

## Program in Writing and Humanistic Studies

The Program in Writing and Humanistic Studies (WHS) offers MIT students the opportunity to study the methods, forms, and traditions of contemporary writing. Students are taught to write with force, clarity, and creativity in a wide range of forms. Electives are available in expository writing, fiction, poetry, the essay, journalism, rhetoric, biography, playwriting, technical communication, science writing, and digital communication.

Our program members include scholars, journalists, and artists who themselves write in these forms and who publish research in a variety of humanistic fields, both traditional and interdisciplinary. Our faculty includes joint appointments in Science, Technology, and Society; Physics; Comparative Media Studies; and Mechanical Engineering. Our program members work in one or more of the four following curricular groups: (1) the core academic curriculum, made up of Humanities and Social Sciences Distribution (HASS-D) subjects and electives; (2) the writing-across-the-curriculum outreach programs throughout the Institute; (3) the Writing and Communication Center; and (4) the graduate program in science writing.

Program subjects during the past year enrolled 742 students, of whom 11 were majors, 15 were minors, and 63 were concentrators in writing for the HASS-D requirement. Our writing-across-the-curriculum programs brought writing instruction to 2,626 students in 17 departments and 51 subjects throughout the Schools of Science, Engineering, and Architecture and Planning. Our Writing and Communication Center staff assisted 754 undergraduate and graduate students during 3,157 visits, providing assistance with reports, papers, oral presentations, applications, and thesis projects. Finally, seven students graduated from our MS science writing program.

### Research and Publications

Professor Robert Kanigel's biography of Frederick Winslow Taylor, *The One Best Way*, has been reissued by MIT Press, and Professor Kanigel continues research and writing for "Faux Real," a book about leather, imitation leather, and the boundaries between natural and man-made materials.

Professor Kenneth Manning continues work on his study of the historical role of African Americans in American medicine and on an encyclopedia of African Americans in science, technology, and medicine.

Professor James Paradis has completed work on an edited essay collection entitled "Samuel Butler: Victorian Against the Grain."

Associate professor Helen Elaine Lee continues work on "Life Without," her novel about prison and prisoners' lives.

Associate professor Junot Diaz continues work on his novel, "Secret Histories."

Assistant professor Aden Evens' book *Sound Ideas: Music, Machines, and Experience* was published in July by the University of Minnesota Press. His essay "Object-Oriented Ontology, or the Creative Moment of Computer Programming" is forthcoming in *Angelaki: Journal of the Theoretical Humanities*.

Assistant professor Anthony Lioi's essay "Of Swamp Dragons: Mud, Megalopolis, and a Future for Ecocriticism" has been accepted for a volume entitled *Coming into Contact: New Essays on Ecocritical Theory and Practice*, to appear in 2005. He is currently working on a study entitled "The Cosmological Crisis and the American Essay, 1945–2000."

Adjunct professor Alan Lightman published a new collection of essays on creativity in science entitled *A Sense of the Mysterious* (Pantheon, January 2005). Another collection of essays, *Landmark Discoveries in the Sciences*, will appear in September.

Adjunct professor Joe Haldeman completed his science fiction novel, *Old Twentieth*, which is scheduled for publication by Ace Books in August 2005. He coedited an anthology of short stories called *Future Weapons* for Baen Books in 2005. A single-volume reprint of his novels *War Year* and *1968* will be published by Night Shade Press in November 2005. His short story "Faces" appeared in the *Magazine of Fantasy and Science Fiction*; his short story "Memento Mori" appeared in *Amazing Magazine* in June 2004 and was selected for *The Best Science Fiction of 2004*; his short story "Heartwired" appeared in *Nature* in March 2005; and his short story "Diminished Chord" appeared in *Renaissance Faire* in February 2005.

Visiting professor Marcia Bartusiak completed her fourth book, *Archives of the Universe: A Treasury of Astronomy's Historic Works of Discovery*, which was published in the fall of 2004 by Pantheon Books. She published an article, "The Amazing Lives of Two Stars," in *Astronomy Magazine* in November 2004, and her article "Beyond the Big Bang: Einstein's Evolving Universe" appeared in *National Geographic* in May 2005.

