

WESLEYAN'S GRAND YOUNG MAN: BOB ROSENBAUM

Born in 1915, **Robert A. Rosenbaum** is University Professor of Science and Mathematics, Emeritus. He is (as far as we can determine – any other claimants?) the oldest living retired faculty member at Wesleyan and remains one of the most active. The following conversation between **Al Turco**, a neophyte retiree from the English department, and Bob took place on November 4, 2009 in his office at PIMMS (q.v.) -- a program which he became director of in 1984 and which he has chaired since 1995. In addition, the Rosenbaum Squash Center at Wesleyan (containing eight courts) is named after him – for good reason, as we shall see!

Q. Where were you born and raised?

I was born in New Haven, Connnecticut, went to grade and high school in Milford, and did both my undergraduate work and PhD at Yale. In between, I spent a year at Cambridge University on a Henry Fellowship.

Q. Did you have any athletic interests in high school?

I played tennis-- though I was not very good at anything of that sort, being smaller than my peers. Not until I was superannuated, and a lot of people who had played squash well were no longer playing it, did I look better. At Cambridge, I rowed in an 8-oar shell, starting out as coxswain because my size mattered less in that position. Subsequently, I taught at Reed College and helped get crew started at Wesleyan when I came here in 1953.

Q. Squash is a major interest of yours, isn't it? Well, you don't have to be very powerful to play it – I was glad to grit my teeth and try to win a point. I wouldn't say that I was very good at any of the

athletics I attempted to play. There is a national squash competition which is age-based – 50 and over, 55 and over, and so forth. By the time I reached 70 I was the "new boy on the block" and I won the competition that year. But then other people were catching up with me. Every five years I had a shot at winning in my age bracket. Finally there were *no* age brackets beyond 85, so I haven't won any competitions since then. Now I'm

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WASCH CENTER LECTURE PROGRAM SPRING 2010

WEDNESDAY, JANUARY 27, 4:15 PM

Ernest Lowrie: "The Search for the Historical Origin of the Word Civilization"

WEDNESDAY, FEBRUARY 10, 4:15 PM

Chris Parslow: "Reconstructing a Shrine to Isis in the Praedia (Properties) of Julia Felix in Pompeii"

WEDNESDAY, FEBRUARY 24, 4:15 PM

Tony Infante: "Action of Iron in Health and Disease: A Delicate Balance"

WEDNESDAY, MARCH 3, 4:15 PM

John Meerts: "Wesleyan's Financial Situation: An Update"

WEDNESDAY, MARCH 24, 4;15 PM

Patrick Henry: "Why we should Study and Teach the Rescuers of Jews during the Holocaust"

WEDNESDAY, APRIL 7, 4:15 PM

Carolyn Sorkin: "Study Abroad Matters"

WEDNESDAY, APRIL 21, 4:15 PM

David Schorr: "GOODS"

nearly 94 and still play - but not very well.

Q. Did your passion for mathematics start when you were quite young?

Actually, it was the result of the influence of my father, who was a mathematician and so naturally assumed that any child of his ought to love mathematics. My father was born in Russia and never became a Connecticut Yankee! One of his passions was for doing mathematics almost every waking moment of his life - and also exercising by taking long walks that I didn't want to accompany him on because I would much rather have played baseball or something like that. But he insisted on the walks and would give me, from about the time when I was six, problems to ponder as we walked. For example, he would tell me to "Imagine a tetrahedron with vertices A,B,C, and D. Let E be a point inside the tetrahedron and draw a line from it to each one of the vertices. Can you determine how many tetrahedra are formed by that operation and then name the vertices of each of them?" Initially, that kind of puzzle didn't really seem all that attractive, but my father thought this was a good way of teaching me mathematics, which eventually would become the intellectual field that I enjoyed most.

Q. Any particular branch of mathematics?

My father's major interest was geometrical, but I didn't have all that great a power of visualization – which one needs in geometry. I tend toward the kind of analysis which is more abstract and algebraic. Let me tell you an anecdote involving both my



Bob Rosenbaum, University Professor of Science and Mathematics, Emeritus

father's style of teaching and how it influenced my own. I once arrived early to a high-school class that he taught, and soon he came into the room looking distraught – he was sort of frowning, searching, and when he had really captured the attention of the class because of this strange behavior, he began to mutter: "I can't find it, I can't find it." He would walk to a wastebasket, look in it, and say: "No, it's not there." Growing ever more excited, he paused and looked at the class before shouting: "You know why I can't find it? Because I don't know what the hell I'm looking for!" I'm in that club too.

