Program Annual Report
November 30, 2011

The School of Architecture has addressed the deficiencies outlined in the 2004 Visiting Team Report and has implemented changes that will correct all of them by the conclusion of the academic year 2007-2008. Spring 2008 is the term in which the first three-year Master of Architecture class will graduate and the new and revised undergraduate and graduate curricula will have been taught in their entirety.

Part I of this report is a description of the actions initiated by the School to address the causes of concern and the deficiencies outlined in the VTR in 2004. The deficiencies listed in the VTR are quoted in their entirety, and the Program response follows in bold and italics. Part II is a narrative of the School's activities in the past year, with a summary of the initiatives since 2004 done in response to the 2004 VTR.

PART I
PROGRAM RESPONSE TO CONDITIONS NOT MET, PROGRAM DEFFICIENCIES AND CAUSES OF CONCERN

I. Summary of Team Findings

5. Causes of Concern (page 4 of the VTR)

The Master of Architecture Degree Program – The School has admitted a number of students to its Master of Architecture (M.Arch.) program without the requisite pre-professional undergraduate degree, and required them to take additional courses to remedy deficiencies in their qualifications for the program. The team noted its concern about the limited architecture and design studio experience among these M.Arch. students. The school is reminded that the NAAB accredits a 3-year M. Arch. Degree for students with an undergraduate degree in a different discipline in order to have adequate architecture-related coursework and design studio experience included in the curriculum.

Program Response:

> The School of Architecture has expanded to include a 3-year M.Arch degree, which it offers in addition to its 2-year M.Arch professional degree program, and which addresses the issues raised by the NAAB Visiting Team. Included with this report is a description of the new three-year M.Arch curriculum and a copy of the curricular requirements for the two M.Arch paths.

Conditions Not Met – The public information requirement of the NAAB was not met. Several critical Student Performance Criteria were not met, including those very closely related to the responsibilities of registered architects: Building Service Systems, Building

Systems Integration, and Comprehensive Design. The latter deficiencies have serious implications for the accreditation of a program.

Program response:

> *Immediately following the Visiting Team's report the School of Architecture updated all of its public information to include the required statements of the NAAB regarding licensure and professional degree programs, which now comply completely with the NAAB criteria and procedural requirements.*
>
> *The School of Architecture has revised its building technology and studio design sequences with respect to course content and new offerings to address the issues raised by the VTR in the areas of Building Service Systems, Building Systems Integration, and Comprehensive Design. Specific changes are discussed below in this report.*

Equity of Teaching-Load Distribution – The team is concerned about the issue of teaching load distribution as it relates directly to the time available for course preparation and for the creative and scholarly work of all members of the faculty, including those seeking tenure or promotion. Within a small faculty, particularly with some members approaching the age of retirement, it is important to attend carefully to the preparation of the next generation through mentoring and development opportunities.

Program response:

> *Faculty members of the School of Architecture are asked each semester about their interests with respect to teaching assignments. Loads are determined in consultation with individual faculty members with their scholarly agenda in mind. Junior faculty are given relief from service in committee work unless they specifically request to participate on a project.*
>
> *A new mentoring program has been in place for three years. As the program matures it becomes more and more part of the School's culture. In the spring of 2006, a symposium was held in conjunction with the Kaneb Center for Teaching and Learning to discuss best practices in teaching studio.*

Viability of the Rome Studies Program – Given the importance of the Rome Studies Program to the success of the school, it should go without saying that efforts must be made to ensure the future viability of the program, perhaps through an endowment. Other options mentioned to the team included moving to a less expensive location in Rome, even though that would make access to some important teaching sites more difficult.

Program response:

The School is working with its advisory council and the University to locate new or additional facilities in the historic center of Rome. These facilities will add classroom and studio space as well as housing for the students. Solving the housing issues will relieve the financial stress on the school's budget as funds that are currently used to house students can be used for operating costs for additional buildings.

In addition, the new administration has made a new Rome facility a priority for the School of Architecture.

II. Compliance with the Conditions for Accreditation

3.   Public Information (page 7 of the VTR)

The program must provide clear, complete and accurate information to the public by including in its catalog and promotional literature the exact language found in appendix A-2, which explains the parameters of an accredited professional degree program.

