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Recent Progress in the Synthesis of Complex Natural Products

John L. Wood

Robert A. Welch Distinguished Professor and Cancer Prevention Research Institute Scholar
Baylor University
Department of Chemistry & Biochemistry
Waco, TX

4:00 p.m. Monday April 13th, 2015
Bowman-Oddy 1059

John L. Wood

John Wood received his Ph.D. degree in Organic Chemistry from the University of Pennsylvania in 1991 under the direction of Prof. Amos B. Smith III followed by postdoctoral studies under the tutelage of Prof. Stuart L. Schreiber at Harvard University where he was an American Cancer Society Postdoctoral Fellow. He began his own independent academic career at Yale University in 1993. After quickly rising through the ranks at Yale (full professor in 1998) he elected to move to Colorado State University in 2006 to become the A. I. Meyers Professor of Chemistry. In 2013 he moved his group to Baylor University in Waco, TX and currently holds a Robert A. Welch Distinguished Professor and Cancer Prevention Research Institute Scholar position. He has garnered numerous awards for his research including the Amgen Faculty Award 2005, 2006, 2007, 2008, 2009, Japanese Society for the Promotion of Science Fellow 2008, American Chemical Society Arthur C. Cope Scholar Award, 2004, Merck Faculty Award 2000, 2001, 2002, Pfizer Research Award 1997-2001, Dreyfus Teacher Scholar Award 1998, Alfred P. Sloan Foundation Fellow 1997, and the NSF CAREER award 1996-2000 to name only a select few. To his credit, there are approximately 100 publications including articles, patents, edited books, book reviews and encyclopedia contributions.

His research interests include asymmetric catalysis, organometallic chemistry, reaction development and synthesis of biologically important molecules. His work extends into many areas of science particularly in the pharmaceutical arena.

Selected Recent Scientific Contributions

1. "Metformin Suppresses Gluconeogenesis by Inhibiting Mitochondrial Glycerophosphate Dehydrogenase" Madiraju, A. K.; Erion, D. M.; Rahimi, Y.; Zhang, X.-M.; Braddock, D. T.; Albright, R. A.; Prigaro, B. J.; Wood, J. L.; Bhanot, S.; MacDonald, M. J.; Jurczak, M. J.; Camporez, J.-P.; Lee, H.-Y.; Cline, G. W.; Samuel, V. T.; Kibbey R. G.; Shulman, G. I. *Nature* **2014**, *510*, 542.

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9. "An Aminooacyl-tRNA Synthetase that Specifically Activates Pyrrolysin" Polycarpo, C.; Ambrogelly, A.; Bérubé, A.; Winbush, S. M.; McCloskey, J. A.; Crain, P. F.; Wood, J. L.; Söll, D. *Proc. Nat. Acad. Sci.* **2004**, *101* (34), 12450.

10. "Total Synthesis of Ingenol" Nickel, A. Maruyama, T.; Tang, H.; Murphy, P.; Greene, B.; Yusuff, N.; Wood, J. L. *J. Am. Chem. Soc*. **2004**, *126*, 16300.

11. "A Mild and Efficient Synthesis of Oxindoles: Progress Towards the Syntheses of Welwitindolinone A Isonitrile" Ready, J. M.; Reisman, S. E.; Hirata, M.; Weiss, M. M.; Tamaki, K.; Ovaska, T. V.; Wood, J. L. *Angew. Chem. Int. Ed. Engl* **2004**, *43*, 1270.

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Yusuff, and Derek A. Pflum *J. Am. Chem. Soc,* **2001**, *123*, 2097.

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