Frank Morgan

Webster Atwell '21 Professor of Mathematics Williams College

1987-2016



The Williams College Society of Alumni

Honors the Retirement

of

Frank Morgan

Webster Atwell '21 Professor of Mathematics
1987-2016



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Layout by Joyia Chadwick Yorgey '05 Cover design by Kate Hyde '96 June 2016

Dear Frank,

On behalf of the Williams Society of Alumni, it is my privilege to present this book of memories from your former students. Their contributions, which they've written to honor and celebrate you at this exciting moment in your life, represent a mere fraction of the gratitude you've inspired in your students throughout your career. There is no way to properly thank you for your dedicated service to Williams, but please think of this book as one small attempt to convey the appreciation your students have for you.

Here's wishing you all the best as your next chapter in life unfolds,

With deep gratitude,

Leila Jere

Leila Jere '91

President of the Society of Alumni



Frank Morgan is the Williams professor who had the greatest influence on my career path. I was a mediocre math major when I first wandered into Frank's office, to introduce myself and to see if I might convince the new guy to supervise an independent study. He sent me away with a book and an assignment: to tell him about something I found interesting in my reading. I can't recall now what my subsequent report entailed, but I suspect it didn't matter, and that Frank was just testing my seriousness. In any case, he took me on, and proceeded to open my eyes to the discovery of new mathematics through research. That experience led me directly to graduate school, and to the PhD that got me into my own position as a math professor at Bowdoin. After meeting Frank, I never really considered another career path; and I'm very grateful to him for helping me on my way.

The image on the facing page was taken during my graduation from Williams, and was shared by Frank (to the delight of my students) during a talk he gave at Bowdoin years ago.

Adam Levy '88 alevy@bowdoin.edu

I had the honor of taking a class from Frank in his very first year at Williams. He put a shark puppet on one hand, a minnow on the other, and chased himself around the room, vividly illustrating the equilibrium problems of advanced calculus. An unforgettable master teacher!

Will Dudley '89 wdudley@williams.edu I was there when Frank joined. He convinced me to be a Math major, in fact. But what I remember most is when I was a volunteer for Williams some 25 years later, he routinely opened his house to me. On one occasion, he wasn't even there. He just said, the back door is open. And when I went in, he had put a post-it on the room he had set out for me. It was beyond gracious.

Back in the early years of Frank's tenure, Math was not cool. I think there were 13 of us in my class of '90. And to think that now there are 5-6 times that many... It's a testament to Frank's infectious conviction that math is good for the soul.

David Pesikoff '90 david@pesikoff.com

I was fortunate to have Professor Morgan in my senior year for Applied Real Analysis. It was the hardest class I ever took at Williams, and Prof. Morgan was one of my best and most memorable professors (at the best college on the planet!). He showed a huge amount of interest in his students, their well being, and how much they learned. His class prepared me for hard math classes in graduate school. Finally, he went out of his way to attend my public thesis defense, even though I wasn't a math major!

I want to thank Professor Morgan for his contributions to the college and to my education. Best wishes in retirement!

Rob Olsen '90 rolsen612@gmail.com Frank is always thinking about mathematics, and he instilled in me and my fellow students the joy of asking mathematical questions and thinking about them. He is also a kind and thoughtful person. When I was applying for a job at my present employer (SUNY Potsdam), he personally called the chair of the mathematics department and spoke on my behalf. This was above and beyond what would be expected from an undergraduate mentor.

Joel Foisy '91 foisyjs@potsdam.edu

Dr. Morgan taught me Calculus during my freshman year. He was a wonderful teacher who believed that everyone should love mathematics. I was not a great math student but Dr. Morgan refused to let me take that negative attitude. He had more confidence in me as a math student than I did in myself. Dr. Morgan loved his profession and it showed every day in the classroom. Williams College is very lucky to have such a talented and giving math instructor. His passion for his vocation set a strong example for his students to follow. I wish him the best during his well-deserved retirement.

Michael Hyde '91 michael.hyde68@gmail.com

Frank Morgan and I both arrived at Williams in 1987. My experience as a math major in the following years was amazing, largely because the department was being transformed and energized before our eyes. Frank played a huge part in that transformation through his teaching, scholarship, and most importantly his inspired, patient, enthusiastic, infectious love of math. I have tremendous admiration and gratitude for his prodigious skills and the energy and passion he has sustained during his years of service at Williams. Thank you Frank, all the best to you!

Mike Donofrio '91 mndonofrio@gmail.com

While I considered myself to be the dumbest Math major in the Class of 1991, this is not an insult as much as it is a compliment to the brain power of the other Math majors in my class. While I was less intellectually gifted (and likely less focused on Math) than my fellow Math majors, I always enjoyed classes with Professor Morgan as well as his friendliness towards me, even though I was not a star pupil.

