

## **2019 CU Anschutz State of the Campus Address**

### **Delivered by Don Elliman, Nov. 19, 2019**

Good afternoon. It is a privilege to be here with you today to talk about the state of our campus.

As you all know, what happens on an academic medical campus like ours is hard to explain to people who aren't steeped in it. There are so many highly developed and diverse areas of expertise — across the spectrum of education, research and care — and somehow, when they all come together, the results are extraordinary.

It can feel something like this: *[Cartoon with scientists at a blackboard showing equations and “Then a miracle occurs,” captioned, “I think you should be more explicit here in step two.”]*

The good news here is that I *can* be explicit about the middle of our equation: the miracles here happen because of you — all of you. They happen because of our partner organizations, especially our hospitals, and their collaboration, which collectively lifts all our boats. And most of all, miracles happen here because of our faculty, staff and students— those here in this room and those watching online.

They happen because we are united in common purpose: to provide the finest health care in the world, to push the science behind that care to new horizons, and to train those who will deliver that care in the future.

Because of all of you, the state of our campus in 2019 is — in a single word — strong.

But we have this room for a while, so I'll take an opportunity to elaborate on that strength.

Today, I'm going to talk briefly about the year that just passed, our progress in the priority areas we laid out for this campus three years ago, the challenges we face, what's ahead, and why it all matters.

#### The past year

As we've done every year since we've moved to this campus, we've shown solid growth. Let's look at some top-level numbers from last year:

- Total university revenues were \$2.19 billion, a 7% increase from last year, with clinical revenues accounting for nearly half of that total.
- Our clinical volume continues to increase. This campus had 2.1 million patient-visits last year, a 5% increase over the previous year.
- Our faculty body grew by 4% and now numbers over 5,000. This represents a 76% increase since we completed our move onto this campus in 2010. But beyond quantity, the quality of our faculty continues to soar. Whether new to the team or our seasoned veterans, our faculty have been and continue to be the foundation of our excellence.
- Our sponsored research is up 7% over last year and new awards topped \$550 million for the first time.
- Philanthropy hit yet another all-time high, with \$324 million raised from more than 6,600 benefactors. As excited as we are about the amount of philanthropy this campus has inspired, we're even more excited about the dramatic increase in the number of gifts, which grew from 16,000 in 2017 to over 18,000 last year.

I need to give a huge shout-out to Scott Arthur and his team, along with their faculty partners. Their success with philanthropy has lit the match, in effect, to the bonfire that's been building around here.

So growth since last year was robust, but our five-year progress is even more impressive. These numbers paint the broad picture of our continued — and very steep — trajectory in all the areas that academic medical centers typically measure.

And unlike many of our peers in large metropolitan areas, we have room to grow.

- Our new Anschutz Health Sciences building (which we think of as 390,000 square feet of possibilities) has been taking shape since breaking ground in January.
- Both hospitals are expanding dramatically to meet growing clinical demand and capacity challenges. University Hospital is starting its third inpatient tower and Children’s is building out previously shelled space- while both systems are expanding facilities up and down the front range that will provide care locally and feed tertiary and quaternary volume to this campus.

Our schools and colleges are continuing to fulfill our critical role in educating and training the future health care workforce.

- While some of our schools are facing market pressures, many of our education programs are more in demand than ever.
- To give you a sense: Last year there were more than 3,000 applications for 669 spots in nursing, over 2,000 applicants for 80 DDS spots, and 10,000 applicants for 184 MD spots.
- Over the last 10 years applications from highly qualified students to our biomedical PhD programs have nearly doubled and a Task Force recently recommended a substantial increase in the number of PhD students across the research disciplines to continue this upward trajectory.
- On the curriculum side, we’re working to ensure that our programs evolve to meet changing health needs. Among our new academic offerings over the last two years:
  - Two new tracks in biomedical science and biotechnology
  - New MS and PhD programs in health economics, in partnership with CU Denver
  - MS degrees in clinical pharmacy and pharmaceutical sciences
  - A PhD in pharmaceutical outcomes research
  - And a new fellowship program in palliative care.
- In addition, we signed an MOU with Colorado State University this summer to begin planning a medical school branch in Fort Collins, to go along with our 3-year-old location in Colorado Springs.

