BREAKFAST KEYNOTE ADDRESS Speaker: *Ted McKinney* October 19, 2018 - 7:30 a.m.

#### Introduction

# Ambassador Kenneth M. Quinn

President - World Food Prize Foundation

So, good morning everyone. So good to see everyone here, bright-eyed. We are going to start in about one minute. So if you could find your place. So the theme for the symposium is "Rise to the Challenge," and I don't know about you, but it was a challenge for me to rise this morning. But I made it, but I made it here. This is our symposium breakfast sponsored by Osmundson Manufacturing. Doug and Mary Bruce are wonderful friends, supporters of ours. I know Joe Sampson is here representing them, they couldn't be here, but we are very grateful to them. And I want to call your attention to the menu. Laureate David Nabarro is here, now officially the Laureate. Stand up David. {Applause}. So, we wanted you to have an appropriate breakfast. So we did extensive research. Not only about your DJing, rock club managing and that. So breakfast is called "bubble and squeak." I have to say I wasn't aware of bubble and squeak before, it is poached eggs, root and vine toast, cucumber, tarragon, honey and orange cream cheese. We wanted a special morning after for you. We are going to begin with a special presention about an event this past summer. And I want to invite a member of our Council of Advisors.

#### Introduction

**Ambassador Kenneth M. Quinn** President - World Food Prize Foundation

So now it's my pleasure to introduce our keynote speaker. Under Secretary of Agriculture Ted McKinney grew up on a family farm near Tipton, Indiana. He was a member of 4-H growing up. He was a ten-year FFA member, state officer at the FFA – what an incredible organization that is. And you go to the national convention. I'm still you go to the national convention, and there's like 45,000 students all in the big... They do it in Indianapolis in the football stadium, domed in. And I was there to see that, and it was just, wow! What a sight – everyone in their blue jackets. So Ted is a proud graduate of Purdue University in Indiana.

Three World Food Prize laureates. If you were here the other night, they had a reception for Purdue. Dr. Jetta is here. Phil Nelson is here. Akin Adesina and President Mitch Daniels – he's so incredibly proud of all the World Food Prize laureates he has there. You'll like this story. Phil Nelson was your laureate. We brought in, snuck in the Purdue Glee Club to serenade him because Phil had been a member of the Glee Club. And so here at the last minute they rush into the chamber at the Capitol, and they sing the Purdue fight song. And they get everybody up including the governor and state officials. And three days later Purdue was playing Iowa in football, and so I had to immediately go in the witness protection program just for having done this to our state officials. But Purdue alums are so very, very proud.

So Ted worked at Dow AgroSciences. I met him when he was working with Elcano, terrific program, and really, thanks to you, Ted, established kind of the Elanco connection here. I think we had about 12 years in a row we had speakers from Elanco when you were there. In 2014 he was appointed by then-governor Mike Pence, now Vice President Mike Pence as the State Director of Agriculture in Indiana. And then in 2017 he became the Under Secretary of Agriculture for Trade and Foreign Agricultural Affairs in the President Trump administration. Such a great friend, he spoke at our laureate announcement ceremony, Dr. Nabarro, when we announced your name and Dr. Haddad's name at the USDA building. So it's so appropriate that he is here this morning. Please welcome Under Secretary Ted McKinney.

#### Hon. Ted McKinney

### Under Secretary of Agriculture for Trade & Foreign Agricultural Affairs

Thank you, Ambassador Quinn, and it's great to be back in Iowa. Yes, I may have my roots from the farm and through the university and elsewhere in Indiana, but it's always good to be here in the heart of the agriculture world. And I'm lucky to have been a participant in about five or six of these, and it was instrumental. It was a continuation of my journey, which started as a 4-H'er, which was to follow along with those that might have a need for more food or, as we're celebrating with our two laureates this time, more and better nutrition. So I see a lot of youth out there, and I hope this becomes a part of our quests as well.

