PRESIDENT BEVAN MORRIS RETIRES, JOHN HAGELIN TAKES THE HELM

MAHARISHI UNIVERSITY OF MANAGEMENT

UNIVERSITY REPORT
2015 -2016

David Lynch delivers commencement address
This is your brain on Transcendental Meditation
Creating peace through group meditation

Fireworks celebration in front of the Golden Dome on Founder’s Day

PRESIDENT BEVAN MORRIS RETIRES, JOHN HAGELIN TAKES THE HELM
MESSAGE FROM OUR FOUNDER

Since accepting the reins of Maharishi University of Management last September from our extraordinary former president Dr. Bevan Morris, I have been greatly inspired by the amazing progress taking place at our University—and by the multitude of tantalizing opportunities that lie just before us. This 2015–2016 University Report provides a quick overview of these inspiring achievements and emerging opportunities.

Our new student applications and enrollments are surging, thanks to the exceptional skill of our newly reconstituted marketing team. We are simultaneously engaged in an intensive transformation and renovation of our MUM campus, starting with our student dormitories, which are so central to the happiness of the precious students we serve. We are strengthening our existing academic programs as we launch innovative new ones—including the nation’s first Regenerative Organic Agriculture program and associated Petra Stanley Center for Regenerative and Organic Agriculture (now under construction). Our inspiring faculty and their enthusiastic students continue to receive national recognition for their groundbreaking research, professional achievements, and artistic creations.

At the center of all this creative activity is Maharishi’s great gift to us of Consciousness-Based education—and the profound development of consciousness that comes from Transcendental Meditation and TM-Sidhi practice. In this Report you will see clear evidence of the quantifiable growth of higher states of consciousness in our students and faculty, the dramatic effect on crime produced by our Invincible America Assembly, and the inspiring legacy of MUM’s accomplishments under the leadership of our past president Dr. Bevan Morris.

Yet these achievements are just the beginning. In the coming semester, we are focusing on student satisfaction, retention, and enrollment; improving faculty skills, credentials, compensation, and benefits—including retirement benefits; increasing our ability to inspire our students with Maharishi’s unique knowledge and vision, as well as deepening their experiences with Advanced Techniques and the Sidhis; and expanding programs with the greatest positive financial impact, thus providing the economic engine to fulfill all our vital goals and commitments.

We have so much untapped potential—so many low-hanging fruits and opportunities for rapid expansion! We need only rally together as a united family and commit our collective focus and resources—and thereby turn these tantalizing opportunities into magnificent achievements. I look forward to working with you to accomplish all these inspiring goals in this coming year.

MESSAGE FROM OUR PRESIDENT

The potential of every human brain is unbounded, infinite. Everyone is equipped with the physical machinery in his brain physiology to experience that level of intelligence which is the ocean of all knowledge, the ocean of all energy, intelligence, and bliss.”—Maharishi Mahesh Yogi
CAMPUS NEWS

4 | Long-time president Bevan Morris retires, John Hagelin assumes presidency
6 | Maharishi Vedic Observatory now graces campus
7 | Donors help fund extensive renovation
7 | Students enroll in new web TV series track in film MFA
8 | Sustainability achievements and recognitions continue
8 | MUM graduates 58 students in South Africa
9 | MUM collaborates with Bali educators
9 | Record enrollment of 1,769 students
10 | Donation supports Vedic organic vegetables

ACHIEVEMENTS

36 | Faculty achievements
40 | Student achievements
44 | Maharishi School achievements

INSTITUTIONAL ADVANCEMENT

48 | Our supporters

UNIVERSITY REPORT - 2015 - 2016

FEATURES

12 | Filmmaker David Lynch delivers commencement address
   Creating a better world through Transcendental Meditation

18 | Accounting Professionals MBA poised for expansion
   Offers state-of-the art technical skills

22 | Your brain on Transcendental Meditation
   EEG research by Fred Travis shows how you evolve

28 | Meditating for peace
   Study shows campus assembly lowered homicide and violent crime

30 | 36 years of remarkable achievements
   Reviewing the presidency of Dr. Bevan Morris
President Bevan Morris announced in May that he would be retiring, effective Founder’s Day on September 12—marking the end of 36 years of service to Maharishi University of Management.
During its regular quarterly meeting in June, the board of trustees named a new president: renowned physics professor John Hagelin. A formal announcement of the transition was made during commencement ceremonies in June.

Dr. Morris will continue to be affiliated with the University in his new role as International President of Maharishi Universities of Management. He will also continue in his role as Prime Minister of the Global Country of World Peace, which includes helping to oversee Transcendental Meditation® organizations in countries around the world.

Speaking of Dr. Hagelin’s qualifications for this new role, Dr. Morris said, “He is tops in knowledge, both in science and Maharishi Vedic Science, a charismatic and inspiring figure, and has proven his administrative and marketing skills by increasing the number of people in the U.S. learning the Transcendental Meditation technique tenfold in just a few years.”

In a letter to MUM supporters, Dr. Hagelin wrote, “I am deeply honored, and greatly looking forward to both the challenges and wonderful opportunities that lie ahead.”

**Physics professor and leading researcher**

Dr. Hagelin has been a physics professor at Maharishi University of Management since 1984 and has served as honorary chair of the board of trustees. He received a PhD in theoretical physics from Harvard University in 1981 and then completed post-doctoral fellowships at European Organization for Nuclear Research (CERN) and the Stanford Linear Accelerator Center. He has made major contributions to grand unified field theory, publishing over 70 papers in journals such as *Physics Letters*, *Nuclear Physics*, and *Physical Review*.

Dr. Hagelin also heads the U.S. organization that teaches the Transcendental Meditation technique and is the president of the David Lynch Foundation, which teaches Transcendental Meditation to at-risk students, veterans, victims of abuse, the homeless, refugees, inmates, and other highly stressed populations. He is also the director of MUM’s Institute of Science, Technology and Public Policy. He will continue in these other roles while serving as president of MUM.

**Dr. Morris’s extraordinary contribution**

Under Dr. Morris’s leadership, the University underwent immense change, including academic offerings and the campus itself. He oversaw the addition of a variety of graduate programs at the master’s and PhD levels. Enrollment grew from around 550 students to nearly 1,700.

The campus itself was transformed, with scores of old buildings razed and dozens of new ones taking their place, all designed according to Maharishi Vastu® architecture. Even as he led the University, Dr. Morris continued to play a leadership role worldwide, working with Maharishi on projects and leading many conferences and assemblies held over the years. He has traveled to more than 100 countries, meeting leaders in government, business, and science, as well as with the international leaders of Transcendental Meditation organizations, students at Consciousness-Based education schools, and alumni and friends of MUM.

“Dr. Morris has inspired countless people with his presentations on the knowledge Maharishi brought to light and how Maharishi’s programs are taking root all over the world,” said MUM vice-president Craig Pearson. “He has led a truly remarkable life of enlightened leadership and service.”

**He is tops in knowledge, both in science and Maharishi Vedic Science, a charismatic and inspiring figure, and has proven his administrative and marketing skills.**

Dr. Morris speaking about John Hagelin

“Dr. Morris has inspired countless people with his presentations on the knowledge Maharishi brought to light and how Maharishi’s programs are taking root all over the world.”

MUM vice-president Craig Pearson

**Other administrative changes**

Coinciding with the naming of a new president, other administrative changes include naming several vice-presidents and a provost. Dr. Pearson, who has served as executive vice-president for 18 years, has been named vice-president of academic affairs. Scott Herriott has been named provost. Rod Eason has been named vice-president of enrollment management and marketing. Brad Mylett is now vice-president for development and alumni affairs, and Tom Brooks is vice-president of operations.
A Maharishi Vedic Observatory™ created by Carl Stone now graces the grounds immediately in front of the Argiro Student Center, thanks to a generous donation from Mr. Stone and Maharishi Global Vedic Observatories.

The observatory consists of 10 instruments in a circle that are different types of sundials as well as a central display of the Rik Ved. These instruments are based on the same timeless Vedic tradition as the Transcendental Medit-tation technique.

In ancient times they were used to track the heavenly bodies and locate the individual in space and time. But, more importantly, they are instruments for cultivating one’s deep connection with the universe and aligning oneself with the orderliness in nature. Maharishi described the observatory as an ancient Vedic technology to expand awareness and train the vision and mind to focus on the mathematical precision and order that regulates the universe without problems.
Donors help fund extensive renovation

Verrill Hall, Hildenbrand Hall, science labs, video and sound studios, and community workshop undergo renovations

Generous supporters of MUM helped fund major renovation this past year. Verrill Hall, which houses offices and classrooms, and Hildenbrand Hall, a residence hall for women, both received upgrades. Other areas receiving attention included two science labs, video studios, and a makerspace, a community workshop available for woodworking, metalworking, electronics, 3-D printing, sewing, and more. Plus, a new sound studio was created that's being used for producing music and for post-production of film.

Renovations in Hildenbrand Hall, funded by board of trustees chair Jeffrey Abramson, include a new kitchen and dining room, study rooms, a TV room, a lounge, and a fitness room. The main entrance received a new canopy, landscaping, and sidewalk. The next phase of improvements will be focused on student rooms, bathrooms, and a new roof.

Renovation in Verrill Hall, most of which was funded by an anonymous donor, included four classrooms to accommodate the hundreds of students in the Computer Science Department and 30 offices for the Computer Science Department as well as other administrative personnel.

Students enroll in new web TV series track in film MFA

A new track in the David Lynch MFA program in which each student writes, directs, and produces a 7-minute episode for a web-based TV series launched with nine students this past spring.

The track is being taught by some top Hollywood professionals, including producer Bill Borden, whose 35 movies and TV shows include Mission: Impossible III, La Bamba, and High School Musical. He is the acting executive producer of the series the students are producing.

Also teaching is screenwriter Ellen Sandler, whose credits include co-executive producer/showrunner of the popular TV series Everybody Loves Raymond, for which she received an Emmy nomination; and screenwriter Kate Purdy, who has written for TV series such as Cougar Town, The McCarthys, BoJack Horseman, Enlisted, Secret Girlfriend, MADtv, and Cold Case.

Heading the program is Michael W. Barnard, who has created hundreds of films, many of which have won awards in various festivals and competitions. He also worked with Maharishi from 1971–78 making films.

Toward the end of this three-semester program, the students will head to Los Angeles to meet with David Lynch and pitch their completed series to various video streaming services.
Sustainable Living Center recognized by United Nations

A two-page case study of MUM's Sustainable Living Center has been included in a 160-page PDF book published by the United Nations that serves to “inspire, encourage, and support universities to develop and implement their own transformative strategies for establishing green, resource-efficient, and low carbon campuses.”

