



BIOGRAPHICAL SKETCH

Masha Niv

POSITION TITLE: Full Professor (Tenured), The Institute of Biochemistry, Food and Nutrition, The Robert H Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem. Homepage [\[URL\]](#) LinkedIn [\[URL\]](#) Google+ [\[URL\]](#)

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
Hebrew University, Israel	BSc (cum laude)	06/1994	Chemistry
Hebrew University, Israel	PHD (direct)	02/2001	Theoretical physical chemistry
Keryx Biopharmaceuticals, Jerusalem, Israel	Molecular Modeller	06/2003	Bioinformatics and drug design
Weill Medical College (Cornell University, NY, USA)	Postdoc	08/2005	Computational biomedicine
Weill Medical College (Cornell University, NY, USA)	Instructor	07/2007	Computational biomedicine
Hebrew University, Israel	Lecturer	07/2009	Computational biochemistry
Hebrew University, Israel	Senior lecturer	02/2014	Molecular recognition and chemical senses
Hebrew University, Israel	Associate professor	2014-2021	Molecular recognition and chemical senses
Hebrew University, Israel	Full Professor	current	Molecular recognition and chemical senses

SELECTED POSITIONS AND HONORS

2017- 2021 Vice Dean for Research, The Faculty of Agriculture, Food and Environment, The Hebrew University

2019 – to date Board of Directors Member, Israel Institute for Advanced Studies

2022 – to date Editorial Advisory Board, Journal of Chemical Information and Modeling

2022 – to date Executive Editor, Chemical Senses

2022 – to date Tenure and Promotions committee, The Hebrew University

2020, 2022 (confidential) ERC evaluation panel member

COST actions management committee member or substitute member

(COST actions: [BM1001](#), [CM1207](#), [CA15135](#))

2010 Krill Prize for Excellence in Science from the Wolf Foundation

2011 Women's League for Israel Senior Lectureship in Nutrition

2017-2018 Vigevani visiting professor to Italy

2018-2019 member of the Israeli "Leadership in Academia" program [\[URL\]](#)

2022 member of 8400 HealthTech network [\[URL\]](#)

Co-founder of [GCCR](#) consortium on chemosensory research
Co-founder of [GPCRladies](#) repository of women scientists in the GPCR field
Co-founder of [WISER](#) mentorship network for Israeli female postdocs

RECENT RESEARCH GRANTS (selected)

2012-2015 Israel Ministry of Agriculture, "Chicken bitter taste receptors – gastrointestinal role, ligand repertoire and the effect on feed"
2012-2016 Israel Science Foundation (ISF), "Bitter Taste Perception in Chicken – a computational, molecular, and behavioral study"
2016-2019 Israel Science Foundation (ISF), "Bitter molecules: chemical space, perceptual variation in humans and underlying 3D differences among TAS2R variants"
2016-2019 ISF-NCSF, "Combining Biomimetic Micro/Nano Sensors with Chemoinformatics, Molecular Modeling and Sensory Studies Towards Better Understanding of Taste and Smell Sensation"
2016-2017 (Yissum TTO), "Discovery and characterization of low-calorie sweeteners and sweetness enhancers"
2019-2022 DFG, "Structure-guided discovery of high affinity TAS2R14 ligands"
2019-2022, Israel Ministry of Agriculture "Neutralizing ochratoxin from grape juice and coffee"
2019-2024 Israel Science Foundation (ISF), "Sweetness recognition: studying mechanisms and identifying sweeteners"
2021-2023 ERANET ICT-AGRI-FOOD call and Israel Innovation Authority "Advanced Digital Solutions for Professional Food and Nutrition Catering Service"

MENTORING GRADUATE STUDENTS

19 MSc students (14 graduated), 10 PhD students (4 graduated), 9 postdoctoral fellows, 7 undergraduate (honors, project or paid) students, 5 international visiting students.

