L O U I S N . C A T T A F E S T A I I I

John G. and Jane E. Olin Endowed Department Chair in Mechanical, Materials, and Aerospace Engineering
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EXECUTIVE SUMMARY

An accomplished leader with extensive experience in engineering. Proven expertise in fostering interdisciplinary collaborations, securing significant research funding, and guiding organizations to build a collaborative, inclusive culture to achieve excellence. Adept at driving strategic growth initiatives, relationship cultivation, advancing diversity, and championing faculty and student success.

EXPERIENCE

August 2022 – present, Illinois Institute of Technology, Chicago, IL
John G. and Jane E. Olin Endowed MMAE Department Chair
Mechanical, Materials, and Aerospace Engineering (MMAE) Department

2012 – August 2022, Florida State University, Tallahassee, FL
University Eminent Scholar & Professor, Department of Mechanical Engineering
2017-2020 Director of the Florida Center for Advanced Aero Propulsion (FCAAP)

June 2019, Visiting Professor, University of Lille, Lille, France

2001 – 2013, *President*, Interdisciplinary Consulting Corporation (IC^2), Gainesville, FL

1999 – 2012, University of Florida, Gainesville, FL
2008 – 2012 Professor, Department of Mechanical and Aerospace Engineering
2003 – 2008 Associate Professor, Department of Mechanical and Aerospace Engineering
1999 – 2003 Assistant Professor, Department of Aerospace Engineering, Mechanics, & Engineering Science

2007–2008, Visiting Professor, University of Poitiers, Poitiers, France

1992–1999, High Technology Corporation, Hampton, VA
1996 – 1999 Senior Research Scientist and Head, Experimental and Instrumentation Group
1992 – 1996 Research Scientist assigned to Flow Physics & Control Branch at NASA Langley

1988–1992, Penn State University, University Park, PA
Graduate Research Assistant, Gas Dynamics Lab, Department of Mechanical Engineering

1986–1988, Massachusetts Institute of Technology, Cambridge, MA
Graduate Research Assistant, Gas Turbine Lab, Department of Aeronautics and Astronautics

Summer 1987, Aircraft Engine Group, GE, Lynn, MA
Engineer, Inlets and Exhausts

Summer 1986, Spacecraft Operations, GE, King of Prussia, PA
Edison Engineer, Spacecraft Dynamics

Summer 1985, Polymer Products Division, DuPont, Wilmington, DE
Laboratory Engineer, Ethylene Copolymers Group

Summer 1984, Reentry Systems Operations, GE, Philadelphia, PA
Summer Intern Engineer, Mechanical Design

EDUCATION

PhD, Mechanical Engineering, Penn State University, August 1992
Thesis: *An Experimental Investigation of Shock Wave/Vortex Interaction*
Advisor: Gary S. Settles

MS, Aeronautics, Massachusetts Institute of Technology, August 1988
Thesis: *An Experimental Investigation of the Effects of Inlet Radial Temperature Profiles on the Aerodynamic Performance of a Transonic Turbine Stage*
Advisor: Alan H. Epstein

B.S., Mechanical Engineering, Penn State University, May 1986
Honor's Thesis: *Numerical Solution of Poisson's Equation Using Multigrid Methods*
University Scholar & Graduated with High Distinction

POSTGRADUATE TRAINING

DELTA New Department Leaders Institute**,** Advanced Leadership Certificate Course (FSU), Stability and Transition (ICASE), Turbulence Modeling (ICASE), Neural Networks (Neural Ware), Advanced Measurement Techniques (Dantec), MEMS (UCLA), Uncertainty Analysis (AIAA), Control Systems Design and Analysis (ODU), Digital Signal Processing (NASA), Acoustic Data Analysis (PSU Acoustics Program), Noise Control Engineering I, II, & III (PSU Acoustics Program), Transducers (PSU Acoustics Program), Digital Signal Processing (PSU Acoustics Program)

TEACHING

Teaching Evaluation Summary (IIT)		
Spring 2025	MMAE 597	Introduction to Physical Acoustics
Fall 2023	MMAE 504	Random Data Measurement & Analysis

Teaching Evaluation Summary (FSU) Scale (5 Excellent to Poor 1)			**Overall Instructor Rating (Mean/5.0 max)**
Spr 2022	EML 5930	Flow Control (Graduate)	4.86
Fall 2021	EML 4930/5930	Acoustics (Graduate and Undergraduate)	4.83
Spr 2021	EGM 5810	Viscous Fluid Flows (Graduate)	5.0
Fall 2020	EML 5930	Random Data Measurement & Analysis (asynchronous online Graduate course)	n/a
Spr 2020	EML 5930	Flow Control (Graduate)	4.89
Fall 2019	EML 4930/5930	Acoustics (Graduate and Undergraduate)	4.89
Spr 2019	EGM 5810	Viscous Fluid Flows (Graduate)	4.91
Fall 2018	EML 5930	Random Data Measurement & Analysis (Undergraduate and Graduate)	5.0
Spr 2018	EML 5930	Flow Control (Graduate)	4.89
Fall 2017	EML 5930	Acoustics (Graduate and Undergraduate)	5.0
Spr 2017	EGM 5810	Viscous Fluid Flows (Graduate)	4.89
Fall 2016	EML 5930	Random Data Measurement & Analysis	4.83
Spr 2016	EML5930	Flow Control	5.0
Fall 2015	EML5709	Fundamentals of Fluid Mechanics (Graduate)	4.40
Spr 2015	EML4930/5930	Acoustics (Graduate and Undergraduate)	4.75
Fall 2014	EML 3015C	Thermal Fluids I (Undergraduate)	4.23
Spr 2014	EGM 5810	Viscous Fluid Flows (Graduate)	4.8
Fall 2013	EML 5930	Flow Control (Graduate)	4.61
Spr 2013	EML 5930	Random Data Measurement & Analysis (Graduate)	4.78

Fall 2012	EML 5930	Acoustics (Graduate)	4.71

Teaching Evaluation Summary (UF)

			Instructor Evaluation (Mean) Scale: 0–5			Instructor Overall (Mean) Scale: 0–5		
Term	**Course**	**Course Title**	**Inst.**	**Dept**	**CoE**	**Course**	**Dept**	**CoE**
Fall 2011	EGM 5121C	Data Measurement and Analysis	**N/A**	**N/A**	**N/A**	**4.54**	4.11	4.17
Spr 2011	EML 5224	Acoustics	**N/A**	**N/A**	**N/A**	**4.75**	4.12	4.11
Fall 2010	EGM 6934	Flow Control	**4.39**	4.26	4.34	**4.57**	4.29	4.39
Spr 2010	EGM 5121C	Data Measurement and Analysis	**4.42**	4.36	4.36	**4.50**	4.40	4.41
Fall 2009	EGN3353C	Fluid Mechanics	**4.39**	4.06	4.06	**4.46**	4.10	4.10
Spr 2009	EML 5224	Acoustics	**4.80**	4.29	4.36	**5.00**	4.36	4.40
Fall 2008	EGM 6934	Data Measurement and Analysis	**4.67**	4.34	4.33	**4.85**	4.41	4.40
Spr 2007	EGM 6934	Data Measurement and Analysis	**4.37**	4.30	4.37	**4.47**	4.37	4.42
Fall 2007	EGN3353C	Fluid Mechanics	**4.20**	3.92	4.00	**4.25**	3.95	4.05
Spr 2006	EGN3353C	Fluid Mechanics	**4.16**	3.91	4.00	**4.21**	3.95	4.04
Fall 2005	EGM 6934	Data Measurement and Analysis	**4.47**	4.24	4.22	**4.50**	4.31	4.26
Spr 2005	EGM 6813	Viscous Flow	**4.27**	4.33	4.07	**4.40**	4.42	4.36
Fall 2004	EGM 6934	Data Measurement and Analysis	**4.67**	3.85	4.21	**4.78**	3.89	4.29
Spr 2004	EML4314C	Dynamics & Controls System Design and Lab	**4.22**	3.95	4.01	**4.35**	4.03	4.07
Fall 2003	EGM6934	Data Measurement and Analysis	**4.58**	4.09	4.22	**4.70**	4.16	4.27
Spr 2003	EAS 3806	Experimental Methods for Engineers II	**4.15**	3.72	3.90	**4.21**	3.70	3.92
Fall 2002	EGN3353C	Fluid Mechanics	**4.33**	3.89	3.92	**4.47**	3.94	3.97
Spr 2002	EAS 3806	Experimental Methods for Engineers II	**4.18**	3.99	3.73	**4.40**	3.72	4.03
Fall 2001	EGM 5933	Data Measurement and Analysis	**4.39**	4.04–	4.20	**4.44**	4.05	4.26
Spr 2001	EAS 3806†	Experimental Methods for Engineers II	**4.15**	3.89	3.96	**4.15**	3.92	4.01
Fall 2000	EAS 4400	Aircraft Stability and Control	**4.24**	3.96	3.95	**4.26**	3.98	3.99
Spr 2000	EGM 6934*	Data Measurement and Analysis	**4.54**	3.85	3.97	**4.58**	3.87	4.01
Fall 1999	EAS 4400	Aircraft Stability and Control	**3.93**	3.87	3.93	**4.00**	3.90	3.97

