Disciplines collide: Art History professor unpacks BioArt

By Sarah Mann, College of Letters & Science

In a sterile, controlled glass sphere grew a tiny piece of art, engineered from a living layer of tissue grown around a biodegradable matrix. Its creators called it “Victimless Leather,” a small coat grown in a controlled environment meant to make audiences question the practice of using animal hide to create actual leather garments.

For Jennifer Johung, it represented far bigger questions – things like, how do we define life? How long and under what circumstances are we going to live? What are our responsibilities toward life that we create?

Johung, a UWM associate professor of Art History, recently completed a manuscript for a book covering BioArt, a practice which uses living materials like tissue, cells and bacteria to create works of art. Creations have included pieces like the Victimless Leather jacket, dolls crafted from living tissue, paintings colored by bacteria with fluorescent proteins, and more. It’s a relatively new art form and therefore an unexplored field. Johung has conducted her research mainly by interviewing the artists who create such works. She became interested in it as a way to impress upon her students some of the controversies that can surround modern art.

“(Initially) I honestly thought BioArt was really frightening. I didn’t know what it was. BioArt is definitely not a field that you encounter even in most contemporary art surveys,” Johung admitted. “Part of what I want to do is explain that BioArt is not this weird practice that exists in separation from a lot of contemporary art and architecture. It’s just that the materials are living, and that can be unsettling.”

It can also be difficult for people interested in the arts and humanities to reconcile the scientific knowledge needed to create these pieces, something Johung said she initially struggled with until she learned more about biotechnology practices during a workshop in Finland. It can be a hurdle simply to understand the terminology associated with biological processes, or to understand how the processes work.

Once that understanding is reached, however, Johung thinks BioArt has the power to unite disciplines that rarely meet.

“The workshop made a really strong case for artists and humanities people to sit at the same table (with scientists) and talk about things. I think we need this transdisciplinary dialogue, particularly to consider questions like, what does it mean to be living? What are the impacts of modifying life at a micro level?” Johung said.

She hasn’t come to any conclusions herself, but she thinks those questions are essential to consider in every discipline. They are questions with aesthetic, political, ethical, and legal implications, but no clear answers. BioArt brings these challenges to the fore because it does use living material – and at the end of an exhibition, that material is usually killed.

Continued on page 7
The success of stay-at-home dads
By Graham Kilmer, University Relations

UWM sociologist Noelle Chesley conducted a study during the financial crisis of 2008 on the family experience of stay-at-home fathers by looking at families that had changed their work-parenting arrangements. Either two working parents morphed into a female breadwinner and a stay-at-home dad, or a mom who previously stayed at home went to work while the father, the previous breadwinner, stayed at home with the children after losing a job.

Today, fathers represent 16 percent of stay-at-home parents. Chesley continues to investigate role switching and discusses her work here.

What drew you to this topic?

Back in 2007, I noticed that some friends and family members were beginning to make the shift to stay-at-home fathers and breadwinner mothers, for a variety of reasons. During the same year I was part of a panel at the annual meeting for the American Sociological Association where we were discussing the work and family experiences of women. During the discussion people kept asking: What about men? What about the experience of fathers? It was an issue beginning to be talked about in both social science and the wider culture.

Do moms and dads have different experiences in the role of breadwinner?

In a more recent study, one of the questions I asked was whether at-home and breadwinner parents are engaged in similar housework and child care activities. What we found was that breadwinner fathers and stay-at-home fathers both engaged in similar levels of housework, and that breadwinner mothers and stay-at-home mothers also did similar amounts of housework. In my earlier study, mothers said that, in their experience, the biggest difference between breadwinner mothers and fathers was a greater expectation that mothers spend more time with their children when they were at home.

Are the people in these non-traditional arrangements happy?

The majority of people I interviewed said they were satisfied with the arrangement. However, it’s complicated. People tended to be happy in some ways, but not in others. For example, while most women indicated that they were very happy with how their husbands were caring for their children, some wives were jealous about not being the stay-at-home parent, and not being able to spend as much time with their children. And men sometimes felt bad about not bringing in money.

Why do couples make such a change?

When I asked couples why they made the decision they often referred to “doing the math.” They described their decision as more economic. Whether it was the high cost of child care, or perhaps they didn’t want their children in child care at all. Sometimes it was more monetarily viable for the mother to work because her job offered better benefits.

