



# THE SHIELD

Volume 3, Issue 1 Fall 2015

## Partnerships enhance learning, connect community



*Matt Stromske (left) explains a coding application to Emily Holland, a freshman in Lourdes Academy's Technical Applications class.*

When it comes to engaging students and providing a creative and interactive learning experience, Lourdes Academy is thinking outside the classroom. Lourdes has developed partnerships with individuals and businesses throughout the community to provide interesting learning opportunities that support curriculum, engage students and help students connect skills to the real world.

Last year, Journalism teacher Jennifer Pollack wanted to teach her Knight Writers (student journalists) to create content for a variety of media sources including print, websites and social media. She teamed up with former Verve, a Credit Union, Director of Cooperative Outreach Bryce Roth to bring real world expertise and experience into the classroom.

Roth met with the Knight Writers once each week to share marketing strategies, create media content and evaluate the effectiveness of their efforts. As a result of Pollack's and Roth's partnership, the Knight Writers have been regularly featured in the Oshkosh Northwestern, doubled

their Facebook presence and increased their Twitter activity. They developed relationships with other local high schools encouraging each other on game days and sending good luck messages.

"The collaboration with Bryce was an invaluable relationship," Pollack said. "Bryce brought in real-world experiences to the students by teaching them the importance of having a professional voice on social media. Often times social media is viewed as a self-centered way of communicating, but Bryce taught the students that when promoting a business, in our case Lourdes Academy, there is no 'I.' The students were promoting the school as a whole, not themselves or their friends, to both the Lourdes and Oshkosh communities."

The success of the partnership prompted other similar conversations. **Matt Stromske ('90)**, a computer software engineer with Madison-based Singlewire Software, was eager to share his passion for computer science with students. Each Monday, Stromske visits **John Cleaver's ('69)** Technical Applications class for some project-based learning.

"I see first-hand the shortage of qualified people that exists in the tech industry," Stromske said. "If my passion for technology and my career rub off on a few students, I would be extremely pleased. I really enjoy what I do and love sharing my experiences with others. It is an exciting time in the world of technology."

Cleaver is also partnering with Colleen Merrill, Director of the Small Business Development Center at UW Oshkosh, to add a new element to his General Business class. Merrill will be working with students to create an entrepreneur think tank.

While each partnership is unique in its content, they all provide students an opportunity to learn from experts in their fields in a hands-on way. The skills they learn and connections they make also help them hone in on a field

**PARTNERSHIPS: Continued on inside flap**

# Where in the world are our alumni?



Attention alumni. You can be part of a fun and interactive project to help elementary students at Lourdes Academy learn geography. Simply send a postcard from your town with a note to our students sharing your favorite thing about your town (fun attraction, unique restaurant, great view, etc.). Our students

will plot the locations on a map to learn “Where in the World” our alumni are living. Please send postcards by November 20, 2015. Post cards can be sent to either or both elementary schools to the following contacts:

Seton Site (formerly St. Vincent) - Attn: Luke Spanbauer  
1207 Oregon Street • Oshkosh, WI 54902

Cabrini Site (formerly St. Mary) - Attn: Rob Mullen  
619 Merritt Avenue • Oshkosh, WI 54901

Thank you for your help with this project. We can't wait to hear from you.

## Send us your #TBT

If you haven't visited Lourdes Academy on Facebook, now is a great time to start. This year, Facebook will feature...YOU...our alumni. Send us your throwback photos featuring alumni at Homecoming, or dressed in Lourdes apparel or athletic wear to be included in our Throwback Thursday (TBT) feature on Facebook.

Email photos with the subject line ALUMNI THROWBACK to Jennifer Pollack at [jpollack@lourdesacademyoshkosh.org](mailto:jpollack@lourdesacademyoshkosh.org). Please include the names of everyone in your photo, year of graduation, and a sentence or two about your photo.

*Emails will not be shared or used for solicitation purposes. Please obtain consent from classmates before sharing photos.*

## PARTNERSHIPS: Continued from page 1

of study as they approach graduation.