* Developed new graduate course †Revamped undergraduate course

GRADUATE AND POSTGRADUATE ADVISING

			Current Group (1 Research Faculty, 2 PhD students, 1 MS students, 5 UG students, 1 Staff Engineer)		
Name	**Role**	**Topic**	**Degree Sought/Position**	**Supported via**	**Expected Completion**
Zhang Yang	Supervisor	n/a	Research Faculty	C&G & IIT	N/A
Sasindu Pinto	Advisor	Anisotropic Porous Materials for Passive Flow Control	PhD	C&G w/ tuition cost share	May 2026
Jonathan Henry Horak	Advisor	High-Speed Cavity Flow Control	PhD	C&G w/ tuition cost share	May 2027
FNU Uzair Abdul Azeem Syed	Advisor	Zero Carbon Emission Aviation	MS	C&G w/ tuition cost share	May 2025

Postdocs and Research Professors			
Name	**Position**	**Dates**	**Current Position**
James Henry	Postdoc, IIT	2024	Post-doc, Penn State
Y Zhang	Research Faculty, FSU & IIT	2017–present	Assistant Research Professor, IIT
Fernando Zigunov	Postdoc, FSU	2021	Assistant Professor, Syracuse University
Zhao Pan	Postdoc, FSU	2018–2019	Assistant Professor, U. of Waterloo
Fei Liu	Research Faculty, UF	2009–2013	Research Scientist, Ford Motor Co.
Hidemi Takahashi	Postdoc UF	2010–2011	Research Scientist, JAXA
Christopher Bahr	Postdoc UF	2010–2011	Senior Research Scientist, NASA

25 Graduated PhD Students (Chair of 21 PhDs and Co-Chair of 4 PhDs)					
#	**Name**	**Current Position**	**Role**	**Degree**	**Date**
25	Ross Richardson	Propulsion Test Engineer, Blue Origin	Chair	PhD	Dec 2023
24	Chelsea Solano	Acoustics Engineer, NextEra Energy	Chair	PhD	May 2023
23	Eric Deem	AI Research Engineer, Lockheed Martin	Chair	PhD	August 2018
22	Y Zhang	Assistant Research Professor, Illinois Tech	Chair	PhD	August 2017
21	Kyle Pascioni	Research Engineer, NASA Langley	Chair	PhD	April 2017
20	Ashley Jones	Aerodynamicist, Boeing	Chair	PhD	April 2017
19	Adam Edstrand	Senior Technical Staff, Sandia National Laboratories	Chair	PhD	April 2016
18	Robert Reger	Senior Technical Staff, Sandia National Laboratories	Chair	PhD	April 2016
17	Eurika Kaiser	Data Science Post-Doc Fellow, U of Washington	Co-Chair[1]	PhD	Dec 2015

[1] Eurika received her PhD from the University of Poitiers in France. She spent 1 year working with me at FSU for her thesis research.

16	John Griffin	Principal Technical Staff, Sandia National Laboratories	Chair	PhD	Dec 2013
15	Miguel Palaviccini	Principal Technical Staff, Sandia National Laboratories	Chair	PhD	May 2013
14	Nikolas Zawodny	Senior Research Scientist, NASA Langley	Chair	PhD	May 2013
13	Brandon Bertolucci	Acoustic Test Engineer, Boeing	Chair	PhD	Dec 2012
12	Drew Wetzel	Senior Engineer, Aerodynamics Honda Racing Corporation	Chair	PhD	April 2011
11	Christopher Bahr	Senior Research Scientist, NASA Langley	Chair	PhD	May 2010
10	Benjamin Griffin†	Senior Vice President of Research Partnerships, Applied Research Institute	Co-Chair (Sheplak)	PhD	May 2009
9	Terry Song	Staff Electromechanical System Engineer Parker Hannifin Corporation	Chair	PhD	May 2008
8	Ye Tian	Analyst Bank of Tokyo America	Chair	PhD	Aug. 2007
7	Fei Liu	NVH Development Engineer Ford Motor Company	Co-chair (Sheplak)	PhD	Aug. 2007
6	Anurag Kasyap	Engineering Manager Eaton Corporation	Chair	PhD	Dec. 2006
5	Zheng Yan	Senior DSP Engineer Cirrus Logic	Co-chair (Niezrecki)	PhD	Aug. 2006
4	Todd Schultz	Test and Evaluation Engineer, Boeing	Co-chair (Sheplak)	PhD	May 2006
3	Ryan Holman	Aeronautical Engineer Senior Staff, Associate Fellow at Lockheed Martin	Chair	PhD	May 2006
2	Jose Mathew	AI/Machine Learning Lead Project 44	Chair	PhD	Dec. 2005
1	Quentin Gallas	Chef d'unité GF2A à la Direction des Souffleries, ONERA	Chair	PhD	May 2005

OTHER ADVISING ACTIVITIES

- **External Thesis Examiner**

T. Arnoult, Centrale Lille, PhD, 2023
B. Sun, Monash University, MS, 2021
H. Zhang, Princeton University, PhD, 2020
Y. Haffner, Université de Poitiers, PhD, 2020
C. Chovet, Université de Valenciennes, PhD, 2018
H. Zong, Delft University, PhD, 2018
R. Li, Université de Poitiers, PhD, 2017
M. Feingesicht, Université de Lille Centale, PhD, 2017
J. Tu, Princeton University, PhD, 2013

- **Advisor of 2 MS students at IIT**

Fenelon, M., Aug-24
Payne, N., Aug-24

- **Advisor of 2 MS project at IIT**

Staouni, Y., Aug-24
Szelag, Q., Aug-23

- **Advisor of 3 MS (non–thesis) students at FSU**

Munroe, M., May–21
Eckert, B., May–20
O'Neill, A., May–19

- **Chair of 17 MS (thesis) students at UF**

Bertolucci, B., December–08
Palaviccini, M., December–08
Oyarzun, M., August–08
Wetzel, D., August–08
Soderholm, A., December–07
Diaz, R., August–06
Song, Q., May–06
Bahr, C., August–05
Ricci, D., April–05
Tian, Y., May–04
Narayanan, P., December–03
Holman, R., December–03
Rasmi, S., December–02
Gallas, Q., August–02
Mathew, J., May–02
Kasyap, A., May–02
Pillarisetti, A., August–01

- **Co-Chair 1 MS Committee**
  Tuzzo, S., August–03
- **Member, 12 PhD Committees at FSU, 3 at IIT**
- **Member, 43 PhD Committees at UF**
- **Member, 22 MS Committees at UF**
- **Undergraduate Research Supervision (since 2003)**
  - 91 Undergraduate Research Assistants (URA)
  - 14 students in University Scholars Program (USP), 15 B.S. Honor's Thesis
  - Research Advisor of 5 Undergraduate students awarded a NSF Graduate Research Fellowship

Undergraduate Researchers at IIT	
1. Derrick Hill	2024 –
2. Peter Mayer	2023 –
3. Hannah Markiewicz	2023 –
4. Michael Baker	2024 –
5. Michael Paxson	2024 –
Past Undergraduate Researchers at FSU	
6. Jane Nordhagen	2022-
7. Dominque Johnson	2021
8. Nijel Brown	2021
9. Sasindu Pinto	2021
10. Melanie Munroe	2018–2021
11. Antonio Goodman	2016–2019
12. Gillian Boyce	2018
13. Jimmy Wheeler	2018
14. Caroline Walker	2017–2018
15. Taylor Davis	2016–2017
16. Andrew Colangelo	2015–2017
17. Charlotte Welch	2015–2016
18. Stanko Gutalj	2014–2016
19. Kevin Sison	2014–2016
20. Gabriel Diez	2015–2016
21. William Fraga	2015–2016
22. Justin McNeely	2014–2015
23. David Hegg	2014–2015
24. Andrew Baldwin	2014–2015
25. Daniel Kozell	2014
26. Russell Hamerski	2013–2014
27. Tyler Routley	2013–2014
28. Dean Gonzalez	2012–2014
29. Hunter Dyke	2012–2014