Our efforts to help build a healthy future for the community in which we live and work also gained steam last year. Building on the efforts at the Dawn Clinic, we’re collaborating with partner organizations in Aurora and the Salud Family Health Centers to plan the Aurora Community Health Commons project. Led by the School of Medicine and with invited participation from all the schools and colleges, this federally qualified health center will serve 4,600 unserved or underserved citizens of Aurora in an interprofessional care delivery model.

### Progress on Priority Areas

Almost exactly three years ago today we suggested a number of priorities for the future of this campus, and I’m happy to report on our progress in these areas.

#### *1. Invest in clinical excellence.*

First, it brings me great pleasure to say that our hospital affiliates — and our relationships with them — are as strong or stronger than ever.

Driven by our faculty, Children's Hospital Colorado is back in the top 10 nationally as ranked by *U.S. News & World Report*, and University of Colorado Hospital remains the number one hospital in Colorado.

We're working with both hospital partners to jointly invest in a number of shared programs and assets, including the Cancer Center, Center for Personalized Medicine, clinical trial software, regenerative medicine, behavioral health care and faculty recruitment in a host of specialties.

Sharing a campus with highly ranked pediatric and adult hospitals puts us in select company; by our count, we are among only a handful of campuses in the country similarly situated. Not to overstate, but I believe our ability to leverage this asset — research and care across the lifespan — will define the arc of our future success.

## *2. Increase and diversify research funding.*

The second priority was to increase and diversify our research funding. While our sponsored research revenues are up 7% from last year to a total of \$553 million, the NIH portion of this is actually up even more — a full 14%. It is critical that we remain competitive for NIH funding.

What's more, support in other areas of research funding is up as well: by 14% from industry and 16% from associations and foundations. Let me cite just two examples behind these numbers:

CU Anschutz faculty, led by Joaquin Espinoza in the Crnic Institute and with the help of the Global Down Syndrome Foundation, just received \$8.2 million in NIH grant funding to advance research on Down syndrome with co-occurring conditions. This represents 23% of the total grants announced by NIH in that category. Let me repeat: 23% went to one institution- ours.

The Colorado Center for Personalized Medicine, now five years old, has received \$26.7 million in research funding to date. With the first enterprise health data warehouse on a highly secure and HIPAA protected cloud platform, its Personalized Medicine Registry now has more than 100,000 patients enrolled, and 30,000 samples genotyped. Last October the registry launched its process for return of results, which provide state-of-the-art clinical decision support to our physicians. Ours is one of the first personalized medicine programs in the country to integrate the clinical use of its pharmacogenics via a research biobank. And it's one of just five in the country that has more than 30,000 samples and is already returning genetic data results.

Finally, and importantly, we've teamed with Children's Hospital Colorado over the past year to evaluate how we're supporting child health research on campus, with a goal of significantly improving that support and increasing efficiencies.

One of our greatest assets with respect to research — and, in fact, everything that we do — is the collaborative spirit on this campus. We can never take that for granted.

One particular aspect of our collaboration is the respect and civility with which we try to treat our colleagues, including those with whom we disagree. Our diversity — in all its forms, including that of opinion — is a great source of pride, and our different identities and viewpoints enrich the learning and professional environment for all of us.

## *3. Invest in innovation.*

Moving on to innovation, the re-engineering of our technology transfer operation is yielding impressive results. Look at these increases from where we were four years ago: invention disclosures up 42%, technologies licensed up 55%, and number of startups formed up 133%. In the last year alone, CU

Anschutz faculty external startup companies raised over \$100 million, over 500 companies applied for access to our innovation centers and both hospitals received national recognition for their work.

Just last month, CU Anschutz was selected by the NIH as one of the top 5 innovation research centers in the country. We are now designated as an NIH Research Evaluation and Commercialization Hub (REACH), and will receive a \$4M grant over 4 years to scale our SPARK program - a partnership of CU Innovations, CCTSI and the Cancer Center. Currently in its second year, the SPARK cohort has already raised over \$7M in follow-on funding, launched several startups, and recruited over 25 industry mentors from around the country to assist our faculty in the process of transitioning their discoveries into products that will improve health.

We also now have a relationship with an external investment fund of up to \$50 million to support innovation at companies associated with our campus.

