

MIT Application for Graduate Admission 2008

Please read instructions carefully before you complete this form. Please print clearly or type.

- 1 Proposed date of entrance: February June September Year: **2008**
- 2 Department **Health Sciences and Technology** Area of research or interdisciplinary program **Medical Engineering / Medical Physics**
consult department listings in Book I
- 3 Initial degree objective at MIT **Ph.D.** Final degree objective (if different) **Ph.D.**
- 4 Are you applying to more than one department? Yes No If yes, indicate departments _____

- 5 Full legal name _____ Date of birth _____
last/family/surname first middle month day year
Former name (if any) _____
- 7 Female Male
- 8 Ethnicity (optional): African-American/Black Caucasian/White Native American _____
US citizens and permanent residents only Afro-Caribbean Chicano or Mexican-American Other _____
 African parentage Puerto Rican Tribal affiliation
 Asian-American Other Hispanic Please describe

- 9 Reply address _____
number street city
state or province country zip or postal code
- 10 Permanent address _____
number street city
state or province country zip or postal code
- 11 Daytime phone _____ Evening phone _____
country code area code/city code number country code area code/city code number
- 12 Fax number _____ Email address _____
country code area code/city code number

- 13 City, state and country of birth _____ Citizen of _____ US Social Security # (if any) _____
If a foreign citizen in the US, give date of entry _____ Type of visa _____ I-20 ID Number _____
month day year
If an Exchange Visitor (J), give program number and name of sponsor _____
Permanent resident of _____ If a permanent resident (immigrant) of the US, give alien registration number _____

- 14 Have you previously applied for admission to MIT? Yes No MIT ID _____
if assigned one as a former student
If yes, what status? Freshman Transfer Special Graduate Date: _____ Department: _____

15 List all colleges and universities attended, major field, dates of attendance and name of degrees received or expected (list most recent first):

College/University	Location	Major field	Dates attended	Actual name of degree/diploma	Date degree awarded/expected
CARNEGIE-MELLON UNIV PITTSBURGH, PA		Materials Science and Eng / Biomedical Engineering	08-2004 05-2008	SB / SB	05-2008
College/University	Location	Major field	Dates attended	Actual name of degree/diploma	Date degree awarded/expected
College/University	Location	Major field	Dates attended	Actual name of degree/diploma	Date degree awarded/expected

- 16 Other graduate schools to which you are applying _____

For department use: Admitted Cond. Admitted Degree _____ Term _____ By _____ Date _____ Not approved
 Admitted Cond. Admitted Degree _____ Term _____ By _____ Date _____ Not approved

MIT Application for Graduate Admission (continued from front)

17 Entrance tests: GRE: Date taken or to be taken: 10-2007 Scores: verbal 640 quantitative 790 analytic 5.5
GRE Subject: Date taken or to be taken: _____ Scores: _____ Subject: _____
GMAT: Date taken or to be taken: _____ Scores: _____
TOEFL: Date taken or to be taken: _____ Scores: _____

18 List language of instruction in: primary school; English; secondary school English
university English; graduate school _____ Native language if other than English: _____

19 Names of three persons to whom you have given evaluation forms. (Request those persons to return the completed forms to you in time to meet the appropriate deadline.)

<u>Dr. Michael McHenry</u> <small>name</small>	<u>Professor</u> <small>title</small>	<u>Carnegie Mellon University</u> <small>institution/company</small>
<u>Dr. Todd Przybycien</u> <small>name</small>	<u>BME Dept. Head</u> <small>title</small>	<u>Carnegie Mellon University</u> <small>institution/company</small>
<u>Dr. Thomas Gilbert</u> <small>name</small>	<u>Research Assistant Professor</u> <small>title</small>	<u>McGowan Institute</u> <small>institution/company</small>

20 Please give the names, years of graduation, department affiliation, and relationships of any close relatives who have attended MIT:

21 Your honors, prizes, or major publications: _____
TSM Nanomaterials Conference Student Poster Session
Andrew Carnegie Society Scholar Award

22 Your extracurricular activities and accomplishments: _____
Biomedical Engineering Society President
Tau Beta Pi / Phi Kapp Phi Honors Fraternities

23 Your teaching or professional experience including summer and term-time work. Give name of employer, dates, and nature of work:
MEDRAD, CT NPD Intern, Summer 2007
Nucor, Metallurgical Intern, Summer 2006

24 Other experience, including military, volunteer work, travel. Give dates and nature of work: _____

International students (non-immigrant visa holders) please complete the following:

25 Your marital status: Single Married Number of children _____
If single, do you intend to marry before you come here? Yes No Will your spouse come with you? Yes No

26 Signature: _____ Date: 12-14-2007

Record of Courses Taken in Preparation for Graduate Study

Please carefully read the instructions below before you complete this form.

Based on your transcript(s), please complete the following summary of your college and university classes.

General instructions:

- Important: some departments do not require this form; other departments require only some of the fields to be completed—check the requirements for the department to which you are applying before completing this form. See pages 4–16 of this booklet.
- This form is **not** required for courses taken at MIT (except for the Department of Physics).
- If the department to which you are applying requires this form, a transcript will not be accepted as a substitute for this information.
- If your university system does not fit with the categories below—for example, if your courses do not have numbers or you did not receive course grades—leave those fields blank.
- Do not try to convert your university grading scale or GPA to MIT's scale. Indicate the grades/GPA as granted by your school and give us a brief explanation of your school's grading system.
- If the space provided is not sufficient, you may attach additional sheets.

Why we ask you to complete this form:

- We see transcripts from thousands of schools from all over the world. It is extremely helpful for us to review applicants' coursework and grades in a standard format.
- Transcripts show courses by semester or year. However, the best way for us to evaluate your preparation is to see your courses grouped by subject area, with the most relevant courses at the top.
- Transcripts do not list textbooks used; many departments find that information especially helpful.

Grading System:

Please describe the grading system(s) used at all colleges and universities you have attended. Explain the specific meaning of any numeric values, letter grades, and rankings. _____

Cumulative GPA as listed on transcript (if available) _____

COURSES MOST RELEVANT TO THE PROGRAM TO WHICH YOU ARE APPLYING

Please list below the college/university courses you have taken that are most relevant to the graduate program to which you are applying. Group courses by subject area, for example, group all math courses together and group all science courses together, etc. Use the next section, if you need more room.

