



## Spotlight Interview with the University of Massachusetts - Amherst INFORMS Student Chapter



**Harsh Anand**  
The University of Virginia



**Gulten Busra Karkili**  
University of Massachusetts Amherst

*It was an honor for ORMS Tomorrow to interview the leadership of the UMass Amherst INFORMS Student Chapter. As part of our quest to gain a deeper understanding of the goals and motivations of the Chapter, past accomplishments, and future directions, we interviewed three key individuals:*



**Professor Anna Nagurney**  
Faculty Advisor



**Paola Pimentel Furlanetto**  
Chapter President



**Ogechi Vivian Nwadiaru**  
Chapter Secretary

## Can you tell us about the UMass INFORMS Student Chapter?

**Prof. Nagurney:** UMass Amherst INFORMS Student Chapter was founded in 2004. At that time, we had a wonderful cohort of Ph.D. students in Management Science at the Isenberg School including my Ph.D. student, Tina Wakolbinger. She had come from Austria, and I had met her when she was a student in my classes at SOWI – the University of Innsbruck, Austria, where I held a Distinguished Fulbright in 2002. Together, we got the Chapter started and approved by INFORMS, and Tina became the first President of the UMass Amherst INFORMS Student Chapter. From the very beginning, the goal was to be very inclusive and promote Operations Research and the Management Sciences across campus and beyond through our Speaker Series and activities while building a welcoming community. The Chapter's members over the years have come from the Isenberg School of Management and the College of Engineering as well as from other parts of the campus. Over the years, many friendships have been formed, as well as a few marriages! The networks continue to provide support even as our students become alumni and as they pursue their professional careers. This includes academic careers or as practitioners in different fields, from high tech and consulting to healthcare, as examples.

## What are the goals of this Chapter, and what motivates the members most?

**Prof. Nagurney:** Students come, study, learn, complete their research and degrees, and graduate. The success of a student chapter depends on continuity and the “passing of the baton.” Interests may change as well as responsibilities and the level of dedication. Still, I would say that love for the discipline of Operations Research and the Management Sciences and its great applications is the tie that binds us across the colleges and schools that make up the University of Massachusetts Amherst. The primary goal of the UMass Amherst INFORMS Student Chapter is stated brightly on its homepage: “to encourage interest in the field of operations research and the management sciences and to provide a means of communication between people having an interest in the management sciences and operations research.” I do think that the chapter, since 2004, has excelled in this dimension.

**Paola:** Goals are to spread awareness about OR/MS and create a venue for collaboration. I am particularly committed to “building bridges”, always seeking to attract people to INFORMS Chapter and help them succeed. This can be achieved through excellence in their research, speaking, listening to talks, learning to network, and in their social and personal lives by fostering a relaxed environment to forge friendships and decompress from academic pressure.

**Ogechi:** The Chapter's goal is to advance its members' professional goals in an environment that fosters collaboration and creativity. Through the chapter, members are prepared to take on roles in academia and industry to solve challenges at the frontier of the discipline. In addition, we can network and connect with senior professionals in the field and become aware of pressing industry challenges. One thing that keeps the chapter motivated is the people and their shared passion for OR/MS. This could be manifested through optimization board game nights, our regular speaker series or practice events that allow us to sharpen our academic knives for the Annual INFORMS meeting.

## How are the previous Chapter members doing in their academic careers, and how did the Chapter contribute to that?

**Prof. Nagurney:** Many of the former members, especially the Ph.D. students from the Isenberg School, have assumed academic positions not only in the US but also in Canada, Europe, and even Australia. What I find incredibly inspiring is that many continue to receive professional accolades in the form of research and teaching awards and are making excellent progress in moving up the ranks in academia to even Full Professor! For example, Tina Wakolbinger, whom I had mentioned earlier, achieved the rank of Full Professor at the Vienna University of Economics and Business in Austria only three years after her Ph.D. She is the Deputy Head of the Institute for Transport and Logistics Management and the Head of the Research Institute for Supply Chain Management there.

Our chapter alums have attained academic appointments at numerous universities and colleges, including Carnegie Mellon University, the University of Connecticut, the University of Nebraska, York University, the University of Sydney, IESEG School of Management Paris, WPI, the SUNY system, the Penn State system, Virginia Tech, Babson College, Bentley University, Old Dominion University, Texas A&M Commerce, the University of San Francisco, Adelphi University, Pace University, the University of Richmond, among others. Some of our chapter alums began their academic careers as postdocs at McGill University, Northwestern University, and Mass General – Harvard Med.

An excellent positive feature of the Chapter has been the hosting of speakers. We have made use of the outstanding INFORMS Speaker Series Program. Students get to meet luminaries in our profession and enjoy lunch with the speaker in groups. We have fond memories of hosting: Radhika Kulkarni, Cynthia Barnhart, John Birge, Sheldon Jacobson, Ellis Johnson, Dimitris Bertsimas, Les Servi, Dick Larson, Arnie Barnett, Brenda Dietrich, Mary Helander, Dietrich Braess, Michael Johnson, Jack Levis (virtually), Tinglong Dai (virtually), to name just a few.