Senior lecturer Edward Barrett is working on a monograph entitled "Digital Poetry" for MIT Press.

Research associate Philip Alexander has completed the writing and editorial work for Julius Stratton and Loretta Mannix's *Mind and Hand: the Birth of MIT* (MIT Press 2005).

Lecturer Erica Funkhauser's essay "Singing in Dark Times" will appear in the autumn 2005 issue of *Harvard Review*; her short story, "Snapper," is forthcoming in *Massachusetts Review*.

Lecturer William Corbett's edited edition *Just The Thing: Selected Letters of James Schuyler* was published by Turtle Point Press in November, 2004. In the fall of 2005, his *Letters of James Schuyler to Frank O'Hara* will be published by Turtle Point Press, and his poetry collection, *Opening Day: Poems*, will be published by Stinehour Press. Other poems and reviews appeared in the *Provincetown Arts Review* and the *Boston Phoenix*.

Lecturer Ellen Cooney's new novel, *A Private Hotel for Gentle Ladies*, will be published by Pantheon in the fall of 2005. Her novel, *Gun Ball Hill*, was published by the University Press of New England in the fall of 2004.

Dr. Leslie Perelman, director of Writing across the Curriculum (WAC), published an op-ed article titled "New SAT: Write Long, Badly and Prosper" in the *Los Angeles Times* (2005).

Lecturer Rebecca Faery, director of First Year Writing, continues work on a collection of essays on Vietnam.

Lecturer Neal Lerner published several essays on writing centers: "Time Warp: Historical Representations of Writing Center Directors" and "The Writing Center Summer Institute: Backgrounds, Development, Vision," both in *The Writing Center Director's Resource* (Erlbaum, 2005). He published an article, "Writing Centers Fifty Years Later," in the *Writing Lab Newsletter*. He has several additional articles accepted for publication, including "The Teacher-Student Writing Conference and the Desire for Intimacy" (*College English*, 2005); "Internal Outsourcing Academic Support: The Lessons of Supervised Study" (*Writing Program Administration*, 2005); "Laboring Together for the Common Good: The Writing Laboratory at the University of Minnesota, circa 1932" (*Teaching English in the Two-Year College*, 2005); "Seeking Knowledge about Writing Centers in Archives, Numbers, and Talk" in *Writing at the Center* (Conference in Rhetoric and Composition, forthcoming); and "Situated Learning in the Writing Center" in *Marginal Words, Marginal Work? Tutoring the Academy in the Work of Writing Centers* (Hampton Press, forthcoming).

Lecturer Mya Poe published "Race and American Educational Testing: Using Socially Situated Research to Understand Student Performance on Large Scale Literacy Tests" in the *International Journal of Learning* (2005).

Lecturer and MD Marilee Ogren, who teaches in the WAC group, published three articles in *Health News*, a publication sponsored by the Massachusetts Medical Society and the *New England Journal of Medicine*. Their titles were "When Substance Dependence Begins Late in Life"; "Treatment for Type 2 Diabetes and the Use of Short-Acting Antidiabetic Drugs"; and "Guidelines for New Epilepsy Drugs."

### **Academic Programs and Initiatives**

As in the past four or five years, WHS continues to participate in three major SHASS initiatives: (1) the Communication Requirement, (2) the Comparative Media Studies MS program, and (3) the MS program in science writing.

The Communication Requirement, approved by the MIT Faculty in 2001, is now in full force after four years of ramping up. The older proficiency-based writing requirement has been replaced with a new instruction-based requirement, in which every undergraduate takes some form of instruction in writing and speaking each year

of his or her four-year program. Roughly 20 percent of incoming MIT freshmen are now required, on the basis of their performance on the Freshman Essay Evaluation test, to take an expository writing class. Dr. Faery continues to improve the first-year expository writing curriculum and continues her training program for first-year writing instructors. A major task facing the Communication Requirement is that of developing an assessment program for reviewing and strengthening its overall impact. Dr. Faery, collaborating with lecturers Mya Poe and Andrea Walsh has begun this process locally in WHS in a pilot assessment of student writing in our first-year writing subjects. Preliminary results of this assessment project have been presented at the Conference of College Composition and Communication and at a special meeting with MIT's dean for undergraduate education, who helped fund the initiative. This assessment initiative is currently being written up.