B. Arch. - Not met
M. Arch - Not met

Program Response:

At the time of the Visiting Team Report the school was publishing out-dated verbatim statements about accredited degrees. Since the accreditation visit, the school has placed in all of its bulletins and catalogues, as well as its website, the most up to date verbatim statements about accreditation (see Appendix 1)

The School takes numerous steps each semester to distribute information about the NAAB 34 criteria: 1) faculty are required to include them in each course syllabus, 2) they are included on the School's web-page, and 3) they are distributed to all students at the beginning of each academic year (see Appendix 2).

11.   Professional Degrees and Curriculum (page 12 of the VTR)

The NAAB accredits professional programs offering the Bachelor of Architecture, Master of Architecture, and Doctor of Architecture degrees. The curricular requirements for awarding these degrees must include three components – general studies, professional studies, and electives- which respond to the needs of the institution, the architecture profession, and the students respectively.

M.Arch. – Not Met

Master of Architecture

It appears that the school is currently offering an ad hoc version of a 3-year first professional degree for students without an undergraduate degree even though it is not authorized by the NAAB to do so. In the school's published *Bulletin of Information for Graduate Programs*, the professional M.Arch degree is described as "intended for students entering the University of Notre Dame with a 4-year pre-professional degree in architecture and seeking a professional degree."

A meeting with the graduate students revealed problems with communications to prospective students about the program requirements and their eligibility to apply. Some without pre-professional architecture degrees are being encouraged to apply to the program and are being admitted. A related problem is determination of course requirements for those incoming students who lack an undergraduate pre-architecture degree. Although these students are required to take some of the technical courses they are missing, the team concluded that the remedial coursework is not sufficient to compensate for the lack of a pre-professional degree. The teams greatest concern is that students are receiving a professional degree in architecture with insufficient preparation in design.

The 2- year component of the school's accredited M.Arch. program is not clearly defined. The prior visiting team expressed concern that the needs of graduate students were not supported as effectively as those of undergraduates. The visiting team observed that concerns raised by the prior team about the graduate program do not appear to have been addressed.

The accredited M.Arch. degree program is currently in transition and faculty members are discussing the possibility of expanding their degree offerings to include a 3-year first professional degree for graduate students with undergraduate degrees in other disciplines.

The school needs to take action to bring its admissions practices into alignment with its accredited degree offerings.

Program action and response:

> *After the VTR was received by the School of Architecture, the Dean and Director of Graduate studies met with the Executive Director of the NAAB to discuss the protocol and procedural correctness of expanding our accredited two-year program to a three-year program. The School was advised that such an expansion could indeed occur within the framework of our existing NAAB-accredited Master's Degree and would not require a new accreditation process.*

> *The Notre Dame School of Architecture subsequently initiated in academic year 2004-2005 significant changes in the graduate architecture curriculum, in an effort to 1) make graduate education in classical and traditional architecture and urbanism more widely available, 2) increase both the size and the profile of the graduate program in architecture, 3) address the concerns of the NAAB visiting team, and 4) expand the financial resources of the School of Architecture. Until the fall of 2005, the School of Architecture had offered two degrees in two 2-year courses of graduate study---the post-professional Master of Architectural Design and Urbanism (M.ADU), and the professional Master of Architecture (M.Arch)---that engaged a total of sixteen graduate students annually. To these existing graduate courses of study the School of Architecture has added a 3-year Master of Architecture degree that is in the process of growing the*

graduate program from sixteen students to approximately forty-five students over the course of three years. The expansion of the graduate program to include the 3-year M.Arch means that the School of Architecture graduate degree offerings now include the following three courses of study:

Path A / Master of Architectural Design and Urbanism (M.ADU):
Total Requirements: 45 credits

The two-year Master of Architectural Design and Urbanism post-professional degree is intended for students who already hold an accredited professional degree and are seeking to further develop their design skills and critical thinking in the disciplines of classical architecture and traditional urban design. The studio course work consists of a foundational first semester spent in South Bend introducing students to classical architectural design, urban principles and history, and the history of Rome; followed by two semesters of studio work (one in Rome) in the student's selected concentration, followed by an independent terminal design project and public defense in the student's fourth semester. 45 credit-hours are required for graduation, and M.ADU students are limited to 12 credit-hours per semester. M.ADU students also serve as Teaching Assistants in undergraduate courses in their three semesters in South Bend, for which they receive a stipend.

