

## **Aaron Ciechanover:**

Aaron Ciechanover was born in Haifa, Israel in 1947. He is currently a Distinguished Research Professor in the Faculty of medicine at the Technion - Israel Institute of Technology in Haifa, Israel. He received his M.Sc. (1971) and M.D. (1973) from the Hebrew University in Jerusalem. He then completed his national service (1973-1976) as military physician, and continued his studies to obtain a doctorate in biological sciences in the Faculty of Medicine in the Technion (D.Sc.; 1982). There, as a graduate student with Dr. Avram Hershko and in collaboration with Dr. Irwin A. Rose from the Fox Chase Cancer Center in Philadelphia, USA, they discovered that covalent attachment of ubiquitin to a target protein signals it for degradation. They deciphered the mechanism of conjugation, described the general proteolytic functions of the system, and proposed a model according to which this modification serves as a recognition signal for a specific downstream protease. As a post- doctoral fellow with Dr. Harvey Lodish at the M.I.T., he continued his studies on the ubiquitin system and made additional important discoveries. Along the years it has become clear that ubiquitin-mediated proteolysis plays major roles in numerous cellular processes, and aberrations in the system underlie the pathogenetic mechanisms of many diseases, among them certain malignancies and neurodegenerative disorders. Consequently, the system has become an important platform for drug development. Among the numerous prizes Ciechanover received are the 2000 Albert Lasker Award, the 2002 EMET Prize, the 2003 Israel Prize, and the 2004 Nobel Prize (Chemistry; shared with Drs. Hershko and Rose). Among many academies, Ciechanover is member of the Israeli National Academy of Sciences and Humanities, The European Molecular Biology Organization (EMBO), the American Academy of Arts and Sciences (Foreign Fellow), the American Philosophical Society, the National Academies of Sciences (NAS) and Medicine (NAM) of the USA (Foreign Associate), the Pontifical Academy of Sciences at the Vatican, the Chinese Academy of Sciences (CAS; Foreign Member), the Russian Academy of Sciences (Foreign Member), and the German Academy of Sciences (Leopoldina).

## CURRICULUM VITAE

**NAME:** Aaron J. Ciechanover

**DATE OF BIRTH:** October 1, 1947

**PLACE OF BIRTH:** Haifa, Israel

**ADDRESS:** Vascular and Cancer Biology Research Center  
The Rappaport Faculty of Medicine and Research Institute,  
Technion-Israel Institute of Technology,  
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[aaroncie@technion.ac.il](mailto:aaroncie@technion.ac.il)

**Mrs. Meirav Franks, Research Coordinator:**  
[meiravf@technion.ac.il](mailto:meiravf@technion.ac.il)

## **EDUCATION:**

### **DEGREES:**

1970	M.Sc.:	Medical Sciences. Summa Cum Laude. Faculty of Life Sciences and the Department of Biochemistry, "Hadassah" and the Hebrew University School of Medicine, Jerusalem, Israel.
1974	M.D.:	"Hadassah" and the Hebrew University School of Medicine, Jerusalem, Israel.
1981	D.Sc.:	Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.

### **CLINICAL TRAINING:**

- 1973-1974      **Internship.** "Rambam" University Medical Center, and the Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.
- 1974-1979      **Partial training.** Department of Surgery "B", "Rambam" University Medical Center and the Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.

### **ACADEMIC APPOINTMENTS (Technion):**

- 1977-1979      **Research Fellow.** Department of Biochemistry, Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.
- 1979-1981      **Lecturer.** Department of Biochemistry, Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.
- 1984-1987      **Senior Lecturer (with tenure).** Department of Biochemistry, Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.
- 1987-1992      **Associate Professor.** Department of Biochemistry, Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.
- 1992-            **Full Professor.** Department of Biochemistry, Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.
- 2002-            **Distinguished Research Professor.**  
Technion-Israel Institute of Technology, Haifa, Israel.

### **ACADEMIC APPOINTMENTS (Foreign Universities):**

- 2011-2014      Adjunct Professor and Co-Director (along with Professor Guigen Li).  
The Institute for Chemistry and Biomedical Studies (ICBS),  
Nanjing University, Nanjing, China.

