

Application Details

Manage Application: CTL/BP Junior Faculty Teaching Excellence Award - 2018

Award Cycle: 2018

Internal Submission Deadline: Friday, February 2, 2018

Application Title: Torres

Application ID: 002200

Nominator's First Name: Jung

Nominator's Last Name: Choi

Nominator's Title: Director of Teaching Effectiveness

Nominator's Primary Organization: School of Biological Sciences

Nominator's Email Address: jung.choi@biology.gatech.edu

Nominator's Phone Number: (404)-894-8423

Nominee's First Name: Matthew

Nominee's Last Name: Torres

Nominee's Title: Assistant Professor

Primary Organization(s): Biological Sciences

Nominee's Email Address: mtorres35@gatech.edu

Submission Date: Wednesday, January 31, 2018



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January 29, 2018

Dr. Joyce Weinsheimer
Center for Teaching and Learning

Re: Nomination of Dr. Matthew Torres

Dear Joyce and members of the selection committee,

On behalf of the School of Biological Sciences, I am truly pleased to nominate Dr. Matthew Torres, Assistant Professor, for the CETL/BP Junior Faculty Teaching Excellence Award. Matt has been teaching at Georgia Tech since Fall 2012, in Biol 2354 Honors Genetics and Biol 8803 Frontiers in Molecular and Cellular Biology. In Spring 2017 he developed and taught a new course, Proteomics: Technologies and Applications.

As the Director of Teaching Effectiveness for the School of Biosciences, I coordinated peer review of Matt's teaching and sat in on his Honors Genetics class. Early in the semester, he uses the few minutes after he has fully set up and before the official class start time (5 min after the hour), to learn student names. He projects the day's learning objectives as the first slide that student see as they arrive. He employs a variety of teaching methods, from paper worksheets, short videos to show dynamic cellular processes, and small group activities. He assigns homework to build relevant skills, such as finding and summarizing research papers on a particular topic. His investment in learning student names pays off as he calls upon students by name to report out on the homework assignments, and to discuss answers to questions and problems he has posed to the class. He does this regularly, and in a casual-friendly way, so students are not intimidated and know this is just part of his expectations of them. His classes feel like a conversation rather than a lecture. Students stay engaged and attentive throughout an 80-minute class session.

Student feedback on the CIOS clearly show that Matt's methods work for them. Although Honors Genetics is a demanding subject taught with high expectations, in Fall 2016 Matt received scores on the 4.7-4.9 range for clarity, communication, respect for students, enthusiasm, stimulates interest, and overall effectiveness. His CIOS scores for his graduate level course teaching was even higher mostly 4.8-4.9.

His classroom teaching practices clearly show that he is willing to learn about evidenced-based pedagogies and try them. He has attended CTL workshops on course design and workshops given to Biosciences faculty by Linda Green and Chrissy Spencer on scientific teaching and active learning.

Matt is also a wonderful mentor to both graduate and undergraduate students in his research

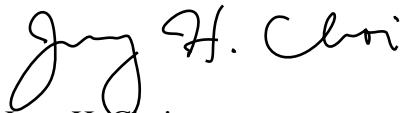
laboratory. He invests time and attention to each of his research mentees. He strives to coach and develop skills that will help them throughout their professional careers, such as written and spoken scientific communication, self-reflection, and how to confront failure productively. These are critical, life-enhancing skills.

I have seen, as the director of the Professional Science Masters in Bioinformatics program, how MS Bioinformatics students achieve success in his lab. He usually takes up to 2 students at a time, again reflecting his philosophy of personal attention and investment in student learning. He puts them on research projects that he thinks will produce publishable results, even though the MS Bioinformatics program has no thesis. In fact, in two of three cases thus far, the students have published some of their work in reputable journals before graduation! These students gain valuable experience and go on to PhD programs in bioinformatics or to prestigious jobs in genomics laboratories and companies.

