Richard Leghorn (SB) had, upon graduation, originally planned to return for an advanced degree after earning a few dollars to deal with his student loan. However, called into the service some six months before Pearl Harbor, he had little time to think about physics until participating in the Bikini Atomic Bomb tests in 1946, shortly before returning to civilian life. Although wistfully dreaming of physics from time-to-time [Richard Feynman was a classmate], life has taken him quite far afield.

Stan Ruttenberg (SB) Last year, Stan Ruttenberg gave up active science and now devotes himself exclusively to music as President of the Colorado MahlerFest. (When he took a class in music appreciation at MIT in 1945 no mention was made of Mahler, although he notes that now the MIT Symphony occasionally performs Mahler). Ruttenberg has been involved in the MahlerFest since 1991 and President since 1992. Visit www.mahlerfest.org for more information.

Robert I. Hulsizer, Jr. (PhD. Thesis advisor: Bruno Rossi) was supposed to retire in 1986, but enjoyed working with freshmen so much that he stayed on until June 2003. Hulsizer wishes that he could stay around until the mysterious dark energy is figured out.

Donald J. Eberly (SB. Thesis advisor: Arthur Cobb Hardy) This past academic year, Donald Eberly presented a paper on linkages between military service and national youth service (e.g., AmeriCorps, PeaceCorps, VISTA) at a symposium on Civic Service at Washington University, St. Louis. He has also made good progress in writing a book on national youth service worldwide. Currently, Eberly is preparing to attend the seventh Global Conference on National Youth Service in Ghana this summer.

John King (PhD ’53, SB ’50. Thesis advisor: J. R. Zacharias) Largely as a result of being one of J. R. Zacharias' students, John King has worked a lot on physics education, as did Zacharias. King's point-of-view is that the U.S. needs to greatly expand its potential by informal educational means: physics everywhere and a more educational environment, such as toys, tools, kits, playground equipment, interactive showcases (indoors and out), posters, instruments in the home, etc. For more details, see Am. J. Phys. 69, 11 – 25 (2001). [Reprints available from King.] One example can be found at www.amherst.edu/~physicsqa/. He would greatly appreciate any comments, ideas, or advice. Contact: jkgking@mit.edu.

Caroline Stuart Littlejohn (SB. Thesis advisor: Karl Ingard) is now retired, and enjoying it. She continues to do some part-time work with ICF Consulting as a technical evaluator for radiological emergency exercises at nuclear power plants around the country. Last September, Littlejohn participated in the Mossbauer History Celebration at Argonne National Laboratory, and gave a talk about the Mossbauer spectrometry of returned lunar samples. She has also given a number of talks about women scientists of the Manhattan Project, and in April 2004 gave a new talk on women at the Metallurgical Laboratory to the Hyde Park Historical Society.

Daniel Willard III (PhD. Thesis advisors: Bruno Rossi, Herbert S. Bridge) After his first retirement year, Daniel Willard traveled extensively, including a cruise from Valparaiso to Cape Horn to Buenos Aires; Mexico’s Copper Canyon by train; six countries from the Black Sea to Budapest by land and Danube; Prague for its astronomical and musical history; Egypt’s historical sights from Cairo to Abu Simbel by bus and ship; and Jordan (cold) with Petra (rain!) in winter. He also does a lot of reading, partly with a local book club; goes to concerts and operas; and even does a little consulting.

Arthur Winston (PhD. Thesis advisor: Louis Osborne) As an active alumnus, Arthur Winston has run the MIT Dinner Lecture Series for a few years and also Technology Day. He is a recipient of the Harold B. Lobdell award. Currently, Winston is Director of the Gordon Institute of Tufts University and Research Professor in the Department of Electrical and Computer Engineering. He is a Fellow and the President of the IEEE, and this spring was made a Fellow of the IEE.

D.R. Chipman (PhD ’55, SB ’49. Thesis advisor: B.E. Warren) remarried in June 2001 to Helen Folweiler. He’s still sailing the same Pearson 35, and cruised with the Yacht Club to Block Island and Long Island last summer, and plans to cruise to Maine in the summer of 2004. Chipman is also still skiing and spent two weeks in Jackson Hole this past February. He’s not doing physics anymore, just work around the house.
Robert at
rists interested in finalizing the field equations of hyper-energy
consulting company, HyperSpace Solutions, which is seeking theo-
deeper understanding of space, time and matter. Robert founded a
physics of gravity and big bang cosmology, as well as the expected
quantum gravity problem, and reveals the long expected new
recently received the Chairman's award for innovation, to recognize his
devoted to the development of satellite simulation software. Gottlieb
was recently acquired by Northrop Grumman. Most of his efforts are
Peter Gottlieb
(PhD. Thesis advisor: Uno Ingard) has been work-
ing in the aerospace industry for the past 22 years with TRW, which
was recently acquired by Northrop Grumman. Most of his efforts are
devoted to the development of satellite simulation software. Gottlieb
recently received the Chairman's award for innovation, to recognize his
development of a novel method for the simulation of the effects of
weather variations on satellite to ground communication. This enables the evaluation (over the entire mission) of alternative techniques for
data recovery.