MAIN COURSES TAUGHT

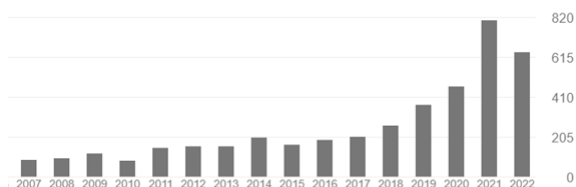
Methodology and lab of Food Evaluation – 3rd year Bachelor's
Introduction to Bioinformatics and Structural Biochemistry – 3rd year Bachelor's
Current topics in GPCRs– MSc, elective, every other year

RECENT and UPCOMING TALKS (selected)

2021 Keynote First Transatlantic ECI conference "Taste receptors and their ligands" (virtual)
2021 ECRO meeting, Lisbon, Portugal "Novel methods for the study of taste" (hybrid)
2022 Gordon Research Conference Computational Chemistry, Castelldefels, Spain
2022 Keynote at European Chemosensory Research Organization (ECRO) Berlin, Germany
2023 Plenary 13th Wartburg Symposium on Flavor Chemistry & Biology

FULL LIST OF PUBLICATIONS [URL](#)

Google Scholar H index = 39



10 selected publications since 2017, listed alphabetically

Asseo, K. and **M. Y. Niv** (2022). "Harnessing Food Product Reviews for Personalizing Sweetness Levels." Foods **11**(13).

Ben Abu, N., D. Harries, H. Voet and **M. Y. Niv** (2018). "The taste of KCl - What a difference a sugar makes." Food Chem **255**: 165-173.

Ben Abu, N., P. E. Mason, H. Klein, N. Dubovski, Y. Ben Shoshan-Galeczki, E. Malach, V. Prazienkova, L. Maletinska, C. Tempura, V. C. Chamorro, J. Cvacka, M. Behrens, **M. Y. Niv**[#] and P. Jungwirth[#] (2021). "Sweet taste of heavy water." Commun Biol **4**(1): 440. #co-corresponding

Ben Shoshan-Galeczki, Y. and **M. Y. Niv** (2020). "Structure-based screening for discovery of sweet compounds." Food Chem **315**: 126286.

Dagan-Wiener, A., A. Di Pizio, I. Nissim, M. S. Bahia, N. Dubovski, E. Margulis and **M. Y. Niv** (2019). "BitterDB: taste ligands and receptors database in 2019." Nucleic Acids Res **47**(D1): D1179-D1185.

Dagan-Wiener, A., I. Nissim, N. Ben Abu, G. Borgonovo, A. Bassoli and **M. Y. Niv** (2017). "Bitter or not? BitterPredict, a tool for predicting taste from chemical structure." Sci Rep **7**(1): 12074.

Dubovski, N., E. Ert[#] and **M. Y. Niv**[#] (2017). "Bitter mouth-rinse affects emotions." Food Quality and Preference **60**: 154-164. #co-corresponding

Israeli, H., O. Degtjarik, F. Fierro, V. Chunilal, A. K. Gill, N. J. Roth, J. Botta, V. Prabakar, Y. Peleg, L. F. Chan, D. Ben-Zvi[#], P. J. McCormick[#], **M. Y. Niv**[#] and M. Shalev-Benami[#] (2021). "Structure reveals the activation mechanism of the MC4 receptor to initiate satiation signaling." Science **372**(6544): 808-814. #co-corresponding

Klein, H., K. Asseo, N. Karni, Y. Benjamini, R. Nir-Paz, M. Muszkat, S. Israel and **M. Y. Niv** (2021). "Onset, duration and unresolved symptoms, including smell and taste changes, in mild COVID-19 infection: a cohort study in Israeli patients." Clin Microbiol Infect.

Margulis, E., Y. Slavutsky, T. Lang, M. Behrens, Y. Benjamini and **M. Y. Niv** (2022). "BitterMatch: recommendation systems for matching molecules with bitter taste receptors." J Cheminform **14**(1): 45.