Section on Genetics and Genomics Newsletter



Section Chair: Rachel Kelly, PhD, MPH

Section co-Chair: Dawn DeMeo, MD, MPH

Section Officers

Ivana V. Yang, PhD, ATSF Nominating Chair/Past Chair

Victor Ortega, MD, PhD, ATSF All Program Committee Representative Katrina A. Steiling, MD, MSc

All Planning Committee Representative Emma (Kaity) Allen, PhD

Web Director Section Committees

Nominating: Ivana V. Yang, PhD, ATSF (Chair) Eric Douglas Morrell, MD Alberta Wang, MD, PhD Program: Victor Ortega, MD, PhD, ATSF (Chair) Craig Hersh, MD, MPH Plannina:

Jezreel (Jez) Pantaleón García, MD Erick Forno, MD, MPH, ATSF Social Media: Emma (Kaity) Allen, PhD

Chris Rider, PhD Diversity, Equity, & Inclusion:

Aisha Souquette, PhD

Section Contact Website

www.thoracic.org/members/assemblies/sections/gg/ Email: gg@thoracic.org Social Media: Twitter/X: @ATS_GG Facebook: ATSSGandG LinkedIn: www.linkedin.com/groups/13912138/

IN THIS ISSUE

Message from the Assembly Chair	1
Message from the Chair-Elect	2
Nominating Committee Report	2
Program & Planning Committee Report	
Web Committee Report	4
DEI Committee Report	4

Message from the Section Chair

Dear Section on Genetics and Genomics Members,

I am excited to see you all at this year's ATS International Conference 2024 in San Diego. We have had another fantastic year of SGG releated programming and of developments across the omics field. We cant wait to share these with you and to discuss plans for the committee in the year ahead.

In our second annual Section newsletter, you will find updates on the wonderful progress of our committees in the past year. As you will see, we have continued to provide a diverse range of content via webinars, journal clubs and podcasts, in addition to promoting the work of our section members and others in the field via our popular Publication Spotlight feature. We had several wonderful applicants for our third Early Career Investigator Achievement Award, but I think you will all agree we chose a worthy winner. Similarly, our Nominating Committee had a fantastic slate of candidates for the 2024 Section Leadership elections, and we are looking forward to welcoming our new members! Please do consider getting involved in the section this year, so that you too can make a mark on the future of omics research in our society.

I would like to express my sincere appreciation to the executive committee this year for your enthusiasm, ideas, hard work, and kindness, and to our whole membership who are the very reason we do what we do! We also want to thank Maria Novozhilova, Javier Guzman, Erica Forrence and Caitlan Bose from the ATS who have helped to make it all happen. It has been an honor and a pleasure to serve as your Chair this past year and I look forward to continued involvement with this amazing group of scientists, clinicians, educators, colleagues, and friends.

Please mark your calendars for the **Section Membership Meeting on Sunday, May 19 11:45am-1:15pm**. We are extremely excited to hear from our keynote speaker, **Dr**. **Trey Ideker (UCSD)**, Professor of Medicine and Bioengineering at UC San Diego. Dr. Ideker is the Director of the National Resource for Network Biology, the San Diego Center for Systems Biology, and the Cancer Cell Map Initiative, and he is one of the most innovative and exciting researchers working in the omic field today. I hope you will take the opportunity to hear from him on where he sees the field going next! Our business meeting will follow. We will celebrate our accomplishments,

congratulate our award winner, review section progress, and look to the future with our new Section leaders. I am delighted to pass on the Section leadership to **Dawn DeMeo, MD, MPH** a Pulmonary/Critical Care specialist, and Associate Professor of Medicine at the Channing Division of Network Medicine at Brigham and Women's Hospital and Harvard Medical School. Dawn is not just an excellent leader, but a champion of junior researchers and of women in science, and I cannot think of a better Chair to take us into this next year!

Please feel free to get in touch to share your feedback and ideas for 2024 and beyond, I know it is giong to be another fantastic year for the ATS SGG.

Sincerely.

. Kelly

Rachel Kelly, PhD, MPH

Message from the Section Chair-Elect

Dawn DeMeo, MD, MPH

I am honored to be taking over the SGG Chair position from Rachel. Rachel has been an exemplary leader of the section over the last year and I hope to continue her new initiatives and excellent vision toward growing the section. I come from a background of genetics and epigenetics, and my research has focused on sex, gender and the intersectionality with Social Determinants of Health. My primary goal for this year is to continue to elevate integrative omic research but also to ensure our collective work endeavors to address social determinants and lung health disparities through genomic insights. The SGG provides an important meeting point to forge new connections and collaborations across different omics disciples; enabling us to learn from each other, develop new methods and ultimately foster novel integrative research. We are looking forward to the next year with a goal of increasing junior faculty and trainee participation, and growing initiatives to support education, mentoring and career development through section programming. See you in San Diego.

