

## CSL Leadership Roles

| Staff Member           | Leadership Role   | Organization | Year               | Type                                 |
|------------------------|---|--------------|--------------------|--------------------------------------|
| Aparajeo Chattopadhyay | CIRES Project (CSD-05) Lead (2019-present)  | CIRES        | 2019, 2020         | CIRES Leadership Roles               |
| Graham Feingold        | AGU session convenor 2020, Organizer of ACPC workshop, Boulder 2018, Organizer ACCP Modeling workshop Dec 2020  | AGU          | 2018, 2020         | Conferences Leadership Roles         |
| Greg Frost             | Session Convener at several recent Fall AGU meetings; Chair of the 2020 GEIA Conference; Organizing Committee of 2018 IGAC Conference   | AGU          | 2018, 2020         | Conferences Leadership Roles         |
| Matt Coggon            | Instrument lead for NY-ICE 2018, FIREX-AQ, COVID-AQS 2020   | NOAA, OAR    | 2018, 2020         | Field Mission Leadership Roles       |
| John Daniel            | Co-Chair of Air Quality Research Subcommittee (2014-2018); Co-Chair of Air Quality Research Seminars and Discussions (2018-2020)  | NOAA         | 2018, 2018-present | Other Federal Leadership Roles       |
| Megan Bella            | USGEO Satellite Needs Working Group   | White House  | 2018-present       | NOAA Leadership Roles                |
| Amy Butler             | Regional Focal Point for the WCRP consultation of the North and Central America and the Caribbean region (SPARC representative); Member, International Commission of the Middle Atmosphere (ICMA), International Association of Meteorology and Atmospheric Science (IAMAS); Co-chair, WCRP/SPARC project Stratospheric Network for the Assessment of Predictability (SNAP), jointly with stratosphere sub-project for the S2S Prediction project |              | 2018-present       | International Leadership Roles       |
| Amy Butler             | Chair, AMS Middle Atmosphere Committee (2018-2021); Member, US CLIVAR Process Studies and Model Improvement (PSMI) panel; Liaison, between the U.S. Weather Research Science Working Group (WRSWG)-S2S and the international S2S Prediction Project   |              | 2018-2020          | U.S. Non-Federal Leadership Roles    |
| Steve Brown            | Royal Society of Chemistry; European Geophysical Union  | EGU, RSC     | 2017, 2020         | Honorary and Prestigious Memberships |
| Sunil Baidar           | Member, AMS Committee on Laser Atmospheric Studies  | AMS          | 2017-2020          | U.S. Non-Federal Leadership Roles    |
| Rebecca Washenfelder   | CSL Seminar organizer; Reviewer for NOAA SBIR grants  | NOAA         | 2017-2020          | NOAA Leadership Roles                |
| Ru-Shan Gao            | PI for NOAA UAS PO NightFOX project (2017-2019)   | NOAA         | 2017-2019          | Other Federal Leadership Roles       |
| Patrick Veres          | CIRES members' council  | CIRES        | 2017-2018          | CIRES Leadership Roles               |
| Christoph Senff        | CIRES CSL Lead  | CIRES        | 2016-present       | CIRES Leadership Roles               |
| Ru-Shan Gao            | Panel reviewer for NOAA UASPO grants  | NOAA         | 2016-2020          | NOAA Leadership Roles                |

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| Andrew Langford      | Co-PI of the California Baseline Ozone Transport Study (CABOTS) and the Fires, Asian, and Stratospheric Transport-Las Vegas Ozone Study (FAST-LVOS).   | NOAA                            | 2016-2017        | Field Mission Leadership Roles |
| Christoph Senff      | Co-PI of the 2016 California Baseline Ozone Transport Study (CABOTS) and the 2017 Fires, Asian, and Stratospheric Transport-Las Vegas Ozone Study (FAST-LVOS).   | NOAA, CIRES                     | 2016-2017        | Field Mission Leadership Roles |
| Karen Rosenlof       | a) member, NOAA Council of Fellows<br>b) Member of the organizing committee, OAR Forums: Atmospheric Chemistry/Air Composition and Ecosystem Modeling, held June 2017, c) Reviewer for the 2016 OAR Scientific Paper Awards d) Selection Committee, NOAA PECASE awards, 2017 | NOAA                            | 2016-2017        | NOAA Leadership Roles          |