J. Reece Roth
(SB. Thesis advisor: Sanborn Brown. PhD '63,
Cornell University) is now a Professor of Electrical and Computer
Engineering at the University of Tennessee, Knoxville, where he runs
the Plasma Sciences Laboratory (www.plasma.ece.utk.edu) and
participates in the spin-off of a small company, Atmospheric Glow
Technologies, Inc. (www.atmosphericslow.com). This company is
developing an atmospheric glow discharge plasma technology,
on which Roth has ten patents. He is a Fellow of the IEEE, an
Associate Fellow of the AIAA, and is now working on the physics and phenomenology of the One Atmosphere Uniform Glow
Discharge Plasma (OAUGDP) and its application to subsonic plasma aerodynamics.

Calvin T. Swift
(SB) In 2001, Calvin Swift became Professor Emeritus, Electrical and Computer Engineering, at the University
of Massachusetts, Amherst, where he was also Director of the
Microwave Remote Sensing Laboratory. In spite of retirement, he
has remained active: assisting a colleague to create an antenna
research center in partnership with the U.S. Air Force; working
with the NASA Earth Science Technology Office to develop the basis
of an Announcement of Opportunity for development of advanced
microwave sensors; and more recently, participating in another NASA working group on creating a new satellite for microwave
remote sensing of ocean salinity.

Verne L. Jacobs
(SB. Thesis advisor: John Slater) research activi-
ties at the Naval Research Laboratory involve the non-equilibrium
theoretical description, by means of density-matrix methods, of the
interaction of electromagnetic radiation with atomic systems and
materials (bulk solids and semiconductor heterostructures). A new
project involves the transfer of quantum coherence between elec-
 tromagnetic fields and matter by means of resonant nonlinear optical phenomena, such as electromagnetically induced transparency.

Martha Harper Redi
(SB. Thesis advisor: Lee Grodzins) is a
Principal Research Physicist at Princeton University's Plasma Physics
Laboratory. She is currently a Visiting Scientist at the MIT Plasma
Science & Fusion Center, working on plasma microturbulence calcula-
tions for high performance RF heated experiments. Redi presented
results on this topic this summer at the European Physical Society
Conference on Plasma Physics and Controlled Fusion, held in London.

Howard Straus
(SB) has been immersed in the alternative health
arena for the past several years, speaking in Thailand, Singapore and
Malaysia, as well as the United States, on the Gerson Therapy for
cancer. His biography of Max Gerson, Dr. Max Gerson: Healing the
Hopeless, is in its second printing, and he has been involved in the
production of a major documentary on the Gerson Therapy, released
for international distribution in May 2004 and awarded the Golden
Palm for Best Picture at the Beverly Hills Film Festival. Straus is also
the President of the Cancer Research Wellness Network in Carmel,
which educates the public about cancer therapy that heals, as it did
his wife Sally 15 years ago.

Chuck Tyler
(SB. PhD '69, Washington University. Thesis advisor:
Kurt Lion) spent 23 years in Corporate R&D at Hewlett-Packard,
followed by nine years founding and advising start-up businesses.
Now retired, he spends his time hunting, fishing, traveling and
playing golf, and feels content.
How did an MIT alumnus with an SB in Physics become head of global R&D for a major pharmaceutical company? Pat Gage responds.

“I struggled at MIT in undergraduate physics, but was saved by four faculty who provided me with invaluable advice and helped me in the transition from physics to biology. The first was the late Edward Herbert, a faculty member of the biology department, who introduced non-biology majors to the excitement of the new biology that was just then emerging. The second was Prof. Philip M. Morse, one of the founders of the field of operations research. Professor Morse, as faculty delegate to my 1964 physics class, shared two thoughts with the class that helped shape my career:

• ‘If you are not at the top of your class by this time, then thank MIT, because the rigor of the undergraduate curriculum differentiates the leaders from the others early on.’

• ‘But do not despair, as there is hope! An exciting new field is now emerging where bright scientists with strong analytical backgrounds can excel. That field is biology.’

“The third faculty member was Prof. Cyrus Levinthal, in whose laboratory I toiled during my senior year. Professor Levinthal was a physicist turned biologist. With his guidance, I learned about the excitement of molecular biology and later gained admittance to the Biophysics program at the University of Chicago, where I earned a doctorate. Finally, I also acknowledge Prof. Maurice Fox for assuaging my anxiety about leaving physics for biology, not a popular thing to do in 1964. He assured me that a physicist was always a physicist no matter what career one pursued.”