Nominating Committee

Ivana V. Yang, PhD, ATSF (Chair); Eric Douglas Morrell, MD; Alberta Wang, Md, PhD

We are excited to annunce the results of our elections at the Section Business Meeting. Please join us!

Please join us for the Section on Genetics & Genomics (SGG) Membership Meeting at the ATS International Conference in San Diego, CA.

SGG Chair: Rachel S. Kelly, MPH, PhD and Co-Chair: Dawn L. DeMeo, MD, MPH

FEATURING A KEYNOTE ADDRESS BY **TREY IDEKER**, **PHD** *Building a Mind for Human Disease*

Trey Ideker, PhD, is a 20-year Professor of Medicine, Bioengineering and Computer Science, and former Chief of Genetics, at the University of California San Diego (UCSD). Additionally, he is Director or Co-Director of the Bridge2AI Functional Genomics Data Generation Program, the Cancer Cell Map Initiative, the National Resource for Network Biology, and the UCSD Graduate Program in Bioinformatics and Systems Biology, all NIH-funded efforts.

Presently, Ideker serves on the Board of Scientific Advisors to the NIH National Cancer Institute and, formerly, to the National Human Genome Research Institute. He also serves on the editorial boards of Cell, Cell Systems, PLoS Computational Biology, and Molecular Systems Biology. He was named a Top 10 Innovator by Technology Review, received the 2009 ICSB Overton Prize, and is a Fellow of the AAAS, AIMBE and ISCB organizations. Since 2020 he has been named a Web of Science Highly Cited Researcher (top 1% by citations).

Time: Sunday, May 19 | 11:45 a.m. – 1:15 p.m. Location: Marriott Marquis San Diego Marina Room: Coronado (South Tower, Level 4)



ATS 2024

Program Committee

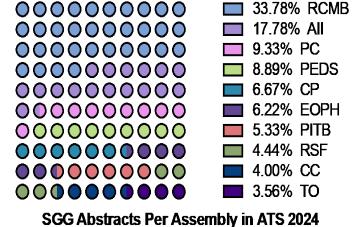
Victor Ortega, MD, PhD, ATSF Craig Hersh, MD, MPH

Our goal is to supervise the long-term planning efforts of the Section by promoting development of current and future projects, as well as fostering academic and non-academic collaborations. Here, we invite you to explore the variety of SGG-related content at ATS 2024: including at least **144 sessions** and **225 abstracts** from a wide array of assemblies and topics [Download SGG Summary].

American	Thoracic	Society 2024 International Conference	
Section on Genetics and Genomics			
San Diego, CA, USA - May 17-122, 2024			
SGG-Related Content for ATS 2024			
Sessions	144		
	2	Basic Science Core	
New!	2	Clinical Topics in Pulmonary Medicine	
New!	10	Mid-day Symposium	
	24	Mini Symposium	
	40	Poster Discussion Session	
	1	Postgraduate Course	
New!	4	RAPiD Poster Discussion Session	
	11	Scientific Symposium	
	49	Thematic Poster Session	
New!	1	Year in Review	
Abstracts	225		
	12	Acute Lung Injury, ARDS	
	2	Allergy	
	31	Asthma	
	3	Autoimmune Lung Disease	
	7	BPD & Congenital Pediatric Lung Diseases	
New!	4	Bronchiectasis, Ciliary Dyskinesia	
New!	2	Cardiovascular Disease, Hemodynamics	
	35	COPD/Emphysema/C. Bronchitis/AAT Def.	
	4	Cystic Fibrosis	
	46	Diffuse Parenchymal Lung Diseases	
New!	2	Interventional Pulmonology	
	10	Lung Cancer, Thoracic Oncology	
	18	Lung Infection (Non-Mycobaterial)	
	1	Multiorgan System Failure	
	1	Non Pulmonary Critical Care	
	3	Occupational, Environmental Health	
	9	Structure, Function and Basic Biology	
	18	Right Ventricular/Pulmonary Vasculature	
	6	Sepsis	
	6	Tobacco/Nicotine/Marijuana Abuse	
	3	Transplantation	
_	2	Tuberculosis, NTM	
_		Assemblies involved 10 out of 14	
	AII, CP,	CC, EOPH, PEDS, PC, PI-TB, RCMB, RSF, TO	

Planning Committee

Jezreel (Jez) Pantaleón García, MD Erick Forno, MD, MPH, ATSF



This year at ATS 2024, we are very excited to see the impact of this year's topic, "Multi-Omics to Mechanisms: Elucidating Pathobiology of Lung Disease", with more than **4x Sessions** and **60% more Abstracts** of SGG-related content compared to 2023. We happily welcome 3 new abstract topics and 4 new session types! Remember to **subclassify** your ATS conference abstracts and session as "**Genetics, Genomics, Epigenetics, and Systems Biology**" regardless of your Assembly!