As part of the new Communication Requirement, we have also revamped and expanded our writing-across-the-curriculum programs. The object of these outreach programs is to take writing instruction and evaluation into core subjects of science and engineering departments throughout the Institute. Dr. Perelman and Ms. Madeline Brown, coordinator of Writing Initiatives, have considerably expanded the WAC teaching efforts of WHS through every department at the Institute (except the Sloan School of Management), and they have experimented extensively with innovative instructional programs. This past academic year, the WAC program staff taught in 51 different science and engineering subjects in 17 departments, reaching nearly 2,626 undergraduate students. This represents a major expansion of the teaching of communication in the majors throughout MIT. Part of this expansion has included the development of an extensive communication tutoring program in SHASS, which we are revamping this year. We are planning to consolidate our 22 tutors to a core of 10–15, in the interests of providing more in-service guidance and a better assessment of the program.

WHS has expanded its support of the Comparative Media Studies (CMS) graduate program in collaboration with the Foreign Languages and Literatures section and the Literature faculty. The three sections continue to collaborate in developing an interdisciplinary graduate curriculum, share in the advising of graduate students, and jointly govern the policy of CMS. Dr. Barrett, who teaches the writing of digital media subjects in WHS, taught two subjects taken by CMS students: CMS.950 The CMS Workshop and 21W.785 Writing in Cyberspace. Professor Evens will be teaching a new subject, 21W.784 Becoming Digital, and assistant professor Beth Coleman has jointly listed her new subject 21W.763J Modern Science Fiction with CMS. In addition, WHS faculty will also continue to serve on search, curriculum, and other administrative committees to help run CMS. Professor Lioi, for example, continues to serve as an advisor to undergraduate CMS concentrators and to CMS graduate students.

The third major WHS initiative, the graduate program in science writing, has now graduated three classes of MS students. Even though its tenure has been relatively short, the graduate program is already seeing its graduates garnering jobs at some of the top science-writing spots in the country. Students from past classes are now working at the *Boston Globe*, *Technology Review*, NOVA, the *IEEE Spectrum*, the Sally Ride Science Center, and the Harvard-Smithsonian Center for Astrophysics. The latest class has just

completed internships at ABC News, *Bio-IT World*, the Woods Hole Oceanographic Institution, the Stanford Linear Accelerator Laboratory, *Technology Review*, and *Popular Science*. The students' thesis topics this year were diverse and wide ranging, including the science of silk, infertility treatments, the effect of timing on cancer drug therapies, computerizing the sense of touch, and advances at the Keck Observatory in Hawaii. The incoming class (7 students out of a pool of 55 applicants) includes former editors-in-chief of both the Yale *Daily News* and the *Journal of Young Investigators*. Because of their meritorious backgrounds, two of the new students were awarded MIT fellowships (the Ida M. Greene and John S. Hennessy fellowships). Meanwhile, program faculty are keeping their writing skills polished. Over the last year, new books were released by both Professor Lightman (*A Sense of the Mysterious*) and visiting professor Bartusiak (*Archives of the Universe*); associate professor Thomas Levenson served as executive producer of the PBS series *Origins*; while Professor Kanigel, director, is on sabbatical to complete his latest book, "Faux Real." The program this year also initiated a quarterly newsletter entitled *Scope*, which showcases the writings of our students.