Titled Greening Universities Toolkit V2.0, the book details strategies and tactics that universities around the world can use to reduce their carbon footprint, address climate change, increase resource efficiency, enhance ecosystem management, and minimize waste and pollution.

The Sustainable Living Center case study includes a photo of the building, a description of MUM, the issues the building was intended to solve, and extensive detail about the building itself.

Approximately 140 trees planted

Thanks to a $10,000 grant from Alliant Energy and the class gift from the 2015 graduating class, around 140 trees were planted on campus this past year.

The class supported planting of 39 fruit trees, while the Alliant grant funded planting of around 100 linden, cypress, oak, buckeye, redbud, birch, hickory, locust, pine, and tulip trees, as well as other varieties.

Many trees on campus in recent years have been lost due to drought and disease, and the new trees are a significant step toward replanting campus. MUM hopes to be able to continue planting each spring and fall.

100% of dining hall food waste now being composted

Since late December, all of the food waste from Annapurna Dining Hall—leftovers from veggie prep, leftover food in serving trays, and diners’ uneaten food deposited in bins—is being composted on campus.

The compost is used by the MUM Student Organic Farm, which grows vegetables year-round for sale to the MUM dining hall and to local customers. In the past, MUM had been paying a company to take away the food waste for composting, and then paying again for delivery of the compost.

Thanks to a $20,000 grant from Iowa’s Department of Natural Resources, a new compost facility will be built on the northwest corner of campus that will include a 90-foot hoop house.

Sustainability achievements and recognitions continue

MUM graduates 58 students in South Africa

MUM continues to enroll students at Maharishi Invincibility Institute (MII) in South Africa, with 53 undergraduates and 5 graduate students receiving degrees this past June.

In March of 2017, MII is scheduled to graduate its fourth class of MUM bachelor’s students, bringing the total number of MII-MUM graduates to almost 200 since December of 2013. Four of these graduates have now enrolled at the Fairfield campus to study for an MBA.

MII continues to garner generous corporate support. In December of 2015 one of the biggest advertising agencies in South Africa (FCB) partnered with the Invincible Empowerment Fund. This deal could ultimately support 200–300 women per year to enroll in Maharishi Institute programs. In addition, FCB has committed to fund the development of an industry-related curriculum in 2016, followed by a pilot program in 2017 and 2018 that will prepare students for jobs in that industry.

Microsoft has also supported MII with a software donation valued at about R20 million ($1.5 million). The software includes Windows 10 licenses, Microsoft Office programs, and associated training courses.
Enrollment continues to reach new heights, with 1,769 students enrolled this past spring. Of these, 1,089 were enrolled in the Computer Professionals Program, including those in their practicum phase working at companies around the country.

The initial phase of the collaboration will entail offering short courses to Warmadewa faculty and executives. Some of these courses have already been developed, and others are being created, with instruction to be online, on-site, or a combination of the two.

Warmadewa University, founded in 1984, is an accredited university with over 10,000 students and over 275 teaching staff. It offers 14 undergraduate and 4 graduate programs.

Short courses will also be the focus for the collaboration with SMA Bali Negeri School, where the 300 students are already practicing the Transcendental Meditation technique and are intending to learn the TM-Sidhi® program.

The visit resulted in a formal agreement that describes four areas of collaboration with Warmadewa University and an agreement for collaboration with SMA Negeri Bali Mandara School. The Warmadewa collaborations include their medical school, agriculture program, management department, and biology department.

The Computer Professionals Program is celebrating its 20th anniversary in 2016. Beginning with 14 students in 1996, the program has grown rapidly thanks to internet and social media marketing, but especially due to word of mouth.

Students in the program spend up to eight months on campus taking advanced courses and then work in paid positions in companies around the U.S. for up to two years as part of their practicum. They also continue to take courses while enrolled in the practicum.
Donation supports

Vedic organic vegetables

A generous donation of $75,000 from the Wege Foundation over the past two years has funded the purchase of Maharishi Vedic Organic™ vegetables for the campus dining hall.
The vegetables are grown by Maharishi World Peace Vedic Organics in Maharishi Vedic City. The farm includes two one-acre greenhouses that grow produce year round. Specially trained Maharishi Vedic Pandits perform specific daily recitations to the seeds and plants in order to enliven vitality and balance.

The performances last many hours and are done at each of the eight stages of the development of the plants.
“Always have final cut.”

FILMMAKER DAVID LYNCH GIVES COMMENCEMENT ADDRESS

RECEIVES HONORARY DOCTORATE

Famous for his movies, revered on campus, and one of the world’s most high-profile advocates of the Transcendental Meditation technique, filmmaker David Lynch delivered the 2016 commencement address and received an honorary doctorate. Movies such as Mulholland Drive, The Elephant Man, Blue Velvet, and The Straight Story have established Mr. Lynch as Hollywood’s most original filmmaker, widely admired for being fiercely committed to his artistic vision.

His key advice to the graduating students sums up that commitment:

“Always have final cut.” Don’t compromise your creative impulse by letting someone else make the final edits.
Practicing Transcendental Meditation since 1973

He credits his practice of the Transcendental Meditation technique for his creativity.

“I started Transcendental Meditation in 1973 and have not missed a single meditation ever since. Twice a day, every day. It has given me effortless access to unlimited reserves of energy, creativity, and happiness deep within. This level of life is sometimes called ‘pure consciousness’—it is a treasury. And this level of life is deep within us all.”

Throughout his career he typically encouraged those he worked with to learn Transcendental Meditation, and many did, such as actresses Laura Dern and Naomi Watts. But mostly his practice was a private matter.

That began to change when he chose to attend a special month-long course with Maharishi in 2003, giving him the opportunity to immerse himself in Maharishi’s wisdom.

Campus visit stirs enthusiasm for promoting Transcendental Meditation

Shortly after his course with Maharishi he made a quiet visit to campus, during which he attended a performance by Maharishi School students of acts they would be presenting at the state speech competition. He was astounded by their creativity, spirit, and presence. He had worked in Hollywood for decades, but felt as if these students had something special. He was sold, then and there, on the idea of Consciousness-Based education.

A shy and private man, later that year he took his first big step to talk publicly about Transcendental Meditation. Collaborating with organizer Bob Roth, he appeared at a press conference along with Heather Graham, Laura Dern, and Laura Haring—actresses who had learned Transcendental Meditation while working with him. They spoke about the benefits of Transcendental Meditation and announced the intention to build a Maharishi Peace Palace in Los Angeles.

More press conferences announcing Peace Palaces followed, with the media always eager to attend, thanks to his fame and that of those who would appear along with him. Transcendental Meditation was increasingly in the news.

After these press conferences, he continued to speak publicly about Transcendental Meditation. In May 2004 he and John Hagelin were featured speakers at a peace conference in Denmark that was attended by the Danish Minister of Defense.

Then in December 2004 and January 2005 Mr. Lynch began to focus on education. He and recording artist Donovan headlined three events that showcased the Transcendental Meditation technique and Consciousness-Based education: Lincoln Center in New York City, the Kennedy Center in Washington, DC, and the Kodak Theatre in Los Angeles.

David Lynch Foundation brings Transcendental Meditation to 500,000

Inspired by the promise of Consciousness-Based education, in 2005 Mr. Lynch launched the David Lynch Foundation for Consciousness-Based Education and World Peace with the goal of making the Transcendental Meditation technique available to at-risk children in urban areas. Within a year schools had begun adopting the foundation’s Quiet Time Program, to great success.

Over the years, fundraisers and generous donations helped support bringing Transcendental Meditation to additional groups who were...
in desperate need: veterans, the homeless, HIV sufferers, abused women and children, and more. Today his foundation has helped bring the Transcendental Meditation technique to more than 500,000 children and adults in 35 countries.

National college tour

Meanwhile, Mr. Lynch continued to go public with his enthusiasm for the transforming power of Transcendental Meditation. In 2005 he embarked on a tour of universities in the U.S.

The theme was “Exploring the Frontiers of Consciousness, Creativity, and the Brain,” and each event also included John Hagelin, Fred Travis, and other notable speakers. Venues included New York University, Yale, Brown, University of Southern California, University of California at Berkeley, and the University of Oregon.

Unlike the earlier press conferences, in which Mr. Lynch spoke briefly along with other speakers, these events promised the opportunity to spend a significant amount of time hearing Mr. Lynch talk about creativity, filmmaking, consciousness, and meditation. Instead of a lecture, though, he would simply take questions—which he prefers to giving a prepared talk.

His legions of fans found the opportunity too good to be true: their hero, in person, answering their questions and talking about creativity. Hundreds of people flocked to the events.

“David is a quiet and shy person by nature, but he just keeps putting himself out there, getting up in front of huge audiences to talk about Transcendental Meditation,” said Bob Roth, principal organizer of Mr. Lynch’s events. “He is completely committed to bringing Transcendental Meditation to everyone, in whatever way he can.”

Catching the Big Fish

The 10th anniversary edition of David Lynch’s best-selling book Catching the Big Fish: Meditation, Consciousness and Creativity is now available. When it first appeared in 2006, his book was lauded for being “as close as Lynch will ever come to an interior shot of his famously weird mind” (Rocky Mountain News).

Providing a rare window into his methods as an artist, his personal working style, and the immense creative benefits he has experienced from the practice of meditation, Catching the Big Fish explains the development of Mr. Lynch’s ideas.

Now for the bestseller’s 10th anniversary, he includes his exclusive interviews with Paul McCartney and Ringo Starr, who open up about first meeting Maharishi in 1967, their musicianship, songwriting, shared history, and the benefits they have experienced from their decades-long practice of the Transcendental Meditation technique.
Then in the spring of 2006 he came to campus for the first of three annual David Lynch Weekends. Open to the public, the theme of the weekends was again “Consciousness, Creativity, and the Brain.” Hundreds of students and fans from the region and even from other parts of the country showed up.

Mr. Lynch spent hours answering questions. Attendees also heard about consciousness and the unified field from John Hagelin. Fred Travis spoke about the brain, and gave a live demonstration of someone practicing Transcendental Meditation while an EEG readout of the person’s brain waves appeared on a large screen. Well-known musicians, including Donovan and Moby, performed.

Following the success of his college tour, in 2007 he appeared at events in 16 countries in Europe, the Middle East, and North America along with John Hagelin to present Transcendental Meditation as a solution for peace.

**Paul McCartney, Ringo Starr, Jerry Seinfeld, Hugh Jackman, Ellen Degeneres support Lynch Foundation**

Mr. Lynch’s openness about his practice of Transcendental Meditation and its benefits, along with his extraordinary reputation among creative artists, gradually began to encourage other well-known practitioners to be open about their practice. And many who weren’t already meditating became interested in learning, creating a groundswell of interest. Meditation was cool.