Q. Would you elaborate on what you once described to me as your "naïve and egocentric view of the teaching profession?" I found that to be a rather mystifying phrase.

The point is that I thought I could explain mathematical problems to my peers in a better way than some of our teachers did. That's what I meant by "egocentric" in that context. It was not uncommon, for example, when I was a freshman in college, to be sitting in class and a student would ask the instructor a question which he would try to answer without satisfying the student and I said to myself on those occasions: "If you'd just give me thirty seconds, I could explain exactly what is bothering the student who asked the question." I had the ability to make complex things clear, or so I thought; and I was very dogmatic about it. I wouldn't pay much attention to the response the student would give me; I would just provide my own explanation of the problem and that would solve everything.

A true story – another anecdote – shows the flaw in this method. After my freshman year at Yale, I got a job tutoring a high-school student who had flunked his college boards in geometry and wanted to take a make-up. Or it might be fairer to say that his *parents* wanted him to take the make-up exam; he wasn't much interested in it at all. So all through one hot Connecticut summer we sat across from each other at a table on which were placed the usual tools of geometry – a straight edge, a pair of compasses to draw circles with, and so forth. And I was simply telling him what the solutions to these problems were. In fact, the more I would lean over and shout at him to pound in a point, the more he would draw

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away from this distasteful stuff. I have described myself as being at a stage where I thought that there could be nothing more *beautiful* than mathematics and that I could make anybody see that beauty. That's what I was trying to do in this rather mulish way.

Anyhow, when this session had gone on for quite a while, he picked up the compasses lying on the table and began to fiddle with them. As I bellowed on, he took the two legs of the compass -- with the pencil end pointing in one direction and the steel tip pointing in the opposite direction -- so that the whole thing made a long straight edge which he balanced on his open palm. I was just working up to the climax of this wonderful theorem that would make him understand everything; and as I paused to let the beauty of it all sink in, he looked down, closed his hand over the compasses, and muttered: "You know, you could kill a man with one of these!" That's when I started to think about changing my teaching style to one more personal and reciprocal.

Q. At what age did you actually retire?

I began at Wesleyan in 1953 and retired in 1985. Back then the limit was 70. That was Wesleyan's own rule, not something mandated by federal law. So I retired.

Q. You were not only a much-esteemed teacher, but also a steadying administrator -- having served as Academic Vice-President, acting President, and Chancellor at Wesleyan during the difficult period of the of the late '60s and early '70s. I have an eye-witness account that at the final faculty meeting of your final year, multiple mundane matters were suspended and bottles of champagne hauled out to grace the occasion for "Bob"!

They were probably just relieved that the academic year was over! But that aside, I didn't think – and still don't – that I had a talent for administering. Why people asked me to take on these tasks I didn't know; but I thought that if they wanted me to do them, I should do the best I could. But I never enjoyed the work. I enjoyed classroom teaching more and believe I was better at it.

Q. So that moment opened the way for your starting PIMMS, of which you are still Chair. *Just what is PIMMS?*

It's an acronym for "Project to Increase Mastery of Mathematics and Science." I have always been interested in teaching even when I didn't do a great job at it. That pleasure in teaching, the desire to really do it, began at the collegiate level, I suppose. I would fashion tutorials for high-school students who had failed an exam and needed help or what not, but my formal classroom experience at the undergraduate level began when I was at Reed College in Portland, Oregon, then reached down to high school. A number of my colleagues and I, during the '60s, realized that, in much of public education, from first grade to high school, students just didn't like mathematics as they should.

So we started in 1979 – a group of about twelve of us – some public school teachers, some from business and industry, some Wesleyan faculty -- who realized we ought to try and improve the quality of public education. We had no financial resources, but the professional development of teachers was the crux of what we were attempting. We felt that teachers of mathematics were unsuccessful frequently because they didn't understand the subject themselves as well as they should – not just its practical applications but also the sheer *beauty* of what they were teaching.

