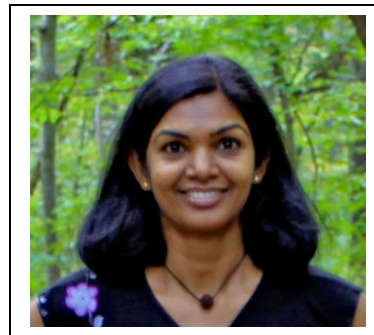


**Dr. Shobini Jayaraman**

**Senior Scientist who actually runs the Gursky lab**

**2003-current**



**Awards:**

- 2005 - Early Career Investigator Travel Award, Keystone Symposium on High-Density Lipoproteins.
- 2014 - Research article by Cavigliolo G & Jayaraman S. "Proteolysis of apolipoprotein A-I by secretory phospholipase A<sub>2</sub>: a new link between inflammation and atherosclerosis" 2014, JBC 289(14):10011-23 has been featured as a commentary on the website of the International Atherosclerosis Society (IAS) in the e-literature section ([www.athero.org](http://www.athero.org)).

**Publications from the lab:** 10/2014

[Proteolysis of apolipoprotein A-I by secretory phospholipase A<sub>2</sub>: a new link between inflammation and atherosclerosis.](#)

Cavigliolo G, **Jayaraman S**.

J Biol Chem. 2014 Apr 4;289(14):10011-23.

[Amyloidogenic mutations in human apolipoprotein A-I are not necessarily destabilizing - a common mechanism of apolipoprotein A-I misfolding in familial amyloidosis and atherosclerosis.](#)

Das M, Mei X, **Jayaraman S**, Atkinson D, Gursky O.

FEBS J. 2014 Jun;281(11):2525-42.

[Role of apolipoprotein A-II in the structure and remodeling of human high-density lipoprotein \(HDL\): protein conformational ensemble on HDL.](#)

Gao X, Yuan S, **Jayaraman S**, Gursky O.

Biochemistry. 2012 Jun 12;51(23):4633-41.

[Folded functional lipid-poor apolipoprotein A-I obtained by heating of high-density lipoproteins: relevance to high-density lipoprotein biogenesis.](#)

**Jayaraman S**, Cavigliolo G, Gursky O.

Biochem J. 2012 Mar 15;442(3):703-12.

Gao X, **Jayaraman S**, Guha M, Wally J, Lu M, Atkinson D, Gursky O. 2012. [Application of Circular Dichroism to Lipoproteins: Structure, Stability and Remodeling of Good and Bad Cholesterol.](#) Chapter 4. In: *Circular Dichroism: Theory and Spectroscopy*, D.S. Rogers, Edt. Nova Publishers pp. 175-215 (open access).

[Pressure perturbation calorimetry of lipoproteins reveals an endothermic transition without detectable volume changes. Implications for adsorption of apolipoprotein to a phospholipid surface.](#)

**Jayaraman S**, Jasuja R, Zakharov MN, Gursky O.  
Biochemistry. 2011 May 17;50(19):3919-27.

[Effects of phospholipase A\(2\) and its products on structural stability of human LDL: relevance to formation of LDL-derived lipid droplets.](#)

**Jayaraman S**, Gantz DL, Gursky O.  
J Lipid Res. 2011 Mar;52(3):549-57.

[Impact of self-association on function of apolipoprotein A-I.](#)

**Jayaraman S**, Abe-Dohmae S, Yokoyama S, Cavigliolo G.  
J Biol Chem. 2011 Oct 14;286(41):35610-23.

[Effects of cholesterol on thermal stability of discoidal high density lipoproteins.](#)

**Jayaraman S**, Benjwal S, Gantz DL, Gursky O.  
J Lipid Res. 2010 Feb;51(2):324-33.

[Differential stability of high-density lipoprotein subclasses: effects of particle size and protein composition.](#)

Gao X, Yuan S, **Jayaraman S**, Gursky O.  
J Mol Biol. 2009 Apr 3;387(3):628-38. doi: 10.1016/j.jmb.2009.02.036. Epub 2009 Feb 21.

[Correlation of structural stability with functional remodeling of high-density lipoproteins: the importance of being disordered.](#)

Guha M, Gao X, **Jayaraman S**, Gursky O.  
Biochemistry. 2008 Nov 4;47(44):11393-7. doi: 10.1021/bi8014746. Epub 2008 Oct 8.

[Effects of protein oxidation on the structure and stability of model discoidal high-density lipoproteins.](#)

**Jayaraman S**, Gantz DL, Gursky O.  
Biochemistry. 2008 Mar 25;47(12):3875-82. doi: 10.1021/bi7023783. Epub 2008 Feb 27.

[Mild oxidation promotes and advanced oxidation impairs remodeling of human high-density lipoprotein in vitro.](#)

Gao X, **Jayaraman S**, Gursky O.  
J Mol Biol. 2008 Feb 29;376(4):997-1007. doi: 10.1016/j.jmb.2007.12.030. Epub 2007 Dec 23.

[Effects of oxidation on the structure and stability of human low-density lipoprotein.](#)

**Jayaraman S**, Gantz DL, Gursky O.  
Biochemistry. 2007 May 15;46(19):5790-7. Epub 2007 Apr 20.

[Role of secondary structure in protein-phospholipid surface interactions: reconstitution and denaturation of apolipoprotein C-I:DMPC complexes.](#)

Benjwal S, **Jayaraman S**, Gursky O.  
Biochemistry. 2007 Apr 3;46(13):4184-94. Epub 2007 Mar 7.

[Effects of salt on the thermal stability of human plasma high-density lipoprotein.](#)

**Jayaraman S**, Gantz DL, Gursky O.  
Biochemistry. 2006 Apr 11;45(14):4620-8.

[Electrostatic effects on the stability of discoidal high-density lipoproteins.](#)

Benjwal S, **Jayaraman S**, Gursky O.  
Biochemistry. 2005 Aug 2;44(30):10218-26.

[Structural basis for thermal stability of human low-density lipoprotein.](#)

**Jayaraman S**, Gantz D, Gursky O.  
Biochemistry. 2005 Mar 15;44(10):3965-71.

[Kinetic stabilization and fusion of apolipoprotein A-2:DMPC disks: comparison with apoA-1 and apoC-1.](#)

**Jayaraman S**, Gantz DL, Gursky O.  
Biophys J. 2005 Apr;88(4):2907-18. Epub 2005 Jan 28.

[Poly\(ethylene glycol\)-induced fusion and destabilization of human plasma high-density lipoproteins.](#)

**Jayaraman S**, Gantz DL, Gursky O.  
Biochemistry. 2004 May 11;43(18):5520-31.