Additionally, I will always remember how one of his classes included a discussion about how prey-predator relationships in the wild can be analyzed in a mathematical way; I found that to be very cool. Professor Morgan and his colleagues in the Math department brought a lot of energy and a great vibe to the department, which made students want to take Math classes and be Math majors. He will be missed, but not forgotten!

Matthew Wyskiel '91 mwyskiel@gmail.com

Having lost my only parent prior to attending Williams, I was overwhelmed going off to college by myself leaving the only place and people I had ever known and stepping onto a prestigious campus with rigorous academics. I was intimidated coming from a small, rural K-12 grade public school. Professor Morgan was one of my professors that difficult first semester freshman year. He challenged me but also encouraged and supported me when I was struggling. He was approachable and dedicated to his students. I went from nearly failing Calculus to excelling and really enjoying it—so much so that I took another Calculus class!

Looking back almost 29 years ago, I am so thankful that Professor Morgan was one of my early Williams professors. Because of him, I did not give up. I learned persistence, determination, confidence, and how to work even harder than I had before. He made math fun. He made learning fun. And I am grateful and honored to have been a student of his!

Audra Kunzman-Mazdzer '91 vt2ca2in@yahoo.com

I didn't ever expect to major in math, but a roommate dragged me to a talk on soap bubbles that Professor Morgan gave. His enthusiasm was so contagious that I took a math class the next semester. That same enthusiasm drove me to major in math and continue through a PhD. Over 20 years later I am a math professor who is still grateful every day to Frank Morgan for leading me down this marvelous path.

Hugh Howards '92 howards@wfu.edu

Bubbles! Professor Morgan did a bubble demo during a Parents' Weekend, and my mother was picked to go on stage to help. She talked about that story for years. This is just a snapshot of how he taught math with a purpose for sure, but with a heavy dose of levity that touched many people.

Jared Cumming '92 jared.cumming@yahoo.com

Prior to enrolling in Professor Morgan's Multivariable Calculus class, I had always been a strong math student. So, when I failed the first exam, I was alarmed. I was even more alarmed when Prof. Morgan asked to see me in his office. During our meeting, Prof. Morgan told me that I had to come to see him every week for tutoring. I dutifully reported to Prof. Morgan's office at least once a week for the rest of the semester.

I managed to get a B in the class, which was great considering my very poor start to the semester. At the time I didn't appreciate what Professor Morgan did for me, because I was too busy being embarrassed about being a "remedial" student who had to get constant help. But by the time I took my next math class at Williams, I realized how much Prof. Morgan did for me.

He spent so much of his time helping me understand the subject and also helping me be more confident as a math student. And while he was teaching me calculus, he was also teaching me that it was okay to ask for help. Whenever I struggled in a class after that semester with Professor Morgan, I never hesitated to go see the professor and ask for help. I was never embarrassed to admit that I couldn't understand this or that. Prof. Morgan made me a better calculus student for one semester but also made me a better student for life.

Laura Lim Prescott '92 MiniLaura@gmail.com I'll share two memories of Frank. First, I remember working on a senior thesis for a whole semester, trying with my advisor to prove a theorem related to number theory, and not getting very far. At the end of the semester, I gave my presentation. At the end of the presentation, he asked a question that immediately showed us how to clear the hurdle we had been stuck on for months. My advisor and I were dumbfounded. What stumped us for months was clear to him after listening to a fumbling 30-minute presentation by an undergraduate.

The second memory: I remember when Frank invited three of us to his house for a night of bridge: definitely Andy Wiz Perry '92, probably Meg Tilton '93, and myself. I remember his house was neat, quiet, and civilized. That night was different from every other night I spent at Williams.

Peter Frechtel '92 pafrecht@verizon.net

Professor Morgan, congratulations on your retirement! I took one math class with you at Williams (calculus as a freshman). I seem to remember that you learned the names of all 60 or 80 of us in the first week. That made such a favorable impression on me. I also have fond memories of playing campus-wide capture the flag games in the summer evenings, and you were dressed in all black: hard core! Five years after Williams, I switched to teaching 6th grade math and science and it was the best career move I ever made.

Ben Ligon '93 benligon@gmail.com I took Professor Morgan's Multivariable Calculus class as a freshman in 1989 and was inspired by his enthusiasm for the material and for his students. While I wound up majoring in physics at Williams, Professor Morgan had a great effect on me. He led me to sign up for SMALL 1990 summer mathematics research and encouraged me in both mathematics and physics. It was a thrill to return to Williams in 2009 to give a lecture to the physics department and to have Professor Morgan take the time to attend.

