Sai P. Gourisankar, Ph.D.

Email: saipg@stanford.edu | LinkedIn: https://goo.gl/c4CBdo

Education and Training

NCI K99/R00 Postdoctoral Fellow *Stanford Cancer Institute, USA*	2023-present
Ph.D., M.S., Chemical Engineering *Stanford University, USA*	2023
M.P.P., Public Policy	2017
M.St., Global History *University of Oxford, UK*	2016
B.S., Chemical Engineering B.A., Plan II Liberal Arts *University of Texas at Austin, USA*	2015

Research Interests

Engineering novel chemical strategies for cancer therapy, e.g., induced proximity therapeutics

Discovering therapeutic vulnerabilities in mechanisms of gene regulation

Grants

NCI Pathway to Independence Award for Outstanding Early-Stage Postdoctoral Researchers (K99/R00) (1K99CA296700-01)	2025
Ruth L. Kirschstein National Research Service Award (NIH 1F31HD103339-01)	2020
NSF Graduate Research Fellowship	2017

Selected Honors and Awards

Rhodes Scholarship	2015
Astronaut Foundation Scholarship (national research award)	2014
Barry M. Goldwater Scholarship	2013

Highlighted Publications (*indicates co-first authorship)

S. Gourisankar*, A. Krokhotin*, W. Ji*, X. Liu, C-Y. Chang, S. H. Kim, Z. Li, W. Wenderski, J.M. Simanauskaite, H.Yang, H. Vogel, T. Zhang, N.S. Gray, G.R. Crabtree. Rewiring cancer drivers to activate apoptosis. *Nature*, **620**, 417-425 (2023).
Highlighted in:

- Phelan, J., Staudt, L. “Double-headed Molecule activates cell-death pathways in cancer cells”. *Nature*, 620, 285-286 (2023).
- Miura, G. “Linked to death”. *Nat. Chem. Biol.*, 19, 1043 (2023).
- Kolata, G. “Flipping a Switch and Making Cancers Self-Destruct”. The New York Times. Published July 26, 2023.
- Dolgin, E. “Two-armed Molecule Flips Switch on Gene Regulation”. Cancer Discovery News in Brief. Published July 27, 2023.
- Wu, L.L. “’An unholy union’: Stanford scientists create drug that flips cancer driver into killer”. Endpoints News. Published July 27, 2023.

R.C. Sarott*, **S. Gourisankar***, B. Karim*, S.A. Nettles, H.Yang, B.G. Dwyer, J.M. Simauskaite, J. Tse, H. Abuzaid, A. Krokhotin, T. Zhang, S.M. Hinshaw, M.R. Green, G.R. Crabtree, N.S. Gray. Re-localizing transcriptional kinases to activate apoptosis. *Science,* **386**, eadl5361 (2024).
Highlighted in:

- Atkinson, V. “Hijacking kinases to kill cancer”. *Chemical & Engineering News*. Published October 14, 2024.

All Publications (*indicates co-first authorship)

