Remembering Our Founder, Our Colleague, Our Friend Dr. Donald J. Abraham, Ph.D.

It is with much sadness that I share the news that Professor Donald Abraham has passed away in Florida. Don was the Chair of the department of medicinal chemistry (1988 - 2000) and the Director



of the Institute between 1995 - 2007. He was also the founding Director of the Institute. Don was well-known as a scientist. drug discoverer, and an entrepreneur. He was one of the early pioneers who pursued the concept of structural biology in drug discovery, especially in the field of hemoglobin-targeting antisickling agents. One of his molecules RSR13 was modulated hemoglobin allosterism and was studied in multiple clinical trials. The key aspect of this work was the molecule was designed and developed entirely at VCU. This set the foundation for the work being performed in the Professor Martin Safo's lab these days. He is also well-known for editing the Burger's Medicinal Chemistry, a massive volume that is the 'go-to' reference for medicinal chemists. In fact, he was editing the current version of this volume. For this and other foundational works, Prof. Donald Abraham was inducted into the Medicinal Chemistry Hall of Fame, a distinguished honor bestowed by the American Chemical

Society's Division of Medicinal Chemistry, in 2010.

Don was highly supportive of colleagues and students/postdocs. Many times, he would take the role of a concerned mentor and go out of his way to support others. I most remember him as the supervisor who would genuinely ask 'How are doing?" every once in a while. I would also like to remind many that Don accomplished the task of completing a marathon when he was nearing retirement! He will be missed. Rest in peace, Don!

Dr. Umesh Desai Chairman, Medicinal Chemistry Director, Institute for Structural Biology, Drug Discovery and Development Some you may not know how I came to VCU. I was a postdoctoral at Northwestern, but the 1987-88 faculty recruiting season was very poor - following the Challenger disaster and a big stock market crash, universities were not hiring. I had interviews, but no firm offers. My wife did get a position at Philip Morris, so we moved to Richmond in Fall 1988. After a month or so here, I saw an advertisement for a postdoctoral placed by Don for a crystallographer to join him in the Medicinal Chemistry department. I was by no means a crystallographer - but I'd taken a course on it, and knew my way around computers - I'd done some quantum mechanics calculations and knew how to program - and had experience with a number of diverse scientific instruments, so I wrote to him. Don immediately called me to come down and talk. He had arrived just a few months earlier, and his new diffractometer still hadn't been shipped. He did have a molecular modeling set up in place but no one to use it. He hired me on the spot! Overnight, I became a molecular modeler.

In those very early days Don's group was a couple of people that he brought with him from Pittsburgh, me, and a growing group of - at first - postdocs and then graduate students. Don laid out for me his ideas for a molecular modeling method based on logP. Together, we developed HINT from his ideas. This was a very fulfilling and exciting time. Don was a fountain of ideas – 24/7 - and it took a lot just to keep up with him! He created the "Giant Molecular Modeling Course" by calling in favors from some of the leading computational medicinal chemists in the world. They all came to Richmond to teach our students, but more importantly, this exposure for VCU elevated our reputation ... and my interactions with them were significant factors in my professional life.

Don was always very supportive and generous to his people. The holiday parties at his house were epic! The department was always fun when he was around: those ideas kept flowing! They led to too many initiatives to count, like the National Medicinal Chemistry Symposium, his drug company, moving Burger's Medicinal Chemistry to VCU, our software company, and even a board game!

It is indeed sad to hear of Don's passing. He was larger than life!! I owe my career at VCU to him.

Dr. Glen Kellogg, Professor Medicinal Chemistry

I can't say enough about Dr. Abraham. He was a mentor to me from the time I arrived at VCU to work for him in the capacity of Executive Secretary in June of 1989. He was a hard worker, and taught me about the VCU community, scientists and all of his collaborators worldwide. He was always thinking about the next idea to move forward; he would walk in the office raring to go. I can say that science was on his heart until the day he passed; as he continued to edit the latest edition of Burger's Medicinal Chemistry. Dr. Abraham was very kind hearted and concerned about everyone in the department, his research group and his fellow man. He had a sabbatical at the University of Cambridge in England; which inspired the breakroom setup at the Institute, where everyone can meet, drink tea and talk about science. He loved Easter, and would always without fail, buy hams for his group and chicken breast for those who did not eat pork; he also provided an alternative for vegetarians. Those that had children, he gave chocolate bunnies for each child. I was looking forward to getting his annual Easter email. I will truly miss him, as he will always be dear and near to my heart. My sincere condolences to his wife, Nancy, his sons and grandchildren.

Michelle Wise, Business Manager Institute for Structural Biology, Drug Discovery and Development

This is really sad news. I only personally met Don once, but I know that he was a great scientist and one of the pioneers of Structure-based Drug Design in the world.

Dr. Youzhong Guo, Assistant Professor Medicinal Chemistry This is indeed very sad. I can't say enough about Don but for those who did not know him he was a very special person with an incredibly good heart. It's a very big loss and I hope his family is doing very well in this trying time. May his soul rest in peace.

Dr. Martin Safo, Professor Medicinal Chemistry

Though I have not had a chance to directly interact with Don, I heard a lot of good things about him as a scientist and a person. My deepest sympathies and prayers go out to his family at this moment.

Dr. Shijun Zhang, Associate Professor Medicinal Professor

I shared the same with Martin. Though I did not work directly under Don, he shared his wisdom with me whenever he was a great scientist and a nice guy.

Best wishes to his family.

Dr. Yan Zhang, Professor Medicinal Chemistry