Daniel Robb '93 robb@roanoke.edu

Professor Morgan is one of my favorite math professors at college. He inspired me to take math seriously as a career option and made serious math research fun. I will always remember my Differential Geometry class I took with Professor Morgan.

Eric Chiu '93 echiu@imservice.com

I took a course with Professor Morgan freshman year (in 1989). Before the first exam, he had the whole class over to his house for dinner and test review, using the whiteboard installed in his dining room! That set the tone for all my best academic experiences at Williams: close interactions with faculty dedicated to teaching undergraduates.

Ethan Marin '93 ethan.marin@gmail.com

I took Professor Morgan's Calculus class as a Freshman in 1989. I remember it vividly because I was quickly in over my head, and I nearly failed the first exam. Having always been an excellent math student, this experience rattled me. I met with Professor Morgan to make a plan. His enthusiasm for his subject and belief in my abilities to not just learn Calculus, but LOVE Calculus, seemed somehow surreal and out of touch with reality. But, I wanted to believe in myself as he believed in me.

I began attending all his tutoring sessions and those famous math dinners he hosted, asking lots of questions, doing extra work, and my confidence grew. Over Thanksgiving break, I volunteered to drive with Professor Morgan and two other students to teach a group of Connecticut elementary school students Bubble Math. I remember watching his contagious energy for numbers and bubbles infect a room full of nine-year-olds. They, too, caught the Frank Morgan magic.

I didn't become a math professor. I did, however, learn to love math. But, in the end, he gave me a greater gift: an understanding of the magic of learning. Today, as a clinical psychologist working with teens and young adults, I often call up this story as an example of how it is possible to stumble, doubt yourself, and then rely on someone else's confidence in you until you can find your own and use it to accomplish your goals. Best of luck in your retirement, Professor Morgan! And thank you for the gift!

Jennifer McQuaid '93 jmcquaidphd@gmail.com

I'll never forget Calculus and all the sliding blackboards and how to recognize formulas like saddles! Thanks for teaching us in your own unique way.

John Case '93 johnecase@hotmail.com

Professor Morgan was unbelievably dedicated to teaching. I took his calculus class in the fall of my freshman year, and flunked the first quiz. This came as a bit of a shock. Professor Morgan invited all of the students who'd flunked to lunch. I went, expecting a pep talk. Instead he grilled us with math problems for the entire time. And I learned how to do advanced calculus. He had high but not unreasonable expectations, and he inspired everyone to do their best. He had a big whiteboard or two in his house, and I remember him having students over for a meal and problem-solving sessions. It wasn't until years later, after I'd taught college classes myself, that I fully appreciated what kind of dedication this took. Thank you, Professor Morgan!

Meg Tilton '93 meg.tilton@gmail.com I remember a few things about Professor Morgan. First semester my freshman year, he had his whole Multivariable Calculus class to his house for a pool party. This was a great intro to the Williams life. Later that same year, he announced with great glee that US News had rated the Williams faculty #1, but he couldn't say the same about the students. He also played Ultimate Frisbee and would run people into the ground trying to keep up with him. Thanks for the memories!

Michael Lapin '93 melapin@hotmail.com

I remember getting cheese bread and thinking about hard math problems with Professor Morgan and Dan Robb when I was a freshman. It was all way over my head. I also remember Dan's submission of an extra credit problem where he had shown different pieces of some complicated multivariate calculus thing, alongside very elegant drawings from someone with technical drawing skills from a previous year. Dan aced it, but his drawing was sloppy, at least relative to the mechanical engineer's drawing. Dan is now teaching college physics, and I am on the faculty at the University of Washington School of Medicine and do a lot of statistical analyses of cognitive tests and Alzheimer's research.

Paul Crane '93 pcrane@uw.edu I never had a class with Professor Morgan but enjoyed working with him over a summer at the SMALL research internship. In my senior year, he encouraged me to write an article about a nearby undergraduate research conference and helped to get it edited and published in a journal. That positive experience has led me to a steady stream of written contributions to industry publications on areas of interest and expertise. I'm grateful for the challenge and encouragement Professor Morgan gave me then, which has helped form the kind of contributor I am in my industry! Congratulations on your well-deserved retirement!

Douglas Briggs '94 douglas.briggs@gmail.com

I count myself exceedingly fortunate to be one of the students who benefited from doing a research project under Morgan's guidance. There are few faculty who can rival his success in mentoring undergraduate mathematics research. He gave us a problem that pushed us to our limits; even after we had solved the problem, I remember working intensely over the following year to meet his high standards for exposition. The research paper we wrote together is still one of my proudest scholarly achievements.

