Luke O'Neill is Professor of Biochemistry in the School of Biochemistry and Immunology, Trinity Biomedical Sciences Institute at Trinity College Dublin, Ireland. He is a world expert on innate immunity and inflammation. His main research interests include Toll-like receptors, Inflammasomes and Immunometabolism. He is listed by Thompson Reuters/ Clarivates in the top 1% of immunologists in the world, based on citations per paper. Professor O'Neill is co-founder of Inflazome and Sitryx, which aim to develop new medicines for inflammatory diseases.

He was awarded the Royal Dublin Society / Irish Times Boyle Medal for scientific excellence, the Royal Irish Academy Gold Medal for Life Sciences, The Society for Leukocyte Biology (SLB) Dolph O. Adams award, the European Federation of Immunology Societies Medal and in 2018 the Milstein Award of the International Cytokine and Interferon Society. He is a member of the Royal Irish Academy, EMBO (European Molecular Biology Organisation) and a Fellow of the Royal Society.

Luke also has a passion for communicating science to the public. He has a weekly radio slot on the Pat Kenny show on Newstalk. In 2018 he published with Gill the best-selling 'Humanology: a scientist's guide to our amazing existence'. This October sees the publication also with Gill of 'The Great Irish Science Book', a Science book for 10-12 year olds.