### **ADMINISTRATIVE APPOINTMENTS:**

- 1993-2000      **Director.** The Rappaport Family Institute for Research in the Medical Sciences. Technion-Israel Institute of technology, Haifa, Israel.
- 2004-2009      **Founder and Director.** The Lorry Lokey Interdisciplinary Center for Life Sciences and Engineering. Technion-Israel Institute of Technology, Haifa, Israel
- 2015-            **Vice Chancellor.** Guandong-Technion-Israel Institute of Technology (GTIIT), Shantou, Guandong Province, China
- 2015-            **Chairman of the Board.** The Rappaport Family Institute for Medical Sciences, Faculty of Medicine, Technion-Israel Institute of Technology.
- 2014-            **Founder and Co-Director** (along with Professor Ze'ev Ronai).  
Technion Integrated Cancer Center (TICC).  
Technion-Israel Institute of technology, Haifa, Israel.

## **VISITING APPOINTMENTS:**

- 1978, 1979  
1980, 1981 **Visiting Scientist.** The Institute for Cancer Research, The Fox Chase Cancer Center, Philadelphia, Pennsylvania, USA (Dr. Irwin A. Rose's laboratory).
- 1981-1984 **Postdoctoral Fellow.** Department of Biology, Massachusetts Institute of Technology (M.I.T.) and The Whitehead Institute for Biomedical Research, Cambridge, Massachusetts, USA (Dr. Harvey F. Lodish's laboratory).
- 1985, 1986 **Visiting Professor.** The Dana Farber Cancer Institute and Harvard Medical School, Boston, Massachusetts, USA (Dr. Alan L. Schwartz's laboratory).
- 1987,  
1990, 1991, 1992  
1993, 1994, 1995  
1996, 1997, 1998  
1999, 2001  
1988-1989 **Visiting Professor.** Division of Hematology-Oncology, Department of Pediatrics, Children's Hospital, Washington University School of Medicine, St. Louis, Missouri, USA. (Dr. Alan L. Schwartz's laboratory).
- American Cancer Society Eleanor Roosevelt Memorial Fellow.**
- Visiting Professor.** Division of Hematology-Oncology, Department of Pediatrics, Children's Hospital, Washington University School of Medicine, St. Louis, Missouri, USA. (Dr. Alan L. Schwartz's laboratory).
- 2000 **Visiting Professor.** University of Kyoto School of Medicine (within the frame of the JSPS – Japan Society for Promotion of Science – Young Scientist Award (Dr. Kazuhiro Iwai's Laboratory).
- 2002, 2003 **Visiting Adjunct Professor.** Northwestern University School of Medicine, Chicago, Illinois, USA. (Department of Medicine and Division of Pulmonary Critical care: Dr. Jacob J. Sznajder's Laboratory).
- 2003, 2005,  
2007, 2009 **Visiting Professor.** STINT Fellow. Microbiology and Tumor Biology Center (MTC), and the Department of Cell and Molecular Biology (CMB). The Karolinska Institute, Stockholm, Sweden. (Laboratory of Dr. Maria Masucci).
- 2002, 2003-2004,  
2005, 2016 **Visiting Professor** (within the frame of the JSPS – Japan Society for Promotion of Science – Eminent Scientist Award). City University of Osaka and Kyoto Universities Schools of Medicine (Dr. Kazuhiro Iwai's Laboratory).
- 2004 **Visiting Professor.** Rockefeller University, New York, NY, USA (Dr. Hermann Steller's laboratory).
- 2007- **Distinguished Visiting Research Professor.** National Cheng Kung University (NCKU), Tainan, Taiwan.
- 2007- **Member.** The Institute for Advanced Studies, Honk Kong University of Science and Technology (HKUST)
- 2013-2014 **Extraordinary Professor.** The "TEFAF Oncology Chair". School of Oncology and Developmental Biology, Faculty of Health, Medicine, and Life Sciences, Maastricht University, Maastricht, The Netherlands.
- 2011- **Co-director.** The Institute for Chemical and BioMedical Sciences (ICBMS), Nanjing University, Nanjing, P.R. China
- 2014- **Co-Director** (along with Professor Yong-Tae Kwon). The Center for Protein Dynamics, Seoul National University (SNU) School of Medicine, Seoul, South Korea.