A new Scholars program was also launched earlier this year to further assist students in the career exploration process. Each Scholars session brings students into a work setting to experience the work environment and talk with professionals in the field. Seven Scholars sessions are planned for 2015-16 including law, engineering, computer science, medicine, hospitality, aviation and church ministries/religious vocations.

The Scholars program would not be possible without the support of local businesses, Lourdes families and especially the following alumni: **Heidi (Egbert) Sweet ('89), Dr. John Leschke ('76), Jay Supple ('78) and Cathy (Schultz) Cluff ('77).**

All of these partnerships share a common goal—to advance Lourdes Academy's mission to prepare students for life, college and a continued relationship with God.

## Lourdes Academy receives accreditation



Lourdes Academy has again successfully completed its accreditation process through AdvancEd, a non-profit, non-partisan organization that conducts rigorous, on-site external reviews of PreK-12 schools and school systems throughout the country.

In May, four team members from AdvancEd spent a week interviewing teachers, staff, parents and students to learn more about Lourdes' academic and extra-curricular activities, leadership initiatives and faith formation programs.

Lourdes scored higher than the national average in each of the three main areas—Teaching and Learning Impact, Leadership Capacity, and Resource Utilization.

The team noted “Powerful Practices” in each area including:

- Utilization of community resources to support instructional practices and enhance student learning.
- Parent and volunteer involvement.
- Implementation of the Lourdes Academy Way (LAW), which reflects the system's Catholic identity and guides stakeholders in their belief in how they should treat one another.
- A collaborative environment in support of student learning.

To view the AdvancEd Accreditation report, visit [lourdesacademyoshkosh.org](http://lourdesacademyoshkosh.org) and click on the Accreditation Report link.

# Eureka! Inspirations in Science



Dr. Ann Weber was part of the team that discovered Januvia and Janumet.

This issue of *The Shield* marks the start of the third year of Lourdes Academy's alumni newsletter. Thank you to the many alumni who have shared their stories and experiences on these pages. Each of your stories becomes part of the Lourdes legacy and the tradition of Catholic education that has served our community for more than a century.

This year is "A Year of Inspiration" featuring

alumni who have been inspirational in their field. This issue focuses on inspirations in science, followed by the Winter issue, which will focus on entrepreneurship. To share your story, see the box at the bottom of this page.

## Breakthroughs in medicine

When **Dr. Ann Weber ('78)** took Bill Behring's chemistry class in high school, she had no idea it would inspire her future, her career path and the field of medicine. In a field dominated by men, Weber has not only left an indelible mark, she is also committed to improving diversity in the field.

"I loved his [Behring's] class and decided to major in chemistry in college because of that class," Weber said. "Mr. Behring was an amazing teacher. He was definitely the person I considered my first real mentor in terms of going into chemistry."

After graduating from Lourdes, Weber went on to become the valedictorian of her class at Notre Dame before pursuing a Ph.D. from Harvard. But she didn't start her degree program there. After her undergraduate research advisor told her none of the research groups at Harvard would accept women, she applied instead to Caltech. During that time, her Caltech research advisor, David Evans, moved to Harvard. Professor Evans, who had been in academics for almost 20 years, invited Weber to continue her studies in Synthetic Organic Chemistry at Harvard. In 1987, she became the first woman from his lab to graduate with a Ph.D.

Weber joined Merck Research Laboratories where she has spent 28 years doing medicine chemistry and drug discovery. She has been involved in numerous projects and drugs, most notably the discovery of Januvia, a drug that helps lower blood sugar in adults with type 2 diabetes. The drug has been on the market since 2007 and Januvia, along with Janumet, a fixed dose combination of Januvia

with another antidiabetic agent, is the best selling drug family in Merck's history. This Discover Team, which was co-led by Nancy Thornberry, marked the first time Merck had a product team led by two women.

"It's exciting because it's reaching millions of patients and helping them control their disease," Weber said of Januvia.