Continued on page 9
Her shining life: Liberal Studies alum teaches, acts, produces
By Sarah Mann, College of Letters & Science

On stage, she’s been called Regan, Mary Kelly, Veronica, and many other names, but in real life, she’s Anna Figlesthaler – a teacher, actor, and UWM graduate.

Figlesthaler laughs as she relates her hectic schedule. Her job as a theater teacher for Rufus King International School in Milwaukee keeps her busy during the school year, but now that summer has started, Figlesthaler’s own acting career is in full swing. Last year, she and three friends founded the Umbrella Group, a theater production company that is beginning to flourish. This summer, the company is producing These Shining Lives, and Figlesthaler will perform.

It was a long road to her current profession. Figlesthaler grew up in Wauwatosa, Wis.; studied theater at UW-Eau Claire; moved to Milwaukee; and quickly found that the life of a starving artist was not one she wanted for herself. She needed to make some changes.

“I broke down what it was about theater that I really loved and realized it was the script analysis. It was getting other people excited about what I was doing with an original play,” Figlesthaler said. “I realized that that is teaching. So, that’s when I first went to UWM.”

Figlesthaler got her teaching license in Secondary English Education, sure that no one would hire a person whose only expertise was theater. She was wrong – after a few setbacks, she was hired as a theater teacher at Rufus King, and so went back to UWM to get her teaching license for that area. It was there that she met Robin Mello, an associate professor of Theater Education in the Peck School of the Arts. Mello began steering Figlesthaler in the direction of the Masters in Liberal Studies in Letters & Science, a degree that emphasizes learning across disciplines.

“I totally dug the MLS program because it’s kind of a ‘build-your-own-program’. It is under this idea that we can better understand humanity through many lenses, not just one, not just English or Art or Theater or History or whatever,” Figlesthaler explained. “That worked really well for me, given the fact that I taught three different subjects.”

Earning her master’s degree while working full time was chaotic, but several professors stand out for Figlesthaler, including Martin Jack Rosenblum and Jeffrey Hayes. Both professors have passed away since Figlesthaler earned her degree in 2012. Hayes especially encouraged Figlesthaler in writing her thesis, a play surrounding the events of Wisconsin Gov. Scott Walker’s budget repair bill, which sparked protests from teachers across the state since the law ended collective bargaining.

After graduating, Figlesthaler embarked on more personal projects, including one fateful production of King Lear where she played Regan. She forged such close friendships with cast mates Libby Amato, Bo Johnson and Matt Wickey that the four decided to open Umbrella Group Theater. Figlesthaler often acts in her company’s productions and will appear in These Shining Lives, which tells the true story of the “Radium Girls” who were stricken with cancer as employees at the Radium Dial watch factory in Ottawa, Ill. Tickets for the show are available at umbrellagroupmilwaukee.com.

Playing women and supporting shows featuring their struggles, journeys, triumphs and personal growth is a cause near and dear to Figlesthaler’s feminist heart.

Continued on page 9
Chemistry professor tests the tests
By Sarah Mann, College of Letters & Science

There are some definite gender disparities in fields involving science, technology, engineering, and math, collectively known as STEM fields. Men earning bachelor’s degrees and finding careers in STEM fields outnumber women three to one.

UWM Associate Professor of Chemistry Kristen Murphy is invested in ensuring a level playing field for men and women in STEM education. Murphy is a unique chemistry professor in that she researches how to teach her field, especially when it comes to writing unbiased exams. She is the Associate Director of the American Chemical Society’s Division of Chemical Education Examinations Institute, which will be based at UWM starting July 1.

“We’ve been developing standardized exams from high school all the way up through graduate entrance exams for 80 years. I started working with that group and have been the associate director with that group for 10 years,” Murphy said. She will take over as the Director on July 1.

When she began her tenure with the Institute, Murphy helped produce standardized chemistry exams, but recently, she’s become more interested in making those exams free of favor. All other aspects of performance being equal, Murphy wants to ensure that questions won’t be easier to answer for male students than for female students, or, if they are, to make sure that another question is easier to answer for females than it is for males to balance out the test.

