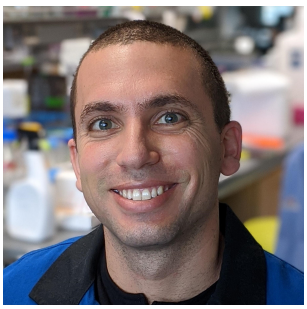
Date: 05-02-2026

R E S U M E

February-2026

1. PERSONAL DETAILS



Full Name:	Nir Hananya
Identity No:	200657542
Date of birth:	16/3/1988
Place of birth:	Israel
Marital status:	married
Phone numbers:	052-5515912
E-mail:	nhananya@technion.ac.il
Orcid Account:	0000-0002-9480-3183

2. ACADEMIC DEGREES

2019	PhD , School of Chemistry, Tel-Aviv University, Tel-Aviv, Israel Doron Shabat
2014	BSc (Magna Cum laude), Faculty of Life Sciences, Tel-Aviv University, Tel-Aviv, Israel
2014	BSc (Summa Cum laude), School of Chemistry, Tel-Aviv University, Tel-Aviv, Israel

3. ACADEMIC APPOINTMENTS

2023 - Present	Assistant Professor, Faculty of Chemistry, Technion-Israel Institute of Technology, Haifa, Israel
2019 - 2023	Postdoctoral fellow, Department of Chemistry, Princeton University ,USA

4. PROFESSIONAL EXPERIENCE (OUTSIDE ACADEMIA)

5. RESEARCH INTERESTS (BRIEFLY)

- Development of photochemical methods to manipulate and investigate cell biology.

- Development of Chemical Biology tools for studying chromatin and epigenetics.

6. TEACHING EXPERIENCE

2014 - 2019	Organic Chemistry , Tutor , Chemistry undergraduate students , Tel-Aviv University, Tel-Aviv
2024 - Present	Selected Topics in Chemical Biology , Lecturer , Graduate Students , Technion-Israel Institute of Technology, Haifa
2025 - Present	Principles of Chemistry B , Lecturer , Chemistry undergraduate students , Technion-Israel Institute of Technology, Haifa

7. ACTIVITIES

8. DEPARTMENTAL ACTIVITIES

2024 - Present	Organizer of the departmental seminar , Technion-Israel Institute of Technology, Haifa

9. PUBLIC PROFESSIONAL ACTIVITIES

10. MEMBERSHIP IN PROFESSIONAL SOCIETIES

- International Chemical Biology Society
- Israel Chemical Society

11. FELLOWSHIPS, AWARDS AND HONORS

2015	Excellent Lecturer , Faculty of Exact Sciences , Tel-Aviv University, Tel-Aviv
2018	Sackler scholarship for excellent Ph.D. students , Faculty of Exact Sciences , Tel-Aviv University, Tel-Aviv
2021-2024	Damon Runyon postdoctoral fellowship
2024	Alon Fellowship

12. GRADUATE STUDENTS

Completed PhD theses

Completed MSc Theses

PhD Theses in Progress

2028	Yuval Gilad-Barzilay , Time-resolved photo-proximity labeling for mapping dynamic protein-protein interactions ,(Nir Hananya)

2029 Nurit Samuel , Designer Chromatin in Living Cells - A chemical biology approach for studying histone post-translational modifications ,(Nir Hananya)

MSc Theses in Progress

2027 Gal Lipson , On-protein radical formation via pyridinium salt–powered photoredox chemistry for precision protein editing ,(Nir Hananya)

2027 Hadas Israel , Studying histone modification readers via designer chromatin in living cells ,(Nir Hananya)

2027 Hagar Daniels-Ozeri , Developing a chromatin editing platform for long-term tracking of chromatin epigenetic states ,(Nir Hananya)

2027 Mernan Taha , Ultra-fast photoproximity labeling for studying protein-protein interaction dynamics ,(Nir Hananya)

13. SPONSORED LONG-TERM VISITORS AND POST-DOCTORAL ASSOCIATES

14. RESEARCH GRANTS

Competitive

2024 - 2029 ISF, Time-resolved photo-proximity labeling for mapping dynamic protein-protein interactions, 1520000 NIS , Nir Hananya (PI)

Industrial and other sources

2025 - 2027 The Israel Cancer Association, Photoredox immunotherapy: a novel photodynamic approach for targeted cancer therapy, 180000, NIS , Nir Hananya (PI)

15. PUBLICATIONS

15.1 Theses

Hananya N (2019), "Bright Chemiluminescent Phenoxy-Dioxetanes for Bioimaging", Shabat D, Tel Aviv University.

