

Gregory C. Gibson

Regents Professor of Biological Sciences, Tom and Marie Patton Chair
Director, Center for Integrative Genomics, Georgia Institute of Technology
Director, Bruce Weir Summer Institutes in Statistical Genetics
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Education and Professional Experience

2009-present	Professor, School of Biological Sciences Human genomics	Georgia Institute of Technology
2008-2009	Australian Professorial Fellow Genetics of gene expression variation in humans	Univ of Queensland, Brisbane Australia
2005-2007	William Neal Reynolds Distinguished Professor of Genetics Genomics of gene expression variation in flies, canids and humans	NC State University
1998-2005	Assistant; Associate (2001) Professor Quantitative genomics of morphogenesis and pharmacology in <i>Drosophila</i>	North Carolina State University
1994-1998	Assistant Professor Quantitative molecular genetics of developmental stability in <i>Drosophila</i> .	University of Michigan
1993-1994	Post-doctoral Fellow Evolutionary quantitative genetics of genital morphology in <i>Drosophila</i> .	Cathy C. Laurie, Duke University
1990-1993	Post-doctoral Fellow Population and quantitative genetics of the <i>Ultrabithorax</i> gene in <i>Drosophila</i> . Theoretical population genetic modeling (with Marcus W Feldman).	David S. Hogness, Stanford University
1986-1989	Graduate Student Functional dissection of biological specificity of homeotic proteins in <i>Drosophila</i> .	Walter J. Gehring, U. of Basel

HONORS AND AWARDS

2021	Tom and Marie Patton Chair, and Regents Professor
2017-2019	Visiting Professor, Garvan Institute for Medical Research, Sydney Australia
2017	Fulbright Council for International Exchange Senior Scholar US for study in Spain
2006	Elected Fellow of the American Association for the Advancement of Science (AAAS)
2005	William Neal Reynolds Distinguished Professor
1998	Visiting Research Associate, Stanford University Center for Computational Genetics
1996-2001	David and Lucille Packard Foundation Fellowship in Science and Engineering
1996-1997	Basil O'Connor Young Investigator Award of the March of Dimes
1993-1994	Hargitt Fellow of Duke University Department of Zoology
1990-1993	Helen Hay Whitney Foundation Post-Doctoral Fellow
1989	Doctor of Philosophy, <i>summa cum laude</i> , Univ. of Basel, Switzerland
1985	Bachelor of Science, First Class Honors, Univ. of Sydney, Australia

COMMUNITY SERVICE

2025	Ad Hoc, Board of Scientific Councillors, NIEHS Biostat Computational Biology Branch
2025-2027	Advisory Board, Mohammed Bin Zayed University of Artificial Intelligence, Abu Dhabi
2024-present	Director, Summer Institute in Statistical Genetics
2020-2021	Director, Campus-wide SARS-CoV-2 CLIA Testing Lab for Georgia Tech
2018-2024	Co-Director, CHoA Center for Immunity and Applied Genomics (CIAG)
2013-2017	Scientific Advisory Board, Rare Alleles NSF Plant Genome Project, Cornell Univ
2013	External Review Committee, Finnish Institute of Molecular Medicine
2012-2016	Scientific Advisory Board, Dartmouth Institute for Quantitative Biomedical Sciences
2010-2015	Chair, Scientific Advisory Board, CARTaGENE Population Genomics, U de Montreal
2007-2014	Chair, Scientific Advisory Board, Max Plank Institute for Evolutionary Biology
2006-2016	Section Editor: Gene Expression and Natural Variation, <i>PLoS Genetics</i>
2005-2007	Associate Director for Education and Outreach, National Evolutionary Synthesis Center
2003-2007	Assistant Director for Life Sciences, North Carolina Agricultural Research Service
2002-2005	North Carolina Governor's Task Force on Genomics and Public Health (Chair 2004, 2005; Futures and Research Group Chair 2003-2005)
2003-2007	Member, FlyBase Advisory Board
2003	Co-author, Drosophila Species White Paper, led to sequencing of 9 new genomes
2002-2003	Executive Director, NCSU CALS Genome Research Laboratory
2002-2007	10 NSF and NIH Scientific Merit Review panels; Christian Doppler Society, Austria
2001-2002	Founding Member, Faculty of the 1000, Online Research Review Service