Weber also developed the drug Mirabegron. Originally, Mirabegron was intended to help control obesity, but ended up being a viable treatment for overactive bladder.

Five years ago, Weber was named Vice President of Discovery Chemistry at Merck Research Laboratories.

"When I started, there were very few women Ph.D.s in chemistry, and it's still difficult to attract and retain women in chemistry. When I was younger I never wanted to be a 'woman chemist.' But when I was promoted to vice president, it was a call to arms for me. I realized I could do something to turn the trend around."

Weber has become an advocate for women in her company and in her field. She joined with the American Chemical Society's Women's Chemist Committee (WCC) to help Merck develop a WCC award to recognize women chemists.

"We try to help the women we have here [at Merck] find a fulfilling career path. They can have a successful scientific career and fulfilling personal lives," added Weber, who has three children of her own.

Weber plans to retire from Merck this fall but will stay active in the chemical research industry. She plans to use her drug discovery expertise to address problems, such as rare or orphan diseases.

"I want to do something to give back in an area that may not be commercially viable but where the need is still great."

## To infinity and beyond

During **Jim Dempsey's ('67)** first year studying physics at Ripon College, he was given an assignment to compute the cross sectional area of a steel wire that extended from Earth into space with the purpose of transporting objects. One end of the wire would be anchored to a structure on

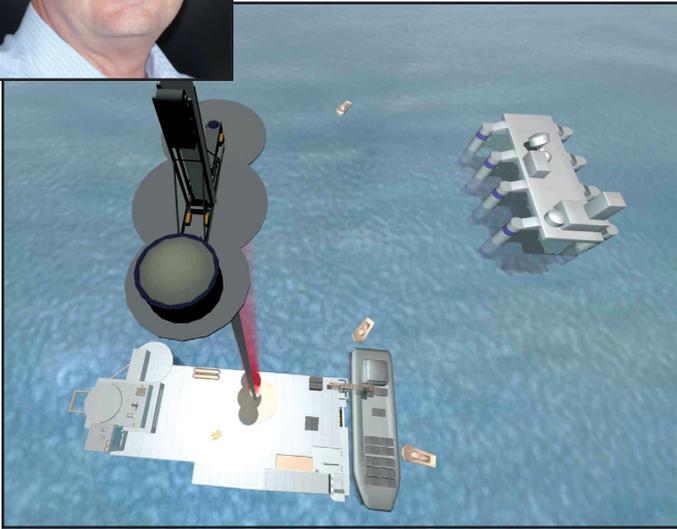
## Calling all Entrepreneurs

The Winter 2016 issue of *The Shield* will feature inspirational stories of entrepreneurship by Lourdes alumni.

Tell us about your entrepreneur experience to be included in *The Shield*. To share your story, contact Karen Boehm at 920-426-3626, ext. 546 or [kboehm@lourdesacademyoshkosh.org](mailto:kboehm@lourdesacademyoshkosh.org).



*Jim Dempsey holds two patents on the space elevator. Below is a conceptual illustration of a space elevator base.*



earth, while the second end would be kept aloft by placing it outside of the earth's gravitational pull. The wire would have to be strong enough to support itself, as well as any objects it carried.

The computer solution produced an unsolvable problem with the biggest challenge being the material from which the wire was built. There is not enough iron in the core of the earth to produce a steel wire that would extend outside the earth's atmosphere—more than 60,000 miles.

The assignment got Dempsey hooked on the idea that, given the proper material, you could build such a tethered satellite. He revisited his computations each time a new material was developed and with each advancement in materials, the concept became close to attainable.

Then in 2003, he read an article by Dr. Bradley Edwards, a UW-Madison alumni and world renowned scientist working for NASA's Institute for Advanced Concepts program at the time. Edwards, a leading proponent behind the concept of the space elevator, presented information on a new carbon nanotube composite that would be tough enough to extend 62,000 miles without breaking.

