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# Minnesota Applied Economist

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**CFANS**  
COLLEGE OF FOOD, AGRICULTURAL  
AND NATURAL RESOURCE SCIENCES

**APPLIED  
ECONOMICS**

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# SCHOLARSHIPS AND FELLOWSHIPS

## **WILLIS PETERSON SCHOLARSHIP**

Trinity Alexander, ApEc  
Andrew Hayek, AFBM  
Ethan McLaughlin, ApEc

## **EASTER FAMILY SCHOLARSHIP**

Brooke Bahner, ApEc  
Brant Thomas, ApEc  
Dominic Wolters, ApEc

## **YOST FAMILY SCHOLARSHIP**

William Bosch, ApEc  
Levi Kermes, AFBM  
Wyatt Lawrence, AFBM

## **ROUTE-CHRISTIANSEN SCHOLARSHIP**

Maryam Salad, ApEc

## **APEC CENTENNIAL UNDERGRADUATE SCHOLARSHIP**

Benjamin Elias, ApEc  
Grant Johnston, ApEc

## **FRANCES ANTONOVITZ FELLOWSHIP**

Monique Davis and Caitlyn Keo

## **CENTER FOR INTERNATIONAL FOOD AND AGRICULTURAL POLICY (CIFAP) FELLOWSHIPS**

Mwaso Mnensa  
Zhanji Zhang

## **DR. DALE C. DAHL MEMORIAL FELLOWSHIP**

Stephen Pitts

## **SAM CHUNG HSIEH AND ALICE YEN-HEE HSEIH FELLOWSHIP**

Qingyin Cai

## **JEAN KINSEY GRADUATE FELLOWSHIP**

Stephen Pitts

## **MARY A. AND ROBERT B. LITTERMAN FELLOWSHIP**

Elizabeth Kula

## **G. EDWARD SCHUH FELLOWSHIP**

Casey McNichols

## **CFANS DIVERSITY SCHOLARS**

Berenger Djoumessi Tiague

Applied Economics at the University of Minnesota



@ApEcMN





# Notes from the Department Head

BY FRANCES HOMANS



It seems like a different lifetime when we celebrated Kent Olson's retirement and learned of the impending retirements of Ward Nefstead and Gerard McCullough. As we prepare ourselves for a year that will feel very different from any we've experienced, we think about our sustaining missions of teaching, research, and outreach in the public interest. These missions are personified in three faculty who have served the department and University over the past decades. We were able to gather in person to wish Kent well but, as with so many things, we were unable to mark Ward's and Gerard's milestones in person.



**Kent Olson** is an Iowa native whose professional focus was farm management. He had an expansive, whole-farm, view of what it means to be successful in farming. Two bookends of his scholarly career include work on environmental controls in agriculture (1979) and a textbook on the economics of farm management in a global setting (2011). Kent became Associate Dean for the Extension Center for Community Vitality in 2015, but he remained a faculty member of the department and now proudly wears the maroon jacket.



**Ward Nefstead** has blazed his own path in his work, with a clear focus on practical experiences for undergraduate students. Ward was on the faculty of the University of Minnesota at Waseca, a campus that was closed in 1992. We were lucky enough to have Ward join us when Waseca closed. He brought his expertise in farm management to our department, and created a host of new courses that found an eager audience. Courses in accounting, sales, entrepreneurship, management, and appraisal fit in with the business interests of many of our students. One of his most notable contributions was his advising of the local chapter of the National Agri-Marketing Association (NAMA). Annually, NAMA hosts a competition in which students present a marketing plan

for an agricultural product. Ward has dedicated his time and expertise to preparing students for this competition. This experience has proved exceptionally valuable and has put the University of Minnesota on the map, as we have perennially have had teams in contention. We reflect on the many students whose undergraduate experiences were enriched by working together on a NAMA team, advised by Nefstead, on products as diverse as OatsCreme, milkweed-insulated jackets, and Heartbeet Vodka.

**Gerard McCullough** came to the University in 1996 to direct the Center for Transportation Studies and became a full-time member of our faculty in 2002. Gerard's scholarship focused on the economics of transportation with a particular interest in rail. According to Gerard, this interest began during the Carter administration when he was asked to help organize political and analytical support for the deregulation of freight railroads in the U.S. Using data from a regulated environment to predict the effects of deregulation requires a careful and deliberative approach, and this type of approach has been a sustaining feature of Gerard's research throughout his career. Gerard was a mainstay of the graduate program, teaching graduate econometrics and supervising many MS theses and PhD dissertations. It was always fun for me to talk with Gerard. I remember the time that he talked my daughter into playing tennis, a sport that Gerard enjoyed for its physical challenge as well as its sociability. I would run into and his wife Kate walking the cat in our neighborhood. Gerard and Kate look forward to living full-time in New Hampshire, where they'll have plenty of time for politics, skiing, tennis and cat-walking. I wouldn't be surprised to learn that presidential candidates in 2024 are fielding questions about freight rail regulation.