| Carsten Warneke      | Mission Scientist FIREX-AQ; co-PI SONGNEX 2015   | NOAA                            | 2015, 2020       | Field Mission Leadership Roles |
| Christoph Senff      | Session Organizer: International Laser Radar Conference  |                                 | 2015, 2017, 2019 | Conferences Leadership Roles   |
| Ru-Shan Gao          | Reviewer for NOAA SBIR Grants  | NOAA                            | 2015-present     | NOAA Leadership Roles          |
| John Daniel          | Chair, NOAA Libraries Advisory Committee (2/2014-3/2016)   | NOAA                            | 2015-present     | NOAA Leadership Roles          |
| Steve Brown          | Organized 10 meetings including sessions at AMS, AGU, AAAR, Cavity Enhanced Spectroscopy, etc. See CV for details.   | Multiple Professional Societies | 2015-present     | Conferences Leadership Roles   |
| Jessica Gilman       | Instrument PI for SONGNEX, FIREX, NY-ICE2018, Boulder VOCs, FIREX-AQ, COVID-AQS (Project Lead)   | NOAA                            | 2015-present     | Field Mission Leadership Roles |
| Jeff Peischl         | Instrument PI for CSL mobile laboratory, SONGNEX 2015, FAST LVOS, NY-ICE, SARP, FIREX-AQ COVID-AQS, Co-PI for ATom   | NOAA                            | 2015-present     | Field Mission Leadership Roles |
| Rebecca Washenfelder | Co-chair of 11th International User Meeting and Summer School on Cavity Enhanced Spectroscopy; Organizing committee for AWMA Atmospheric Optics; Organizing committee for OSA meeting on Optics and Photonics for Sensing the Environment; Session chair at various meetings |                                 | 2015-present     | Conferences Leadership Roles   |
| Carsten Warneke      | CSL Seminar organizer; Reviewer for NOAA SBIR grants   | NOAA                            | 2015-present     | NOAA Leadership Roles          |
| Jan Kazil            | AGU session Convener and Chair   | AGU                             | 2015-2020        | Conferences Leadership Roles   |

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| Sean Davis        | Member: AMS Bernhard Haurwitz Lecture Selection Committee, 2015, 2016<br><br>Lead Author: Stratospheric Water Vapor Section, NOAA State of the Climate Report, 2015 – present<br><br>Science Team Member: SAGE III-ISS ozone and water vapor and satellite instrument, 2018 – present<br><br>Lead: U.S. CLIVAR Working Group on Changing Width of the Tropical Belt, Metrics Subgroup, 2016 – 2019<br><br>Member: AMS Middle Atmosphere Committee 2015 – 2020 |              | 2015-2020 | U.S. Non-Federal Leadership Roles |
| James Churnside   | Led airborne missions to study distributions of flying fish in the Gulf of Mexico, plankton distributions in the Gulf of Mexico, and effects of sea ice on primary productivity in the Arctic Ocean   |              | 2015-2019 | Field Mission Leadership Roles    |
| Audrey Gaudel     | 1) co-founder and co-leader of the NOAA CSL early career group  | NOAA         | 2015-2019 | NOAA Leadership Roles             |
| James Roberts     | NOAA FIREX FireLab Study, Co-lead Scientist   | NOAA         | 2015-2019 | Field Mission Leadership Roles    |
| Steve Brown       | Chemistry Twin Otter, FIREX-AQ 2019; Utah Winter Fine Particulate Study, 2017; WINTER (NSF-NOAA) 2015)  | NOAA, NSF    | 2015-2019 | Field Mission Leadership Roles    |
| Elizabeth Asher   | CSL First Friday Forum organizer  | CSL          | 2020      | NOAA Leadership Roles             |
| Troy Thornberry   | Panel reviewer for NOAA UASPO grants  | NOAA         | 2020      | NOAA Leadership Roles             |
| Joshua Schwarz    | Guest Editor: New observations and related modelling studies of the aerosol–cloud–climate system in the Southeast Atlantic and southern Africa regions (ACP/AMT inter-journal SI); The Saharan Aerosol Long-range Transport and Aerosol-Cloud-interaction Experiment (SALTRACE) (ACP/AMT inter-journal SI)  |              | 2020      | U.S. Non-Federal Leadership Goals |