Path B / Master of Architecture (M.Arch):
Total Requirements: 57 credits (minimum)

Notre Dame's 2-year Master of Architecture degree is intended for students entering the University of Notre Dame with a four-year pre-professional degree in architecture who are seeking a professional graduate degree that focuses upon classical architecture and traditional urbanism. Studio course work is identical to that of the 2-year Path A M.ADU program, with a foundational first semester spent in South Bend, followed by two semesters of studio work (one in Rome) in the student's selected concentration, followed by a terminal design project and public defense in the student's fourth semester. Required studio and seminar courses are supplemented by other courses needed to meet the NAAB's substantive curricular requirements for accredited professional architecture degree programs, which will vary from student to student depending upon their undergraduate architectural education, and which will be determined by cross-referencing the student's undergraduate course of study with the three-year M.Arch curriculum and matrix that have been designed to ensure compliance with NAAB accreditation criteria. A minimum of 57 credit-hours are required for graduation, and the normal course load for Path B / 2-year M.Arch students is 15 credit-hours per semester.

Path C / 3-Year Master of Architecture (M.Arch):
Total Requirements: 96 credits

The 3-year Master of Architecture professional degree is intended for students entering the University of Notre Dame with a four-year undergraduate degree in a field other than architecture. An intensive three semester sequence of studio, history, theory and technology courses prepare students for the final three semester concentration / terminal design project and public defense sequence described above. 96 credit-hours are required for graduation, including a normal load of 18-credit hours each of the first three semesters (see Appendix 3 for curricular requirements).

A New Curricular Approach
In addition to the 3-year M.Arch course of study, the graduate program in architecture has changed its focus from being a two-semester thesis-based advanced curriculum to being a two-semester-concentration + one-semester terminal-design-project-based advanced curriculum. The new curriculum, in Paths A, B and C, is organized as follows:

Foundations: All students in all paths begin with foundational courses; spend one year in a concentration; and end with a one-semester terminal project that is defended publicly. In their foundational courses, all Notre Dame graduate students receive instruction in both classical architecture and traditional urbanism, in studios and classes appropriate to their previous levels of architectural education: one semester for Path A and B students, three semesters for Path C students.

Concentrations: In the final three semesters of each path the studio courses "track" with one another: i.e., Path A, B and C students take studios with each other in their final three semesters. Each path requires the student to engage a concentration in either Classical Architecture or Urban Design in the two semesters prior to their final semester. All students spend one of those two concentration semesters in Rome, and which semester they spend in Rome depends upon which concentration they select. (Note: this means that beginning in academic year 2006-2007 there have been graduate students in Rome in both the fall and the spring of every year; in the old curriculum there were graduate students in Rome only in the spring semester). Students in the 3-year M.Arch program select their concentration a year after beginning their course of study; 2-year M.Arch and M.ADU candidates indicate when they apply whether they intend to concentrate in Classical Architecture or in Urban Design.

Classical Architecture Concentration: Students choosing to concentrate in Classical Architecture spend extensive time in both South Bend and Rome on studio projects and ancillary course work that develop their knowledge of and ability to participate in the 2500-year old tradition of western classical architecture descending from Greece and Rome.

Urban Design Concentration: Students choosing to concentrate in Urban

Design likewise spend time in both South Bend and Rome---and travel extensively to other towns and cities as well---learning in their design studios the formal principles of good urban design, and being introduced to the political, legal and cultural frameworks of contemporary traditional urban design through studio-based community design workshops.

<u>Terminal Design Project</u>: The independent semester-long terminal design project is required of all students in their final semester. This project provides an opportunity for students to design in a variety of scales and contexts of their own choosing, in which contemporary architectural issues are explored in projects that require the student to synthesize their academic experience. M.Arch student projects may include an urban design component, but must include the in-depth design of a building; and all terminal design projects are subject to a final public presentation and defense.

We believe the above curricular changes address the deficiencies and concerns of the NAAB VTR.

12.21   Building Service Systems (page 18 of the VTR) (New 12.22)

Understanding of the *basic principles that inform the design of building service systems, including plumbing, electrical, vertical transportation, communication, security, and fire protection systems.*

B.Arch. – Not Met
M.Arch – Not Met

There was virtually no evidence presented of such systems in either coursework or studio work.

