

# Curriculum vitae et studiorum

**PERSONAL INFORMATION** Georg Mahlkecht

## WORK EXPERIENCE

- 2019- Researcher (Assegno Ricerca “tipologia C-Senior”)  
Consiglio Nazionale delle Ricerche (CNR), Lecce (Italy)
- 2018–2019 Researcher  
Laimburg Research Centre, South Tirol (Italy)
- 2012–2016 Senior Intern  
Weizmann Institute of Science, Rehovot (Israel)
- 2008–2012 Postdoc (Sergio Lombroso Program, 2009)  
Weizmann Institute of Science, Rehovot (Israel)
- 2003–2007 Doctoral Student (DR. RER. NAT., 04.12.2007)  
Technical University Munich, Munich (Germany)
- 2002–2003 Doctoral Student  
Max Planck Institute for Biological Cybernetics, Tübingen (Germany)

## EDUCATION AND TRAINING

- 1996–2002 Magister (MAG.RER.NAT., 03.04.2002)  
University of Salzburg, Salzburg (Austria)

## PERSONAL SKILLS

Mother tongue(s) German

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Italian	C2	C2	C2	C2	C1
English	C2	C2	C2	C2	C2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

Classification: European skills passport

## PUBLICATIONS

Mancini M, Gal H, Gaborit N, Mazzeo L, Romaniello D, Salame TM, Lindzen M, Mahlkecht G, Euka Y, Burton DG, Roth L, Noronha A, Marrocco I, Adreka D, Altstadter RE, Bousquet E, Downward J, Maraver A, Krizhanovsky V and Yarden Y: **An oligoclonal antibody durably overcomes resistance of lung cancer to third-generation EGFR inhibitors.** EMBO Mol Med 2018, 10(2):294-308.

Mahlkecht G, Maron R, Schechter B, Yarden Y, Sela M: **Multimerization of ERBB2/HER2 specific aptamer leads to improved receptor binding.** Biochem Biophys Res Commun 2015, 465(2):218-24.

Maron R, Schechter B, Mancini M, Mahlkecht G, Yarden Y, Sela M: **Inhibition of pancreatic carcinoma by homo- and heterocombinations of antibodies against EGF-receptor and its kin HER2/ErbB-2.** Proc Natl Acad Sci U S A. 2013, 110(38):15389-94.

Mahlkecht G, Maron R, Mancini M, Schechter B, Sela M, Yarden Y: **Aptamer to ErbB-2/HER2 enhances degradation of the target and inhibits tumorigenic growth.** Proc Natl Acad Sci USA 2013, 110(20):8170-5.

Emde A, Mahlkecht G, Maslak K, Ribba B, Sela M, Possinger K, Yarden Y: **Simultaneous Inhibition of Estrogen Receptor and the HER2 Pathway in Breast Cancer: Effects of HER2 Abundance.** Transl Oncol 2011, 4(5): 293-300.

Witsch EJ, Mahlkecht G, Wakim J, Sertchook R, Bublil E, Yarden Y, Sela M: **Generation and characterization of peptide mimotopes specific for anti ErbB-2 monoclonal antibodies.** Int Immunol 2011, 23(6): 391-403.

Mahlkecht G, Hock B, Kramer K: **Development of a monoclonal antibody for the detection of a potentially allergenic epitope in soy.** Analytical letters 2010, 43: 119-132.

Sommer A., Mahlkecht G., Obermeyer G: **Measuring the osmotic water permeability of the plant protoplast plasma membrane: implication of the nonosmotic volume.** J. Membr. Biol. 2007, 215 (2-3): 111-23

## COMMENTARIES ON PUBLISHED WORK

Distillery: Therapeutics-Cancer. HER2 (EGFR2; ErbB2; neu) SciBX 6(20); DOI: 10.1038/scbix.2013.489

Hirao I and Kimoto M: F1000Prime Recommendation of [Mahlkecht G et al., Proc Natl Acad Sci USA 2013, 110(20): 8170-5]. In F1000Prime, 03 Oct 2013; DOI: 10.3410/f.718122707.793484499.