### Service, Grants, and Awards

Professor Kanigel spoke on "The Biography of a Mathematician: Writing about Ramanujan" as an invited lecturer at the Matematica e Cultural conference in Venice, Italy, in June 2005, served as a panelist on "Choosing a Scholarly or General Audience: Can We Have It Both Ways?" at the National Coalition of Independent Scholars biennial conference in New York in October 2004, and spoke as a panelist on "Narratives of Science" at the Media in Transition conference at MIT in March 2005. He also received an Alfred P. Sloan Foundation grant for the research and writing of his work-in-progress, "Faux Real."

Professor Manning completed his third year as secretary of the MIT Faculty.

Professor Lee received a Wade Fund award from MIT for the writing of her work-in-progress, "Life Without." She continues as associate fiction editor of *Callaloo Magazine*. She also continues her volunteer fiction workshop teaching at the Bay State Correctional Institute in Norfolk, Massachusetts, and in the women's section of the Bristol County House of Correction in Dartmouth, MA.

Professor Diaz served as the fiction editor of the *Boston Review*. He gave readings of past work and work-in-progress at Boston University in October 2004; at the Walt Disney Concert Hall in Los Angeles in February 2005; at the University of Wisconsin in February 2005; at Wellesley College in March 2005; at Whitman College in Walla Walla, Washington in March 2005; at the Villa Aurora Symposium, "Multicultural Authors in the US and Germany," in Los Angeles in April 2005; at the Rhode Island Council for the Humanities series, "American Dreaming: a Series on Immigrant Writers" in Providence, RI, in May 2005; at the Hyde Square Task Force symposium, "Celebrating Teen Literacy" in Jamaica Plain, MA, in May 2005; and at the Roxbury Preparatory Academy in Roxbury, MA, in June 2005.

Professor Evens gave an invited lecture, "The Smooth and the Striated," at the School of the Museum of Fine Arts in Boston in February 2005; he lectured on "Music Does Not (Dark) Matter" at the Baltimore Museum of Art in November 2004; and he spoke on "Intuitionism as Minor Mathematics" at the 18th Annual Conference of the Society for Literature and Science in October, 2004.

Professor Lioi received a Coolidge Fellowship from the Association for Religion and Intellectual Life at Columbia University for the Summer of 2005. He spoke on "American Nature Writing and the Problem of Secularity" at the British Comparative Literature Association Triannual Meeting at the University of Leeds (UK) in July 2004; on "Cosmos and Empire in Jane Eyre" at Union College in Schenectady, NY, in September 2004; on "Writing at the Center of the Technical University" at the Conference on Rhetoric and Composition at the University of Louisville in October 2004; on "St. Francis the Robot: Reconciliations of Nature and Technoculture in the Work of Hayao Miyazaki" at the Modern Language Association in December 2004; on "You're at What? Using the Ubiquity of Composition to Remedy the Invisibility of Ecocriticism" at the Conference on College Composition and Communication in March 2005; on "Dying to Know: The Dilemma of the Student Essayist at a Technical University" at the Conference on College Composition and Communication in March 2005; on "Cosmos and Nation in Silko's *Yellow Woman and a Beauty of the Spirit*" at the American Literature Association Annual Conference in May 2005; and on "Toward an Ecocritical Theory of the Machine" at the Association for the Study of Literature and Environment Conference in Eugene, Oregon in June 2005.

Visiting professor Bartusiak was an invited lecturer and spoke on the work of Albert Einstein at Einstein: A Celebration at the Aspen Institute in Aspen Colorado in August 2004. She spoke on "Science, Theatre, Audience, Reader: Theoretical Physics in Drama and Narrative" at an event cohosted by the Kavli Institute for Theoretical Physics and the Interdisciplinary Humanities Center at the University of California, Santa Barbara, in March 2005; she also was a guest speaker in the Image and Meaning conference (IM2) at the Getty Center at Los Angeles in June 2005. She was also an invited lecturer on "Einstein's Legacy" in a lecture series that was part of a Penn State University centennial celebration of Einstein's Miraculous Year; and she delivered an invited lecture on Albert Einstein at the New York Science Library in June 2005. Visiting professor Bartusiak was also a judge at the 2004 National Academies Communication Awards.