Editorial Boards: Molecular Biology and Evolution (Senior Editor since 2019)
 PLoS Genetics (since 2005)
 Genome Medicine (since 2013)
 Journal of Personalized Medicine (since 2015)
 Genetics (2004-2010)
 American Naturalist (2005-2010)
 Current Biology (2003-2009)
 Genetical Research (1999-2012; Minireviews Editor 2001-2005)
 Genes, Brain, and Behavior (2002-2008)
 Development, Genes, and Evolution (since 1996)

Ad-hoc Reviewer for: Nature, Nature Genetics, Science, PLoS Biology, PNAS, Cell, Genetics,
Genetical Research, PNAS, Journal of Heredity, Current Biology,
Development and Evolution, Genome Biology, Genome Research,
Molecular Biology and Evolution, TREE, Molecular Ecology,
Gastroenterology, Inflammatory Bowel Disease, etc.

TEACHING (1999 – 2025)

BIOL4545	Human Genetics (13X @ GaTech)
BIOL4520	Health, Genes and Society (10X @GaTech)
BIOL8802H	Experimental Genomics: Graduate Colloquium (1X @ GaTech)
BIOL8802L	Quantitative Genetics: Graduate Colloquium (1X@GaTech)
GN495G:	Genes, Development, and Evolution: Advanced Undergraduate Course (4X @ NCSU)
GN810G:	Genome Science: Core Graduate Course in Genome Science curriculum (3X @ NCSU)
GN495A:	Introduction to Genome Science: Advanced Undergraduate Course (4X @ NCSU)
GN810E:	Complex Human Disease: Graduate Colloquium (1X @ NCSU)

Summer Institute of Statistical Genetics: “Genome Science” and “Gene Expression” Modules
Raleigh NC 2001 - 2004; Seattle WA 2006 – 2022; Atlanta 2024,2025
Christchurch NZ, 2001; Dublin Ireland, 2002, Melbourne Australia, 2003;

Faro Portugal, 2004; Seoul Korea, 2005; Aarhus Denmark, 2006; Beijing China, 2010, Liege Belgium 2007, 2009, 2011, Edinburgh 2012, Abu Dhabi 2017,2019; Brisbane 2017

Doctoral Students:

Dae-gwon Ahn, Ph.D.	1994-1998	Research Assistant Professor, Seoul Korea
Arnar Palsson, Ph.D.	1998-2003	Currently Asst Prof, Univ. of Iceland
Roland Carrillo, Ph.D.	1999-2004	Regional representative, DiscoverX Corporation
Gisele Passador-Gurgel	2000-2006	Currently Teaching Asst. Prof, NCSU
Jennifer Moser	2001-2005	Currently Program Officer, Veterans Affairs
Pierre Bushel	2001-2005	Currently Director of Bioinformatics, NIEHS Durham
Wen-Ping Hsieh	2002-2005	Currently Associate Professor, Tsing Hua Univ. Taiwan
Erin Kennerly	2005-2008	Currently Account Manager, Q ² Solutions, Durham NC
Youssef Idaghmour	2005-2010	Currently Assistant Professor, NYU Abu Dhabi
Kevin Lee	2011-2014	Currently MD Fellow, Univ Alabama at Birmingham
Thanawadee Preeprem	2012-2014	Currently Assistant Professor, Ubon Ratchathani Univ, Thailand
Jing Zhao	2011-2015	Senior Bioinformatician, Guradant Health, San Francisco, CA
Monica Rojas	2012-2016	Currently Research Scientist, University of Washington, Seattle
Swetha Garimalla	2014-2018	Director Computational Immunology, OminAb, Emeryville, CA
Diana Williams	2014-2018	Forensic scientist, Defence Forensic Science Center
Biao Zeng	2014-2018	Post-Doctoral Fellow, Columbia University, New York
Hari Somineni	2017-2019	Senior Data Scientist at Insitro (co-advised with S Kugathasan)
Ruoyu Tian	2016-2020	Senior Data Science Expert I, Novartis Institute Biomed Res, MA
Hamid Hassanzadeh	2018-2019	Data Analyst, Home Depot (co-advised with C Isbell, M Wang)
Camila Medrano	2017-202	Computational Scientist II, Blueprint Medicine, Boston MA
Khalid Alhumimidi	2014-2021	Assistant Faculty, King Saud University, Riyadh, Saudi Arabia
Angela Mo	2016-2021	Bioinformatics Scientist II, Azenta Life Sciences, Atlanta, GA
Sini Nagpal	2019-2022	Current Post-Doc in my group at GT
Kiera Berger	2017-2022	Bioinformatic Scientist, Pillar Biosciences, MA
Meixue Duan	2018-2022	Senior Data Scientist, Novartis Institute Biomed Research, MA
Courtney Astore	2021-2023	Senior Bioinformatician, Ionis Pharmaceuticals
Maggie Brown	2020-2024	Bioinformatics Scientist, The Arc Institute, Palo Alto, CA
Erin Connolly	2020-2024	Instructor, Emory University School of Medicine
Paramita Chatterjee	2022-2024	Bioinformatics Lead, Leidos/CDC, Atlanta, GA
Emily Greenwood	2020-2025	Post-Doc, Dana Farber Cancer Center, Boston MA
Kyndal Goss	2021-2025	Graduated at Emory, Post-Doc with Advisor Ed Horwitz)
Savannah Washburn	2021-	Current student at GT
Stephanie Dallaire	2021-	Current student at GT
Hira Anis	2022-	Current student at GT
Varsha Bhat	2022-	Current student at GT
Siming Zhao	2024-	Current student at GT
Ilaha Husseyinli	2024-	Current student at GT
Lucia Serrano-Marin	2024-	Current student at GT
Desirée Bogen	2025-	Current student at GT
Jennifer Xu	2025-	Current student at GT

Masters Students (Georgia Tech):

Neha Gupta	2009-2010	Research Bioinformatician, NIH dbGaP, Bethesda
Arthi Talla	2009-2010	Research Bioinformatician, VGTI, Florida
Ben Hsieh	2009-2011	Research Bioinformatician, UGA
Jinhee Kim	2009-2012	Lab Manager, Northwestern University, Chicago
Haozheng Tian	2010-2011	PhD Student, Georgia Tech
Peter Qin	2010-2011	Software developer, Amazon, Seattle WA

Artika Nath	2011-2012	Post-Doctoral Fellow, IDI-Baker Institute, Melbourne, Aust.
Ambily Sivasdas	2011-2012	Post-Doctoral Fellow, Hyderabad, India.
Seo Young Choi	2011-2012	Accountant
Vartika Agarwal	2012-2013	Research Bioinformatician, Phillips, NY
Karthik Murugesan	2013-2014	Research Bioinformatician, Phillips, NY
Roopa Reddy	2014-2015	In India
Chen Guo	2015-2016	Research Bioinformatician, Sacramento CA
Hari Subramanian	2015-2016	Research Bioinformatician, Chicago IL
Michael Finlayson	2016-2017	Research Bioinformatician, Columbia University, NY
Annachiara Korchmaros	2017	Research Bioinformatician, Albert Einstein College, NY
Meixue Duan	2016-2017	PhD, now Research Bioinformatician at Novartis since 2023
Sini Nagpal	2017-2018	Current Post-Doc at GT (my group)
Maggie Fisher (Brown)	2018-2019	Current PhD student at GT (my group)
Kristine Lacek	2019-2020	ORISE Fellow, CDC, Atlanta GA
Jenn Kintzle	2020-2021	Staff Scientist, Allelica
Yifan Liang	2020-2021	Medical student
Harini Adepu	2020-2021	Staff Data Scientist, Baylor Genetics
Zheyang Xu	2021-2022	Bioinformatician in China
Varsha Bhat	2021-2022	Current PhD student at GT (my group)
Jared Collins	2022-2023	Staff bioinformatician at Harvard
Neha Bhatia	2021-2023	Analyst at Deloitte
Kate Xie	2022-2023	Bioinformatician in China
Fang Shu	2022-2023	Current student and staff member at GT
Akshaya Thoutam	2022-2023	Applying for Medical School
Emily Hang	2023-2024	Current PhD student at Harvard
Tamarin Tandra	2023-2024	Returned to Indonesia
Caleb Connors	2023-2024	Staff Scientist, Emory University
Suraksha Vinod	2023-2025	PhD student at Penn State University
Mia Denning	2024-2025	PhD student at UC Berkeley
Honoka Miura	2024-	Current student at GT