## **BOARDS (academic):**

- 2005 -2010 Chairman, Scientific Advisory Board, Rambam Medical Center, Haifa, Israel
- 2005- Scientific Advisory Board, National Institute of Biotechnology - NIBN, Ben Gurion University in the Negev, Beer Sheba, Israel
- 2005 - Board of Governors, Ben Gurion University in the Negev, Beer Sheba, Israel
- 2005 - Board of Governors, Haifa University, Haifa, Israel
- 2005- Member, Scientific Advisory Board, Migal Research Institute, Kiryat Shmona, Israel
- 2006- Board of Governors, Israeli Academy for the Hebrew Language, Jerusalem, Israel
- 2006 - Institute of Advanced Studies, Hong Kong University of Science and Technology
- 2006 - Scientific Advisory Board. Britton Chance Center for BioMedicalPhotonics. Huazhong University of Science and Technology, Wuhan, China
- 2006- International Union for Biochemistry and Molecular Biology (IUBMB)
- 2007 - Board of Directors, German-Israeli Foundation (GIF) for Scientific Research and Development
- 2007- Angelman Syndrome Foundation, USA
- 2008- Israel National Council for Research and Development (Molmop)
- 2008 - President's council, NY Academy of Sciences
- 2009- International Institute for Biomedical Science and Technology (IIBMST), Upstate Medical University, Syracuse, NY, USA.
- 2009- National Advisory Board, Government of Singapore
- 2009- Scientific Advisory Board, San Raffaele Scientific Institute, Milan, Italy
- 2009 - Scientific Advisory Board, Venetian Institute of Molecular Medicine - VIMM, Padua, Italy
- 2009- Scientific Advisory Board, CEINGE-Biotecnologie Avanzate, Napoli, Italy
- 2010- Scientific Advisory Board, Rabin-Schneider Pediatric Medical Center, Petach Tikva, Israel.
- 2011- Scientific Advisory Board, Friedrich Miescher Institute (Novartis), Basel, Switzerland
- 2015- Scientific Advisory Board, Faculty of Life Sciences, University of Macau, Macau
- 2015- Consultant to the President on Academic Affairs and Academic Development, University of Macau, Macau
- 2015- President (Honorary), Global Foundation for Man's Health
- 2017- Chairman, Scientific Advisory Board, Migal Research Institute, Kiryat Shmona, Israel.

### **BOARDS (non-academic):**

- (1) Achva - Organization of the handicapped people in North Israel
- (2) President (Honorary) IsrALS (Amyotrophic Lateral Sclerosis Association), Israel
- (3) Children at Risk Organization, Israel
- (4) Genealogical Institute, Jerusalem, Israel
- (5) MadaTech - Youth Science Center and Museum, Hadera, Israel
- (6) Rashi -Saksta Charity Foundation, Israel (past)
- (7) STEP-GTP - Science Training Encouraging Peace - Graduate Training Programs for Israeli and Palestinians, Tufts University, Boston, MA, USA
- (8) Wolfson Family Charitable Foundation, Tel Aviv, Israel (past)
- (9) It is all about Education Foundation (HaKol Hinuch), Israel (past)
- (10) President (Honorary), Israel Cancer Society (ICS)
- (11) Technoda – Science Museum, Haifa, Israel

### **SCIENTIFIC ADVISORY BOARDS (companies):**

#### **Current:**

- (1) BioCancell, Jerusalem, Israel; (2) BioLine Rx, Jerusalem, Israel;
- (2) Natural Cure (Technion, SunPharma), Haifa, Israel; (4) NovoCure, Haifa, Israel;
- (3) Protalix, Karmiel, Israel; (6) BioTree, Boston, Massachusetts, USA;
- (4) CureLab Oncology, Inc. (CL Oncology), California, USA;
- (5) HealthWatch Technologies, Inc., Herzliya, Israel;
- (6) NovellusDX, Inc., Jerusalem, Israel; (12) Haplogen, Vienna, Austria
- (7) StemRad, Rehovot, Israel; (13) NovItero, Rehovot, Israel;
- (8) BioTheryX, Inc., NY, NY, USA
- (9) PTM, Caesarea, Israel

