Author Profile



T. Carlomagno

The author presented on this page has recently published her 10th article since 2000 in Angewandte Chemie: "Drug Design for G-Protein-Coupled Receptors by a Ligand-Based NMR Method": S. Bartoschek, T. Klabunde, E. Defossa, V. Dietrich, S. Stengelin, C. Griesinger, T. Carlomagno, I. Focken, K. U. Wendt, Angew. Chem. 2010, 122, 1468-1471; Angew. Chem. Int. Ed. 2010, 49, 1426-1429.



T. Carlomagno has also been featured on the cover of Angewandte Chemie: "The High-Resolution Solution Structure of Epothilone A Bound to Tubulin: An Understanding of the Structure-Activity Relationships for a Powerful Class of Antitumor Agents": T. Carlomagno, M. J. J. Blommers, J. Meiler, W. Jahnke, T. Schupp, F. Petersen, D. Schinzer, K.-H. Altmann, C. Griesinger, Angew. Chem. **2003**, *115*, 2615 – 2619; Angew. Chem. Int. Ed. 2003, *42*, 2511 – 2515.

Teresa Carlomagno

Date of birth: April 30, 1968

Education:

Position: Group leader in Biomolecular NMR Spectroscopy at the EMBL, Heidelberg (Germany)

1992 Diploma in Chemistry with honors, University of Naples (Italy)

1996 PhD with Prof. L. Paolillo, University of Naples

1997–1999 Postdoc with Prof. C. Griesinger, University of Frankfurt (Germany)

2000-2001 Postdoc with Prof. J. R. Williamson, Scripps Research Institute, La Jolla (USA)

2006 Habilitation in Organic Chemistry, University of Hannover (Germany)

Professional 2002–2007 Group leader at the Max Planck Institute for Biophysical Chemistry, Göttingen associations: (Germany)

Awards: 1995 EMBO (European Molecular Biology Organization) fellowship and grant from the Italian

Ministry University, 1997 European Union grant of the "Marie Curie Researcher Training and Mobility Program", 1999 Richard Ernst Stipendium from the Group of Magnetic Resonance of

the GDCh

Current research 1) Investigate the structure and mechanisms of action of ribonucleoprotein complexes involved in RNA processing, for which we use a combination of NMR spectroscopy, biochemical,

biophysical, and computational methods. Our strategy is to tackle the structure of high-molecular-weight complexes, the large size of which impedes a detailed structural description by NMR only, with an array of complementary methodologies. 2) The development of NMR

spectroscopy-based methodologies to support structure-based drug design

Hobbies: Hiking, gardening, dancing

My favorite subject at school was ... philosophy.

The most exciting thing about my research is ... facing new challenges everyday.

The secret of being a successful scientist is ... curiosity, perseverance, and analytical thinking.

When I was eighteen I wanted to be ... either a scientist or an economist. But when I was ten I wanted to be an archeologist. Quite a change of direction!

The biggest problem that scientists face is ... surviving frustration and also staying motivated after not being successful.

f I could have dinner with three famous scientists from history, they would be ... Marie Curie, Alexander Fleming, and Isaac Newton.

The part of my job which I enjoy the most is ... solving problems. It is a wonderful feeling to get it done after trying different things for some time.

The most groundbreaking discovery in science in the past 100 years has been ... antibiotics. They have really changed the world!

My favorite food is ... bread: simple and delicious.

f I could be described as an animal it would be ... an elephant.

My 5 top papers:

- "Binding of the Human Prp31 Nop Domain to a Composite RNA-Protein Platform in U4 snRNP": S. Liu, P. Li, O. Dybkov, S. Nottrott, K. Hartmuth, R. Lührmann, T. Carlomagno, M. C. Wahl, *Science* 2007, 316, 115–120.
- "Crystallography-Independent Determination of Ligand Binding Modes": J. Orts, J. Tuma, M. Reese, S. K. Grimm, P. Monecke, S. Bartoscheck, A. Schiffer, K. U. Wendt, C. Griesinger, T. Carlomagno, *Angew. Chem.* 2008, 120, 7850–7854; *Angew. Chem. Int. Ed.* 2008, 47, 7736–7740.
- "Structural Basis of the Activity of the Microtubules-Stabilizing Agent Epothilone A Studied by NMR Spectroscopy in Solution": M. Reese, V. M. Sanchez-Pedregal, K. Kubicek, J. Meiler, M. J. J. Blommers, C.

- Griesinger, T. Carlomagno, *Angew. Chem.* **2007**, *119*, 1896–1900; *Angew. Chem. Int. Ed.* **2007**, *46*, 1864–1868
- "The INPHARMA Method: Protein-Mediated Interligand NOEs for Pharmacophore Mapping": V. M. Sanchez-Pedregal, M. Reese, J. Meiler, M. J. J. Blommers, C. Griesinger, T. Carlomagno, Angew. Chem. 2005, 117, 4244 4247; Angew. Chem. Int. Ed. 2005, 44, 4172 4175.
- "TAR-RNA Recognition by a Novel Cyclic Aminoglycoside Analogue": D. Raghunathan, V. M. Sanchez-Pedregal, J. Junker, C. Schwiegk, M. Kalesse, A. Kirschning, T. Carlomagno, *Nucleic Acids Res.* 2006, 34, 3599–3608.

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