Post-Doctoral Fellows:

Wei (Wendy) Jin	1999-2000	Currently Director of Plant Epidemiology, APHIS, Raleigh NC
Naruo Nikoh	2001-2003	Currently Associate Professor, Open University of Japan, Chiba
Ian Dworkin	2002-2007	Currently Associate Professor, Michigan State University
Lisa Goering	2003-2007	Currently Associate Professor, St Edwards College, Austin TX
Laura Reed	2006-2010	Currently Assistant Professor, University of Alabama
Yue Luo	2010-2011	Currently Clinical Research Coordinator, Emory University
Rubina Tabassum	2012-2013	Currently Research Scientist, FIMM, Helsinki Finland
Idy Akinsanmi	2014-2015	Currently Clinical Scientist, Alpharetta GA
Yang Tan	2013-2015	Currently Post-Doctoral fellow, Harvard University
Bao Zhang	2016-2017	Currently Research Assistant Professor, Jiaotong Univ, PRC
Urko Martinez	2013-2018	Currently Research Fellow, Ikerbasque Basque Science Fdn, Spain
Sini Nagpal	2022-	Current Post-Doc

GRANTS RECEIVED

ACTIVE:

1. National Institutes of Health, NHGRI 1-R01HG011459-01
“Precision mapping of regulatory causal variants by expression CROPseq”
G Gibson, G. Bao (Rice) Co-PIs
5 years, \$500,000 / yr DC 2/21 – 1/26
2. National Institutes of Health, NHLBI 1-R01-DK125936
“SMILE: Sickle Cell Disease Microbiologic and Immunologic Links to Health” B Kopp, PI
\$50,000 Annual Direct to GT 8/25 – 6/29
3. National Institutes of Health, NHLBI 1-R01-HL164583
“Transcriptomics of Pain in Sickle Cell Disease” Vivien Sheehan, Emory, PI
4 years, \$75,000 / yr DC to GT 9/22 – 8/26
4. National Institutes of Health, NHLBI 1-P01-HL169552
“Basic and Translational Mechanisms of Alloimmunization to RBC Transfusion”
James Zimring, Uva PI; Vivien Sheehan, Emory, Co-PI; G Gibson Co-I
5 years, \$50,000 / yr DC to GG (awaiting sub-contract from Emory) 10/23 – 6/28
5. Gates Foundation
“Enhancement of Plasma Cells for Vaccination” Eun Lee, Emory, PI
Renewed as “STELLAR: Stem Cell Therapy for Engineered Long-Lived Antibody Response”
\$50,000 / yr DC to Gibson 1/24 – 12/27
6. Helmsley Foundation
“Longitudinal Single Cell Transcriptomics of Crohns Disease” Peng Qiu, BME, PI
3 years, \$50,000 / yr DC to GG 9/21 – 8/24 (on NCE)
7. National Institutes of Health, RMIP Krish Roy, BME, initial PI
“In Depth Cell Characterization (IDCC) Hub for Regenerative Medicine Innovation Project”
Open ended, currently \$850,00 / yr DC to Georgia Tech 7/22 – ongoing
I took over as PI when Dr Roy moved to Vanderbilt in summer 2023
8. National Science Foundation Greg Gibson, PI
“Summer Institute in Statistical Genetics” 7/20 – 6/25
Transferred from University of Washington, Bruce Weir initial PI until his retirement
This grant supports an advanced nation-wide statistical genetics training program