Program Response:

UNDERGRADUATE:
The previous Environmental Systems course (ARCH 541) was expanded to two courses in the academic year 2005-06, Environmental Systems I and II, ARCH 40411 and ARCH 50411 The first occurs in the fall semester of the fourth year. The second occurs in the fall semester of the fifth year (see Appendix 4).

ARCH 40411 covers elevator systems, fire safety, accessible design, plumbing, heating, air conditioning, solar design, and ventilation. ARCH 50411 covers acoustics, electrical systems, lighting, and illumination. In each case, fourth- and fifth-year studio projects include assignments that integrate course material from the Environmental Systems course. The attached syllabi are presented as evidence.

GRADUATE:
There are two required environmental Systems courses required in the Path C 3-year M.Arch program: ARCH 60431 and ARCH 70441 (see Appendix 4).

ARCH 60431covers principles of acoustics, electrical systems, lighting, and illumination, with emphasis on architectural applications. This course occurs in the fall of the first year.

ARCH 70441 covers basic concepts of heating, ventilation, air conditioning, energy conservation, fire suppression, plumbing and vertical transportation, with a focus on integration of these systems in building design, with particular reference to ARCH 71131, the integrative design studio. Both ARCH 70441 and ARCH 71131 occur in the fall of the second year of the 3-year program.

Students enrolled in the 2-year M.Arch program must meet the requirements of the Path-C program through a combination of their undergraduate or graduate education, the specific courses of which are determined for each student on a case by case basis.

These changes should completely and fully address the deficiencies described in the VTR.

12.22 Building Systems Integration (page 19 of the VTR) (New 12.23)

Ability to assess, select, and integrate structural systems, environmental systems, life-safety systems, building envelope systems, and building service systems into building design.

B.Arch – Not Met
M.Arch – Not Met

There was virtually no evidence of the integration of these systems into studio design projects.

Program action and response:

UNDERGRADUATE:
In the spring of 2005 an elective course was offered that presented the technology material that has been missing from the school's curriculum since 2000-2001. This class was a response to fill an immediate need when changes to the required curriculum were not possible on such short notice. From 2006 on, there is a new curriculum for the two Building Tech courses, (ARCH 20411 Building Tech I and Arch 40411 Building Tech II) (see Appendix 5).

Since the Spring semester of 2006, the fourth year design studio syllabus requires one studio project to be designed in coordination with the new Fourth year Building Technology class (Arch 40411 Building Tech II).

The required thesis studio (ARCH 51121) has been modified in the Spring of 2006 to focus on issues of comprehensive design. Required for each project is a wall section, egress diagram, structural diagram, and mechanical services distribution diagram. Each project is reviewed at mid-term for egress and ADA compliance by a panel of practicing architects.

GRADUATE:
In the Graduate Program, Architecture 71131, the Integrative Design Studio, became a regular part of the 3-year M.Arch curriculum beginning in the fall of 2006, and is specifically intended for the integration of building systems into graduate studio projects. In addition, ARCH 81161 / Terminal Design Project requirements for M.Arch students include a wall section, an egress diagram, a structural diagram, and a mechanical services distribution diagram.

These changes should completely and fully address the deficiencies described in the VTR

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12.29 Comprehensive Design (New 12.28)

Ability to produce an architecture project informed by a comprehensive program, from schematic design through the detailed development of programmatic spaces, structural and environmental systems, life-safety provisions, wall sections, and building assemblies, as may be appropriate; and to assess the completed project with respect to the program's design criteria.

B.Arch – Not Met
M.Arch – Not Met

While the team was impressed with the high quality of the presentation drawings and the thorough attention to detailed development of programmatic spaces in the design of the thesis projects, there appeared to be little effort made to address the integration of structural, environment, or life-safety systems in the design. One thesis by an M.Arch. student had interior stairs with no direct means of egress and only a perfunctory space labeled "mechanical." In questioning this issue, the team was led to believe that there was an absence of interest in pursuing such integration by faculty assigned as instructors for the thesis projects or in some cases a lack of qualifications.

Program action and response:

UNDERGRADUATE
As an introduction to comprehensive design, the fourth year design studio syllabus requires one studio project to be coordinated with the new fourth year

building technology class and environmental systems. Fifth year thesis studio has been modified to focus on issues of comprehensive design (see Appendix 6).