15.2 Refereed papers in professional journals

1. **Hananya, N.**, Eldar Boock, A., Bauer, C. R., Satchi-Fainaro, R., Shabat, D. Remarkable Enhancement of Chemiluminescent Signal by Dioxetane–Fluorophore Conjugates: Turn-ON Chemiluminescence Probes with Color Modulation for Sensing and Imaging. J. Am. Chem. Soc. 138, 13438-13446 (2016).

2. Green, O., Eilon, T, **Hananya, N.**,Gutkin, S., Bauer, C. R., Shabat, D. Opening A Gateway for Chemiluminescence Cell Imaging: Distinctive Methodology for Design of Bright Chemiluminescent Dioxetane Probes. ACS Cent. Sci. 3, 349–358 (2017).
3. **Hananya, N.**, Green, O., Blau, R., Satchi-Fainaro, R., Shabat, D. A Highly Efficient Chemiluminescence Probe for the Detection of Singlet Oxygen in Living Cells. Angew. Chem. Int. Edit. 56, 11793–11796 (2017).
4. **Hananya, N.**, Reid, J. P., Green, O., Sigman, M. S., Shabat, D. Rapid Chemiexcitation of Phenoxy-Dioxetane Luminophores Yields Ultrasensitive Chemiluminescence Assays. Chem. Sci. 10, 1380-1385 (2019).
5. Son, S., Won, M., Green, O., **Hananya, N.**, Sharma, A., Jeon, Y., Kwak, J.H., Sessler, J.L., Shabat, D., Kim, J.S. Chemiluminescent Probe for the In Vitro and In Vivo Imaging of Cancers Over-Expressing NQO1. Angew. Chem. Int. Edit. 58, 1739-1743 (2019).
6. Miranda-Apodaca, J., **Hananya, N.**, Velázquez-Campoy, A., Shabat. D., Arellano, J.B. Emissive Enhancement of the Singlet Oxygen Chemiluminescence Probe after Binding to Bovine Serum Albumin. Molecules 24, 2422 (2019).
7. **Hananya, N.**, Press, O., Das, A., Scomparin, A., Satchi-Fainaro, R., Sagi, I., Shabat, D. Persistent Chemiluminescent Glow of Phenoxy-Dioxetane Luminophore Enables Unique CRET-Based Detection of Proteases. Chem. Eur. J. 25, 14679-14687 (2019).
8. Ye, S., **Hananya, N.**, Green, O., Chen, H., Zhao, A. Q., Shen, J., Shabat, D., Yang, D. A Highly Selective and Sensitive Chemiluminescent Probe for Real?Time Monitoring of Hydrogen Peroxide in Cells and Animals. Angew. Chem. Int. Edit. 59, 14326-14330 (2020).
9. **Hananya, N.**, Daley, S.K., Bagert, J.D., Muir, T.W. Synthesis of ADP-Ribosylated Histones Reveals Site-Specific Impacts on Chromatin Structure and Function. J. Am. Chem. Soc. 143, 10847-10852 (2021).
10. Gnaim, S., Gholap, S. P., Ge, L., Das, S., Gutkin, S., Green, O., Shelef, O., **Hananya, N.**, Baran, P. S., Shabat, D. Modular Access to Diverse Chemiluminescent Dioxetane Luminophores through Convergent Synthesis. Angew. Chem. Int. Edit. 61, e202202187 (2022).
11. **Hananya, N.**, Ye, X.J., Koren, S., Muir, T.W. A genetically encoded photoproximity labeling approach for mapping protein territories. Proc. Natl. Acad. Sci. U. S. A. 120, e2219339120 (2023).