Past Undergraduate Researchers at UF	
30. Ben Johnson	2011–2012
31. Rhett Rampi	2011–2012
32. John Cadavid	2010–2012
33. Enrique Chan	2010–2012
34. Kyle Hughes	2010–2012
35. Jason June	2010–2011
36. Jason Pivowar	2010–2011
37. Kevin Rausch	2010–2011
38. Eric Deem	2009–2010
39. Magda Topolski	2009–2011
40. Ann Dietrich	2009–2011
41. Manko "Victor" Ho	2009–2011
42. Tamás Kolos–Lakatos	2009–2011
43. Carlos Pulido	2009–2011
44. Justin Rackley	2009–2011
45. Kyle Woolwine,	2008–2011
46. Ty Morton	2008–2011
47. Steve Buck	2008–2011
48. David Reich	2008–2011
49. Robert Reger	2008–2011
50. Kyle Pascioni	2008–2011
51. Brandon Lang	2009–2010
52. Papa Mbodj	2009–2010
53. Paul Huang	2009–2010

54. John Van Kirk	2008–2010
55. Matt Inman	2008–2010
56. Michael Aguilar	2008–2010
57. Benjamin George	2008–2010
58. Ilan Eskinazi	2008–2010
59. Shane Dabrowski	2008–2010
60. Keith Javier Stober	2008–2010
61. David Guerra	2008–2010
62. Amory Timpe	2008–2010
63. Chris Pergola	2008–2010
64. Jared Allen	2008–2010
65. Adam Edstrand	2008–2009
66. Jared Lee	2008–2009
67. Nikolas Vitt	2008–2009
68. Tom Kennedy	2007–2008
69. Alberto Gordon	2007–2008
70. Brian Rosenberg	2007–2008
71. Susan Trumpler	2007–2008
72. Randy Gruby	2006–2008
73. John Griffin	2007–2008

74. Charles Cook	2007–2008
75. Rodney Dagulo	2007–2008
76. Ryan Durscher	2007–2008
77. Gloria Goebel	2007–2008
78. Nicolas Castrillon	2007–2008
79. Jessica Sockwell	2006–2008
80. Adam Hart	2006–2008
81. Jeremy Sanford	2006–2008
82. Santiago Naranjo	2006–2007
83. Dylan Alexander	2006–2008
84. Vinod John	2006–2008
85. Nate Holmes	2006–2007
86. Ez Hassen	2006
87. Brian Sytsma	2006
88. Stephen Presutti	2005–2007
89. Miguel Palaviccini	2005–2007
90. Nikolas Zawodny	2004–2007
91. Cesar Moreno,	2004–2008
92. Ben Griffin,	2002–2003

RESEARCH

	Pending Research Proposals					
#	Title	Role	Agency	Dates	Amount	Status
1.	IUSE/PFE RED Innovation: Enabling Agile Engineering Education for Enhanced Learning	PI	NSF	08/2024 – 07/2028	$1,989,373	pending

	Funded Research Projects				
#	Title	Role	Agency	Dates	Amount
1.	Passive Flow Control with Bio-inspired Anisotropic Permeable Propulsive Substrate	Co-PI	AFOSR (via sub from UMISS)	9/1/24 – 8/31/27	$345,696
2.	Ground Effect on Wings and its Control in High Sea States	PI	ONR	8/1/2024 – 7/31/2028	$3,967,266
3.	The National Diagnostic Facility	PI	ONR	3/1/2024 – 8/31/2025	$664,900
4.	Dissecting Complex Flows via Fusion of Volumetric Particle Tracking and Data Assimilation	PI (0.25 mo)	ONR ($190,266 sub to UMich)	3/1/23 – 02/28/25	$388,704
5.	Passive Control of Non–Canonical Flows with Anisotropic Porous Materials	PI	AFOSR ($483,795 sub to JHU)	5/1/23 – 4/30/25	$700,470
6.	A23-0052-001; **IZEA** – **I**ntegrated **Z**ero-**E**mission **A**viation using a Robust Hybrid Architecture	PI (1.16 mo)	Sub from FSU to IIT via NASA ULI grant	8/1/22- 5/31/27	$767,046
7.	A23-0091; Flow Physics and Optimized Suppression of High-Speed Cavity Flow	PI (0.5 mo)	Sub from UF via AFOSR grant	10/1/22 – 9/30/25	$275,706
8.	A23-0063; Dissecting Complex Flows via Fusion of Volumetric	PI	Sub from FSU via ONR grant	8/14/22 – 8/3/23	$99,710

	Particle Tracking and Data Assimilation				
9.	A23-0064; Passive Control of Non–Canonical Flows with Anisotropic Porous Materials	PI (0.67 mo)	Sub from FSU via AFOSR grant	8/14/22 – 5/14/23	$50,696
10.	**IZEA – I**ntegrated **Z**ero-**E**mission **A**viation using a Robust Hybrid Architecture	Co-PI (switched from PI after moving to IIT)	NASA ULI	6/1/22-5/31/27	$9,986,548
11.	Validation of Co-Flow Jet Technology for Revolutionary All-Electric Aircraft	PI	The Emil Buehler Perpetual Trust	12/1/21-	$125,000
12.	Flow Physics and Optimized Suppression of High–Speed Cavity Flow	Co-PI	AFOSR (sub from UF)	11/1/21–9/30/22	$38,703
13.	Passive Control of Non–Canonical Flows with Anisotropic Porous Materials	PI	AFOSR	9/15/21–4/14/25	$1,050,635
14.	Dissecting Complex Flows via Fusion of Volumetric Particle Tracking and Data Assimilation	PI	ONR	5/10/2021–6/30/2024	$893,118
15.	Aeroacoustic Measurements of Noise Sources Associated with Slat Brackets on a Constant Sweep High–Lift Configuration	PI	NIA/NASA	10/1/21–9/25/22	$41,252
16.	High Reynolds Number Turbulence Research in Cryogenic Helium	Co-PI	NSF	6/1/18–12/31/21	$375,000
17.	Slat Noise Reduction	PI	NASA	11/27/20–5/26/2021	$38,000
18.	Active Attenuation of a Trailing Vortex	PI	ONR	03/01/2019–02/29/2020	$30,000
19.	Advanced Molecular Tagging Velocimetry in Cryogenic Helium	Co-PI	ARO	12/01/2018–5/31/2020	$216,893
20.	Additional Measurements of Leading–Edge Slat Noise Including the Effects of Noise Reduction Devices	PI	NASA	9/01/2018–4/30/2020	$30,000
21.	Characterization of Perturbation Dynamics in Unsteady Flows	Co-PI	AFOSR	12/1/17–11/30/19	$444,475
22.	DURIP: A Volumetric Particle Image Accelerometer for Fluid Dynamic Applications	PI	AFOSR	9/30/2017–9/29/2019	$373,656
23.	Uncovering Flow Physics for High–Speed Cavity Flow Control	PI	AFOSR (sub from UF)	5/1/2017–9/29/2020	$330,783
24.	Flow Physics and Nonlinear Dynamics of Natural and Perturbed Turbulent Separation Bubbles	PI	AFOSR	8/1/2017–7/31/2020	$1,165,667
25.	Active Acoustic Liner Technology	PI	Boeing via NASA	1/1/17–6/30/20	$395,504