Course no.
(if applicable)

Course name

Principal textbook used (author and title)

Year in which course
was taken

Official course grade
(if applicable)

Course no. (if applicable)	Course name	Principal textbook used (author and title)	Year in which course was taken	Official course grade (if applicable)
42-506	Surgery for Engineers	None		A
27-312	Metallic and Ceramic Biomaterials	None		A
42-311	Polymeric and Synthetic Biomaterials	Biomaterials Science: An Introduction to Materials in Medicine - Ratner, Hoffman, Schoen,		A
42-300	Biomedical Engineering Research	None		A
39-500	Independent Honors Research Project	None		-
42-101	Introduction to Biomedical Engineering	Introduction to Biomedical Engineering - Domach		A
27-445	Structure, Properties, and Performance Relations in Magnetic	Magnetic Materials: Fundamentals and Device Applications - Spaldin		A
27-216	Transport and Materials	Diffusion in Solids - Glicksman		A
27-217	Phase Relations and Diagrams	Phase Transformation in Metals & Alloys - Porter		A
27-215	Thermodynamics of Materials	Introduction to Thermodynamics of Materials - Gaskell		A
27-202	Defects in Materials	Introduction to Dislocations - Hull, Bacon		A
27-201	Structure of Materials: Perfect Crystals	The Structure of Materials - DeGraef, McHenry		A
27-301	Microstructure and Properties	Phase Transformation in Metals & Alloys - Porter		A
28-401	Materials Science & Engineering Capstone	None		-

ADDITIONAL COURSES

Please list below other college/university courses you have taken. Group courses by subject area (science, math, engineering, humanities, social sciences, etc.). You may also use this section for any courses that you could not fit in the section above.

Course no.

(if applicable)

Course name

Principal textbook used (author and title)

Year in which course was-taken

Official course grade (if applicable)

Course no. (if applicable)	Course name	Principal textbook used (author and title)	Year in which course was-taken	Official course grade (if applicable)
27-205	Materials Characterization Laboratory	None		A
27-367	Selection and Performance of Materials	Materials Selection in Mechanical Design - Ashby		A
27-100	Engineering the Materials of the Future	Materials Science and Engineering: An Introduction - Callister		A
09-105	Modern Chemistry	Modern Chemistry - Oxtoby		A
09-101	Experimental Chemistry	None		A
09-217	Organic Chemistry	Organic Chemistry: Structure and Function - Vollhardt, Schore		-
33-121	Modern Biology	[text provided electronically]		A
42-202	Physiology	Principles of Human Physiology - Germann, Stanfield		A
33-106	Physics for Engineers	University Physics with Modern Physics - Young, Freedman		A
33-132	Honors Physics II	Matter & Interactions II : Electricity & Magnetism - Chabay		A
21-120	Differential and Integral Calculus	Calculus: Early Transcendentals - Anderson		A
21-122	Differential Equations and Calculus of Approximations	Calculus: Early Transcendentals - Anderson		A
21-259	Calculus in 3-Dimensions	Calculus: Early Transcendentals - Anderson		A
21-260	Differential Equations	Elementary Differential Equations - Boyce		A
36-220	Engineering Statistics & Quality Control	Probability and Statistics for Engineering and the Sciences - Devore		A
76-101	Interpretation and Argument	None		A
80-180	Nature of Language	Language Files: Materials for an Introduction to Language and Linguistics - Tserdanelis, Wong		-
15-100	Introduction to Programming	None		A
42-444	Medical Devices	Unknown - Pending		-
42-401	Biomedical Engineering Design	Unknown - Pending		-



TO VERIFY THE AUTHENTICITY OF THIS TRANSCRIPT, RUB OR BREATHE ON THE AREA ABOVE. THE LOGO WILL DISAPPEAR AND THEN REAPPEAR.

Enrollment Services

Degree Awarded

Carnegie Mellon University
 5000 Forbes Avenue
 Pittsburgh, Pennsylvania 15213-3890
 (412) 268-8186

Date: 29-nov-2007
 Page 1 of 1

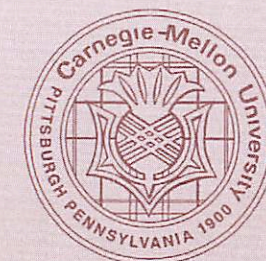
Date Awarded

Name
 Address
 Student ID#

CONFIDENTIAL

College Carnegie Institute of Technology
 Department Materials Science & Engineering
 Major Materials Science and Engineering