1. M.N. Nix*, **S. Gourisankar***, R.C. Sarott, B.G. Dwyer, S.A. Nettles, M.M. Martinez, H. Abuzaid, H. Yang, Y. Wang, J.M. Simanauskaite, B.A. Romero, H.M. Jones, A. Krokhotin, T.N. Lowensohn, L. Chen, C. Low, M.M. Davis, D. Fernandez, T. Zhang, M.R. Green, S.M. Hinshaw, N.S. Gray, G.R. Crabtree. A bivalent molecular glue linking lysine acetyltransferases to oncogene-induced cell death. *bioRxiv*, (*in revision at Cell*) (2025).
2. M.J. Bond, R.P. Golden, G. DiGiovanni, B. Howard, R.C. Sarott, B.A. Karim, **S. Gourisankar**, G. Alexe, K. Ross, N.S. Gray, K. Stegmaier. Rewiring the fusion oncoprotein EWS/FLI in Ewing sarcoma with bivalent small molecules. *bioRxiv* (*in revision at J. Am. Chem. Soc.*) (2025).
3. **S. Gourisankar***, S.A. Nettles*, W. Wenderski, J.A. Paulo, S.H. Kim, K.C. Roepke, C. Ellis, H.Z. Abuzaid, S.P. Gygi, G.R. Crabtree. Synaptic activity causes minute-scale changes to BAF complex composition and function" *Molecular Cell* **85**, 12, 2374-89 (2025).
4. R.C. Sarott*, **S. Gourisankar***, B. Karim*, S.A. Nettles, H.Yang, B.G. Dwyer, J.M. Simauskaite, J. Tse, H. Abuzaid, A. Krokhotin, T. Zhang, S.M. Hinshaw, M.R. Green, G.R. Crabtree, N.S. Gray. Re-localizing transcriptional kinases to activate apoptosis. *Science,* **386**, eadl5361 (2024).
5. **S. Gourisankar**, A. Krokhotin, W. Wenderski, G.R. Crabtree. Context-specific functions of chromatin remodellers in development and disease. *Nature Rev. Genetics*, **25**, 340-361 (2024).
6. **S. Gourisankar***, A. Krokhotin*, W. Ji*, X. Liu, C-Y. Chang, S. H. Kim, Z. Li, W. Wenderski, J.M. Simanauskaite, H.Yang, H. Vogel, T. Zhang, N.S. Gray, G.R. Crabtree. Rewiring cancer drivers to activate apoptosis. *Nature*, **620**, 417-425 (2023).
7. E.J. Chory, J.G. Kirkland, C-Y. Chang, V.D. D'Andrea, **S. Gourisankar**, E.C. Dykhuizen, G.R. Crabtree. Chemical inhibitors of a selective SWI/SNF function synergize with ATR inhibition in cancer cell killing. *ACS Chem. Biol.,* **15**, 1685-1696 (2020).
8. E.Y. Son*, A. Krokhotin*, **S. Gourisankar**, C-Y. Chang, G.R. Crabtree. *ARID1B* is a dosage-sensitive regulator of PRC distribution and Hox gene regulation in human neural progenitors. *ResearchSquare* (2021) (*in revision at Nat. Comm.):* preprint doi: 10.21203/rs.3.rs-959800/v1.
9. R.J. Stover*, E. Moaseri*, **S. Gourisankar**, N. Rahbar, B. Changalvaie, M. Iqbal, T. Truskett, K. Johnston. Formation of small gold nanoparticle chains with high NIR extinction through bridging with calcium ions. *Langmuir*, **32**, 1127-1138 (2016).
10. R.J. Stover, A.K. Murthy, G.D. Nie, **S. Gourisankar**, B.J. Dear, T.M. Truskett, K.V. Sokolov, K.P. Johnston. Quenched assembly of NIR-active gold nanoclusters capped with strongly bound ligands by tuning particle charge via pH and salinity. *J. Phys Chem C.*, **118**, 14291-14298 (2014).
11. A.K. Murthy, R.J. Stover, A.U. Borwankar, G.D. Nie, **S. Gourisankar**, T.M. Truskett, K.V. Sokolov, K.P. Johnston. Equilibrium gold nanoclusters quenched with biodegradable polymers. *ACS Nano*., **7**, 239-251 (2013).
12. A.K. Murthy, R.J. Stover, W.G. Hardin, R. Schramm, G.D. Nie, **S. Gourisankar**, K.V. Sokolov, K.P. Johnston. Charged gold nanoparticles with essentially zero serum protein adsorption in undiluted fetal bovine serum. *J. Am. Chem. Soc.,* **135**, 7799-7802 (2013).
13. N.W. Smith, **S.P. Gourisankar**, J.L. Montchamp, S.V. Dzyuba. Silver-free synthesis of nitrate-containing room-temperature ionic liquids. *New J. Chem*., **35**, 909-914 (2011).

Patents and Applications

G.R. Crabtree, N. Gray, **S. Gourisankar,** *et al*. Heterobifunctional compounds and methods of use thereof. WO/2025/007026, published February 2025.