Adjunct professor Haldeman delivered the dedication speech at the opening of the Science Fiction Museum in Seattle in April 2004; spoke on "The War in the Gulf as Science Fiction" as the American guest at the Antwerp World Book Capitol in Antwerp in May 2004; gave readings of his fiction and poetry at the World Science Fiction convention in Boston in September 2004; spoke on "War: Past, Present, Future" at the Kosmopolis literary conference in Barcelona in September 2005; was guest of honor at the Icon convention in Cedar Rapids, Iowa, in October 2005; gave readings and served on a panel at the World Fantasy Convention in Tempe, Arizona, in October 2004; was guest of honor at the Cosine convention in Colorado Springs, Colorado, in January 2005; delivered a speech as guest of honor at the Radcon convention in Pasco, Washington, in February 2005; gave a reading at the International Conference on the Fantastic in

the Arts in March 2005; gave a speech as guest of honor at the Conquest conference in Kansas City, MO, in May 2005. Haldeman received a residency at the Eastern Frontier Foundation at Norton Island in Maine in July 2004; a James Tiptree Jr. Award for Camouflage for “the work of science fiction or fantasy published in one year which best explores or expands gender roles.” He also offered seminars on fiction writing at Operation Homecoming for returning combat veterans, sponsored jointly by the National Endowment for the Arts and the Department of Defense.

Dr. Stephen Strang received the MIT Excellence Award for 2004–2005 for his leadership and innovation in directing the MIT Writing and Communication Center.

Dr. Perelman gave a paper on “Do We Need Large Populations for Meaningful Research and Assessment in Writing across the Curriculum?” at the University of California at Santa Barbara in February 2005; and two papers, “Alan Turing, John Searle, and Lt. Commander Data: An Outline of a Procedure for Determining if Machines Can Score Papers as Humans Do” and “Online Essay Assessments: Designs, Costs, and Benefits,” at the University of Alaska at Anchorage in July 2005.

Lecturer Poe gave papers on “Disciplinary Cross-Talk: Research on Writing and Learning at a Technical Institute” at the Conference on College Composition and Communication in San Francisco in April 2005 and at the Annual International Literacy and Education Conference in Granada, Spain, in July 2005; on “Interrogating Merit: What Writing Assessment Research Tells Us about the Myth of Racially-Ordered Performance” at the University of New Hampshire in Durham in January 2004; and on “Research on Race and Writing Assessment” at the University of Louisville, Kentucky, in January 2005.

Lecturer Jennifer Craig gave a paper on “Using Teamwork and Communication Skills to Monitor and Strengthen the Effectiveness of Undergraduate Aerospace Engineering Design Projects” at the American Society of Electrical Engineering Conference in Salt Lake City in the fall of 2004.

Lecturer Lerner gave papers on “The Teacher-Student Writing Conference and the Desire for Intimacy” at the Conference on College Composition and Communication at San Francisco in March 2005; on “Getting Uncomfortable in the Writing Center” at the South Central Writing Centers annual conference in Baton Rouge, Louisiana, in March 2005; on “Opportunities Lost: Composition in the School Science Laboratory” at the University of California at Santa Barbara in February 2005; and on “Seeking Knowledge about Writing Centers in Archives, Numbers, and Talk” at the Thomas R. Watson Conference at the University of Louisville, Kentucky, in October 2004.

## **Personnel**

There was no new faculty hiring in WHS this year. Dr. Edward Barrett was renewed as a senior lecturer in the spring of 2005. The program hired three new WAC lecturers: Harlan Breindel, Jane Abbott Connor, and Leslie Ann Roldan. Kathleen MacArthur was hired as WAC program coordinator.

Women represent 43 percent of our total teaching staff and 21 percent of our core faculty. Minority representatives are 13 percent of our total staff and 29 percent of our core faculty. Two of our core faculty—a tenured associate professor and a full professor—are African Americans.

**James Paradis**  
**Program Head**  
**Professor of Scientific and Technical Communication**

*More information about the Program in Writing and Humanistic Studies can be found online at <http://web.mit.edu/humanistic/www/>.*