A turning point came in 2009 when Mr. Lynch and Bob Roth envisioned an event that would feature surviving Beatles Paul McCartney and Ringo Starr. It was to be a benefit for the David Lynch Foundation and was to be held at Radio City Music Hall in New York City.

Not only did these famous musicians agree to perform for free to support this worthy cause, they were accompanied by a lineup of meditating celebrities and musicians: Jerry Seinfeld, Howard Stern, Sheryl Crow, Donovan, Eddie Vedder, Ben Harper, Moby, Paul Horn, Bettye LaVette, Mike Love, and Jim James. National publicity followed. The theme was “Change Begins Within” and many of the performers spoke about the benefits of the Transcendental Meditation technique in their lives.

The event was a bold move: it was conceived and implemented in a matter of months. A top New York PR firm was astounded, saying that something like this usually takes a year to plan and stage, and that the organizers usually only get one big name.

But David Lynch’s sincerity, and the high regard people have for him, plus the merit of his cause, drew a roster of top performers. And that was just the beginning...

Around 20 similar events have now been held, typically featuring meditators such as Katy Perry, Sting, Russell Brand, Ellen Degeneres, Dr. Mehmet Oz, Hugh Jackman, Arianna Huffington, and Candy Crowley.

The success in schools, the scores of endorsements by famous people, the events and tours, the rigorous research—all of this has helped bring Transcendental Meditation into the limelight again. Many more people are now learning the practice.

**Lends name to MUM’s David Lynch MFA in Film**

Despite being busy with his foundation and with his ongoing creative endeavors, Mr. Lynch has been generous enough to spend time with MUM’s film students.

In 2013 MUM launched the David Lynch MFA in Film, which gives experienced filmmakers with an un-
dergraduate degree the opportunity to earn a master of fine arts degree and take their skill to a new level.

Mr. Lynch co-founded the program in hopes of spreading Transcendental Meditation throughout the filmmaking community. He meets intermittently with the students via Skype throughout the year and has hosted each cohort at his home studio in Los Angeles. In 2016, the class also met with him on campus during his visit to Fairfield.

His friendship with MUM also extends to allocating David Lynch Foundation funds to help pay for new students to learn Transcendental Meditation, and to assist with the cost when students learn the TM-Sidhi program. In addition, he has served as a trustee of the University.

An unusual, and delightful, commencement address

Given his close ties to MUM, as well as all that he is doing for the world, Mr. Lynch was invited to deliver the 2016 commencement address and was awarded an Honorary Doctor of World Peace Honoris Causa.

Instead of giving a prepared talk, he asked that his commencement address be his preferred mode of public speaking: taking questions. And he requested that he not be shown the questions in advance. Four graduating students joined him on stage to take turns asking questions.

As usual, his central point was the wonderful gift of Maharishi—all that it has done for him, all that it promises to those who practice it, and the very real potential for creating world peace.

 Asked to speak about leadership, he said, “I think this is the definition of a great leader: someone who inspires others to learn Transcendental Meditation, to become a light unto themselves and ... sending them out there to get [Transcendental Meditation] to other people so that we can have peace on earth.”

On the role of intuition, he responded, “[Intuition is] knowing when something isn’t quite correct and then knowing a way to make it correct... I always say, intuition is the number one tool for an artist, for people in business, and for human beings. As Maharishi says, ‘There are no problems, only solutions.’”

On the most important thing for success: “Transcendental Meditation, it’s obviously the most important thing to do day in and day out.”

On getting creative ideas: “I equate ideas to fish; we don’t make the fish, we catch the fish... It’s very fortunate when one catches a great idea... Once you get one fragment [of an idea], it’s like bait... You drop the line into the beautiful ocean of consciousness.”

And when a film student asked him to tell about one thing learned on one of his film sets that became a life lesson, he said, “Always have final cut!”

David Lynch has created extraordinary films, nearly always with final cut, and now he’s helping to create a better world—and he’s doing it in his unique way.
WHY IS ANDY EXCITED?

Not just because MBA faculty and students have received national awards

Andy Bargerstock is excited. In August he received, for the second time, a national award: Lean Accounting Professor of the Year. And his student Linlin Ye Shi received, for the second time, Lean Student of the Year. Never before in the history of the Lean Enterprise Institute have there been repeat winners. But that’s not why Andy is excited now.
Over the past 10 years he’s guided MUM’s graduate study in accounting to a national reputation. But he’s just getting started. The best is yet to come in spring 2017, he says, when the MBA launches a new specialization that’s in demand worldwide.

Andy’s excited about ERP. Yes, ERP (Enterprise Resource Planning), and he envisions hundreds of students eventually enrolled in this new specialization for the MBA program.

Professor at age 23

If Andy’s enthusiastic, people have learned to pay attention. He always seems to be on a fast track to success. At the age of 23, already having an MBA and having passed the Certified Public Accountant exam, he began teaching at Allegheny College in Pennsylvania. Earlier he worked as an auditor for a large CPA firm in Pittsburgh.

He was attracted to accounting, he says, because it’s fun: “It’s like solving mathematical puzzles.”

He spent time on MIU faculty in the late 1970s before jumping into several highly successful ventures, including a national consulting business that trained corporations how to recruit personnel, with clients such as the U.S. Patent and Trademark Office, Allstate Insurance corporate headquarters, and the Virginia Department of Social Services. In 1994 he earned a PhD in management from MUM.

He was also a senior executive at a Fortune 500 company, where he headed a division with hundreds of employees and guided a turnaround in sales.

National reputation for MUM management program

In 2005 Andy was invited to rejoin the management department—his third stint as faculty. He was recruited to direct a new Accounting Professionals MBA that would be modeled on MUM’s highly successful Computer Professionals Program.

Students come from around the world, drawn by the opportunity to earn an MBA, get work experience at a U.S. company as part of their practicum, and pay for their education from the money they earn while they’re working.

Although the students in the Accounting Professionals Program don’t number in the hundreds, it has clearly been a success. Over the past 11 years he has helped the department earn a national reputation, both for the success of his MBA students in accounting competitions and the national awards that he and his students have received. Which is not really a surprise, given his track record of success.

#1 in the world

Six years after the Accounting Professionals Program began, Andy wasn’t satisfied. He wanted concrete evidence that the abilities of his accounting students were at least on par with other MBA students.

So, beginning in 2011 he had them participate in the worldwide CAPSIM business simulation as part of their capstone course. Since then, every cohort of MBAs from MUM has placed at least one team in the 90th percentile or higher, competing against as many as 1,100 other master’s degree-level teams—and three MUM teams have finished #1 in the world.

In CAPSIM simulations, students play the role of top management executive teams who guide the decision-making of their enterprise through eight years of multi-faceted decisions, including sales and marketing, product development, manufacturing operations management, finance, human resource management, and total quality improvement.

“The CAPSIM simulation provides an important third-party assessment of our MBA students’ development,” Andy says. “An MBA education is designed to prepare leaders for the future, leaders who possess good strategic and tactical insights based on data analysis and problem-solving skills.”

The students have also excelled in the workplace. For example, Erin Liu, whose CAPSIM team finished in the top 10%, now works as a senior manager at Friedman LLP, a New York City accounting firm, performing audits for companies...
In 2009 Andy was named Excellence in Lean Accounting Professor of the Year by the Lean Enterprise Institute, a nonprofit research, education, and publishing organization that focuses on “making things better through lean thinking and practice throughout the world.”

In 2011 Andy’s PhD student Manjunath Rao (right) was selected as Lean Accounting Student of the Year for his PhD dissertation.

that are planning their initial public offering.

**National awards for “lean accounting”**

Early on during Andy’s latest stint on faculty, business professor Jimmy Sinton introduced him to a state-of-the-art approach to management, manufacturing, and accounting called “lean,” famously pioneered by Toyota Corporation.

Lean is a systematic method for driving business priorities to address customer needs and expectations, which benefits the enterprise by the elimination of waste in all its forms.

Always on the cutting edge, Andy embraced the idea of lean. “It allowed me to exercise my intellectual curiosity about how natural principles can be used effectively to guide the growth and development of companies,” he says. He taught it to his students, guided his PhD students in researching it, presented at conferences, and published in professional journals on the topic—and introduced the principles at all levels of MUM management and personnel.

The profession took notice. In 2009 he was named Excellence in Lean Accounting Professor of the Year by the Lean Enterprise Institute, a nonprofit research, education, and publishing organization that focuses on “making things better through lean thinking and practice throughout the world.”

In 2011 Andy’s PhD student Manjunath Rao was selected as Lean Accounting Student of the Year for his PhD dissertation research that studied why organizations that are embracing lean aren’t also adopting lean accounting.

Then in 2013 another of Andy’s PhD students, Linlin Ye Shi, received the 2013 Excellence in Lean Accounting Student Award for her teaching of, and research on, lean accounting.

And more recognition was to come. In 2016 Andy again won Lean Professor of the Year and Linlin again won Lean Student of the Year.

**The future is ERP**

Is Andy one to rest on his laurels? No, he’s thinking ahead. He hardly wants to talk about lean, which he says is an interesting niche worth mining. But now his attention is on the future prospects for ERP.

It’s an integrated information platform that includes modules in such areas as human resources, finance, supply chain, and inventory management. At many companies these databases are unconnected, making it a challenge to get the kind of information that a CEO needs. “Think about the challenges faced by an international corporation with divisions in China, Africa, and South America,” he says, clearly relishing the thought of the challenge. “Suppose a CEO wants to see financial statements for the past three years. If the corporation doesn’t have ERP, it’s hard to do.”

Each country has its own accounting practices, and each division its own way of doing things. The CEO has to contact the chief financial officer to ask for data. Then he has to try to combine that data, which is difficult. Once he’s combined it, only then is he able to run the sort of analyses that he needs to do.

The solution, Andy says, is ERP. An ERP accounting module standardizes data entry and has flexible reporting capabilities. With ERP, the CEO at this international corporation doesn’t even need to contact the CFOs in each of the divisions. He simply logs in to the software. All the data he needs is at his fingertips.

And better yet, ERP makes possible the use of EPM (Enterprise Performance Management), which allows specialists like the ones MUM will be training to help the CEO make better decisions by providing reports based on financial
There’s a huge demand for accountants with experience in this area. Coming to MUM’s MBA 2017 is a four-course specialization in ERP and EPM. Because few MBA programs offer this sort of specialization, Andy expects to eventually have hundreds of students on campus just like the Computer Professionals Program.

