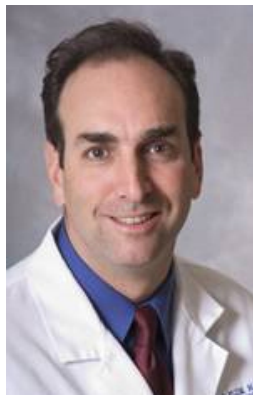


SURGERY Synopsis

Dr. David Flum: Becoming the Premier Home for Surgical Research



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Dr. David Flum, Professor, Associate Chair for Research in the University of Washington's Department of Surgery and Medical Director of the Surgical Outcomes Research Center (SORCE), was recently interviewed about the history of research in the Department, the vision and future of research for the Department as well as current issues and trends in research, particularly as they affect the Department. Dr. Flum was formally appointed to the position of Associate Chair for Research in the Department of Surgery in February 2011. Recently two faculty members, Heather Evans, Assistant Professor, Division of Trauma/Critical Care & Burns, and Kris Calhoun, Associate Professor, Division of General Surgery, Surgical Oncology, sat down with Dr. Flum to discuss his vision and goals as Associate Chair.

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Q: “It has been stated that the research goal is for the ‘UW Medicine, Department of Surgery to be the premier home for surgical research.’ What does this research vision mean to you as the recently appointed Associate Chair of Research?”

A: “First, research has always been a key component of the Department. There is a proud history that spans decades – back to the first randomized placebo controlled trial in cardiac surgery. There are creative out-of-the-box approaches by some of our research ‘stalwarts’ –[Eu] **Gene Strandness, MD** (deceased; Professor and former Chief of Vascular Surgery), **Alec Clowes, MD** (Professor & the V. Paul Gavora/Helen and John Schilling Endowed Chair in Vascular Surgery) and **Ron Maier, MD** (Professor & the Jane & Donald Trunkey Endowed Chair in Trauma Surgery; Chief of Trauma/Burns) come immediately to mind.”

“So, I wasn’t asked to take this position for lack of research productivity, lack of researchers or lack of creativity within the Department. **Dr. Carlos A. Pellegrini** (The Henry N. Harkins Professor & Chair, Department of Surgery), working with leaders in the Department, created this role and asked me to head this effort in order for the Department to rededicate and refocus our research efforts.”

“But, unless you have a clear vision for it, it’s very hard to know whether you’ve accomplished it. In Spring/Summer of 2011 I did qualitative research, in the Department. I talked with our folks at all levels - junior, mid-level and senior - asking, ‘what is it that research success would look like to you?’ What emerged was this notion of a ‘home’ - a place that you could spend your whole career, a place that really led the nation. When I talk about how to focus our energy, how to develop new programs, how to get resources - it’s all organized around this notion of being a premier home for surgical research.”

Q: “It sounds like there’s been a tremendous amount of research done on our background and ‘what makes a premier home for research.’ So, how do you see this [vision] becoming a reality?”

A: “First, to really reinvent research in the department, we need to approach the structure differently; perhaps see research like we do clinical divisions in the department. If you think about the research within the department, it really is made up of about 10 research ‘pods’ or divisions that are linked in some way whether thematically or through personnel. Organizing research in this way allows us to thoughtfully recruit researchers, bring the right resources and intentionally promote research, not just sort of accidentally.”

“We have an obligation to the junior faculty and also some of the midlevel faculty who are feeling like they need/wish they had more direction. I think this sort of structure helps in this regard.”

Q: “Could you to talk a little bit more about the leadership infrastructure to support this?”

A: “We’re developing a research executive group that is going to be key to advising Dr. Pellegrini on how to balance the goals and the resources available around research. This research executive group, for the most part, is made up of more senior department investigators who have had successful extramural funding for 20-30 years. They know the ropes, the barriers and they know the opportunities. But, we’ve also included mid and more junior level folks as part of that group. It’s a ‘recommending group’ to Dr. Pellegrini. My job as leader of that group is to simply marshal and help focus their energy.”

“Then, there are two other work groups that are key. One is an operations leadership group, and the other is a metrics leadership group.”

“The operations leadership group addresses many of the important issues that we deal with in research - how to promote it, how to talk about it, how to run conferences - like the modified Schilling Lecture and Research Symposium that we saw this year for the first time. This group will help to operationalize the research reinvestment activity with the department.”

“The metrics group equally has an important role. They are helping to define what success is for researchers. For instance, do we value researchers who bring in grants as much as researchers who don’t bring in grants but make publications? How do we measure our investment in research as a Department? The metrics group grapples with those issues.”