Finally, Matt's teaching extends beyond the Georgia Tech campus. He and his students have engaged in K-12 outreach in various ways, such as STEM Night, and by mentoring high school students from the Gwinnett School of Math Science and Technology.

Matt is dedicated, caring, thoughtful and highly successful in both teaching and research. He is amply deserving of the CETL/BP Junior Faculty Teaching Excellence award.

Sincerely,

A handwritten signature in black ink that reads "Jung H. Choi". The signature is fluid and cursive, with the first name "Jung" being the most prominent.

Jung H. Choi

Director of Teaching Effectiveness, School of Biosciences

TEACHING REFLECTION

I knew that I was a scientist from a young age – but I never thought I was a teacher. In fact, through my post-undergraduate years as a research intern at Lawrence Livermore National Lab, my years as a research associate in industrial R&D, and throughout my graduate and postdoctoral training, I thought only about research and what it would take for me to become a professional scientist. However, I have also always known that I enjoy people. I enjoy interacting with people. I enjoy conversing with and even entertaining people (*I played in a band for several years during my postdoc*). Most of all, I enjoy helping people. My experience in teaching and research at Georgia Tech has made me recognize – indeed, embrace – the fact that first and foremost, I am a teacher.

My lab in the School of Biological Sciences at Georgia Tech studies the chemistry and biology of proteins involved in the signal transduction of hormones, neurotransmitters, and photons – fundamental processes that control the behavior of single-cell yeast to complex multicellular organisms including humans. To study the control mechanisms underlying these systems, we capitalize on three major areas of research, including: Cell biology and genetics, mass spectrometry-based proteomics, and bioinformatics. No one area operates independently, and thus, communication and mutual respect between students is important to facilitate the lab's progress. My classroom teaching, similar to my lab, consists of several overlapping areas, including genetics, proteomics, and bioinformatics.

My general philosophy and style of teaching reflects the approach that I take for my own self-improvement as a teacher, scientist, and faculty member. Just as I **invest in myself**, I **invest in my students**: those in my lab, those in my classroom, and those whom have begun their own journey towards independence. I strive to help them in any way that I can, and in any way that they need to fulfill their potential. I **respect the learning process** and recognize that learning takes time and self-reflection. Confidence in our abilities can only come from knowing ourselves and how we learn. Finally, I try to **visualize the “bigger picture”** and attempt to teach students in a way that enables them to do the same. Some of the greatest discoveries come from those who recognize the historical, social, or global context of their work, and allow this to sustain their impactful effort throughout life.

Investment in yourself; investment in others – Leadership by example. As the PI of my lab or the professor in my classroom – I always try to lead by example. *I strive to invest in myself because I know that others are investing in me*, and I strive to give students a sense that this is true for them as well. Much of my own personal growth can be traced back to several instances when my mentors invested their belief in me, even before I knew how to invest in myself. Thus, I also make a conscious effort to convey my sincere belief in the potential of students to do great things. Through one-on-one and lab-wide meetings, I encourage critical thinking, scientific communication (both written and verbal), and the asking and answering of questions with sincerity and depth. In so doing, I hope to provide an example of what it means to be *mentally invested* in oneself and one's project goals. When students are ready, I encourage them to “take charge” and invest in themselves through opportunities both in and outside of the classroom. Our efforts in this regard have been rewarded in many cases, as evidenced by several examples of Torres Lab student success (see impact on student learning).

Respect for the learning process. I've learned that students can be their own worst enemy if they fail to recognize that understanding is a process – not a destination. Failure to recognize this can lead to frustration and hopelessness, which are counterproductive to the learning process.