COMPLETED:

9. National Institutes of Health, NIDDK 1-R01-DK125936
“Genomic analysis of perianal fistulizing Crohn’s disease across ancestries” S Kugathasan, PI
\$125,000 Annual Direct to GT 7/20 – 6/23
10. National Institutes of Health, NIAID 1-U01-AI141993
“Human Vaccine Durability Using Integrated Bioinformatics” Ignacio Sanz, Emory, PI
5 years \$110,000 Annual Direct to Gibson 1/19 – 12/23
11. National Institutes of Health, NIDDK 1-R01DK119991
“New computational and transcriptional approaches to the biology of inflammatory bowel disease”
G Gibson PI
4 years, \$125,000 / yr DC 9/18 – 8/22

12. National Institutes of Health, NIDDK 3-R01DK087694
 “Gene Discoveries in Subjects with Crohn's disease of African descent”
 Subra Kugathasan, Emory, PI; G Gibson Co-I
 8 years (renewed in 2021), \$90,000 Direct to GT 7/16 – 6/24
13. National Institutes of Health, NIAID 1-P01-AI125180
 “B cells in Lupus Nephritis” Ignacio Sanz, Emory, PI; Ronghu Wu GT Co-I
 5 years, \$55,000 / yr DC to GT 7/16 – 6/21
14. IBB Seed Grant (Co-PI with Ed Botchwey, BME) 7/17 – 6/18
 “Single cell RNASeq and Lipidomics of Mesenchymal Stem Cells”
 2 years, \$50,000 per year (second year pending)
15. National Institutes of Health, General Medical Sciences 1T32GM105490-01
 “A Computational Biology and Predictive Health Genomics Training Program at GT”
 5 years, \$180,000 / yr 6/14 – 4/19
16. Emory+Childrens Healthcare of Atlanta Center for Pediatric Innovation (CPI) Seed Grant:
 G Gibson PI, M Hegde Co-I, \$50,000 in FY 2016/2017
17. Emory+Childrens Healthcare of Atlanta Center for Pediatric Innovation (CPI)
 “A disruptive approach to CF therapy: targeted RNAi delivery to reprogrammed airway neutrophils”
 Rabindra Tirouvanziam PI, G Gibson and J Dahlman CoIs at GT
 \$25,000 DC to GT
18. National Institutes of Health, General Medical Sciences 1-P01GM0996568
 Statistical and Quantitative Genetics – Project 3 Bruce Weir, UWashington, Program Director
 5 years, \$225,000 / yr DC to GT 6/12 – 5/17
 Administrative supplement, 2 years, \$40,000/yr 3/14 – 2/16
19. NIAID-DMID-NIHAI2010100 (M. Galinski, Yerkes Primate Center, PI)
 An Integrated Approach to Understanding Host-Pathogen Interactions
 3 years, \$300,000/yr DC to GT 7/12 – 12/15
20. Georgia Tech/Emory Immunoengineering Seed Grant (J Galipeau, Emory, Co-PI)
 Molecular genetic and functional characterization of Crohn’s MSCs immune plasticity
 1 year, \$50,000 7/14 – 6/15
21. Children’s Healthcare of Atlanta Pediatric Innovation Center (R Guldberg, Co-PI)
 Toward personalized treatment for Osteochondritis Dissecans based on Genomic Imaging
 1 year \$60,000 6/13 – 5/14
22. National Institutes of Health, NICHD Biostatistics and Bioinformatics Branch
 Inter-Personnel Agreement 5/13 – 4/14
23. Georgia Tech Institute for Bioengineering and Bioscience (IBB)
 Single cell genomic profiling Co-PI with Melissa Kemp, GT
 2 year, \$50,000 / yr 7/11 – 6/13
24. Childrens Healthcare of Atlanta Pediatric Medical Device Consortium
 RNA-Seq profiling in support of in-time craniosynostosis intervention (with R. Olivares)
 1 year, \$50,000 7/12 – 6/13