“My next transition was to leave behind a successful career in basic molecular biology research at the Roche Institute of Molecular Biology. The second half of the 1970s saw a watershed event — the development of recombinant DNA and monoclonal antibody technology. For the first time, technologies were available that could be utilized to develop breakthrough medicines. Intrigued by the possibilities, I jumped the fence to the pharmaceutical research effort at Roche, and after a time, led the drug discovery group for the U.S. The biotechnology revolution was well underway in 1989 when I moved to head R&D at an important biotechnology company in Cambridge, the Genetics Institute (GI). After GI was acquired, I became head of global pharmaceutical R&D for Wyeth Pharmaceuticals. In these roles, I was fortunate to oversee an annual research budget approaching $2 billion, but more importantly, was able to influence the development of many important pharmaceuticals. I retired from this career in 2002 to go back to my first love, helping really smart scientists and business people create and develop medicines and build companies. I do this now as a Venture Partner with Flagship Ventures in Cambridge, and as Chairman of two exciting startups, Compound Therapeutics, Inc., and Acceleron Pharma, Inc. Despite many twists and turns, I’ve had a wonderful career experience since graduating with a physics degree from MIT.”
'66
Edward M. “Monty” Graham (SB. Thesis advisors: Philip Morse, John D.C. Little) Since last year, little has changed for Monty Graham as he continues to face an uphill battle against a rare form of cancer. However, and he thanks heaven for it, he continues to be reasonably productive, but in the field of economics and not physics. In fact, at the moment, he's co-editing a book on foreign direct investment and economic development with MIT Institute Professor Emeritus Robert Solow.

Fred Kuttner (SB. Thesis advisors: Henry Kendall, Jerome Friedman) teaches physics at the University of California, Santa Cruz. This past year, he helped start an applied physics bachelor's degree program in the physics department for the more than 50% of graduating students who go directly into the work force after receiving their undergraduate degrees.

Allen Rubenstein (PhD. Thesis advisor: Francis E. Low) has been a partner in a New York City patent law firm since 1986. He and his wife Carole have two sons: Daniel, an assistant professor of computer science in Columbia's electrical engineering department and Samuel, a sports writer. This past academic year's accomplishments are a flute recital at the 92nd Street Y and a $3.5 million jury verdict for a client on a patent infringement claim.

D.H. Kaye (SB) spent this past academic year in China, first at Wuhan University on a Fulbright grant for a semester, then on his own at Sichuan University. For historical reasons, the Fulbright program does not send scientists to China. As a lawyer, he taught law at these universities. Needless to say, MIT commands great respect in China.

'67
Alan Goldberg (SB) is a Principal Scientist with MITRE in McLean, VA. After working on NASA astronomical and land remote sensing satellite systems, he began a project with NOAA and the DoD on the next generation of polar environmental operational satellites, NPOESS. Goldberg's responsibility is centered on the requirements and implementation of an integrated ground data processing system that will rapidly provide over 100 standard products to operational (weather) and archival (climate) users. Some MIT graduate subjects he took in planetary astronomy help quite a bit, but he also gets many opportunities to apply the first-principles approach learned in undergraduate physics to problems of both science and engineering.

Marion Reine (PhD ’70, MS ’65. Thesis advisor: Benjamin Lax) was the recipient of the annual Levinstein Award of the Detector Specialty Group of the Military Sensing Symposia. The award is given to an individual who has demonstrated "outstanding technical leadership and management of infrared technology." Reine is a Principal Engineering Fellow at the BAE Systems IR Imaging facility in Lexington, MA. Since joining BAE Systems in 1969, she has specialized in the physics, design, analysis, modeling and architecture of advanced HgCdTe IR detectors. In 1996, she was elected a Fellow of the American Physical Society by the Forum for Industrial and Applied Physics for "technical leadership in the design and development of innovative photoconductive and photovoltaic HgCdTe devices for advanced infrared detectors."

Barbara Sollner-Webb (SB) immediately became a physics drop-out after graduating from MIT by going to graduate school for Biology at Stanford. She did her doctoral research on chromatin at the NIH with Gary Felesnfeld, followed by a postdoc with Ron Reeder at the Carnegie Institute in Baltimore. For the past 24 years, Sollner-Webb has been a member of the faculty of the Johns Hopkins University School of Medicine. (She was only the ninth woman to be tenured at Johns Hopkins since its founding over 100 years ago.) Her research first focused upon the mechanism of rRNA gene transcription, then RNA processing, and she now studies both a form of RNA processing that can change 4⁄5 of the codons in mitochondrial mRNAs and a system discovered by her group that provides novel information on how the mammalian cell organizes its DNA in the nucleus. Married and with a daughter recently graduated from Dartmouth, her hobbies include environmental activism and riding Icelandic horses, who are wonderful!

Bennie F.L. Ward (SB, physics and mathematics. Thesis advisor: Philip Morrison) In August 2003, Bennie Ward moved from the Physics Department of the University of Tennessee, Knoxville, to the Department of Physics, Baylor University, Waco, TX, where he's currently Chairman and Distinguished Professor of Physics.