We've been challenged for years by a lack of support, in terms of both funding and personnel, for bringing our ideas to market. There is a quote that says: "A vision without money is a hallucination." I'm happy to say that with the Spark program, Gates Grubstake awards, a Chancellor's Innovation Fund and now this external fund, our vision is closer to realization.

These accomplishments have been achieved through the work of many, but I'd especially like to call out Kim Mueller and Steve VanNurden at CU Innovations, Rich Zane and Steve Hess at UCHealth, and Robin Deterding at Children's. They've done an amazing job.

#### *4. Significantly escalate our work in mental health and wellness.*

The next priority was mental health. I couldn't be prouder of the work going on in that area. Through the efforts of so many units of the university, we are making progress toward more fully integrating mental and behavioral health into both our patient care environments and our curriculum. I hope we're also making strides toward reducing the harmful stigma that too-often keeps those in need of quality mental health care from seeking it.

Our hospital partners are weighing in heavily in this area, as well. Last fall, Children's Hospital Colorado teamed with our Department of Psychiatry to launch Partners for Children's Mental Health, a statewide network of individuals, organizations and agencies helping kids get the right mental health, at the right time, within their own community.

And UCHealth's huge announcement in September that it will invest over \$100 million to build out its behavioral health care offerings throughout the state will ensure that behavioral health therapists are an integral and growing part of the patient care experience.

We're also bolstering our support of our students' mental health. We've expanded the services and availability of the Student Mental Health Service, which is now coordinating closely with the Campus Health Center. We've launched the YOU@CUAnschutz portal, and we are increasing wellness programming, across the board. We still have a long way to go on this road, but we are committed to the journey.

#### *5. Increase regional and national marketing efforts.*

Finally, I have a lot to say about our regional and marketing efforts, but I'm saving that for last.

## Challenges

So, we've continued to experience rapid growth in most key areas, not just in the past year, but in the past several. That said, life isn't a bed of roses. In reporting to you on the state of our campus, I would be remiss if I did not also mention what I see as some continuing challenges for the campus and for the field of health care.

The first, and most obvious, is the continually rising cost of healthcare. We have a very real obligation to be part of the solution to what is an unsustainable pattern.

The second — and it is totally related to the first — is the impact of shifting government policies on the healthcare marketplace. Looming state and federal legislation has the potential to significantly impact our economics. At the state level, it is very clear that the Polis administration has placed a bull's eye on health care costs, with the center of that eye focused on hospital expenses. At the federal level, the 2020 election has enormous potential for creating a market disruption. These are very real headwinds on the horizon. And let me be clear, anything that impacts any of our partners impacts us as well.

Federal funding for scientific research, at NIH and other agencies, faces an uncertain future. While we are more hopeful here, with the climate in Washington today, anything can happen.

Outside of funding, regulatory guidelines, especially in the new areas of biologics, present new and shifting hurdles. We've struggled with issues here and we need to invest in our capabilities.

And, largely because of our rapid growth, we have infrastructure issues. The need for better transportation access, parking, nearby amenities — these are all constraints.

Challenges driven by growth are nice problems to have, but they're still problems.

## So What's Ahead

We do expect exciting developments in the coming year. Here are a few, in brief:

- We will see continued growth in our clinical practices;
- The FQHC I mentioned earlier will open in Aurora in a temporary location in advance of its permanent campus on Colfax;
- Bioscience 3 will open on the Fitzsimons Innovation Campus with greatly expanded space and programs for bioengineering;
- We will launch new educational offerings in Public Health and Personalized Medicine;
- We will have a plan to grow and consolidate efforts in Data Sciences;
- We will launch a program to provide funding for collaborative research with our colleagues in Boulder;
- We will begin first in human investigator-initiated trials in cellular therapy with our faculty and in our clinics;
- We will have a plan and process to reduce the time it takes us to start a clinical trial from where it is now to under 90 days;
- We will see the continued growth of CU Innovations partnerships and round 3 of Spark with round 4 of the Grubstake awards;

And that's just a taste of what's coming.

## What We Do Matters

I've spoken at length today about numbers — volumes and revenues. And those are all very good stories, and by many accounts good measures of success. But I don't want us to lose sight of the forest for the trees. More important than the numbers is our work's purpose.