We didn't really get going until 1984 when I got a call from the head of the General Electric Foundation, whom I knew because he used to visit the Wesleyan campus now and then. This time he said: "We have an idea about how to refashion public education, thinking that some of our retired engineers might go into the classroom and help teachers improve. What do you think of that?" I replied -- somewhat non-committally -- that it sounded like a useful idea. Next thing you know, he asked me to come down to Fairfield (GE headquarters), and when I arrived there it turned out he proposed something quite different from what had been suggested on the phone about retired engineers. was like this: "Supposing that we offered summer institutes for teachers, could you do what is needed to make them comfortable and competent with the mathematics they are teaching?" That was not

what I expected to hear; but I told him: "If you are serious, I have in my briefcase a program identical to the one you propose." A half hour later I left with a check for \$200,000 to start that program. That's when I thought that money raising was really simple!

Anyhow, PIMMS has continued, starting in the summer of '84, with twenty-five high-school mathematics teachers and twenty-five science teachers from around the state. Later on we expanded it to include middle and elementary and now even pre-school teachers. Throughout this entire program I've been involved because I enjoyed it and thought it was potentially useful. Following a friend's advice, I kept a detailed log of every one of my activities and can now say that I have done over 50,000 hours of volunteer work, both administrative and teaching, for PIMMS.

Q. What effect has the advent of Information Technology (IT) had on mathematics in general? Has the use of computers been a hindrance to your preferred intimate style of teaching?

In increasing order of importance, IT is handy for ordinary communication and simple computations – though, frankly, I still balance my checkbook by hand. Second, the computer is a great economizer in its ability to process enormous amounts of data that it would take a person millions of years to generate. The famous "four-color map theorem" was solved by the use of computers to try out and eliminate an ever-increasing number of arrangements in order to arrive at the smallest one that covered every case. That's a brute force approach – admittedly not beautiful. Third, in regard to very high-level arguments in the field, the computer can organize the questions one asks to get results in abstract areas that individuals could not access directly.

As for teaching, much of mathematics - or the learning of it - is done in terms of geometric or algebraic symbolism which is essential for logical The computer can be a great facilitator of communication between teacher and learner. Suppose I'm making an exposition in class to a student who says "I just don't see the point?" Then I can say "Let me present it to you in a modified exposition" and do that instantly. And then if the student says "I sort of see the point, but still ...," I can make further instantaneous clarifying changes. IT is a better expositor because of the immense number of alternative approaches that it can generate. It's an enabling device that has not caused me to alter my own interactive style with students. No more dogma!

Q. Speaking as a recent retiree, I don't miss preparing for classes or grading papers or coping with all the political static that is part of any academic environment. Yet these very routines – while perhaps tedious – do provide a structure for daily life that one can grow dependent on without realizing it until afterwards. "The first year can be hard," one colleague told me. Was it for you?

Have you heard of E.B. MacNaughton? He started out as a civil engineer in Oregon, went from that into land management and then into banking, then became publisher of *The Oregonian* newspaper, then President of Reed College from 1948-52, and after that a leader in the international Unitarian Church. He changed the center of gravity of his pursuits very markedly from period to period; and he counseled other people, including me, to think of ways of altering one's daily activities dramatically every ten years. I thought of that as being a wise notion. While going from being a Wesleyan faculty member to becoming director of PIMMS may not

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SEE YOU AT THE MOVIES!

nce again Joe Reed has selected a starstudded constellation for the Wasch Center Film Series. Come and enjoy Joe's pungent introductions and the visual pleasures of these classic flicks. All this and popcorn, too.

The schedule for 2010:

Tuesday, February 9, 3:15 pm W.C. Fields, It's a Gift (1934) and The Bank Dick (1940)

Tuesday, March 9, 3:15 pm Howard Hawks, *Red River* (1948)

Tuesday, April 6, 3:15 pm John Ford, *The Horse Soldiers* (1959) sound like that much of a shift, it really was. For one thing, starting PIMMS of necessity involved business training work. On top of that, deciding how to help ninth-grade public school teachers is a very different matter from getting Wesleyan sophomores excited about a mathematics course they had signed up for. You'd like students to be enthusiastic? Well, they don't start out that way! My years since we began conducting regular summer fellowship programs in 1984 meant spending 70-80 hours per week on PIMMS, so it wasn't as if I had a lot of time during which to ask myself: "What am I going to do today?"