“These three groups are helping guide the Department’s research activities.”

Q: “How do you see research becoming more transparent and promoted within and outside the Department?”

“The concept of “elevate” is important to achieving our research goal. My goal is to make research part of the daily life of being a faculty member in the Department of Surgery. How might that work? I see many activities that elevate research. From email alerts coming from Dr. Pellegrini when a paper gets published to our Departmental website and social media outlets all highlighting our research - awards, papers, and the like. This entire issue of Surgery Synopsis is on research. Then there are events like the Schilling Lecture. The Schilling Lecture this year, in addition to all the wonderful work by the residents and fellows, included presentations by several faculty members who described their research.”

“Another way we are elevating research is through Grand Rounds. The leadership of the department agreed to change Grand Rounds to start including more research. Beginning in May, a 20 minute research segment before or during Grand Rounds will reconnect the department with the faculty who are doing research.”

“So, all these activities will elevate research within the Department. It will be a much more organic component of our daily lives.”

Q: “Can you talk a little bit more about how this research reinvestment fund is going to play a role in achieving the research goal of becoming the premier home for surgical research?”

A: “This is a phenomenally exciting activity. The department already commits a significant amount of resources to research in the form of staff, administration, oversight, faculty support, and commitments made during recruitment periods.”

“Reinvestment activity would really allow game changing activities to occur. As I went around talking to the investigators in the department, I asked them all the same thing ‘What is one thing that would allow you to get to the level of research productivity that you want?’ Much of the response was related to resource-related reinvestment. ‘If there was a fund that would allow me to buy a key piece of machinery, that I can’t get a grant to buy, it would be a game changer because it would allow us to do X, Y, and Z, and not just me, but the ten or seven or five of us to use. I also heard people talk about hiring key personnel. I’ll give you an example. You know, each year in the T-32 program over at Harborview, we bring in Fellows who learn PCR analysis (polymerase chain reaction). They learn PCR in their first year and do PCR in their second year. It takes a lot to train people every other year on how to do a technique, and then they’re gone a year later. What if we had core resources that people could use in PCR so that we weren’t always in a learning/losing cycle of support?”

“I also heard, ‘if I only had one day a week for the next three months to work on these grants, I’d be able to get these grants in, but I just can’t. The clinical work is overwhelming me.’ The possibility of reinvesting in people short term - an FTE buy-back was one of the concepts that emerged.”

“Our job as a research leadership group is to give Dr. Pellegrini great advice on how to take this fund and make it not just business as usual, not just replacing what’s already being spent on research in the department, but to be a ‘game change fund.’ So, yes, the idea is that investigators would apply for use of these funds. It would not be an arduous process but enough of a process so that the leadership group that I defined earlier can review the proposals and figure out what’s likely to be a game changer and the metrics of success. Then we will hold them accountable for that work.”

“So think about this investment fund as almost an entrepreneurial prospect for the Department. If you think about

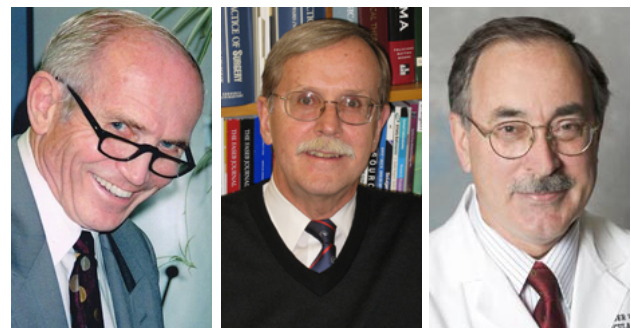
it in that way, it’s a wonderful opportunity to reinvest and redirect.”

Q: “Can we follow up on something that you said about there are these stalwart figures in the history of the department. Their success happened at a different time – in a different funding climate, in a different environment. So how do you see the new environment in which we’re trying to get research funding?”

A: “People look back at research funding and research in the past and say, ‘oh, it was better, easier’ – and I totally disagree. I think we’re in a golden era of research funding. I’ll give you a couple of examples: there’s never been more funding coming out of the NIH for surgical research. There’s never been more recognition about the role of helping junior investigators and there have never been more diverse funding options, everything from AHRQ (Agency for Healthcare Research and Quality) which didn’t exist when Gene Strandness was working, to PCORI (Patient-Centered Outcomes Research Institute) which didn’t exist when I started applying for funding. There are NIH junior-investigator career development awards (K awards) and Training grants (T-32) and a whole cycle of awards aimed at getting people started.”