'70
Martin Ewing (PhD. Thesis advisor: Bernard F. Burke) is pursuing new and old interests after retiring as Director of Information Technology for the Faculty of Engineering at Yale University. The new interest is church finance, which has led him to the position of Treasurer of the Connecticut Conference of the United Church of Christ. The old interest is amateur radio, which despite contrary rumors, is alive and well and receptive to MIT grads, even physicists. This is offered in support of Victor Weisskopf's assertion that physicists are the best people to do anything.
Maury Goodman (SB. Thesis advisor: Stanislaw Olbert) continues to participate in and monitor the incredible recent progress in understanding neutrino masses and mixing. You can visit his web site on the subject at www.neutrinooscillation.org. To receive a monthly email newsletter on neutrinos, email Goodman at maury.goodman@anl.gov.

Sava Milosevic (PhD. Thesis advisor: H.E. Stanley) In 16 months, Sava Milosevic will retire from his position as University Professor in the Faculty of Physics, University of Belgrade, Serbia and Montenegro, where he teaches statistical physics and quantum statistical physics. Former students often praise him for the quality of his teaching, unaware, however, that in almost every lecture Milosevic has been transferring a part of MIT and the mastery of his former supervisor.

Gerald “Gerry” Paul (PhD. Thesis supervisor: Eugene Stanley) spent the first 27 years of his career in the IT industry doing and managing software development. In 1998, he returned to academia to do physics research. Currently, Paul is a research associate at Boston University, working in statistical mechanics with Gene Stanley. He and his wife Robin have lived in Lexington, MA, for the last 30 years, where they raised four sons.

Steve Berger (PhD '73, SB '67. Thesis advisors: Bernard Feld, Lee Grodzins) continues to work with minority students in the New York City school system, teaching physics and mathematics. Concurrently, he has made good progress in his academic research with regard to the relativistic Dirac equation for electrons and neutrinos.

Mitch Tyson (SB) was the CEO of PRI Automation (supplier of automation hardware, software and services to the semiconductor industry) until the company was acquired by Brooks Automation. He has since joined a few corporate boards (AmberWave Systems, strained silicon technology; Photronics, semiconductor mask maker), been active with trade associations (SEMI, Mass High Tech Council), and busy lecturing and consulting with start-ups and VC firms.

Jonathan D. Lettvin (SB. Thesis advisor: Ray Weiss) Last fall, Jonathan Lettvin developed a new theory of neural processing that uses standard physics and math to perform simple dynamic analysis. The theory is both predictive and useful in understanding neuroanatomy. In addition, the theory is an unusually rich source for designing new devices. Part of the material has been vetted by experts and he welcomes inquiries. Contact: jdl@alum.mit.edu.

Zachary Levine (SB, physics and mathematics. Thesis advisor: Ray Weiss) has been a physicist at NIST since 1995. In the past year, he helped secure approximately six million dollars in funding for a five-year project aimed at using electron microscopy to create three-dimensional images of micron-sized samples, including chemical information. He also published an article in Applied Physics Letters which, through simulation, suggests that by incorporating multiple scattering theory into tomography it should be possible to obtain reconstructions of samples three times larger than those treated to date.

Chung-Yin Lo (PhD) has shown in his recent work that existing criticisms on Einstein’s equivalence principle are due to misunderstandings in physics and that the “principle of covariance” has no theoretical basis in physics or observational support beyond what is allowed by the principle of general relativity. To illustrate that (restricted) gauge invariant results are limited to integrated effects, he considers a new metric that there is no space contraction in the radius direction. Surprisingly, its “event horizon” relates to an arbitrary integral constant, instead of those horizons in other gauges. A physical reason for the non-existence of dynamic solutions is identified as the absence of an energy-stress tensor along the path of a gravitational wave in Einstein’s equation. Thus, all its plane wave solutions, including those obtained by Liu and Zhou, cannot have weak limits.

Glenn R. Young (PhD. Thesis advisor: Stephen G. Stadman) has been Director of the Physics Division of the Oak Ridge National Laboratory since July 2002. Earlier in his career, he had spent three years as Deputy Project Director, followed by nine years as Deputy Spokesman, of the PHENIX Experiment at RHIC at Brookhaven. Young’s busy at ORNL with various projects to upgrade the intensity and number of beams of unstable nuclear species that can be produced by the Holifield Radioactive Ion Beam Facility. He and colleagues are also working on a new beamline for studying physics of the neutron at the Spallation Neutron Source, undergoing construction at ORNL, as well as studying how one might use the neutrinos that will be produced by the SNS to study cross sections of interest in describing the collapse of Type II supernovae.

