

**BIOGRAPHICAL SKETCH**

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NAME David Ron		POSITION TITLE Professor of Cellular Pathophysiology and Clinical Biochemistry, Cambridge Institute for Medical Research, University of Cambridge, England	
eRA COMMONS USER NAME & ORCID ROND01; 0000-0002-3014-5636			
EDUCATION/TRAINING ( <i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i> )			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Technion, Haifa, Israel	MD	1972-1980	Medicine

**A. Positions and Honors**

1980-1984 National Service.  
 1984-1987 Internal Medicine Residency, Mount Sinai Hospital, New York, NY  
 1987-1992 Endocrine Fellow, Department of Medicine, Massachusetts General Hospital, Boston, MA.  
 1992-1996 Assistant Professor of Medicine and Cell Biology, NYU School of Medicine, New York NY  
 1996-1999 Associate Professor of Medicine and Cell Biology, NYU School of Medicine, New York NY  
 1999-2010 Professor of Medicine and Cell Biology, NYU School of Medicine, New York, NY  
 2008-2010 Julius Raynes Professor of Cell Biology and Medicine, NYU School of Medicine, New York, NY  
 2010 Adjunct Professor of Medicine and Cell Biology, NYU School of Medicine, New York, NY  
 2010- Professor of Cellular Pathophysiology and Clinical Biochemistry, University of Cambridge  
 2012-2016 Honorary Consultant in Chemical Endocrinology, Addenbrooke's Hospital

Pew Scholar in Biomedical Research (1993)  
 Scholar, Leukemia Society of America (1997)  
 American Society of Clinical Investigation (ASCI, 1998)  
 Senior Scholar, Ellison Medical Foundation (2000)  
 NIH MERIT award (2004)  
 American Association of Physicians (AAP, 2002)  
 Council, Harvey Society (2004).  
 Editorial board of *Journal of Cell Biology* (2001-present)  
 Editorial board of the *Journal of Cell Science* (2008-present)  
 Editorial Board *Journal of Clinical Investigation* (2002-2008)  
 Faculty of 1000 (2001-2008)  
 Scientific Advisory Board of the Dystonia Foundation (2003-2007)  
 Scientific advisory Board of Proteostasis Inc (2009-2011)  
 Principal Research Fellow, Wellcome Trust (2009-)  
 Edwin B. Astwood Award, Endocrine Society (2011)  
 Member, European Molecular Biology Organization (2011)  
 Fellow, Academy of Medical Sciences (UK) (2013)  
 Fellow, Royal Society (2014)