We wish Kent, Ward and Gerard all the best in retirement.

*Frances Homans*  
DEPARTMENT OF APPLIED ECONOMICS

# Interview

WITH LAURA KALAMBOKIDIS Professor of Applied Economics & Minnesota State Economist

**Tell us a bit about the role of the Minnesota State Economist. How have graduate students been involved in your work with Minnesota Management and Budget?**

**LK** The main responsibility of the State Economist to produce the twice yearly economic and revenue forecasts for the state of Minnesota. These forecasts determine the size of the state's biennial budget. So, in a year like this one, when the governor and legislature are constructing a budget for the next biennium, our forecast sets the starting point for that process. When we forecast a deficit for the current biennium, the governor and legislature must adjust the existing budget to bring it back into balance.

I manage a team of three economists within Minnesota Management and Budget (MMB). In addition to the forecasts, we also publish monthly reports showing how actual revenues are coming in relative to our forecasts, and we produce reports showing how accurate our forecasts have been over time. I present the forecasts to the governor, legislature, the state's bond rating agencies, and the public. It's definitely a "show your work" kind of job.

Per Minnesota statute, we are required to produce a forecast each November and February. My team starts each forecast month with the most recent outlook for the U.S. economy from a consulting firm. We use the U.S. outlook and Minnesota-specific data for such variables as wages and employment as inputs to a time series econometric model that generates a forecast of Minnesota's economy. Our ultimate goal is to forecast tax revenues, so our focus with the Minnesota model is to produce estimates of those variables that have the largest impact on tax revenues, such as wages and business income. We then use the forecast variables from the Minnesota economic model as inputs to a microsimulation model of the state income tax system that estimates income tax revenues for the next four to six fiscal years. We repeat some version of this process for the other major tax types, including corporate and sales taxes. That represents a lot of applied research that gets done in a short amount time, twice a year.

As in many areas of government, my office has no shortage of critical policy questions and relevant data. But, we're a small team, and we lack the time and personnel to pursue every interesting question that could be answered with our data. We have been fortunate to be able to hire University of Minnesota graduate students to work as research assistants in our office during the summer. They have done a variety of applied research projects. In some cases, we have handed the student one of our models and asked them to review, test, and critique it and offer suggestions for improvements. For example, students have reviewed the Minnesota economic model, the

capital gains forecasting model, and the estate and trust income tax model. Since my MMB team rarely has time to present our work for review in conferences, it is a great help to get feedback from Applied Economics graduate students. And the graduate students get experience doing applied research that becomes immediately relevant.

**Covid-19 made itself known as a pandemic shortly after the Spring revenue forecast. How did you and your staff respond?**

**LK** The timing of the COVID-19 economic shock was tough for Minnesota's forecasting team. We published our February forecast on February 27, based on a U.S. outlook that had been published earlier that month. We knew the potential for a pandemic posed a serious risk to our forecast, and we said so at the time. But macroeconomists were not yet projecting a recession, so there was no recession in our forecast either.

By mid-March, the pandemic and the steps taken to slow its spread had hit Minnesota's job market hard. During the week of March 21, an unprecedented 116,000 Minnesotans applied for unemployment insurance benefits. In contrast, during the same week last year, only 3,000 initial unemployment claims were filed. Meanwhile, the state's macroeconomic consultant began drastically lowering their expectations for U.S. growth. While their February outlook—the one that informed our February forecast—projected 2.1 percent real GDP growth in 2020, by early April they were forecasting a 5.4 percent decline.

Official economic data lag our observations about economic activity in our daily lives, which made it difficult in early spring to measure how the COVID-19 crisis was impacting the state. But, the spike in unemployment claims and the deteriorating U.S. outlook meant that Minnesota's economic growth was in jeopardy, and our February forecast was no longer the best basis for the budget process. In May, we released an Interim Budget Projection—not a full forecast, but an update of major revenues and expenditures for the current biennium. To my knowledge, MMB has never before produced such a projection outside of the usual forecast cycle.

The May projection flipped what had been a \$1.5 billion forecast surplus for the current biennium to a \$2.4 billion deficit. This was unwelcome news to the many policymakers and interest groups who were developing proposals to spend some of that \$1.5 billion. There were enormous uncertainties associated with the projection, but it gave those policymakers and the public their first look at the size of the budget problem that needed to be solved. Since then, we have also released



projections for the next biennium. For fiscal years 2022 and 2023, we project expenditures will exceed revenues by \$4.7 million, creating yet another budget problem that needs addressing.