What an outstanding institution and event this is. I was a lucky, lucky guy. I got to know Norm Borlaug. He was on the Advisory Council I worked for then, Dow AgroSciences. In fact, we sat next to each other on a couple of those. And to this day I still have my photo. We set an event at the world famous Children's Museum in Indianapolis, invited in all of the notables, much like you do here in Iowa. Kent, I think you were there. So it still stands up there, because we can hold our politicians, we can hold our pastors, we can hold moms and dads up, but I don't know very many who can hold up a person who's saved millions and millions of lives. So that's very, very significant to me. And so, Jeanie, to you and Julie, wherever Julie is, thanks for sharing your Dad with us at Dow AgroSciences.

I also want to congratulate and recognize Dr. Haddad and Nabarro. What a terrific story that you all have, and it was great to meet and talk to you last night. I made mention to you, and I said such to Ken that I thought it was outstanding that there was this doubling down, this additional focus on nutrition. Clearly, nutrition is a part of food, and I think that's understood. But to really add a focus on that, I thought was timely, maybe even past time, and what two great people to represent that. So congratulations to the both of you. Yes.

Well, we're somewhere between the 7 and the 9. A few years ago I opened The Wall Street Journal, and there was a photo of a Filipino baby The Wall Street Journal said was the 7 billionth person on the planet. How they figured that out, I do not know, but I trust The Wall Street Journal, so I accepted it. And I have no doubt that you've heard over these last two or

three days that we're on our way to 9 or 9.5 billion, and it means we've got to double food. And that really doesn't even get into the intricacies of best, better nutrition. It just means pure food.

So the challenge is enormous. That's why I'm so glad there are so many youth out there, because, yes, I'll do my part and others of us that have gray or colored hair will also do our part. But this is yours. This is yours. And so for you to engage as you are is just outstanding, and I hope this catches fire in your heart, in your minds, and that you go out. Because I don't think there's any loftier cause than to make sure some child has a meal. And I'll come back to that in just a moment.

So global demand is moving. So *Rise to the Challenge*, I think, is perfectly fitting – and we're all in. I'd like to address three things today.

First, what in the world is USDA? And I'll extend that a bit to — What is the U.S. Government doing to help with this need to address hunger around the world? I want to address the importance of science-based solutions, because I believe we are squarely at a major crossroad. And let me underscore that point. I don't think we're at a crossroads of two country roads in rural Iowa. I'm talking about a crossroad of interstate proportions. More to come on that.

And then perhaps, most importantly, what's next. I'd like to draw an analogy, and I don't mean to overdue the Purdue thing, although we are proud. I want to bring in an example, a very true, real-life example of another Boilermaker named Neil Armstrong. I suspect most of you remember Neil as the first man on the moon, and we have a program that Purdue called the Old Master's Program, and I was very involved in that. And it involved four students, two men, two women, hosted an old master, which was usually an outstanding person in some different field of study. And because Purdue is very known for its aeronautic engineering program and a lot of astronauts, we always had the National Aeronautics and Space Administration, the NASA jocks. Well, this is right at the close of Apollo and before the Space Shuttle came on.

So I was lucky enough to host a guy named Jerry Griffin, who was number two at the Kennedy Space Center at the time and later went on to head the very, very famous Houston or Johnston Space Center. And he showed an interesting story that I think is so applicable to what we're doing today and frankly has a number of ties to Norm Borlaug and I would even say to our many laureates. And here's what he said.

After the successful moon shot, a number of the NASA folks and a few outside consultants, about 40 or 50, went on a retreat with a simple question to answer. Why did we do what we did? Now, some could say it was as simple as it was a space race with those from Russia or the Soviet Union, and there was probably some truth to that. There was a quest to advance the sciences and reach the galaxy. So they broke up, and sometimes with somebody sitting on their own, sometimes with small groups doing ink-board or chalkboard exercises, but it was interesting. And Jerry told me that the group thought... And there was no right or wrong answer by the way. But when they all came back together and shared their rationale, Mr. Griffin told me that Neil Armstrong's assessment probably resonated the most. And here's what he said.