Distillery: Therapeutics-Cancer. Epidermal growth factor receptor (EGFR); HER2 EGFR2; ErbB2; neu) SciBX 6(38); DOI: 10.1038/scbix.2013.1063

## BOOK CHAPTERS

Mahlkecht G, Sela M, Yarden Y: **Aptamer Targeting the ERBB2 Receptor Tyrosine Kinase for Applications in Tumor Therapy.** In: Gene Therapy of Solid Cancers. Wolfgang Walther, Ulrike Stein (Editors) 2015;1317:3-15. DOI: 10.1007/978-1-4939-2727-2\_1

Mahlkecht G: **Antibodies as Bioanalytical Tools in Food Analysis.** In: **Antibodies Applications and New Developments.** Eline P. Meulenber (Editor). ebook. DOI: 10.2174/97816080526461120101

Köstler WJ, Mahlkecht G, Yarden Y: **Resistenzmechanismen gegenüber anti-ErbB Therapien und deren Überwindung.** In: Roth SL (Editor) Klinische Onkologie 2011/2012. (1st edition), Düsseldorf Univ. Press. (DUP), Düsseldorf, Germany. <http://d-nb.info/1011152517>, pp132-140.

Kramer K, Mahlknecht G, Hock B: **Molecular antibody technologies for biosensors and bioanalytics.**  
**In: Handbook of Biosensors and Biochips.** R.S. Marks, D. Cullen, C. Lowe, H. Weetall und I. Karube  
(Editor). John Wiley & Sons, West Sussex, 2007 ISBN: 10.1002/9780470061565.hbb007.  
DOI: 10.1002/9780470061565.hbb00

## TALKS AT CONFERENCES AND WORKSHOPS

Aptamers 2015, 2nd Oxford Symposium on Aptamers, Oxford, UK 31 March-01 April 2015

Nano-scaled arrangements of proteins, aptamers, and other nucleic acid structures-and their potential applications, EC COST Thematic Workshop-part of the COST action "Bio-inspired nanotechnologies: from concepts to applications" (TD 1003, <http://www.bioinspired-nano.eu/en/>), Helmholtz Centre for Environmental Research-UFZ, Leipzig, Germany, 8-9 October 2013

Aptamers in Medicine and Perspectives, Naples, 4-5 October 2013

Several talks at EU project meetings "Development of capacitance based immunodetection analyzer for the assay of genetically modified organisms in food".

[http://cordis.europa.eu/data/PROJ\\_FP5/ACTIONeqDndSESSIONeq112482005919ndDOceq614ndTBL eqEN\\_PROJ.htm](http://cordis.europa.eu/data/PROJ_FP5/ACTIONeqDndSESSIONeq112482005919ndDOceq614ndTBL eqEN_PROJ.htm)

## MEETING ABSTRACTS

Aptamer to ErbB-2/HER2 enhances degradation of the target and inhibits tumorigenic growth.  
"Aptamers in Medicine and Perspectives", Naples, Italy, 4-5 October 2013

Aptamer to ErbB-2/HER2 enhances degradation of the target and inhibits tumorigenic growth.  
"Nano-scaled arrangements of proteins, aptamers, and other nucleic acid structures-and their potential applications, EC COST Thematic Workshop-part of the COST action "Bio-inspired nanotechnologies: from concepts to applications" (TD 1003, <http://www.bioinspired-nano.eu/en/>), Helmholtz Centre for Environmental Research-UFZ, Leipzig, Germany, 8-9 October 2013

Leopold DA, Bondar IV, Mahlkecht G, Logothetis NK: Prototype-referenced encoding of faces in the monkey inferotemporal cortex. 33<sup>rd</sup> Annual Meeting of the Society of Neuroscience, New Orleans, USA, 2003

Mahlkecht G, Schober R, Aschl J, Gehwolf R, Obermeyer G: Aquaporin-mediated water transport in lily pollen. 12<sup>th</sup> Int Workshop on Plant Membrane Biology, Madison, USA, 2001

## **PATENTS**

**Title:** Aptamers, multimeric aptamers and uses thereof

**Patent number:** 9926564

**Type:** Grant

**Filed:** Oct 27, 2013

**Date of Patent:** Mar 27, 2018

**Patent Publication Number:** [20150307883](#)

**Assignee:** [Yeda Research and Development Co. Ltd.](#) (Rehovot)

**Inventors:** Yosef YARDEN, Michael SELA, Georg MAHLKNECHT, Ruth MARON, Bilha SCHECHTER

**Primary Examiner:** [Sean McGarry](#)

**Application Number:** 14/439,248

## **PEER REVIEW ACTIVITY**

Journal of Cancer and Clinical Oncology

BMC Cancer

Analyst

Analytical letter