26.	Instability–Based Control of a Developing Trailing Vortex	PI	ONR	6/1/15–5/31/19	$369,724
27.	ESTOL Performance for Heavy Lift Transports Using Ultra–High Lift High Efficiency Co–Flow Jet Airfoil	Co-PI	UM via DARPA	9/16/16–9/15/17	$152,830
28.	Exploring the Design of Resonance Enhanced Microjet (REM) Actuators as an Acoustic Source for the NASA Langley GFIT	Co-PI	NASA	7/1/14–3/31/16	$60,001
29.	Additional Aeroacoustic Measurements of Leading–Edge Slat for Computational Validation	PI	NASA	9/1/15–12/31/16	$80,000
30.	Assessment of Noise Reduction Concepts for Leading–Edge Slat Noise	PI	NASA	9/15/14–12/31/16	$90,000
31.	Flow Physics and Nonlinear Dynamics of Separated Flows Subjected to ZNM–based Control	PI	AFOSR	9/15/14–9/14/17	$1,078,400
32.	Three–Dimensional Control of High–Speed Cavity	Co-PI	AFOSR	10/1/12–9/30/15	$304,477
33.	I/UCRC Planning Grant: Center for Applications in Flow Control	PI	NSF	8/15/14–7/31/15	$16,060
34.	Aeroacoustic Measurements of a Leading–Edge Slat	PI	Boeing	12/12/11–06/30/15	$171,744
35.	A Novel Method to Predict Circulation Control Noise	PI	ONR	5/1/11–12/31/15	$401,396
36.	PIRE: Collaborations with France and Japan on Multiphase Fluid Science and Technologies	Co-PI	NSF	07/01/10–06/30/15	$3,201,637
37.	An Experimental Investigation of Wing Tip Vortex Attenuation	PI	ONR	6/1/10–12/31/15	$361,389
38.	MRI: Development of a Next Generation Polysonic Wind Tunnel for Transformative Active Control Technologies and Non–Intrusive Flow Diagnostics	Co-PI (FSU is lead)	NSF	9/1/10–8/31/15	$3,295,028
39.	Volumetric Flow Field Measurements in Complex Flows Using a Plenoptic System	Co-PI	AFOSR DURIP	8/1/12–7/31/13	$402,330
40.	Diagnostic Techniques to Elucidate the Aerodynamic Performance of Acoustic Liners	Co-PI	NASA	6/15/11–6/14/14	$563,739
41.	An Integrated Study of Separation Control: Flow Physics, Nonlinear Dynamics and Effective Control Strategies	PI	AFOSR	01/01/09–12/31/13	$922,340

42.	Unsteady Circulation Control for High–Performance, Low–Noise Aircraft	PI	NASA	10/1/07–9/30/10	$1,405,107
43.	Silent and Efficient Supersonic Bi-Directional Flying Wing	Co-PI	NASA/U Miami	7/1/12–6/30/13	$13,000
44.	Circulation Control Experiment at NUWC Keyport Facility	PI	ONR	04/01/11–12/31/13	$30,000
45.	FAA Center of Excellence on Commercial Space Transport	PI at UF	FAA	9/15/10–9/14/12	$100,000
46.	Acoustic Monitoring of Temporal and Spatial Abundance of Birds Near OCS Structures	PI	IATech	2/1/11–12/31/11	$120,089
47.	Rudimentary Landing Gear	PI	Boeing	1/24/11–12/31/11	$149,711
48.	Supersonic Aero–Adaptive Electro–Optic Beam Control	PI	Lockheed–Martin	9/16/10–8/31/12	$189,889
49.	Acoustic Monitoring of Temporal and Spatial Abundance of Birds Near OCS Structures	PI	IATech	9/1/10–8/31/11	$120,089
50.	Integrated Component and System Analyses of Instabilities in Test Stands–Phase II NASA STTR	PI	Craft Tech Inc.	8/19/10–8/18/12	$300,000
51.	Integrated Component and System Analyses of Instabilities in Test Stands–Phase I NASA STTR	PI	Craft Tech Inc.	01/01/09–12/31/09	$40,000
52.	On the Flow Physics of Effectively Controlled Open Cavity Flows	Co-PI	AFOSR	12/01/08–11/30/11	$406,952
53.	Feedback Control of Flow over a Turret for Directed Energy Applications	PI	Lockheed Martin	12/08/08–10/31/10	$232,643+$58,821 matching funds (FHTCC)
54.	Aeroacoustic Model Testing in the UF Aeroacoustics Wind Tunnel	PI	General Electric	08/01/08–07/31/09	$100,000
55.	Florida Center for Advanced Aero Propulsion (FCAAP)	PI	State of Florida	7/1/08–6/30/11	$2,620,283
56.	Anechoic Wind Tunnel Experiments of Landing Gear Noise	PI	Gulfstream	9/1/07–8/31/11	$253,158
57.	PEAR–Partnerships in Education And Research–with emphasis on thermo–fluid mechanics in technology and science	Co-PI	Partner Univ Fund	08/31/08–08/31/11	$120,000
58.	An Integrated Flow–Noise Measurement Suite	PI	ONR	4/12/07–12/31/08	$268,630
59.	An Experimental Investigation of the Acoustic and Fluid Dynamic Characteristics of a Circulation–Controlled Airfoil	PI	ONR	4/30/07–4/30/11	$522,228

60.	Development of Advanced Zero–Net Mass–Flux Actuators	PI	NASA	3/19/07–3/18/10	$695,868
61.	Aeroacoustic Characterization and Noise Reduction Technology Development for Wind Turbine Airfoils	PI	GE Global Research	9/6/05–9/5/07	$264,245
62.	Estimation of Time-Dependent Flowfield Quantities from Surface Pressure in Supersonic Open Cavities	Co-PI	AFOSR	01/1/06–12/31/09	$370,265
63.	An Aerodynamic Wind Tunnel Facility at UF–REEF	PI	Eglin AFB	01/1/06–12/31/06	$61,101
64.	Contrast Enhancement for Thermal Acoustic Breast Cancer Imaging via Resonant Stimulation	Co-PI	Army	01/1/06–12/31/09	$410,397
65.	Progress in MEMS Sensor Technology toward Suitability for Aeroacoustic Phased Array Measurement Applications	Co-PI	Boeing Company	07/01/05–04/01/09	$600,000
66.	The Development of a Tunable Electromechanical Acoustic Liner for Engine Nacelles	Co-PI	NASA–LaRC	03/04/04–06/01/07	$342,792
67.	An Experimental Investigation of Three–Dimensional Trailing Edge Noise	PI	NASA–LaRC	05/01/03–04/30/06	$417,486
68.	Micromachined Sensors for the Direct Measurement of Wall Shear Stress	Co-PI	NSF	06/03/04–08/31/07	$380,000
69.	Moiré–Based Optical MEMS Shear Stress Sensor Technology	Co-PI	ONR	11/01/04–10/31/07	$453,548
70.	Separation Control Using ZNMF Devices: Flow Physics and Scaling Laws	PI	AFOSR	11/1/04–10/31/07	$191,051
71.	Implementation of Real-Time Feedback Flow Control on Canonical Testbeds	PI	NASA–LaRC	06/15/04–06/14/05	$69,254
72.	SGER: Micromachined Floating Element Skin Friction Sensor Technology	Co-PI	NSF	12/01/03–11/30/04	$60,313
73.	Nonlinear Dynamics and Closed Loop Control of Supercavitating Vehicles	Co-PI	ONR	10/01/03–09/30/04	$781,313
74.	Self–powered Health Monitoring of Life Support Systems	Co-PI	NASA–KSC	4/1/02–9/30/03	$81,492
75.	Strain Sensitive Skin (S3) Data Analysis and Reduction Suite	Co-PI	Visteon Corp.	4/1/02–3/31/03	$120,000
76.	Characterization of Micromachined Thermal Shear–Stress Sensors for Quantitative Turbulence Measurements	Co-PI	NASA	09/01/01–08/31/03	$102,167
77.	Integrated Shear Stress/Temperature Micromachined Sensors	Co-PI	NASA	06/02/01–10/31/01	$52,091
78.	Computational Modeling and Analysis of Synthetic Jets	PI	NASA	04/01/01–03/31/04	$45,000

79.	Real-Time Feedback Flow Control	PI	NASA	02/01/01–1/31/04	$210,000
80.	Electromechanical Acoustic Liner Technology	Co-PI	NASA	1/1/01–12/31/03	$290,000
81.	Adaptive Real-Time Separation–Control System	PI	AFOSR	5/1/00–5/2/03	$301,272
82.	An Anechoic Aeroacoustic Test Facility	PI	AFOSR	3/1/00–2/28/01	$287,217
83.	Actuator Systems for Aircraft Weapons Bays	PI	Lockheed–Martin	02/01/00–01/31/01	$46,261
84.	The Development of Design Tools for Flow–flow-control actuators	PI	NASA	01/03/00–01/02/03	$183,052
85.	Advanced Technology Development for the Control of High–Speed Supercavitating Weapons	Co-PI	ONR	11/15/99–9/30/02	$660,000
86.	Advanced Technology Development for Active Acoustic Liners	Co-PI	NASA	11/01/99–10/31/00	$92,320
87.	Modeling and Nonlinear Adaptive Control of Weapons Bay Oscillations	PI	AF STTR w/ HTC	09/01/99–06/30/00	$40,000
88.	Innovative Design, Analysis and Experimental Validation of Energy Reclamation for Acoustic Signature Reduction	Co-PI	ONR	3/22/99–12/31/01	$255,066
89.	Reduced Order Models via Multiresolution Analysis for Control of Flow	Co-PI	NASA	02/19/99–02/18/02	$157,810