Required for each thesis is a wall section, egress diagram, structural diagram, and mechanical services distribution diagram. Each project is reviewed at mid-term for egress and ADA compliance by a panel of practicing architects.

GRADUATE
In the second year of the 3-year M.Arch program there is also a requirement that a studio project be coordinated with a building technology class as an introduction to comprehensive design. Comprehensive design in the M.Arch studio curriculum is also addressed in ARCH 81161, the Terminal Design Project.

A wall section, an egress diagram, a structural diagram, and a mechanical services distribution diagram are required in either or both ARCH 71131 (Integrative Design Studio) or ARCH 81161 (Terminal Design Studio).

These changes should address the deficiencies described in the VTR.

PART II
The Year in Review

In the academic Year 2006-2007 the School of Architecture (SoA) fulfilled much of what it had set out as goals in the preceding year. As in the previous year, the School's efforts have been focused primarily in two areas. The first was the expansion and development of the graduate program; the second was taking steps towards the modernization and development of the Rome program.

Graduate Education and Research

This was the second year of the newly expanded Master of Architecture program. The School of Architecture welcomed nineteen incoming graduate students in August of 2006; four Path A (M.ADU) students, two Path B (2-year M.Arch) students, and thirteen Path C (3-year M.Arch) students, which raised the graduate student population from 16 in 2004-2005 to thirty-four (34) in 2006-2007.

There will be sixteen incoming graduate students in the fall of 2007: four Path A students, three Path B students, and nine Path C students, which will bring our total number of graduate students at the beginning of the academic year 2007-2008 to forty-one (41).

The School of Architecture sent its first full class of graduate students to Rome in academic year 2006-2007, which included five classical architecture students in the Fall of 2006 and six urban design students in the spring of 2007. We anticipate having 15-16 graduate students in Rome in academic year 2007-2008. There is a consensus among faculty and students alike that the influx of new graduate students has added much to the intellectual environment of the School.

Distinguished Visiting Critic Program. In recent years, we have brought two of the most distinguished classical architects, Demetri Porphyrios and Leon Krier, to teach in the graduate program at our Rome campus; and this year we brought to Rome the well-respected "Cornell School" practitioners Steve Peterson and Barbara Littenberg as Visiting Critics. This was possible because of the Frank Montana endowment that allowed us to provide for their salaries and accommodations. This has been very well received by the graduate students. Two years ago we were able to attract the renowned scholar Dr. Ingrid Rowland to our Rome Studies program as the program's architectural and art historian. Her presence as a full-time tenured faculty member enhances the already rich offerings of the Rome Center.

Undergraduate Education

Enhancements and Development of the Rome Studies Program: During the Spring semester, The University Board of Trustees held their annual meeting in Rome in 2005. This offered a unique opportunity for the School to showcase its Rome Studies Program, the facilities, student work, and faculty. A case was made for new or expanded facilities, and the importance of the Program in the School's curriculum and mission was made apparent.

The University is embarking on an expanded University presence in Rome that will include departments from the College of Arts and Letters and the Office of International Studies. A feasibility study is currently under way.

Undergraduate Curriculum: Changes to the core undergraduate and graduate curricula that reflected the concerns of the National Architectural Accreditation Board (NAAB), were implemented in academic year 2005-2006. New courses were added and syllabi were revised to address the concerns of the NAAB visiting team.

New Initiatives: The educational objectives of the School of Architecture have been broadened in numerous ways during the 2006-07 academic year by 1) the initiation of two new concentrations, 2) two new elective courses, 3) the establishment of the Center for Building Communities, and 4) by hosting a Campus Town Planning Symposium in conjunction with the Indiana Chapter of the American Institute of Architects. The year was highlighted by the Driehaus Award ceremony and the honoring of architect Jaquelyn Robertson and philanthropist Edward P. Bass.

Two new concentrations will be introduced starting in the fall of 2007, one in Architectural Practice and Enterprise, the other in Preservation and Restoration (See Appendix 7). These two concentrations each require four elective courses to be taken in the area of specialization during the students' fourth and fifth years. These concentrations will give our students expertise in a particular area, one on running an architectural practice, the other in the techniques, laws, and practices of preservation and restoration.

Two new undergraduate elective courses will be offered in the 2007-08 academic year (See Appendix 8). The first is Construction Technology: Katrina Cottage, the second, Proportion in Architecture, Theory and Method.