G.R. Crabtree, N. Gray, **S. Gourisankar**, *et al.* Compositions, systems, and methods for modulating a target gene. WO/2023/215311, published September 2023.

G.R. Crabtree, **S. Gourisankar**, *et al.* Modulation of gene expression via transcription factor-chemical induced proximity (TF-CIP). WO/2022/098989, published December 2022.

Selected Presentations

European Society for Hematology, Estoril, Portugal, *invited talk*	Oct 2025
MIT-Broad Institute Chemical Biology SuperGroup, *invited talk*	Oct 2025

Center for Targeted Protein Degradation, Dundee, U.K., *invited talk*	June 2025
Max Planck Institute for Biomedical Research, Heidelberg, Germany, *invited talk*	June 2025
Synthesis Workshop, online https://shorturl.at/6Fsp4 *invited talk*	May 2025
AACR, Major Symposia: Harnessing Induced Proximity, Chicago, IL, *invited talk*	Apr 2025
American Society for Biochemistry and Molecular Biology, Chicago, IL, *invited talk*	Apr 2025
Prof. K. Shokat Group Seminar, UCSF, San Francisco, CA, *invited talk*	Mar 2025
Experimental Therapeutics, MD Anderson Cancer Ctr., Houston, TX, *invited talk*	Nov 2024
Prof. R. Tijan and Prof. X. Darzaq Joint Group Seminar, Berkeley, CA, *invited talk*	Aug 2024
American Chemical Society National Meeting Fall 2024, Denver, CO	Aug 2024
Fragile Nucleosome Seminar, online https://youtu.be/-eNl-ByXB-E*, invited talk*	Apr 2024
Proximity-Inducing Pharmacology, IRB Biomed Conference, Barcelona, Spain	May 2023
Steel Symposium for Developmental Oncology, Memorial Sloan, New York, NY	May 2023
Dana Farber Targeted Protein Degradation Seminar, Cambridge, MA, *invited talk*	Jan 2023
American Institute of Chemical Engineers Nat'l Meeting, Atlanta, GA, *invited talk*	Nov 2014

Teaching Experience

University of Chicago | Chicago, IL USA — 2025
Guest Speaker, Cancer Biology Seminar

Stanford University | Stanford, CA USA — 2020-2022
Instructor, INDE 209: Analysis of Life Science Companies

Stanford University | Stanford, CA USA — 2020-2021
Teaching Assistant, CHEMENG 355: Advanced Biochemical Engineering

Stanford Prison Education Project, San Bruno Jail | San Bruno, CA USA — 2018-2019
Lecturer, Genetics and CRISPR/Cas9

University of Texas at Austin | Austin, TX USA — 2013
Tutor, CHE 317: Introduction to Chemical Engineering

Trainees Mentored

Hanxi Tang – Graduate Student, Stanford Chemical & Systems Biology
Meredith Nix – Graduate Student, Stanford Chemistry
Basel Karim – Graduate Student, Stanford Chemistry
Hind Abuzaid – Research Assistant, Stanford Pathology
Jason Tse – Research Assistant, Stanford Chemical and Systems Biology
Juste Simanauskaite – Research Assistant, Stanford Pathology
Kyra Roepke – Undergraduate research student; Stanford Pathology, won Goldwater Scholarship
Makayla Conley – Undergraduate research student, Stanford Pathology

Academic Service

Reviewer for *ACS Chem. Biol.*, *Nature Genetics, Nature Communications* — 2022-present

Stanford Office of Global Scholarships | Stanford, CA USA — 2019-present
Interviewer, Rhodes and Marshall Scholarship Candidates

Stanford Department of Chemical Engineering | Stanford, CA USA — 2018-2020
Chair, Convocation and Research Symposium

Industry Experience

Co-founder and Advisor, Shenandoah Therapeutics | Woodside, CA USA — 2023-present

References

Professor Gerald Crabtree, MD
Stanford University
crabtree@stanford.edu

Professor Nathanael Gray, PhD
Stanford University Chem-H
nsgray01@stanford.edu

Professor Michael Green, PhD
The University of Texas – MD Anderson Cancer Center
Mgreen5@mdanderson.org