NOMINATION FORM FOR OUTSTANDING PHD GRADUATE

COLLEGE OF ENGINEERING AND COMPUTING SUMMER 2015

PURPOSE

The Outstanding Doctoral Graduate is selected through a college wide competition. This award recognizes a student's academic **EXCELLENCY** and **EXEMPLARY SERVICE** to his or her department while pursuing the doctoral degree.

- The Outstanding Ph. D. Graduate Award is presented to one student.
- The faculty of each department chooses a **nominee** for each major at the PhD Level.
- There may not be a nominee for each major every semester.
- There may not be a winner every semester.

CRITERIA

An **Outstanding Ph. D. Graduate** is a student with at least a 3.5 GPA, in all of Graduate Coursework **AND** has been very active in his/her

- Quality & Impact of research, including publications, patents, awards, and scholarships in national and international conferences, in journals, trade magazines, and similar forums. The publications should be limited to those produce while at FIU.
- Presentations at conferences: research presentations at national or international meetings. The presentations should be limited to those made while at FIU.
- Professional societies: an officer, or a very active member not just a member;
- Departmental activities: has supported the department activities such as E-Week Activities, represented the department in E-Week Activities at the college level, part of recruitment team / visits to High schools, technical competitions, and so forth.
- College activities: part of the Ambassadors Team, the recruitment team, etc.
- Local community: Mentoring, habitat for Humanity, etc.
- Mentorship to undergraduate and graduate Master's students: has been an active mentor to one or more undergraduate students, or has mentored high school students.

The Graduate Program Directors and Associate Dean for Research and Graduate Studies will evaluate the student's achievement under the framework of the **duties assigned**, and realizing that these nominees are Graduate students who are expected to have a high GPA. The **distinguishing traits reside in the professional production and in the service**.

At the ceremony, an excerpt of the student's accomplishments will be read based on the

- 1. Nominator Additional Comments, and
- 2. Letter of support from department chair

CHECK LIST FOR NOMINATOR

Part A Completed
Part B Completed
Nominator's Additional Comments (optional)
Part C Completed
Copy of students unofficial transcripts
Letter of support from department chair
Student will graduate this semester
Student will be present at the ceremony

NOMINATION FORM FOR OUTSTANDING PHD GRADUATE

COLLEGE OF ENGINEERING AND COMPUTING

Student Name: Yinchen Song	Panther ID: <u>3009863</u>			
FIU Graduate GPA: <u>3.93</u> (GPA ≥ 3.5)	Email: _ysong006@fiu.edu			
Department: X Biomedical Mechanical & Materials	Civil & Environmental Electrical & Computer SCIS			
Major: Ph D in X Biomedical (BME) Civil (CE) Materials (Mat) Mechanical (ME)	Computer Science (CS) Electrical (EE)			
PART A	: Dissertation Work			
Dissertation Title: Intraoperative guidance	for pediatric brain surgery based on optical techniques			
Major Professor: Dr. Wei-Chiang Lin and	Dr. Jorge J. Riera			

Dissertation Abstract:

For most of the patients with brain tumors and/or epilepsy, surgical resection of brain lesions, when applicable, remains as one of the optimal treatment options. The success of the surgery hinges on accurate demarcation of neoplastic and epileptogenic brain tissue. The primary goal of this PhD dissertation is to demonstrate the feasibility of using various optical techniques in conjunction with sophisticated signal processing algorithms to differentiate brain tumor and epileptogenic cortex from normal brain tissue intraoperatively.

In this dissertation, a new tissue differentiation algorithm was developed to detect brain tumors in vivo using a probe-based diffuse reflectance spectroscopy system. The system as well as the algorithm were validated experimentally on 20 pediatric patients undergoing brain tumor surgery at Nicklaus Children's Hospital. Based on the three indicative parameters, which reflect hemodynamic and structural characteristics, the new algorithm was able to differentiate brain tumors from the normal brain with a very high accuracy.