#### **Past:**

- (1) ARTemis Simetra, Haifa, Israel; (2) Chiasma, Jerusalem, Israel;
- (2) Keryx, Jerusalem, Israel; (4) Lumitest, Haifa, Israel; (5) Theravitae, Rehovot, Israel;
- (3) BioMimic Pharma (Yoram Reiter). Haifa, Israel;
- (4) Allosterix, Rehovot, Israel; (8) Oncobate (Amir Goren), Rehovot, Israel;
- (5) Vaxil (Lior Carmon), Rehovot, Israel; (10) Aurora MRI, Andover, MA, USA;
- (6) CanFite, Petach Tiqva, Israel; (12) Celgene, Warren, NJ, USA;
- (7) MGVS, Haifa, Israel; (14) Rosetta Genomics, Rehovot, Israel;
- (8) Oran, Delaware, USA (16) Proteologics, Rehovot, Israel.
- (9) Quintiles (Sara Bacus), Westmont, Illinois, USA;
- (10) BioLine Rx, Jerusalem, Israel

### **SOCIETIES (active role):**

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|-------|--|
| 2010- | President (Honorary), Israel Cancer Society                                      |
| 2014- | President (Honorary) – IsrALS (The Israel Amyotrophic Lateral Sclerosis Society) |
| 2015- | President (Honorary), Global Foundation for Man’s Health                         |

### **FELLOWSHIPS:**

- 1981-1984 Fulbright Fellow. Massachusetts Institute of Technology (M.I.T.)  
Cambridge, Massachusetts, USA (Dr. Harvey Lodish's Laboratory).
- 1981-1983 Leukemia Society of America Fellow. M.I.T.
- 1981-1984 Israel Cancer Research Fund (ICRF), USA Fellow. M.I.T.
- 1983-1984 Medical Foundation and Charles A. King Trust Fellow. M.I.T.  
Research Career Development Award, Israel Cancer Research Fund  
(ICRF), USA.
- 1988-1989 American Cancer Society Eleanor Roosevelt Memorial Fellow.
- 2003- Professor, Israel Cancer Research Fund (ICRF), USA
- 2011- Alexander von Humboldt Fellow, Alexander von Humboldt Stiftung,  
Bonn, Germany.

### **MILITARY SERVICE:**

- 1974-1977 National Compulsory Service, Israel Defense Forces (IDF).  
Military Combat Physician, Israeli Navy and the Unit for Research and  
Development, Surgeon General Headquarters.

### **EDITORIAL BOARDS:**

- 1999- Israel Medical Association Journal (IMAJ)
- 2006- Experimental Biology and Medicine
- 2007- Cell Death and Differentiation (CDD; Nature Group)
- 2008- Science China - Life Sciences
- 2005- Structural Chemistry (Springer)
- 2015- European Journal of Neurodegenerative Diseases

### **AWARDS (academic):**

- 1999 The Austria Ilse and Helmut Wachter Prize, University of Innsbruck  
(along with Dr. Avram Hershko).
- 2000 The Jewish National Fund Alkales Award for Distinguished  
Scientific Achievements.
- 2000 The Albert and Mary Lasker Award for Basic Medical Research (along  
with Drs. Avram Hershko and Alexander Varshavsky)
- 2001 The Michael Landau (Mifa'al Ha'Peis) Award in Medical Sciences (along  
with Dr. Avram Hershko).
- 2002 EMET (Truth) Prize (Israeli Prime Minister Prize), for Arts, Sciences and  
Culture (in Life Sciences and Medicine along with Drs. Avram Hershko  
and Leo Sachs). Awarded by the AMAN Foundation.
- 2003 The Israel Prize for Biology
- 2003-2006, 2017 Japan Society for Promotion of Science (JSPS) Eminent Scientist  
Fellowship
- 2004 Nobel Prize in Chemistry (shared with Drs. Avram Hershko  
and Irwin A. Rose)