This is challenging to overcome because respect for the learning process is not inherent, but rather, learned through self-reflection, analysis, and good mentorship. Indeed, Science is hard. In a research lab such as mine, it is quite common that newer students are subject to several experimental failures, especially in the early stages of their career. Compounding the problem is the fact that students come from well-controlled scholastic environments where success is more clearly defined by testing and grades. Thus, I strive to empower my students with respect for the learning process by teaching them to expect failure, and prepare to face it “head on”. Experimental science is truly perfect for conveying this lesson since scientific progress demands that we overcome our failures. Thus, before my students run their experiments, I teach them to mentally prepare “Plan B” and “Plan C” scenarios in case the hypothesis they are testing is not supported by the results from the “Plan A” experiment. With practice, this exercise becomes second nature and, when achieved perfectly, enables the student to mentally explore several possible outcomes for an experiment. Once mastered, students are effectively playing a mental game of chess to strategize their attack of any given problem. I’m sure this approach will be helpful to them in other aspects of life as well.

Visualizing the bigger picture. The nature of scientific research is such that “seeing the forest for the trees” is not always easy. In fact, it is impossible if one does not recognize that such a problem exists. Undergraduates, graduate students, postdocs and even full-blown professors can easily fall into such a trap, whereby they fail to visualize the bigger picture and their place in it. Throughout my career, I have strived to visualize the bigger picture. As an assistant professor, I try to make my students aware of this idea by providing historical, social, and global context to our own research or to the topic of discussion in the classroom. In the lab, the best way I have found to train students in visualizing the bigger picture is by giving them opportunities to communicate their science through writing and presentation. Writing poster abstracts or article introductions (for which I provide guidance) require that students convey the relevance of their work to the community at large, and give them the opportunity to practice *visualization*. Verbally communicating scientific concepts to high school and K-12 students – efforts that we frequently make in my lab – provides another meaningful way to hone our visualization of the bigger picture. In the classroom, one of my favorite aspects of teaching undergraduates is to give them historical context surrounding major eras of scientific discovery. For example, when discussing the invention of PCR, and DNA sequencing – which came about in the early 1970’s – I like to start by sharing some of the pervading social phenomena of that time period, such as the release of the Eagles Greatest Hits album, Pink Floyd’s Dark Side of the Moon album, Roe vs. Wade, and Star Wars! We also discuss how these tools enabled further biotechnological advances, including CRISPR-Cas9, personalized genotyping, and more. Generally, I receive very positive feedback from students who feel invigorated by understanding the connection of text-book materials to real-world scenarios. This also helps to expand the perspective of more knowledgeable students in cases where the class knowledge level spans a wide range.

ILLUSTRATIONS OF TEACHING EXCELLENCE AND IMPACT ON STUDENT LEARNING.

Some formal examples of my commitment to teaching excellence and impact on student learning are reflected by the personal statements of students whom I have taught inside and outside the classroom (1); from the formally awarded efforts of my students at the local and national level (2); and through my contributions and awards in outreach, teaching, and citizenship (3). Selected examples from each category are shown below.

(1) Personal statements from students whom I have taught inside the classroom. I have taught three courses since arriving at Georgia Tech in 2012: (BIOL 2354) *Honors Genetics*, which consists mainly of sophomore and junior level students; (BIOL 8803) *Frontiers in Molecular and Cellular Biology*, which consists of ~8-12 graduate level students from departments across COS that I taught in 2015; and (BIOL 4803/8803) *Proteomics: Technologies and Applications*, which I have created and have taught once in SP2017 (Note: This course is still in development and there are several aspects I will tweak in the next offering based on student feedback).

BIOL 2354 Honors Genetics, taught 2012-present

"Dr. Torres, you did an excellent job with communicating the required material for us. I had a great time in your class and definitely learned a lot. Your enthusiasm for the topic also made me interested in research in these areas. You are an excellent teacher!"

"I felt like Professor Torres was very approachable and clearly passionate about the subject. Not only was he always available, but he also wanted to share his knowledge and tried his hardest to make everything engaging."

"Dr. Torres really cares for his students and was extremely helpful when you'd go to meet with him to discuss material and/or grades."

"Dr. Torres is so enthusiastic about teaching and about his research and genetics in general. He very obviously cares so much about his students. It's comforting."