The main drawbacks of the probe-based system were its high susceptibility to artifacts induced by hand motion and its interference to the surgical procedure. Therefore, a new optical measurement scheme and its companion spectral interpretation algorithm were devised. The new measurement scheme was evaluated both theoretically with Monte Carlo simulation and experimentally using optical phantoms, which confirms the system is capable of consistently acquiring total diffuse reflectance spectra and accurately converting them to the ratio of reduced scattering coefficient to absorption coefficient ($\mu_s'(\lambda)/\mu_a(\lambda)$). The spectral interpretation algorithm for $\mu_s'(\lambda)/\mu_a(\lambda)$ was also validated based on Monte Carlo simulation. In addition, it has been demonstrated that the new measurement scheme and the spectral interpretation algorithm together are capable of detecting significant hemodynamic and scattering variations from the Wistar rats' somatosensory cortex under forepaw stimulation.

Finally, the feasibility of using dynamic intrinsic optical imaging to distinguish epileptogenic and normal cortex was validated in an in vivo study involving 11 pediatric patients with intractable epilepsy. Novel data analysis methods were devised and applied to the data from the study; identification of the epileptogenic cortex was achieved with a high accuracy.

PART B: Student's Curricular and Extracurricular Activities

Provide the following information:

Student work in regards to

- 1. Publications: (limited to those produce while at FIU).
- Yinchen Song, Jorge J Riera, Sanjiv Bhatia, John Ragheb, Claudia Garcia, Alexander G. Weil, Prasanna Jayakar, Wei-Chiang Lin. "Intraoperative optical mapping of epileptogenic cortices in pediatric

- patients". PNAS. Under Review. 2015
- Yinchen Song, Jessica Ramella-Roman, Mohammad Soltani, Wei-Chiang Lin. "Determination of the optical properties of turbid media using total diffuse reflectance". Biomedical Optics Express. Under Review. 2015
- Yinchen Song, Rafael A. Torres, Jihye Bae, Abhay Deshmukh, Wei-Chiang Lin, Ying Zheng and Jorge J Riera. "Dysfunction of neuro-vascular/metabolic coupling in chronic focal epilepsy". IEEE Transaction on Biomedical Engineering. Under Revision. 2015
- Yinchen Song, Basavaraju Sanganahalli, Fahmeed Hyder, Wei-Chiang Lin, Jorge J Riera. "Distributions
 of irritative zones are related to individual alterations of resting-state networks in focal epilepsy". PLOS
 One. Accepted. 2015
- Jihye Bae, Abhay Deshmukh, Yinchen Song, Jorge J Riera. "Brain source imaging in rats with preclinical models of focal epilepsy using high resolution EEG recordings". JoVE, (100), e52700, (2015).
- Yinchen Song; Joasil, A.; Wei-Chiang Lin, "Optical Spectroscopy for In Vivo Estimation of Hemodynamics and Structural Properties of the Brain," Biomedical Engineering Conference (SBEC), 2013 29th Southern, 107-108 (2013).
- Nitin, Yadav, Sanjiv Bhatia, John Ragheb, Yinchen Song, Adrian Romero, Sanghoon Oh, Wei-Chiang Lin, "Evaluating and improving the quality of time-dependent, diffuse reflectance spectroscopic signals measured from in vivo brain during craniotomy", Medical Engineering & Physics, May. 2013.
- Yinchen Song, Po-Ching Chen, Sanjiv Bhatia, John Ragheb, Prasanna Jayakar, Wei-Chiang Lin, "Low-frequency pathophysiological characteristics of pediatric epileptic cortex during the interictal period detected using a dual-wavelength imaging system", Proc. SPIE 8317, 83170V (2012).
 - 2. Presentations at conferences: (limited to those made while at FIU).
- September 15-16, 2011. NIH Workshop 2011 -- 7th Inter-Institute Workshop on Optical Diagnostic and Biophotonic Methods from Bench to Bedside, Bethesda, Maryland.