25. Children's Healthcare of Atlanta, Center for Cystic Fibrosis Research
Genome-wide gene expression profiling in CFRD 3/10 - 2/11
1 year, \$50,000 Co-PI with Arlene Stecenko, MD (Emory University)
26. Australian Research Council, Australian Professorial Fellowship DP0880204
Drosophila Quantitative Genomics
5 years, AUD \$1,015,754 (approx US \$900,000) 1/08 – 12/12
27. National Institutes of Health, Heart, Lung and Blood R01HL085481
Polygenic Basis of Cardiac Dysfunction in *Drosophila*.
5 years, \$1,250,000 total direct costs 1/08- 12/12
(Co-PI with R. Bodmer, Burham Institute, San Diego)
- 28a. National Institutes of Health, General Medical Sciences R01GM61600
Quantitative Genetic Analysis of Signal Transduction in *Drosophila*.
4 years, \$500,000 total direct costs 10/00 - 9/04
- 28b. National Institutes of Health, General Medical Sciences 2-R01GM61600
Quantitative Genetic Analysis of Signal Transduction in *Drosophila*.
4 years, \$600,000 total direct costs 4/05 - 3/09
29. National Institutes of Health, General Medical Sciences P01-GM45344
Quantitative Pharmacogenomics in *Drosophila*
5 years, \$425,000 total direct costs 12/00 - 11/05
30. National Science Foundation EF-0423641
A National Center for the Synthesis of Biological Evolution
5 years, \$15 million; Total Costs to NCSU \$1,500,000
(K. Smith, Duke, P.I.; Co-P.I. with J. Kingsolver, T. Vision at UNC)
(last 2 yrs of NCSU portion transferred to B. Wiegmann 11/2007)
31. David and Lucille Packard Foundation for Science and Engineering
Quantitative Developmental and Evolutionary Genetics
5 years, \$575,000 total direct costs 10/96 - 9/01
32. NC State Center for Comparative Medicine and Translational Research
Development of an illumina genotyping resource for pharmacogenetics of anti-epileptic response
in dogs. 1 year pilot, \$15,000 direct costs. 3/06 – 12/06
33. Canine Health Foundation of the American Kennel Club ACORN
Pharmacogenetics of Canine Epilepsy
1 year, \$12,000 11/07 – 10/08
34. Canine Health Foundation of the American Kennel Club
Genomics of Canine Brain Neoplasia
2 years, \$123,600, total costs 9/04 – 8/06
(M. Breen, NCSU-CVM, P.I.; Co-P.I. with N. Olby, NCSU-CVM)
35. National Institutes of Health, General Medical Sciences R24-GM65513
Quantitative genomics of sexual dimorphism
2 years, \$56,000 total direct costs to NCSU 4/02 - 8/03
36. National Institutes of Health, National Institute of Aging R03
Microarray-based Analysis of Gene Expression in Aging *Drosophila*
1 year, \$50,000 total direct costs 9/99 - 8/00

37. North Carolina Affiliate of the American Heart Association
Quantitative Genetic Analysis of Heart Rate in *Drosophila*
2 years, \$110,000 total direct costs 5/98 - 4/00
38. March of Dimes Research Foundation, Basil O'Connor Award
Quantitative Genetic Analysis of Developmental Stability
2 years, \$80,000 total direct costs 8/96 - 7/98