“It’s true the funding lines are tighter now than they were before. That goes up and down with the financial cycles (and in the 90s it was tight as it is right now). And, the NIH as a government organization is susceptible to all the funding trends that go on in the other Washington.”

“Having said that, what do we learn from stalwarts like Gene Strandness and Ron Maier and Alec Clowes? We learn that nothing’s changed. You still need to have a great idea and you still need to pursue it doggedly. You need to reach out to collaborators who have skills that you don’t have. Success still relies on key leadership skills: being able



Drs. Gene Strandness, Ron Maier & Alec Clowes

to build a team, being able to reach across traditional lines to cross-pollinate your ideas with others.”

“And then you have to be dogged ~ which is something that surgeons have the potential to do better than anybody ~ to be like a dog on a bone, as I sometimes describe it to the residents. Because you know, the ideas worth pursuing are worth the investment of your time and energy. The one thing I think we can learn best from Gene and Alec and Ron is that this stuff does not come easy. And I don’t know why we think it would. The legacy that I take from them is this dogged approach; this day in and day out chasing something that’s important to you and not expecting it to come easy.”

“I don’t think that things have changed that much. The funding environment may be different and the need for reaching across the aisle to other departments has become more important. But, the opportunities to write a grant with world famous experts across the school have only increased. I think in a lot of ways this is a golden era for surgeons to begin doing research, to be getting funded, and to make a career that’s balanced between clinical care and research.”

Q: “Do you think that there are other specific barriers particularly for younger investigators, for new faculty, that we as a department should be focusing on? Mentoring seems like a key element: having good mentors, being a good mentor? Can you speak to that?”

A: “I think mentorship in the department of surgery on the research side really is best exemplified in the T-32 training programs. I mean- you know that expression, ‘money can’t buy you love, but it can buy you some time with a mentor.’ There’s something to be said for that. We’re now lucky enough to have two T-32 grants in the department: The Trauma-inflammation area (led by **Dr. Grant O’Keefe**, Professor in the Division of Trauma/Burns), and then in SORCE (Surgical Outcomes Research Center) for outcomes research (led by Dr. David Flum, Professor in the Division of General Surgery). We now have multiple spots within our department with really focused mentorships. I think this is really important.”

“And, for the first time we’re seeing a wave of K awards (career development awards). Right now we have **Dr. Heather Evans** (Assistant Professor, Division of Trauma/Burns, K12 Comparative Effectiveness Research Scholar) and **Dr. Leah Backhus** (Assistant Professor, Division of Cardiothoracic Surgery, ITHS KL2 Scholar), as well as others who are applying for K Awards. Mentorship is an expectation of both the T-32 and the K awards. People are

coming in dedicating three to five years of their career in a mentored research training environment.”

“You’re also seeing some new faculty recruits coming into the department hired specifically to work at a perhaps a 50 percent research; 50 percent clinical work. Those hires are being made explicitly because they can come into a very structured mentorship relationship. And that’s where I see we do it best - structured mentorship relationships - where mentoring is part of the success of the program.”

Q: “Do you have anything that you want to say in closing?”

A: “Sometimes when you read these articles they’re all high level, rainbows and unicorns. What you forget is that a lot of people who want to be researchers are struggling. One of the reasons that I took this position was because of the 90 department faculty I asked if they felt this was the premier home for surgical research. And they didn’t.”

“The survey went on to explore why. And we found a lot of anxiety at a lot of levels ~ not just junior levels ~ about being a researcher in the department. There’s a lot of pressure pulling us into the clinical realm and pulling us away from the research realm. We can talk about research, but in fact we get paid, in large part, based on clinical volume. And, we’re a different generation ~ a generation not willing to write grants at nights and weekends, because you know what? We have family and friends and hobbies. Work-life balance is important and different than it was maybe in a different era.”

“I recognize those anxieties. We’re trying to build something that’s actually going to help people. But at its core, the message is: ‘have faith.’ None of us learned how to operate overnight. We had to stick with it. We were forced to stick with a residency training program despite lots and lots of things that made it hard and made us discouraged and made us feel like we were maybe not on the right path.”

“It’s the same thing in research. And, it’s okay that not everybody wants to be a researcher. But, if you do, chase it with passion and the department’s there to help. That’s the message that I want to send to the people who want to know about what it’s like doing research in the Department of Surgery.”