Yinchen Song, Po-Ching Chen, John Ragheb, Sanjiv Bhatia, Prasanna Jayakar, Wei-Chiang Lin "A novel dual-modality optical system for intraoperative neoplastic and epileptic brain detection" Poster Session 1, NIH100-44, Sep 15, 6:00—8:00 pm

• February 4-9, 2012. SPIE Medical Imaging – Biomedical Applications in Molecular, Structural, and Functional Imaging (Conference 8317), San Diego, California

Yinchen Song, Po-Ching Chen, Sanjiv Bhatia, John Ragheb, Prasanna Jayakar, Wei-Chiang Lin "Low-frequency pathophysiological characteristics of pediatric epileptic cortex during the interictal period detected using a dual-wavelength imaging system" Session 6, 8317-30, Feb 6, 10:50—11:10 am

 April 29 – May 2, 2012. Biomedical Optics and 3-D Imaging: OSA Optics and Photonics Congress, Miami, Florida

Yinchen Song, Sanjiv Bhatia, John Ragheb, Prasanna Jayakar, Wei-Chiang Lin "Potential Use of Low-Frequency Oscillations of Cortical Hemodynamics in Pediatric Epilepsy Surgery" Brain Imaging (BSu2A.7), Apr 29, 11:45 am —12:00 pm

 April 17-19, 2013. Curing the Epilepsies 2013: Pathways Forward (Sponsored by National Institute of Neurological Disorders and Stroke), Bethesda, Maryland.

Yinchen Song, Jared Leichner, Sanjiv Bhatia, John Ragheb, Prasanna Jayakar, Jorge J Riera, Wei-Chiang Lin

"Hemodynamic Low-Frequency Oscillations May Locate Epileptic Brain Lesions"

- May 3-5, 2013. 29th Southern Biomedical Engineering Conference 2013, Miami, Florida Yinchen Song, Arnold Joasil, Wei-Chiang Lin
 "Optical Spectroscopy for In Vivo Estimation of Hemodynamic and Structural Properties of the Brain"
- May 3-5, 2013. 29th Southern Biomedical Engineering Conference 2013, Miami, Florida
 Andrea Charara, Yinchen Song, Racquel Aking, Wei-Chiang Lin, Jorge Riera "Effects of pilocarpine doses on a rat model of FCD epilepsy"
- October 26-29, 2013. 2013 American Academy of Pediatrics (AAP) National Conference and Exhibition,

Orlando, Florida

Madhuradhar Chegondi, Jun Sasaki, Sayed Naqvi, Jared Leichner, Yinchen Song, Wei-Chiang Lin and Balagangadhar Totapally

"Heart Rate Variability in Children With Submersion Injury: A Case Series"

 October 26-29, 2013. 2013 American Academy of Pediatrics (AAP) National Conference and Exhibition, Orlando, Florida

Jun Sasaki, Madhuradhar Chegondi, Jared Leichner, Yinchen Song, Wei-Chiang Lin and Balagangadhar Totapally

"Heart Rate Variability in Patients With Diabetic Ketoacidosis in a Pediatric Intensive Care Unit"

- December 6, 2013. 22nd Neuroscience Research Day at University of Miami, Miami, Florida Yinchen Song, Basavaraju G Sanganahalli, Fahmeed Hyder, Wei-Chiang Lin and Jorge J. Riera "A Simultaneous fMRI and EEG Study of the Interictal Epileptiform Discharges in a "Double-hit" Rat Model of Focal Cortical Dysplasia"
- December 6, 2013. 22nd Neuroscience Research Day at University of Miami, Miami, Florida Rafael A. Torres*, Yinchen Song*, Wei-Chiang Lin and Jorge J. Riera "A Neurovascular Decoupling during Seizures in Rats with Focal Epilepsy"
- December 6, 2013. 22nd Neuroscience Research Day at University of Miami, Miami, Florida Abhay Deshmukh, Jihye Bae, Yinchen Song, Jorge J. Riera
 "A Methodology to Perform Brain Source Imaging in Rats with Focal Epilepsy"
- December 6, 2013. 22nd Neuroscience Research Day at University of Miami, Miami, Florida Andrea Charara, Winnie Medina, Janet Villafranca, Abhay Deshmukh, Yinchen Song, Jared Leichner, Wei-Chiang Lin, Jorge J. Riera
 "Effects of Pilocarpine Doses on a Rat Model of TLE"
- June 8-12, 2014. Organization for Human Brain Mapping (OHBM)'s 2014 Annual Meeting, Hamburg, Germany

