CSB|SJU CHEMISTRY



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# The Cavendish Chronicle

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# Ardolf Science Center Turns 25 Years Old

The Ardolf Science Center, home of CSB/SJU's departments of Chemistry and Nutrition, celebrates its 25<sup>th</sup> Anniversary this academic year. To mark the occasion, a celebration was organized for Homecoming Weekend, October 6<sup>th</sup> and 7<sup>th</sup>. Originally the initiative of Professor Brian Johnson, the occasion was planned by a select group of faculty from nutrition and chemistry with help from the CSB Alumnae Office and the CSB Archives.

The birthday party included a Friday evening social gathering with a slide show of memories from both before and after Ardolf's construction. On Saturday morning, a group of alumni from both departments discussed their career paths since leaving CSB/SJU. Both events underwent last-minute scheduling changes out of respect for funeral arrangements for S. Coleman O'Connell, OSB, 11th President of the College of Saint Benedict.



Alumni, faculty and students gather for a panel presentation

#### ASC Celebration

(Continued from page 1)

O'Connell was instrumental in leading the way for construction of the Ardolf Science Center during her term as CSB President. The effort involved a capital campaign, relying on alumnae giving, but was aided by a \$490,000 grant from the Bush Foundation. The Bush Foundation funds creative initiatives in education and community development in Minnesota and the Dakotas.

In addition, a significant contribution to the capital campaign came from Lottie and Frank Ardolf, Jr., Los Angeles philanthropists with a history of giving to education but no direct connection to CSB/SJU. Instead, Frank Ardolf heard about the campaign through his cousin, S. Miriam Ardolf, OSB. Miriam Ardolf was CSB Vice President of Finance at the time.

The building was designed by the architectural firm, Perkins and Will, of Chicago. On the chemistry faculty, **Professor Richard White** played a major advisory role in the design, along with **Professors Mark Hughes** and **William Muldoon**. At the time, the science center was praised for its open atrium and bright hallways, in contrast to the relatively Brutalist structures on the Saint John's campus. It was also recognized with an Award from the American Chemical Society's Division of Chemical Health and Safety.

Prior to the move, chemistry had maintained a relatively minor presence on the CSB campus. Moving from Saint John's, where most of the chemistry department was located, was a massive undertaking. Nevertheless, the change was deemed worthwhile despite some obvious sacrifices, such as diminished contact with colleagues in biology and physics.

"It was certainly a very powerful thing in terms of sending a message that women were welcome in chemistry," said Professor Henry Jakubowski, who remembers the move.

Indeed, when Ardolf opened its doors in 1992, it was meant to mark a new era on campus for women in science. Some progress has been made since then. During the five-year period prior to the move, only 35% of CSB/SJU chemistry majors were women, compared to 46% of chemistry and biochemistry majors in the last five years. However, similar increases have been seen nationwide over that time.

The Friday evening social hour was attended by approximately thirty faculty and alumnae. In addition to the slide show, Johnson gave a brief presentation reminiscing about the time period, along with corresponding remarks from Amy Olson of nutrition. About twenty people attended the Saturday morning panel, including a half-dozen current students. Panelists included Teresa Abraham, Chem & Biol '02 and Jean (Abler) Kelly, Chem '93.

In addition to those who were physically present, over seventy-five alumni submitted comments and photos to a virtual guestbook commemorating the celebration.



# Grad Launch What the Class of 2017 is Doing Now

Chemistry majors left CSB/SJU to pursue studies in graduate or professional school, began career paths in clinical and industrial labs, and found service opportunities across the globe. Alvin Burrows is in graduate school in chemistry at University of Minnesota-Duluth. Claire Buysse is in graduate school in atmospheric sciences at the University of Washington in Seattle. Alex Charbonneau is headed to graduate school in chemistry at Montana State University. Rejene Giinther is working at Pace Analytical doing industrial hygiene testing. Zach Gibbs is doing contract work at 3M. Nick Harbeck interned in public policy in Washington, D.C. over the summer. Stephanie Jean has deferred graduate school in chemistry at Penn State University while she works for a year. Faith **Kersey-Bronec** is working with the Jesuit Volunteer Corps in Tacna, Peru. Joe Koll is working with the Benedictine Volunteer Corps in Zambia. Meredith Liu is working and studying for the LSAT. Alex Madsen is in pharmacy school at University of Colorado-Denver. Danny Maki is working at Pace Analytical. Tom Nilles-Melchert is serving in the Benedictine Volunteer Corps in Tanzania. Alex Miller is studying engineering at University of Minnesota-Duluth. Max Olson is in a master's program at Tufts University. Catherine Pettinger is working with Franciscan Community Volunteers. Maeve Rvan is in graduate school in chemistry at University of Minnesota-Duluth. Raymond Twumasi is in graduate school in chemistry at The Ohio State University. Gao Yang is working at Radiometer. Dan Zoltek is in graduate school at University of Minnesota-Duluth.