He said, "We know that life and the world and matter and all things tend to work in cycles." And he said, "Could it possibly be that we saw and experienced the convergence of three cycles?" And here were the three. We all know that life moves on because of leadership. And most of know well that siren cry by then-president John F. Kennedy that, by the end of the decade, we will successfully send a man to the moon and return him," (He might have been more politically correct by saying man or woman, but it happened to be a man.) "and bring him back safely." There was clear leadership. It resonated. We had a charming fellow who resonated with the American public, dare I say even the global public. So there was leadership here. And then the congress was there to provide the resources.

So the point I want to leave you with is there was leadership shown to go after an enormous quest that was maybe not completely out of reach, but, boy, you could barely see the success of that on the horizon. So leadership.

The second was technology. The technology was nowhere near doable when President Kennedy called for that act. But once again, maybe, just maybe, just maybe, if everybody did things right, if we can cultivate the science, if we can bring the best minds together, maybe the science could deliver a man to the moon and back by the end of the decade. And they did.

And the third one was that there was a will of the people, the consuming public. In this case it was a U.S., but I could extend that to say the world was fascinated with that success as well.

So I don't quite know exactly where we are right now in food, but I can draw some analogies, and let me give you my perspective. And this is not a U.S. Government perspective, although I work in the federal government now, so maybe some of my opinions are shaped by that. So let me try to draw the analysis.

Oh, I think there's leadership out there. I think this organization is one of the finest, maybe even the finest in that. There are some of us in government, some in the U.S. Government, who's very compassionate, has for several decades had food problems. I'll get to those in a moment. I know that these exist in many other countries. I was sitting with our friends from Europe. I know that's the case, Canada and Mexico. A lot of people have that, but to bring the diversity of people together like the World Food Prize has and the way we just heard you're extending it globally – thank you very much – says that maybe we're going to grow that leadership even beyond where it is so that leadership is there to address this urgent, urgent need of meeting the food needs of the 9, of the 9+ billion. Because I think most of us do not want to have to go through what Norm Borlaug did when there was starvation and we did not have the food or all the transportation and logistics to get it there. So leadership.

Technology — it's a warp speed. Now, I would argue we need more technology. We will not meet the 9, 9½ billion under current technology. We've got to keep advancing that. But we have this dichotomy where I don't think we're keeping the consuming public up as current as the science is moving forward. And that's tough to deal with. You can't boil the ocean. You can't air condition the world. How do we make sure we're bringing the latest discoveries from all the many, many universities that are represented here today, or governments or whoever is in the entrepreneurial spirit? But the technology is there, and if allowed to, it will keep coming. So I'll check that box with a pencil, maybe a pen.

And then we come to the will of the people – and that's where I just don't know if we're there. We're a wealthier world. We have people who do not need the raw commodities like so many others. Some would call them elitist – I do not choose to do that. But the point is, we've got to double, triple, quadruple down to make sure that these wonderful scientific advancements, these new and different types of food and certainly more food, are accepted. Because the fourth thing that was not in that is we then have to trade it. Welcome to my world. And when we have some that say – No, I don't want that technology, but I'll accept those, or I'll have those... That's a residue level that I'll accept. That we'll not. – you have a patchwork quilt around the world. Now, what's different? It's been that way for a long time, but it's getting much more concerted with the immediacy of technologies, mostly communication, Twitter, all those kinds of things.

So I think Neil Armstrong probably was more right than wrong, and I would like you to think hard about where we are on those three items that he elevated – leadership, technology, and a willing supportive public.

So quickly, what are we doing? What's the USDA doing? I think some of you are familiar with these programs. We're very, very proud to fund and support the Borlaug Fellows Program. Every trip I've made — I've been to 19 countries in the last year, 350,000 miles. Every single one, we meet with the Borlaug Fellows in that family, and we also meet with the Cochran Fellows. Borlaug is a 6- to 12-week research sabbatical of sorts where we pair a scientist from lots of countries around the world, mostly mid to developing countries who have some special need they want to work on, and marry them up to somebody in a university. And I think some of you were out there today, and to all of you, I think you for your efforts, both the Borlaug Fellows and those who are mentors and host them. You're doing God's work.

