John Clements: A career devoted to lifesaving vaccines

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John Clements, PhD, is retiring this month after 35 years on the Tulane University School of Medicine faculty. (Photograph by Paula Burch-Celentano)

<u>Professor John Clements, PhD</u>, is retiring from Tulane School of Medicine in June, after chairing the <u>Department of Microbiology and Immunology</u> since 1999. Over the past 35 years on the Tulane faculty, he has helped to secure \$40 million in grants, including one that paid for five new "ballroom labs" he designed in the J. Bennett Johnston building. After Hurricane Katrina, Clements played an instrumental role

leading a team into New Orleans that rescued decades worth of research from Tulane laboratories.

Q. What should we know about the vaccines that you worked on?

What we really work on are things called adjuvants, things you add to vaccines to make them work better. Just think Tony Chachere's—it makes everything you put it on a little bit better. Well, that's what adjuvants do, they amplify the body's immune response to a vaccine's antigens.

Q. The adjuvants you work on can improve access to vaccines by helping to reduce the amount of antigens needed in vaccines or allowing them to be delivered differently?

Yes. Our primary focus is vaccines against diarrheal diseases for children in developing countries. These diseases do not affect children in developed countries, so they are not attractive targets for large pharmaceutical companies. Along with numerous other organizations, we explore novel ways to develop low-cost, safe, effective vaccines for these children.

Q: I'm told you enjoy mentoring.

Junior investigators are always asking questions that I would not have thought to ask. The answers allowed us to move forward in directions that I would not have moved on my own. Betzi Norton and Jacob Bitoun in our department will continue working on the same things that I'm working on now, in their own way. It's a natural progression. And because of them, my science won't end when I retire. That's a great consolation to me.

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