Everything we do, all of it, *matters* for the simple reason that it's in service of people: finding the next cure, improving the lives of our patients, and teaching future health professionals to do the same.

If you really want to see why our work matters... just take a walk around the campus.

- You can talk to a new dental student, who's using virtual reality technology to practice the fine motor skills and hand-eye coordination that her field requires. It matters that she's at one of only a handful of schools in the country to offer this. Her education is further enhanced by the diversity of perspectives in a class that's now 25% underrepresented minority.
- Or talk to Jason Stoneback, who's pioneering new osseointegration surgery for amputees. Because of Dr. Stoneback and his Limb Restoration Program team, patients who were running out of options when traditional socket prosthesis failed them now have the possibility of an innovative bone-anchored device implanted on their femur and tibia, allowing them to move with less discomfort, more sensation, and significantly improved quality of life.
- Talk to Dan Pollyea about the mood in his acute myeloid leukemia clinics these days. His clinical trials, using research from Craig Jordan's lab, led to a treatment breakthrough that showed a 91% response rate in a condition that had for decades been almost always fatal. His clinics, in his words, "have gone from a somber, depressing place, to one where we don't talk much about cancer anymore."

You can see why our work matters in all corners of the state.

- Go to the southwest Denver suburbs and talk to Joey, the asthmatic kid who's managed not only to avoid the ER but is fulfilling his dream of playing Friday night football, thanks to the services he's received from the CU Youth Health Clinic at his school, run by CU Nursing's Alexis Barrere and her staff.
- Talk to the people in El Paso County who are worried about the elevated levels of PFA chemicals in their blood due to contaminants in their drinking water. They're glad the Colorado School of Public Health is about to embark on research to determine just what the exposure, risks and health impacts are.
- Near Steamboat Springs, you can talk to Ashley, who struggled for years with opioid addiction and couldn't get treatment without traveling to either Grand Junction or Denver. She finally found the help she needed, right in her community, through medication-assisted treatment at the clinic run by CU Nursing, a program so successful that Gov. Polis recently expanded it to the San Luis Valley.
- Or talk to patients across the state who aren't getting addicted to opioids in the first place because their doctors, trained through the Center for Prescription Drug Abuse Prevention, are now prescribing alternatives for pain management.

You can see why our work matters across the globe, actually.

- Talk to the patient in Australia who has epilepsy so severe that, until recently, she couldn't drive, go to work or even walk to the mailbox alone for fear of falling and blacking out. With a pump in her abdomen distributing a concentrated epilepsy drug directly to her brain, developed by Tom

Anchordoquy from the CU Skaggs School of Pharmacy, she's now commuting to work and talking about having children -- things she couldn't have even dreamed of a couple years ago.

- Talk to the family of 8-year-old Mario in the Trifinio region of Guatemala, who was suffering from dental infection so bad it left him incapacitated and threatened his life.  
After CU dental students extracted six teeth, the swelling and infection resolved. Thanks to the basic health and education services provided by all of our schools and colleges at the Center for Human Development, Mario's family – and 30,000 other rural Guatemalans – are looking to brighter futures.
- Or talk to the patients from around the world who bring their battle with pancreatic cancer here – because they know we're up for the fight.

### Letting the world know

We do know that what we do matters, that our particular combination of clinical practice, education and research results in world-class science and exceptional care.

We know all this, because we work here. But does the rest of the world? Not as much as we think they should.

I promised last year that we would find a way to tell the world our story, and develop a plan to communicate the collective impact of this campus. I'm happy to say that we're making good on that promise.

The first step was the shift of our domain from ucdenver.edu to cuanschutz.edu over the spring and summer.

Next, we developed a new marketing campaign this year with a key element: it jointly promotes all three entities.

Our "This is Breakthrough" campaign illustrates how, together with our partner hospitals, we are breaking down barriers to accomplish the extraordinary. Perhaps most exciting of all, the campaign features our own people, highlighting their visionary work and the innovations they've achieved.

See for yourself in this video about the campaign: [VIDEO](#)

The talent and collaboration on this campus lead to countless breakthroughs, all in the service of what matters most: the improved health of our patients and our community.

It matters, and it will continue to matter, to patients, families, and communities everywhere who rely on us for hope, for healing, and for life. May we never lose sight of how important and priceless that is.

Thank you.