

**Dr. Samina Akbar**  
**Assistant Professor**  
**Biological Sciences**



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**Specialization:**

Cell and Molecular Biology

**Education:**

PhD Biotechnology & Food Processing (2009 - 2013), University of Lorraine, Nancy, France.

MPhil Biotechnology, Agro-Resources, Food & Nutrition (2008 - 2009), University of Lorraine, Nancy, France.

M.Sc. Biochemistry (2005 - 2007), PMAS University of Arid Agriculture, Rawalpindi, Pakistan.

B.Sc. (Bot, Zool., Chem., 2002 - 2004), F.G. Postgraduate College for Women, Rawalpindi, Pakistan.

**Experience:**

Assistant Professor (2019 – To date), National University of Medical Sciences, Rawalpindi, Pakistan. Assistant lecturer (2014 – 2016), University of Lorraine, Nancy, France.

Teaching assistant (2008) PMAS University of Arid Agriculture, Rawalpindi, Pakistan.

**Research Interests:**

Regulation of lipid and lipoprotein metabolism, dyslipidemia and related disorders, transcription factors, fatty acids.

**Publications:**

1. Xie T.,\* **Akbar S.**,\* Stathopoulou M.G.,\* Oster T., Masson C., Yen F.T., Visvikis-Siest S. (2018) Epistatic interaction of APOE and LSR genetic variants is associated with Alzheimer's disease. *Neurobiol aging* 69:292.e1-292.e5. \*equal first authors

2. Gorenjak V., **Akbar S.**, Stathopoulou M., Visvikis-Siest S. (2018) The future of telomere length in personalized medicine. *Frontiers in Bioscience* (Landmark Ed) 23:1628-1654.
3. Xie T., Stathopoulou M., **Akbar S.**, Oster T., Siest G., Yen F.T., Visvikis-Siest S. (2017) Effect of LSR polymorphism on blood lipid levels and age-specific epistatic interaction with the APOE common polymorphism. *Clin Genet* 93:846-852.
4. **Akbar S.**, Pincon A., Lanhers M.-C., Claudepierre T., Corbier C., Gregory-Pauron L., Malaplate-Armand C., Visvikis A., Oster T., Yen F.T. (2016) Expression profile of hepatic genes related to lipid homeostasis in LSR heterozygous mice contribute to their increased response to high-fat diet. *Physiol Genomics* 48:928-935.
5. Layeghkhavidaki H., Lanhers M.C., **Akbar S.**, Gregory-Pauron L., Oster T., Grova N., Appenzeller B., Jasniewski J., Feidt C., Corbier C., Yen F.T. (2014) Inhibitory action of Benzo[ $\alpha$ ]pyrene on hepatic lipoprotein receptors in vitro and on liver lipid homeostasis in mice. *PLoS ONE* 9(7): e102991.
6. Ahmad N., Girardet J.M., **Akbar S.**, Lanhers M.C., Paris C., Yen F.T., Corbier C. (2012) Lactoferrin and its hydrolysate bind directly to the oleate-activated form of the lipolysis stimulated lipoprotein receptor. *FEBS J* 279: 4361-73.
7. Stenger C., Hanse M., Pratte D., Mbala M.L., **Akbar S.**, Koziel V., Escanyé M.C., Kriem B., Malaplate-Armand C., Olivier J.L., Oster T., Pillot T., Yen F.T. (2010) Upregulation of hepatic lipolysis stimulated lipoprotein receptor by leptin: a potential lever for controlling lipid clearance during the postprandial phase. *FASEB J* 24:4218-4228.
8. Yasmin T., Mahmood T., Hyder M.Z., **Akbar S.**, Naqvi S.M.S. (2008) Cloning, sequencing and in silico analysis of Germin-like Protein Gene 1 promoter from *Oryza sativa* L. ssp. Indica. *Pak J Bot* 40: 1627-1634.