

**Dr. Abu Bakar Siddique, an alumnus of the Department of Pharmacy, State University of Bangladesh, has been awarded with a U. S. patent with his mentor Prof. Dr. Khalid El Sayed for anticancer drug research**



Dr. Abu Bakar Siddique, an alumnus of the Department of Pharmacy of State University of Bangladesh, and a team of researchers lead by Prof. Dr. Khalid El Sayed, University of Louisiana at Monroe, College of Pharmacy, United States of America, have recently been awarded with a U. S. patent for the discovery of the role of oleocanthal, a natural compound found in extra virgin olive oil, to fight against breast cancer relapse.

Dr. Khalid El Sayed, a Professor of Medicinal and Natural Products Chemistry in the School of Basic Pharmaceutical and Toxicological Sciences, College of Pharmacy, piloted the research into a process to isolate oleocanthal from olive oil for use in the treatment of breast cancer and relapse prevention. The patent was awarded to the University of Louisiana System Board of Supervisors. The inventors listed for this award are Prof. Dr. El Sayed (Head of the team), Dr. Siddique (a post-doctoral fellow at ULM) and Dr. Hassan Y. Ebrahim of Cairo, Egypt.

It took eight years to pilot the process to isolate oleocanthal from olive oil, after a lot of trials and errors, said the team leader, Dr. El Sayed. Currently, laboratory has diversity of research projects for drug designing and discovery of new anticancer drug molecule for the treatment of breast, lung, ovarian and prostate cancers using cutting edge technologies. The results of their investigations have been published in several renowned international journals including Cancers (Impact factor: 6.126), available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6562541/>; Nutrients (Impact factor: 4.546), available at: <https://www.mdpi.com/2072-6643/11/2/412>); Pharmaceutics (Impact factor: 4.421), available at: (<https://doi.org/10.3390/pharmaceutics11100515>); Plos One (Impact factor: 2.74), available at: <https://doi.org/10.1371/journal.pone.0214798>; International Journal

of Pharmaceutics (Impact factor: 4.845), available at: (<https://www.ncbi.nlm.nih.gov/pubmed/31394181>); Pharmacological Research (Impact factor: 5.893) available at: <https://www.sciencedirect.com/science/article/abs/pii/S1043661820311555>; European Journal of Medicinal Chemistry (Impact factor: 5.572), available at: <https://www.sciencedirect.com/science/article/abs/pii/S0223523419311067>;

Dr. Siddique was a student of 8<sup>th</sup> batch of Bachelor of Pharmacy (Hons.) program. He has completed his Bachelor of Pharmacy (Hons.) and Master of Pharmacy Degrees from the Department of Pharmacy, State University of Bangladesh (SUB) in 2010 and 2011, respectively. Then he worked Radiant Pharmaceuticals Ltd. (under the Licence of Hoffmann LA Roche) as quality assurance officer in the year 2011, where he worked from June 2011 to December 2014. Later, he joined the University of Louisiana at Monroe College of Pharmacy as a Ph.D. student under the supervision of Professor Dr. Sayed in 2015. He has been successfully awarded his Ph.D. in 2019 and again joined the same lab as a Postdoctoral Research Fellow. Since then, he is working as a Postdoctoral Research Fellow with Prof Dr. El Sayed. I was really delighted to have Dr. Siddique in my laboratory with his impressive research success, and I am confident he will be a great scientist and future leader in modern natural products research arena as said the team leader, Dr. El Sayed.

Dr. Siddique is a very successful alumnus of the Department of Pharmacy, State University of Bangladesh. He has already proved himself as an international scientist due to his academic and scientific merits and dedication. The research activities of Dr. Siddique are focused on anti-cancer drug discovery and translational science. Dr. Siddique's research expertise is in areas of medicinal chemistry, drug designing, and molecular cancer biology including breast, lung, ovarian and prostate carcinoma. So far, he has published 23 scientific papers having google scholar citations 319 with an H-index of 12. He has attended several international scientific conferences to present his research achievements including American Society of Pharmacognosy (ASP) Annual Meeting 2018 and 2019, American Association for Cancer Research Annual Meeting (AACR) 2017 and 2018, etc. Dr. Siddique mentored more than 10 undergrad, PharmD, and doctoral students in his academic career. Dr. Siddique is an associate member of multiple professional organizations including, American Association of Cancer Research (AACR), American Association of Pharmaceutical Scientists (AAPS), European Association of Cancer Research (EACR) and The American Society of Pharmacognosy (ASP). Dr. Siddique served as Head of Education Committee of the American Association of Bangladeshi Pharmaceutical Scientists (AABPS). Prior to this, while as graduate student he served as Vice-chair and Chair of ULM Student Chapter of the American Association of Pharmaceutical Scientists (AAPS) in 2015 and 2017, respectively. Currently, Dr. Siddique serving as editorial reviewer member in top class scientific journals publisher, *ACS, Nature, MDPI and Elsevier*.

Dr. Siddique received several awards and grants including "Kilmer Prize" for outstanding research by The American Society of Pharmacognosy (ASP) & American Pharmacists Association (APhA) available at (<https://www.pharmacognosy.us/grants-and-awards/grants->

[and-awards-archive/the-kilmer-prize/](#)), WI, USA (2019); Travel grant in graduate student category, ASP annual meeting, Lexington, KY., USA (2018); Best poster presentation in 17<sup>th</sup> Annual Student Research Symposium, ULM, LA, USA (2017); The Thomas L. Lemke Outstanding poster presentation award, The 43rd Annual MALTO Medicinal Chemistry-Pharmacognosy Meeting-in-Miniature, UH, TX, USA (2016) available at (<https://www.uh.edu/pharmacy/news-and-events/releases-2016/may/malto/>);

The Department of Pharmacy, State University of Bangladesh is really proud of having such an outstanding alumnus. We wish him to succeed in his future endeavour.