

Norman Metanis, Ph.D.

Employment

Since 2018: Associate Professor, Institute of Chemistry, The Hebrew University of Jerusalem.

2013-2018: Assistant Professor, Institute of Chemistry, The Hebrew University of Jerusalem, Jerusalem, Israel.

2008-2013: Post-doctoral Fellow, Mentor: Prof. Donald Hilvert, The Swiss Federal Institute of Technology (ETH) Zurich, Zurich, Switzerland.

Honors & Awards (Since joining HUJI)

2022: The 2022 NCK Prize for an Outstanding Young Medicinal Chemist by the Medicinal Chemistry Section of the Israel Chemical Society (MCS-ICS).

2021: Sir Zelman Cowen Universities Fund Prize for Discovery in Medical Research.

2020: Israel Chemical Society (ICS) Young Investigator Award 2020.

2017, 2019, 2021: Selected as outstanding teacher for "Organic Chemistry for Medical Students".

2018: The Miklós Bondanszky Award, European Peptide Society (EPS).

2018-present: Elected National Representative at the European Peptide Society (EPS).

2017: Thieme Chemistry Journal Awardee

2013-2016: Ma'of Fellowship for Outstanding Lecturer.

1997-2000: Technion - Dean's excellence distinction.

Selected Publications (selected from the last 3 years)

1. Babu, T.; Ghareeb, H.; Basu, U.; Metanis, N.; Gandin, V.; Ott, I.; Schmidt, C.; and Gibson, D. "Oral Heterometallic Pt(IV)-Au(I) Complexes with Dual Mechanism of Action Shows High potency with Low Toxicity In-Vivo" ", (2023) *Angew. Chem. Int. Ed.*, *Accepted*.
2. Shemesh, A.; Ghareeb, H.; Dharan, R.; Levi-Kalishman, Y.; Metanis, N.; Ringel, I.; Raviv, U. "Effect of tubulin self-association on GTP hydrolysis and nucleotide exchange reactions." (2023), *Biochimica et Biophysica Acta (BBA) - Proteins and Proteomics*, 1871, 140869.
3. Seal, M.; Weil-Ktorza, O.; Despotović, D.; Levy, K.; Metanis, N.; Longo, L. M.; Goldfarb, D. "Peptide-RNA Coacervates as a Cradle for the Evolution of Folded Domains" (2022), *J. Amer. Chem. Soc.*, 144, 14150-14160.
4. Zhao, Z.[§]; Mousa, R.[§]; and Metanis, N.* "One-Pot Chemical Protein Synthesis Utilizing Fmoc-Masked Selenazolidine to Address the Redox Functionality of Human Selenoprotein F" (2022), *Chem. Eur. J.* *published online-e202200279*. [§]Authors contributed equally.
5. Zhao, Z.; Shimon, D. and Metanis, N.* "Chemoselective Copper-Mediated Modification of Selenocysteines in Peptides and Proteins" (2021), *J. Amer. Chem. Soc.*, 143, 12817-12824.
6. Mousa, R.; Hidmi, T.; Pomyalov, S.; Lansky, S.; Khouri, L.; Shalev, D. E.; Shoham, G.* and Metanis, N.* "Diselenide crosslinks for enhanced and Simplified Oxidative Protein Folding." (2021), *Nature Commun. Chem.*, 4, 30.
7. Longo, L. M.[§]; Despotović, D.[§]; Weil-Ktorza, O.[§]; Walker, M. J.; Jabłońska, J.; Fridmann-Sirkis, Y.; Varani, G. Metanis, N.*; Tawfik D. S.* "Primordial emergence of a nucleic acid binding protein via phase separation and statistical ornithine to arginine conversion" (2020), *Proc. Natl. Acad. Sci. USA*, 117(27), 15731-15739. [§]Authors contributed equally.
 - Highlighted in Ynet newspaper, Salon.com, Jerusalem Post newspaper, radio stations, etc.
8. Dardashti, R. N.; Kumar, S.; Sternisha, S. M.; Reddy, P. S.; Miller, B. G.; Metanis, N.* "Selenolysine: A New Tool for Traceless Isopeptide Bond Formation" *Chem. Eur. J.* (2020), 26, 4952-4957.
9. Ghareeb, H. and Metanis, N.* "Thioredoxin System is a Promising Target for Cancer Drug Development" (2020), *Chem. Eur. J.* 26, 10175-10184.
10. Zhao, Z. and Metanis, N.* "Utilizing Copper-Mediated Deprotection of Selenazolidine for Cyclic Peptides Synthesis" *J. Org. Chem.* (2020), 85, 1731-1739.
11. Zhao, Z. and Metanis, N.* "Copper-mediated selenazolidine deprotection enables one-pot chemical synthesis of challenging proteins" *Angew. Chem. Int. Ed.* (2019), 58, 14610-14614.
12. Weil-Ktorza, O.; Rege, N.; Shalev, D. E.; Shoham, G.; Weiss, M. A.*; and Metanis, N.* "Substitution of an internal disulfide bridge in human insulin by a diselenide enhances its foldability and stability" (2019), *Chem. Eur. J.* 25, 8513-8521; *Selected for cover of the issue; Authors profile highlighted*.