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International Conference Presentations (presenter is underlined)

1. R Richardson, Y Zhang, and L Cattafesta, "3D low-frequency dynamics of a turbulent separation bubble," DisCoVor 2024, April 2024, Delft, Netherlands.
2. R Richardson, Y Zhang, and L Cattafesta, "3D topology of a turbulent separation bubble," DisCoVor 2023, May 2023, Breckenridge, CO.
3. M Hulse, H Sanavandi, Y Zhang, L Cattafesta, and W Guo, "Visualization study of the law of the wall in superfluid helium-4," 76th Annual Meeting of the APS Division of Fluid Dynamics, November 2023, Washington, DC.
4. S Pinto, R Richardson, M Aghaei-Jouybari, Y Zhang, J-H Seo, L Cattafesta, R Mittal, and C Meneveau, "Experimental analysis of anisotropic porous lattice substrates on pressure gradient induced turbulent separation bubbles," 76th Annual Meeting of the APS Division of Fluid Dynamics, November 2023, Washington, DC.
5. S Anantharamu, K Mahesh, M Fenelon, and L Cattafesta, "An arbitrarily high-order, non-dissipative, and kinetic-energy conserving HDG numerical method to simulate incompressible flows in complex geometries and its application to PTV," 76th Annual Meeting of the APS Division of Fluid Dynamics, November 2023, Washington, DC.
6. M Fenelon, Y Zhang, P Schmid, L Cattafesta, K Mahesh, and S Anantharamu, "Kinematic decomposition of multi-pulse shake-the-box particle tracking velocimetry data," 76th Annual Meeting of the APS Division of Fluid Dynamics, November 2023, Washington, DC.
7. M Aghaei-Jouybari, J-H Seo, S Pinto, L Cattafesta, C Meneveau, and R Mittal, "Generalized Darcy-Forchheimer law for capturing flow refraction effects in anisotropic porous media," 76th Annual Meeting of the APS Division of Fluid Dynamics, November 2023, Washington, DC.
8. M Fenelon, Y Zhang, L Cattafesta, N Morse, and K Mahesh, "Optimizing Δt for multi-pulse shake-the-box (MP-STB) in particle tracking velocimetry," 75th Annual Meeting of the APS Division of Fluid Dynamics, November 2022, Indianapolis, IN.

9. R Richardson, Y Zhang, L Cattafesta, and W Wu, "Low frequency dynamics of a pressure-gradient induced turbulent separation bubble," 75th Annual Meeting of the APS Division of Fluid Dynamics, November 2022, Indianapolis, IN.
10. S Pinto, L Cattafesta, Y Zhang, C Meneveau, R Mittal, J-H Seo, and M Aghaei-Jouybari, "Passive control of non-canonical flows with anisotropic porous materials," 75th Annual Meeting of the APS Division of Fluid Dynamics, November 2022, Indianapolis, IN.
11. J-H Seo, M Aghaei-Jouybari, S Pinto, C Meneveau, L Cattafesta, and R Mittal, "Control of wall-mounted bluff body wake by a porous substrate," 75th Annual Meeting of the APS Division of Fluid Dynamics, November 2022, Indianapolis, IN.
12. M Aghaei-Jouybari, J-H Seo, S Pinto, L Cattafesta, C Meneveau, and R Mittal, "Darcy-Forchheimer law for porous media flows in the highly-nonlinear regime for passive flow control," 75th Annual Meeting of the APS Division of Fluid Dynamics, November 2022, Indianapolis, IN.
13. S Anantharamu, K Mahesh, Y Zhang, M Fenelon, and L Cattafesta, "Inferring volumetric data from PTV measurements of incompressible flows," 75th Annual Meeting of the APS Division of Fluid Dynamics, November 2022, Indianapolis, IN.
14. Y Zhang, L Cattafesta, L Ukeiley and K Taira, "Dynamic density modes of high-speed cavity flow from low sampling rate Schlieren," 75th Annual Meeting of the APS Division of Fluid Dynamics, November 2022, Indianapolis, IN.
15. S. Singh, L. Ukeiley, Y. Zhang, and L Cattafesta, "Flow field estimation of supersonic open cavity flows conditioned on time-resolved pressure measurements," 74th Annual Meeting of the APS Division of Fluid Dynamics, November 2021, Phoenix, AZ.
16. M Szőke, C Bahr, L Cattafesta, K-S Rossignol, H Ura, Y Zhang and F Zigunov, "Comparative assessment of sound generated using laser-induced plasma," AIAA Aviation 2021, 3rd Hybrid Anechoic Wind Tunnel Workshop, August 2021.
17. M P J Sanders, C H Venner, L D de Santana, K Yamamoto, M Murayama, H Ura, K Pascioni, Y Zhang, and L Cattafesta, "Aeroacoustic testing of the high-lift 30P30N airfoil in hybrid anechoic wind tunnels," AIAA Aviation 2021, 3rd Hybrid Anechoic Wind Tunnel Workshop, August 2021.
18. L Pilozo–Hibbit, P Sellappan, P Schmid, L Cattafesta, and Z Pan, "Lagrangian strain rate tensor evaluation based on multi–pulse particle tracking velocimetry and radial basis functions," 73rd Annual Meeting of the APS Division of Fluid Dynamics, November 2020, Chicago, IL (virtual).
19. L Ukeiley, S Singh, L Cattafesta, Y Zhang, and K Taira, "Control of supersonic flow over an open cavity with a leading–edge spanwise tab array," 73rd Annual Meeting of the APS Division of Fluid Dynamics, November 2020, Chicago, IL (virtual).
20. C Ni, J-H Seo, S Sterbing–D'Angelo, C Moss, L Cattafesta, and R Mittal, "Computational flow–structure–aeroacoustics modeling of ultrasound generation in the larynx of echolocating bats," 73rd Annual Meeting of the APS Division of Fluid Dynamics, November 2020, Chicago, IL (virtual).
21. H Sanavandi, S Bao, Y Zhang, W Guo, and L Cattafesta, "Molecular tagging velocimetry study of high reynolds number turbulent pipe flow in cryogenic helium," 72nd Annual Meeting of the APS Division of Fluid Dynamics, November 2019, Seattle, WA.
22. Z Pan, Y Zhang, J Gustavsson, J-P Hickey, and L N Cattafesta III, "Unscented Kalman Filter (UKF) based nonlinear parameter estimation for a turbulent boundary layer: a data assimilation framework," 72nd Annual Meeting of the APS Division of Fluid Dynamics, November 2019, Seattle, WA.
23. N Benard, H Zong, Y Zhang, M Kotsonis, G Acher, L N Cattafesta, J-P Bonnet, and E Moreau, "New pulsed jet using spark plasma discharge: subsonic configuration," 72nd Annual Meeting of the APS Division of Fluid Dynamics, November 2019, Seattle, WA.
24. W Wu, R Mittal, C Meneveau, A Padovan, C Rowley, and L Cattafesta, "Flow physics and nonlinear dynamics of pressure–gradient–induced turbulent separation bubbles," **Invited** Oral Presentation, AIAA SciTech Forum, Orlando, FL, January 2019.
25. Y Sun, A Edstrand, P Schmid, K Taira, and L Cattafesta, "Active attenuation of a trailing vortex inspired by a parabolized stability analysis," 71st Annual Meeting of the APS Division of Fluid Dynamics, November 2018, Atlanta, GA.
26. L Cattafesta, Y Zhang, and L Ukeiley, "Spectral analysis modal methods (SAMM) for fluid dynamics experiments," US-Japan Workshop on Bridging Fluid Mechanics and Data Science, Tokyo University of Science, Tokyo, Japan, March 2018.