Q. Have you in the long course of your experience become interested in fields that have no relation to mathematics?

Can there *be* such a field? As time has gone on, the connection of mathematics to other areas of inquiry has become more apparent, more attractive, more exciting to me. I have found such connections mainly in the areas of history and philosophy, less so in physics and chemistry. Others find them in music and art. You probably remember the epigraph of Forster's *Howards End* – "Only connect" – and it's the connections that are becoming more important and interesting. I'm always thinking of new ones, even after doing it for sixty years. They can come at any time.

Q. For many faculty looking ahead to retirement, the prospect looms as a forsaking of one's

professional life. And in some ways it has to be -even for you. Your friends don't live forever, you
no longer have the physical stamina that you
did at 80, and so forth. But it sounds like you
have found ways in which retirement can be an
expansion and enrichment of one's life as well.

I cannot imagine doing nothing! Let's pretend that I can't tutor Wesleyan undergraduates any more and someone else is running PIMMS. What would I do? I'm pretty sure that I would try to find something that would take virtually all my time-not just an hour here and there. It's hard to be more specific about it, since I have never been faced with a time when my spirit was fallow. I would probably search out a number of like-minded people - like Jon Barlow in music, Joe Reed in English and film, Wis Comfort in mathematics -- with the idea of discovering new ways to make teachers at all levels realize that connections are a very important part of intellectual life and that the curriculum ought to contain segments that focus on that. No doubt there are limits. Notice that I don't say that I should try to help President Obama solve all his political problems. There are some things I can imagine myself getting involved in without having any talent for them at all, but that is not one of them.

Q. But you might give him tips on how to improve his squash game?

That's a novel notion! Add it to the list.

NECROLOGY

Ramnad V. Raghavan

Ramnad V. Raghavan, a long-time member of the Music Department and widely respected performer on the Karnatak mrdangam died on November 21 in Chennai, India.

Valerie Butler

Wife of the late Professor Jeffrey Butler of the History Department, Valerie Butler died in at Middlesex Hospital in Middletown on September 10.

Ruth Shimony Montgomery

Ruth Montgomery, wife of former Wesleyan librarian Chris Montgomery and long-time Latin teacher in the Middletown schools, died in Middletown on November 16.

Carl A. Viggiani

Carl Viggiani, professor of Romance Languages & Literatures, emeritus died on January 16 at Middlesex Hospital. He received his B.A. from Columbia, his M.A. from Harvard, and his Ph.D. from Columbia. A memorial service will be held Saturday, February 20, 2010, at I p.m., at Russell House.

Jane Mead Viggiani

Jane Mead Viggiani, wife of Carl A. Viggiani, professor of Romance Languages and Literatures, died at Middlesex Hospital in Middletown on November 10, 2009.

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News & Notes

from retired members of the faculty

Retired faculty members are encouraged to submit short descriptions (150 words or fewer) of their research, scholarly writing, and related activities. The deadline for the fall 2010 issue is August 15.

Gertrude Hughes

I gave a talk on December 6 at Anthroposophy NYC about poetry and its subtle relationships to human consciousness, a talk that I have given several times for anthroposophical audiences these past few years. Its usual title is "Poetry as Portal to Spiritual Perception," but each time I give it I find myself choosing different poems and exercises for its contents and new articulation of the main idea. In short, a work in progress.

Joyce Lowrie

A paper I gave at an inter-disciplinary conference in Salzburg in 2008 on the French author Barbey d'Aurevilly and Bizet's *Carmen* will appear in an eBook published by Inter-Disciplinary.Net. I am currently working on a book that will be entitled *Considering Carmen: An Inter-Disciplinary Study.* I was also instrumental in inviting Prof. Patrick Henry (Whitman College) to give a paper at the Wasch Center Spring 2010 (March 24) entitled "Why We Should Study and Teach the Rescuers of Jews during the Holocaust." This paper and a previous book were inspired by Philip Hallie's work on saving Jews in the town of Le Chambon-sur-Lignon during WWII.