We are also very proud to announce our **2024 Early Career Investigator Achievement Award.** So, don't miss our Section Mebership Meeting on Sunday, May 19 11:45am-1:15pm at Marriott Marquis in the Coronado Room (Fourth Floor, South Tower). Come find out this year's winner, and listen to a live presentation about our winner's outstanding contributions to the scientific understanding of genetics, genomics, "omics" technologies, and systems biology applications in the fields of respiratory, critical care, and sleep medicine.

For suggestions or assistance regarding our section (awards, working groups, project applications, funding, and more), please contact our Planning Committee directly at <u>JPantaleon@mdanderson.org</u> and <u>eforno@iu.edu</u>. Thank you so much for your contributions this year!

Web Committee

Emma (Kaity) Allen, PhD

Our goal for the Digital Content for the Section on Genetics and Genomics has been to highlight the remarkable work of our members and also to highlight work that may be of interest or useful to our members. To meet this goal, we have many initiatives that we have been updating including Journal Clubs, Webinars, Workshops, Podcasts, Featured Researchers, Publication Spotlight, and all of our Social Media accounts.

This year, we have had three very successful Journal Clubs about profiling nasal airways during severe broncholitis to detect biomarkers of asthma, comprehensive cellular profiling of baseline PBMCs to correlate with protection against severe influenza illness,

Follow us on social media

X/Twitter: @ATS_GG Facebook: ATSSGandG LinkedIn: <u>https://www.linkedin.com/</u> groups/13912138/

and using oropharyngeal microbiota clusters in children to correlate with asthma, immune markers, and risk. Also, a powerhouse team of investigators came together to comprehesively discuss the challenges and opportunities we face when generating and analyzing single cell data from lung tissue. This is an incredible resource for our membership. We are also planning on a Podcast with experts on metabolomics and the issues faced with analyzing such large datasets. Our two-part Webinar series on health disparities in basic and translational research from the previous year was so valuable to our members that we are planning to expand on this topic with Podcasts in the upcoming year (lead by Dr. Aisha Souquette; see the DEI section for more information on these initiatives.) Finally, we have a Workshop series geared towards early career issues lead by Dr. Matt Moll which had a very successful first installment with more to come! Please let us know if you have a paper that you would like highlighted as a Journal Club or a topic of interest for Webinars or Podcasts!

Our current Early Career Researcher being featured is Dr. Zhaozhang Zhu from Massachusetts General Hospital and Harvard Medical School! Please check it out and make sure to nominate colleagues (early career or more established) to be featured. We have a great line up of Features for this coming year, and we are **changing formats** to get to know our Featured Researchers even better and to continue to help foster collaboration within SGG and throughout ATS.

Since our last ATS Conference, SGG has highlighted twelve publications in the Publication Spotlights on the front page of our website (see "Publication Spolight" page of our website for the full list!) If you are in the process of having a paper accepted and would like it to be shared with the Section to get it out to the community, please contact us! We love sharing the research from our members!

Our Social Media team has been spreading the word about all the exciting research being carried out by our SGG members. We tweet papers, events, and highlights every day to keep the Section up to date. Also, we have continued to increase membership of our Linked In and Facebook groups. We post regularly about new research, events, webinars, podcasts, new articles and updates from the society. If you have any suggestions for digital content for our section, please contact Kaity at <u>emma.allen@stjude.org</u>.

Diversity, Equity and Inclusion (DEI) Committee Aisha Souquette, PhD

We are excited to share the addition of a Diversity, Equity, and Inclusion subcommittee in the SGG. Last year, under the "Web Development" committee, we organized two webinars on health disparities and a symposium at the ATS 2023 International Conference ("Disparities in Respiratory Genomics Research: Strategies to Advance Science and Clinical Care"). This DEI committee will work to continue the conversation and aims to provide accessible resources that makes science more accessible as a profession, raises awareness of health disparities, and provides suggestions on how to improve study designs to ensure results and products are broadly applicable to the diverse populations we aim to treat.

Upcoming in 2024 - We are preparing a proposal and events on: (1) Social determinants of health and OMICs, and experimental and analytical considerations for research in diverse populations and health disparities. (2) Leading a diverse lab, including discussions of imposter syndrome and the influence of society and institutional barriers to higher education on the journey through an academic career.

If you have any suggestions for the DEI committee or would like to be involved, please email <u>asouquette@som.umaryland.edu</u>.

Funding opportunities

Submit an ATS Project Application for Funding in FY2024!

We are happy to announce that ATS will once again accept **NEW Assembly/Committee Projects for FY2024**. All interested applicants should begin developing their ideas for Assembly/Committee Project Applications. Applications will be available on the ATS website at <u>www.thoracic.org</u>

Please consider submitting an application for an Assembly/Committee project. If you have a suggestion for a project application and you need assistance, please contact your **Section Planning Committee Chairs!**

For questions regarding submissions please contact Miriam Rodriguez Tel: (212) 315-8639 or email:<u>Mrodriguez@thoracic.org.</u>