“Common disparities that we may hear about are that female students tend to do better at open response questions and male students tend to do better at multiple choice. Or female students tend to do better at verbal questions. … Visual-spatial components, those tend to favor male students. Physical science tend to favor male; life science tend to favor female,” Murphy explained. However, “There’s a lot of disagreement in the literature (about which questions show favor), and part of the problem is that you’re talking about these very large-scale tests. No other information is available.”

To gather information, Murphy and her colleagues conduct research with model tests and subtly, repeatedly, alter questions to gauge how the format and content of the question can affect favor. The sample questions are given to male and female students who perform at the same academic level to see if they are easier for one group or the other.

If a question does show favor, Murphy’s group removes it from the tests that are sent out to chemistry students nationwide. It’s not a huge problem – only about 5 percent of questions show favor – but it can be important as students delve further into their chemistry education.

“The research shows that if there’s a gap (in performance) at a young age, the gap gets wider as students get older,” Murphy said.

There are also gaps in students’ confidence, no matter how their performances in class and on tests stack up. Murphy is working on research that aims to address that disparity as well, especially if a lack of confidence in their skills translates into students leaving STEM education. She is researching models to predict whether students will persist in their major by giving them surveys about their confidence levels when it comes to solving chemistry problems, working in a lab, and other skills they need to continue in chemistry. If students experience a drop in confidence that leads to a loss of interest in STEM, Murphy wants to have tools in place to help students regain it. And once again, she’s finding that gender plays a role.

“Research has shown that there are differential affective components for males and females, and we’ve actually found that ourselves. Even when we have our students matched on performance, our male students tend to be more confident than our female students,” Murphy said. “That’s a concern to me. I don’t want to know my female students are at risk for persisting in their major, especially when it’s a STEM major.”
From the Student Association President

The UWM Student Association has been hard at work the last couple months. In addition to a number of other ventures, one of our main projects has been restructuring parking, a topic that affects everyone on campus.

In an effort to enhance the attractiveness of sustainable transportation, increase pedestrian and bicycle safety on campus, and improve availability of parking for those who must drive, the Student Association, at the request of the Parking and Transit Office and the Nelson Nygaard Parking and Transportation Study, decided to decrease funding to subsidized parking, a service for which all students were paying about $1,500 per parking spot. However, the majority of UWM students were not using the provided subsidized parking.

This decision will positively impact campus in several ways. Reallocations encourage students living in the neighborhood surrounding campus to bus, bike, or walk, thus helping to improve parking for UWM students who live a driving distance from campus or have other extenuating circumstances and must drive. One of the chief complaints received was that there were no spaces left in parking garages for commuters. Students were paying $1.3 million for parking, but commuters weren’t actually getting to use those spots. Furthermore, most of those paying this price have never used the parking garages.

In addition, this policy change will cultivate a more modern and sustainable transportation culture for UWM students in years to come. Ultimately, the decrease in funding will assist UWM to provide parking for those who truly need it, while making strides to become a more bicycle- and pedestrian-friendly campus.

In addition, the Student Association has been advocating for shared governance rights for everyone, and students in particular. Recently, in the May 29 Omnibus Motion put forward by the state legislature’s joint finance committee, the right for students to play a significant role in shared governance and policy development at their school was stricken from state statute (if passed). You can read my full thoughts at http://bit.ly/1HjLKbp.

The Student Association has been working on a number of other projects, like building a better B.O.S.S. (the university safe ride system), helping launch Homecoming, fighting sexual violence, and much more.

Mike Sportiello, President of the Student Association
He didn't just write 'Everyone Leads' - he lived it
By Angela McManaman, University Relations

When President Barack Obama wanted a national Day of Service as part of his 2009 inauguration, when he needed community leaders to help shape the White House’s first Office of Social Innovation, when he was seeking change-makers for the White House Council for Community Solutions, he called Paul Schmitz (’94, BA Political Science).

Today, Schmitz keeps a foot on the ground in Washington, D.C., as the first innovator in residence at Georgetown University’s Beeck Center for Social Impact + Innovation. But the UWM graduate still lives within walking distance of the alma mater that profoundly shaped the writer and thought leader he is today.

In the early ’90s, community engagement was getting off the ground at UWM and commuter students like Schmitz were the majority of the student population.

He was president of College Dems and juggled political science courses with a telemarketing job. He was earning straight As for the first time in his life and flexed the writing muscle that would land him guest-columnist roles in *The Washington Post* and power his first book, “Everyone Leads: Building Leadership from the Community Up” (2011).