Edward C. Sittler, Jr. (PhD. Thesis advisor: Stanislaw Olbert) As Co-Investigator for the Cassini Plasma Spectrometer experiment, Edward Sittler has been busy working with the team getting the
“My MIT physics experience actually began three days before classes during my freshman year, when I joined John King’s Molecular Beams Lab. After my S.B. in Physics, I went on to get an M.S. and Ph.D. in Physics from the University of Arizona, Tucson. Since then, I’ve worked at Bell Labs, Sun Microsystems, had my own consulting company and am currently the Chief Technology Officer for Interconnect Devices Inc., in Kansas City. [Interconnect is the world’s largest manufacturer of spring probes for high-reliability, high-performance electrical interconnect.] I’ve written four books and over 200 papers, and have had two monthly columns in magazines, writing on signal integrity and interconnect technology topics. My fourth book, Signal Integrity Simplified, was just published by Prentice Hall.

For the last twenty years, I’ve been an MIT Education Counselor, interviewing prospective MIT students as part of the admissions process. This enjoyable task has given me over 100 opportunities to articulate the value of my MIT education for high school students trying to make their selection.

I probably spent more time working in the lab and on other UROP projects my four years at MIT than doing class work. From John King and Rai Weiss, I learned to think about experiments. When I would ask them a puzzling physics question, the answer was usually phrased in terms of an experiment that had been done, or one that might be done. As King used to say, and which I quote him on regularly, “Any physicist can come up with an explanation, but a really good physicist can come up with three possible explanations.” One of the ways we can often distinguish which explanation is correct is by devising a definitive experimental test. While theoretical analysis is equally important, it is often given a disproportionate amount of attention. In industry, an orientation toward experimentation and measurement has helped me stand out.

The most valuable talent I developed at MIT, which has turned out to be both personally rewarding and beneficial to my professional career, is communicating technical information. I got my start in presentations at UROP symposia and in Junior Physics Lab. I discovered how much I enjoyed writing about physics from Charlie Weiner and John Graves when I took their history of physics classes. Being able to articulate technical ideas at the appropriate level of my audience is the most effective way I have found of leveraging my influence. This applies looking up the organization to managing my bosses, down the organization at rallying the troops to implement my plans, working with customers to understand their needs and convince them of the value of our solutions, and in the industry as a whole, in helping it move forward in the direction I think it should go.

Even now, thirty years later, my four years at MIT stand out as the best time of my life. I have searched in vain for another environment that has provided the same opportunities for growth and enrichment. This is my thank you to all those professors, staff, graduate students and fellow undergraduates who helped shape such great memories.”

Eric can be reached at eric@bogent.com.
instrument ready for orbit on July 1, 2004. He has been working on the interaction of the moons Dione and Enceladus with Saturn’s magnetosphere. Sittler has also been working on MHD modeling of the Sun’s corona and solar wind, and was recently appointed Study Scientist for Solar Probe at the Goddard Space Flight Center.

‘79 Paul Finman (SB) went on to graduate school at Stanford University, earning a Ph.D. in electrical engineering. He started an electronics company in Southern California that specializes in the design and manufacture of RF-power amplifiers (visit www.LCFamps.com for further details). Finman’s company is one of over 500,000 small businesses that have left California recently; he relocated his to Post Falls, Idaho. Idaho has a favorable business climate, but Finman hopes to move some of their work to New Hampshire to be closer to the east coast and MIT. He would enjoy hearing from any classmates in the area. Contact him at pfinman@alum.mit.edu.

Peter Reynolds (PhD. Thesis advisor: H.E. Stanley) In June 2003, Peter Reynolds changed jobs from Program Manager at the Office of Naval Research to Program Manager at the Army Research Office (ARO). This past January, he was promoted to Head of Physics at the ARO.

Lawrence G. Votta, Jr. (PhD. Thesis advisor: George Bradenburg) is a Distinguished Engineer at Sun Microsystems, Inc., working to improve the software and system reliability and availability of Sun’s products while pursuing his research interest in high availability computing and empirical software engineering. He works in the Sun Customer Advocates for Reliability (SunCARE) group providing technical leadership as a principle investigator of the Reliability, Availability and Serviceability (RAS) and Productivity Analysis teams for Sun’s DARPA High Productivity Computer Systems (HPCS) Phase Two program.

‘80 John Mace Grunsfeld (SB. Thesis advisors: George Clark, George Ricker) was named to the position of NASA Chief Scientist in the fall of 2003, taking leave from the Astronaut Office after four space flights on the Space Shuttle (including two Hubble Space Telescope Servicing missions). While at MIT, he worked with Prof. George Clark and Dr. George Ricker in X-ray astronomy, his current field of study. As Chief Scientist, Grunsfeld is the principle advisor to the NASA Administrator on scientific matters.

John Molitoris (SB. Thesis advisor: Harald Enge. PhD ’86, Stanford University) is a physicist at Lawrence Livermore National Laboratory, where he leads research programs in Shock/Detonation Physics and Advanced Concepts for Defeat of Biological/Chemical Agents. Molitoris’ training as an experimentalist at MIT (in the old Van de Graaff Laboratory) has served him well in leading experimental programs and in diagnostic development. Two of his projects received internal awards at LLNL in 2003 and 2002. On the personal side, Molitoris and his wife had a baby girl last year, which makes him the proud father of three children!

