

Curriculum Vitae

Name: Rana K. Gupta

Degree: PhD

Affiliation: Duke University School of Medicine

Position Title: Professor of Medicine (Tenure)

Education/Training

Institution and Location	Degree	Completion Date	Field of Study
University of Pennsylvania Philadelphia, PA	B.A.	2001	Biochemistry
University of Pennsylvania School of Medicine Philadelphia, PA (Mentor: Dr. Klaus Kaestner)	Ph.D.	2006	Pharmacology
Dana-Farber Cancer Institute and Harvard School of Medicine Boston MA (Mentor: Dr. Bruce Spiegelman)	Postdoctoral Fellowship	2012	Adipose Tissue Development

Positions and Scientific Appointments

Year(s)	Academic Title	Department	Academic Institution
2012-2018	Assistant Professor	Internal Medicine	UT Southwestern Medical Center
2018-2022	Associate Professor (Tenure)	Internal Medicine	UT Southwestern Medical Center
2022-Present	Professor (Tenure)	Medicine/Div. Endocrinology, Metabolism and Nutrition	Duke University School of Medicine
2022-Present	Section Chair, Basic Sciences	Duke Molecular Physiology Institute	Duke University

Honors (Maximum 7)

Year	Name of Honor/Award	Awarding Organization
2022	Duke Science and Technology Scholar	Duke University
2017	2016 Individual Biomedical Research Award	The Hartwell Foundation
2015	Grossman Award for Excellence in Diabetes Research	Grossman Family/UT Southwestern
2013	Searle Scholar	Searle Scholars Program
2013	New Scholar in Aging Research	Ellison Medical Foundation (Award declined due to conflict with Searle Scholar award)
2010	NIH Mentor-based Career Development Award (K01)	NIH-NIDDK

Selected Publication
PDGFR β + Mural Preadipocytes Contribute to Adipocyte Hyperplasia Induced by High-Fat-Diet Feeding and Prolonged Cold Exposure in Adult Mice.

 Vishvanath L, MacPherson KA, Hepler C, Wang QA, Shao M, Spurgin SB, Wang MY, Kusminski CM, Morley TS, **Gupta RK**.

Cell Metab. 2016 Feb 9;23(2):350-9. doi: 10.1016/j.cmet.2015.10.018. Epub 2015 Nov 25.

PMID: 26626462

Zfp423 Maintains White Adipocyte Identity through Suppression of the Beige Cell Thermogenic Gene Program.

 Shao M, Ishibashi J, Kusminski CM, Wang QA, Hepler C, Vishvanath L, MacPherson KA, Spurgin SB, Sun K, Holland WL, Seale P, **Gupta RK**.

Cell Metab. 2016 Jun 14;23(6):1167-84. doi: 10.1016/j.cmet.2016.04.023. Epub 2016 May 26.

PMID: 27238639

Identification of functionally distinct fibro-inflammatory and adipogenic stromal subpopulations in visceral adipose tissue of adult mice.

 Hepler C, Shan B, Zhang Q, Henry GH, Shao M, Vishvanath L, Ghaben AL, Mobley AB, Strand D, Hon GC, **Gupta RK**.

Elife. 2018 Sep 28;7. pii: e39636. doi: 10.7554/eLife.39636. PMID: 30265241

Perivascular mesenchymal cells control adipose-tissue macrophage accrual in obesity.

 Shan B, Shao M, Zhang Q, Hepler C, Paschoal VA, Barnes SD, Vishvanath L, An YA, Jia L, Malladi VS, Strand DW, Gupta OT, Elmquist JK, Oh D, **Gupta RK**.

Nat Metab 2020. <https://doi.org/10.1038/s42255-020-00301-7> PMID: 33139957

Pathologic HIF1 α signaling drives adipose progenitor dysfunction in obesity.

Shao M, Hepler C, Zhang Q, Shan B, Vishvanath L, Henry GH, Zhao S, An YA, Wu Y, Strand DW, Gupta RK.

Cell Stem Cell. 2021 Jan 27;S1934-5909(20)30592-0. doi: 10.1016/j.stem.2020.12.008. PMID: 33539723

ZFP423 Controls EBF2 Co-activator Recruitment and PPAR γ Occupancy to Determine the Thermogenic Plasticity of Adipocytes

Shao M, Zhang Q, Truong A, Shan B, Vishvanath L, Li L, Seale P, and Gupta RK.

Genes Dev. 2021 Nov 1;35(21-22):1461-1474. doi: 10.1101/gad.348780.121. Epub 2021 Oct 7.

PMID: 34620682

Multilayered omics reveal sex- and depot-dependent adipose progenitor cell heterogeneity

Shan B, Barker CS, Shao M, Zhang Q, Gupta RK, Wu Y. *Cell Metab.* 2022 May 3;34(5):783-799.e7. doi: 10.1016/j.cmet.2022.03.012. Epub 2022 Apr 20. PMID: 35447091