Dept	Course#	Course Title	Units	Grades	QltPnts	Dept	Course#	Course Title	Units	Grades	QltPnts	Dept	Course#	Course Title	Units	Grades	QltPnts					
		Pass / Fact		Qpa	QltPnts				Pass / Fact	Qpa	QltPnts				Pass / Fact	Qpa	QltPnts					
FALL 2004			Dean's List			FALL 2006			Dean's List													
MSC	21120	DIFFERENTIAL INT CAL	10.0	A	40.0	MSE	27301	MICROSTRUC & PROP I	9.0	A	36.0											
MSE	27100	ENG MATERLS OF FUTRE	12.0	A	48.0	MSE	27312	METLLC CERMC BIOMTRL	9.0	A	36.0											
PHY	33106	PHYSICS I ENG STUDNT	12.0	A	48.0	MSE	27399	PROF DEVELOPMENT II	1.0	A	4.0											
PSY	85100	INTRO TO INTELLGNCE	9.0	A	36.0	BMD	42202	PHYSIOLOGY	9.0	A	36.0											
CMU	99102	COMPUTNG SKLLS WKSHP	3.0	P	0.0	PHI	80100	WHAT PHILOSOPHY IS	9.0	A	36.0											
		SEMESTER QPA:	46.0 / 43.0	4.00	172.0	PSY	85221	PRINC CHILD DVLPMTNT	9.0	A	36.0											
		CUMULATIVE QPA:	46.0 / 43.0	4.00	172.0	PSY	85507	RESEARCH PSYCHOLOGY	9.0	A	36.0											
SEMESTER QPA:			46.0 / 43.0	4.00	172.0	SEMESTER QPA:			55.0 / 55.0	4.00	220.0											
CUMULATIVE QPA:			46.0 / 43.0	4.00	172.0	CUMULATIVE QPA:			252.0 / 249.0	4.00	996.0											
SPRING 2005			Dean's List			SPRING 2007			Dean's List													
MSC	21122	INTGR DIFF EQUA APPX	10.0	A	40.0	CMY	09101	INTRO TO EXPER CHEM	3.0	A	12.0											
PHY	33132	MATTER & INTRACTN II	12.0	A	48.0	MSE	27367	SELECT PERFRMC MATRL	6.0	A	24.0											
BMD	42101	INTRODUCTION BIOMED	12.0	A	48.0	MSE	27445	MAGNETIC MATERIALS	9.0	A	36.0											
ENG	76101	INTERPRETN & ARGMNT	9.0	A	35.0	STA	36220	ENGR STAT QUAL CTRL	9.0	A	36.0											
		SEMESTER QPA:	43.0 / 43.0	4.00	172.0	BMD	42300	N	12.0	A	48.0											
		CUMULATIVE QPA:	89.0 / 86.0	4.00	344.0	BMD	42311	POLYMERIC BIOMATERLS	9.0	A	36.0											
FALL 2005			Dean's List			BMD	42506	SURGERY FOR ENGINEER	9.0	A	36.0											
BSC	03121	MODERN BIOLOGY	9.0	A	36.0	SEMESTER QPA:			57.0 / 57.0	4.00	228.0											
MSC	21126	INTRO MATHMTCL SFTWR	3.0	A	12.0	CUMULATIVE QPA:			309.0 / 306.0	4.00	1224.0											
MSC	21259	CALCULUS IN 3-D	9.0	A	36.0	=====																
MSE	27201	STRUCTURE MATERIALS	9.0	A	36.0	End of Undergraduate Record																
MSE	27202	DEFECTS IN MATLS	9.0	A	36.0																	
MSE	27215	THERMODYNMC OF MTRLS	12.0	A	48.0																	
MSE	27299	PROF DEVELOPMENT I	1.0	A	4.0																	
BMD	42201	PRO ISSUES IN BIOMED	3.0	A	12.0																	
		SEMESTER QPA:	55.0 / 55.0	4.00	220.0																	
		CUMULATIVE QPA:	144.0 / 141.0	4.00	564.0																	
SPRING 2006			Dean's List																			
CMY	09105	INTRO MOD CHEMSTRY I	10.0	A	40.0																	
CS	15100	INTRO INTERM PRGMNG	10.0	A	40.0																	
MSC	21260	DIFFRENTL EQUATIONS	9.0	A	36.0																	
MSE	27205	MATERIALS CHARACTZTN	3.0	A	12.0																	
MSE	27216	TRANSPRT IN MATERIAL	9.0	A	36.0																	
MSE	27217	PHASE RELTNS & DIAGM	12.0	A	48.0																	
		SEMESTER QPA:	53.0 / 53.0	4.00	212.0																	
		CUMULATIVE QPA:	197.0 / 194.0	4.00	776.0																	



[Signature]

John R. Papinchak
 Director of Enrollment Services
 University Registrar

A raised seal is not required. An official signature is white with a burgundy background.

Carnegie Mellon

Transcript Information

Accreditation

Carnegie Mellon University is an accredited member of the Middle States Association of Colleges and Schools (MSA), 3624 Market St., Philadelphia, PA 19104. Telephone: (267) 284-5000, Fax: (215) 662-5501.

College and department accreditations include: Accreditation Board for Engineering Technology (ABET) – Chemical Engineering, Civil Engineering, Electrical and Computer Engineering, Engineering and Public Policy, Mechanical Engineering, and Materials Science and Engineering; National Architectural Accrediting Board (NAAB) – Architecture; National Association of Schools of Art and Design (NASAD) – Art and Design; National Association of Schools of Music (NASM) – Music; American Assembly of Collegiate Schools of Business (AACSB) and Middle Atlantic Association of College of Business Administration (MAACBA) – David A. Tepper School of Business; American Chemical Society (ACS) – Chemistry; and National Association of Schools of Public Affairs and Administration (NAPAA) – H. John Heinz III School of Public Policy and Management.

Degrees Awarded

BA	Bachelor of Arts
BAC	Bachelor of Architecture
BFA	Bachelor of Fine Arts
BHA	Bachelor of Humanities and Arts
BS	Bachelor of Science
BSA	Bachelor of Science and Arts
DA	Doctor of Arts
EMBA	Executive Master of Business Administration
MA	Master of Arts
MAC	Master of Architecture
MACLL	Master of Arts Computer-Assisted Language Learning
MAM	Master of Arts Management
MAT	Master of Arts Teaching
MBA	Master of Business Administration
MBS	Master of Building Science
MCH	Master of Chemical Engineering
MCP	Master of Chemical Engineering and Colloids, Polymers and Surfaces
MDE	Master of Design
ME	Master of Engineering
MEIM	Master of Entertainment Industry Management
MET	Master of Entertainment Technology
MFA	Master of Fine Arts
MHC	Master of Health Care
MHI	Master of Human-Computer Interaction
MHM	Master of Health Care Policy and Management
MIS	Master of Information Systems
MISM	Master of Information Systems Management
MME	Master of Manufacturing Engineering
MMM	Master of Medical Management
MMU	Master of Music
MPD	Master of Product Development
MPH	Master of Philosophy
MPM	Master of Public Management
MS	Master of Science
MSD	Master of Sustainable Development
MSE	Master of Software Engineering
MUD	Master of Urban Design
PHD	Doctor of Philosophy

Degree Requirements

Degrees are awarded upon satisfactory completion of residence requirements, all requirements in the approved curriculum(s) and by recommendation for degree(s) by the faculty of the appropriate college(s).

Calendar

Carnegie Mellon observes the semester system including two six-week summer sessions and a 12-week summer session.

Units of Work

Three units equal one semester hour of credit.

Quality Point Average (QPA) Calculations

Carnegie Mellon defines a quality point as a point value times units for a given course. QPAs are calculated according to the following formula:

Semester QPA: quality points divided by factorable units.

Cumulative QPA: total quality points divided by total factorable units.

Undergraduate courses are not factorable into the QPA for graduate students in the following colleges or departments: College of Humanities and Social Sciences (admitted F84 or later), H. John Heinz III School of Public Policy & Management, School of Industrial Administration, Tepper School of Business, Integrated Product Development, Information Systems, Information Technology, Software Engineering, West Coast Campus.