He had just one problem with college life – he wasn’t giving back.

“I was a recovering addict and I was already involved in service through that, but I was looking for more,” says Schmitz. “I had this sense that was built into my DNA by then: Whenever you’re given the opportunity, you need to give back.”

Then he met someone.

“I met Vanessa Kirsch in ’92. She told me she was starting an organization, Public Allies, for young people who had a passion for making a difference (and turning) that passion into careers in nonprofit and public service.

"When I heard that, I said: ‘That’s it! That’s what I want to do.’"

By 1993, Schmitz was founding director of Public Allies Milwaukee, one of the first city chapters of the national nonprofit that recruits and trains young leaders for the nonprofit sector. His closest colleague during those early years was a Princeton and Harvard Law graduate from Chicago. “It made me feel like a complete imbecile,” he now says, laughing. “I was 24 and didn’t even have my bachelor’s degree completed.”

Good thing that in addition to being talented and professional, Public Allies Chicago Director Michelle Obama was a gracious colleague.

Schmitz turned out to be a natural leader himself. He became Public Allies national CEO in 2000. When he stepped down in summer 2014, Allies alumni numbered 5,600 in 23 city chapters nationwide.

Continued on page 10
Art meets biology

continued from page 1

“It’s caused curators to start crying. It’s caused museum guards to say, ‘Can you show us how to feed these living forms? We’ll go on feeding them.’ The ethical questions are often surrounding what it means to end a form of life that you have brought into being,” Johung said. “Artists are bringing that into the open, but that happens all the time. There is a surplus of living stuff that exists in pharmaceutical labs by the tons. But we don’t see it.”

But, she adds, BioArt is about more than asking hard questions about life – it’s also about the joy of discovery in fields many people know little about. Artists are becoming more knowledgeable about traditionally biological fields and processes like DNA extraction, genetic modification, tissue engineering and more.

Scientists working in a lab have an end goal in mind, while artists are generally more free-form about their scientific creations – but the two aren’t as different as they think.

“Across the humanities, we’re becoming adept at doing interdisciplinary work. For me, this is almost the same thing,” Johung said. “When you engage with BioArt, you’re just talking to a biologist or a chemical engineer or an artist who’s trained in these sorts of fields. I think it just requires you to be playful and open-minded.”

Johung will be co-curating a BioArt exhibit in Perth, Australia in October.
In the Media and Around the Community

Jessica McBride’s (Journalism, Advertising, and Media Studies) JAMS:320 class has been featured all over news outlets for their role in procuring photographs of soldiers who died in the Vietnam War as part of a project to find a photograph for every veteran on the Vietnam Memorial Wall. Features included a story on WUWM (http://bit.ly/1FUjnSX), in the Waukesha Freeman, on Channel 3000 Madison (http://bit.ly/1J2BhS2), in the LaCrosse Tribune (http://bit.ly/1J2BfrF), in the Milwaukee Courier (http://bit.ly/1KxxmPq), on Fox6 News (http://bit.ly/1IZ33AV) and in various other media outlets. You can read more about her class in May’s edition of In Focus (http://bit.ly/1HhPJrm).

Field Station Manager Gretchen Meyer gave an account of how her love of the outdoors turned into a career with UWM on ScienceMag.org. http://bit.ly/1HYY45


Callanan has been busy this month; in addition to his appearances online and in print, he was featured on an episode of “What History Forgot” on the American Heroes Channel on June 21. He discussed the World War II Japanese practice of sending bomb-laden paper balloons floating across the Pacific Ocean to the U.S. west coast, which was explored in his novel The Cloud Atlas.