PUBLISHED RESEARCH AND REVIEW PAPERS

https://scholar.google.com/citations?user=e4_ZXcwAAAAJ&hl=en&oi=ao

Citations: 41,825

h-index: 74

i10-index: 223

225. Brown M, Ferrari A, Dodd A, Shi F, Kolachala VL, Kugathasan S, Wolfinger RD, Gibson G. (2025) snATAC-Express infers gene expression from prioritized chromatin accessibility peaks using machine learning. *bioRxiv* [Preprint]. doi: 10.1101/2025.07.25.666784.
224. Yao Q, Gorevic PD, Gibson G. (2025) Genetically transitional disease and the road to personalized medicine *Genes* 16(4): 401. PMID: 40282361
223. Greenwood E, Cao M, Lee CM, Liu A, Moyo B, Bao G, Gibson G. (2025) Haplotype rather than single causal variants effects contribute to regulatory gene expression associations in human myeloid cells. *bioRxiv* doi: 10.1101/2025.01.30.635675. PMID: 39975189
222. Nagpal S, Gibson G. (2024) Dual exposure-by-polygenic score interactions highlight disparities across social groups in the proportion needed to benefit. *medRxiv* doi: 10.1101/2024.07.29.24311065. PMID: 39132477
221. Gibson G, Rioux JD, Cho JH, Haritunians T, Thoutam A, Abreu MT, Brant SR, Kugathasan S, McCauley JL, Silverberg M, McGovern D. (2024) Eleven grand challenges for inflammatory bowel disease genetics and genomics. *Inflamm Bowel Dis*. 31(1): 272-284. PMID: 39700476
220. Bhat V, Potdar AA, Yu GK, Gibson G, Sheehan VA. (2024) Impact of hydroxycarbamide treatment on the whole-blood transcriptome in sickle cell disease. *Br J Haematol*. 206(2): 713-720. PMID: 39552261
219. Farrell ML, Bryksin AV, Ryan E, Lin J, Djeddar N, Khunteev G, Holton B, Paca M, Speller N, Merrill JT, Ross TM, Hogan RJ, Gibson G, García AJ, Shannon MP. (2024) Validation of saliva as the clinical specimen type for a university-wide COVID-19 surveillance program. *Viruses* 16(9):1494. PMID: 39339970
218. Chatterjee P, Stevens HY, Kippner LE, Bowles-Welch AC, Drissi H, Mautner K, Yeago C, Gibson G, Roy K. (2024) Single-cell transcriptome and crosstalk analysis reveals immune alterations and key pathways in the bone marrow of knee OA patients. *iScience*. 27(9):110827. PMID: 39310769
217. Connolly E, Pan T, Aluru M, Chockalingam S, Dhere V, Gibson G. (2024) Loss of immune cell identity with age inferred from large atlases of single cell transcriptomes. *Aging Cell*. 23(12):e14306. PMID: 39143696