4.0 Grading Standards

Undergraduate students and graduate students (in CFA, CIT, CMU, MCS, and SCS who entered before Fall 1995)

Grade	Point Value	Description
A	4.0	Excellent
B	3.0	Good
C	2.0	Satisfactory
D	1.0	Passing
R	0.0	Failure
X	0.0	Conditional Failure
S	non-factorable units	Satisfactory
P	non-factorable units	Passing
N	non-factorable units	Failure in Pass/Fail Course
O	non-factorable units	Audit
W	non-factorable units	Withdrawal
I	non-factorable units	Incomplete
AD	non-factorable units	Credit granted for work completed at another institution or examination credit.

4+ Grading Standards

Graduate students (who entered in and after Fall 1995)

Grade	Point Value	Description
A+ *	4.33	
A	4.00	
A-	3.66	
B+	3.33	
B	3.00	
B-	2.67	
C+	2.33	
C	2.00	
C-	1.67	
D+	1.33	
D *	1.0	
R	0.0	Failure
X	0.0	Conditional Failure
S	non-factorable units	Satisfactory
P	non-factorable units	Passing
N	non-factorable units	Failure in Pass/Fail Course
O	non-factorable units	Audit
W	non-factorable units	Withdrawal
I	non-factorable units	Incomplete
AD	non-factorable units	Credit granted for work completed at another institution or examination credit.

* College of Humanities and Social Sciences and Carnegie Institute of Technology graduate students are not permitted to receive an A+. Tepper and Heinz graduate students do not receive D or D+ grades.

9.0 Grading Standards

Graduate students (in SIA, HNZ, HSS, SCS, and UPA who entered before Fall 1995)

Grade	Point Value	Description
A+ *	9.0	
A	8.0	
A-	7.0	
B+	6.0	
B	5.0	
B-	4.0	
C+	3.0	
C	2.0	
C-	1.0	
D+	0.0	
D *	0.0	
R	0.0	Failure
X	0.0	Conditional Failure
S	non-factorable units	Satisfactory
P	non-factorable units	Passing
N	non-factorable units	Failure in Pass/Fail Course
O	non-factorable units	Audit
W	non-factorable units	Withdrawal
I	non-factorable units	Incomplete
AD	non-factorable units	Credit granted for work completed at another institution or examination credit.

Reserve Officer Training Corps (ROTC)

ROTC units are considered Units Passed in the student's overall semester and cumulative QPA; they are not considered Units Factorable and are not used in calculating the student's overall semester QPA, rank in class or for academic actions. ROTC courses and grades are kept separate from the rest of the student's academic history and are located on the lower right corner of the transcript. A separate ROTC QPA is calculated.

Family Education Rights and Privacy Act (FERPA) of 1974 as Amended

This record is released on the condition that the student information contained herein will not be transferred to a third party without the written consent of the student.

Contact Information –

Please direct all questions to The HUB

Carnegie Mellon University	Phone: 412-268-8186
The HUB – Enrollment services	Fax: 412-268-8084
5000 Forbes Avenue	Email: thehub@andrew.cmu.edu
Pittsburgh, PA 15213-3890	URL: http://www.cmu.edu/hub

Carnegie Mellon University does not discriminate and Carnegie Mellon University is required not to discriminate in admission, employment, or administration of its programs or activities on the basis of race, color, national origin, sex or handicap in violation of Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973 or other federal, state, or local laws or executive orders.

In addition, Carnegie Mellon University does not discriminate in admission, employment, or administration of its programs on the basis of religion, creed, ancestry, belief, age, veteran status, sexual orientation or gender identity. Carnegie Mellon does not discriminate in violation of federal, state, or local laws or executive orders. However, in the judgment of the Carnegie Mellon Human Relations Commission, the Presidential Executive Order directing the Department of Defense to follow a policy of "Don't ask, don't tell, don't pursue" excludes openly gay, lesbian and bisexual students from receiving ROTC scholarships or serving in the military. Nevertheless, all ROTC classes at Carnegie Mellon University are available to all students.

Inquiries concerning application of these statements should be directed to the Provost, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-6684 or the Vice President for Enrollment, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-2056.

Carnegie Mellon University publishes an annual campus security report describing the university's security, alcohol and drug, and sexual assault policies and containing statistics about the number and type of crimes committed on the campus during the preceding three years. You can obtain a copy by contacting the Carnegie Mellon Police Department at 412-268-2323. The security report is available through the World Wide Web at <http://www.cmu.edu/police/statistics.htm>.

Carnegie Mellon University makes every effort to provide accessible facilities and programs for individuals with disabilities. For accommodations/services please contact the Equal Opportunity Services Office at 412-268-2012.

Obtain general information about Carnegie Mellon University by calling 412-268-2000.

Statement of Objectives

Please read instructions carefully before you complete this form.

Please give your reasons for wishing to do graduate work in the field you have chosen. Prepare your statement of objectives and goals in whatever form clearly presents your views. Include as far as you can, your particular interests, be they experimental, theoretical, or issue-oriented, and show how your background and MIT's programs support these interests. The statement could be much like a proposal for graduate studies, in the more specific context of your professional objectives. You should set forth the issues and problems you wish to address. Explain your longer-term professional goals. The Admissions Committee will welcome any factors you wish to bring to its attention concerning your academic and work experience to date.

HST
Carnegie Mellon University, Class of 2008

- Type or print using black ink.
- Use reverse side if necessary or separate form.
- Keep a copy for your file. You may also wish to provide copies to your evaluators before they complete their forms.
- Return this form with the completed application to the appropriate MIT department (see pages 4–16).

I am currently a senior at Carnegie Mellon University where I am double-majoring in materials science and biomedical engineering. I plan to complete graduate-level research concerning cell and tissue engineering. As a long term goal, I intend to utilize my background in regenerative medicine and cellular response in a career focused on the development of implantable medical devices.

Fifteen years ago, if someone had described my future, I would have found their description unfounded and perhaps unrealistic. Today, I find myself extremely fortunate to have the opportunities that I face. Growing up, I did not receive much encouragement to strive for an esteemed education or challenging career path. This was of no fault of my family as the majority of my family members did not continue their education beyond the high school level; for those who did, I was the first to attend a private university. Furthermore, none of my relatives have ever attended graduate school, which is a record that I have every intention of breaking. Still, throughout adolescence, I maintained a firm grasp on my own aspirations. In my future, I will maintain this grasp and encourage those in my life to likewise seize their own ambitions. My interest in the medical field began when I was in elementary school. In the fourth grade, I had a joint-based cancer scare. Thankfully, it was an inaccurate diagnosis and I survived with no need for surgery; but, that experience motivated me, years later, to seriously consider dedicating my life to the medical field. I tossed around the notions of becoming a pediatrician or an orthopedist. I even spent a summer volunteering at a local rehabilitation clinic in consideration of becoming a physical therapist. At the beginning of my college career, I realized that I should contribute to the world through optimal use of my skills and interests. I decided that my abilities could be best put to use in engineering, combining mathematics and scientific theory with the intention of pushing beyond current technological limitations.