Marc Levine (History) was quoted in an op-ed piece in the Milwaukee Journal Sentinel about the revitalization of Milwaukee’s downtown. http://bit.ly/1EEOE59

Mara McGhee (’13, MA Nonprofit Management,) was featured in a Wisconsin Gazette article about her role in the founding of Milwaukee’s newest theater company, All In Productions. http://bit.ly/1drk1KJ

Student Nick Yannett (Journalism, Advertising, and Media Studies) had a fowl adventure in Milwaukee – he and some friends rescued some ducklings caught in a storm drain and were lauded as heroes in the Milwaukee Journal Sentinel. http://bit.ly/1cwDbxW


Elana Levine (Journalism, Advertising, and Media Studies) traveled back in time with CNN’s docu-series “The Seventies”, in which she discussed the impact of ’70s television shows. http://cnn.it/1J5DgHp

Jeffrey Sommers (Africology and Global Studies) lent his expertise and gave an interview to The Nation regarding the current crisis in Ukraine. http://bit.ly/1egOkvI

Associate Dean of the Humanities Dave Clark was quoted in an article on EducationDive.com regarding the shifting role and importance of humanities in education and the workforce. http://bit.ly/1SL2fBR

Joel Berkowitz (Jewish Studies) delivered a paper at “The World of Yiddish Today,” a two-day symposium connected to Kulturfest NYC, a week-long celebration of Yiddish culture.

Marc Tasman (Journalism, Advertising, and Media Studies) helped to create the Living Waters art exhibition shown at the Harry & Rose Samson Family Jewish Community Center in Whitefish Bay, Wisc. WUWM featured the exhibit on the show Lake Effect. http://bit.ly/1GlxyYx

Wisconsin’s newest poet laureate Kim Blaeser (English) was featured in a Star Journal article regarding her visit to Rhinelander in early June. http://bit.ly/1BCWts5

Cary Costello (Sociology) talked with Wauwatosa Now about the climate for transgender people in Milwaukee. http://bit.ly/1BBc9Ni

Continued on page 10
Stay-at-home fathers

Sometimes couples would say the father’s personality was better suited or he was more flexible to take on child care. However, when people gave that reason, I found it was often to mask underlying issues like a lack of job security for the father. An arrangement like this wasn’t something the couples talked about, or planned for beforehand. It was more of a reaction to situations like loss of a job or the birth of a child.

What’s the main lesson from this study?

One of the things that came out of this work was mutual understanding between couples. Some women said they now understood the stress that goes along with being the sole provider for the family. Some men realized that, before the shift, they had no conception of what it took to be a stay-at-home parent. Based on my research, I believe these sorts of experiences can contribute to both men and women feeling more flexible in stepping in and out of work and parenting roles.

Can changes like this have positive impacts on society?

I have found some evidence that hints at that. Social theories suggest that should be possible. Massive social and economic shifts like the Great Recession can shake things up. One father I interviewed remarked that once he saw how complicated and how much there was to manage as a stay-at-home parent, he realized that a stay-at-home mother would make a fabulous employee.
Alum gives back to community, country  

continued from page 6

Through it all, family and career kept him based in Milwaukee, where he’s proud to see his alma mater firmly entrenched in the city’s nonprofit community and many of his fellow alumni taking on diverse leadership positions across the city.

“People, UWM students, serving the community tend to stay in the community,” he says. “When they get involved with an issue or an organization, there’s a potential for sustainability with that.”

He thinks the city-university bond, strengthened by UWM’s success in enrolling first-generation Milwaukee-area students, makes the UWM engagement model uniquely authentic within higher education.

“At UWM, more students come from the community, and live in the community. Many universities that are doing student service, the students are coming from the outside – and typically far outside the economic class of the city they’re serving in,” explains Schmitz, who also holds a senior advisor position with the Collective Impact Forum.

“For Milwaukee and UWM, students aren’t coming in with some view of the community as something outside of them, but as something they are part of. That is why UWM is such a vital asset for our community.”

In the Media  

continued from page 8


Joseph Frederickson (’11, BA Geosciences), Scott Schaefer (’09, BA History; ’12, MS Geosciences) and Janessa Doucette-Frederickson (’11, BA Anthropology) published an article on the PLOS One website covering the discovery of fossils from a huge shark dating before the Late Cretaceous period. http://bit.ly/1fGsYRC
Pluto Rocks!

NASA’s New Horizons is set to pass by Pluto this summer and help us learn about the outer frozen worlds of our solar system. Explore the history of Pluto, the discovery of other Kuiper belt objects, and find out what New Horizons can teach us about the former ninth planet.

Date: July 22-24 and 29-31
Time: 7-8 p.m.
Where: Manfred Olson Planetarium, 1900 E. Kenwood Blvd.
Admission is $3. For more information, visit [http://bit.ly/1uNTnBD](http://bit.ly/1uNTnBD).