Center for Building Communities: Community outreach is the goal of the School's recently created Center for Building Cities, which is intended to foster urban design initiatives in cities and towns across the United States through design, scholarship and applied research. It is intended to promote a sustainable and thoughtfully designed physical environment. It emphasizes the importance of social, cultural, and physical contexts, both natural and built. The architectural process is enriched by collaboration with city officials, developers, and experts in construction and modular building techniques.

Career Fair: The annual career fair once again recorded more than sixty firms that came to interview our students with some firms making multiple offers to a class of fifty. The career fair not only gives our students the opportunity to find employment but it also projects the School's identity and strengths to many of the country's leading firms (See Appendix 9).

Annual Lecture Series: A number of events contributing to the intellectual life of the school took place with the support and encouragement of the administration (See Appendix 10).

Acquisition of Metropolitan Museum of Art Cast Collection. The School has refurbished many of the two dozen casts given to the school by the Metropolitan Museum of New York, and they have been installed in the Schools Gallery. As stated in last year's report, the casts will be used for the teaching of drawing to students of all levels.

Diversity and Internationalization

Setbacks and Successes for a Diverse Faculty: During the year 2004-2005 the school lost both of its full-time women faculty members. One was successfully hired away by a major architectural firm and the other was not successful in being re-appointed. Four women were hired by the School for the Academic year 2005-2006, one as an associate professor without tenure and three as visiting professors. Two of the visiting positions have been converted to tenure-track positions. After a national search, three full-time positions were accepted by women: a tenure-track assistant professor position by Krupali Uplekar, a tenure-track associate professor position and a tenured full professor position by Ingrid Rowland.

Ethnic diversity is represented by the presence of recently hired faculty members from Turkey and India, who joined permanent faculty members from Lebanon and Italy. These add to the School's already nationally diverse faculty and help foster the rich formal pedagogy and culture of the School. The School encourages faculty members to place studio design projects in both western and non-western settings.

Summer School Programs: An overseas program has been organized by the School again this year. A program to Japan and China will take place this summer and will take place on a bi-annual basis (see Appendix 11).

Communications and Development
Communications: The School of Architecture received excellent press at various venues; most recently an article in *Traditional Building Magazine*. Currently we produce a newsletter for alumni, *Acroterion* (the annual catalogue of student work which this year received a CASE silver medal), and the monograph of the Richard H. Driehaus Prize laureate. Over the next year we will develop a more scholarly journal to fill a void in the publication program of the School. It remains to be seen whether *Acroterion* will evolve to be that scholarly journal or if we will produce a separate publication.

The Richard H. Driehaus Prize and the Henry Hope Reed Medal: *The Richard H. Driehaus Prize* is a $100,000 prize given to a leading architect in the classical tradition. A new medal named for the inaugural recipient was given to Henry Hope Reed. The *Henry Hope Reed Medal* is to be given annually to a non-architect for his or her contributions to the art and life of the traditional city. The medal and its $25,000 award are given by Mr. Richard H. Driehaus. The fifth celebration of the bestowing of these international prizes took place at the University Club in Chicago and last year's laureate's monograph was published by the School. The School's reputation continues to be enhanced by its association with the Prize. So far, in its five-year history, the Prize has

received coverage in the New York Times, the Chicago Tribune, National Public Radio and in regional newspapers and prominent architectural journals around the world. The Dreihaus laureates to date are Leon Krier, Demetri Porphyrios, Quinlan Terry, Allan Greenberg, and Jaquelyn Robertson. The Henry Hope Reed Medal recipients are Henry Hope Reed, David Morton, and Edward P. Bass.

Development and fund raising: The Dean of the School has continued to host a number of receptions for alumni around the country. This year, the School has worked more closely with the development office to meet with prospective donors and build relationships for the School. There is potential for significant contributions for endowed positions and other programs of the School, graduate fellowships and awards. With respect to alumni relationships the School has continued the program of holding receptions in the major cities and at professional venues. In the academic year 2006-07 such events were held in New York, Washington D.C., and at the *American Institute of Architects* convention in San Antonio.

The School benefits from an active Advisory Council that supports the school with funding resources, grants and fellowships, and acts as an advocate for the School with the University administration and outside donors.