**Naveed Abbasi, the right person at the right time**

Andy’s confidence in the appeal of this new specialization is based in part on his knowledge of the accounting industry, but also on having met with MBA-bound undergraduate students at the Institute of Management Accountants Student Leadership Conference in the fall of 2015. The purpose of the conference was for MBA programs to exhibit their offerings to some 600 interested undergrads. He was accompanied to the conference by then MBA student Naveed Abbasi.

“About 80% of the prospective students asked about ERP,” Andy said. “That was a key factor in their choosing an MBA program, but ERP is rarely offered to accounting students. Naveed said to me, ‘I know about that. I’ve been doing it for years.’”

Born in Pakistan, Naveed grew up in Saudi Arabia, where he worked for IKEA for eight years—managing accounting teams and installing ERP systems.

“He’s brilliant,” Andy says. “The next step was obvious: hire Naveed for faculty when he graduated with his MBA and begin offering a specialization in ERP.”

Highly experienced in ERP, and also a CPA, Naveed is now on faculty and directs the new ERP track.

**Both ERP and EPM**

Accounting students taking the new track will get a solid grounding in ERP, learning to log accounting data in a way that’s compatible with this standard. If a school does teach this new accounting approach, it’s typically limited to ERP.

EMP takes things a step further. There are add-on tools that take the raw data from an ERP system as an input for highly valued financial analysis and data mining. Being skilled in this advanced area will make an MBA grad doubly valuable to his or her employer.

Of course, the software for EPR and EMP doesn’t come cheap, costing hundreds of thousands of dollars and requiring similarly expensive servers to run on.

Fortunately, Maharishi University of Management students will be able to have access to ERP software for just $8,000 per year, thanks to SAP, a German company and one of the world’s leading ERP platform providers. MUM has joined SAP’s University Alliance and will gain full access to most of the SAP platform through the University of Wisconsin’s web-based hosting.

“There’s a big demand in the U.S. for SAP analysts,” Andy says. “Students will be able to come here, get the valuable tools in SAP, and take the path towards a high paying profession.”

What motivates Andy?

As noted above, accounting originally appealed to Andy because it entailed solving puzzles. And that may be the thread that runs through everything. He likes challenges, whether a new entrepreneurial venture, a new academic offering, or a better approach to accounting.

One can hardly ever cross paths with him without his radiating some new enthusiasm. That spirit even extends to his Fringe Toast internet radio shows about contemporary music that also air on a local radio station and his music reviews in a local magazine. And even on the athletic field, where he has also excelled, playing both varsity football and lacrosse for Muhlenberg College. In recent years he’s taken up pickleball, wallyball, and disk golf.

Next up for Andy is ERP and EPM. Expect it to be a winner.
THIS IS YOUR BRAIN ON TRANSCENDENTAL MEDITATION:

BRAIN WAVES REVEAL HOW YOU EVOLVE
When Fred Travis was doing his first electroencephalography (EEG) study on the Transcendental Meditation technique as a PhD student at MUM in the mid-1980s, he was perplexed. He had hypothesized that fairly new meditators would have a different EEG signature during meditation from that of longer-term meditators.

Instead, he found no difference. First-year students at MUM who had just learned Transcendental Meditation had levels of frontal alpha1 brain wave coherence during meditation that were similar to the levels of students who had been meditating nine years on average.

He looked at the data for three months, unable to figure it out. He expected to see some sort of evidence of growth. Then one day walking home from the Dome, he had an idea: look at the three-minute period before the subjects began meditating.

When he was testing his subjects, he had each subject sit for three minutes with his or her eyes open to be sure the EEG signals were stable. Maybe I’ll see a difference during that three-minute period, he thought.

**Beta waves accompanied by alpha1**

Bingo. Whereas the alpha1 EEG coherence patterns were similar during Transcendental Meditation practice, the three-minute eyes-open period showed differences. In fact, the longer a person had been meditating, the greater the difference.

When a person’s eyes are open and the mind active, EEG readings typically show beta brain waves (12.5–30 Hz). But he found that as one practiced Transcendental Meditation over a period of months and years, the beta waves were increasingly accompanied by alpha1 waves (8–10 Hz), which are seen when one’s mind is silent and alert. And this alpha1 EEG was highly coherent in the front of the brain—the electrical activity on the left was similar to that on the right sides.

“It’s very kind of nature to make the EEG signature of the long-term effects of Transcendental Meditation so clear,” Fred says. “It could have been hidden. But the presence of alpha1 EEG along with other EEG frequencies, such as beta, gives us a clear picture of how the brain is changing over time.”

In retrospect Fred says that it shouldn’t have surprised him that the alpha1 coherence of new meditators would be no different from that of longer-term meditators during Transcendental Meditation practice.

“Maharishi explains that the process of transcending is conducted by the natural tendency of the mind. Since Transcendental Meditation is conducted by a natural process, transcending during the practice should be as effective on the first day as it is nine years later.”

**Alpha1 as a marker of higher states**

This discovery set the direction for much of Fred’s future research: to see whether alpha1 would be evident in the EEG of long-term meditators during waking, sleeping, and dreaming.

Maharishi explained that the repeated alternation of transcendence and activity results in the infusion of transcendence into one’s awareness, until it eventually completely suffuses these other common states of awareness—which Maharishi referred to as Cosmic Consciousness.

Fred did just that over a period of years, and it has resulted in his being considered one of the top meditation researchers in the U.S. No other researchers of other techniques have characterized the brain patterns associated with higher states of consciousness.

**The next step: The EEG of persons witnessing during sleep**

Having finished his PhD as well as a postdoctoral fellowship, Fred began guiding his own PhD students at MIU in the 1990s. By then there was a pool of people who had been meditating for several decades who reported experiences of higher states of consciousness.

He was eager to see if alpha1 EEG would be seen during sleep in people reporting the experience of “witnessing” sleep. “Witnessing is not a process of watching or consciously attending to ongoing experience,” Dr. Travis says. “Rather, ‘witnessing’ describes the natural co-existence of two mutually exclusive states—inner, unbounded awareness along with the lack of awareness during sleep.”

Maharishi explained that witnessing sleep is the criterion of cosmic consciousness. The nervous system needs to be highly integrated to be able to hold together wide-awake, inner transcendence along with the inertia of deep sleep.

Fred and the late Skip Alexander guided PhD student Lynne Mason
in her dissertation that investigated EEG patterns during sleep in individuals reporting the experience of Cosmic Consciousness. She compared the EEG during sleep in 11 subjects who reported witnessing sleep with the EEG patterns during sleep in a group of subjects who had been meditating three years but weren’t yet experiencing witnessing, and a group of individuals who did not meditate.

The researchers found that the witnessing subjects had more alpha1 EEG during deep sleep than the meditating control group, and the meditating control group had more alpha1 during deep sleep than the non-meditating control group.

How enlightenment grows

Fred’s original hypothesis was supported. Alpha1 EEG is a marker for transcendence, and as one regularly meditates, that transcendence gradually becomes integrated into one’s awareness outside of meditation—as evidenced by the appearance of alpha1 during deep sleep.

“Again, it’s a gift of nature that the brain markers of witnessing sleep are so straightforward,” Fred says. “The EEG patterns of inner transcendence (alpha1) coexist with the EEG of deep sleep (delta, 1–4 Hz) when a person reports the continuum of inner self-awareness during sleep.”

This study shows how higher states of consciousness develop. Even the meditating control group that was not experiencing witnessing during sleep had higher alpha EEG than the non-meditating control group. Although they weren’t yet having the subjective experience of witnessing, the EEG clearly showed that they were growing toward higher states of consciousness.

“This gives a picture of how enlightenment grows,” Fred says. “Every time you meditate, you begin to integrate more of the alpha marker

Alpha1 waves are seen when one’s mind is silent and alert

Alpha1 Coherence During Meditation

First-year students at MUM who had just learned Transcendental Meditation had levels of frontal alpha1 brain wave coherence during meditation similar to the students who had been meditating nine years on average.

Alpha1 Coherence Eyes Open

When a person’s eyes are open and the mind active, EEG readings typically show beta brain waves. But Fred found that as one practiced Transcendental Meditation over a period of months and years, the beta waves were increasingly accompanied by alpha1 waves, which are seen when one’s mind is silent and alert. And this alpha1 EEG was highly coherent in the front of the brain.
"This gives a picture of how enlightenment grows," Fred says. "Every time you meditate, you begin to integrate more of the alpha marker of transcending. Your brain changes with each meditation, accumulating meditation by meditation."

Eventually a threshold is crossed, and then the experience of inner wakefulness dawns. It can seem like this experience suddenly emerged, but as Maharishi said, and as the EEG research shows, Cosmic Consciousness builds with every meditation, day after day, week after week, year after year.

The EEG of Cosmic Consciousness during activity

By the late 1990s Fred had a number of studies showing the patterns of alpha1 during meditation, and he had a clear picture of alpha1 during sleep. The next step was to study subjects who were having experiences of witnessing during activity. Fred wanted to get a clear picture of brain patterns during challenging tasks in those who are experiencing Cosmic Consciousness. How do they differ? What are the markers? What will science tell us about life in this exalted state? People say they’re experiencing it, but how can it be empirically verified?

Now that many people had been practicing Transcendental Meditation for decades, there was a pool of subjects experiencing Cosmic Consciousness that Fred could draw upon to see how their brains differ during activity. He recruited a group of 17 subjects who were witnessing sleep and who reported experiences of Cosmic Consciousness. He was eager to look at their EEG during the focused mental activity entailed in specific computer tasks.

These subjects had been meditating about 25 years, on average. They were compared with a group of 17 subjects who had been meditating an average of eight years, but who weren’t experiencing witnessing during sleep or while they were awake. And a third group included 17 persons who hadn’t yet learned Transcendental Meditation.

To measure how the brains of individuals having experiences of witnessing functioned while they were absorbed in a task, Fred had the subjects perform reaction time tasks at a computer while he recorded their EEG.

More coherence during computer tasks

Did his hypothesis of alpha coherence hold true? Was it present even when subjects’ brains were in high gear? Again Fred found the presence of alpha coherence—along with some other surprising results.

The subjects experiencing Cosmic Consciousness indeed had higher alpha power over all brain areas compared to both control groups. The presence of alpha indicates that the subjects retained their inner awareness, that quiet settled state of mind, even in the midst of a task that engaged many parts of the brain.