‘81 Michael B. Heaney (SB. PhD ’90 University of California, Berkeley. Thesis advisor: Phil Myers) is an experimental physicist at the Palo Alto Research Center (www.parc.com), where he’s working on the “digital paper” project.

David Powsner (SB. Thesis advisor: Ernest Moniz) continues to enjoy the practice of patent law at Nutter, McClennen & Fish, in Boston. On the home front, his family has grown to five, with the adoption of a third child from South Korea. Dave keeps abreast of at least some developments in physics through his law practice and through the MIT Physics Department’s faculty breakfast talks.

‘82 Mary Barsony (SB) In June 2003, Mary Barsony relocated to the San Francisco Bay Area, where she now holds an Adjunct Professorship in the Physics & Astronomy Department at San Francisco State University. She’s continuing, as well, her research on star formation as an off-site Research Scientist with the Space Science Institute of Boulder, CO. In the summer of 2004, Barsony will participate for a second consecutive year as a NASA Faculty Fellow at Ames Research Center, working on near-IR spectroscopy of young binary stars. Fellow alumni may reach her at fun@alumni.caltech.edu.

Lawrence Krauss (PhD. Thesis advisor: Roscoe Giles) was awarded the Oersted Medal by the American Association of Physics Teachers this year. He is the first physicist to be honored with the highest awards of the AAPT, the APS, and the AIP.

Alex Storrs (SB. Thesis advisor: Claude Canizares) finally got tenure in the Department of Physics, Astronomy, and Geosciences at Towson University in Maryland. To see what he has been up to lately, visit his web site at www.pages.towson.edu/astorrs/.

‘83 Thomas J. Grycewicz (SB, physics & electrical engineering. Thesis advisor: Cardinal Warde) It has been a year of changes for Thomas Grycewicz. His wife Karen began working part-time to have more
time at home with their first child, Terrence. Grycewicz himself retired from the Air Force in October 2003 and started a second career as a Senior Engineering Specialist at The Aerospace Corporation in Chantilly, VA. He continues to specialize in electro-optics, image processing, and radiation-hardened sensors. The Grycewiczs moved from Burke, VA, to Fairfax, VA, in May 2004.

David E. Brahm (SB, physics and mathematics, Thesis advisor: Thomas Greytak) is now a quantitative financial analyst in Boston at Geode Capital Management (a Fidelity spin-off). He has been back to MIT a few times recently to participate in a graduate career seminar, take an IAP Java class, and do a little sailing. He and his wife Karen bought a townhouse in Chelsea (Admiral’s Hill) in September 2003, and just celebrated their 7th wedding anniversary with a trip to Italy.

Charles David Nabors (SB, PhD ’90, Stanford University) has worked at a number of places since earning his Ph.D., including MIT’s Lincoln Laboratory from 1990 – 93. Presently, he’s a program manager with Coherent, Inc., a commercial laser manufacturer in Northern California, managing product development projects in semiconductor lasers. Nabors is married to Stephanie Oberg ’84 (Course 3, of course) and they have two daughters, Annika, 11, and Charlotte, 4.

Alberto C. Sadun (PhD ’84, SB ’77. Thesis advisors: Kenneth Brecher, Philip Morrison) continues to teach physics and do research in astrophysics at the University of Colorado, Denver. His principle areas of research are in multifrequency image and broadband spectral analysis of extragalactic jets, and time variability studies of TeV quasars. Sadun’s very excited about this new era of high energy astrophysics, with the inclusion of Chandra, XMM-Newton satellites, and the Hubble telescope.

Fulvio Melia (PhD. Thesis advisors: Paul Joss, Saul Rappaport) recently completed a six-year stint as scientific editor of the Astrophysical Journal and began a new appointment as Associate Editor of the Astrophysical Journal Letters. Currently a Professor of Astronomy and Associate Head of the Physics Department at the University of Arizona, he is currently working on a textbook, The Galactic Supermassive Black Hole (for Princeton), due out in late 2004.

Brad Waller (SB) left engineering about five years ago to concentrate on building a business co-founded with another MIT alumnus and a Cornell alumnus, which provides services for other Internet companies. They survived the “dot bomb” quite well and are growing again. In 1994, they began with what is now the oldest web classifieds, www.EF.com, and have developed other services as the markets open. Last year they launched www.AdConnect.com to provide outsourced classifieds to others. More recently, www.AdJungle.com was launched, which provides advertising management services to allow advertisers to place ads into the owner’s site through a more streamlined process.

Andrea Ghez (SB) won the 2004 Sackler Prize of Tel-Aviv University (www.tau.ac.il/~spps/sackler_prize/winners.html). The prize is awarded to a scientist under the age of 40 for achievements in the field of observational or theoretical astronomy and astrophysics. Ghez was noted for her “…pioneering high-resolution infrared observations that provide evidence for, and establish the mass of, the supermassive blackhole in the center of the Galaxy.”