Then the Cochran Fellows, named after former Senator Thad Cochran, and that provides for people to come on a two-week sabbatical, and it ranges, and we have several thousand of those. And it's not just for them to come see how we do things — that's a little selfish, and I don't like to look at it that way. It is that, but I think those who they visit with learn as much from the host or from the guest as vice versa. So those are two outstanding programs. I'm very pleased that those are part of my area. I love them, and we support them. We're examining those programs to see how we can double down, lift them up, reach more of you youth, leverage them more. Because it's a terrific goodwill effort, and it feeds kids.

The McGovern-Dole Program, or if you in Kansas, the Dole-McGovern Program... I was reminded in my confirmation hearing by Chairman of the Senate Ag Committee, Pat Roberts, who if you didn't know, is a very famous Kansan. He made sure to point out and correct me that it's Dole-McGovern. All right, whichever one you choose, it's a wonderful school feeding program. Now, I knew of it. I've seen it. I've seen photos, but I only experienced it when I was in Guatemala in the Western Highlands. It'll just tear you up. I got to see there's three parts. It's feeding, of course, but it's also education and so forth. And they do have some nutrition elements to that, so I hope we're fulfilling the desires and goals of our two laureates.

But I got to spoon the rice in, and it was only after that — and I'm glad I learned that afterward — but I learned that for 25% of those little kids age 5 to 10, it was their only meal of the day. So the cause is just. What we do is right. Yeah, it builds political will, it brings friendships — but gosh darn it, it's giving a kid a meal, and I think that's very, very important.

So our capacity building efforts are strong. And I haven't even touched on AID. I like to kid my friends at AID—I hope you know it, but somehow one of the machinations of government is that the millions and billions that they get at AID comes racing right through my department, but it doesn't stop. So I sort of hold that over them when I have some special project that I need. It wouldn't make any difference anyway, but we enjoy it.

So we're working on market development. A word about trade. I don't know if you've been reading the papers, but there's some trade stuff going on. Welcome to my world. The U.S. has not changed its heart or its head, not at all. We are as giving or more so than we ever have been before, and we want to double down on it. But it's true for the sake of our farmers and ranchers that all we seek is free, fair and reciprocal trade. And that has not happened. I did not fully appreciate that. That has not happened. So if we're going through a mid-course correction, I think we'll get there. Certainly we're taking it country by country. Very pleased that the U.S. MCA – that's NAFTA 2.0 – is settled, and I think we're moving very quickly to talk urgently with the UK and Europe and Japan, of course. And right behind that will be, for the first time, I think taking and visiting with three countries of Africa, very important, and Southeast Asia, Vietnam and Philippines and others are in that mix.

But that's all that they U.S. seeks is free, fair and reciprocal trade. And we're hoping our farmers and ranchers... But I want you to know something. I have yet to miss a government-togovernment meeting without starting the meeting by saying, "I want you to know that for me and for USDA, trade is a two-way street." Sometimes I worry about that. I tell them, "If I come in thinking I'm going to win and you're going to lose, we don't have a very long or productive partnership." So I go out of my way, even though I don't have the regulatory functions of USDA – that's my friend Greg Ibach, former Director of Ag from Nebraska. Somebody named Northey is in there somewhere. Most of you Iowans know Bill Northey. I talk to my colleagues and remind them that we're going to be talking two-way, and we're not going to get greater access, which we do need and do deserve, on some of our products if we're not working equally or as hard or harder to make sure that their products also come in.

So we're trying to get free and equitable trade. We are dedicated to helping our farmers and ranchers. For those of you that are not from the U.S., you should know that our farmers and ranchers are now into year six of a very depressed farm economy. It's getting tough. My colleagues at Purdue just finished a study on mental health – not the best in farmland [inaudible]. So we've got to work on that. And I've crisscrossed the globe to try to build trust, make sure people know that we do believe that this is a two-way street, and that's the way we live our lives.

