Dr. NOA NOVERSHTERN

A. PERSONAL DETAILS

- Date of birth: 10.6.1977
- Married + 4
- Born in Israel, Citizenship: Israeli
- Mailing address:
  Molecular Genetics Department, Weizmann Institute of Science, Rehovot, Israel, 7610001
- **Contact information:** Ph: +972-8-9342314, E-mail: noa.novershtern@weizmann.ac.il,
  Website: http://hannalabweb.weizmann.ac.il/ ; Orcid ID 0000-0002-2244-6877

B. EDUCATION

2011-2013 **Weizmann Institute of Science, Rehovot, Israel**

- **Post-Doctoral Fellow**
- Laboratory for Pluripotent Cell Studies
- Principle Investigator: Dr. Jacob Hanna

2004 - 2011 **Hebrew University, Jerusalem, Israel**

- **PhD, Computer science**
- Major in computational biology and probabilistic graphical models.
- Supervisor: Prof. Nir Friedman
- Thesis title: "Transcription Regulation Models and Their Application to Human Disease Research"
- Invited twice to **The Harvard Center for Genomic Research** in order to conduct scientific collaboration with researchers in the center.
- Close clinical collaboration with Pittsburgh University Medical Center.
- Assisted university public relations by repeated lectures for donors and media.

2006 - 2008 **Broad Institute, Cambridge, MA**

- Supervisor: Prof. Aviv Regev.
- Visiting student at the Genome Evolution Group.
- Close scientific collaboration with the Broad Institute's Imaging Platform and the Dana Farber Cancer Institute.

2005 - 2006 **The Wellcome Trust Sanger Institute, Cambridge, UK**

- Co-supervisor: Prof. Richard Durbin.
- Visiting student in the Genome Informatics Group.

2002 - 2004 **Hebrew University, Jerusalem, Israel**

- **M.Sc., Computer Science.**
- Major in probabilistic graphical models and computational biology, as part of the Bioinformatics Group in the Machine Learning Laboratory.
- Supervisor: Prof. Nir Friedman.
- Thesis title: "Computational Aspects in Gene Expression Analysis"
- Close clinical collaboration with the Hadassah Research Hospital. Appeared on the Hebrew University

President's Report for the years 2003-2004.

1999 - 2002 **Hebrew University, Jerusalem, Israel**

- **B.Sc.**, **Integrated Program in Computer Science and Life Science (CS-LS)**, focusing on computational biology.
- Appeared in Israeli media to promote the CS-LS integrated program, then the program with the **most competitive admission requirements** in the Hebrew University.

C. EMPLOYMENT HISTORY

2019- **Weizmann Institute of Science, Rehovot, Israel**

- **Associate Staff Scientist (with Tenure)**
- Laboratory for Pluripotent Cell Studies
- Principle Investigator: Dr. Jacob Hanna

2013-2019 **Weizmann Institute of Science, Rehovot, Israel**

- **Assistant Staff Scientist**
- Laboratory for Pluripotent Cell Studies
- Principle Investigator: Dr. Jacob Hanna

2005 **Hebrew University, Jerusalem, Israel**

- **Teaching the course** "Workshop in Computational Bio-Skills," which includes teaching Perl, Shell and PHP.

2004 - 2005 **Israel's Prime Minister Office**

- Served as an **expert computational consultant**.
- Specialized in Probabilistic Graphical Models.

2002 - 2005 **Hebrew University, Jerusalem, Israel**

- **Teaching assistant** in courses in the School of Computer Science and Engineering, including "Introduction to Data Bases" and "Computational Bio-Skills."

1998 - 1999 **TARO pharmaceutical industries Ltd., Herzliya, Israel**

- Administrator in TARO's main world wide pharmaceutical R&D facility

MILITARY SERVICE

1995-1998 "**HAMAN TALPIOT**" Project (8200, Military Intelligence)

- Served in an officer position (as anon-commissioned officer), fulfilling a key role in a strategic intelligence capacity.
- Led cross-professional intelligence teams in an intensive, highly pressured environment.