"I really appreciated how Dr. Torres took the time to go into detail in areas that students struggled with and to always make sure everyone felt comfortable with the material."

"He was so caring about his students and really made the classroom a more personal environment."

"Dr. Torres was an excellent professor who was able to make even the most difficult concepts readily understandable. His passion was evident every day in class!"

"He is an incredible professor, his lectures are clear, and he is great at explaining very very complex systems. He made the class interesting and I felt like I was actually learning something new overtime I walked out of his class. One of my favorite professors at Tech so far."

"Dr. Torres was awesome. He knows his stuff and he really made me excited about the class and the material. He admits when he doesn't know something and is always willing to do the research and spend time in class talking about it."

"He taught clearly and helped us go beyond the material in the textbook. He helped me learn more than most teachers and made the class enjoyable. He was also funny and cared about what we learned."

BIOL 8803 Frontiers in MCB, taught Fall 2015; (Note: I taught one of six 2-week modules)

"The only instructor where students stayed 30 minutes after class because the topic was so interesting. Provided a clear, gradual (from basic to advanced) explanation of mass spec techniques. Very enthusiastic."

"Prof. Torres is a very active and enthusiastic scientist! The topic he led us into was a little difficult for me to understand, but he helped us focus on the important things and let us participate in the discussion from different aspects. The papers were difficult to understand, but with certain guidance we did get to understand them. I really liked how Dr. Torres led us into active discussions."

BIOL 4803/8803 Proteomics: Technologies and Applications, taught Spring 2015

"I was able to learn a considerable amount about a subject that I always struggled with. At the beginning of the semester I considered my knowledge to be very weak when it came to mass spectrometry, but after the course, I no longer feel that way. This class helped me develop my critical thinking skills significantly. I can now think very deeply about proteomics. I have the foundations to be able to carry my knowledge from this course into my future endeavors. I liked that the course was discussion based and that we were exposed to a lot of the primary literature. Primary literature is so important and I wish I was exposed to more of it in my other courses!"

“Great professor, I really enjoyed his teaching style. One of the best I've had!”

“Dr. Torres had great passion and depth of knowledge for the subject. He is likely one of the most passionate lecturers that I have had. Dr. Torres stimulated my interest for the subject material and was super enthusiastic. He also knew exactly what to focus on and how to outline the course so that we would learn the material most efficiently. I liked how we went from protein biochemistry to mass spectrometry to bioinformatics.”

(2) Examples of student success that reflect impact outside the classroom. The success of my students and my own success are one in the same. We strive to maximize our potential as students, teachers, and global citizens. I take a very active role in preparing all of my students for success scientifically, personally, and professionally. Below are some examples wherein my students have been recognized for their achievements – through formal awards, the pursuit of higher education, and non-academic science-based career advancement.

Undergraduates (10 students trained to date) – Undergraduates have enriched their own careers, but also the careers of my graduate students, from whom they receive daily mentorship. Undergraduates are given independent projects that dovetail with the project of their graduate student mentors. A few notable achievements include:

K. Look Loy, B.S. (2015) – Medical College of Georgia; 2-time PURA awardee (Torres Lab)
M. Tillman, B.S. (2014) – Emory Biochemistry PhD program (Eric Ortlund Lab)
Paris B.-Mashinchi (2017) – Mercer University School of Medicine; Study co-author (Cell Reports, *in review*)

Masters (4 students) – Masters in Bioinformatics students in my lab have made enormous contributions to our program and have been recognized for their effort in a variety of ways. Notable achievements include:

N. Sundararaman, M.S. (2016) – Computational Biology Faculty Research Award (*3-time awardee*); Manuscript co-author in top-ranked proteomics journal (*Molecular and Cellular Proteomics 2016*); Bioinformatician at Falcon Computing Solutions (CA).
Ramya Madupuri, M.S. (2017) – Computational Biology Faculty Research Award (Sp/Fa-2017)
Rushika Pandaya M.S. (2017) – Computational Biology Faculty Research Award (Sp/Su/Fa-2017)
Manuscript co-author on 2 research articles (*1 published, 1 in review*).