### **HONORS (academic):**

- 1996- Janet and David Polak Professor of Life Sciences.  
Technion-Israel Institute of Technology, Haifa, Israel
- 2002- University Distinguished Research Professor.  
Technion-Israel Institute of Technology, Haifa, Israel.
- 2003- Professor. Israel Cancer Research Fund (ICRF), USA.
- 2006 Sir Hans Krebs Medal. Federation of the European Biochemical Societies
- 2007 Medical Magnus Medal. Polish Academy of Medicine.
- 2010 Lee Kuan Yew Visiting Professorship and Award, Singapore.
- 2011 IUBMB (International Union of Biochemistry and Molecular Biology)  
Medal for Distinct Contribution to Science, Society  
and the IUBMB Mission

### **MEMBERSHIPS (academies, etc.):**

- 1996- Member, Council of the European Molecular Biology Organization  
(EMBO).
- 1999- Member. Asia-Pacific IMBN (International Molecular Biology Network)
- 2004- Member. European Academy of Arts and Sciences.
- 2004- Member. European Academy of Sciences.
- 2004- Fellow. European Academy of Sciences.
- 2004- Member. Israeli National Academy of Sciences and Humanities.
- 2004- Member (Hon.). American Chemical Society (ACS)
- 2005- Fellow (Hon.). Royal Society of Chemistry RCS, (UK). HonFRSC.
- 2005- Member. American Philosophical Society
- 2005- Cell Stress Society international (CSSi) Medal  
and Distinguished Life Member.
- 2006- Honorary Member. Society for Experimental Biology and Medicine.
- 2006- Fellow. Federation of Asian Chemical Societies (FACS).
- 2007- Member. Pontifical Academy of Sciences, The Vatican.
- 2007- Member. Polish Academy of Medicine.
- 2007- Member. Albert Schweitzer World Academy of Medicine.
- 2007- Member. National Academy of Science and Technology of South Korea
- 2007- Associate (Foreign). National Academy of Sciences of the USA  
(NAS USA).
- 2008- Fellow (Honorary; Foreign). American Academy of Arts and Sciences  
(AAAS).
- 2008- Associate (Foreign). National Academy of Medicine (previously Institute  
of Medicine; IOM) of the National Academies of the USA (NAM).
- 2009- Member (Foreign), Ukrainian Academy of Sciences
- 2009- Member (Founding), European Academy of Cancer Sciences
- 2009- Member, Academia Europaea
- 2011- Member (Honorary). Hellenic Society for  
Biochemistry and Molecular Biology
- 2011- Member (Honorary). World Immunopathology Organization (WIPO)
- 2011- Member (Foreign). Russian Academy of Sciences
- 2011- Alexander von Humboldt Fellow, Alexander von Humboldt Stiftung,  
Bonn, Germany.
- 2012- Member (Foreign). Georgian Academy of Sciences, Tbilisi, Georgia



- 2012- Member (Honorary), Georgian Association of Allergology and Clinical Immunology
- 2012- Member, American Association for Cancer Research (AACR) Academy.
- 2013- Fellow, American Academy for Cancer Research (AACR).
- 2013- Member (Foreign), Chinese Academy of Sciences (CAS).
- 2016- Member, Royal European Academy of Doctors (Barcelona, Spain)
- 2016- Member, German National Academy of Sciences (Leopoldina)

**MEMBERSHIPS (professional organizations):**

- 1984 - American Association for Advancement of Science (AAAS)

**HONORARY DEGREES (academic institutions):**

- 2001 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), Tel Aviv University, Tel Aviv, Israel.
- 2004 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), Ben-Gurion University, Beer Sheba, Israel.
- 2005 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), City University of Osaka, Osaka, Japan.
- 2005 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), University of Athens, Greece.
- 2005 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), National University of Uruguay, Montevideo, Uruguay.
- 2006 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), Washington University, St. Louis, Missouri, USA
- 2006 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), Cayetano Heredia University, Lima, Peru.
- 2006 Honorary Professor. Capital University of Medical Sciences (CPUMS), Beijing, China.
- 2006 Honorary Professor. Peking Union Medical College (PUMC). Beijing, China.
- 2006 Honorary Professor. Chinese Academy of Medical Sciences (CAMS), China.
- 2007 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), Hebrew University, Jerusalem, Israel.
- 2007 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), Bar-Ilan University, Ramat Gan, Israel.
- 2007 Honorary Professor. Henan University, Keifang, China.
- 2007 Honorary Professor. Nankai University, Tianjin, China.
- 2007 Honorary Professor. 1<sup>st</sup>. Teaching Hospital Medical School, XinJiang University, Urumqi, China.
- 2007 Honorary Professor. 4<sup>th</sup> Military Medical University, Xi'an, China.
- 2007 Honorary Professor. Shihezi University, Shihezi, China.
- 2007 Honorary Doctor (Doctor Honoris Causa of Science; D.Sc. Hon.), Albert Schweitzer World Academy of Science.
- 2007 Honorary Professor. Jiaotong University, Xi'an, China.
- 2007 Honorary Professor. Northwest University, Xi'an, China.
- 2008 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), Weizmann Institute of Science, Rehovot, Israel.

