## Personal details

Name	Samuel Bocobza
Date of birth	14/02/1977
Country of birth	France
Family status	Married, 2 children

## **Higher Education**

1996-2000 **B.Sc** studies at the Faculty of Life Sciences of Tel Aviv University, Tel Aviv.

- 2000-2002 **M.Sc** studies at the Plant Sciences Department of the Faculty of Life Sciences of Tel Aviv University, Tel Aviv, under the supervision of Prof. Adina Breiman and Prof. Nir Ohad.Thesis title: "Characterization of the Arabidopsis thaliana knockout mutants and over-expressers of members of the FK-506 binding protein gene family".
- 2006-2010 **PhD** study in the Department of Life Sciences at the Ben Gurion University of the Negev, Beer Sheva, under the supervision of Prof. Michal Shapira and Prof. Asaph Aharoni. Thesis title: "Discovery and Characterization of Riboswitch-Mediated Mechanisms in Plant Metabolic Regulation".
- 2010-2013 **Post-doctoral fellow** in the Plant Sciences Department at the Weizmann Institute of Science, Rehovot, under the supervision of Prof. Asaph Aharoni. Research in the field of plant riboswitches and chemo-metabolomics.
- 2013-2017 **Scientific advisor** in the Plant Sciences Department at the Weizmann Institute of Science, Rehovot, at the laboratory of Prof. Asaph Aharoni. Research in the field of plant metabolic engineering and plant functional genomics.
- 2017-2018 **Post-doctoral fellow** in the Department of Fruit Trees Sciences, Institute of Plant Sciences, ARO, The Volcani Center, at the laboratory of Dr. Moshe Flaishmann. Research in the field of genome editing.
- 2018-present **Research Scientist** in the Department of ornamental flowers and biotechnology, Institute of Plant Sciences, ARO, The Volcani Center. Research in the field of cell transformation, regeneration, differentiation, and genome editing.

## Publications

- Dahan-Meir, T., Filler-Hayut, S., Melamed-Bessudo, C., Bocobza, S., Czosnek, H., Aharoni, A., & Levy,
  A. A. (2018). Efficient in planta gene targeting in tomato using geminiviral replicons and the CRISPR/Cas9 system. *The Plant Journal: For Cell and Molecular Biology*, 95(1), 5–16.
- Sonawane, P. D., Heinig, U., Panda, S., Gilboa, N. S., Yona, M., Kumar, S. P., ... Aharoni, A. (2018). Short-chain dehydrogenase/reductase governs steroidal specialized metabolites structural diversity and toxicity in the genus Solanum. *Proceedings of the National Academy of Sciences of the United States* of America, 115(23), E5419–E5428.
- Tzfadia, O., Bocobza, S., Defoort, J., Almekias-Siegl, E., Panda, S., Levy, M., ... Aharoni, A. (2018). The "TranSeq" 3'-end sequencing method for high-throughput transcriptomics and gene space refinement in plant genomes. *The Plant Journal: For Cell and Molecular Biology*. https://doi.org/10.1111/tpj.14015
- Cárdenas, P. D., Sonawane, P. D., Heinig, U., Bocobza, S. E., Burdman, S., & Aharoni, A. (2015). The bitter side of the nightshades: Genomics drives discovery in Solanaceae steroidal alkaloid metabolism. *Phytochemistry*, *113*, 24–32.
- Bocobza, S. E., & Aharoni, A. (2014). Small molecules that interact with RNA: riboswitch-based gene control and its involvement in metabolic regulation in plants and algae. *The Plant Journal: For Cell and Molecular Biology*, *79*(4), 693–703.
- Bocobza, S. E., Malitsky, S., Araújo, W. L., Nunes-Nesi, A., Meir, S., Shapira, M., ... Aharoni, A. (2013). Orchestration of thiamin biosynthesis and central metabolism by combined action of the thiamin pyrophosphate riboswitch and the circadian clock in Arabidopsis. *The Plant Cell*, *25*(1), 288–307.
- Itkin, M., Heinig, U., Tzfadia, O., Bhide, A. J., Shinde, B., Cardenas, P. D., ... Aharoni, A. (2013). Biosynthesis of antinutritional alkaloids in solanaceous crops is mediated by clustered genes. *Science*, 341(6142), 175–179.
- Bocobza, S., Willmitzer, L., Raikhel, N. V., & Aharoni, A. (2012). Discovery of new modules in metabolic biology using ChemoMetabolomics. *Plant Physiology*, *160*(3), 1160–1163.
- Panikashvili, D., Shi, J. X., Bocobza, S., Franke, R. B., Schreiber, L., & Aharoni, A. (2010). The Arabidopsis DSO/ABCG11 transporter affects cutin metabolism in reproductive organs and suberin in roots. *Molecular Plant*, 3(3), 563–575.
- Bocobza, S. E., & Aharoni, A. (2008). Switching the light on plant riboswitches. *Trends in Plant Science*, *13*(10), 526–533.
- Cohen, A., Bocobza, S., Veksler, I., Gabdank, I., Barash, D., Aharoni, A., ... Kedem, K. (2008). Computational identification of three-way junctions in folded RNAs: a case study in Arabidopsis. *In Silico Biology*, 8(2), 105–120.
- Bocobza, S., Adato, A., Mandel, T., Shapira, M., Nudler, E., & Aharoni, A. (2007). Riboswitch-dependent gene regulation and its evolution in the plant kingdom. *Genes & Development*, *21*(22), 2874–2879.