Christopher French '95 frenchc@grinnell.edu

History was my major. Math was not. Nevertheless, Professor Morgan helped me tremendously. I failed my first math test at Williams in Calculus 103. I had never cried in front of a teacher before or since, but when Professor Morgan called me in to his office about my failure, I cried because I was so overwhelmed and didn't know what to do.

Professor Morgan helped me realize that although I had studied many hours for that first test, it has been in a completely ineffective way; I studied and studied the things I knew how to do and completely ignored the parts of class that confused me. He gave me the advice that I should do my homework in the math study skills center. After that, I visited that center three times a week to do my homework under the tutelage of Kate Sharkey. Her workstudy job was to help people with their math. I will never forget her name even though I never saw her after the fall of 1991 because she helped me pass the class. She never gave me an answer outright, but helped me build my ability to think mathematically.

Though I never took another math class, I have shared this story with hundreds of students I have taught in middle and high school. I want to thank Professor Morgan for going out of his way for a new student who was completely confused and overwhelmed. I'm sure he did that for hundreds of people and not just for me.

Teresa Rodriguez '95 Teresa_A_Rodriguez@yahoo.com I did a winter study with Professor Morgan. We were a small group—about 6 of us, I think. We did several events/activities to spread the joy of math throughout the town. I remember sitting in the entrance of Stop and Shop sharing cool math tricks and demos to anyone who would stop by our table and listen. It was totally goofy and totally fun!

Bonnie Ricci '96 bricci16@verizon.net

I would be very hard pressed to find someone who brought as much excitement, passion and enthusiasm to the study of mathematics as Professor Morgan.

Joseph Kenner '96 joseph_kenner@msn.com After I performed abysmally on my first test in one of Professor Morgan's Calculus classes my freshman fall at Williams, he came and sat down next to me before the next class started. He explained to me that he'd gone through my admittance records, and based on what he saw, he believed that I could be performing much better in his class. As follow-up to that, he required that the TA check my homework at every session to hold me accountable. And he was right—the results of my second exam were dramatically better.

Now, that was the first and last math class I took at Williams. It is not where my interests or particular talents lie. But I think that Professor Morgan's actions were indicative of the commitment to teaching that the Williams faculty exemplifies, and I have told that story over the time more times that I can count.

Jennifer Elworth '96 jenpalm@hotmail.com Frank Morgan was a goofy math nerd (I'm sure he would be proud of this description) that inspired his students through that zaniness. I took calculus with him my freshman year. He had a great way of making math fun and accessible. He taught through envisioning creative examples that brought his teaching alive. Of course he was famous for describing the surface area of soap bubbles. The fact that someone would even think about this is fascinating to me.

I will never forget review session dinners at Frank's house, in which he would gather the whole class around his dining room, with a big pasta dinner which he cooked, and a whiteboard on the dining room wall. He had a wonderful dedication to his craft, and he always remembered my name when we crossed paths on campus, despite the fact that his was the one and only math class I ever took at Williams.

Tim Billo '97 timbillo@uw.edu As for many alumni, the first word that comes to mind with Professor Morgan is bubbles. He used this very simple concept as a gateway to the joyous world of mathematics. Professor Morgan was a high energy and exceptionally committed teacher. He constantly moved around, told humorous self-deprecating stories, and made mathematics an adventure during the time you spent with him. He always put on a show. Regardless of what type of mood you were in at the beginning of class, you always left smiling, laughing, and loving math. For me, he was truly an iconic figure in my Williams education. I'm so glad to have had a front row seat to his greatness.

Jean Raphael '97 raphael@bcm.edu

After struggling mightily to stay awake, let alone understand high school Calculus, I decided to take it again at Williams. I'm so glad I did! Professor Morgan, you made class both interesting and fun. Needless to say, I did much better as well. While I did not continue with Math after your class, I am proud to say I am one of a small subsection of attorneys who is not afraid of math. Thank you for all the years of energy and devotion you gave to the Williams community!

Kirsten Rigney '97 Kirsten.Rigney@gmail.com Professor Morgan an incredibly encouraging and energizing force. I remember doing poorly on a mid-term, but bouncing back on the final well enough that he even suggested I major in math. I don't believe I ended up with the best grade in the world, but was glad to have the positive reinforcement. Thanks, Professor Morgan!

Alex Hassinger '99 alexhassinger@yahoo.com

I took one math class at Williams and it was with Professor Morgan. My lack of affinity and talent for math is in no way a reflection of Professor Morgan; he was an excellent teacher. I remember how clear and accessible he made math seem to me, I remember his tremendous energy, and I remember that he had our (very large) class over for dinner. I thought that was so kind, and I still remember that evening and his class fondly.