Through networking with such outstanding INFORMS role models, students learn a great deal, and several students have even used the contacts made to obtain letters for promotion and tenure! They get to see them at INFORMS conferences, which is also very special.

**Paola:** They are doing so well that it can be intimidating! Just to name a few past officers that are star scholars: Dr. Deniz Besik, Dr. Destenie Nock (a Minority Issues Forum Paper Competition finalist at the 2022 INFORMS Annual Meeting!), Dr. Charalampos Sipetas, and Dr. Katerina Deliali. I had the pleasure and luck to overlap with most of them, but I met Destenie later at the 2021 INFORMS Annual Meeting through recommendations from our mutual Ph.D. advisor, Dr. Erin Baker. Their sharpness, commitment, and humbleness are astonishing. They encourage and make you feel like you belong to this research community.

**Ogechi:** Graduated members currently boast of illustrious careers, taking up positions as tenure-track associate professors immediately upon graduation at well-renowned universities, where they continue to mentor current members. The Chapter's Faculty Advisor mentors members of the Chapter and ensures we can interact with a curated list of industry professionals through the speaker series. I believe this has helped with both exposure and inspiration. Furthermore, chapter members often take classes together in the early stages of their graduate program, which helps forge strong bonds and camaraderie. Hence, growth opportunities are easily shared in a collaborative spirit.

## Is there anything this Chapter does differently, pushing the boundaries of traditional Chapter events and tasks? How did the members come up with those ideas?

**Prof. Nagurney:** I believe that one of our greatest strengths is that we seek out thought leaders to come and share their experiences and findings with us. For example, we have hosted Tom Vanderbilt, the author of the best-selling book "Traffic," who drove up from NYC to make it just in time to speak at the Isenberg School at 11 AM, and news TV crews were waiting. I was waiting with bated breath, but he showed up with just minutes to spare. We were also the first from North America to invite Dietrich Braess of Braess Paradox (and other accomplishments) fame. He published his famous article in 1968. He gave an amazing talk and stayed with us for a few days. Interestingly, Braess, Wakolbinger, and I translated the Braess (1968) article from German to English. The translation was published in the INFORMS journal Transportation Science, along with an accompanying preface article by David Boyce and me on the fascinating history behind the paradox. (As an aside, Tom Vanderbilt interviewed me about the Braess Paradox, and credit is given in his book.)

**Paola:** Our Speaker Series is outstanding, and we owe a gratitude to Dr. Anna Nagurney and the Isenberg School of Business. The research caliber and broad network of Dr. Nagurney allow us to connect with top researchers. Specifically, in the context of covid and remote speakers, we implemented "Watch Parties" where healthy students (negative-tested or asymptomatic) would meet and share lunch over the seminar.

**Ogechi:** As long as I have been a part of the Chapter, we have evolved from hosting "tune-up events" where members can practice communication skills in preparation for the Annual INFORMS Meeting to hosting game nights using games that can be interpreted as OR/MS games. We have also leveraged social media tools to showcase chapter events and activities.

## What are the expectations of the members for the future of this Chapter?

**Prof. Nagurney:** I will do my best to support the expectations of future members.

**Paola:** Continually improve and professionalize our processes. The Chapter is relied upon for self-motivated service and friendship between office boards. A lot of the knowledge is transmitted by one-to-one interactions with past officers. We want to take training, recruiting, and operations to an enterprise level in order to facilitate board transitions as well as further train our members for the job market.

**Ogechi:** We want to attract more members from underrepresented backgrounds and advocate for equity. In addition, we would like to ensure that our most critical assets – our people – are prioritized. We hope to continue supporting our members in advancing their professional goals.

## What are the key activities that the Chapter conducts throughout the year?

**Prof. Nagurney:** Speakers have been a mainstay of the student chapter along with various social events and professional panels on the job market, careers in academia and industry, etc. Annually, we have an INFORMS Conference Tune-up at which the students who will be presenting at the yearly conference get to practice their presentations and field questions from the audience. This is always a terrific event and enjoyable for everyone since we learn about the great research being done in OR/MS on different parts of campus. Field trips have also been very successful, whether to ISO (Independent System Operator) New England or to orchards to pick fruit. Volunteer activities in the form of helping out with food distribution at the Amherst Survival Center or collecting supplies and funds for victims of dis-



asters have been meaningful and impactful activities. Students seize opportunities as they arise and try to make a positive difference.

**Paola:** Seminars via Speaker Series, game nights, outreach events, practice sessions for the INFORMS Annual Meeting, field trips, and end-of-the-semester networking party. Some of these got disrupted due to Covid-19, but we are working on returning to the pre-pandemic activity levels. We are also planning to introduce informal coffee hours so our members can practice pitch, recruiting, and networking throughout the UMass Amherst campus.

**Ogechi:** We also host seasonal events such as a spring hike or cookout and conduct community outreach by organizing high school outreach events and recruiting new members with university tabling events.

## How do you recruit new members and the leadership board? What key personality traits do you see in students when recruiting?