1998

- Received a special award as the unit's **Outstanding Solider**

D. OTHER APPOINTMENTS

2017- **Davidson Institute of Science Education, Rehovot, Israel**

- **Guiding research project** of gifted high school student in "Alpha" program

2014-

- **Consultant for "Chromatin and RNA Gene Regulation" i-Core**
  Established and maintains the i-Core website

2013- **Department of Science Teaching, Weizmann Institute, Rehovot, Israel**

- **Teaching bioinformatics classes** in seminars for biology teachers

2014 **Tel Aviv University, Tel-Aviv, Israel**

- **Teaching bioinformatics class** for students in NYU-Tel Aviv program

2005 **Hebrew University, Jerusalem, Israel**

- **Teaching the course** "Workshop in Computational Bio-Skills"

E. INTERNATIONAL RECOGNITION

PRIZES AND AWARDS

2021

- **Scientific Council prize** for outstanding staff scientist

2012

- The Helena Rubinstein **Postdoctoral Fellowship** in Biomedical Sciences and Cancer Research

2011

- Weizmann Institute Dean of Faculty Fellowship **for outstanding post-doctorate fellows**
- Travel Fellowship, the Sudarski Center for Computational Biology
- Travel Fellowship, International Society for Computational Biology

2010

- **Sivarsten Prize for Research of Pediatric Cancer**, the highest monetary sum award for scientific research in the Hebrew University.
- Best Poster Award, Hebrew University Faculty Day.

2006 - 2009

- Dalia and Dan Maydan Fellowship, Maydan Fellowship Endowment; **Awarded for three consecutive years.**

2004 - 2005

- Student Fellowship, Leibniz Center for Research in Computer Science.

2003

- Wolf Fellowship for Graduate Students, Hebrew University.
- Travel award, the Sudarski Center for Computational Biology.

REVIEWING ACTIVITIES

2012-

- **Scientific Reviewer for granting agencies**, including BBSRC (UK), Israel Science Foundation (ISF), Broad Institute, FWO (Belgium).

2011-

Scientific Reviewer for journals, including PNAS, PLOS ONE, STAR-protocols, Cell Transplantation, Bioinformatics, The Journal of Physiology, Cellular and Molecular Life Science, Tissue and Cell, The Anatomical Record and many others.

TALKS IN INTERNATIONAL MEETINGS

INVITED TALKS

2023
"From Naïve Stem Cells to Ex-Utero Embryo Models"
56th Society for the Study of Reproduction Annual Conference, Ottawa, Canada

2023
"Synthetic Ex Utero Embryogenesis: from Naive Pluripotent Stem Cells to Advanced Whole Embryoids"
FISEB Conference (Ilanit), Eilat, Israel

2018
"High Resolution Mapping of Deterministic iPSC Reprogramming to Murine Ground State Pluripotency"
11th Annual Stem Cell International Meeting, Guangzhou, China

OTHER TALKS

2019
"Compensation of m6A Readers in Mouse ESCs"
RNA & Chromatin Gene Regulation ICore meeting, Binyamina, Israel

2016
"High Resolution Mapping of Deterministic iPSC Reprogramming to Murine Ground State Pluripotency"
5th Cambridge Stem Cell International Symposium, Cambridge, UK

2013
"Tweaking the Chromatin to Deterministic Reprogramming"
Broad-ISF Cell Circuits Symposium, Jerusalem, Israel

2012
"Mechanisms of Pluripotency Induction and Maintenance"
The Helmsley Stem Cell Symposium, Weizmann Institute, Israel

2011
"Physical Module Network An Integrative Approach for Reconstructing Transcription Regulation"
International Society for Computational Biology (ISMB/ECCB), Vienna, Austria

2006
"Stochastic Integrative Modeling of Transcription Regulation"
Neural Information Processing Systems (NIPS), Computational Biology Meeting, Vancouver, Canada

2003
"Gene Expression Patterns in Blood Cells Classify Post-Traumatic Stress Disorder among Trauma Survivors"
Bertinoro Computational Biology Meeting, Bertinoro, Italy