Rebecca Missonis '99 rebeccamissonis@gmail.com

When I was selected to participate in the SMALL summer research program, I had no idea what to expect when I was assigned to Frank Morgan's Geometry group. My first impressions of Frank were that he was demanding and intimidating, but I got to know him as fun-loving and quirky. My birthday fell on a Saturday a couple of weeks into the program, and he had our group over to his house for a celebration: we donned party hats, had some cake, then conducted our work meeting (yes, on a Saturday) while we still had our hats on! This made him less intimidating and showed he cared about us as people; he later organized multiple bonding experiences for our group like a road trip to our conference in Toronto. Even so, he never lowered his standards, always expecting the best of those around him—and so he often got it. Thank you, Professor Morgan, for an interesting, memorable summer!

Cara (Yoder) Matzen '99 caramatzen@gmail.com



I had calculus with Professor Morgan my freshman year. It was one of the larger classes at Williams and yet Prof. Morgan seemed to know the name of just about every student. I will never forget his brilliance or his passion for teaching. Thanks, Professor Morgan!

Alex Jarvis '99 jarvissimo@gmail.com

Professor Morgan was the first mathematics professor that really made me feel mathematics was a major I was capable of pursuing. Professor Morgan made teaching his students *confidence*—not just mathematical *content*—a hallmark of his courses. In effect, he taught me more than just my classes; he helped mold my life. I'll forever be grateful that he believed I could be a successful mathematics major and helped me believe in myself.

Kristen Grippi '00 kristen.grippi@gs.com Dr. Morgan was kind enough to invite his students over to his home on numerous occasions. I took his class as a senior art major looking to fulfill my core requirements. It made a tremendous impact on me to be included and mentored, even though I was not a math major. It was just the gesture I'd hoped to receive as a liberal arts student at a small college.

Steele Marcoux '02 steele.marcoux@gmail.com

I remember learning about precession from Dr. Morgan and his demonstration with a tennis racket. I love sharing this fascinating demonstration!

Abby Tadenev '03 atadenev@gmail.com

The part of Williams' liberal arts program that was most intimidating was the Division III course requirement. As I searched through the course catalog freshman year, in a seemingly impossible attempt to find something I could wrap my brain around, my Junior Advisor recommended Math 100—it would make the subject less intimidating and actually helpful. My response was a resounding NO! Even this level of Math intimidated me after many nights in high school struggling through frustrated tears to complete problem sets.

However, after an incredibly unimpressive run with a biology class, the next semester I decided to give it a shot. What a great idea (kids, listen to your JAs)! Professor Morgan corrected so many misconceptions I had about the subject. His class was useful, even fun! Now let's not go nuts—I wasn't about to run off to take Calculus—but I was inspired enough to take another math class (okay, okay, it was the Art of Mathematical Thinking, but still!). Imagine that.

Thank you, Professor Morgan. I don't think I voiced it then, but you made a difference in my academic confidence, and inspired me to take a lot more chances with my course selection!

April King '04 april.a.m.king@gmail.com

Professor Morgan's 9:00 AM Calculus 105 was my first class on my very first day at Williams. By 9:10 AM I knew I was in way over my head. I should have switched into the easier Calculus 104, but I was too proud or naïve, and Prof. Morgan seemed so very kind and happy and eager. So I stayed, and I studied. I studied harder than ever.

Every time Prof. Morgan held office hours, I was there. If there was a study group, I was there. If the math library was open, I was there. The midterm came and went, and then one Saturday in late October I got a call on my dorm room phone. It was Professor Morgan, cheerful as ever, calling to tell me I had passed the midterm, and passed with the highest grade in the class. Yahoo! It was my proudest moment at Williams.

This was the last math class I ever took; I quickly found out there were other things to do at Williams besides study. But if I had it to do over again, I would have taken every class Professor Morgan taught, even if I had failed them all. Now 15 years later I find myself working as a General Pediatrician. Every August as I'm seeing a teenager for her pre-college check-up I say a little prayer that she finds herself in over her head and with a Professor like Frank Morgan.

Jessica Ebberson '04 jebberson@gmail.com Professor Morgan showed me how love for one's field, one's students, and one's teaching can make an academic career beautifully rewarding. As an academic myself now, studying chemical oceanography, I only rarely get to use the triple integrals and partial derivatives I learned so well in Fall 2000 MATH 105 (the class photos of which are undoubtedly still up in Frank's office). Frank's passion and dedication to his field, however, and his incredibly infectious love for explaining research to others, is something I continue to tap. Thank you so much, Frank!