Doctorate (4 students) – My doctoral students have been rewarded for ingenuity and research success. Notable achievements include:

S. Choudhury (5th yr) – ASBMB Conference Travel Award (2016); Author or co-author on 3 manuscripts (1 in review at Cell Reports)
H. Dewhurst (2nd yr) – UGA Big Data Symposium Travel Award (2015); ASBMB Travel Award (2016); Invited seminar at Experimental Biology 2016; Author or co-author on 3 published manuscripts

(3) Impact through community outreach and citizenship. Beyond my efforts in teaching and research, I have tried to make a positive impact on my community in Atlanta as well as Georgia Tech. A short list of notable examples include:

K-12 outreach – STEM Night (2013-2015). Torres lab undergraduate and graduate students join me to create a hands-on laboratory for young students. Topics include: “What’s In Spit?” or “I’m Made of Proteins - WHAT?”.
High school – Mentor for high school students from Gwinnett school of Math, Science and Technology. Students spend 2 semesters doing research in my lab with an undergraduate mentor.
GT Teaching Awards – Thank a Teach award (2014) – Nominated by Jiby Yohannan (Protein Biology)
GT Softball Professor Appreciation Day (2017) – Invitation by UG Emily Anderson
GT Citizenship Award – Petit Institute “Above and Beyond” Award (2016) for contributions in establishing the Systems Mass Spectrometry Center at Georgia Tech
(see <http://petitinstitute.gatech.edu/addressing-systems-level-need>)



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January 30, 2018

Dr. Joyce Weinsheimer
Center for Teaching and Learning

Dear Joyce and members of the selection committee:

On behalf of the School of Biological Sciences, it is with great pride and enthusiasm that I nominate Assistant Professor Matthew Torres for the CETL/BP Junior Faculty Teaching Excellence Award. I have interacted with Matt for ~5 years as a faculty colleague and more recently as the Chair of the School of Biological Sciences. Since his arrival at Tech in 2012, Matt has been an outgoing and positive contributor to our school's research and teaching portfolio and I am not the least bit surprised that he is now in a position to potentially receive this honorable award. In this nomination letter, I'd like to focus on a few specific aspects of Matt's involvement with our School that go beyond his work in the classroom, which I believe are indicative of a strong and caring teacher.

Matt is clearly committed to the process of teaching, in all its various forms, including service to our School and to the College of Sciences. For example, over the past few years he has volunteered to mentor two high school students from Gwinnett School of Math Science and Technology, who participate in year-long research internships through the GSMST Junior Fellowship Experience program. He routinely volunteers to give lab tours to local STEM-focused high school coordinated through COS. He incorporates undergraduate research into this lab, and has in fact submitted publications in which these undergraduates are co-authors. He has had success in supporting PURA scholarship recipients in his lab over the summer and he also makes a point to participate as a project judge in science competitions across campus. He has indicated to me that he served as an Inventure Prize judge (in the preliminary round) nearly every single year since 2012, something that clearly gives him great joy.

Matt has also made a significant impact in the teaching/training of students in the Bioinformatics professional M.S. program within our School. As you may know, students in the professional Masters program in Bioinformatics undergo a 1.5 year training period in which they take courses in computer science and bioinformatics, with an option to also do hands-on research in a lab if desired. Since becoming a faculty member in the program, Matt has mentored up to 2 students per year into his lab. Although the MS program does not require a thesis or publications, Matt encourages each of his MS students to strive towards this goal. He has been very successful with this as evidenced by two out of three students having published between 1 and 2 peer-reviewed research articles within the 1.5 duration of their tenure in the program. These students have since gone on to find excellent jobs in bioinformatics firms across the country. This is a testament to Matt's ability to teach and lead students from the classroom to the real world.