| Ann Middlebrook   | Award Committee Member, Amer. Assn. Aerosol. Research   | AAAR         | 2020      | Conferences Leadership Roles      |
| Sunil Baidar      | Co-convener for Lidar Applications for the Renewable Energy Industry and Forecasting—Resource Assessment, AMS   | AMS          | 2020      | Conferences Leadership Roles      |
| Amanda Makowiecki | Led instrument installation and deployment for PUMAS.   | NOAA         | 2020      | Field Mission Leadership Roles    |
| Graham Feingold   | ATOMIC  | NOAA         | 2020      | Field Mission Leadership Roles    |
| Jake Gristey      | Principal investigator of the CIRES Libera award  | CIRES        | 2020      | CIRES Leadership Roles            |
| Jan Kazil         | NOAA CSL Seminar Co-Chair   | NOAA         | 2020      | NOAA Leadership Roles             |
| Jan Kazil         | Member of the American Meteorological Society's Committee on Cloud Physics  | AMS          | 2020      | U.S. Non-Federal Leadership Roles |

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|-----------------|--|--|------|--------------------------------|
| Jan Kazil       | Flight Scientist, NOAA ATOMIC  | NOAA   | 2020 | Field Mission Leadership Roles |
| Greg Frost      | Program Manager for the Earth's Radiation Budget initiative, NOAA OAR Liaison for Atmospheric Composition and Chemistry  | OAR  | 2020 | NOAA Leadership Roles          |
| Greg Frost      | Chair of the GeoXO Atmospheric Composition Observation User Team; Co-Lead of the Unified Forecast System Research-to-Operations Atmospheric Composition project  | NOAA   | 2020 | Other Federal Leadership Roles |
| Brian McDonald  | 1) Co-PI of NOAA CSL AEROMMA<br>2) Co-PI of NOAA CSL NY-ICE<br>3) Co-PI of NOAA CSL COVID-AQS  | NOAA   | 2020 | Field Mission Leadership Roles |
| Brian McDonald  | Session convener Fall AGU 2020 Meeting, ACM 2020 Meeting, AAAR 2020 Meeting; JGR-Atmospheres Associate Editor (2020-present)   | AGU, ACM, AAAR, JGR Atmospheres                          | 2020 | Conferences Leadership Roles   |
| Matt Coggon     | AGU Session Convener   | AGU  | 2020 | Conferences Leadership Roles   |
| Jessica Gilman  | Panel reviewer for NASA grant  | NASA   | 2020 | Other Federal Leadership Roles |
| Jessica Gilman  | AGU Session Convener   | AGU  | 2020 | Conferences Leadership Roles   |
| Caroline Womack | CSL Seminar Series Co-coordinator  | NOAA   | 2020 | NOAA Leadership Roles          |
| David W. Fahey  | Earth Observations & Modeling for Decision Making, Course lecture in ATMS 491: Climate and Weather Policy: Building Capacity for Urban Sustainability at the University of Illinois-Champaign-Urbana, Champaign-Urbana, Illinois,  | University of Illinois                                   | 2020 |                                |
| David W. Fahey  | Future changes to stratospheric composition and their impacts, American Meteorological Society Meeting, Middle Atmosphere Symposium, Boston, Massachusetts   | AMSM   | 2020 | Conference Leadership Roles    |
| Eric Ray        | Flight forecasting, ATom   | NOAA   | 2020 | Field Mission Leadership Roles |
| David W. Fahey  | NASEM Airborne Committee: The National Academies of Sciences, Engineering, and Medicine has appointed a committee to conduct a study on the Future Use of NASA Airborne Platforms to Advance Earth Science Priorities, with a particular focus on the role of "large" airborne facilities, such as the current NASA DC-8, whose lifetime is limited and for which a potential replacement in the 2025 timeframe may be required. David Fahey is a member of the committee. | National Academies of Science, Engineering, and Medicine | 2020 | International Leadership Roles |

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| David W. Fahey  | ** International Civil Aviation Organization (ICAO): The Impacts and Science Group (ISG) of the ICAO Committee on Aviation Environmental Protection (CAEP) is formulating a new series of white papers to update the scientific understanding of global aviation effects. David Fahey is working with a subgroup concerning the emissions of nitrogen oxides (NOx) and their impact on climate through changes in ozone and methane. <a href="https://www.icao.int/environmental-protection/Pages/CAEP-ISG.aspx">https://www.icao.int/environmental-protection/Pages/CAEP-ISG.aspx</a> | ICAO                      | 2020 |   |