RECENT POSTER PRESENTATIONS

2017
"The Epigenetics of Cellular Reprogramming"
FISEB Conference (Ilanit), Eilat, Israel

2017
"The Epigenetics of Cellular Reprogramming"
Broad-ISF Cell Circuits Symposium, Jerusalem, Israel

2015
"Mechanisms of Pluripotency Induction and Maintenance"
Stem Cell Epigenetics Symposia, Sitges, Spain

2015
"Mechanisms of Pluripotency Induction and Maintenance"
Broad-ISF Cell Circuits Symposium, Jerusalem, Israel

2014
"Mechanisms of Pluripotency Induction and Maintenance"
ISSCR Global Controls in Stem Cells, Singapore

2014
"The Role of m6A RNA Modification in Early Development "
FISEB Conference (Ilanit), Eilat, Israel

2014
"The Role of m6A RNA Modification in Early Development "
Broad-ISF Cell Circuits Symposium, Cambridge, MA

2012
"The H3K27 Demethylase Utx Facilitates Epigenetic Reprogramming to Pluripotency"
ISSCR 10th Annual Meeting, Yokohama, Japan

F. SCIENTIFIC PRODUCTIVITY

GRANTS

2022-2025
- MBZUAI-WIS Research project grant

2020-2024
- Israel Science Foundation (ISF)- personal Grant 1220/20

2017-2019

- Israel Science Foundation (ISF)- personal Grant 355/17

2016-2017
- Israel Science Foundation (ISF)- INCPM Grant 2291/16

2014-2018
- Israel Science Foundation Legacy Biomed Grant 107/14

COLLABORATORS

Current
- Prof. Frederik Lanner, Karolinska Institute, Sweden
- Dr. Sophie Petropoulos, Universite de Montreal
- Dr. Yonatan Stelzer, Weizmann Institute of Science, Rehovot
- Dr. Hisham Cholakkal, MBZUAI, Abu-Dhabi
- Dr. Fahad Khan, MBZUAI, Abu-Dhabi
- Dr. Salman Khan, MBZUAI, Abu-Dhabi

Past
- Dr. Noam Stern-Ginossar, Weizmann Institute of Science, Rehovot
- Dr. Shraga Schwartz, Weizmann Institute of Science, Rehovot
- Dr. Igor Ulitzky, Weizmann Institute of Science, Rehovot
- Dr. Ido Amit, Weizmann Institute of Science, Rehovot
- Prof. Yitzhak Pilpel, Weizmann Institute of Science, Rehovot
- Dr. Yifat Merbl, Weizmann Institute of Science, Rehovot
- Prof. Amos Tanay, Weizmann Institute of Science, Rehovot
- Prof. William Greenleaf, Stanford University, Stanford, CA
- Prof. Toshihiro Shioda, Mass General/Harvard Medical School, MA
- Prof. Ronnen Segman, Hadassah Medical Center, Jerusalem
- Prof. Naftali Kaminski, Yale School of Medicine, New-Haven, CT
- Prof. Ben L. Ebert, Dana Farber/Harvard, Boston, MA
- Prof. Aviv Regev, Broad Institute, Cambridge, MA
- Prof. Gidi Rechavi, Sheba Medical Center, Tel-Aviv
- Dr. Erez Levanon, Bar Ilan University, Ramat-Gan

G. PATENTS & COMERCIAL PRODUCTS

2014
- **"Isolated Naïve Pluripotent Stem Cells and Methods of Generating Same",** Filed by Weizmann Institute of Science, YEDA.

- **"Media For Culturing Naïve Pluripotent Stem Cells".** Filed by Weizmann Institute of Science, YEDA (Provisional)

- **RSeT™**, the first defined human naïve pluripotency growth media commercialized by Stem Cell Technologies INC. (Vancouver, Canada)

2004

- **"Compositions and methods for diagnosing and treating post traumatic stress disorder",** filed by The Hebrew University, Yissum.

H. LANGUAGES

Hebrew: Reading (3), Writing (3), Speaking (3)
English: Reading (3), Writing (3), Speaking (3)