Accepted (or in press) papers

Submitted papers

Review papers

1. **Hananya, N.**, Shabat, D. A Glowing Trajectory between Bio- and Chemi-Luminescence: From Luciferin-Based Probes to Triggerable Dioxetanes. Angew. Chem. Int. Edit. 56, 16454 – 16463 (2017).
2. **Hananya, N.**, Shabat, D. Recent Advances and Challenges in Luminescent Imaging: Bright Outlook for Chemiluminescence of Dioxetanes in Water. ACS Cent. Sci. 5, 949-959 (2019).
3. **Hananya, N.**, Koren, S., Muir, T.W. Interrogating epigenetic mechanisms with chemically customized chromatin. Nat. Rev. Genet. 25, 255-271 (2024).

4. Ben-Oz, B.M., **Hananya, N**. Emerging chemistries in proximity labeling. Biorg. Med. Chem. 129, 118339 (2025).

15.3 Books

Monographs and textbooks

Edited Books

15.4 Book chapters

Hananya, N., Green, O., Gutiérrez-Fernández, I., Shabat, D., Arellano, J.B. Singlet Oxygen Detection by Chemiluminescence Probes in Living Cells. In: Corpas, F.J., Palma, J.M. (eds) ROS Signaling in Plants. Methods in Molecular Biology, vol 2798. Humana, New York, NY.

15.5 Refereed papers in conference proceedings

15.6 Patents (granted)

1. Shabat D, Satchi-Fainaro R, **Hananya N**, Green O, Eilon T. Chemiluminescent Probes for Diagnostics and In Vivo Imaging. WO 2017/130191 (A1).
2. Ihssen J, Spitz U, Shabat D, Green O, **Hananya N**. Long Wavelength Emitting Chemiluminescent Probes. WO 2019/224339 (A1).
3. Shabat D, Roth-Konforti, ME, **Hananya N**, Green O, Spitz U, Wick L, Ihssen J, Vorberg R, Cribiu R, Babjakova Z, Yao C. Dioxetane Compounds and Their Use for the Detection of Microorganisms. WO 2019/224338 (A1)

15.7 Research reports and other publications

16. CONFERENCES

16.1 Plenary, keynote or invited talks

International

National

16.2 Contributed Talks and Posters

International Oral

1. **Hananya N**, Synthesis of ADP-ribosylated histones reveals site-specific impacts on chromatin structure and function, The PARP Family and ADP-ribosylation meeting, USA. 04-2022 .

2. **Hananya N**, A genetically encoded photoproximity labeling approach for mapping protein territories, EMBO Workshop Chemical biology 2024, Germany. 09-2024 .

International Poster

1. **Hananya N**, Green O, Gnaim S., Unlocking the Potential of Chemiluminescence Imaging by The Design of Bright Chemiluminescent Dioxetane Probes, Gordon Research Conference on Bioanalytical Sensors, USA. 06-2018 .

2. **Hananya N**, A genetically encoded photoproximity labeling approach for mapping protein territories, Gordon Research Conference Bioorganic Chemistry, USA. 06-2024 .

3. **Hananya N**, The roles of histone ADP-ribosylation in the DNA damage response, Gordon Research Conference Chromatin Structure and Function, USA. 07-2024 .

National Oral

1. **Hananya N**, Turn-on chemiluminescence probes with color modulation, 10th Annual Conference of the ICRS, Israel. 09-2016 .

2. **Hananya N**, Unlocking the potential of chemiluminescence imaging, The Lewiner Symposium on Chemical Biology, Israel. 01-2019 .

3. **Hananya N**, A genetically encoded photo-proximity labeling approach for mapping protein-protein interactions, 18th Annual Meeting of the MCS-ICS, Israel. 07-2022 .

National Poster

16.3 Participation in organizing conferences

1. 21st Annual Meeting of the Medicinal Chemistry Section of the Israel Chemical Society, Israel, 08-2025, Conference Organizer .

17. NOTES