Yinchen Song, Basavaraju Sanganahalli, Fahmeed Hyder, Wei-Chiang Lin, Jorge Riera Diaz "An fMRI and EEG Study of Epileptogenesis in a Rat Model of Focal Cortical Dysplasia"

 June 8-12, 2014. Organization for Human Brain Mapping (OHBM)'s 2014 Annual Meeting, Hamburg, Germany

Jihye Bae, Abhay Deshmukh, Yinchen Song, Jorge Riera Diaz

"Brain source analysis of Interictal epileptiform discharges using a preclinical model of focal epilepsy"

- November 13-14, 2014. IEEE EMBS BRAIN Grand Challenges Conference, Washington, DC, USA Yinchen Song, Rafael A. Torres, Jihye Bae, Abhay Deshmukh, Wei-Chiang Lin and Jorge J. Riera "Electrophysiological and hemodynamic signatures of epileptic neocortex in rats with focal cortical dysplasia: Implications on epilepsy surgery"
- November 15-19, 2014. Society for Neuroscience 2014 Annual Meeting, Washington, DC, USA Yinchen Song, Basavaraju G Sanganahalli, Fahmeed Hyder, Wei-Chiang Lin, Jorge J Riera "Activation and deactivation in blood-oxygen-level dependent signals on a preclinical model of focal epilepsy"
- November 15-19, 2014. Society for Neuroscience 2014 Annual Meeting, Washington, DC, USA Rafael A. Torres*, Yinchen Song*, Wei-Chiang Lin, and Jorge J. Riera
 "A Neurovascular Decoupling during Ictal Activity in Rats with Focal Epilepsy"
- November 15-19, 2014. Society for Neuroscience 2014 Annual Meeting, Washington, DC, USA Jihye Bae, Yinchen Song, Abhay Deshmukh, Jorge J Riera
 "An EEG methodology to localize the irritative cortices in a preclinical model of focal epilepsy"
 - 3. Mentorship to undergraduate students (list name of students mentored)

• Undergraduate students:

Lashawnta Goss

Rafael A. Torres

Sarahy Garcia

Yisel Frometa

Javier How

Janet Villafranca

Maria Fernanda Pena

• Graduate student:

Arnold Joasil

Abhay Deshmukh

4. Duties assigned: as part of TA/RA

TA and RA

5. Honor & Awards

FIU Graduate Student Association Travel Award	Feb 2012
2nd Place (Biomedical Session) in 2012 Graduate Scholarly Forum at FIU	Mar 2012
2nd Place (Education, Environment & Engineering Poster Session) in 2013 Graduate Scholarly	Mar 2013
Forum at FIU	
Travel Award from National Institute of Neurological Disorders & Stroke (NINDS)	Apr 2013
1st Place in 3rd Annual Graduate Research Day for Poster Presentation at FIU-BME	Sep 2013
1st Place (Engineering Oral Presentations) in 2014 Graduate Scholarly Forum at FIU	Apr 2014
Trainee Abstract Travel Award for the 2014 OHBM Annual Meeting in Hamburg, Germany	Jun 2014
BRAIN Young Investigator Award - IEEE EMBS BRAIN Grand Challenges Conference,	Nov 2014
Washington, DC	
2nd Place (Engineering Poster Presentation) in 2015 Graduate Scholarly Forum at FIU	Apr 2015

6. Fellowship & Scholarships

N/A

Student involvement in

7. Professional societies

AEMB (active member)