In addition, they had less gamma power than the control groups. Gamma brain waves (30–50 Hz) are associated with strenuous mental activity, and the brains of those in the control groups appeared to be working harder to accomplish the

Brain waves explained

Neurons in the brain communicate via tiny electrical pulses. With the use of electroencephalography (EEG), sensitive electrodes on the scalp pick up the average electrical activity of billions of neurons talking back and forth. This electrical activity occurs at different rates. In deep sleep, the pulses are slow, just .5–4 times a second or Hz. When one is concentrating, they’re fast, from 30–50 Hz. So the speed of the EEG measurement gives insights into how one is feeling and thinking.

In the past, Fred had to attach nine electrodes to a subject’s scalp with an adhesive. And the electrodes were themselves connected to a monster computer. It was a tedious process.

Today he uses a special cap that’s fitted with 32 electrodes and is connected to a laptop computer.
same task. Rather than having a quiet center, they were completely absorbed in the task.

**More coherence overall**

Fred had expected to see alpha EEG coherence during the tasks because alpha EEG coherence is the primary indicator of transcendence.

What he didn’t expect to see was higher coherence in the higher-frequency beta and gamma bands. This means that those who were experiencing Cosmic Consciousness had more orderly brains at every level of activity of the brain.

This coherence across the alpha, beta, and gamma EEG bands is referred to as broadband coherence. During the tasks, the Cosmic Consciousness group had higher broadband coherence in the frontal part of their brains than the meditating control group, and the meditating control group had higher broadband coherence than the non-meditating control group.

The frontal areas are the executive centers of the brain. When a person is experiencing Cosmic Consciousness, these frontal areas appear to be functioning in a more coordinated fashion across many frequency bands, whether it’s the alpha1 EEG of inner transcendence, the beta EEG of brain processing, or the gamma EEG associated with intense focus. In fact, the differences in broadband coherence accounted for the greatest variation among the three groups.

**More efficient brain function**

So what does it all mean? Is there any practical value? Is it more than a novelty that the brain of someone experiencing Cosmic Consciousness functions differently?

Another facet of the study looked at an indicator of efficiency of brain function, and indeed those in the Cosmic Consciousness group appeared to have more efficiently functioning brains.

To test this, Fred looked at the brain’s “preparation response” during several tasks presented on a computer display. The most telling finding was the “choice reaction time” task. In this task, one number appears on the screen, and then 1.5 seconds later a second number appears in place of the first. Subjects indicate if the first or second number was higher by pressing the button in either their left or right hand.

Fred wanted to see what their brains were doing during that brief 1.5-second interval. The differences among the groups were remarkable. The brains of the Cosmic Consciousness group were much less active during that interval. The brains of the Cosmic Consciousness subjects only became active after the second number appeared, and then only as active as need be. Simply put, their brains were more efficient, only becoming as active as necessary.

“Those who were witnessing remain more balanced,” Fred says. “They didn’t move until it was time to move. Maharishi explains that in enlightenment the thought comes at the right time. Here we see that the brain doesn’t start to respond until it is needed.”
Maharishi explained that witnessing sleep is the criterion of cosmic consciousness. The nervous system needs to be highly integrated to be able to hold together wide-awake, inner transcendence along with the inertia of deep sleep.

National recognition

Because of these and other groundbreaking studies, in 2013 Fred was invited to present at the New York Academy of Sciences along with 20 other leading meditation researchers.

As the only researcher who has been studying higher states of consciousness, he found that his body of work was held in high esteem.

“I was almost taken aback, their praise was so effusive,” he says. “After I presented, one person got up during the question period and said, ‘I’ve read every study you’ve ever done, and I think you’re doing excellent work.’”

An outcome of the meeting was the formation of a group of top meditation researchers to collaborate on research and to meet regularly as a group. There is increasing recognition among the researchers that different types of meditation have different effects. In addition, Fred says, there’s an increasing recognition of the need to study the growth of inner subjectivity.

Together the group is developing criteria for higher states of consciousness. And they look to Fred as the expert on this.

“They’re meditators themselves, and they’ve sometimes had an experience they don’t understand,” he says. “They’re trying to understand their experiences. When I present the model of higher states, they really appreciate it. And they’re starting to understand the criteria of these states: a broader sense of self—the experience of pure consciousness along with waking, sleeping, and dreaming—and the associated physiological patterns.”

They also are clearly coming to understand how the Transcendental Meditation technique is different from other meditations.

This collegiality is itself a remarkable achievement—and just one more extraordinary accomplishment of Fred Travis.

How a person in Cosmic Consciousness describes himself or herself

Maharishi described Cosmic Consciousness as an exalted state of awareness, in which one’s sense of oneself is completely transformed. But what is that experience like?

Fred researched this too in a followup to his original EEG study on Cosmic Consciousness. In structured interviews he asked the subjects how they would describe themselves.

Those who hadn’t yet learned the Transcendental Meditation technique said things like, “I guess I’m open to new experiences, and I tend to appreciate those things that are different,” and “I kind of like to forge my own way.”

In contrast, the individuals reporting the state of Cosmic Consciousness described themselves much differently, saying things such as, “I experience myself as being without edges or content. . . beyond the universe. . . all-pervading, and being absolutely thrilled, absolutely delighted with every motion that my body makes. . . . My consciousness, my intelligence pervades everything I see, feel, and think.”

This experience, Maharishi said, is the birthright of everyone.
During 2007–2010, there were 8,157 fewer homicides and 182,744 fewer violent crimes in the U.S. than would have been predicted based on crime trends during the previous four years—a highly significant decrease. Why did this happen?

The answer comes in a new and rigorous study, published in April 2016 in the journal SAGE Open: This decrease was brought about by a large group of meditation experts in southeast Iowa, on the campus of Maharishi University of Management.

This study provides some of the strongest scientific support thus far for Maharishi’s boldest proposition: large groups practicing the Transcendental Meditation and TM-Sidhi programs can radiate a positive influence to the whole society.

What was significant about 2007-2010? During those years, the number of people practicing these programs together was at or above the predicted threshold to have an effect. If you were one of those participating in this group at that time, you were personally responsible for averting 4.6 deaths and 104.2 violent crimes.

Field effect of consciousness

That may sound like a fantasy. But coauthors Michael Dillbeck and Ken Cavanaugh rigorously analyzed the data, using such tools as time-series regression.

Could other influences, such as policing, demographic trends, and unemployment trends, explain the result? No other explanation would suffice. Diagnostic tests found that the results cannot be explained by pre-existing trends, seasonal variation, autocorrelation, or “spurious regression.”

Could the reduced homicide trend be simply due to chance? Statistical analysis showed that this probability is less than 3 in 10,000 million million—and less than 3 in 100 million for violent crime.
Influence of coherence takes effect in 2007

The story begins in the summer of 2006 when Maharishi called for a large group to assemble on campus and in nearby Maharishi Vedic City. The goal: to reach the threshold of 1,725 participants. At the time, this number represented the square root of 1% of the U.S. population—the size sufficient to create an effect nationwide.

By January of 2007 that threshold was crossed, and the numbers remained near or above the threshold through the end of December 2010, when some of the participants began to disperse.

Figuring out the details

To see if there was an effect, the researchers first established a baseline by looking at the trends from 2002–2006. This is where it gets complicated for a statistician because, for example, there are marked seasonal fluctuations, with violent crime being lowest in January and highest in July. Using time-series regression, they established this baseline and then compared it with 2007–2010.

When the information for 2010 was released by the government in 2013, the researchers got the homicide data from the U.S. Centers for Disease Control, which compiles homicide data for each month. For violent crime the data came from the FBI Uniform Crime Report database.

The results

The researchers found that during the baseline period of 2002–2006, there was a rising trend in the U.S. monthly homicide rate. However, that trend was reversed during 2007–2010, when it declined 21.2% over the four-year period compared with the baseline average. The decline in homicide rate was even greater, 28.4%, in urban areas with populations over 100,000.

For violent crime, there was a flat trend during 2002–2006, and a declining trend during 2007–2010, with a total decline of 18.5% over the four-year period.

The researchers then extrapolated from these changes in trend to estimate the number of homicides and violent crimes that were averted.

Although there were previously eight peer-reviewed articles comprising over a dozen studies that showed similar effects, this study offers some of the strongest evidence to date because it covers a much longer period—four years compared to periods of a few months in most of the other studies.

Implications for crime prevention

Dr. Dillbeck feels this research has important implications.

“Given the multiple studies showing a highly significant relationship between a large group practicing the Transcendental Meditation and TM-Sidhi programs and decreased violence in society, this obviously has implications for crime prevention,” he said. “It has a calming effect on others, and if the group of people is large enough, that effect can spread to the whole society in a measurable way.”
DURING HIS REMARKABLE 36-YEAR TENURE AS PRESIDENT, BEVAN MORRIS LED MAHARISHI UNIVERSITY OF MANAGEMENT THROUGH MANY IMPORTANT DEVELOPMENTS AND EVENTS:

- Expansion of enrollment
- Creation of new academic programs
- Large assemblies of Yogic Flying® practitioners that created significant and historic influences of peace nationwide and worldwide
- Expansion of Consciousness-Based education around the world
- Reconstruction of the campus
- Extensive research and publication by the faculty, and more

HIGHLIGHTS

A COMMUNITY OF YOGIC FLYERS

Dr. Morris was at the heart of the initiative to create world peace through large groups of Yogic flyers ever since the beginning. In the summer of 1979 Maharishi sent him to the University of Massachusetts in Amherst to lead the world’s first large World Peace Assembly, which brought together 2,500 Yogic flyers.

At the end of the course, Maharishi inspired over 800 Governors and Sidhas to move immediately to Fairfield, where over 700 Yogic flyers were already practicing together, to create the world’s first national Super-Radiance group. In mid-September 1979, Dr. Morris moved to Fairfield to help form the Super-Radiance group on campus.
In recognition of Dr. Morris’s inspiring leadership and organizing power related to these initiatives, Maharishi awarded him the first-ever doctorate of the Science of Creative Intelligence®. And at that time he joined the University’s Board of Trustees. The following year, on September 12, 1980, the Trustees appointed him president.

To accommodate the large group of Yogic flyers, two domes were built. The Maharishi Patanjali Golden Dome of Pure Knowledge, for men, was completed on January 12, 1980, after three months of day-and-night construction by dedicated volunteers in the cold of winter. The Bagambhrini Golden Dome, for women, was completed in 1981.

**Hosting and Participating in Assemblies**

During Dr. Morris’s presidency, the emphasis on large groups of Yogic flyers continued. The University was involved in every large gathering of Yogic flyers, whether in the Golden Domes or in other parts of the world.

From December 1983 to January 1984, the University hosted the Taste of Utopia course, with 8,000 people from 46 countries practicing Yogic Flying together, creating a worldwide wave of peace and harmony and verifying scientifically the Global Maharishi Effect for the first time.