But we have challenges. We've always had challenges, but they're becoming more acute. Let me explain. I said it earlier, but sometimes the pace of innovation and the ability to describe that innovation and describe its safety, describe its value to the world, outpaces our ability to speak to that world, particularly when you've got 50 million Twitter feeds and social media and all kinds of different outlets. It's not easy, but we've got to rise to the occasion and work at consumer acceptance.

And let me just be honest – sometimes there is just outright, pure protectionism. And I understand it. I understand it, but we can't be a member of the WTO and then not pursue the rules of the WTO, which says free, fair and reciprocal trade. So that is stopping a lot of innovation. It's stopping a lot of information.

So we're working very hard. We've got a team set up to look at how we look and regulate and talk about pesticides and all the biotechnologies and anything else that we need to do. Because these are products that help deliver safe, nutritious products for the world. I'm so encouraged when I've been in Africa and India at what biotech cotton is doing for the farmers there, mostly women [inaudible]. Pesticide applications have dropped from 10 or 13 applications to 1 or 2. I think that's an environmental benefit. Precision technology like genome editing. Gosh, if you

don't know about gene editing – CRSPR might be another way to describe it – you've got to understand it. This is probably the poster child of what I used when I said major crossroads. This technology is so exciting for human health, for animal and livestock, and poultry health and for crop health.

I think of what's happening to our good friends, and I do mean our good friends in China with African swine fever—there's no solution for it. Vaccines are still months if not years away. If we had the ability and started over where we can flip a gene on or flip a gene off—and for those that are concerned about genetic insertion, there's none of that; it's not GMO. It's just like standard hybridization like Henry Wallace commercialized here in Iowa. Gene editing could be one of those great saviors of the world.

I look back. I'm a history buff. I look back, and in the U.S. I think of things like rural electrification, the advent of safe, efficient crop protection chemicals, hybridization, mechanization, John Deere and his plow, Cyrus McCormick and his reaper – these are all those iconic milestones. I believe gene editing, or if you want to enlarge it and call it the biotechnologies, plural, could very well be the next one.

But go back to my Neil Armstrong message. Consumer acceptance, protectionism – are we going to allow it?

So I for one, I am not distraught with the European Court of Justice opinion. They may truly have just been interpreting what they saw as the law. It would be unfair of us to be too critical of that, because somebody could easily say the same thing about some ruling of our U.S. Supreme Court. I'm not here in the blame game. But I will say that I so hope, and I have offered up my help to DG AGRA, to DG SANTE, to any ag counselor at their embassies in the U.S. that might listen, that we are there to help. But I think this one's on Europe. I think it's on academia. Thank you, Wageningen—I know your leadership role, and I think it's on the small companies. I don't think multinationals and the U.S. Government is going to pull this one off. This has got to be homegrown grassroots. And I hear there's some movement there. But, oh, my God.

And further, the owners of the technology have created an open architecture. Universities, have at it – go create stuff. Be ingenious. Create new technologies. Feed a hungry world. Oh, my gosh. The opportunities excite me just as the downside scares me. The first commercialized genome-edited crops are currently being harvested. Now, its identity preserved, so those of you that have worries about regulatory, it's in the right channels, but, boy, it's coming and it's coming fast. And there's so many needs for that technology. So I beg of you – and I'm looking primary at you youth – rally, form your club, join the Wageningen seed group, whatever you call it. This is your world. This is not my world – well, maybe for a few years. This is your world.

And consumers, my gosh – these benefits are not just for farmers. I've heard that criticism, even though I think that's a very valid use of technologies. If we're lifting up our farmers, we're doing good things with food and efficiency and lower cost to foods. So there's benefits in there for consumers all the way up and down. But we've got outdated regulations. And I'll throw some in the U.S. in there as well. We are always updating our regulations. I'm very proud that USDA came out with the statement that gene editing will not be regulated. It's a tool. It's just like hybridization in a different sort of way. We're hoping, and we've got a number of countries, the likeminded countries, the coalition of the willing, whatever you might want to

call it, are working hard. But I think this will make a difference in lives, not just policies, not just incomes but lives.