216. Brown M, Dodd A, Shi F, Greenwood E, Nagpal S, Kolachala VL, Kugathasan S, Gibson G. (2024) Concordant B and T cell heterogeneity inferred from the multiomic landscape of peripheral blood mononuclear cells in a Crohn's disease cohort. *J Crohns Colitis*. 18(12):1939-1956. PMID: 38613150
215. Sivadas A, Sahana S, Jolly B, Bhoyar RC, Jain A, Sharma D, Imran M, Senthivel V, Divakar MK, Mishra A, Mukhopadhyay A, Gibson G, Narayan KV, Sivasubbu S, Scaria V, Kurpad AV. (2024) Landscape of pharmacogenetic variants associated with non-insulin antidiabetic drugs in the Indian population. *BMJ Open Diabetes Res Care*. 12(2):e003769. PMID: 38471670
214. Niewold TB, Aksentijevich I, Gorevic PD, Gibson G, Yao Q. (2024) Genetically transitional disease: conceptual understanding and applicability to rheumatic disease. *Nat Rev Rheumatol*. 20(5):301-310. PMID: 38418715
213. Astore C, Gibson G. (2024) Integrative polygenic analysis of the protective effects of fatty acid metabolism on disease as modified by obesity. *Front. Nutrition* In press. PMID: 38303904
212. Washburn S, Maddipatla SC, Murthy S, Dodd A, Pelia RS, Kolachala VL, Deem G, Matthews JD, Gibson G, Kugathasan S. (2024) Persistent inflammation of the rectum in perianal fistulizing Crohn's Disease is associated with goblet cell function. *Gastro Hep Advances* **3**: 131-133. PMID: 39132177
211. Astore C, Sharma S, Nagpal S; NIDDK IBD Genetics Consortium; Cutler DJ, Rioux JD, Cho JH, McGovern DPB, Brant SR, Kugathasan S, Jordan IK, Gibson G. (2023) The role of admixture in the rare variant contribution to inflammatory bowel disease. *Genome Med*. **15**: 97. PMID: 37968638
210. Duan M, Nguyen DC, Joyner CJ, Saney CL, Tipton CM, Andrews J, Lonial S, Kim C, Hentenaar I, Kusters A, Ghosn E, Jackson A, Knechtle S, Maruthamuthu S, Chandran S, Martin T, Rajalingam R, Vincenti F, Breeden C, Sanz I, Gibson G, Lee FE. Understanding heterogeneity of human bone marrow plasma cell maturation and survival pathways by single-cell analyses. *Cell Rep*. 42: 112682. PMID: 37355988
209. Mautner K, Gottschalk M, Boden SD, Akard A, Bae WC, Black L, Boggess B, Chatterjee P, Chung CB, Easley KA, Gibson G, Hackel J, Jensen K, Kippner L, Kurtenbach C, Kurtzberg J, Mason RA, Noonan B, Roy K, Valentine V, Yeago C, Drissi H. (2023) Cell-based versus corticosteroid injections for knee pain in osteoarthritis: a randomized phase 3 trial. *Nature Medicine* **29**: 3120-3126. PMID: 37919438
208. Burnham AJ, Foppiani EM, Goss KL, Jang-Milligan F, Kamalakar A, Bradley H, Goudy SL, Trochez CM, Dominici M, Daley-Bauer L, Gibson G, Horwitz EM. (2023) Differential response of mesenchymal stromal cells (MSCs) to type 1 ex vivo cytokine priming: implications for MSC therapy. *Cytotherapy* **25**: 1277-1284. PMID: 37815775
207. Keshavarz-Joud P, Zhao L, Bobe D, Hernandez C, Kopylov M, Yen LY, Djeddar N, Thompson B, Connors C, Gibson G, Bryksin A, Finn MG. (2023) Exploring the landscape of the PP7 virus-like particle for peptide display. *ACS Nano*. 17: 18470-18480. PMID: 37669408
206. Li X, Gibson G, Qiu P. (2023) Gene representation in scRNA-seq is correlated with common motifs at the 3' end of transcripts. *Front Bioinform*. 3: 1120290. PMID: 37255988

205. Rufibach L, Berger K, Chakravorty S, Emmons S, Long L, Gibson G, Hegde M.(2023) Utilization of targeted RNA-seq for the resolution of variant pathogenicity and enhancement of diagnostic yield in dysferlinopathy. *J Pers Med.* 13: 520. PMID: 36983702
204. Venkateswaran S, Somineni HK, Matthews JD, Kilaru V, Hyams JS, Denson LA, Kellamayer R, Gibson G, Cutler DJ, Conneely KN, Smith AK, Kugathasan S. (2023) Longitudinal DNA methylation profiling of the rectal mucosa identifies cell-specific signatures of disease status, severity and clinical outcomes in ulcerative colitis cell-specific DNA methylation signatures of UC. *Clin Epigenetics* 15: 50. PMID: 36964596
203. Imbach KJ, Treadway NJ, Prahalad V, Kusters A, Arafat D, Duan M, Gergely T, Ponder LA, Chandrakasan S, Ghosh EEB, Prahalad S, Gibson G. (2023) Profiling the peripheral immune response to ex vivo TNF stimulation in untreated juvenile idiopathic arthritis using single cell RNA sequencing. *Pediatr Rheumatol Online J.* 21: 17. PMID: 36793127
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SUBSTACK

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COMMENTARIES

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