Daniel Ohnemus '04 dohnemus@gmail.com

I remember sitting in MATH 103 and thinking, this is going to be a disaster. I was new to the US, not sure what I had gotten myself into by opting out of the intro class, and worrying about everything under the sun. But then there came Frank Morgan: so lively and energetic! His energy alone made me want to wake up for an 8:00 AM class. I was never absent because Frank made me want to come to class and every class was worth it!!!

Fran-Fredane Fraser '05 frassfran@gmail.com

I was a local high school senior, trying to take advanced calculus courses at Williams since I had finished the courses offered at my high school. Before I was allowed to enroll, I had to have a screening/placement call with Frank. I made the mistake of not finding a secluded place to take his call—during the discussion I was both harassed by a large dog and peppered with questions from Professor Morgan about integrals—and needless to say my clenched-teeth responses were neither audible nor correct. I was placed in a class at a level lower that I thought I should have been. No harm was done in the end—I ended up coming to Williams the following fall and majoring in Math and I finally shared this story with Frank and the department after completing my senior colloquium.

I took differential equations with Professor Morgan during my time at Williams and I now appreciate the emphasis that he and others in the department put on public speaking. At the time, I saw preparing a talk for the Hudson River Undergraduate Mathematics Conference as a bit of a chore. But it was not long after I graduated that I realized how unique and valuable that experience was and how important it is to develop skills that go beyond computation and logical arguments. I feel very fortunate to have gained that experience in Professor Morgan's class. I wish him the best in retirement!

Chuck Soha '05 05crs@alumni.williams.edu I took Applied Real Analysis with Professor Morgan during my senior spring. Prof. Morgan's enthusiasm (as well as his excellent book) made the material fun, and my success in that course gave me a confidence in my mathematical abilities that has supported me through a physical chemistry Ph.D. and now a post doc. I also really appreciated going to the Hudson River Math Conference—what an excellent opportunity for young students. Professor Morgan, thank you so much for your devotion to excellent teaching; it was the best I had at Williams!

Geoffrey O'Donoghue '06 geoff.odonoghue@gmail.com

Professor Morgan, now nearly ten years since graduation, I have such fond memories of all my math classes at Williams and especially those with you. Your energy and passion were infectious and the pure joy that you had for math and for teaching made every class, problem set, and exam a real pleasure.

Wesley Tjosvold '07 wesley.tjosvold@gmail.com When in his real analysis course Frank Morgan presented the proof that the cardinality of the real numbers is greater than the cardinality of the integers, a feeling of *Wow, math is amazing!* washed over me. That remains one of my favorite proofs. Now, when I teach *my* real analysis students about the proof, I think of Professor Morgan and attempt to convey to my students the sense of enthusiasm and excitement for mathematics that he inspired in me.

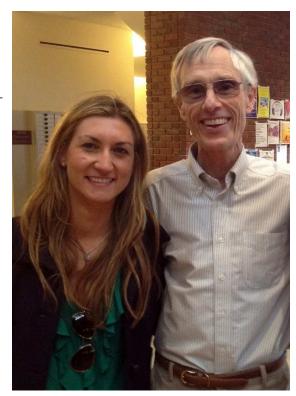
Kathryn Lindsey '07 kathryn.a.lindsey@gmail.com

Frank was a great mentor and a vibrant presence at Williams. I remember he was very encouraging. When I was planning to go alone to a Knoxville conference to represent Williams in the Problem Solving competition, he offered for me to travel with his SMALL summer research group and attend the conference together. In my alumni interviews for the Herchel Smith fellowship, the interviewers and I spent the first five minutes sharing Frank Morgan stories!

Jerry He '08 08xjh@williams.edu In my sophomore year, I learned that Professor Morgan had been a thesis advisor and mentor to a distant cousin of mine. When Prof. Morgan found out, he asked me to lunch. He acted like we were old friends, sharing memories of Williams in the '90s (and of my cousin, whom I didn't even know) and sharing stories about his recent travels to Europe, where I had never been. That conversation was when I first realized that the Williams faculty were really as accessible and welcoming as I had

hoped they would be. At the end of our lunch, he said that he has a gift for me and produced a €2 coin from his travels, telling me that he hoped I would go one day. Ten years and four European adventures later, I still have that coin.

Ali Barrett '09 alicia.l.barrett@gmail.com



One of my favorite memories from Williams was taking Discrete Math with Professor Morgan in the spring of 2006, which re-energized my interest in Mathematics. The class was so good that we created T-shirts for everybody, superimposing Professor Morgan's face on the classic Che Guevara revolutionary tee.