Over the next few years, the University hosted three more World Peace Assemblies of 4,000 to 5,000 participants. Subsequent research documented the role these assemblies played in bringing the Cold War to a close.

In the summer of 1993, the University, led by John Hagelin, organized 4,000 Yogic flyers for the Group for a Government course in Washington, DC, which lowered crime in Washington, improved quality of life, and changed the course of President Clinton’s presidency for the better.

A crowning achievement has been the Invincible America Assembly. Established in the community a decade ago, the assembly has led to advanced experiences of higher states of consciousness coupled with improved U.S. quality of life, reflected in reduced crime rate nationwide. Dr. Morris, along with Doug and Linda Birx, has been guiding the Invincible America Assembly experience sessions from 2006 to the present. Dr. Morris continues, even when he is traveling in the far corners of the world, to connect four days each week to these sessions, during which Invincible America Assembly participants report on experiences of higher states of consciousness.

Thanks to the generosity of Howard and Alice Settle, and with Maharishi’s personal guidance, the numbers of Yogic flyers participating in the Invincible America Assembly increased dramatically from 2006. At the peak, there were 450 participants in the Invincible America Assembly; in addition, more than 1,100 Maharishi Vedic Pandits were practicing the Transcendental Meditation and TM-Sidhi programs together in nearby Maharishi Vedic City as well as conducting Vedic performances designed to create peace for the nation. These groups, together with other Sidhas and Governors in the community, created a group of nearly 2,000 practicing these programs together.

Subsequent scientific research showed that the collective practice in the peak years 2007–2010 produced a significant reduction in homicide and violent crime nationwide.
Beyond hosting large groups of Yogic flyers, the University has also played a key role in instructing new Yogic flyers, having hosted over 80 TM-Sidhi courses and Yogic Flying blocks.

**Creating Coherence Abroad**

In addition to local assemblies, Yogic flyers from Fairfield have participated in creating coherence courses around the world, including 400 participants in the Vedic Science course with Maharishi in Delhi in 1980, and later the Philippines World Peace Assembly in 1984–85, and the Maastricht World Peace Assembly in Holland in 1991 with Maharishi.

In one of the University’s most significant contributions to global coherence, a group of University faculty and administrators traveled to the Soviet Republic of Armenia in 1989 to help with relief of the deep stress created by the terrible earthquake in Leninakan. Within a year they had taught the Transcendental Meditation technique to 30,000 people. This campaign expanded throughout the Soviet Union, where, within two years, 150,000 people learned the Transcendental Meditation technique and 3,000 became Sidhas. The campaign was later extended into the communist countries of Central and Eastern Europe. During this period, the Berlin Wall fell, the Cold War came to an end, and the countries that comprised the Soviet Union gained their freedom.

**Accreditation and Expansion of Academic Programs**

In May 1980 the University was granted accreditation at the bachelor’s and master’s levels by the North Central Association of Colleges and Schools. In 1982, Dr. Morris led the effort to gain accreditation through the PhD level and ultimately to the offering of six PhD programs. The crowning achievement was the University’s offering the first accredited PhD in SCI, later to become the doctorate in Maharishi Vedic Science.

As of September 2016, MUM had awarded 3,038 bachelor’s degrees, 5,188 master’s degrees, and 145 PhD degrees. Hundreds of graduates have become Transcendental Meditation teachers, many of whom have returned to their home countries to become national directors.

**The Creation of Consciousness-Based Education**

Throughout Dr. Morris’s tenure, the University grew as a Consciousness-Based institution of higher learning. Under Maharishi’s guidance, the Consciousness-Based education approach was systematized, including development of Unified Field Charts, Main Point Charts, Unity Charts, and Richo Akshare Charts.

In keeping with Maharishi’s inspiration to share this knowledge, the University has held more than 100 seminars and conferences at our Fairfield campus in a wide range of disciplines, bringing experts from the U.S. and other countries to explore the latest and deepest principles of their fields in the light of Maharishi Vedic Science.

This growth led to MUM’s offering academic guidance and course work to other educational institutions worldwide, including Maharishi Invincibility Institute, South Africa; Rajapark College, Thailand; and Maharishi University of Enlightenment, USA.
As the flagship for Consciousness-Based education, the University started the world’s first Maharishi School of the Age of Enlightenment, preschool to grade 12. This inspired schools to develop in Washington, DC, Great Britain, Canada, Australia, Holland, Thailand, and India, and hundreds more—both private and public—to incorporate Transcendental Meditation in their curricula. In Latin America alone, Consciousness-Based education has been introduced to well over 100,000 students, tens of thousands of whom have become Yogic flyers.

Dr. Morris himself has traveled to 120 countries and territories over the past 36 years, giving presentations on Consciousness-Based education to leaders in education, government, business, and science.

By now, schools in 67 countries have adopted Consciousness-Based technologies. And all that began at Maharishi University of Management.

Research was also a major focus during Dr. Morris’s time as president. The University, together with its collaborating institutions, received $25 million in grants from the National Institutes of Health to research the effects of Transcendental Meditation. These grants led to the publication of scientific papers, including many rigorous studies on the prevention and treatment of hypertension and heart disease. These research publications, in turn, were routinely greeted with waves of national and international publicity.

By September of 2016, the faculty as a whole had published more than 2,000 articles and books and presented papers at more than 250 conferences and symposia.

From curating a collection of recordings of Maharishi to publishing books, the University during Dr. Morris’s tenure played a major role in maintaining and disseminating Maharishi’s knowledge.

Maharishi University of Management Press has published 48 books, including a new edition of Maharishi’s Translation and Commentary on the Bhagavad-Gita. The University has also published the Journal of Modern Science and Vedic Science and the International Journal of Mathematics and Consciousness.

The University’s radio station, KHOE, offers Maharishi’s knowledge to the public and plays Maharishi Gandharva Veda™ music 24 hours a day to enliven specific laws of nature. The University also organized the Maharishi Festival of Music for World Peace—Maharishi Gandharva Veda concerts all over the country.

The University has played a central role in curating and preserving Maharishi’s videos and audios that embody his teaching. Included in the MUM Tape Library are five years of Maharishi’s weekly press conferences that were organized by the University. In addition, tape librarian Peter Freund has created the world’s largest online resource of all Vedic texts in Sanskrit.
SPEARHEADING NEW AREAS OF KNOWLEDGE

As Maharishi brought out new areas of knowledge, the University played a leading role in developing those areas. MUM developed the first educational degree program in Maharishi AyurVeda and helped create Maharishi AyurVeda clinics in Fairfield and in Maharishi Vedic City—the first two such clinics outside of India. The University also instituted the first Maharishi Vedic Organic Agriculture projects in the world. The campus also features the recently-completed Maharishi Vedic Observatory, only the second one to be created outside of India (the first being in Maharishi Vedic City).

In keeping with one of its seven Founding Goals, “to maximize the intelligent use of the environment,” MUM also offered the first Sustainable Living major in America and constructed the Sustainable Living Center—a Vastu building that the Associated Press called “the ultimate green building.”

Computer science has also become a major focus, and since the late 1990s, MUM has developed what has become one of the largest master’s of computer science programs for professionals in the U.S. Over 1,100 students were enrolled in this program as of September 2016, with a total enrollment of over 3,000 in the past 20 years.

RECONSTRUCTING THE CAMPUS

Dr. Morris also took to heart Maharishi’s charge to live and work in buildings constructed according to principles of Maharishi Sthapatya Veda—Vedic architecture in harmony with natural law. A total of 43 improperly oriented buildings on the campus were demolished, and 20 new Vastu buildings constructed, including the Argiro Student Center. The new construction also included the iconic Maharishi Tower of Invincibility between the Golden Domes.

TRANSFORMING THE LOCAL COMMUNITY

Coinciding with Dr. Morris’s 36 years as president has been the growth and achievements of the Fairfield community. The influx of meditators beginning in 1979 has transformed the local economy and culture. Perhaps most remarkable was the establishment of Maharishi Vedic City, the first city in the modern world following all Vedic principles. University faculty played a leading role in this effort.

The community transformation includes over $100 million of Vastu buildings—University buildings, private homes, office buildings, and hotels. In addition, a large Sidha business community employs more than 1,000 people, making Fairfield a bright economic star in the state—in the 1980s the Governor of Iowa called Fairfield the “entrepreneurial capital of Iowa.” The cultural transformation also includes a lively and renowned cultural and arts community, drawing visitors from around the region, and leading to Fairfield’s being voted the number 2 best small city to visit by *Smithsonian* magazine.

In addition, Mayor Ed Malloy, a University Trustee, was named one of the twelve greenest mayors in the U.S. He has been elected again and again and is supported by all parts of the Fairfield community, working together to create new sports facilities, convention center and theater, a 17-mile recreational trail around the city, and an advanced medical center.
Perhaps most important, over the years Dr. Morris was a direct channel to Maharishi for the whole community—adopting and guiding all of Maharishi’s programs and technologies with tremendous passion and speed.

Maharishi appreciated Dr. Morris’s deep understanding of the Vedic wisdom and his commitment to bringing it to the world. During his October 5, 2005 Global Press Conference, Maharishi expressed how fully he trusted Dr. Morris to represent him:

“There cannot be any question which cannot be answered by our wise and simple Prime Minister of the Global Country of World Peace, Dr. Bevan Morris. And Bevan Morris puts me up to answer the questions just as a formality. But there cannot be any question which cannot be answered by the Prime Minister of the Global Country of World Peace. There cannot be any task which cannot be achieved by the Prime Minister of the Global Country of World Peace, who has at hand, on his fingertips, the command over the total creativity of infinite dimension of natural law.”

Dr. Morris receives honorary doctorate, addresses the community

At the Founder’s Day celebration on September 12, 2016, Bevan Morris officially passed the presidency to John Hagelin. In recognition of Dr. Morris’s achievements, he was presented an honorary degree in Maharishi Vedic Science and Technology—Maharishi Veda Vigyan Vidyaa Vaachaspati Honoris Causa.

In receiving the award, Dr. Morris reflected on his time as president of MUM: “Thank you for the honor of this degree, bestowed by the great University founded by Maharishi, who was Brahm itself. And thank you for all the kind words spoken about me.

“It is from this University that Consciousness-Based education has spread to 67 countries. Consciousness-Based education will now enable the youth of the world to create perpetual world peace, and a heavenly life for all.

“I love America, so I was thrilled when Maharishi in 1979 suggested to me to come to MIU and direct the Creating Coherence program. The American family of the enlightened is simply amazing: their devotion, their energy and creativity, their sense of all possibilities, their generosity, what miracles they get done. And they welcome anyone into their family, even from far away places like Adelaide, South Australia.