Finally, I recently attended a departmental seminar given by Matt who had the opportunity to speak about his own research as part of his tenure process. He gave an outstanding talk that was very well received by the audience. He was engaging as well as clear in explaining his science, and it struck me how his delivery was conversational so as to be relatable to a broad audience. I have no doubt this is why his students enjoy his classes and very frequently rank him as one of the best professors they have had at Tech.

I hope you agree with me that Matt is one of Tech's finest examples of a great teacher, a characteristic that he exhibits in the classroom but also in his service to our department and to the community in general. He is highly deserving of the CETL/BP Junior Faculty Teaching Excellence Award.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Todd Strelman', with a long horizontal flourish extending to the right.

J. Todd Strelman
Professor & Chair
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January 29th, 2018

Attn: CETL Teaching Excellence Award Committee

Dear Sir or Madam:

Dr. Matthew Torres is an excellent candidate for the CETL Teaching Excellence Award, and he wholeheartedly deserves your full consideration. I was a student in Dr. Torres' Honors Genetics course (BIOL 2354) in the fall 2015 semester, and I served as the teaching assistant to him and Dr. Yury Chernoff for the same course for the fall 2016 semester. From working with him as a student and as his TA, I know that he is one of the best teaching professors in the biology department and Georgia Tech as a whole.

Every class, it was abundantly clear that Dr. Torres has spent a significant amount of time preparing slides and reviewing the material to provide the highest quality lecture. He also creates and amends course material year to year to include new biotechnologies and research techniques. In doing so, Dr. Torres keeps the material extremely relevant to current research projects in the field of genetics. Additionally, it is refreshing to have a professor so willing to answer questions and delve deeper into the material when students show particular interest in a topic. He promotes students' intellectual curiosity and will even share information about research labs on campus working in areas discussed in lecture. Finally, Dr. Torres exposes students to upper level scientific papers to have them acquire new skills in grasping very formal and challenging material. As a lecturer, Dr. Torres is second to none due to his preparation and his willingness to improve the course with clearer information for the students.

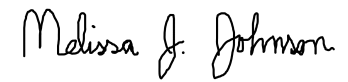
Beyond his teaching skills, Dr. Torres cares for his students and wants them to succeed far more than most other professors I have taken classes from at Tech. He makes it his goal to remember students' names, and he encourages all students to respond to questions or ask their own questions. When Dr. Torres does not know the answer to a question, he researches the answer between lectures and will inform the entire class at the beginning of the next lecture. He also ensures that the course requirements remain reasonable by remaining willing to modify test dates if the material has not been covered in full. Finally, he is extremely helpful in meeting with students outside of class to ensure they comprehend the class content completely, not superficially, and he expresses his desire for everyone to succeed in a way that encourages students to do their very best.

During my semester as his teaching assistant last year, Dr. Torres was really supportive, and he made me feel comfortable as a first-time teaching assistant. He also checked in regularly with me to see how students felt about the material and to see if I had any suggestions for course improvement. He made my life as a teaching assistant easy by teaching the material well to the students the first time so that I merely had to review the especially difficult concepts with the class. I rarely had more than one student ever at my office hours, and when students elected to attend the office hours, they already had a good handle on the material.

Even though I am no longer his student or teaching assistant, Dr. Torres has gone out of his way to stay in contact with me and keep up with my career goals. He has encouraged me and advised me as I interview for medical school, and he has by far been my favorite professor at Georgia Tech.

Dr. Torres deserves the CETL Teaching Excellence Award because he is an outstanding lecturer who invests his time, energy, and resources into his students and teaching assistants. I hope he receives your full consideration for this award.

Sincerely,

A handwritten signature in black ink that reads "Melissa J. Johnson". The signature is written in a cursive style with a large, prominent "M" and "J".

