Curriculum Vitae

Name: **Sigal Lazar (Rencus)**
Date of birth: 31.10.1977
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Work experience

01/2017-present: Grant writer and scientific editor at the lab of Prof. Ehud Gazit, The Shmunis School of Biomedicine and Cancer Research, Tel Aviv University.

05/2015-12/2016: Scientific editor at the Faculty of Life Sciences, Tel Aviv University, and research associate at the lab of Prof. Danny Chamovitz, the Department of Molecular Biology & Ecology of Plants at the Faculty of Life Sciences, Tel Aviv University.

09/2012-04/2015: Senior researcher at the lab of Prof. Ruth Ashery-Padan, the Department of Human Genetics and Biochemistry at the Sackler School of Medicine, Tel Aviv University.

Education

11/2009-11/2011: Recipient of ICRF Postdoctoral Fellowship at the Department of Cell Research and Immunology, Tel Aviv University. Supervisor: Prof. Mia Horowitz.

Fellowship title: "Elucidation of the roles of Past1 in regulation of the Notch signaling pathway in *Drosophila*".

2008: Post-doctoral fellow at the Department of Cell Research and Immunology, Tel Aviv University. Supervisor: Prof. Mia Horowitz.

2002-2007: PhD student, Tel-Aviv University. Thesis title: "The onco-protein Int6 is essential for neddylation of Cul1 and Cul3 in *Drosophila melanogaster*". Supervisors: Prof. Danny Segal and Prof. Danny Chamovitz.

2000-2002: M.Sc. in Genetics, Tel-Aviv University. *Suma Cum Laude*.

Thesis title: “Elucidation of the roles of the CSN4 and CSN5 subunits of the COP9 signalosome in *Drosophila melanogaster*”. Supervisor: Prof. Danny Segal.

1997-2000: B.Sc. in Biology, Tel-Aviv University. *Suma Cum Laude*.

Scholarships & prizes

2009-2011: Recipient of ICRF Postdoctoral Fellowship.

2002-2003: Dean’s scholarship during the first year of my PhD studies.

2000: Wolf Foundation scholarship.

1997-2000: Excellence scholarship. Each year of my B.Sc. studies.

Publications

1. Oron, E.*, Mannervik, M., **Rencus, S.***, Harari-Steinberg, O., Neuman-Silberberg, S., Segal, D. & Chamovitz, D. A. COP9 signalosome subunits 4 and 5 regulate multiple pleiotropic pathways in Drosophila melanogaster. *Development* **129,** 4399–4409 (2002). * Co-first authors.
2. Oron, E., Tuller, T., Li, L., Rozovsky, N., Yekutieli, D., **Rencus-Lazar, S.**, Segal, D., Chor, B., Edgar, B. A. & Chamovitz, D. A. Genomic analysis of COP9 signalosome function in Drosophila melanogaster reveals a role in temporal regulation of gene expression. *Mol. Syst. Biol.* **3,** 108 (2007).

3. **Rencus-Lazar, S.**, Amir, Y., Wu, J., Chien, C. T., Chamovitz, D. A. & Segal, D. The proto-oncogene Int6 is essential for neddylation of Cul1 and Cul3 in Drosophila. *PLoS One* **3,** e2239 (2008).

4. Zenvirt, S., Nevo-Caspi, Y., **Rencus-Lazar, S.** & Segal, D. Drosophila LIM-Only is a positive regulator of transcription during thoracic bristle development. *Genetics* **179,** 1989–1999 (2008).

5. Maor, G., **Rencus-Lazar, S.**, Filocamo, M., Steller, H., Segal, D. & Horowitz, M. Unfolded protein response in Gaucher disease: From human to Drosophila. *Orphanet J. Rare Dis.* **8,** 140 (2013).

6. Raviv, S., Bharti, K., **Rencus-Lazar, S.**, Cohen-Tayar, Y., Schyr, R., Evantal, N., Meshorer, E., Zilberberg, A., Idelson, M., Reubinoff, B., Grebe, R., Rosin-Arbesfeld, R., Lauderdale, J., Lutty, G., Arnheiter, H. & Ashery-Padan, R. PAX6 regulates melanogenesis in the retinal pigmented epithelium through feed-forward regulatory interactions with MITF. *PLoS Genet.* **10,** e1004360–e1004360 (2014).

