

## Curriculum Vitae - Talma Rosenthal, M.D.

- Education:** 1957 - 1962 - Hebrew University Medical School  
1962 - 1963 - Intern, Hadassah University Hospital, Jerusalem  
1964 - M.D. degree
- Clinical Experience:** 1971 June - 1997 - Acting Chief, Dept. Medicine D, Chaim Sheba Medical Center, Tel Hashomer  
1974-2003 - Founder and Head, Hypertension Unit, Chaim Sheba Medical Center, Tel Hashomer
- Academic Experience:**  
End 1987 - Professor Internal Medicine  
May 2000 Incumbent, Hella Gertner Chair for Research in Hypertension  
August 2004 - Member, Department of Physiology and Pharmacology, Sackler School of Medicine, Tel Aviv University
- Area of Expertise:** Internal Medicine, Hypertension  
1973 - 1974 WHO Research Fellow, Columbia Presbyterian Hospital, New York; San Francisco General Hospital, USA, Renin Aldosterone Methodology.  
1976 (Sabbatical) St. Mary's Hospital Medical School, London, The role of sympathetic nervous system in hypertension.  
Visiting Professor Durban, New Orleans, Boston, Cambridge UK
- Membership in Professional Societies:**  
1983-1997 Israel Society of Hypertension, Founder and President of First Israel Society of Hypertension, Chairman.  
American Society of Hypertension  
European Society of Hypertension  
International Society of Hypertension  
Since April 1992 National Fellow on the Council for High Blood Pressure Research of The American Heart Association
- Professional Activities**  
1980-1990 Ministry of Health Committee for Drug Prescriptions  
1992-2000 Steering Committee, International HOT Study  
1993-2002 Supreme Council for Prevention and Treatment of Cardiovascular Diseases, Ministry of Health  
1994-2000 Steering Committee, International INSIGHT Study  
1998-2003 Supervising Committee on Animal Studies, Tel Aviv University  
2001 - Chair, Section for Hypertension, College of Master's and Doctoral Students, Tel Aviv University Sackler School of Medicine  
2005 - Teaching of Cardiovascular Issues to Elementary and Secondary Schools adopted by the Tel Aviv University Sackler School of Medicine  
2005 - Chair, Research Studies Evaluation Committee, Tel Aviv University
- Editorial Boards**  
Since 1988 Journal of Human Hypertension  
1989-1999 Journal of Cardiovascular Pharmacology  
Since 1992 Blood pressure  
1998-2000 Hypertension  
Since 2000 American Journal of Geriatric Cardiology  
Since 2000 Coronary Artery Disease  
Since 2002 Editor-in-Chief, Israeli Bilingual Journal of Hypertension Screening, Investigation, Therapy  
Since 2006 J CardioMetabolic Syndrome  
Since 2007 Journal of the American Society of Hypertension
- Awards:** Bnot Brith Award for contribution of women to medicine  
Life Achievement Award, Association of Law and Medicine  
Julius Award, International Society of Hypertension 2008, for contribution to research and treatment of hypertension
- Patents:** Two patents with the Weizmann Institute of Science, on allicin and allylmercaptocaptopril.
- Supervisor of students' dissertations, Tel Aviv University**  
M.D. Thesis - 22 students  
Ph.D. Thesis - 4 students  
M.Sc. Students - 6 students



## **BIBLIOGRAPHY - 277 articles**

Chapter in book, *Comprehensive Hypertension*

### **My contributions to the field of Hypertension**

Established Israel's first Institute for Hypertension Research, devoted to clinical and experimental studies.

- **Immigration Studies on Ethiopian and Yemenite Jews.** Many of these immigrants came from rural villages and arrived in Israel with very low body mass index and extremely low blood pressure. Over time, as their diet changed and they began to consume large amounts of salt, they gained weight and developed high blood pressure. Longitudinal studies were carried out for several years, beginning with their arrival in Israel, demonstrating the impact of urbanization and a change in lifestyle on blood pressure.

- **Generation of the Cohen Rosenthal Diabetic-Hypertensive (CRDH) rat,** created by cross-breeding SHR and Cohen Diabetic Rats. Male and female siblings with the highest blood sugar levels and blood pressures were selected and mated. The same selection procedure was applied to the following generations. Pathology of CRDH rats include glomerulosclerosis, myocardial fibrosis and vascular changes. The animals are approaching the 60<sup>th</sup> generation. We have employed this model of non-obese type II diabetes and hypertension in numerous pharmacological studies since 1990.

- **Creation of a potential new drug.** Responsible for the experimental animal studies with a team of researchers from Weizmann Institute, Rehovot, that synthesized allylmercaptocaptopril. This nonsymmetric disulfide combines the specific drug activity of captopril and the beneficial properties of allylmercaptan (allicin) in garlic that are responsible for the decrease in hypertension, triglycerides and insulin. The compound was studied in Reaven model rats where we found it to decrease blood pressure, triglycerides and insulin. Animals treated with allylmercaptocaptopril did not gain weight in contrast to control rats. The unique combination of pharmacological and non-pharmacological features of this compound makes it an ideal drug for lowering blood pressure while preserving weight. It is hoped the compound will be tested in human trials.