Douglas Singleton (SB) From January through August 2004, Douglas Singleton was on leave from Cal State Fresno on a Fulbright Fellowship to Moscow. He worked with the theoretical group of Professor Vitaly Melnikov at the Center for Gravitation and Fundamental Metrology, associated with the People’s Friendship University of Russia. Singleton did theoretical research on higher dimensional solutions to gravitation theories, which go under the heading of Kaluza-Klein theories.

Prashant Singh (SB, physics and electrical engineering) For the past year, Prashant Singh has been working on CMOS SERDES in an ASIC standard cell format for LSI Logic. After recently completing a 10 Gb/s design in 0.115 micron CMOS, he is now working on a multi-rate/multi-standard SERDES, which covers 1 – 8.5 Gb/s, in 90nm CMOS.

John T. Chen (SB. Thesis advisor: Stephen Meyer. PhD ’97, MIT, Materials Science & Engineering) Having spent the last four years as an entrepreneur founding two nanotechnology startups in the Boston area, John Chen decided to enter the MIT Sloan School of Management for an MBA and pursue a career in early-stage technology venture capital. He has had a wonderful first year at the Sloan School and has had an opportunity to work with a venture firm called Navigator Technology Ventures, leading the due diligence of early-stage technology companies. Chen has also been working with and helping to formulate a business plan for an MIT startup focusing on cargo scanner technology for homeland security, called
Passport Systems. For the summer of 2004, he’ll work with the venture capital firm Draper Fisher Jurvetson, New England, to identify and perform due diligence of nanotechnology companies as well as the broader IT sector. Outside of work, he and his wife recently completed a 100-mile bike race around Lake Tahoe, raising money for the Leukemia and Lymphoma Society’s Team in Training program.

Matthew McCluskey (SB. Thesis advisor: Jonathan Wurtele) and his research group at Washington State University have been investigating wide-bandgap semiconductors such as gallium nitride and zinc oxide, materials that are important for blue light-emitting applications. They have also performed fundamental research on the vibrational properties of defects in semiconductors, work that was recently published in Physical Review Letters. This year, McCluskey was promoted to Associate Professor with tenure.

Lerothodi L. Leeuw (SB. Thesis advisor: Ron Remillard) In August 2004, Lerothodi Leeuw will have finished two years of astrophysical postdoctoral research at the University of Toledo, OH. As soon as he knows where he’ll be next and what he’ll be doing, he’ll send us an update.

Ken Ricci (SB, physics and literature. Thesis advisor: George Bekefi. PhD ’00, Stanford) joined the NASA Ames Research Center in Mountain View, CA, in July 2003, where he worked for six months as a senior research scientist and data analyst studying the effects of aerosols on global warming and climate change. During that time, he consulted for a Mountain View optics company, Los Gatos Research, Inc. (LGR). In January, Ricci joined LGR full-time as a senior physicist, to develop and market new optical instruments for measuring and monitoring atmospheric pollutants and trace gases.

Miltiadis Sarakinos (PhD ’93, SB ’89. Thesis advisor: Ulrich Becker) has been employed since August 2002 as a Data Miner at Swisscom Fisnet in Zurich. By means of algorithms such as decision trees, neural networks and Kohonen networks, he’s developing predictive or clustering models to understand and hence influence customer behavior patterns. Sarakinos’ focus is mostly on customer defection to, or winback from, competitors, product affinities and customer lifetime value. From June 2000 until July 2002, he had a similar role with the Swissair Group.

Ted Sung (PhD. Thesis advisor: Steven Steadman) is married to Yuri Kinoshita (MIT ’86) and they’ve three children ages ten, six and three, who keep life fun and busy (there’s nothing like watching a three-year old ski down a bunny slope yelling “faster, faster!”). Sung is starting his second decade at a small financial software company, Intex Solutions, just outside of Boston. Aside from the problem-solving skills learned at MIT that help at work, learning how to play ice hockey was an extra perk for Sung. He still loves to play during the winter (and sometimes during the summer).

Vijay Pande (PhD. Thesis advisor: Toyoichi Tanaka) is now a dad. Tara Sophia Stephens Pande was born on April 2, 2004, a happy 9lbs., 3oz. baby girl. Pande is an Assistant Professor of Chemistry and Structural Biology at Stanford University.

Celeste Winant (SB) received her Ph.D. from the University of California, Berkeley, in May 2003. Her dissertation topic was balloon-borne observations of the cosmic microwave background temperature anisotropy with MAXIMA, under the supervision of Dr. Paul Richards. Winant is now a postdoc at Lawrence Livermore National Labs, working on neutrino and dark-matter detectors.