**Prof. Nagurney:** I do not engage in recruiting students for the leadership board. This is a student chapter that I have had the honor and privilege of serving as the Faculty Advisor of since 2004 – for an amazing 18 years. In fact, I had an outstanding offer from another university around that time and almost left UMass Amherst. However, I decided to stay (UMass counteroffered) and felt that there was a void. This led, in part, to the motivation for starting the chapter with having speakers come to campus being an important component.

Serving on the leadership board of the student chapter helps in the development of students' leadership and organizational skills, as well as communication and time management skills. Plus, such service is appreciated very much by colleges and organizations when a student is on the job market (and often is something discussed during interviews many students have told me). Not everyone is suited for a chapter leadership post. The best leaders I have found are excellent communicators; are very responsible and also are wonderful at building community and esprit de corps. OR skills in logistics are also very useful in planning for and in setting up various events and social activities. Of course, dedication and focus are very important alongside with being empathetic, kind and well-mannered.

**Paola:** Personal connection with current officers and referrals from professors play a big role. We would love to reach a membership level that we would need to run electoral campaigns (something to aim for as we ramp recruiting!). At the moment, most grads that show interest can be recommended for an officer position.

**Ogechi:** We recruit new members through university tabling events, communicating with all departments with shared interests, and sharing our events with other departments and programs. Our priority is to recruit students interested in engaging with colleagues and collaborating.

## Has the Chapter returned to normal since the pandemic? What is making this transition difficult?

**Prof. Nagurney:** Last year, our speaker series were virtual, as were several of the activities (but not all). With more individuals with boosters and with greater knowledge surrounding the transmission of the coronavirus, I expect that there will be more face-to-face activities. At UMass Amherst, we have returned to face-to-face teaching. Hosting speakers virtually did allow for audience participation from many corners of the planet, and some activities, for various reasons, will likely be virtual.

**Paola:** We are getting there. The issue is a lot of the knowledge got lost as many pre-pandemic officers and more active members graduated (as mentioned in Question 5). Processes and documentation are helping us do more.

**Ogechi:** I would say we are still in a transition period. It is exciting to have activities in-person. However, it will take some time to return to the new normal. We had to adapt our activities to an online format during the pandemic. Now, many people are struggling with readjusting to being in a room where we are not just jumping from one Zoom room to the other. For ease of participation, we may retain an online or hybrid format for upcoming events.

## Could you highlight some of the achievements of the Chapter in recent years?

**Prof. Nagurney:** I do believe that the UMass Amherst INFORMS Student Chapter is one of such chapters that has been in operation the longest. We have been recognized with an annual award from INFORMS ever since INFORMS started giving out such awards in 2007. I am especially delighted that several of the Chapter Officers over the years have been recognized with the Judith B. Liebman Award, and I was honored to receive the Moving Spirit Award from INFORMS in my role as Faculty Advisor.

I think that sustaining the Chapter over such a period of time speaks to its strength in community building through its various activities. For example, pre-pandemic, our end-of-the-semester parties with international cuisine were not to be missed, with many faculty and some students even bringing their children.



We would always bring Ukrainian foods such as varenyky (called pierogies by some) and kovbasa (kielbasy), as well as pastries. We had a special event marking the Chapter's 10th anniversary with alums even preparing touching videos of remembrances.

**Paola:** Keeping strong throughout the pandemic, we were among the prized Chapters in 2020 and 2021!

**Ogechi:** We are recognized annually by INFORMS for our activities and student engagement through the Annual Student Chapter Awards. Also, our Chapter alum, Dr. Destenie Nock, currently an assistant professor at Carnegie Mellon University, received an honorable mention for the Minority Issues Forum (MIF) Early Career Award at the INFORMS Annual Meeting this year, in addition to being a finalist for the paper competition.

### Is there anything else you would like to share with us that has not been covered by the previous questions?

**Prof. Nagurney:** Starting and maintaining a student chapter does take energy and effort and certainly some financial support, so one may have to be entrepreneurial, but the rewards

and memories are definitely worth it. It is heartwarming to see so many former members of the UMass Amherst Student Chapter who every year come to INFORMS Student Chapter Award ceremonies at the annual INFORMS meeting to support present members!

**Paola:** I want to add my statement as President about UMass INFORMS:

UMass INFORMS Student Chapter brings together students working on Operations Research & Analytics from across the UMass Amherst campus. This means creating a venue for collaboration, support, and friendship among the College of Engineering, the College of Information and Computer Science, and the Isenberg School of Management. Such schools are geographically apart; however, they often have overlapping interests. UMass INFORMS is here to bridge the distance, creating seminars and events that are of interest to multiple colleges. As president, I work with faculty, staff, and students to make sure our Chapter is fulfilling its goals. I bring my experience in engineering R&D and project management to support and motivate our members. Together we learn and, most importantly, make meaningful life-long connections.

**Ogechi:** I am grateful for the Chapter. I arrived during the pandemic, and being an active member of the Chapter has helped me personally and professionally.



Figure 4: UMass-Amherst Student Chapter Gathering at the 2022 Annual INFORMS Meeting. From left to right: Dr. Laura Albert, Christian G. Hernández-Negrón, Paola Pimentel Furlanetto, Vivian Ogechi Nwadiaru, Dr. Anna Nagurney, and Gulten Busra Karkili