“Dr. Morris has been an invincible pillar of strength and stability for Maharishi’s entire global Movement for decades, and the rock upon which Maharishi University of Management was built, has flourished, and has enjoyed unprecedented historic achievements.”

Dr. Hagelin’s appreciation for Dr. Morris’s contribution to the University

“I have been so proud to work alongside them in all the marvels of our history together. Through all these years Maharishi guided us, and we have done everything to fulfill his vision for us, and to maintain our connection to him.

“Maharishi looked to us to preserve the purity of his teaching and his planning for the bright future of the human race. Every future generation of the human race should be able to gain knowledge from Maharishi in his own words exactly as we have been able to do.

“I am greatly fulfilled today to be able to hand the reins of the golden chariot which is Maharishi University of Management, to Dr. John Hagelin. He is truly a genius, and a warm and loving presence as a leader. Under his presidency the University will thrive and rapidly expand. In fact, the reason I am retiring as president is just because I believe so much that his leadership is going to make all the difference.”

Dr. Hagelin’s appreciation for Dr. Morris’s contribution to the University

“Dr. Morris has been an invincible pillar of strength and stability for Maharishi’s entire global Movement for decades, and the rock upon which Maharishi University of Management was built, has flourished, and has enjoyed unprecedented historic achievements.”
Presentations

Dr. Thimmaiah offers agriculture workshop in Italy

A. Thimmaiah presented a two-day workshop on Biodynamic Agriculture in Cissone, Italy, as well as speaking at a school and a university and networking with various individuals and organizations. He was invited by AgriBio, an association of over 1,000 farmers who practice Biodynamic agriculture in Italy, to speak about this approach to agriculture and his experiences in implementing organic agriculture in the country of Bhutan.

Dr. Schneider addresses holistic medicine doctors

Managing one’s mind and brain with the Transcendental Meditation technique

Robert Schneider gave a presentation on treating the body by managing the brain at a gathering of nationally recognized medical doctors in integrative medicine. The event, in Grand Rapids, MI, was titled “Medicine Beyond Medication: Rethinking Brain Health.” Dr. Schneider spoke on how one can manage heart health by managing one’s mind and brain with the Transcendental Meditation technique.

Presentations at Harvard on sustainable agriculture

MUM faculty presented a more profound view of agriculture at a conference on “The Spirit of Sustainable Agriculture” hosted by Harvard Divinity School. Travis Cox spoke about integral agriculture, John Fagan about Maharishi Vedic Organic Agriculture™, and A. Thimmaiah about Biodynamic agriculture. In addition, in a plenary address, Dr. Thimmaiah said that the future is spirituality in agriculture, clean agriculture. It’s agriculture such as Vedic and Biodynamic agriculture that gives deep reverence for—and humility toward—farmers and farming.
Data analytics book #1 on Amazon

Data Analytics Made Accessible, an ebook published by Anil Maheshwari in 2014, has ranked #1 on Amazon.com among ebooks in the Data Mining category. It’s a concise and accessible overview of the evolving area of data analytics and provides a toolset of the major data mining techniques and platforms. In addition, in June of 2016 he published Big Data Essentials, which has ranked as high as #8. It covers big data tools such as Hadoop and MapReduce. His books also rank #1 and #6 in the Information Management category.

Dharma parenting

Keith Wallace and Fred Travis have published Dharma Parenting: Understand your Child’s Brilliant Brain for Greater Happiness, Success, and Fulfillment (TarcherPerigee). This how-to book combines ancient Ayurvedic principles with a modern understanding of child brain development, giving practical tools to nurture a child’s brain.

The brains of world-class performers

Seeking to understand what’s different about the brains of world-class performers, Harald Harung and Fred Travis have published a series of studies on top athletes, managers, and musicians—findings that have now been published in a book. Titled Excellence Through Mind-Brain Development: The Secrets of World-Class Performers and published by Gower, the book describes the key to high performance: an integrated brain.

Translation of Upanishads

Vernon Katz and Thomas Egenes published a new translation of the Upanishads, a beloved section of the Vedic literature of India that reveals the essence of the Vedic wisdom and the path to enlightenment. Titled The Upanishads: A New Translation, the book was published by TarcherPerigee press and is available on Amazon.com and in most bookstores.

Metrics for sustainability

Metrics for Sustainable Business, by Scott Herriott, describes the methods companies use to document their sustainability and analyzes the certification and rating systems used to evaluate sustainability. He walks students through the steps for doing a sustainability assessment, teaching them to be financial analysts who understand sustainability reports and are able to create or audit them. Published by Routledge, the book is part of their series on Environment and Sustainability.

Book chapter on management education

Research

Increase in telomerase gene expression
A randomized controlled trial published in *PLOS One* found that the Transcendental Meditation technique and lifestyle changes both appear to stimulate genes that produce telomerase, an enzyme that’s associated with a decrease in cellular aging, reduced blood pressure, prevention of cardiovascular disease, and reduced mortality. This pilot study was the central part of Shanthi Duramani’s PhD dissertation in physiology at MUM.

Reduced stress following Japan tsunami
A study on 171 residents of two cities in Japan affected by the 2011 tsunami and earthquake found that those who practiced the Transcendental Meditation technique had a reduction in stress compared to a control group. The subjects were instructed between two and eight months after having experienced the earthquake. The study was published in *Psychological Reports: Mental & Physical Health* and coauthored by MUM Trustee Michael Dillbeck.

Reduced stress in caregivers
A study of 23 caregivers, most of whom were taking care of a family member with Alzheimer’s, found that over a two-month period practice of the Transcendental Meditation technique helped to reduce the stress associated with caregiving. The study, led by Sanford Nidich, was published in the *International Archives of Nursing and Health Care*. Subjects experienced improvements in perceived stress, spiritual well-being, and mood. In addition, qualitative evaluation suggested reduced anxiety and improvements in energy level, feeling of calmness, and resilience.

Neural correlates of doshas
A paper by Fred Travis and Keith Wallace published in the *Journal of Ayurveda & Integrative Medicine* laid out the areas of the brain that may be associated with each of the three doshas, vata, pitta, and kapha—basic body types described by Maharishi AyurVeda that are fundamental to health and well-being. The authors postulate that since metabolic and growth factors are controlled by the nervous system, each dosha type should be associated with patterns of functioning of six major areas of the nervous system. This could better explain individual differences.

Role of transcending in cognitive development
A paper by Fred Travis in the *Annals of the New York Academy of Sciences* discussed how specific experiences help promote cognitive development at various stages as one grows, culminating in the experience of transcending as a driver of further development once an individual reaches the adult stage of rational thought. He suggests that to go beyond hypothetical deductive reasoning, one needs to transcend language, and he cites studies showing that the Transcendental Meditation technique has an effect on cognitive development.

Improvement in allergies
The herbal formula Maharishi Amrit Kalash Ambrosia™ (MAK 5) was shown to improve seasonal respiratory allergies in a study published in the *Ayurveda Journal of Health*. The double-blind, randomized controlled trial, by Jay Glaser, Don Robinson, and Keith Wallace, involved 54 subjects and found a progressive decrease in symptoms in the treatment group compared to controls, whose symptoms remained elevated. The researchers suggested MAK 5 appears to modulate immune function, as allergies are known to be an overreaction of the immune system.
Professor Nolle awarded patents

Computer science faculty member Steve Nolle was awarded his third and fourth patents related to optimizing performance for broadband cable data, voice, and video networks. His third patent allows Internet cable providers to balance traffic generated by their customers’ cable modems based on the load generated by customer downloads and by loads generated by customer uploads. His fourth patent provides a way to predict traffic generated by cable modems and to balance the traffic of thousands of cable modems across hundreds of broadband channels.

Ken Daley, Kesha Nelson receive awards from health council

Ken Daley, faculty, and Kesha Nelson, staff, received awards for their leadership and service on the council at the annual meeting of a regional council focused on eliminating health disparities among minorities. Mr. Daley is a member of the 28-person Heartland Regional Health Equity Council (RHEC), one of 10 regional councils nationwide, and Ms. Nelson is a former co-chair of the council.

Surya Gied exhibits in Washington, DC

Faculty artist Surya Gied exhibited a series of abstract paintings at Hillyer Art Space in Washington, DC. Titled “Looking into the Distance Becomes Difficult,” the paintings in this solo exhibition addressed the push and pull the artist feels when looking to the future—feelings of wide open possibilities mixed with the fear of being swept away or left behind.

Journal on mathematics and consciousness

A new online journal, International Journal of Mathematics and Consciousness, examines consciousness from the point of view of mathematics. Maharaja Adhiraj Rajaram is both the founder and editor-in-chief. The first article published in the journal is by Maharaja and entitled “Consciousness Is All There Is: A Mathematical Approach with Applications.” It is the first of a series aimed at solving the question of how the physical universe emerges from consciousness. See www.ijmac.com.

Website elucidates over 700 Maharishi Vedic Science terms

The Maharishi Vedic Science Thesaurus website provides access to over 700 alphabetically arranged terms from Maharishi Vedic Science (mvsthesaurus.mum.edu). Created by emeritus University librarian Craig Shaw, the thesaurus offers a description of each term or a related quote from Maharishi, as well as links to websites where the term is described in more depth. The entries also include links to related books, videos, and scientific research, as well as to hierarchically related thesaurus terms.
A film by Monica Demes, a 2015 graduate of the David Lynch MFA in Film, took home awards for Best Direction—Long Form, Best Cinematography, and Best Actress at the recent Iowa Motion Picture Association awards held in Pella.

Ms. Demes herself received the director award, Gregor Kresal, a 2015 graduate of the Lynch MFA, received the cinematography award, and undergraduate student Sophia Woodward received the acting award.

Titled _Lilith’s Awakening_, Ms. Demes’s film is a haunting yet beautiful vampire film, and is the first complete feature-length film produced by a student in the Lynch MFA. The film uses a service station as a setting and draws upon the characters of the classic tale Dracula. However, it uses a female as the vampire character.

A ceramic teapot by BFA student Kurtis Kujawski was one of 61 pieces accepted for a national exhibit of student work in Kansas City. There were over 600 works submitted. In addition, Mr. Kujawski was one of just 16 undergrad students who had their work accepted. The 2016 National Student Juried Exhibition was sponsored by the National Council on Education for the Ceramic Arts.
MBA student Alden Rowe traveled to Des Moines to pitch his business plan to three judges after having been selected as one of 13 finalists from colleges and universities statewide in the Pappajohn Student Entrepreneurial Venture Competition. Competing against three-person teams from schools such as the University of Iowa and Iowa State, he was the only student representing a small school. While he didn’t win one of the three seed grants of $5,000, he was awarded $500 for being a finalist.