There are various courses at Carnegie Mellon that have provided me with preliminary research experience. I have conducted experimentation in the following areas: steel processing techniques; the effects of annealing and cold-working on the grain size of brass material; the mechanical differences between artificial bone cement that is currently approved for use in the United States in comparison to that in European countries; and the synthesis of superconducting materials, to name a few. By participating in and leading such experiments, I have built a strong foundation of research knowledge that could be applied to all future laboratory endeavors.

I took on a lab assistant role my junior year, working alongside a doctoral candidate in an attempt to synthesize mineralized bone from purified protein along with calcium and phosphate solutions. This experience taught me basic laboratory skills; but, more importantly, it gave me the clarification that the lab setting is one which I enjoy and am therefore able to excel in.

My interest in ferrogel material led me to become involved in various research projects during my senior year. Alongside a team at McGowan Institute for Regenerative Medicine, I am investigating tissue engineering applications of these systems. I intend to characterize the magneto-elastic response of scaffold-based ferrogel systems and investigate current hypotheses regarding the effects of site-specific in vivo straining on wound healing and the generation of functional tissue. As I have found this research to be incredibly fascinating, I would truly enjoy the opportunity to continue with a similar study.

I am also completing an independent honors research project intended to both quantitatively identify the diffusion coefficient of magnetic nanoparticles through a hydrated tissue scaffold and examine the effects of antibody anchoring on particle migration. Scaffold-derived ferrogels have previously been used in tracking the degradation rate and profile of these components within the body. However, there is no justification that the ferrogel's behavior is that of the scaffold

12-14-2007

Signature

Date

Statement of Objectives (Cont.)

material and not evidence of the nanoparticles' leaving the composite system. The same holds true for the aforementioned in vivo straining research of ferrogel materials. To prove that the previously witnessed behavior is that of the scaffold's one must demonstrate that the nanoparticles that are magnetically activated are still entrapped within the hydrogel, not free-floating within the body. Therefore, studying the diffusional character of these particles is of significant importance to current external research. I believe my previous experience with tissue engineering-based projects has prepared me to continue work in this field at the graduate level.

There is a great deal of interesting and exciting research currently underway at MIT. I am particularly interested in the multiscale regenerative technological research that is being completed by Associate Professor Dr. Sangeeta Bhatia; indeed, speaking with her is what sparked my application to this program. I am also interested in the research taking place within the laboratories of Dr. Alan Grodzinsky [tissue remodeling and repair, cartilage tissue engineering], Dr. Scott Manalis [nanofabrication technology], and Dr. Linda Griffith [tissue morphogenesis guidance] - all of whom I have been in contact with.

The collaborative Health and Science Technology Program would provide me with a set of physical resources, a social network, and academic environments that are currently unparalleled by other graduate institutions. This unique program would also provide me with the clinical experience and insight to prepare me for a career in the development of medical devices from the "endpoint," or direct product application, perspective. This is a factor that is missing in other competitive programs. Furthermore, working alongside medical students would allow me to develop a deeper understanding of the mindset and expectations of those who practice medicine. This program would be an undeniably vital asset to my maturing career in research.

My diverse academic and industrial background has prepared me for success in graduate level research. I have participated in research and design projects in various roles - as a team member, as a group leader, and as an independent researcher. My work in industrial internships have encompassed projects ranging from process control of HSLA steels at an industrial manufacturing level to risk assessment of computed tomography power injectors. Leadership ability is a vital personal asset, and I have therefore assumed various officer positions in campus-based organizations, along with head roles in various research and design team-based projects. My leadership experiences have taught me how to disassemble a large-scale project into sequential, obtainable goals for effective time management while not losing sight of the "big picture" behind the study. I am confident that my team morale, leadership abilities, research experience, and independent drive will enable me to make a broad impact with cutting edge technological advancements. Moreover, I believe I possess all the potential needed to warrant my acceptance to The Health and Science Technology Program as a wise and worthwhile investment; all I need is a chance to prove it.

Use this space for additional information or comments, if needed.

If there are any prerequisite courses for this program that I have not yet completed, I will enroll at a local university for the summer semester to fill these requirements.

MIT Evaluation for Graduate Admission

Please read instructions carefully before you complete this form.

Return to:

Department of _____
Massachusetts Institute of Technology
77 Massachusetts Avenue, Room _____
Cambridge, MA 02139-4307

Part 1 To be completed by all applicants

Please type or print using black ink.

Important: In the upper right of this form, fill in the return address department name and room number (as indicated on pages 4–16 of this booklet).

Name: CONFIDENTIAL
last/family first middle

Applying for admission in the department of Health Sciences and Technology

for the ultimate degree of Ph.D. area of research MEMP

for the term beginning in September 2008 email CONFIDENTIAL

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Applicant's signature: CONFIDENTIAL
date

Part 2 To be completed by evaluator

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Evaluator's name: Michael Edward McHenry Title Professor

Address 243 Roberts Hall - CMU - 5000 Forbes Ave Pittsburgh PA 15213 USA

email mm7g@andrew.cmu.edu Date 12-04-2007

School or company Carnegie Mellon Univ. Telephone number 4122682703

In what capacity do you know the applicant? Teacher 4 courses, research supervisor

How long have you known the applicant? 4 years

How does this applicant compare with his or her peer group in academic ability?

- Truly exceptional *equivalent to the very best you have known – a person who, in your experience, appears only every few years* Outstanding *comparable to the best student in a current class* Well above average *top 25%* Above average *demonstrated high ability* Average *able to complete work to the Ph.D.* Below average *lower 50%* Inadequate opportunity to observe

In your opinion, how would this student compare to other students in the graduate program at MIT?

- Truly exceptional Outstanding Well above average Above average Average Below average Inadequate opportunity to observe

Please give the applicant's relative standing in your department (e.g., 7th in 89) 1st in 35

(continue on reverse side)

Personal evaluation of the applicant. What particularly qualifies this student for study at MIT? Information about accomplishments in research or independent projects will be particularly helpful. If you know of other students who have entered MIT from your institution, a comparison will be especially valuable. If you have any reason to believe that the applicant should not be considered, please explain.