Aroop Mukharji '09 aroopm@gmail.com

Professor Morgan never taught me at Williams, but he is one of my favorite professors at Williams. He is kind, caring, involved, and passionate about the college experience. There is no substitute for a faculty sponsor showing up for you and Prof. Morgan did just this—whether on Mountain Day hikes or personal interventions, he helped me feel gratitude for Williams. He is a outstanding man and I was privileged to share a campus with him.

William Slack '11 wls1@williams.edu

As a mathematics PhD student and math teacher, Professor Morgan is one of my strongest influences in learning and teaching mathematics. His topology and analysis courses instilled in me the importance of precision and clarity, and his high standards and constant support pushed me to do the best I could.

His most valuable contribution to my career, though, was getting me admitted into graduate school in the first place! After being wait listed, I was worried about my prospects for graduate school and emailed Professor Morgan asking what I could do to help my chances. He was on a world-wide speaking tour at the time, and I would have understood if he wasn't able to help. However, not only did he respond encouragingly to my email, he called the admissions office from Asia to urge the committee to accept me! I know that his support was an integral part of their eventual decision to admit me, and without question I would not be where I am today without his guidance.

Andrew Lee '10 lee.andrew.sc@gmail.com

I took a class on teaching math with Professor Morgan in the fall of 2009. Professor Morgan's zeal for teaching shone through every interaction we had. He expected a lot from us, his student teachers, because our students deserved our best. I always knew that Professor Morgan was giving us his best, as well.

In my current work as a school counselor, I think back often to the lessons I learned from Professor Morgan. I strive to be as committed to my students as he was to us. I try to be as responsive and effective in my communications as he was with us (he taught me how to write efficient email subject lines - a lesson for which I will be forever thankful). I desire to be as diligent as he was.

I am grateful to Professor Morgan for the time he spent with me and the lessons he imparted upon me. His love for teaching (and learning) has stuck with me most of all.

Heath Pruitt '11 pruitt.heath@gmail.com

I will never forget when Professor Morgan had our entire Real Analysis class over to his house for dinner at the end of the semester. What unique Williams experience to be welcomed with open arms into a teacher's home! I feel so lucky to have taken his class.

Nicole Ballon-Landa '11 n.ballon.landa@gmail.com

Professor Morgan was my senior colloquium advisor on Benford's Law. During the preparation process, Professor Morgan made me understand and appreciate the importance of being concise and precise in my use of language. Having honed this skill as his advisee, it has now profoundly influenced my work in my career and graduate school. I will also be forever grateful for Professor Morgan's sheer dedication to my project: I can't count the number of times he read my colloquium draft and provided his immensely useful feedback on it!

Aayush Khadka '12 aayush.khadka@gmail.com

Frank Morgan was the professor who convinced me to be a math major at Williams. His enthusiasm for our multivariable calculus class, evidenced by his memorizing every student's name the first day of class, his energy at the blackboard, his rewards of old pennies or Math Magazine articles for interesting questions or correct answers, made me excited for the subject and for the major.

As my colloquium advisor, Frank Morgan pushed me to think carefully about not just the subject I was presenting, but also about the most effective way to communicate it to the audience. This is a lesson I continue to apply as a graduate student. Frank Morgan was a professor who demanded a lot from his students, but one who was so dedicated to his classes and to the math major that my effort and time spent in return felt appropriate.

Christina Knapp '13 cknapp@umail.ucsb.edu

Thank you for inviting our Math 105 class to your house for exam review and muffins. Best muffins I've ever had. And loved your nickel system in class.

Tracy Hu '13 tracy.hu8@gmail.com

I didn't post this, but thought I would share...



Samuel Tripp '14 samuel.tripp1@gmail.com

I took Multivariable Calculus (my first math class as Williams) with Professor Morgan during freshman year, and at the end we each had a one-on-one conference to go over how we had done in the class. After giving me my grade, Professor Morgan said to me, "So what other classes are you planning to take on your way to being a math major?" I hadn't come into Williams planning to be a math major, but having such a senior member of the faculty express that kind of assurance and enthusiasm gave me a lot of confidence that it was doable. I had Professor Morgan again two years later for Real Analysis.

A prefrosh I hosted once told me that he decided to come to Williams because of the class he sat in on with Professor Morgan. Combining this with my own experience, I start to get a sense for the large number of Williams students on whom Professor Morgan has made a lasting impact.

Daniel Siegel '15 daniel.siegel.25@gmail.com The first time I met Professor Morgan was at the first Math dinner in Mission of my freshman year. I was in my first month at Williams, knew close to no one, and had only just met most of the Math professors. At the dinner, Professor Morgan was sitting near me and overheard me talking to Professor Adams about my love of baking. He interjected at this point, introducing himself, and telling me that if I like to bake so much, that I should make cookies for the class I was in with Professor Adams and that he, Prof. Morgan, would pay for the ingredients. This first experience and memory of Prof. Morgan, to me, embodies who he is as a person: kind, willing to help anyone, even someone he had never met before, and what every professor at Williams should strive to be.