**How is Minnesota positioned, relative to other states, to deal with the economic crisis caused by Covid-19?**

**LK** Minnesota's economy has been rocked by the COVID-19 pandemic. Our economy is closely tied to the U.S. economy, so as long as the U.S. economic outlook remains volatile, Minnesota's will, too. But we do have some points in our favor. While no industry is untouched by the pandemic and the resulting economic downturn, the impacts have not been uniform across industries. Minnesota has relatively low reliance on tourism and entertainment—compared to, for example, Nevada or Florida—which insulates the state from the worst of the shocks to those industries. We also have a large share of our population working in professional service jobs that can be conducted remotely. And the persistent assets of Minnesota's economy—an educated workforce, a high labor force participation rate, a large share of corporate headquarters per capita, and a diverse industry base—remain intact.

From a financial management standpoint, the state has some key advantages. We entered the crisis with AAA bond ratings, a forecast budget surplus, and a \$2.4 billion budget reserve. The budget reserve is one of many tools the governor and legislature have at their disposal as they address the projected budget gaps for this biennium and the next.

Minnesota's budget reserve is the result of a nationally recognized policy that requires 33 percent of any November forecast surplus to be automatically deposited in the reserve until a target is reached. The target is set by my MMB team based on our analysis of the volatility of the state's revenue system. The principle is this: if the revenue system becomes more volatile, either because the underlying economy has changed or because tax policy has shifted reliance away from more stable revenue sources—such as sales taxes—toward more volatile sources—such as income taxes—our budget reserve needs to grow to insure against the increased risk to revenue. In the years since the policy was enacted in 2014, Minnesota's revenue growth was strong enough that allocations to the budget reserve were required in several November forecasts. With the November 2019 forecast, the state's budget reserve reached the target. And just in the nick of time.

**Thank you, Laura.**

## APEC WELCOMES JUSTIN JOHNSON TO THE FACULTY

The department recently welcomed back **Justin Johnson** as an Assistant Professor of Environmental and Natural Resource Economics.

Justin earned a Ph.D. in applied economics from our department in 2014. He then



became a senior scientist and economist with the Natural Capital Project at the University of Minnesota's Institute on the Environment. Justin specializes in food security, climate change, land-use change modeling and agricultural management in developing countries. He's also interested in computable general equilibrium modeling, behavioral economics and agent-based economic simulation. Justin received his B.A. at St. Olaf College and studied environmental science at Tsinghua University, Beijing, on a Fulbright Scholarship. In his spare time, Justin is an avid mountain biker, rock climber and board game designer.

We are glad to have you back, Justin!



## OUTSTANDING DISSERTATION AWARD

**Anuar Bechara Bitar** received the department's outstanding dissertation award for 2019. His dissertation, advised by Professor Joe Ritter, focused on the impacts of three economic and social policies in Mexico.



The first policy he studied was a policy designed to incentivize businesses to move out of the underground economy and into the formal economy, helping to guarantee social protections for employees, giving the business better access to financing, and promoting tax compliance. Although the program he studied offered much larger incentives than similar efforts by other countries, Anuar found only modest effects. This tells us that reducing informality will be more difficult than previously anticipated.

Next, he studied how the introduction of Mexico's public health insurance program for the poor acted as a magnet, improving conditions enough to encourage recently deported migrants to return home rather than to try to reenter the U.S.

Finally, he studied a policy that provides subsidized child care for low-income families. Results show that the subsidy has a dramatic impact on mothers' ability to participate in the labor force. Anuar noted that the effects of the subsidy could "imply an additional source of income for their low-income households, a higher bargaining power for the mother within the household, and a promotion of gender equality in the labor market."

Anuar now serves as a senior economist at the Banco de Mexico in Mexico City.

## OUTSTANDING M.S. THESIS AWARD

**Gabriella Sorg** was the recipient of the 2020 Outstanding M.S. Thesis Award from the Agricultural and Applied Economics Association. The objective of her thesis, entitled "Dairy Confined Animal Feeding Permits on Public Notice as a Leading Indicator of Milk Supply," was to test whether data on the number of cows being permitted through the CAFO process can improve milk production forecast accuracy. Her research suggests that CAFO permits on public notice do have some future predictive power, though the

economic significance of this variable did not match that of milk margin above feed costs.

Gabriella grew up on a fifth generation dairy farm near Hastings, Minnesota with many University of Minnesota alumni in her family tree. She is currently working for Compeer Financial in Lakeville, Minnesota.