Graduates of the biochemistry program, jointly administered by chemistry and biology, found a similar range of opportunities.

Austin Anderson works in the microbiology lab at Pace
Analytical. Mike Beckmann is in medical school at University of Minnesota-Duluth. Emma
Bonglack is in graduate school in pharmacology at Duke University.

Sarah Clark is in medical school at Emory University. Ian Durbin is a Clinic Assistant at Twin Cities Pain Clinic. Abbie Eckman is

a process scientist at Diasorin in Stillwater. Adam McVey is in pharmacy school at University of Minnesota. Luke Morrey is going to medical school at University of Minnesota. Niesha Ford is a maternal health volunteer with the Peace Corps in Rwanda. Heather Kaluzniak is studying medicine at the University of North Dakota. Cody Kohout is a medical scribe with the Emergency Physicians Professional Association. Thomas O'Toole is in medical school at Oregon Health & Science University. Jenny Paul is getting married and relocating with her husband to an Air Force base in California. Joe Rabaey is in graduate school in Fisheries & Wildlife at Michigan State University. Taylor Reny is studying pharmacy at University of Minnesota. John Schmelzer is working as a laboratory research technician at University of Wisconsin-Madison. Katie Schmitz works as an emergency medical technician at Methodist Hospital. Katie Wesche is working in the veterinary diagnostic lab at University of Minnesota.

#### **Alum Notes**

(continued from page 6)
Medicine Residents' Association
(EMRA) Medical Student Council
(MSC).

Jill Kerrigan, Chem '12 earned a Ph.D. in environmental engineering at the U of MN. She is doing post-doctoral work in the lab of Yu-Ping Chin at the University of Delaware.

Annie Luke, Chem '15 was awarded Outstanding Chem TA of the Year at the U of MN.

Amy Knutson, Bchm '15 spent two years with Teach for America in North Minneapolis and received a Masters of Education in middle school science from the University of Minnesota. She is currently married and is in school for occupational therapy School at the U of MN.

Maria McGlinch, Chem '16 is working in lab at the Mayo Clinic on a DNA methylation project.

Sam Hager, Bchm '16 was recently married and he has moved to Des Moines, Iowa, to begin his studies to become a Doctor of Osteopathic Medicine.



#### Postcards from Abroad



"I am currently studying abroad in Salzburg, Austria, and this photo was taken in Hohe Tauern National Park in the Austrian Alps, right after we had hiked for hours to reach the hut we were staying in for the weekend. The clouds and fog broke right as we arrived, which was rewarding."-Augie Witkowsi, Bchm '19

"In our last week in Greece on the Greco-Roman program, we spent two days hiking all the way to the top of Mount Olympus!"-Jack Barsody, Bchm '19





"I'm studying abroad in London, but this photo is from when we visited the Cliffs of Moher in Ireland."-Jack Kirsch, Bchm '19

#### Hard Work, Many Rewards in the Life of a 3M Patent Attorney

By Alex Messner

When most people think about lines of work in the field of chemistry, they may think of the care and precision of the analytical chemist, or the creative synthetic work of the organic chemist. For **Jean Lown, Chem '74,** a degree in chemistry led to a different route. A law school graduate, she now works as a patent attorney for 3M.

As a patent attorney, Lown primarily works with inventors to draft and prosecute patent applications and provide counseling regarding various intellectual property law issues. She is the primary attorney for the 3M Corporate Research Materials Laboratory, and as such coordinates work done by patent agents and other attorneys to ensure that legal needs are addressed.

After graduating from Saint Ben's, Lown set off for graduate school at Iowa State University. She obtained a Ph.D. in

analytical chemistry in 1979. Subsequently, she worked as a research chemist for a number of years. Finally, in 1997, Lown decided to change career paths. She attended law school at the University of Minnesota, graduating with a J.D. in 2000.

Lown says she still uses her chemistry background almost every day, although in ways that are different from her days as a bench chemist. As a research chemist, Lown's chemical knowledge was relatively focused. In contrast, as a patent attorney she has found that she needs a much broader understanding of chemistry in order to easily converse with researchers and discuss why their inventions are "new and non-obvious" (a common phrase among patent attorneys).

Even though she may work long hours during the week, Lown has still found time to be a leader outside of the office.

She currently serves on the finance council for the Cathedral of Saint Paul, and on the board for Options for Women East, a pregnancy center in the Twin Cities. She also utilizes her law degree by participating in a free, walk-in legal clinic where she is commonly asked questions about copyrights, trademarks, and patents. Lown also has a tradition of travelling to Europe or Israel every year for a religious pilgrimage. Those trips also give her time to indulge her love of photography.

Lown encourages students to take their time in finding a career they will enjoy, as well as one that utilizes their talents. "You might not follow a linear path," says Lown. "When I was a student at Saint Ben's, it never occurred to me that I might like patent law. Be open to how God wants to lead you."

