

The International Carbohydrate Organization Young Researcher Award 2018

The International Carbohydrate Organization is delighted to announce that the *Young Researcher Award* for 2018 has been awarded to Dr Nuria Martínez Sáez, University of Utrecht, The Netherlands.

The International Carbohydrate Organization established the Award in 2014 to recognize outstanding international achievements on any aspect of glycochemistry and/or glycobiology. The Award is recognized with a plaque, an invitation to present at the upcoming International Carbohydrate Symposium (ICS), and covers registration and accommodation expenses. The next ICS will be held in Lisbon, Portugal from July 15 to 19, 2018.



Nuria Martínez Sáez (1986) studied chemistry at the University of La Rioja, Spain, and completed her MSc (2010) and PhD (2013) at the same institution with Professor Jesús Manuel Peregrina and Dr. Francisco Corzana. During this time, she undertook a short stay with Professor Geert-Jan Boons at the University of Georgia. Her first post-doctoral studies were carried out under the supervision of Dr Gonçalo Bernardes at the University of Cambridge (2014-16), and she is presently a Marie Skłodowska Curie Fellow at the University of Utrecht with Professor Geert-Jan Boons.

Throughout her career, Dr Martínez Sáez has used chemical synthesis to help understand problems in the field of glycobiology. In her PhD studies, she developed methods to synthesize unnatural glycopeptides enabling the exploration of how their three-dimensional structures affect their molecular recognition by the immune system. Highlights of this work include the determination of the X-ray structure of a MUC1 glycopeptide bound to an anti-MUC1 antibody, revealing the key role of the carbohydrate in the recognition process; and the construction of a MUC1-based three-component vaccine that elicited immune responses in mice. In post-doctoral work at Cambridge she developed new protein conjugation technologies including methods exploiting oxetanes and sulfonyl acrylates, with particular highlights including the development of high-site-selective methods for disulfide and lysine modification. Her present work at Utrecht involves the design of glycoconjugate vaccines with improved antimicrobial activity.

Dr Martínez Sáez has published 15 papers. Her independent work since 2017 is supported by a Marie Skłodowska Curie Fellowship.

Melbourne, Australia, April, 2018

Professor Spencer Williams

Secretary of the International Carbohydrate Organization (ICO)