Armed with the new information, Dempsey once again revised his formula and in September 2004 received a patent (US 6981674) for a "system and method for space elevator." The serpentine shaped tether would distribute the mass at an equilibrium point, allowing it to carry payloads up and down.

"If you have a strong material with low mass, you can construct a tether that can extend out about 65,000 miles by putting a counter weight on one end to hold the wire up," Dempsey explained. "Once you have that structure, you can put a climbing device on the tether. Since there is no fuel required to launch or receive payloads, you could transport materials for about 1 percent of the cost that it currently takes using a rocket."

Dempsey then received a second patent (US 7971830)

in July 2011 for a "system and method for space elevator deployment." The space elevator would be deployed via a doubly spooled tether using a beacon satellite and positional thrusters. As the tether is de-spooled, one end would fall inwards to an anchor point on earth and the other end would fall outward to a support point in Geosynchronous orbit. In other words, it explains how the tether would be positioned so that it wouldn't crash to earth or bounce up into space during deployment.

While Dempsey developed both patents independently, recent research by leading aerospace industries has contributed to his own research. Carbon Designs Inc., a company founded by Edwards, and JAXA (Japan Aerospace Exploration Agency) for example, have invested research dollars into the viability of the carbon nanotube.

Dempsey's dream is to see the space elevator come to fruition in his lifetime.

"My dream is for someone to find the materials to build the space elevator and then to build marketable products that can be used with that material to fund the space elevator project." Dempsey said. "The material is very valuable on earth. It could be used for high strength-to-weight ratio items, such as I-beams, air frames, cars, golf clubs, etc."

### **Compassionate options for medical treatment**

Visit your family doctor and you will likely be asked to document your advanced directives...to spell out how you would like your end-of-life care to look. While this practice is common place now, it elicited more questions than answers in the 1990s.

As a medical Student at St. Louis University Hospital in the late 1990s, **Dr. Laurie (Schuster) Muller ('91)**, was involved with ethical research studying end-of-life decision making. Do Not Resuscitate (DNR) orders were just starting to evolve, and medical professionals were finding that there was a lot of grey area surrounding those decisions. It was about more than whether or not to perform CPR.

Muller's team began collecting data on end-of-care decisions at the hospital. They conducted a retrospective study to review past charts and the end-of-life decisions that had been made. Specifically, they looked at DNR orders and whether or not additions or alterations had been made. They administered a survey to gain a better understanding of what the term DNR meant to different people.

In alignment with St. Louis University Hospital's Ethics Committee, the team compiled data to develop a form that residents and attending physicians used with families when discussing end-of-life care. The pilot study allowed them to evaluate how the process worked and how the forms could be improved to take into consideration the myriad options of end-of-life decisions.



*Laurie Muller's research helped shape today's advanced directives.*

"At that time, physicians were starting to realize that the questions surrounding end-of-life decision making were more complex than a simple Do Not Resuscitate order," Muller said. "As part of the geriatric research team at that time in history, it became important to create the correct tools to be used to improve communication and clarify these questions. This was an area of research that combined the scientific process, as well as medical ethics, which was interesting to me."

Muller and the research team, led by Dr. Douglas Miller, at St. Louis University School of Medicine presented an abstract in 1999 based on their research called "Limiting Life Support Using Order Forms in Two Hospitals: Mode of Use, Rationales and Satisfaction," outlining their findings.

The research, carried out at St. Louis University Hospital and the VA Hospital of St. Louis, helped define the end-of-life decision making process used in many hospitals today. The forms created a vehicle to facilitate the end-of-life discussion between physicians, patients and their families.

"Today, every patient admitted to a hospital is encouraged to have an advanced directive as part of his or her medical chart," Muller added. "In the late 1990s this was not the case and often these conversations were happening too late. Our research created an avenue for health care professionals to provide quality and compassionate end-of-life care that takes the patients' and families' wishes into consideration."