7. Aizen, R., Tao, K., **Rencus-Lazar, S.** & Gazit, E. Functional metabolite assemblies—a review. *J. Nanoparticle Res.* **20,** 125 (2018).

8. Bera, S., Mondal, S., **Rencus-Lazar, S.** & Gazit, E. Organization of amino acids into layered supramolecular secondary structures. *Acc. Chem. Res.* **51,** 2187–2197 (2018).

9. **Rencus-Lazar, S.**, DeRowe, Y., Adsi, H., Gazit, E. & Laor, D. Yeast models for the study of amyloid-associated disorders and development of future therapy. *Front. Mol. Biosci.* **6,** 1–10 (2019).

10. Ji, W., Xue, B., Arnon, Z. A., Yuan, H., Bera, S., Li, Q., Zaguri, D., Reynolds, N. P., Li, H., Chen, Y., Gilead, S., **Rencus-Lazar, S.**, Li, J., Yang, R., Cao, Y. & Gazit, E. Rigid tightly packed amino acid crystals as functional supramolecular materials. *ACS Nano* **13,** 14477–14485 (2019).

11. Zaguri, D., Shaham-Niv, S., Naaman, E., Mimouni, M., Magen, D., Pollack, S., Kreiser, T., Leibu, R., **Rencus-Lazar, S.**, Adler-Abramovich, L., Perlman, I., Gazit, E. & Zayit-Soudry, S. Induction of retinopathy by fibrillar oxalate assemblies. *Commun. Chem.* **3,** 2 (2020).

12. Tao, K., Chen, Y., Orr, A. A., Tian, Z., Makam, P., Gilead, S., Si, M., **Rencus-Lazar, S.**, Qu, S., Zhang, M., Tamamis, P. & Gazit, E. Enhanced fluorescence for bioassembly by environment-switching doping of metal ions. *Adv. Funct. Mater.* **n/a,** 1909614 (2020).

13. Chen, Y., Tao, K., Ji, W., Makam, P., **Rencus-Lazar, S.** & Gazit, E. Self-assembly of cyclic dipeptides: platforms for functional materials. *Protein Pept. Lett.* **27,** 1 (2020).

14. Chen, Y., Orr, A. A., Tao, K., Wang, Z., Ruggiero, A., Shimon, L. J. W., Schnaider, L., Goodall, A., **Rencus-Lazar, S.**, Gilead, S., Slutsky, I., Tamamis, P., Tan, Z. & Gazit, E. High-efficiency fluorescence through bioinspired supramolecular self-assembly. *ACS Nano* **14,** 2798–2807 (2020).

15. Zaguri, D., Shaham-Niv, S., Chakraborty, P., Arnon, Z., Makam, P., Bera, S., **Rencus-Lazar, S.**, Stoddart, P. R., Gazit, E. & Reynolds, N. P. Nanomechanical properties and phase behavior of phenylalanine amyloid ribbon assemblies and amorphous self-healing hydrogels. ACS Appl. Mater. Interfaces 12, 21992–22001 (2020).

16. Ji, W., Yuan, C., Chakraborty, P., Makam, P., Bera, S., **Rencus-Lazar, S.**, Li, J., Yan, X. & Gazit, E. Coassembly-induced transformation of dipeptide amyloid-like structures into stimuli-responsive supramolecular materials. ACS Nano 14, 7181–7190 (2020).

17. Tao, K., Tang, Y., **Rencus-Lazar, S.**, Yao, Y., Xue, B., Gilead, S., Wei, G. & Gazit, E. Bioinspired supramolecular packing enables high thermo-sustainability. Angew. Chemie Int. Ed. 59, 19037–19041 (2020).

Teaching experience

2002-2006: Teaching assistant in an undergraduate Genetics lab course.

2000-2002: Teaching assistant in an undergraduate Genetics course.

Army service

1996-1997: Assistant at the deputy chief of staff office.

1995-1996: Trainee at the 'Talpiot' training program of the air force.