**B. Selected Publications**

1. Crozat A, Aman P, Mandahl N, Ron D. 1993. Fusion of CHOP to a novel RNA-binding protein in human myxoid liposarcoma with t(12;16)(q13;p11). *Nature*. 363: 640-644 ([PMID: 8510758](#)).
2. Zinszner H, Kuroda M, Wang XZ, Batchvarova N, Lightfoot RT, Remotti H, Stevens J and Ron D. 1998. CHOP is implicated in programmed cell death in response to impaired function of the endoplasmic reticulum. *Genes & Dev* 12:982-995 ([PMID: 9531536](#)).
3. Wang X-Z, Harding HP, Zhang Y, Jolicoeur EM, Kuroda M and Ron D. 1998. Cloning of mammalian Ire1 reveals diversity in the ER stress response. *EMBO J*. 17:5708-5717 ([PMID: 9755171](#)).
4. Harding HP, Zhang Y and Ron D. 1999. Translation and protein folding are coupled by an endoplasmic reticulum kinase. *Nature* 397:271-274 ([PMID: 9930704](#)).
5. Harding, HP, Zeng, H, Zhang, Y, Jungries, R, Chung, P, Plesken, H, Sabatini, DD, and Ron, D. 2001. Diabetes mellitus and exocrine pancreatic dysfunction in *Perk*<sup>-/-</sup> mice reveals a role for translational control in survival of secretory cells. *Molecular Cell*, 7:1153-1163 ([PMID: 11430819](#)).
6. Calton M, Zeng H, Urano F, Till JH, Hubbard SR, Harding HP, Clark SG and Ron D. 2002. IRE1 couples endoplasmic reticulum load to secretory capacity by processing the *XBP-1* mRNA. *Nature*. 415:92-96 ([PMID: 11780124](#)).
7. Novoa I, Zhang Y, Zeng H, Jungreis R, Harding HP and Ron D. 2003. Stress-induced gene expression requires programmed recovery from translational repression. *Embo J*. 22:1180-1187 ([PMID: 12606582](#)).
8. Harding H, Zhang Y, Khershonsky S, Marciniak SM, Javitt N, Chang Y-T and Ron D. 2005. Bioactive small molecules reveal antagonism between the integrated stress response and sterol regulated gene expression. *Cell Metab* 2:361-71 ([PMID: 16330322](#)).
9. Petrova K, Oyadomari S, Hendershot LM and Ron D. 2008. Regulated association of misfolded endoplasmic reticulum luminal proteins with P58/DNAJc3. *Embo J* 27:2862-2872 ([PMID: 18923430](#))
10. Harding HP, Zhang Y, Scheuner D, Chen J-J, Kaufman RJ and Ron D. 2009. *Ppp1r15* gene knockout reveals an essential role for translation initiation factor 2 alpha dephosphorylation in mammalian development. *Proc Natl Acad Sci U S A* 106:1832-1837 ([PMID: 19181853](#)).
11. Haynes CM, Yang Y, Blais SP, Neubert TA and Ron D. 2010. The matrix peptide exporter haf 1 signals a mitochondrial unfolded protein response by activating the transcription factor *zc376.7* in *C. elegans*. *Mol. Cell* 37:529-40 ([PMID: 20188671](#)).
12. Zito E, Pinho Melo E, Yang Y, Wahlander Å, Neubert TA and Ron D. 2010. Oxidative protein folding by an endoplasmic reticulum localized peroxiredoxin. *Mol. Cell* 40:787-797 ([PMID: 21145486](#))
13. Zito E, Hansen H, Yeo G, Fujii J and Ron D. 2012. Endoplasmic reticulum thiol oxidase deficiency leads to ascorbic acid depletion and non-canonical scurvy in mice. *Mol. Cell* 48:39-51 ([PMID: 22981861](#))
14. Volmer R, van der Ploeg K and Ron D. 2013. Membrane lipid saturation activates endoplasmic reticulum unfolded protein response transducers through their transmembrane domains. *Proc. Natl. Acad. Sci. U. S. A.* 2013 110:4628-33 ([PMID: 23487760](#))
15. Preissler S, Chambers JE, Crespillo-Casado A, Avezov E, Miranda E, Perez J, Hendershot LM, Harding HP and Ron D. 2015. Physiological modulation of BiP activity by *trans*-protomer engagement of the interdomain linker. *Elife* 4:(10.7554/eLife.08961) ([PMID: 26473973](#))
16. Preissler S, Rato C, Chen R, Antrobus R, Ding S, Fearnley IM and Ron D. 2015. Ampylation matches bip activity to client protein load in the endoplasmic reticulum. *Elife* 4:(10.7554/eLife.12621) ([PMID: 26673894](#))
17. Sekine Y, Zyryanova A, Crespillo-Casado A, Fischer PM, Harding HP and Ron D. 2015. Mutations in a translation initiation factor identify the target of a memory-enhancing compound. *Science* 348:1027-1030 ([PMID: 25858979](#))
18. Preissler S, Rato C, Perera LA, Saudek V and Ron D. 2017. FICD acts bifunctionally to AMPylate and de-AMPylate the endoplasmic reticulum chaperone BiP. *Nat. Struct. Mol. Biol.* 24:23-9 (10.1038/nsmb.3337) ([PMID: 27918543](#))
19. Amin-Wetzel N, Saunders RA, Kamphuis MJ, Rato C, Preissler S, Harding HP and Ron D. 2017. A J-protein co-chaperone recruits BiP to monomerize IRE1 and repress the unfolded protein response. *Cell* 171:1625-37 ([PMID: 29198525](#))
20. Zyryanova AF, Weis F, Faille A, Alard AA, Crespillo-Casado A, Sekine Y, Harding HP, Allen F, Parts L, Fromont C, Fischer PM, Warren AJ and Ron D. 2018. Binding of ISRIB reveals a regulatory site in the nucleotide exchange factor eIF2B. *Science* 359:1533-6 ([PMID: 29599245](#))