Chinese Students and Scholars Association at FIU (Vice President, Secretary)

8. Departmental activities

Graduate Research Day Undergraduate Research Day Year of Light Mini-symposium eMerge Americas 2015 Undergraduate Senior Design

9. College activities

Engineering Expo

30th Anniversary Celebration

10. Local community

Volunteer at BioFlorida Conference 2012, Miami, FL, Oct 7th-9th, 2012

Return all materials, by email, to: Dr. Kang Yen at yenk@fiu.edu and cc Ms. Laura Gim

Nominator Additional Comments (preferably the Major Professor)

11. Additional Comments: unique stories, special situation that makes the students accomplishment even more remarkable.

PART C: Additional Documentation

Attach a:

- 1. Copy of students unofficial transcripts
- 2. Letter of support from department chair

PART D: Electronic Submission

- PDF file of this completed form.
- PDF of Letter of support from Department Chair
- Electronic version of **Transcripts** (PDF)



305-348-6950 Fax: 305-348-6954 Email: bmeinfo@fiu.edu http://www.bme.fiu.edu

July 14, 2015

Dear Awards Committee Members,

I would like to very strongly recommend Yinchen Song for the Outstanding PhD student in the College of Engineering and Computing for the Summer 2015 semester. I have known Yinchen since he joined the PhD program in the Department of Biomedical Engineering at FIU, his PhD research is jointly supervised by Dr. Jorge Riera from the Department of Biomedical Engineering and me.

During his tenure as a doctoral student, Yinchen has succeeded in both academic pursuits and professional development. His PhD research focuses on developing optical techniques for *in vivo* brain studies. To date his research work has led to the preparation of six manuscripts for peer-reviewed journals, two conference proceedings, one patent application, and more than 15 presentations in regional/national scientific conferences, which is an outstanding accomplishment at this stage of his career. Moreover, Yinchen received the prestigious Young Investigator Award in the BRAIN Grand Challenge Conference 2014, based on his research work in modeling neuro-vascular/metabolic coupling during ictal activity. This award also led to an invitation to submit the above mentioned research work to the BRAIN Special Issue of IEEE Transactions on Biomedical Engineering. Yinchen is the first author of this manuscript because he made significant contribution to the study design, the execution of the experiments, the analysis of the experimental data, and the writing of the manuscript. This research work would not receive so much attention and recognition from the national and international research community without Yinchen's effort.

Through the discussions about his PhD research work, Yinchen repeatedly demonstrates his ability to produce creative solutions for challenging engineering problems. He also takes his assignments, research related or not, very seriously and always delivers high-quality results in a timely fashion. These traits are very hard to find in today's graduate students. Because of his intellectual abilities and personal qualities, I am very confident that Yinchen will become an excellent biomedical engineering researcher in the future.

I hope the information provided in this letter is sufficient to allow you to give favorable consideration to Yinchen's application. Please let me know if you need any further information.

Sincerely,

Wei-Chiang Lin, Ph.D.

wer C

Acting Chair and Associate Professor

3.00

18.00

18.00

3.00 A-

11.010

70.020

Report Results

Return

BME

UGRD and GRAD Record Unofficial

Name : Yinchen Song

Student ID: 3009863

Address : 366 NW 114th Avenue Apt 101

Miami, FL 33172-4752

United States

Print Date : 2015-07-01

5560

Florida International University

-	-	-	-	-	Beginning	of	Graduate	Record	-	-	-	-	-

FALL 2009

Program : Engineering - Doctoral

Plan : Biomedical Engineering - PHD Major:

BME Optics

BME	6705	Nonlin Sys Lif	e Sci	3.00	3.00 A	12.000
EEE	6285	Biosig Proc I		3.00	3.00 A	12.000
	TERM GPA :	3.890	TERM TOTALS :	9.00	9.00	35.010

CUM GPA: 3.890 CUM TOTALS: 9.00 9.00 35.010

Good Standing

SPR 2010

Program : Engineering - Doctoral

Plan : Biomedical Engineering - PHD Major:

BME	6330	Cell/Tissue Eng I	3.00	3.00 A-	11.010
BME	6563	Optical Spect	3.00	3.00 A	12.000
PCB	6027	Mol & Cell Bio II	3.00	3.00 A	12.000
	TERM GPA :	3.890 TERM TOTALS:	9.00	9.00	35.010

: 3.890 Good Standing

SUM 2010

CUM TOTALS:

Program : Engineering - Doctoral

CUM GPA:

Plan : Biomedical Engineering - PHD Major:

BME 6910 Supervised Research 6.00 6.00 P

TERM GPA: 0.000 TERM TOTALS: 6.00 6.00 0.000

CUM GPA: 3.890 CUM TOTALS: 24.00 24.00 70.020

Good Standing

FALL 2010

Program : Engineering

Plan : Biomedical Engineering - PhD Major

EEL 5820 Image Processing 3.00 3.00 A- 11.010
EEL 6836 Comp Vis Brain Elec 3.00 3.00 A 12.000

7/1/2015		Unofficial Transcrip	ots	
STA	5126 Fund. Design Of Exp. TERM GPA: 3.890 TERM TOTALS	3.00 5: 9.00	3.00 A 9.00	12.000 35.010
	CUM GPA: 3.890 CUM TOTALS Good Standing	33.00	33.00	105.030
	SPR 2011			
Program		•		
Plan	: Biomedical Engineering - PhD Major			
BME	6505C Med Imag Instr	3.00	3.00 A	12.000
BME	6564 Optical Imaging	3.00	3.00 A	12.000
BME	6716 Math Model of Cells TERM GPA: 3.890 TERM TOTALS	3.00 5: 9.00	3.00 A- 9.00	11.010 35.010
	TERM GIA . 5.050 TERM TOTALS	5. 5.00	2.00	33.010
	CUM GPA: 3.890 CUM TOTALS Good Standing	42.00	42.00	140.040
	SUM 2011	L		
Program				
Plan	: Biomedical Engineering - PhD Major			
BME	6019 Clin Res Experience	1.00	1.00 A	4.000
BME Gra	6910 Supervised Research ding Basis: Pass/Fail	5.00	5.00 P	
	TERM GPA : 4.000 TERM TOTALS	6.00	6.00	4.000
	CUM GPA: 3.890 CUM TOTALS Good Standing	48.00	48.00	144.040
	FALL 201	.1		
•	: Engineering			
Plan	: Biomedical Engineering - PhD Major	3.00	2 00 4	42.000
BME EEL	5105 Biomaterial Science 5543 Random Signal Princ	3.00 3.00	3.00 A 3.00 A	12.000 12.000
PHZ	6255 Molecular Biophys	3.00	3.00 A	12.000
	TERM GPA : 4.000 TERM TOTALS		9.00	36.000
	CUM GPA: 3.910 CUM TOTALS Good Standing	57.00	57.00	180.040
	SPR 2012)		
Program				
Plan	: Biomedical Engineering - PhD Major			
BME	6532 Molecular Imaging	3.00	3.00 A	12.000
BME	6910 Supervised Research	3.00	3.00 P	
BSC Gra	ding Basis: Pass/Fail 6926 Workshop Biology	2.00	2.00 A	8.000
	rse Topic(s): Electrophysiology	2.00	2.00 A	0.000
BSC	6926 Workshop Biology	1.00	1.00 A	4.000
Cou	rse Topic(s): Practical Flow Cytometry		0.00	24 000
	TERM GPA: 4.000 TERM TOTALS	5: 9.00	9.00	24.000