| Troy Thornberry | Vice-Chair CIRES Members Council   | CIRES                     | 2019 | CIRES Leadership  |
| Andrew Rollins  | Panel Reviewer for NASA Proposals  |                           | 2019 | Other Federal Leadership Roles                          |
| Joseph Katich   | Instrument PI (SP2), FIREX-AQ  | NOAA                      | 2019 | Field Mission Leadership Roles                          |
| Drew Rollins    | Instrument PI for NOAA and NASA Airborne Campaigns   | NOAA and NASA             | 2019 | Field Mission Leadership Roles                          |
| Joshua Schwarz  | Mission Scientist: FIREX-AQ; Instrument Scientist PI (HD-SP2/SP2)  | NOAA                      | 2019 | Field Mission Leadership Roles                          |
| Joshua Schwarz  | Mission Scientist KORUS-AQ   | NASA                      | 2019 | Field Mission Leadership Roles                          |
| Troy Thornberry | Regular convener of UTLS science sessions at AGU; Organizer/Convener of NOAA-hosted UTLS science meeting   | AGU                       | 2019 | Conference Leadership Roles                             |
| Adam Ahern      | FIREX-AQ Instrument PI   | NOAA                      | 2019 | Field Mission Leadership Roles                          |
| Charles Brock   | Chair of NSF OFAP panel; Reviewer for DOE SBIR proposal, NASA grant review panels, NSF review panel  | DOE, NASA                 | 2019 | Other Federal Leadership Roles                          |
| Karl Froyd      | Science Investigation Manager, NASA CLARINET Mission Proposal  | NASA                      | 2019 | Other Leadership Roles                                  |
| Dan Murphy      | Lead author, IPCC AR3 Expert reviewer IPCC AR4, AR5, and AR6   | IPCC                      | 2019 | Assessment Contributions                                |
| Nick Wagner     | AOP and SOAP Principal Investigator  | NASA                      | 2019 | Field Mission Leadership Roles                          |
| Andrew Langford | Co-convener of the "Measurement and Understanding of Boundary Layer and Surface Processes of Trace Gases and Aerosols" session at AGU Fall Meeting.  | AGU                       | 2019 | Conferences Leadership Roles                            |
| Graham Feingold | ACPC Committee   | ACPC                      | 2019 | International Leadership Roles                          |
| Jake Gristey    | Organiser of the the NOAA CSL early career scientist group   | NOAA CSL Seminar Co-Chair | 2019 | NOAA Leadership Roles                                   |
| Tak Yamaguchi   | AGU fall meeting session convener (Boundary layer clouds and turbulence, and their interaction with the underlying land or ocean surface)  | AGU                       | 2019 | Conferences Leadership Roles                            |
| Kenneth Aiken   | Mentor for Hollings Scholar  | NOAA                      | 2019 | Mentors for Graduate/Undergraduate/High School Students |

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| Matt Coggon          | First Friday Forum co-organizer, NOAA SBIR grant reviewer   | NOAA, OAR              | 2019 | NOAA Leadership Roles                |
| Andrew Neuman        | co-hosted annual ToF-CIMS users meeting   |                        | 2019 | Conferences Leadership Roles         |
| Jeff Peischl         | Reviewer AC4 Proposal   | NOAA                   | 2019 | NOAA Leadership Roles                |
| Rebecca Washenfelder | BrC-PILS PI for NOAA airborne campaign  | NOAA                   | 2019 | Field Mission Leadership Roles       |
| David W. Fahey       | A Human Forest in New York City and Implications on Urban Air Quality: Are urban terpene emissions from vegetation or people?, Summary presentation of CSL research at the Advisory Board Meeting of International Joint Laboratory of Regional Pollution Control (IJRC), Peking University, Beijing, China | IJRC                   | 2019 | Conference Leadership Roles          |