Jennifer Krishnaswamy (née Nickel) (SB. Thesis advisor: George Benedek) earned her Ph.D. in Biophysics from the University of California, Berkeley in May 2003, and shortly thereafter gave birth to her daughter, Sandhya, in July 2003. She’s really excited about publishing her doctoral thesis work in journals within the next few months; she focused her studies on vision.

Daniel B. Nestor (SB. Thesis advisor: Alan Levine) will (hopefully) received his Ph.D. in Astrophysics from the University of Pittsburgh this summer, followed by a move to Gainesville to start a postdoc at the University of Florida.

David Garrison (SB. Thesis advisor: Jacqueline Hewitt. PhD, Pennsylvania State University.) After earning his S.B. at MIT, David Garrison went to Penn State, where he earned the Ph.D. in Physics. He is now the Faculty Chair of the Physics Program at the University of Houston-Clear Lake. Garrison is currently in the process of developing a new Professional Physics Master’s Degree program and has research collaborations with Johnson Space Center’s Advanced Space Propulsion Laboratory, as well as with local industry.
Igor Bilinsky  (PhD. Thesis advisors: James Fujimoto, Daniel Kleppner) After spending the past five years with the Boston Consulting Group, Igor Bilinsky recently joined Androclus Therapeutics in San Diego as Chief Operating Officer. Androclus is developing therapeutics for treatment of autoimmune and inflammatory diseases such as rheumatoid arthritis and multiple sclerosis. Androclus’ products are designed to be safer and more specific than the drugs on the market today.

Andre B. Fletcher  (PhD. Thesis advisors: Bernard F. Burke, S.W. Stahler) is finishing a third postdoctoral year in the Korea Astronomy Observatory (KAO), Daejeon. He’s assisting with lectures and discussions on the construction of the new Korean VLBI Network (KVN), a dedicated array of three millimeter-wavelength radio telescopes in South Korea. Fletcher will join the Shanghai Astronomical Observatory (SHAO) Radio astronomy Group in September 2004.

Michael Golinko  (SB. Thesis advisor: Michael Feld) is finishing up medical school at the University of South Florida in Tampa, and getting ready for a big trip to India, Bangladesh and Sweden before starting his general surgery residency at SUNY Downstate, NYC. He aspires to work with kids at some point.

Megan L. Hepler  (SB, physics and brain and cognitive sciences. Thesis advisors: Alan Guth, Suzanne Corkin) is still at MIT, working towards her doctorate in Health Sciences and Technology. (She’s ABD!) Her research is in magnetic spectroscopic imaging (or chemical shift imaging) of the brain at high fields. Hepler recently married another MIT alum, William Blackwell (PhD ’02).

Marta Dark  (PhD. Thesis advisor: Michael Feld) was married in July 2003 to Dwayne McNeese. They live in Atlanta, GA.

Gabriele Migliorini  (PhD. Thesis advisor: A. Nihat Berker) In January 2004, Dr. Migliorini joined the Neural Computing Research Group in the Information Engineering Department at Aston as a Postdoctoral Research Fellow.

Teresa Fazio  (SB. Thesis advisor: Ulrich Becker) graduated from the Communications/Information Systems Officer Course in December 2003. She then reported to Communications Company, 1st Force Service Support Group, Camp Pendleton, CA; in January 2004. Since February 2004, Fazio has been deployed near Fallujah, Iraq, and will serve there as a communications officer until September 2004. She was promoted to 1st Lieutenant in May 2004 in the U.S. Marine Corps.

Ananth Chikkatur  (PhD. Thesis advisor: Wolfgang Ketterle) After his dissertation, Ananth Chikkatur traveled to India to learn about rural energy. He volunteered at an NGO (Environment Support Group, ESG) in Bangalore and worked on issues related to environmental justice in India. At ESG, he participated in several projects, including research on electricity infrastructure in a medium-sized Indian city; working with a local community to protect a river being polluted by a large paper factory; and coordinating a petition to the Karnataka Electricity Regulatory Commission regarding safe and reliable electricity in Bangalore. Chikkatur also teamed up with a small energy company, Sahyadri Energy Systems, to do feasibility studies for micro-hydro projects in the Himalayan and Eastern Ghats sections of India. In addition to his work at ESG and Sahyadri, he has traveled through much of India, gaining an understanding of various aspects of rural energy needs in a developing country.

Joshua Jackson  (SB, physics and mathematics. Thesis advisor: David Pritchard) is currently in Denver working to create the next generation of school communications technology at Centrifuge Solutions. He’s also recording and writing his first album, due out this fall. Joshua plans to return to the Boston music scene next year when he enters graduate school, so keep an eye out!

Bin Zhang  (PhD. Thesis advisor: William Bertozzi) This past year, Bin Zhang has been designing electronics components that can work in harsh environments, such as high temperature, high pressure, high radiation exposure, etc. He developed a line of products utilizing the wide bandgap silicon carbide material, and has made progress in the development of a radiation protection technique for electronics. Zhang’s products are designed mainly to serve the aerospace industry. •