Paula Paige

For the past couple of years, I've been concentrating on writing short stories and trying to publish them in various literary magazines, not a task for the faint of heart. One of my stories was long-listed in the Fish International Fiction contest in Ireland, and another received an Honorable Mention in the 2009 competition of New Millenium Writings (Winter 2009). And I am looking for a publisher for a new translation, of Lucio Mastronardi's novel of 1962, Il maestro di Vigevano ("The Schoolteacher of Vigevano"), which will have an introduction by Stefano Giannini.

John Paoletti

In May I attended an international conference at the Villa I Tatti in Florence (the Harvard University Center for Renaissance Studies in Florence) on the topic of the church of San Lorenzo, the earliest church in the city and ultimately the church most closely associated with the Medici family whose artistic patronage I am studying. In October I gave a talk titled "Michelangelo's David: Naked Men in Piazza" at Notre Dame on September 30 and at Rutgers on November

12. In October I was chair of a visiting committee at Reed College that reviewed its second-year Humanities course as part of the general Humanities program. I lectured on Medici patronage at the Metropolitan Museum at the end of November and led a gallery tour in New York for New York City members of the Friends of the Davison Art Center on December 12. In January I will lead a Renaissance seminar at Stanford's Center for Medieval and Renaissance Studies on the political and social implications of Michelangelo's David. And in February I will speak at a conference on Renaissance sculpture at the Victoria and Albert Museum in London that will celebrate the reinstallation of its sculpture galleries. And then again in May I will be speaking at the Metropolitan Museum.

Franklin Reeve

Last July, Laura, the Blue Cat, John Lake (piano), Phil Paton (sax), and I had a mini-tour of England's literary festivals arranged by Andy Croft of Smokestack Books. High old time. Made the COL 50th in November and closed St. Anselm College's contemporary art exhibit with a poetry reading (while everyone had a glass of champagne). Don

Davis and Joe Deleault are working hard to grow "The Puzzle Master" (a long poem) into a jazz opera; wish us luck; if we succeed, come to the premiere in Ogunquit in September.

Gay Smith

Feburary 2nd is the release date for my latest book, *Lady Macbeth in America: From the Stage to the White House* (Palgrave Macmillan). (As with all academic publishing, the price is high when ordered through the publishing house; but Barnes and Noble and Amazon offer better prices online.) One of the chapters, "Playing for Revolutionaries" formed the topic for my talk at the Wasch Center on December 2, with music and some images that unfortunately don't sound or appear in the book. On a different note, my recent time in Paris included meeting with the editors of the complete works of George Sand, for whom I'm preparing the introduction and annotations for a never-before-published play by that renowned nineteenth-century writer.

Al Turco

I delivered a plenary address at the triennial meeting of the ISS (International Shaw Society) at Catholic University in Washington DC on October 16th, 2009. The lecture was a reworking of one tried out previously at the Wasch Center: "Nobody's Perfect': GBS as Wagnerite." Both audiences were commendably indulgent.

Arthur Upgren

I am publishing the collection of Chile Site Survey Reports written by Jurgen Stock in the 1960s when he was chosen to be the site selector and the first director of the Cerro Tololo InterAmerican Observatory (CTIO) in northern Chile. Dr. Stock was Adjunct Professor of Astronomy at Wesleyan in the 1990s and earlier was my PhD thesis advisor at Case-Western Reserve University in 1959-61. He summarized his efforts in 30 reports and obtained copies of all of them just before he died in 2004. I have proofed them and prepared them for publication with the assistance of Dr. Stock's daughter, Jeanette, also a professor of astronomy. Stock's choice of Cerro Tololo as the final site led to Chile being chosen by a half-dozen other new large observatories after astronomy had abandoned South Africa and Australia, due to apartheid in the one and inadequate skies in the other, for observation of the southern celestial hemisphere.

Richard Vann

In Middletown this fall I was attending the more or less simultaneous celebrations of the 50th anniversaries of the College of Letters, Center for the Humanities, and the forthcoming Volume 50 of *History and Theory*. I also attended conferences in Rochester in April and Taipei in October. The after-effects, besides a lot of jet lag, are that now I have to write the papers based on the talks I gave.