| Amy Butler           | Convener, Advances and Challenges for Subseasonal to Seasonal Prediction, AGU fall meeting session; Planning Committee, SPARC DynVarMIP-SNAP workshop, Madrid, Spain; Program chair, AMS 20th Middle Atmosphere Conference, Phoenix, Arizona  |                        | 2019 | Conference Leadership Roles          |
| Pengfei Yu           | "30 under 30": list of 30 elites under the age of 30 in 20 different fields, as a young scholar in science and technology that will begin a research position at the Institute for Environment and Climate Research at China's Jinan University.  | Forbes China           | 2018 | Honorary and Prestigious Memberships |
| Ann Middlebrook      | AMS Principle Investigator  | AMS                    | 2018 | NOAA Leadership Roles                |
| John Daniel          | Co-Lead Author, Chapter 6 of Scientific Assessment of Ozone Depletion   | IPCC                   | 2018 | International Leadership Roles       |
| John Daniel          | Chair of AGU Session, Atmospheric Trace Species in the Stratosphere: Distribution, Trends, Variability, and Processes Related to Stratospheric Ozone and Climate  | AGU                    | 2018 | Conferences Leadership Roles         |
| Eric Williams        | Steering Committee member, International Workshop on Air Quality Forecasting Research   |                        | 2018 | International Leadership Roles       |
| Eric Williams        | Organized and hosted 9th International Workshop on Air Quality Forecasting Research, Boulder, CO  |                        | 2018 | Conferences Leadership Roles         |
| Steve Brown          | NO3-Isop Campaign, SAPHIR Chamber   |                        | 2018 | International Leadership Roles       |
| David W. Fahey       | Climate change: Current and projected impacts on the United States, SOLAR 2018: Pathways to the Renewable Energy Transformation, American Solar Energy Society (ASES), University of Colorado, Boulder, CO,   | University of Colorado | 2018 | Conference Leadership Roles          |
| David W. Fahey       | Improving our knowledge of the climate system with observations, DLR-Climate Change Conference 2018: Atmospheric Research for Understanding and Mitigating Climate Change, Cologne, Germany   |                        | 2018 | Conference Leadership Roles          |

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| Karl Froyd           | Science Investigation Manager, NASA CLARINET Mission Proposal  | NASA                      | 2017 | Other Leadership Roles         |
| Karl Froyd           | Instrument PI ATOM   | NOAA                      | 2017 | Field Mission Leadership Roles |
| Karl Froyd           | ATOM Aerosol Working Group Leader  | NOAA                      | 2017 | Conferences Leadership Roles   |
| Ann Middlebrook      | Instrument Leader for UWEPS  |                           | 2017 | Field Mission Leadership Roles |
| Gregg Schill         | Session organizer, chair, and convener at AGU  |                           | 2017 | Conferences Leadership Roles   |
| Kenneth Aiken        | Reviewed SBIR proposal for Automated peak fitting and analysis software  | NOAA                      | 2017 | NOAA Leadership Roles          |
| Rebecca Washenfelder | Panel reviewer for NASA grants; panel review for Barry Goldwater Scholarship   | NASA                      | 2017 | Other Federal Leadership Roles |
| David W. Fahey       | Science Saves: Atmospheric research in support of wildfire management, House Earth & Space Science Caucus, Rayburn House Office Building, Washington, DC |                           | 2017 | Other Leadership Roles         |
| David W. Fahey       | Messing with stratospheric chemistry: What's at stake, Geoengineering Gordon Research Conference   | Gordon Conference         | 2017 | Conference Leadership Roles    |
| Ru-Shan Gao          | Co-Mission Scientist for the NASA POSIDON (2016) missions  | NASA                      | 2016 | Other Federal Leadership Roles |