27. A Nickels, L Ukeiley, R Reger, and L Cattafesta, "Pressure field estimates in a three–dimensional turbulent wall jet," 70th Annual Meeting of the APS Division of Fluid Dynamics, November 2017, Denver, CO.
28. Y Sun, Q Liu, L Cattafesta, L Ukeiley and K Taira, "Use of biglobal stability and resolvent analyses for controlling cavity flows," 70th Annual Meeting of the APS Division of Fluid Dynamics, November 2017, Denver, CO.
29. L Cattafesta and K Pascioni, "Estimation of far field acoustics from a multi-element airfoil," Symposium on the Physics and Control of Turbulent Shear Flows, New York, NY, July 2017.
30. H Zhang, Dawson, S, C Rowley, E Deem, and L Cattafesta, "Evaluating the accuracy of the dynamic mode decomposition," 69th Annual Meeting of the APS Division of Fluid Dynamics, November 2016, Portland, OR.
31. E Deem, L Cattafesta, M Hemati, H Zhang, and C Rowley, "Towards DMD–based estimation and control of flow separation using an array of surface pressure sensors," 69th Annual Meeting of the APS Division of Fluid Dynamics, November 2016, Portland, OR.
32. A Edstrand, P Schmid, K Taira, and L Cattafesta, "A parabolized stability analysis of a trailing vortex wake," 69th Annual Meeting of the APS Division of Fluid Dynamics, November 2016, Portland, OR.
33. E Kaiser, B R Noack, A Spohn, L N Cattafesta, M Morzynski, G Daviller, B W Brunton, S L Brunton, "A probabilistic approach to modeling and controlling fluid flows," 69th Annual Meeting of the APS Division of Fluid Dynamics, November 2016, Portland, OR.
34. R K Niven, E Kaiser, B R Noack, L N Cattafesta III, M W Abel, and L Cordier, "Rapid Bayesian inference for fluid flow modeling and control," 69th Annual Meeting of the APS Division of Fluid Dynamics, November 2016, Portland, OR.
35. Y Sun, K Taira, L Cattafesta, and L Ukeiley, "Effects of spanwise instabilities on the suppression of wake mode in flow over a long rectangular cavity," 69th Annual Meeting of the APS Division of Fluid Dynamics, November 2016, Portland, OR.
36. A Nickels, L Ukeiley, R Reger, and L Cattafesta, "Estimation of turbulent wall jet velocity fields for noise prediction," 68th Annual Meeting of the APS Division of Fluid Dynamics, November 2015, Boston, MA.
37. Y Sun, K Taira, L Cattafesta, and L Ukeiley, "Biglobal stability analysis of compressible open cavity flows," 68th Annual Meeting of the APS Division of Fluid Dynamics, November 2015, Boston, MA.
38. A Edstrand, P Schmid, K Taira, and L Cattafesta, "Stability analysis of flow past a wingtip," 68th Annual Meeting of the APS Division of Fluid Dynamics, November 2015, Boston, MA.
39. B George, L Ukeiley, L Cattafesta, and K Taira, "Effects of segmented slot blowing at the leading edge of a finite span cavity in supersonic flow," 68th Annual Meeting of the APS Division of Fluid Dynamics, November 2015, Boston, MA.
40. E Deem, T Davis, L Cattafesta, and F Alvi, "On the application of compressed sensing to non–time-resolved PIV measurements," 67th Annual Meeting of the APS Division of Fluid Dynamics, November 2014, San Francisco, CA.
41. A Edstrand and L Cattafesta, "Nearfield flow topology of a rounded wingtip subject to circulation control," 67th Annual Meeting of the APS Division of Fluid Dynamics, November 2014, San Francisco, CA.
42. A Nickels, L Ukeiley, R Reger, and L Cattafesta, "A method for estimating far–field acoustics generated by a turbulent wall jet," 67th Annual Meeting of the APS Division of Fluid Dynamics, November 2014, San Francisco, CA.
43. B George, L Ukeiley, L Cattafesta, and K Taira, "Effects of segmented slot blowing at the leading edge of a finite span cavity in supersonic flow," 67th Annual Meeting of the APS Division of Fluid Dynamics, November 2014, San Francisco, CA.
44. T Davis, A Edstrand, F Alvi, L Cattafesta, D Yorita, and K Asai, "Identification of the resonant modes in supersonic impinging jets using fast response pressure sensitive paint," 66th Annual Meeting of the APS Division of Fluid Dynamics, November 2013, Pittsburgh, PA.
45. R Reger, N Zawodny, K Pascioni, D Wetzel, F Liu, and L Cattafesta, "Design–optimization of a broadband phased microphone array for aeroacoustic applications," J. Acoust. Soc. Am. 131, 3221, May 2012.
46. F Liu, S Yang, and L Cattafesta, "Flow-induced acoustic resonance prediction using the transfer matrix method," J. Acoust. Soc. Am. 131, 3428, May 2012.
47. J Griffin, L Cattafesta, J Tu, C Rowley, E Aram, and R Mittal, "Experimental investigation of frequency lock–on in separated flow," 64th Annual Meeting of the APS Division of Fluid Dynamics, November 20–22, 2011, Baltimore, MD.

48. F Liu, M Oyarzun, and L Cattafesta, "Analyzing acoustic response of orifices using transfer matrix method," J. Acoust. Soc. Am. 129, 2613, May 2011.
49. D Wetzel, C Bahr, M D Williams, J Meloy, M Sheplak and L Cattafesta, "An aeroacoustic microelectromechanical systems microphone phased array," J. Acoust. Soc. Am. 129, 2645 (2011); http://dx.doi.org/10.1121/1.3588818
50. C Bahr, M Sheplak, L Cattafesta, and J Li, "Wave space array methods for aeroacoustic testing," J. Acoust. Soc. Am. 129, 2674 (2011); http://dx.doi.org/10.1121/1.3588958
51. C Bahr, T Yardibi, F Liu, and L Cattafesta, "Analysis of source denoising techniques," J. Acoust. Soc. Am. 125, 2538 (2009); http://dx.doi.org/10.1121/1.4783588
52. F Liu, A Phipps, S Horowitz, L Cattafesta, T Nishida, and M Sheplak, "Acoustic energy harvesting using an electromechanical helmholtz resonator," J. Acoust. Soc. Am. 125, 2596 (2009); http://dx.doi.org/10.1121/1.4783879 (Invited)
53. L Cattafesta, S Arunajatesan, Q Song, C Moreno, and M Palaviccini, "Adaptive closed–loop control of cavity flows," J. Acoust. Soc. Am. 123, 3679 (2008); http://dx.doi.org/10.1121/1.2935041
54. B Homeijer, B Griffin, T Nishida, L Cattafesta, and M Sheplak, "Design optimization of a microelectromechanical piezoresisitive microphone for use in aeroacoustic measurements," J. Acoust. Soc. Am. 120, 3330 (2006); http://dx.doi.org/10.1121/1.4781260
55. Z Yan, L N Cattafesta III, C Niezrecki, and Beusse, D O, "Background noise reduction of manatee vocalizations," J. Acoust. Soc. Am. 119, 3405 (2006); http://dx.doi.org/10.1121/1.4786763
56. Z Xia, L Cattafesta, R Mei, M Sheplak, and Z Fan, "Investigation of fluid mixing in channels with microfabricated ridges," 59th Annual Meeting of the APS Division of Fluid Dynamics, November 19–21, 2006, Tampa Bay, FL.
57. J Mathew, C Bahr, B Carroll, M Sheplak, and L Cattafesta, "Design and characterization of an anechoic aeroacoustic facility," J. Acoust. Soc. Am. 118, 1943 (2005); http://dx.doi.org/10.1121/1.4781141
58. F Liu, L Cattafesta, M Sheplak, S Horowitz, and T Nishida, "A transfer matrix formulation of an electromechanical helmholtz resonator," J. Acoust. Soc. Am. 118, 1944 (2005); http://dx.doi.org/10.1121/1.4781167
59. T Schultz, L Cattafesta, and M Sheplak, "Modal decomposition method for high-frequency acoustic impedance testing," J. Acoust. Soc. Am. 118, 1864 (2005); http://dx.doi.org/10.1121/1.4779023
60. S Horowitz, T Nishida, L N Cattafesta III, and M Sheplak, "Development of an acoustical energy harvester," J. Acoust. Soc. Am. 118, 1945 (2005); http://dx.doi.org/10.1121/1.4809089
61. M Sheplak, T Nishida, and L Cattafesta, "MEMS based acoustic arrays: promise and challenges," J. Acoust. Soc. Am. 116, 2510 (2004); http://dx.doi.org/10.1121/1.4785016 (Invited)
62. D P Arnold, T Nishida, L N Cattafesta, and M Sheplak, "A directional acoustic array using silicon micromachined piezoresistive microphones," J. Acoust. Soc. Am. 113, 289 (2003); http://dx.doi.org/10.1121/1.1527960
63. S Horowitz, T Nishida, L N Cattafesta III, and M Sheplak, "Impedance tuning of an electromechanical acoustic liner," J. Acoust. Soc. Am. 110, 2773 (2001); http://dx.doi.org/10.1121/1.4777719
64. D P Arnold, T Nishida, L Cattafesta, and M Sheplak, "Technology development for directional acoustic arrays," J. Acoust. Soc. Am. 110, 2671 (2001); http://dx.doi.org/10.1121/1.4777120
65. V Chandrasekaran, X Li, J Li, T Nishida, L N Cattafesta III, and M Sheplak, "Thermoelastically actuated mems ultrasonic transducer," J. Acoust. Soc. Am. 110, 2646 (2001); http://dx.doi.org/10.1121/1.4776982
66. P Rampunggoon, R Mittal, H S Udaykumar, and L Cattafesta, "Interaction of a synthetic jet with a flat plate boundary layer," 54th Annual Meeting of the APS Division of Fluid Dynamics, Washington, DC, November 2000.
67. S Horowitz, T Nishida, L N Cattafesta III, and M Sheplak, "Compliant-backplate helmholtz resonators," J. Acoust. Soc. Am. 107, 2824, (2000); http://dx.doi.org/10.1121/1.429114
68. C Fuentes, X He, B Carroll, L Cattafesta, and W Shyy, "Development and actuation of transitional, separating shear layer," 53rd Annual Meeting of the APS Division of Fluid Dynamics, November 1999.
69. L N Cattafesta III, S Garg, and D Shukla, "Active Control of Compressible Flow–Induced Cavity Oscillations," 51st Annual Meeting of the APS Division of Fluid Dynamics, Philadelphia, PA, November 1998.

