman Pollack, Rabbi Chaim Brovender and Rabbi Noah Weinberg in Jerusalem.

Dr. Schroeder has approximately 60 publications in peer-reviewed scientific journals. He is the author of *Genesis and the Big Bang* (Bantam Doubleday); *The Science of God* (Free Press of Simon & Schuster, and Broadway Books of Bantam Doubleday); and *The Hidden Face of God* (Free Press). In the first full year of its publication, *The Science of God* was on the Barnes & Noble list of non-fiction best sellers and was Amazon.com's best selling book in the field of physics/cosmology for that entire year. His books appear in nine languages.

Biography



Dr. Elia M. Leibowitz is a Professor of Astronomy at the Tel Aviv University; he obtained his Ph.D. in 1971 in Astronomy at Harvard University, Cambridge, MA. After a year as a post-doc researcher at Kitt Peak National Observatory in Tucson, Arizona, he joined the School of Physics and Astronomy of the Tel Aviv University in 1972, where he has been a faculty member ever since. Dr. Leibowitz was for many years the director of the Wise Observatory of the Tel Aviv University and served as the Chairman of the Department of Astronomy and Astrophysics of the University. He was a visiting associate at the University of California at Berkeley, visiting astronomer at the European Southern Observatory and a visiting lecturer in the University of Munster, Germany. Dr. Leibowitz has over two hundred publications in the literature in astronomy, as well as in other subject matters.

Biography



Dr. Cihat Gündoğdu is a medical doctor specialized in family medicine. His main interest is in “Creation Science”. He graduated from The School of Medicine, University of Marmara in Istanbul in 1992. He completed the Family Medicine Residency Program in Haydarpasa Numune Educational and Research State Hospital in Istanbul in 1999. As a lecturer, he has given numerous lectures in several universities and high schools in USA (Columbia University), Canada (McGill University, Concordia University), England (10 universities including Cambridge, Oxford and London School of Economics), Wales, Scotland, Northern Ireland, Ireland, Malaysia (International University of Islam), Holland (Erasmus University Faculty of Medicine), Belgium, Japan (6 different campuses including School of Medicine, University of Tokyo), Australia and more than 150 conferences in Turkey, mainly based on the scientific evidence invalidating Darwinism. He had many articles published on several journals dealing with the scientific facts of creation and has been on TV programs as well. He works with The Science Research Foundation of Turkey. He says “it is the mission of scientists to tell people that what we observe in the scientific field is the clear evidence of ‘Creation’”.

Biography



Dr. Lee M. Spetner is currently Director of Research at Redoxia Israel, Ltd., of which he is a founder, where he is engaged in cancer research. He received the BS degree in mechanical engineering from Washington University in 1945 and the PhD degree in physics from MIT in 1950. He then joined the Applied Physics Laboratory of The Johns Hopkins University, where he was Principal Physicist engaged in development of guided-missile systems. In 1970 he joined Eljim, Ltd. in Israel as Technical Director, and later as manager of Elbit, Nes Ziona where he supervised development work in military electronic systems including electronic countermeasures, and a military electronic navigation system. He has taught courses at the Johns Hopkins University, Howard University and the Weizman Institute. These courses include classical mechanics, electromagnetic theory, real-variable theory, probability theory, and statistical communication theory.

Biography



Professor Juan G. Roederer is Professor of Physics Emeritus at the University of Alaska-Fairbanks. Doctor of Science from the University of Buenos Aires in 1952; between 1959 and 1993 Professor of Physics at the universities of Buenos Aires, Denver and Alaska. He was director of the Geophysical Institute of the University of Alaska (1977-1986), chairman of the United States Arctic Research Commission (1986-1992) and senior advisor of the International Centre for Theoretical Physics, Trieste (1997-2003). His research interests are space physics, psychoacoustics and theory of information; his most recent book, on which the present article is based, is *Information and its Role in Nature* (2005), Springer-Verlag, Heidelberg. He is also an organist.