| Ann Middlebrook      | Instrument PI for FireLab  | NOAA                      | 2016 | Field Mission Leadership Roles |
| Sunil Baidar         | Flight planning for GrOAWL AOVt flights  | NASA                      | 2016 | Field Mission Leadership Roles |
| Andrew Langford      | Co-convener of the "Understanding processes that influence the vertical distribution of ozone in the troposphere" session, AGU Fall Meeting              | AGU                       | 2016 | Conferences Leadership Roles   |
| Jeff Peischl         | Reviewer for NOAA SBIR grants  | NOAA                      | 2016 | NOAA Leadership Roles          |
| David W. Fahey       | Earth observations & modeling for decision making, International Global Atmospheric Chemistry (IGAC) Science Conference, Breckenridge, Colorado          | IGAC                      | 2016 | Conference Leadership Roles    |
| Claire Granier       | Co-chair of the Scientific program committee of the 2016 IGAC conference; co-convener of AGU sessions  |                           | 2016 | Conference Leadership Roles    |
| Ann Middlebrook      | Instrument PI for HAGiS  |                           | 2015 | Field Mission Leadership Roles |
| Christoph Senff      | Member of the International Coordination Group on Laser Atmospheric Studies (ICLAS)  |                           | 2015 | International Leadership Roles |
| Andrew Rollins       | Panel Reviewer for NOAA SBIR Grants  | NOAA CSL Seminar Co-Chair |      | NOAA Leadership Roles          |
| Troy Thornberry      | Panel Reviewer for NASA Proposals  | NASA                      |      | Other Federal Leadership Roles |
| Troy Thornberry      | Panel Reviewer for DOE Grants  | DOE                       |      | Other Federal Leadership Roles |

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| Charles Brock        | Aerosol Microphysical Properties lead;<br>Reviewer for NOAA SBIR grants   | NOAA                     |      |                                   |
| Karl Froyd           | PALMS Principal Investigator  | NOAA                     |      |                                   |
| Owen Cooper          | 1) Core Member of the World Meteorological Organization (WMO) Global Atmosphere Watch (GAW) Scientific Advisory Group (SAG) on Reactive Gases; 2) Member of the WMO GAW Expert Team on the Atmospheric Composition Network Evolution; 3) Chairperson of IGAC's Tropospheric Ozone Assessment Report (TOAR) since 2014 | WMO                      |      | International Leadership Roles    |
| Owen Cooper          | co-Convener of Session A084. Quantifying Tropospheric Ozone's Present Day Distribution and Trends from the Perspective of Human Health, Climate and Ecosystem Productivity, AGU Fall Meeting, New Orleans   | AGU                      |      | Conferences Leadership Roles      |
| Greg Frost           | Chair of the Global Emissions Initiative (GEIA), Steering Committee Member for the International Global Atmospheric Chemistry (IGAC) initiative   |                          |      | International Leadership Roles    |
| Brian McDonald       | 1) USGEO Satellite Needs Working Group<br>2) PI of COVID-19 AQ Forecasting Project  | White House              |      | NOAA Leadership Roles             |
| Brian McDonald       | Scientific steering committee member of GEIA  | IGBP                     |      | International Leadership Roles    |
| Daniel Van Hoomissen | Outstanding Teaching Assistant Award  | Colorado School of Mines |      | Recognition from Academia         |
| Eric Williams        | Council member, Earth System Science and Modeling Division, CPO/OAR   | OAR                      |      | Other Federal Leadership Roles    |
| Carsten Warneke      | Panel reviewer for NASA grants  | NASA                     |      | Other Federal Leadership Roles    |
| Patrick Veres        | Instrument PI for NOAA and NASA airborne campaigns  | NOAA, NASA               |      | Other Federal Leadership Roles    |
| Erik Larson          | Journal reviewer for Nature Geoscience, Nature Astronomy, GRL, JGR-Atmospheres, Nature-Applied Science  |                          |      | U.S. Non-Federal Leadership Roles |