In my role as Professor of Materials Science and Engineering and undergraduate research advisor, I can speak to

CONFIDENTIAL's skills in the field and her work ethic. I have known **Con** for 3 years, instructed her in three courses and am currently advising her Senior Capstone Design Project as well as her CIT Honors Research. **Con**'s coursework and exams in all 3 of my courses were extraordinary, and she impressed me with the effort she put into a team laboratory project. **Con** was one of the top 4 students out of 35 in my course "The Structure of Materials" in the Fall of 2005. She was the top student in my course "Phase Relations and Phase Diagrams" as well as in the course "Structure and Applications of Magnetic Materials." She is truly a remarkable student. The Magnetics course is an upper level course that is chosen only by our brightest undergraduates. To rank first in that course is a true accomplishment. I would rank her in the top 1% of the ~500 undergraduate students that I have encountered at CMU. **Con** has already demonstrated significant research and leadership skills. MIT would be crazy to not go all out to attract a student of her caliber. She will receive offers from nearly every school she applies.

If the applicant's first language is not English, please evaluate her/his proficiency to read, write, and speak English.

Evaluator's signature Michael Edward McHenry

12-04-2007

Evaluators: Please feel free to add information about your own educational and professional background if you feel that such information will enhance our understanding of your evaluation.

A. Professional Preparation:

Case Western Reserve Univ., Materials Science and Engineering, B.S. -1980

Massachusetts Institute of Technology, Electronic Materials, Ph.D, 1988.

Directors Funded Post-Doctoral Associate, High Tc Superconductors.

Los Alamos National Lab -1988-89

B. Appointments:

1997- Carnegie Mellon Univ., Professor of Materials Science and Engi.

1992- Carnegie Mellon Univ., Assoc. Prof. of Materials Science and Eng.

Please seal and sign the envelope.

>> Evaluators: Please feel free to add information about your own educational and professional background if you feel that such information will enhance our understanding of your evaluation. (Cont.)

1989- Carnegie Mellon Univ., Asst Prof. of Materials Science and Eng..
1988-89 Directors Funded Post-Doctoral Associate, Los Alamos National Lab.
1988 Post-Doctoral Research, Massachusetts Institute of Technology.
1983-1988 Research Assistant, Massachusetts Institute of Technology.
1980-83 Technology Implementation Prog., U. S. Steel - Lorain Works.
1978-79 Summer Engineering Program, Diamond Shamrock Corp.

Carnegie Mellon

Department of Materials Science
and Engineering
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213-3890

December 04, 2007

Dear Selection Committee,

I am pleased to recommend **CONFIDENTIAL** for admission to the Massachusetts Institute of Technology Graduate Program. **Con** is pursuing a B.S in Engineering in Carnegie Mellon University's EAC/ABET accredited Materials Science and Engineering Department with a double major in Biomedical Engineering. Her grade point average is 4.00, with a 4.00 GPA in her major, through completion of her junior year. **Con**'s grades put her at the very top of her class. In speaking with **Con**, she has expressed a sincere interest in pursuing a Ph.D in Biomedical Engineering and taking advantage of her considerable skills in Materials Science and Engineering. It is her ultimate goal to pursue research opportunities in the field at the interface between Biomedical Engineering and Materials Science and Engineering.

In my role as Professor of Materials Science and Engineering and undergraduate research advisor, I can speak to **Con**'s skills in the field and her work ethic. I have known **Con** for 3 years, instructed her in three courses and am currently advising her Senior Capstone Design Project as well as her CIT Honors Research. **Con**'s coursework and exams in all 3 of my courses were extraordinary, and she impressed me with the effort she put into a team laboratory project. **Con** was one of the top 4 students out of 35 in my course "The Structure of Materials" in the Fall of 2005. She was the top student in my course "Phase Relations and Phase Diagrams" as well as in the course "Structure and Applications of Magnetic Materials." She is truly a remarkable student. The Magnetics course is an upper level course that is chosen only by our brightest undergraduates. To rank first in that course is a true accomplishment. I would rank her in the top 1% of the ~500 undergraduate students that I have encountered at CMU.

Con has already mastered many technical skills in Materials Science and Engineering. She was considered to be the group leader by her peers in course laboratory projects. **Con**'s grades reflect a particular persistence and patience in learning. She frequently comes to my office with insightful questions. She has pushed me to be a better teacher. She possesses a calm, yet determined demeanor and is respected by her classmates and instructors alike. She is poised and speaks publicly with confidence and clarity.

A graduate degree would afford **Con** the opportunity of exploring a unique and challenging problem in biomaterials. Specifically, she is interested in further pursuing studies of the magneto-elastic response of ferrogels. However, she is versatile and could fit into any interesting biomaterials research program. Ferrogels are important new smart materials with magnetomechanical properties of particular interest in many biomedical applications. In my Magnetics course, **Con** has modeled the magnetomechanical response of ferrogels writing Mathematica codes. She is currently extending this work to incorporate temperature dependent

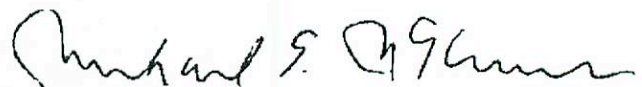
elastic moduli of the gel materials as part of her CIT Senior Honors Research project. This will alert the world to the possibility of using RF heating of nanoparticles to tune the mechanical properties of polymers.

In Spring 2007, [Con] won second prize in the "Surgery for Engineers" course for her presentation: "Use of ferrogels to improve catheter navigational control:neurointerventional radiology-based applications." She has furthered her pursuit of advancing these novel materials through work related to her Materials Science and Engineering Senior Capstone Design project which she is pursuing this semester. This work examines gels used in tissue scaffolds used in regenerative medicine and incorporation of magnetic nanoparticles to realize the unique magnetomechanical response of ferrogels to change the shape of tissue scaffolds with a remote field stimulus. Her CIT Honors Project with me is aimed at quantitatively measuring the diffusion coefficient of magnetic nanoparticles through tissue scaffolds and restricting their motion by functionalizing with appropriate antibodies to anchor them to the tissue scaffolds.

[Con]'s interest in graduate school is motivated by the opportunity that it would afford her to pursue research in developing new areas of biomaterials. [Con] is excited with the possibility of being able to continue her studies in a fertile area with an expert in the field.