Biography



Dr. Seth Shostak is a Senior Astronomer at the SETI (Search for Extraterrestrial Intelligence) Institute, in Mountain View, California. He has an undergraduate degree in physics from Princeton University, and a doctorate in astronomy from the California Institute of Technology. For much of his career, Dr. Shostak conducted radio astronomy research on galaxies, and has published approximately fifty papers in professional journals. He also founded and ran a company producing computer animation for TV.

Seth has written several hundred popular magazine and Web articles on various topics in astronomy, technology, film, and television. He now lectures on astronomy and other subjects at the California Academy of Sciences, and for the last five years, has been a Distinguished Speaker for the American Institute of Aeronautics and Astronautics. He has edited and contributed to a half dozen books. His first popular tome, *Sharing the Universe: Perspectives on Extraterrestrial Life*, appeared in March, 1998. His most recent books are *Life in the Universe* (2002, textbook with Jeff Bennett and Bruce Jakosky) and *Cosmic Company* (2003, with Alex Barnett).

Biography



Dr. John Baumgardner is currently associate professor of geophysics at the Institute for Creation Research in Santee, California. He obtained his Ph.D. in geophysics and space physics from the University of California, Los Angeles, in 1983 and continued his research in the Theoretical Division of the Los Alamos National Laboratory in Los Alamos, New Mexico, from 1984 until his retirement in 2004. He joined the Institute for Creation Research in 2005. Dr. Baumgardner's primary scientific interest is planetary mantle dynamics.

Biography



Dr. Arie S. Issar is a Professor Emeritus at the J. Blaustein Institute for Desert Research, and the Geological Department of Ben Gurion University of the Negev. He founded, and was the head of, the Water Resources Center of the Institute for Desert Research since 1975 until his retirement in 1998. It was partly his inspiration, which saw the founding of the Institute for Water Sciences and Technologies.

He received his Ph.D. at the Hebrew University of Jerusalem in 1961. From 1980-1998 he was the holder of the Alain Poher Chair in Hydrogeology of Arid Zones. In

1985 he was awarded the Ernest D. Bergmann Prize for Special Scientific Contributions to the Development of the Negev Desert. In 2003, he received the Prize of the President of the International Association of Hydrogeologists for Outstanding International Contributions toward the Advancement of Hydrogeology. In 2005 he was awarded Honorary Member of the Israeli Association for Water Resources.

Prof. Issar's current research focuses on the impact of climate change on the hydrological cycle and socio-economic systems; and developing conceptual models in order to mitigate the negative impact of global change on the water resources of the Middle East, including long term policies of progressive development of the fossil aquifers of the region. He has published about one hundred papers, co-edited five books, and wrote five books in the fields of geology and hydrogeology.

In addition to his research in the above mentioned fields he is investigating the evolution of intelligence in the bio-world and has published a book with Late Professor Robert G. Colodny of Pittsburgh University, (1995), *From Primeval Chaos to Infinite Intelligence—Information as a Dimension and Entropy as a field of Force*, Ashgate-Avebury, UK.

Biographies



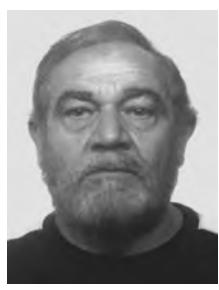
Sandra Ramos-Amézquita is currently studying Sociology at the Department of Social and Political Sciences at the Universidad Nacional Autónoma de México, (UNAM). She recently earned a scholarship to study at the University of Ballarat, Australia. Her interests are mainly interdisciplinary studies; she is trying to associate Sociology with aspects of Biology specially connected to the origin of life. Ms. Ramos is also interested in daily life sociological relationships.



Ninel Valderrama-Negrón is currently studying History at the Department of Philosophy and Humanities at the Universidad Nacional Autónoma de México (UNAM). Her interest is mainly history of Mexico, but she is trying to incorporate the various aspects that include the human studies to fully understand our society. She is especially interest in the history of science and the origin of life.



Dr. Alicia Negrón-Mendoza was born in Mexico City. She studied chemistry at the Universidad Nacional Autónoma de México; later she got her Ph.D. under the direction of Professor Ponnampерuma. She is working at the Instituto de Ciencias Nucleares, UNAM in the Chemistry Department. Her research field is related to radiation chemistry applied to problems in chemical evolution.