Melissa Johnson

Parastoo Baradaran-Mashinchi

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30th January 2018

CTL Teaching Award Review Committee

Center for Teaching and Learning
Georgia Institute of Technology
Atlanta, GA 30332-0383

Dear CTL Teaching Award Review Committee,

I highly recommend Dr. Matthew Torres for the CTL Teaching Award. I graduated from the Georgia Institute of Technology in May 2017 with a Bachelor of Science in Biology. During my time at Georgia Tech, I had the pleasure of working as an undergraduate research assistant in Dr. Torres' research lab for more than four semesters. He also taught my Honors Genetics course Fall 2014 and my Proteomics: Technologies and Applications course Spring 2017. Through my interactions with Dr. Torres over a span of three years, I can confidently say that Georgia Tech upholds its positive reputation of being a rigorous, yet highly rewarding academic institution because of passionate professors like Dr. Torres.

As a student in Honor Genetics, I immediately noticed that Dr. Torres had a unique and innovative teaching style. Dr. Torres took a more problem-based approach to his teaching which encouraged us to use higher-order thinking and reasoning skills to actively engage with the course material. His homework assignments and exams required us to apply our knowledge to analyze and evaluate information when answering questions, rather than memorization and simple regurgitation of concepts. He truly wanted us to grasp and understand the material deeply, rather than just superficially. Because the class consisted mostly of 1st and 2nd year students, early on he encouraged us to look for the bigger picture and find the real world applications of the science we were learning.

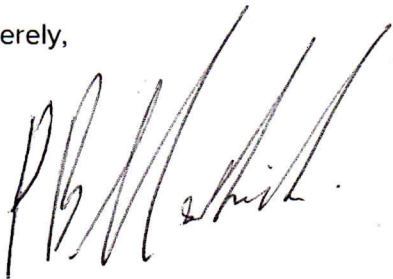
In Proteomics: Applications and Technologies, Dr. Torres took his innovative teaching style a step further and created an engaging and collaborative classroom environment. We were responsible for reading assigned primary literature before class. During class, my classmates and I actively engaged in group discussions where Dr. Torres participated as a moderator. We all worked together to propose solutions to discussion questions. By the end of the semester, Dr. Torres had skillfully guided us through challenging topics in protein biochemistry, mass spectrometry, and bioinformatics. Our final assignment was to design a proteomics experiment and explain sample preparation, data collection, data analysis, and expected results. Not only had Dr. Torres helped

us further advance our analytical and critical thinking skills, but he also encouraged us to apply our knowledge to create something new with a real world application.

Furthermore, Dr. Torres believes in and sees the potential in all of his students. Whenever my classmates and I struggled, he was always available and excited to sit down and discuss questions until we understood. His compassion for his students became even more apparent to me once I became an undergraduate research assistant in his lab. He agreed to take me under his wing with no research experience and a vague understanding of the scientific method. Semesters later, he has seen my growth as a student. His research lab provided an environment which allowed me to challenge myself, develop my self-directed learning skills, and become skilled with the scientific method. I learned how to integrate knowledge from my coursework in order to read scientific literature, propose a project, plan and conduct experiments, optimize protocols, and communicate results in oral and written deliverables. He has shown the same compassion to other students through his involvement in STEM outreach. In the past, he has welcomed a young high school student into his research lab from the Gwinnett School of Mathematics, Science and Technology for two semesters and he has also participated in "STEM Night" at a local Elementary School for a few years.

I truly believe my experience at Georgia Tech would have been incomplete without the professorship of Dr. Torres. I feel self-assured and confident as I approach medical school in August due to the critical thinking skills that Dr. Torres has helped me develop over the years. His passion for science and teaching truly radiates both inside and outside the classroom. Once again, I highly recommend Dr. Torres for the CTL teaching award!

Sincerely,

A handwritten signature in black ink, appearing to read 'Parastoo Baradaran-Mashinchi', written in a cursive style.

Parastoo Baradaran-Mashinchi

To Whom It May Concern:

I am honored to write this letter in support of Dr. Matthew Torres for his nomination for the Junior Faculty Teaching Excellence Award. I have been fortunate to know Dr. Torres since my sophomore year at Georgia Tech and am currently a second year medical student at the Medical College of Georgia. Even now, Dr. Torres' impact is evident in my life, and I am more than happy to provide insight into his unparalleled passion for teaching and his investment in his students.