Jerry Wensinger

(1) Summer before last I gave a presentation about my experience at the University of Munich in 1948 and my part in the reconstruction of a war-damaged dormitory there before an audience of several hundred. The university's Studentenwerk was celebrating the 100th anniversary of the Marie-Antonie-Haus's construction and dedication and its donor, the great American/Jewish philanthropist James Loeb and his many other benefactions in Munich and other parts of Bavaria in the early 20th-century. That fall (2) I

gave a paper at the 5th Norman Douglas Symposium in Bregenz/Thueringen, Vorarlberg/Austria. (3) I published as co-editor with my collaborator, Michael Allan of Cologne, the first two volumes of the selected correspondence of Douglas. (4) I am working with Allan on vols. 3 and 4. (5) I am developing and simplifying a talk given this fall about the Narragansett Indian Abraham Symon(d)(s) -- who with his brother Daniel from The Moor's Indian Charity School of Lebanon CT was one of the two native Americans to accompany Eleazar Wheelock and his slaves in the founding of Dartmouth College in 1769. The Haddam Historical Society will set a date for this next spring, I believe.

Jelle Zeilinga de Boer

This summer Wesleyan University Press published my Stories in Stone; How Geology Influenced Connecticut History and Culture. While doing fieldwork with E+ES students over many years, we discovered many sites where rocks and minerals were excavated. With the exception of a few, we were rarely able to find any reference to these activities in books/papers on Connecticut history, other than some short notes here and there. After much research we learned that gold from Cobalt probably played a role in obtaining Connecticut's Charter and that lead from Middletown and iron from Salisbury provided badly-needed munitions during the Revolution. Portland brownstone can be found in buildings up and down the Eastern Seaboard and the Statue of Liberty rests on Stony Creek granite. In a general sense, geology allowed Connecticut to become the Provisions State in the 18th century and helped trigger its manufacturing eminence in the 19th century when it became known as the Industrial Incubator. Not bad for such a small state! The book also has chapters on Connecticut's climate, Moodus' earthquakes and Wethersfield's meteorite home invasions.

RETIREMENT SESSIONS AT THE WASCH CENTER

The Wasch Center is presenting two programs of interest to retiring or soon to retire faculty in the spring semester, both at 4:15 in the Butterfield Room.

Wednesday, April 14, 2010

A discussion of retirees' benefits with representatives from Human Resources and TIAA/CREF

TIAA CREF

Wednesday, May 5, 2010

A panel discussion and question session about more general matters of retirement with three emeriti faculty members: Mike Lovell, Joyce Lowrie, and Bill Firshein

The Center will also hold a reception for faculty members retiring in the 2009-10 academic year on **May 22**, the Saturday of Commencement Weekend.

WESLEYAN INSTITUTES ADVISORY BOARD FOR LIFELONG LEARNING

An Advisory Board for the new Wesleyan Institute for Lifelong Learning has been established and has begun to meet. Members of the Board include Karen Anderson, Herbert Arnold, Sheryl Culotta, Frank Kuan, Sonia Mañyon, and Karl Scheibe, Director.

A charter for the new program was established by the Office of Academic Affairs in August 2009. It states:

The Wesleyan Institute for Lifelong Learning is hereby chartered to provide informal educational opportunities for members of the Wesleyan, Middletown, and Central Connecticut communities, while introducing area residents to Wesleyan University, the Wesleyan campus, and Wesleyan's educational mission. The Institute will sponsor and run courses designed for adults, and these will be taught by emeriti faculty, senior members of the current Wesleyan faculty, or other instructors deemed to have similar qualifications. The courses will not confer Wesleyan credit, will not require on-campus residency, and are not part of a degree program.

The Board plans to offer a first set of courses in the next academic year. Courses will, in general, meet for a minimum of two 90-minute periods, up to a maximum of six such periods. Courses will be scheduled either in the Butterfield Room of the Wasch Center or in other available classroom space. The Board anticipates charging students at the rate of \$25 per class meeting, which will make possible the payment of instructors and covering of other costs connected with the program.

The Board also anticipates presenting occasional all-day programs, along the lines of the Saturday programs offered by the Academy of Lifelong Learning at Trinity College. The first such program will focus on the history of Middletown. It will include presentations by four or five leaders, a panel discussion, a luncheon, and a reception at the end of the day.

A list of faculty members and others in the community who might offer courses in the Institute program has already been developed, and additional suggestions are welcome. The Board expects to announce its offerings for Fall 2010 by April of this year and to begin the recruitment of students.



Editorial Board of the Wasch Center Newsletter

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