Dr. Sergio Ramos-Bernal is a researcher at “Instituto de Ciencias Nucleares”, at the Universidad Nacional Autónoma de México (UNAM). He obtained his Ph.D. in 1974 at the University of Manchester, England. Dr. Ramos-Bernal carries out research in the field of solid state physics connected with problems of prebiotic processes.

Biography



Dr. Arnie Gotfryd is Chief Environmental Scientist with the Gotfryd Group of consultants in Toronto, conducting environmental impact assessments for government, business, and individuals. He earned Canada's first doctorate in Applied Ecology at the University of Toronto (1985). His scientific work centers on urban wildlife habitats, assessment of observer bias in multivariate ecological analyses, and the health impacts of electromagnetic fields from power lines. He is a popular speaker, author and educator, especially on the interplay of science and faith.

He designed and taught an accredited, undergraduate course called Faith and Science in the Faculty of Arts and Science at the University of Toronto. The course won a Templeton Award of Excellence and was the most popular course at U of T's New College for many years.

Dr. Gotfryd has lectured in over 20 cities on 3 continents and has written 3 books and over 150 articles in peer-reviewed literature, popular science, magazines, and web-based media. His weekly e-newsletter, *Convergence, Exploring the Interplay of Science and Faith* reaches 3,000 subscribers. His book *Mind Over Matter, the Lubavitcher Rebbe on Science, Technology and Medicine* has been acclaimed by the likes of Nobel Physicist Arno Penzias and *Time Magazine*'s scholar of the century, Adin Steinsaltz.

Biographies



Professor Julian Chela-Flores was born in Caracas, República Bolivariana de Venezuela and studied in the University of London, England, where he obtained his Ph.D. in quantum mechanics (1969). He was a researcher at the Venezuelan Institute for Scientific Research (IVIC) and Professor at Simon Bolivar University (USB), Caracas until his retirement in 1990.

During his USB tenure he was Dean of Research for six years.

He is a Fellow of The Latin American Academy of Sciences, The Academy of Sciences of the Developing World, the Academy of Creative Endeavors (Moscow) and a Corresponding Member of the Venezuelan “Academia de Fisica, Matematicas y Ciencias Naturales”. His current positions are Staff Associate of the Abdus Salam International Center for Theoretical Physics (ICTP), Trieste, Research Associate, Dublin Institute for Advanced Studies (DIAS) and Profesor-Titular, Institute of Advanced Studies (IDEA), Caracas. His particular area of expertise is astrobiology, in which he is the author of numerous papers. He organized a series of Conferences on Chemical Evolution and the Origin of Life from 1992 till 2003. In 2001 he published the book: *The New Science of Astrobiology From Genesis of the Living Cell to Evolution of Intelligent Behavior in the Universe*.



Professor Joseph Seckbach is the initiator and chief editor of **Cellular Origins, Life in Extreme Habitats and Astrobiology (COLE)** series. www.springer.com/sereis/5775. He is the author of several chapters in this series. Dr. Seckbach earned his Ph.D. from the University of Chicago, Chicago, IL (1965). Recently he spent three months in Ludwig Maximilians University in Munich with a DAAD fellowship from the German service of exchange academicians, where several forward steps of this volume have been performed.

Among his publications are books, scientific articles concerning plant ferritin (phytoferritin), cellular evolution, acidothermophilic algae (mainly on *Cyanidium caldarium*), and life in extreme environments. He also edited and translated several popular books. Dr. Seckbach is the co-author (with R. Ikan) of the Chemistry Lexicon (1991, 1999) and other volumes, such as the *Proceedings of Endocytobiology VII Conference* (Freiburg, Germany, 1998) and the *Proceedings of Algae and Extreme Environments Meeting* (Trebon, Czech Republic, 2000) <http://www.schweizerbart.de/pubs/books/bo/novahedwig-051012300-desc.htm>). His recent interest is in the field of enigmatic microorganisms and life in extreme environments.