- 2008 Honorary Doctor (Doctor Honoris Causa), Universidad San Francisco, Quito, Ecuador.
- 2008 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), Universidad del Norte, Asuncion, Paraguay.
- 2008 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), Angeles University, Angeles City, The Philippines.
- 2008 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), University of New South Wales (NSW), Sydney, Australia
- 2008 Honorary Professor. Nanjing University, Nanjing, China.
- 2009 Honoraris Causa. The Academic College, Netanya, Israel.
- 2009 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), The National University of Cambodia, Phnom Pen, Cambodia
- 2010 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.). The Government of the People's Republic of China via Huazhong University of Science and Technology (HUST), Wuhan, China.
- 2010 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.). Haifa University, Haifa, Israel.
- 2010 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.). Medical University of Armenia, Yerevan, Armenia.
- 2010 Honoraris Causa. The Tel Hai College, Qiryat Shmona, Israel.
- 2010 Honorary Professor. Nanjing University of Technology, Nanjing, China.
- 2011 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.), Warsaw University of Technology, Warsaw, Poland.
- 2011 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.). Warsaw University, Warsaw, Poland.
- 2011 Honorary Professor. Chongqing Medical University, Chongqing, China.
- 2011 Scientific Consultant, The City of Chongqing, China.
- 2012 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.). University of Łódź, Łódź, Poland.
- 2012 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.). Medical University of Łódź, Łódź, Poland.
- 2012 Honorary Professor. Guandong University Medical College, Zhanjiang, Guandong, China.
- 2012 Honorary Professor. Wuhan University, Wuhan, China.
- 2012 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.). Shota Rustaveli State University, Batumi, Georgia.
- 2012 Distinguished Honorary Professor. South China Normal University, Guangzhou, China.
- 2012 Distinguished University Professor (Honorary), Kyushu University, Fukoka, Japan.
- 2013 Extraordinary Professor. TEFAF Oncology Chair, Maastricht University, The Netherlands.
- 2013 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.). Mount Sinai School of Medicine, New York, NY, USA.
- 2013 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.). State University of New York (SUNY), Upstate Medical College, Syracuse, NY, USA.

- 2013 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.).  
University of Croatia, Split, Croatia.
- 2013 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.).  
SPIT-Saint Petersburg Institute of Technology, St. Petersburg, Russia.
- 2013 Honoris Causa. Law and Science Gates College (מכללת שערֵי משפט ומדע),  
Hod Hasharon, Israel.
- 2013 Honorary Professor. Haikou People's Hospital,  
Central South University Medical School, Changsha, China.
- 2013 Consultant, The Chongqing Academy of Science and technology,  
Chongqing, China.
- 2014 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.).  
Kazan University, Kazan, Russia.
- 2014 Fellow (Honorary), the Interdisciplinary Center, Hezeliya, Israel.
- 2015 Honorary Professorship. Tor-Vergata University, Rome, Italy.
- 2015 Doctor Honoris Causa, University of Panama, Panama City, Panama.
- 2015 Distinguished Honorary Professor, Shantou University Medical College,  
Shantou, China.
- 2016 Doctor Honoris Causa, University of Kyushu, Fukoka, Japan.
- 2016 Doctor Honoris Causa, School of Business and Social Sciences,  
Central University of Catalunya, Spain.
- 2017 Doctor Honoris Causa. Academic University of the  
Russian Academy of Sciences, St. Petersburg, Russia
- 2017 Doctor Honoris Causa. Tbilii State Medical University (TSMU),  
Tbilisi, Georgia
- 2017 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.),  
University of Brasilia, Brasilia, Brasil
- 2018 Honorary Professor. Beijing Normal University, Beijing, China.
- 2018 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.),  
European University, Nicosia, Cyprus
- 2019 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.),  
University of Macau, Macau.
- 2019 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.),  
Ionian University, Corfu, Greece.
- 2019 Honorary Doctor (Doctor Philosophiae Honoris Causa; Ph.D. Hon.),  
University of Ioannina, Ioannina, Greece.