Mr. Rowe’s business centers around an organic and non-genetically modified food product for a niche market.

His plan was also a finalist in a competition sponsored by the Fairfield Chamber of Commerce.

A team of three students finished in third place overall in the client/advocate category at the International Intercollegiate Mediation Tournament held at Drake University Law School in Des Moines, Iowa.

Competing against 31 other teams from 18 schools, the third-place team of Tal Ron, Lauren Webster, and Nahshon Yisrael made it to the finals of the tournament along with teams from Boston University, the University of Texas-Dallas, the University of San Diego, the University of Dubuque, and Principia College.

In the individual category, the client advocate team of Tal Ron and Nahshon Yisrael earned fifth place out of 64 competitors. In addition, the team of Janet McDonald, Lauren Webster, and Nahshon Yisrael received a first-place Spirit of Mediation award in the mediator category, which is chosen by the competitors. The MUM mediators received perfect scores from their co-mediators in all three preliminary rounds.

Tal Ron, Lauren Webster, Janet McDonald, and Nahshon Yisrael
**Student teaches art to area seniors**

**Offers 11-week program to assisted living centers in Fairfield, Ottumwa and Iowa City**

Recognizing that those in assisted living have most of their decisions made for them, student Kenzie Wacknov offered them the opportunity to make choices and express themselves by teaching art classes to area seniors.

She offered an 11-week program at SunnyBrook Assisted Living in Fairfield and in similar centers in Ottumwa and Iowa City. The program included sculpting and painting clay sculptures as well as drawing. Those involved gave an exhibit at the end of the program.

Ms. Wacknov is pursuing a double major in art and education.

---

**PhD student receives $5,000 research grant**

**Mr. Dinesh Gyawali is an Ayurvedic vaidya (doctor) and offers consultations at the clinic on campus, as well as teaching courses on Maharishi AyurVeda.**

Dinesh Gyawali, a doctoral student in physiology, received a competitive $5,000 grant from the Cochrane Collaboration to help subsidize expenses associated with his project to systematically review research on the effect of Ayurvedic preparations on cardiovascular risk factors, specifically high cholesterol. He will also conduct a systematic review and meta-analysis of studies on Ayurvedic treatments of hypertension.

Mr. Gyawali is an Ayurvedic vaidya (doctor) and offers consultations at the clinic on campus, as well as teaching courses on Maharishi AyurVeda.
Running club wins timed team award for sixth time

The MUM running club participated in the Komen Southeast Iowa Race for the Cure in Ottumwa, and for the sixth time won the timed team award, which is given for the team with the five combined fastest times of all clubs entered in the 5-kilometer race.

MUM's combined time was 1:52:57. Leading the way for the club was Vinodthan Nayagar in a time of 21:16. He also won the first-place trophy for having the best time in the 25–29 age group.

Club coach Peter Mannisi was next in a time of 21:19. He also won a trophy for the best time in the 65–69 division. Cy Winther-Tamaki also won a trophy for winning the 20–24 division in a time of 22:22.

Club president Mahmood Al Shameri was second in the 25–29 division in a time of 22:50. Vanan Nayagar was the fifth finisher for the club members in a time of 25:08 and won a second place medal in the 50–54 division.

Also winning a second place medal was Pathu Nayagar in the women's 50–54 division in a time of 34:23.

Music, Athletics

Student song goes viral

A single with lyrics by student Tara De Santis went viral, with over 28,000 views on Soundcloud.com the first month it was released.

An indie dance song but with a flavor of electronic dance music, the single was produced by Saxton, a music producer in Maine, and is about love and hope for the future.

Ms. De Santis began writing lyrics at the age of 15, but it was only in her course on digital music production that she realized she wanted to be involved in the music industry and to pursue her dream of writing music.

The success of the song was all the more impressive given that there was very little promotion of it.

Soundcloud is an online platform for artists to upload, record, promote, and share worldwide their original sounds. Her song can be heard at soundcloud.com/s-xton/aurora-ft-tara-de-santis.
Pranav Chhalliyil

State science champion

Youngest student in state history to win the senior division

It’s hard to imagine what’s next for Maharishi School student Pranav Chhalliyil. He won the junior division of the State Science and Technology Fair of Iowa last year as an 8th grader and this year, as a 9th grader, won the senior division, competing against 300 other young scientists grades 9–12.

He was the youngest student in state history to win the senior division championship.

He also took fourth place in the microbiology category at the prestigious Intel International Science and Engineering Fair in Phoenix. And he was invited by the Iowa Dental Association to present his research at their annual meeting—the youngest person to present in the history of the organization.

Researching best approaches to oral hygiene

His research centers around oral hygiene: which method of cleaning one’s teeth is best at reducing oral bacteria. And because his volunteer work has brought him into contact with some of India’s most destitute people, he is especially interested in traditional approaches people used to clean their teeth before the modern era of toothbrushes and toothpaste—a luxury the impoverished can’t afford.

Last year he found that traditional oral hygiene using activated charcoal to brush followed by tongue cleaning was the most effective reducer of oral bacteria. This approach is ideal for developing countries because it is easy, convenient, and cost effective.

This year, he worked to discover what percentage of specific dental damaging bacteria was removed using three different approaches to cleaning with activated charcoal products: 1) toothpaste brushing plus tongue cleaning, 2) gum and tooth finger rubbing plus tongue cleaning, and 3) rice-husk charcoal powder finger rubbing plus tongue cleaning.

To reduce variations in the testing methods, he had 70 subjects perform all three cleaning methods separately for two nights each. The subjects collected saliva every morning in a DNA extraction tube. A second trial was done after a gap of one week.

Pranav then analyzed DNA from 960 saliva samples using genetic sequencing to look for the types of bacteria known to damage one’s teeth. His statistical analysis showed a significant decrease in damaging bacterial counts in all three methods.
However, he concluded that method 3 (rice-husk charcoal powder finger rubbing plus tongue cleaning) had the additional advantages of removing bad breath and whitening teeth.

**Inventing a new dental powder**

The particular activated charcoal powder of the winning method was actually an invention of Pranav himself, developed during the course of experimentation. He derived it from rice husks, which are typically considered waste material. He says that this powder is simple, efficient, and microbiome friendly, meaning that it’s compatible with the good bacteria in one’s body.

And since this highly adsorbing charcoal is made from recycling abundantly available rice-husks, it’s eco-friendly and can reduce plastic usage by both developed and developing countries.

It’s also cost-effective: Pranav estimates that using this powder for a year would cost $0.0019. That’s a fifth of a penny.

So what is next for Pranav? He plans to continue his mission to foster oral hygiene, knowing that poor hygiene can contribute to health problems such as diabetes, cancer, and heart disease.

This will include more research, of course, but also will continue to include a dental awareness camp that he offers every summer in India, as well as a half-hour science class he teaches most mornings via Skype.

---

**Top state award for Musical theater**

After performing well in the state competition, two acts from Maharishi School were invited to perform at All-State Speech Festival in Des Moines, coming away with the top award: a Critic’s Choice banner. The critic commended their ability to sing in dialect, and said that the performance had a “Zen-like quality.”

Two acts from Maharishi School performed at the All-State Speech Festival in Des Moines, coming away with the top award: a Critic’s Choice banner. The critic commended their ability to sing in dialect, and said that the performance had a “Zen-like quality.”

School senior Anna Unger and sophomore Devan Burke performed an excerpt of “Once,” a musical stage adaptation based on the 2007 film about a Czech woman who encounters an Irish man on a street corner singing about his ex-girlfriend. Feeling depressed, he considers giving up music altogether. However, Unger’s character slowly falls in love with him.

The critic who gave them the top honor commended their ability to sing in dialect, and praised Ms. Unger’s vocal range. She also was impressed by the emotional depth of the performance, which centered around heartbreak and mixed feelings. And she said that the performance had a “Zen-like quality.”

Also performing at the festival was a group of 15 students who performed a choral reading about immigrants arriving at Ellis Island that featured prose, poetry, and song. The piece was conceived in the context of the students’ study of the Syrian refugee crisis and was also notable for the fact that the students performing it were from Estonia, China, India, the UK, and Africa, as well as the U.S.
In tennis, the team won the district competition. At the state competition, twelfth-grader Chandre Morales placed third in singles, and the doubles team of Kai Vessey and Daniel Zhu also placed third.

Success at state tennis

Twelfth-grader Ross Emmanuel qualified for the state track meet and came in second in the 800-meter race and fifth in the 400, as well as anchoring the second-place distance-medley relay team. His second-place finish in the 800, a personal best 1:56.31, was only .04 seconds behind the winner. He also came in second last year.

and track
First at state in creativity

In an annual creativity competition, Maharishi School had seven teams win the top award in their categories at state.

Destination Imagination teaches the creative process, from imagination to innovation. The students are required to respond to specific challenges by building things and creating performances. They learn teamwork, initiative, and thinking outside the box. Their success at state qualified them for the international competition in Tennessee, where their best result came from a team of senior girls. Competing against 80 other teams, they earned 7th place.

Alumni successes

Ari Berman (class of 2000) returned to Maharishi School to give the 2016 commencement address. He is a noted author and political commentator. His book *Give Us the Ballot* was named one of the 100 best books of 2015 by the *New York Times*. He is a senior contributing writer for *The Nation* magazine and a Reporting Fellow at The Nation Institute. His writing has appeared in the *New York Times*, *Rolling Stone*, and *The Guardian*. He is a frequent political commentator on MSNBC, PBS, C-Span, and NPR. In addition, he has testified at a Congressional briefing on the threat of voter suppression.

Yale Shaw (2009) was honored with a silver design award in the 2015 international Spark Design Awards competition for his life-saving medical device, “Epi,” which is an auto-injection epinephrine device that is lighter, more stylish, and more accessible than previous devices. When the user senses an allergic reaction, Epi can be quickly accessed to inject epinephrine into his or her muscle tissue, temporarily neutralizing the reaction. Epi then triggers its smartphone app to notify 911 emergency services of the user’s exact location, allergy susceptibility, and personal information.

John DeAngelis (2009) was selected by GreenBiz to be included in their 2016 listing of “30 Under 30”: young people who are providing leadership in sustainability. GreenBiz is an organization that “advances the opportunities at the intersection of business, technology and sustainability.” Mr. DeAngelis is the Energy Program Manager at Steelcase, the leading manufacturer of furniture for offices, hospitals, and classrooms. He leads high-impact projects such as overseeing the company’s renewable energy portfolio and engaging with energy policy in Michigan.