My first interaction with Dr. Torres was during Fall of 2012 in his Honors Genetics course. Most Biology majors will agree, there is a great deal of overlap and repetition between biology courses, especially the genetic component. However, Dr. Torres brought an energy and enthusiasm to this topic that was contagious. Most professors only relay to us the conclusions in biology – what we now know and can easily find in textbooks. Dr. Torres always took it a step further by engaging and challenging us to think about the impact of that knowledge on life today and how current research is driving the creation of new conclusions. Incorporating research and demonstrating these connections to the present are essential to truly teaching a science and this is what his teaching style so effective. Regardless of your performance in the classroom, he always invested in our success and put forth every effort to be accessible. For example, he would hold reviews in his office before exams and even brought doughnuts! One thing that also set Dr. Torres apart was how much he valued our opinion. He always sought feedback on whether certain aspects of lecture were effective and if the resources he provided were helpful to our understanding of the material. Dr. Torres' investment in our success and desire to maximize learning was refreshing to say the least and helped me make a smoother transition to Tech as a new transfer student.

After completing Honors Genetics with Dr. Torres, I was thrilled to join his lab as it was then being formed. My research participation and mentorship from Dr. Torres made my educational experience at Georgia Tech complete. I have personally, educationally, and professionally grown substantially as a result. Dr. Torres implemented a weekly journal club among the members of our lab where a selected member would present an article that we would then discuss and critique. I relayed my fear of public speaking at length to Dr. Torres, and he challenged me to step out of my comfort zone, gave me constructive feedback, and most importantly, affirmed my progress. He even let me practice my presentations with him if I felt the need to. Although I might not have a future in public speaking, I gained confidence in presenting and speaking up in general with his continuous support. Additionally, Dr. Torres would often ask us questions to invoke critical thinking. Even if I had no doubt that I knew the answer, I was silenced by my fear of being wrong and "looking stupid" which Dr. Torres knew without me having to tell him. He taught me to separate being wrong or not knowing the answer from my perception of intelligence. This was substantial because I needed to learn that the foundation of science itself is not knowing, testing, and being wrong over and over. He taught me to not be so detrimentally hard on myself, and I eventually began to see myself for what he saw in me. Each interaction with Dr. Torres, he found ways to sow little seeds of

confidence in me, which has helped ensure that self-doubt and criticism would never prevent me from pursuing opportunities in my life.

My experience working with Dr. Torres continues to propel me forward in my education and career. As a medical student, the sheer volume of material we are expected to learn and apply can be overwhelming. However, I have been fortunate because the foundation in biochemistry and genetics that Dr. Torres afforded me made the transition much smoother and has helped me excel so far. It has also helped open doors for me such as my prior employment as a Biologist at the CDC and my current clinical research position in Cardiology. As a result of Dr. Torres' unyielding investment and mentorship, I've been equipped with the confidence, interpersonal skills, scientific knowledge, and application to accomplish any goal or dream I set my sights on.

One reason why I truly consider Dr. Torres a mentor is that he had a genuine interest in our other commitments because he valued anything that contributed to our wellbeing as his students. For me, my leadership in the American Medical Student Association was a significant commitment. We had countless conversations about the ideas I had for our organization and new initiatives I wanted to implement. Not only did he affirm those ideas, he even volunteered his time by sitting as a panelist for our first Undergraduate Research Panel which became an annual event. Dr. Torres was always busy, but never too busy to take the time to talk or help in whatever way he could.

Dr. Torres has made a lasting impact in my life and I have no doubt that many students could attest to this as well. His investment in his students, passion for learning and teaching, and ability to inspire others remains unequalled among any professor I've come across. I hope that you would consider Dr. Torres for this honor as I could not imagine a more deserving candidate.

Best regards,

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