[Con]'s background is well matched with her career goals in Biomedical Engineering and Materials Science and Engineering and her ultimate goal to perform research in the field. [Con] is pleasant and outgoing and works well with other students. I am extremely impressed with her organizational skills and leadership as well as her scientific maturity. She is focused and ambitious with a clear love of science. She has taken advantage of the many opportunities afforded her at CMU and no doubt will continue to do so as a graduate student. I give [Con] my highest recommendation for admission to the Massachusetts Institute of Technology Graduate Program.

Sincerely,



Michael E. McHenry
Professor of MSE
Carnegie Mellon University

MIT Evaluation for Graduate Admission

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Important: In the upper right of this form, fill in the return address department name and room number (as indicated on pages 4–16 of this booklet).

Name: Confidential
last/family first middle

Applying for admission in the department of Health Sciences and Technology

for the ultimate degree of Ph.D. area of research MEMP

for the term beginning in September 2008 email Confidential

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Applicant's signature: Confidential date

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Evaluator's name: Todd M Przybycien Title Prof and Head, BME

Address 5000 Forbes Ave Pittsburgh PA 15213 US

email todd@andrew.cmu.edu Date 12-11-2007

School or company CMU Telephone number 412-268-3857

In what capacity do you know the applicant? instructor, dept head

How long have you known the applicant? 3 yrs

How does this applicant compare with his or her peer group in academic ability?

- Truly exceptional *equivalent to the very best you have known – a person who, in your experience, appears only every few years* Outstanding *comparable to the best student in a current class* Well above average *top 25%* Above average *demonstrated high ability* Average *able to complete work to the Ph.D.* Below average *lower 50%* Inadequate opportunity to observe

In your opinion, how would this student compare to other students in the graduate program at MIT?

- Truly exceptional Outstanding Well above average Above average Average Below average Inadequate opportunity to observe

Please give the applicant's relative standing in your department (e.g., 7th in 89) not computed

(continue on reverse side)

Carnegie Mellon

Biomedical Engineering

Carnegie Mellon University
Pittsburgh, Pennsylvania 15213-3890

(412) 268-3857
Fax: (412) 268-1173
Email: todd@andrew.cmu.edu

Todd Przybycien
Professor and Head

11 December 2007

Re: Recommendation for Confidential

Dear Sirs:

I write in strong support of Confidential's application for graduate study.

I have known Con since the beginning of the Spring 2005 semester; I was her instructor for 42-101 Introduction to Biomedical Engineering. Con's overall performance in the course was outstanding, ranking 1st out of 95 students. I used an instructional format for this course in which problem sets were completed in teams with rotating membership. I used a 360° peer evaluation format that involves a fair amount of writing as well as formative and summative evaluations, the results of which were a component of the overall course grade. Con was one of a handful of students in the course who received a perfect rating in this dimension from her peers. Con's performance has been consistently strong - at the 4.0 GPA level - during her pursuit of a challenging dual major in biomedical engineering and materials science and engineering.

Since this class, my contact with Con has been limited to her role as an officer for the student BioMedical Engineering Society chapter for the past several years. She was effective and enthusiastic in these roles, especially given the challenges of managing a student professional organization for students who are dual majors and have additional professional societies to which they belong. I am aware that she has had multiple, successful internship and research experiences in the materials, medical devices and bone tissue engineering areas during her studies at Carnegie Mellon - most recently via the school of engineering honors research program. Finally, I know Con to be hard-working, assertive and pleasant.

I enthusiastically recommend Con for graduate study. She has had fine academic and research preparation and I have every confidence that she will have an impact at the graduate level and represent Carnegie Mellon very nicely.

Sincerely,



Todd M. Przybycien
Professor and Head, Biomedical Engineering
Professor, Chemical Engineering (by courtesy)

MIT Evaluation for Graduate Admission

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Name: Confidential
last/family first middle

Applying for admission in the department of Health Sciences and Technology

for the ultimate degree of Ph.D. area of research MEMP

for the term beginning in September 2008 email Confidential

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Applicant's signature: Confidential date

Part 2 To be completed by evaluator

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Evaluator's name: Thomas Gilbert Title Research Assistant Professor

Address 100 Technology Drive, Suite 200 Pittsburgh PA 15219 USA

email gilberttw@upmc.edu Date 12-12-2007

School or company University of Pittsburgh Telephone number 412-235-5141

In what capacity do you know the applicant? Professor

How long have you known the applicant? 6 months

How does this applicant compare with his or her peer group in academic ability?

- Truly exceptional *equivalent to the very best you have known - a person who, in your experience, appears only every few years* Outstanding *comparable to the best student in a current class* Well above average *top 25%* Above average *demonstrated high ability* Average *able to complete work to the Ph.D.* Below average *lower 50%* Inadequate opportunity to observe

In your opinion, how would this student compare to other students in the graduate program at MIT?

- Truly exceptional Outstanding Well above average Above average Average Below average Inadequate opportunity to observe

Please give the applicant's relative standing in your department (e.g., 7th in 89) 1st in 35

(continue on reverse side)

Personal evaluation of the applicant. What particularly qualifies this student for study at MIT? Information about accomplishments in research or independent projects will be particularly helpful. If you know of other students who have entered MIT from your institution, a comparison will be especially valuable. If you have any reason to believe that the applicant should not be considered, please explain.

Con has excelled in multidisciplinary biomedical research that included computer modeling, experimentation, and mechanical design. She has shown the ability to work and think independently and at a high level. She has also shown leadership and interpersonal skills that are necessary for productivity in a multidisciplinary field.

If the applicant's first language is not English, please evaluate her/his proficiency to read, write, and speak English. _____

N/A

Evaluator's signature Thomas Gilbert

12-10-2007

Evaluators: Please feel free to add information about your own educational and professional background if you feel that such information will enhance our understanding of your evaluation.

I graduated with my undergraduate degree from the same Department as Ms. Snyder in 1998 and trained with many of the same Professors. Since 1998, I completed a PhD in Bioengineering at the University of Pittsburgh, working with Stephen Badylak, Michael Sacks, and Savio Woo among others. At the time of my graduation, I had published 15 manuscripts in topics ranging from highly biological phenomena to rigorous modeling of biomechanical behavior of tissues. In many ways, Ms. Snyder is a superior student to what I was, and I expect that she will show similar if not greater productivity in her graduate career and beyond.

Please seal and sign the envelope.