7/1/2015 Unofficial Transcripts

CUM GPA: 3.920 CUM TOTALS: 66.00 66.00 204.040 Good Standing

SUM 2012

Program : Engineering

Plan : Biomedical Engineering - PhD Major

BME 7980 Ph.D. Dissertation 9.00 9.00 P

Grading Basis: Pass/Fail

TERM GPA: 0.000 TERM TOTALS: 9.00 9.00 0.000

CUM GPA: 3.920 CUM TOTALS: 75.00 75.00 204.040

Good Standing

FALL 2012

Program : Engineering

Plan : Biomedical Engineering - PhD Major

BME 7980 Ph.D. Dissertation 9.00 9.00 P

Grading Basis: Pass/Fail

TERM GPA: 0.000 TERM TOTALS: 9.00 9.00 0.000

CUM GPA: 3.920 CUM TOTALS: 84.00 84.00 204.040

Good Standing

SPR 2013

Program : Engineering

Plan : Biomedical Engineering - PhD Major

BME 6993 Electrophysiology Phenom 3.00 3.00 A 12.000

BME 7980 Ph.D. Dissertation 6.00 6.00 P

Grading Basis: Pass/Fail

TERM GPA: 4.000 TERM TOTALS: 9.00 9.00 12.000

CUM GPA: 3.930 CUM TOTALS: 93.00 93.00 216.040

Good Standing

SUM 2013

Program : Engineering

Plan : Biomedical Engineering - PhD Major

BME 7980 Ph.D. Dissertation 6.00 6.00 P

Grading Basis: Pass/Fail

TERM GPA: 0.000 TERM TOTALS: 6.00 6.00 0.000

CUM GPA: 3.930 CUM TOTALS: 99.00 99.00 216.040

Good Standing

FALL 2013

Program : Engineering

Plan : Biomedical Engineering - PhD Major

BME 7980 Ph.D. Dissertation 9.00 9.00 P

Grading Basis: Pass/Fail

TERM GPA : 0.000 TERM TOTALS : 9.00 9.00 0.000

7/1/2015 Unofficial Transcripts

CUM GPA: 3.930 CUM TOTALS: 108.00 108.00 216.040

Good Standing

SPR 2014

Program : Engineering

Plan : Biomedical Engineering - PhD Major

BME 7980 Ph.D. Dissertation 9.00 9.00 P

Grading Basis: Pass/Fail

TERM GPA: 0.000 TERM TOTALS: 9.00 9.00 0.000

CUM GPA: 3.930 CUM TOTALS: 117.00 117.00 216.040

Good Standing

SUM 2014

Program : Engineering

Plan : Biomedical Engineering - PhD Major

BME 7980 Ph.D. Dissertation 6.00 6.00 P

Grading Basis: Pass/Fail

TERM GPA: 0.000 TERM TOTALS: 6.00 6.00 0.000

CUM GPA: 3.930 CUM TOTALS: 123.00 123.00 216.040

Good Standing

FALL 2014

Program : Engineering

Plan : Biomedical Engineering - PhD Major

BME 7980 Ph.D. Dissertation 9.00 9.00 P

Grading Basis: Pass/Fail

TERM GPA: 0.000 TERM TOTALS: 9.00 9.00 0.000

CUM GPA: 3.930 CUM TOTALS: 132.00 132.00 216.040

Good Standing

SPR 2015

Program : Engineering

Plan : Biomedical Engineering - PhD Major

BME 7980 Ph.D. Dissertation 9.00 9.00 P

Grading Basis: Pass/Fail

TERM GPA: 0.000 TERM TOTALS: 9.00 9.00 0.000

CUM GPA: 3.930 CUM TOTALS: 141.00 141.00 216.040

Good Standing

SUM 2015

Program : Engineering

Plan : Biomedical Engineering - PhD Major

BME 6936 Biomed Eng Seminar

Grading Basis: Pass/Fail

BME 7980 Ph.D. Dissertation 6.00

Grading Basis: Pass/Fail

TERM GPA: 0.000 TERM TOTALS: 0.00 0.00 0.000

CUM GPA: 3.930 CUM TOTALS: 141.00 141.00 216.040

Graduate Career Totals

CUM GPA: 3.930 CUM TOTALS: 141.00 141.00 216.040

Return