## Your story.. our mission

How your support  
brings Catholic  
education  
to life



When Christian Pecore ('16) attended kindergarten at a public school, he expressed to his parents, Chris and Ragan, that he couldn't talk about God at school. It was important to the Pecores that their children be able to celebrate their faith through education like they did at home. At a Catholic Schools Week mass, they listened to a family share their experience in the Catholic school system, and felt a stirring to learn more.

"I looked at Ragan with four kids between us and said, 'let's pray about it,'" Chris said. "We started in the system (Lourdes Academy) and never looked back. I felt like we were led there, like that is where God wanted us to be."

Christian's faith has evolved during his 11 years at Lourdes. From the JC (Jesus Christ) Club he formed with friends in elementary school where everyone was welcome to a new men's ministry he formed this year with four other seniors, Christian has become a leader in faith, academics and athletics.

Chris and Ragan have enjoyed watching their five boys attend and plan mass, celebrate their first communion with their classmates, attend confession and adoration and develop a reverence for Mary and for the mass. Their youngest daughter, Helen, will also start preschool at Lourdes Academy next year.

Lourdes is honored to be part of the faith formation for students like Christian. You too can help Lourdes support its mission to prepare students for life, college and a continued relationship with God.

In November, you will be receiving the Lourdes Academy annual appeal. The annual appeal helps bridge the gap between tuition and the actual cost to educate a student at Lourdes Academy. It helps build a rigorous curriculum, develop leadership programs, provide extra-curricular programs and attract exceptional teachers who are committed to continuing the tradition of faith-based education in our community.

To learn how you can support Lourdes Academy, please contact Karen Boehm at 920-426-3626, ext. 546 or [kboehm@lourdesacademyoshkosh.org](mailto:kboehm@lourdesacademyoshkosh.org).

*Don't be Late...*  
It's a very important date!  
Dinner Auction benefiting Lourdes Academy PreK-12  
[lourdesacademyoshkosh.org](http://lourdesacademyoshkosh.org)




*Mad Hatter  
Gala & Auction*

Friday, November 6, 2015  
5-10 p.m.  
Oshkosh Convention Center  
2 North Main Street




Contact Carla Huizenga  
920-426-3626, ext. 540  
[carla.huizenga@lourdesacademyoshkosh.org](mailto:carla.huizenga@lourdesacademyoshkosh.org)



Lourdes Academy  
250 North Sawyer Street  
Oshkosh, WI 54902

Non-Profit  
Organization  
U.S. Postage  
PAID  
Oshkosh, WI  
Permit No. 104

# THE SHIELD

Lourdes Academy Alumni Newsletter

*Special thanks to Bart Putzer, Class of 1984, for assisting with the layout & design of The Shield.*

## UPCOMING LOURDES REUNIONS

### *Welcome Back!*



*Above: Members of the class of 1985 celebrated their 30th reunion at the Best Western Premier Waterfront Hotel in downtown Oshkosh on August 8.*

*Right: The class of 1965 celebrated their 50th reunion at Lourdes Academy on September 11.*

### UPCOMING REUNIONS

**Class of 1990 (25 Years) - Saturday, October 17, 2015**

**4:30-5:30 pm** - School Tours - Lourdes Academy, 110 N. Sawyer Street (enter Door #7, back parking lot, east side of building)

**6 pm** - Dinner & drinks - Fratello's, 1501 Arboretum Dr.

**8 pm** - Lourdes Homecoming Football Game - Titan Stadium, 450 Josslyn Street (2 blocks from Lourdes)

Contact: Dan McGinley at 414-534-2058 or [danmcginley@quovisinc.com](mailto:danmcginley@quovisinc.com).

**Class of 1986 - Saturday, August 13, 2016, Elks Club**



Planning a reunion? Contact Shannon Gibson at 920-426-3626, ext. 541 or [sgibson@lourdesacademyoshkosh.org](mailto:sgibson@lourdesacademyoshkosh.org) for assistance. Lourdes Academy offers free mailing lists and facilities usage for Lourdes class reunions.