70. S Garg and L N Cattafesta III, "Active control of cavity resonance," 49th Annual Meeting of the APS Division of Fluid Dynamics, Syracuse, NY, November 1996.
71. L N Cattafesta III and M R Khorrami, "On the stability of compressible vortices," 46th Annual Meeting of the APS Division of Fluid Dynamics, Albuquerque, NM, November 1993.

HIGH TECHNOLOGY CORPORATION REPORTS

1. L N Cattafesta III and S Garg, "Active control of cavity resonance," HTC Final Report, NASA contract NAS2–14248, May 1997.
2. L N Cattafesta III, "Swept–wing suction experiments in the supersonic low–disturbance tunnel," High Technology Corporation Report HTC–9605, June 1996.
3. M R Khorrami, L N Cattafesta III, and M Choudhari, "Active control/alleviation of trailing (streamwise) vortices," HTC Final Report, NASA contract NAS1–20348, June 1995.

INVITED PRESENTATIONS

Invited Seminars at U.S. Universities

1. "Adaptive Separation Control of a Laminar Boundary Layer using Online Dynamic Mode Decomposition," University of Utah, February 16, 2024.
2. "Adaptive Separation Control of a Laminar Boundary Layer using Online Dynamic Mode Decomposition," Utah State University, February 12, 2024.
3. "Adaptive Separation Control of a Laminar Boundary Layer using Online Dynamic Mode Decomposition," Penn State University, December 5, 2023.
4. "Adaptive Separation Control of a Laminar Boundary Layer using Online Dynamic Mode Decomposition," University of Alabama, September 8, 2023.
5. "Adaptive Separation Control of a Laminar Boundary Layer using Online Dynamic Mode Decomposition," University of Michigan, October 11, 2022.
6. "Adaptive Separation Control of a Laminar Boundary Layer using Online Dynamic Mode Decomposition," Rutgers University, October 14, 2020.
7. "On the Control of a Canonical Separated Flow," University of Minnesota, April 12, 2019.
8. "Uncovering Flow Physics for High–Speed Cavity Flow Control," Department of Mechanical Engineering, University of New Mexico, October 5, 2018.
9. "Flow and Acoustic Characteristics of a Circulation Control Airfoil," Mechanical & Nuclear Engineering Department, Penn State University, March 16, 2017.
10. "Flow and Acoustic Characteristics of a Circulation Control Airfoil," Aerospace Engineering Department, Embry–Riddle Aeronautical University, September 29, 2016.
11. "An Experimental Study of Circulation Control," Department of Aerospace Engineering, Iowa State University, April 21, 2016.
12. "On the Control of a Canonical Separated Flow," Boise State University, March 4, 2016.
13. "On the Control of a Canonical Separated Flow," Johns Hopkins University, Feb. 13, 2015.
14. "An Experimental Investigation of Circulation Control," University of Illinois at Chicago, October 22, 2013.
15. "An Experimental Investigation of Circulation Control," University of Illinois at Urbana–Champaign, March 1, 2013.
16. "An Experimental Study of Circulation Control," Department of Mechanical Engineering, University of Louisville, April 8, 2011.
17. "Active Control of Separated Flow," Department of Mechanical, Aerospace, and Nuclear Engineering, Rensselaer Polytechnic University, April 28, 2010.
18. "Active Control of Separated Flow," Department of Mechanical Engineering, University of Wyoming, April 17, 2008.
19. "Active Control of Separated Flow," Department of Mechanical and Aerospace Engineering, UCLA, January 24, 2008.
20. "Active Control of Separated Flow," Department of Aerospace and Mechanical Engineering, USC, January 23, 2008.
21. "Active Control of Separated Flow," Mechanical Engineering, Caltech, January 22, 2008.
22. "Active Control of Separated Flow," Department of Aerospace and Mechanical Engineering, University of Arizona, September 20, 2007.

23. "Closed–Loop Flow Control: Progress, Prospects, and Challenges," Department of Aerospace Engineering and Mechanics, The University of Texas at Austin, April 27, 2006.
24. "Closed–Loop Flow Control: Progress, Prospects, and Challenges," University of Kentucky, 10/14/04.
25. "Active Flow Control: Progress, Prospects, and Challenges," The Ohio State University, 10/3/03.
26. "Active Flow Control: Progress, Prospects, and Challenges," U.S. Air Force Academy, 12/12/02.
27. "Active Flow Control: Progress, Prospects, and Challenges," Dept. of Mechanical and Aerospace Engineering, University of Florida, 8/30/02.
28. "Active Flow Control: Progress, Prospects, and Challenges," Dept. of Industrial and Mechanical Engineering, University of Illinois at Urbana–Champagne, 3/05/02.
29. "Active Flow Control: Progress, Prospects, and Challenges," MMAE Dept., Illinois Institute of Technology, 02/27/02.
30. "Active Flow Control Technology," Dept. of Mechanical Engineering, FAMU/FSU College of Engineering, 9/00.
31. "Active Flow Control," Dept. of Mechanical Engineering, University of Florida, 02/00.