I want to cite the Global Harvest Initiative Gap Report. It's been busy this week. If you didn't pick up on the study... And I see Margaret over here. We're now in year five, but we're not keeping up with the projections of productivity that we need. Year five. I see there's some youth out there. Didn't I say there's some youth out there? This is more your baby than ours. So I hope we get engaged and start saying that. Technology has got to be reviewed for safety, of course, of course. It's got to be science-based, of course. But after that, it's got to enter the free flow of trade.

So we at USDA are really doubling down on clear, science- and risk-based policies, but we'll get there. So we're going to redouble our efforts. I wake up with a click in my heels every day, thinking maybe, just maybe something I do could add a few cents a bushel to some farmer's corn or soybeans or wheat, maybe bales of cotton. Perhaps more importantly, maybe we're keeping a low-cost food supply that lets some hungry kid like I saw in Guatemala have a meal where they would not have before. We cannot make food for only the wealthy and the elite. We cannot do that. And that's in some [inaudible] what's happening.

So let's continue our quest. Let's find out that time when we can identify whether those cycles of leadership, scientific innovation, and consumer acceptance can merge. I don't think we're so far off. Just as Apollo 11 astronauts were looking on a horizon... And by the way, they didn't know they were Apollo 11 at the time. But just as NASA and the government was looking ahead (it turned out to be nine years) we need to look forward. Our timeline has to be shorter — lives count — but if we look ahead at that horizon, just like others, I believe we can do it. We can do it, but it's got to all come together. So the time has got to be now. To all of you, but particularly to the youth, this is your moon shot.

Thanks very much.

## **Ambassador Quinn**

Ah, Secretary McKinney, you've added your name to a list of very illustrious people who have given very inspiring messages at our breakfast. The Secretary General of the U.N. spoke here. [inaudible] Bob Gates gave an address. Mike Huckabee, when he was governor of Arkansas, came and spoke about obesity. So it's a very interesting array of individuals, and you've now added another chapter to this. Thank you. Let's have another round of applause.

So I want to be sure students know this. I have a retina problem, so I go to a retinal specialist at the University of Iowa, about 70 miles or so down the interstate. And he told me that using CRSPR technology, people who are blind because they have a genetic defect in their retina, that at that university they have a way of taking DNA from a person's retina, edit it, put it back in, and they make the blind see. They perform a miracle. And so when I asked Dr. George Church from Harvard... When I was there, I said, "What's the equivalent in agriculture?" because if we have that, that new breakthrough technology, think of the incredible potential of what can be done, increasing, ensuring enough food, enough nutritious and produced sustainably.

You know, George McGovern and Bob Dole were the 2008 World Food Prize laureates, so pleased for international school feeding. Catherine Bertini worked with them, our 2003 laureate. I want to say thank you to you. If you would please convey to Secretary Perdue not only our greetings, but thank you for hosting our Wallace Carver Fellows. So some of you students out here in the Global Youth Institute, you're going to have a chance to apply to become Wallace Carver Fellows. We send 30, 40. We've got plenty, so we're pleased to... And they spend the summer all over the U.S., so it's such a terrific program. And our youth team shows up in Washington and works so closely with the USDA staff and particularly with Dr. Chavonda Jacobs Young and the Agricultural Research Service. Please keep doing the Borlaug Fellows. They come here every year. They're so welcome. We are thrilled to have them here.

And I want to just conclude by saying, so taken by your emphasis on leadership. Norman Borlaug always realized the power of government officials to step into the middle of issues as they did in Pakistan and India when he was there. And it's critical to have individuals in those leadership roles. And as we all see today, after hearing you speak, I am so pleased and so proud to have you, Secretary McKinney in your leadership role.

Let's have another round of applause for Secretary Ted McKinney.