University of Pittsburgh

McGowan Institute for Regenerative Medicine

Suite 200
100 Technology Drive
Pittsburgh, PA 15219-3130
412-235-5100
Fax: 412-235-5110
www.mirm.pitt.edu

November 20, 2007

To Whom It May Concern:

I am writing to recommend **Con** for your graduate program. I have served as an advisor to **Con** as a member of a group of students completing their Senior Research Design course. **Con** has emerged as an obvious leader on the team, directing the work and ensuring that milestones are achieved by putting in extra work. Professionally, she has received exposure to a wide variety of research techniques, including preparation of naturally derived scaffolds and production of ferrofluids. **Con**'s primary focus has been on the passive diffusion of magnetic nanoparticles through various forms of tissue scaffolds. Her objective is to functionalize the particles so that they can be specifically bound to the scaffold to allow for tracking of degradation, mechanical loading, and other parameters important to tissue remodeling in vivo. Through her work, she has demonstrated independent thought and execution. Coupled with her academic credentials and other varied professional experience, **Con** is positioned to make an important impact on her desired field of study.

I recommend **Con** for your program without hesitation. Please feel free to contact me by email at gilberttw@upmc.edu or by phone at (412) 235-5141 if you have any additional questions.

Best regards,

A handwritten signature in cursive script that reads "Thomas W. Gilbert".

Thomas W Gilbert, PhD
Research Assistant Professor
McGowan Institute for Regenerative Medicine
Departments of Surgery and Bioengineering
University of Pittsburgh
Pittsburgh, PA 15219

MIT Evaluation for Graduate Admission

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Name: Confidential
last name first middle

Applying for admission in the department of Health Sciences and Technology

for the ultimate degree of Ph.D. area of research MEMP

for the term beginning in September 2008 email Confidential

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Applicant's signature: Confidential date _____

Part 2 To be completed by evaluator

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Evaluator's name: David Laughlin Title ALCOA Professor

Address Carnegie Mellon University Pittsburgh PA 15213 USA

email laughlin@cmu.edu Date 11-14-2007

School or company Carnegie Mellon University Telephone number 412.268.2706

In what capacity do you know the applicant? as a student

How long have you known the applicant? ~ 3 years

How does this applicant compare with his or her peer group in academic ability?

- Truly exceptional *equivalent to the very best you have known - a person who, in your experience, appears only every few years* Outstanding *comparable to the best student in a current class* Well above average *top 25%* Above average *demonstrated high ability* Average *able to complete work to the Ph.D.* Below average *lower 50%* Inadequate opportunity to observe

In your opinion, how would this student compare to other students in the graduate program at MIT?

- Truly exceptional Outstanding Well above average Above average Average Below average Inadequate opportunity to observe

Please give the applicant's relative standing in your department (e.g., 7th in 89) I believe she is 1

(continue on reverse side)

Personal evaluation of the applicant. What particularly qualifies this student for study at MIT? Information about accomplishments in research or independent projects will be particularly helpful. If you know of other students who have entered MIT from your institution, a comparison will be especially valuable. If you have any reason to believe that the applicant should not be considered, please explain.

I believe she is better than the recent students we sent to MIT that worked in Prof. Carter's group.

Multiple horizontal lines for writing the evaluation.

If the applicant's first language is not English, please evaluate her/his proficiency to read, write, and speak English.

Horizontal line for writing the English proficiency evaluation.

Evaluator's signature David Laughlin 11-14-2007

Evaluators: Please feel free to add information about your own educational and professional background if you feel that such information will enhance our understanding of your evaluation.

Multiple horizontal lines for providing additional background information.

Please seal and sign the envelope.

Carnegie Mellon

Department of Materials Science
and Engineering
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213-3890
Email dl0p@andrew.cmu.edu
Phone 412-268-2706
Fax 412-268-3113

November 14, 2007

This letter is written in enthusiastic support of the application of [Con] to Your Graduate Program:

[Con] is a senior in the Department of Materials Science and Engineering at Carnegie Mellon University. I have known her for three years. I am the ALCOA Professor of Physical Metallurgy in that department where I have taught for thirty four years. During that time I have seen about 750 undergraduate students. [Con] is in the top 1% of these students.

First let me comment on [Con]'s academic career. To say the least it has been stellar! She has the highest grade point average possible, namely a 4.0. However it is her breadth of background that is amazing: from modeling and simulation to hands on research; from research on steel to research on microcatheters. Furthermore her work spans the Engineering College from Materials to Bio-engineering and also includes a bit of Solid State Physics. I taught her in the Spring of 2007 in an upper level course on Magnetic Materials and she excelled in it, presenting a project at the end of the course that was of graduate level quality. Indeed, her depth of knowledge in fields related to her major is well beyond that of an undergraduate.

I believe that [Con] will do well wherever she goes to graduate school. She is one of those students who is great to teach since she is self motivated.

I highly recommend her to your program.

Sincerely

David E. Laughlin
ALCOA Professor



GRE

GRADUATE INSTITUTION REPORT OF SCORES

SCHOOL CODE: 3514
DEPT. CODE: 5199

LAST NAME: CONFIDENTIAL
 FIRST NAME:
 ADDRESS:

HGX

BIRTH DATE MO DAY YR	SOCIAL SECURITY NUMBER	SEX	MOST RECENTLY REPORTED		PRINT DATE
			TEST DATE	REGISTRATION NUMBER	
Confidential	229-49-7766	F	10/07	5789569	12/07/07

INSTITUTION CODE & NAME	DEPARTMENT CODE & NAME
3514 MASSACHUSETTS INST TECH	5199 COPY FOR ANY DEPARTMENT NOT LISTED

GENERAL TEST								ANALYTICAL WRITING/ WRITING ASSESSMENT*			
TEST DATE MMYY	VERBAL		QUANTITATIVE		ANALYTICAL WRITING		ANALYTICAL		TEST DATE MMYY	SCORE	% BELOW
	SCORE	% BELOW	SCORE	% BELOW	SCORE	% BELOW	SCORE	% BELOW			
10/07	640	91	790	92	5.5	88					
07/07	590	83	750	84	6.0	96					

NS: No Score. Indicates that no questions were answered in this section.

* Analytical Writing scores earned from the stand-alone administration and/or Writing Assessment scores earned between October 1, 2002, and December 31, 2003.

SUBJECT TEST						
TEST DATE MMYY	TEST NAME	SCORE	% BELOW	SUBSCORE NAME	SCORE	% BELOW