**HONORS (non-academic):**

- 2005 Honorary Citizenship, City of Haifa, Israel
- 2005 Sakura Award, the City of Osaka, Japan.
- 2005 Special Award, the Mayor of Osaka, Japan.
- 2006 Honorary Citizenship, City of Montevideo, Uruguay.
- 2006 Honorary Citizenship, City of Lima, Peru
- 2008 Honorary Citizenship, City of Quito, Ecuador
- 2008 Special Distinction for Contribution to Education, Minister of Education,  
Government of Ecuador
- 2008 Honorary Citizenship, City of Manila, The Philippines
- 2010 The Highest Award of Recognition, Minister of Science and Technology,  
Armenia.

2011 Honorary Citizenship, City of Cajamarca, Peru.  
2012 Honorary Citizen, Nanjing, Jiangsu Province, China  
2014 Jingling Friendship Award of the City of Nanjing, Jiangsu Province, China  
2014 Honorary Citizen, Jiangsu Province, P.R. China  
2015 Honorary Citizen, Panama City, Panama

**HONORARY MEMBERSHIPS (non-academic):**

2004- The Roule Wallenberg Foundation  
2005- The World Innovation Foundation, WIF  
2005- Academy of Achievement, USA.

## **PUBLICATIONS:**

### **Original Papers:**

1. **Ciechanover, A.** and Hershko, A. (1976). Early Effects of Serum on Phospholipid Metabolism in Untransformed and Oncogenic Virus Transformed Cultured Fibroblasts. *Biochem. Biophys. Res. Commun.* **73**, 85-91.
2. **Ciechanover, A.,** Hod, Y. and Hershko, A. (1978). A Heat-stable Polypeptide Component of an ATP-dependent Proteolytic System from Reticulocytes. *Biochem. Biophys. Res. Commun.* **81**, 1100-1105.
3. Hershko, A., **Ciechanover, A.** and Rose, I.A. (1979). Resolution of the ATP-dependent Proteolytic System from Reticulocytes: A Component that Interacts with ATP. *Proc. Natl. Acad. Sci. USA* **76**, 3107-3110.
4. **Ciechanover, A.,** Heller, H., Elias, S., Haas, A.L. and Hershko, A. (1980). ATP-dependent Conjugation of Reticulocyte Proteins with the Polypeptide Required for Protein Degradation. *Proc. Natl. Acad. Sci. USA* **77**, 1365-1368.
5. Hershko, A., **Ciechanover, A.,** Heller, H., Haas, A.L. and Rose, I.A. (1980). Proposed Role of ATP in Protein Breakdown: Conjugation of Proteins with Multiple Chains of the Polypeptide of ATP-dependent Proteolysis. *Proc. Natl. Acad. Sci. USA* **77**, 1783-1786.
6. **Ciechanover, A.,** Elias, S., Heller, H., Ferber, S. and Hershko, A. (1980). Characterization of the Heat-stable Polypeptide of the ATP-dependent Proteolytic System from Reticulocytes. *J. Biol. Chem.* **255**, 7525-7528.
7. **Ciechanover, A.,** Heller, H., Etzion-Katz, R. and Hershko, A. (1981). Activation of the Heat-stable Polypeptide of the ATP- dependent Proteolytic System. *Proc. Natl. Acad. Sci. USA* **78**, 761-765.
8. Hershko, A., **Ciechanover, A.** and Rose, I.A. (1981). Identification of the Active Amino Acid Residue of the Polypeptide of ATP-dependent Protein Breakdown. *J. Biol. Chem.* **256**, 1525-1528.
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