Throughout my time at Williams I was lucky enough to have Professor Morgan for three classes: Investment Math, Real Analysis, and Tournament Bridge. It is this last class where I got to know and admire Professor Morgan in the month I spent with him and 4 other students during Winter Study. Many know him for his teaching in math classes how he is willing to help anyone no matter the problem, but I was lucky enough to get to know him outside of that context. One of my favorite times from that month long class where we often traveled to Pittsfield and various other bridge tournaments was our multi-day event in Rye, New York. Prof. Morgan, in the 4-5 day span of the tournament, never once set foot outside the hotel, but instead immersed himself in the bridge world, not only playing with us, but teaching us along the way. Without his guidance and mastery of bridge, my partner, Paul, and I would never have won one of the events.

I will forever remember that class, and that week, as one of my favorite times at Williams. Countless other things Professor Morgan has done for me, including dinners at his house, help on any math problem ever, being my adviser, and encouraging me to write a Math thesis my senior year, also rank among my best memories. Thank you so much for everything you have done for me and for everyone else at Williams. I was so sad that you were on leave my senior year, but the three previous years I knew you had to be good enough.

Neeko Garnder '15 neekogardner@gmail.com



A friend and I were sitting down in Paresky for dinner one night when Professor Morgan came and sat down with us. It was totally unexpected. We spent the next hour or so talking about our spiritual lives, and how this aspect of our lives informed and directed our academic and personal lives. I will always treasure this memory.

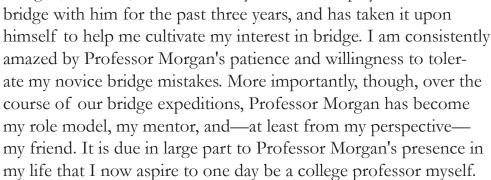
Dylan Griswold '15 dylgris@me.com

Taking a tutorial with Frank Morgan really taught me how to present material confidently. You knew that if you were under prepared, he would find out, and no one wanted to disappoint him. My tutorial partners and I learned a lot more that semester than just the class material; we learned how to properly prepare for and give confident academic presentations.

Samuel Donow '16 sad3@williams.edu

No single person has had a bigger influence on me during my time at Williams than Professor Morgan. Freshman year, I had the opportunity to take a truly wonderful Winter Study course with him in tournament bridge. Professor Morgan's enthusiasm for bridge was contagious and by the conclusion of the course, I too was hooked.

It would have been very easy for this nascent passion to fizzle out. After all, opportunities to play bridge in Williamstown are few and far between. Professor Morgan, however, has consistently asked me to play



I do not know what trajectory I would currently be on if I had never met Professor Morgan, but I am confident that my current trajectory is better for having had the opportunity to know this truly inspiring member of the Williams community.

Paul Friedrich '16 ptf1@williams.edu Professor Morgan is one of the first professors I came to know when I began my freshman year at Williams, and probably the one who influenced me the most. I started off the semester in his real analysis class, but after one lecture he placed me out of Math 350 and encouraged me to take higher level courses. I then took his topology tutorial in the spring. Admittedly, topology was hard to begin with, not just because of the material, but also because of the tutorial format which consists mainly of presentation and defense. I remember completely screwing up one meeting early on, but Professor Morgan had faith in me as a freshman kid, so I carried on with his kind guidance and help. In the end, he even recommended me going to the Hudson River Math Conference as part of Williams team, to give a small talk on a topology topic!

Professor Morgan is also extremely generous in helping students for their best. I planned to study away at MIT for my junior spring and went to him for a recommendation. MIT's application opened pretty late and I felt really sorry for bothering him on such short notice. However, Professor Morgan agreed readily and turned in a very strong letter early next morning! Apart from the classroom, I frequently have the pleasure of joining him for meals at Paresky. Professor Morgan loves to talk with all students, on everything, from the latest Green chicken challenges to his childhood fear. Great teacher, and beloved friend!

Yuanchu Dang '17 yuanchu.dang@williams.edu Once, in my Discrete Math class, Professor Morgan told us a story about the time he lost his shirt in a foreign bank or embassy. He later had to clarify that "lost my shirt" was a phrase relating to losing money, and that he didn't actually lose his shirt in a foreign country. It's moments like this that made Discrete Math an incredibly fun class and gave me a fond respect and appreciation for the Math professors at Williams.

Anjali Pai '19 ap8@williams.edu



Photo submitted by Yuanchu Dang '17