### Conservation Association Takes Grad to Alaska

Claire Buysse, Chem '17 took a gap season before heading to grad school in Seattle, working over the summer with the Student Conservation Association as part of the Alaska Team Corps. Her 6-member crew did exotic plant management in Sitka National Historic Park, cleared boundary brush in Glacier Bay, and laid an ADA accessible trail in Denali.

"The Alaska Corps program was really easy to apply for through the Student Conservation Association (SCA) website," said Buysse. A variety of different environmental and conservation-focused internships are available, with different start and end

dates; these are updated throughout the year. Applicants start by setting up a profile (sort of like making an online "conservation" resume, says Buysse). The site allows users to apply for up to 20 positions at a time, picking and choosing which ones work best in terms of timing and interests. Buysse interviewed for three different positions before choosing the Alaska Corps.

"The program was a lot of fun and I really got to get outside (both literally and figuratively) of the academic bubble that college students can sometimes get stuck

in," said Buysse. "It was really cool to hear the stories of native Alaskans, my other Corps members, and NPS agency partners, all while traveling to and working at 3 different Alaska national parks."

The program also provided Wilderness First Aid (WFA) and chainsaw training for Buysse's position.

Buysse's overall impression of Alaska? "I'm already thinking of volunteering with the Washington Trail Association here in my free time."



Buysse with halibut



Approaching Scidmore Glacier



The Beartrack Mountains



Kayaking through kelp in the Beardslee Islands

## **Alum Notes**

Marietta Haeg Schwartz, Chem '83 has died. Although raised on a small farm in Minnesota, Haeg Schwartz moved to Boston after receiving a PhD from the University of Wisconsin - Madison. She was a professor at the University of Massachusetts Boston for almost 30 years, more recently serving as an Associate Dean in the College of Science and Math. Haeg Schwartz believed strongly in social justice issues, volunteering at her local Food Pantry as well as the farmer's market, and she was a significant donor to CSB scholarships. She had two sons, Ian and Graham, whom she guided through to Eagle Scouts. In addition, she was an avid Red Sox fan.

Christopher Bannochie, Chem '84 earned a PhD in Inorganic Chemistry at Texas A&M University under Prof. Arthur Martell. After post-doctoral work at Washington University School of Medicine's Mallinckrodt



#### The Cavendish Chronicle

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The College of Saint Benedict|Saint John's University

Institute of Radiology, he joined Savannah River National Laboratory. He is a Fellow of the American Chemical Society and serves on the boards of a number of community organizations. He and his husband have been married for ten years (and have been together for twenty). Chris Blaine, Chem '88 is in her 25th year of teaching chemistry, including 22 years at Carthage College. She and her colleagues were just awarded a \$1.2 million Robert Noyce Grant to encourage chemistry, physics, biology and mathematics majors to pursue teaching middle and high school science in high-need schools. She has been married for 24 years and has two boys, ages 15 and 12. Brent Hilbert, Chem '95 attended grad school in Ann Arbor before returning to MN, working briefly at Beckman Coulter before taking a position with Cargill. He does process development for new food ingredients and manages projects in the R&D group. He has two kids (ages 12 and 15) and has also taken

Jessica (Odenthal) Hammerberg, Chem '00 has spent most of her career with Ecolab. After eight years formulating products within R&D, she earned an MBA; her chemistry background and technical training continue to serve her well in her innovation-focused role as Director of Marketing for Global Food & Beverage. She has been married for 15 years; she and husband, Eric, have two children: Evan (8) and Charlotte (4.5).

over the family farm.

Ben Steil, Chem '02 received a
Ph.D. in microbiology and
immunology from the University of
Colorado. He did post-doctoral work
with a non-profit, Global Vaccines in
Research Triangle Park, North
Carolina. He is now a product
development scientist in with a small
biotech company, MYcroarray (soon

to be Arbor Biosciences). He and his wife, a medical fellow at University of Michigan, live in Ann Arbor.

Jeremiah Scepaniak, Chem '05 is a new assistant professor at Drexel University in Philadelphia. His research efforts focus on the development of first-row transition metal contrast agents for MRI, and bimetallic complexes to conduct small molecule activations.

Tony Wieland, Chem '08 has a doctorate in pharmacy from NDSU and works at St. Cloud Hospital as an inpatient pharmacist. He and his wife, Jessica, had their first child (Francis Raymond) last December.

Jeff Bandar, Chem '09 has started a new position as an assistant professor at Colorado State University. Bandar's lab investigates general catalytic strategies for promoting, controlling and utilizing chemical reactivity.

Hadley MacIntosh, Chem '10 completed a Master's in Marine Science at the Virginia Institute of Marine Science at College of William & Mary. She worked at Virginia Commonwealth University as a lab technician. Since fall 2015, she has been a Ph.D. student at the University of Maryland's Chesapeake Biological Lab in Solomons, MD.

Erin Karl, Chem '12 is in medical school at the University of Minnesota and is currently applying for residency in Emergency Medicine. She is the 2017-2018 Chair of the Emergency (continued on page 3)



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