## DONOR HIGHLIGHT: ARLENE LEARN

**Elmer W. Learn** grew up in a small town in Pennsylvania and attended Penn State University. It was there that Elmer obtained his BA, MS, and PhD degrees in Agricultural Economics, with Dr. Willard Cochrane serving as one of his professors. He then accepted a position as an Assistant Professor at the University of Minnesota, becoming a colleague of Dr. Cochrane who had joined Minnesota's faculty in 1951.

During his time in Minnesota, Learn was an active scholar, collaborator, and faculty mentor. He advised the dissertations of future department head Jim Houck and three who would later be

named Outstanding Alumni of the department (Bill Tomek, Rachel Dardis, and Alex McCalla). Learn also served as department head.

Dr. Learn moved to Davis, CA in 1969, where he served as Executive Vice Chancellor and on the faculty of the Department of Agricultural Economics. He retired in 1992 and died in 2015.

It was Elmer's wish to contribute to the Cochrane Fellowship to honor Willard's mentorship and friendship throughout his career and life. His widow, Arlene Learn, honored this wish through a donation to the Cochrane Fellowship.

# OUTSTANDING ALUMNI AWARD

2020 Winners: Gretta Hanson • Taro Nagashima • Mike Swanson

## Gretta Hanson, '04

**Gretta Hanson** earned her B.S. in Applied Economics in 2004. She grew up on a crop farm in the Red River Valley and studied applied economics in hopes of someday working with farmer-owned cooperatives.

Following college, Gretta pursued a legal career, earning advanced degrees in law, business, and agricultural economics. She has served as in-house counsel at Land O'Lakes and CHS. She is an adjunct faculty member at the University of St. Thomas, volunteers at a housing law clinic, and is actively involved in both the Minnesota State Bar Association and the American Agricultural Law Association.



He hopes that expansion of the program will lead to higher premiums, assisting a struggling market with opportunities to help both farmers and consumers.

## Mike Swanson, '98

**Michael Swanson** earned his M.S. under the supervision of Wilbur Maki and his Ph.D under the supervision of George Morse. Mike joined Wells Fargo in 2010 as a senior agricultural economist and consultant. His responsibilities include analyzing the impact of energy on agriculture and strategic analysis for key agricultural commodities and livestock sectors. His focus includes consumer food demand and its linkage to agribusiness. Additionally, he develops credit and risk strategies for Wells Fargo's customers, and performs macroeconomic and international analysis on agricultural production and agribusiness.



Congratulations to all of our 2020 Outstanding Alumni Award winners. We are eager to celebrate you and your accomplishments in the coming year.

## Taro Nagashima, '03

**Taro Nagashima** received his M.S. in Applied Economics in 2003, under the supervision of Jean Kinsey. His career with Cargill has focused on managing the specialty grains and oilseeds program for market export. He returned to Minnesota in 2019 after a time in his native Japan.



“Follow the golden rule, do unto others as you would have them do unto you. Do your best to be honest and deal with others with a sense of integrity.”

—Elmer Learn

*This photo of Dr. Learn is from a field trip for graduate students and faculty of UC Davis' agricultural economics department to California's Central Valley during the summer of 1987. Frances Homans was one of the students on the trip and took this photo.*







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## CARGILL GLOBAL SCHOLAR

### University of Minnesota Student Selected as 2020 Cargill Global Scholar

**Kegan Zimmerman**, a University of Minnesota junior double majoring Applied Economics and Political Science, has been selected as a 2020 Cargill Global Scholar.

The prestigious Cargill Global Scholars Program, a distinctive international scholarship program that began in 2013, offers a scholarship award of \$2,500 per year for up to two years.

In addition to scholarship funding, Zimmerman will join the nine other scholars selected for the program's eighth cohort in the U.S. for an upcoming leadership development seminar facilitated by Cargill, where they will receive training in a variety of business and leadership skills. They will also each be paired with a Cargill business leader who will serve as their one-on-one mentor for the next 12 months.

In the summer of 2021, Zimmerman will rejoin the U.S. cohort members to participate in a five-day global leadership seminar with scholars selected for

the program from Brazil, China, India, Indonesia, and Russia to further build on their leadership development skills and broaden their global mindsets.



The students selected as Global Scholars are those who demonstrate exemplary academic achievement and leadership potential and study in a field relevant to Cargill's world of food, agriculture and risk management.

Including Zimmerman, six University of Minnesota students in total have been selected as Cargill Global Scholars finalists since the program's inception.

For more information about the Cargill Global Scholars Program, please visit <https://www.cargillglobalscholars.com/>. The next U.S. application cycle for the program will launch sometime this fall.