Invited Seminars/Lectures at International Universities & Organizations

32. "There and back again…model-free vs. model-based active flow control", Turbulence - Where have we come from and where are we going - A day in celebration of the career of Jean-Paul BONNET, Poitiers, France, June 21, 2024.
33. "Application of Conditional Spectral Analysis to Fluid Dynamics Experiments," Experiments in Fluids Seminar Series, November 7, 2023.
34. "Adaptive Separation Control of a Laminar Boundary Layer using Online Dynamic Mode Decomposition," TU Vienna, March 15, 2023.
35. "Adaptive Separation Control of a Laminar Boundary Layer using Online Dynamic Mode Decomposition," GDR, Controle Des Décollements, Poitiers, France, November 2021. **Keynote Lecture**.
36. "Instability–based control of a trailing vortex," University of Lille, Lille, France, June 14, 2019.
37. "On the Control of a Canonical Separated Flow," Department of Mechanical Engineering, Delft University, Delft, Netherlands, March 12, 2018.
38. "On the Control of a Canonical Separated Flow," Pprime Institute, Poitiers, France, December 12, 2017.
39. "Research Overview," Shanghai Jiao Tao University, Shanghai, China, August 24, 2017.
40. "On the Control of a Canonical Separated Flow," ONERA, Meudon, France, January 25, 2017.
41. "On the Control of a Canonical Separated Flow," Ecole Central de Lille, Lille, France, January 24, 2017.
42. "Closed–Loop Flow Control: Progress, Prospects, and Challenges," Department of Mechanical and Manufacturing Engineering, Trinity College, Dublin, Ireland, October 25, 2016.
43. "Closed–Loop Flow Control: Progress, Prospects, and Challenges," TU Braunschweig, Sept. 14, 2015.
44. An Experimental Investigation of Circulation Control, University of Toronto Institute for Aerospace Studies, March 13, 2013.
45. Overview of Flow Control and Aeroacoustics Research, Tohoku University, Sendai, Japan, November 4, 2010.
46. Short Course on Flow Control, four 75-minute lectures, Von Karman Institute, Belgium, March 2–6, 2009.
47. Short Course on Flow Control, 6 2.5 hour lectures), University of Southampton, Southampton, UK, Feb. 25–29, 2008.
48. "Active Control of Separated Flow," Imperial College, UK, February 21, 2008.
49. "Closed–Loop Flow Control: Progress, Prospects, and Challenges," Laboratoire d'Etudes Aérodynamiques, Université de Poitiers, Poitiers, France, October 26, 2007.
50. "Closed–Loop Flow Control: Progress, Prospects, and Challenges," École de technologie supérieure, Université du Québec, Montreal, Canada, June 11, 2007.
51. "Research Progress in the University of Florida Anechoic Aeroacoustic Flow Facility," University of Southampton, UK, July 15, 2003.
52. "Summary of Active Flow Control Research at the University of Florida," University of Southampton, UK, July 15, 2003.

Invited Seminars at U.S. Government Agencies

53. "Research Overview," Argonne National Laboratory, November 4, 2022.

54. "A Dielectric Elastomer Acoustic Liner," NASA Acoustics Technical Working Group Meeting, April 2021.
55. "Active Flow Control for Armaments Research & Development," Armaments Research, Development, and Engineering Center (ARDEC), US Army Picatinny Arsenal, NJ, May 8, 2018.
56. "Some Thoughts on Active Flow Control for Naval Fixed–Wing Applications," NAVAIR, April 2016.
57. "Aeroacoustics", NASA Langley Research Center, Hampton, VA, April 2010.
58. "Active Flow and Noise Control," NASA Glenn Research Center, Cleveland, OH, February 2010.
59. "Overview of Active Flow Control Research at the University of Florida," NASA Langley Research Center, Hampton, VA, Dec. 2006.
60. "Potential for Active Flow Control (AFC) in Wind Turbines," Sandia Wind Turbine Blade Workshop, Albuquerque, NM, April 2006.
61. "Active Flow Control: Progress, Prospects, and Challenges," Naval Surface Warfare Center, Carderock Division, October 2003.
62. "Experimental Flow Control," Eglin Air Force Base, FL, February 2002.
63. "Overview of Interdisciplinary Microsystems Group (IMG)," Army Research Laboratory, Adelphi, MD, August 2001.

Invited Presentations at International Conferences (no paper)

64. "Building upon Baseline Noise Measurements for Category 7 (30P30N) High–Lift Configuration: Effect of Noise Reduction Concepts," 5th AIAA Workshop on Benchmark Problems for Airframe Noise Computations (BANC–V), Atlanta, GA, June 2018.
65. "Aeroacoustic measurements of the 30P30N high–lift airfoil in a kevlar wall test section," 4th AIAA Workshop on Benchmark problems for Airframe Noise Computations (BANC–IV), Lyon, France, June 2016.
66. "On the Control of a Canonical Separated Flow," Active Flow and Combustion Control, Berlin, Germany, Sept. 2014.
67. "Towards a Measurement Database for the Aeroacoustics of the 30P30N Multi-Element High–Lift Airfoil," 3rd AIAA Workshop on Benchmark problems for Airframe Noise Computations (BANC–III), Atlanta, GA, June 2014.
68. "Experimental Studies of Separated Flow and Their Control," Instability and Control of Massively Separated Flows, Prato, Italy, Sept. 2013. **Plenary Lecture**.
69. "Active Flow and Noise Control Actuator Technologies for Advance Aero–Propulsion," Florida Center for Advanced Aero-Propulsion (FCAAP) Symposium, Orlando, FL, August 2009.
70. "30P30N Slat–Noise Experiments in the FSU Anechoic Wind Tunnel", 2nd AIAA Workshop on Benchmark problems for Airframe Noise Computations (BANC–II), Colorado Springs, CO, June 2012.
71. "Towards Closed–Loop Flow Control: Issues in Modeling, Simulation, and Experimental Implementation," AIAA 2009–0607, 47th AIAA Aerospace Sciences Meeting, January 2009.
72. "Actuator Flow Physics and Implications for Computational Modeling of ZNMF Jet Based Separation Control," Mittal R., L Cattafesta, 4th AIAA Flow Control Conference, June 2008.
73. "Closed–Loop Flow Control–Lessons Learned and the Future," GDR, Turbulence and Controle Des Décollements, Ile d'Oléron, France, May 2008.
74. "Benchmark Experiments and Computations for Airframe Noise–Trailing Edge Noise," AIAA/CEAS Aeroacoustics Conference, Vancouver, Canada, May 2008.
75. "Active Control of Separated Flow," GDR, Controle Des Décollements, Paris, France, October 2007. **Keynote Lecture**.
76. "Closed–Loop Post–Stall Separation Control," The Aerodynamics of Heavy Vehicles II: Trucks, Buses, and Trains, September 2007.
77. "Development of Advanced Zero–Net Mass Flux Actuators for Active Flow Control Applications," 37th AIAA Fluid Dynamics Conference and Exhibit, Miami, FL, June 2007.
78. "Flow Quality Issues for Airframe Noise Testing," Panel Session, 45th AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV, January 2007.
79. "Experimental Approaches and Considerations in Closed–Loop Flow Control," First International Symposium on Closed–Loop Flow Control, Jackson Hole, WY, July 2005.
80. "Measurement Needs and Challenges for the Characterization of Flow Control Actuators," 25th AIAA Aerodynamic Measurement Technology and Ground Testing Conference, San Francisco, CA, June 2006.

81. "Towards Closed–Loop Flow Control of Separation," Oral Session, 35th AIAA Fluid Dynamics Conference and Exhibit, Toronto, Ontario, Canada, June 2005.
82. "Modeling and Design of Zero–Net Mass Flux Actuators for Active Flow Control," International Symposium on Recent Advances in Aeroacoustics and Active Flow–Combustion Control," in Honor of Prof. John E. Ffowcs Williams, Goa, India, January 2005.
83. "MEMS Shear Stress Sensors: Promise and Progress," AIAA Paper AIAA 2004–2606, 24th AIAA Aerodynamic Measurement Technology and Ground Testing Conference, Portland, OR, June 2004.
84. "Modeling and Design of Piezoelectric Actuators for Fluid Flow Control," 2000 World Aviation Congress, San Diego, CA, October 2000.

Invited Presentations at U.S. Companies

85. "Active Flow and Noise Control", Lockheed Martin, Orlando, FL, April 2009.
86. "Active Flow and Noise Control", Pratt & Whitney, West Palm Beach, FL, March 2009.
87. "Closed–Loop Flow Control: Progress, Prospects, and Challenges," Lockheed Martin, Fort Worth, TX, August 2006.
88. "Technology Development for Electromechanical Acoustic Liners" The Boeing Company, Seattle, WA, August 2005.
89. "Experimental Closed–Loop Flow Control: Progress, Prospects, and Challenges," The Boeing Company, Seattle, WA, August 2005.
90. "Anechoic Wind Tunnel Facility at the University of Florida," The Boeing Company, Seattle, WA, August 2005.
91. "Technology Development for Electromechanical Acoustic Liners," The Boeing Company, Seattle, WA, August 2005.
92. "Active Flow Control," United Technologies Research Center, July 2003.

PROFESSIONAL SERVICE

Illinois Institute of Technology

- Department Chair, MMAE

Florida State University

- Member, Council of Research and Creativity (2013–2015)

Florida State University

- Member, Engineering Diversity, Equity, and Inclusion Advisory Council (2021-)
- Member, Search Committee for Dean of the College of Engineering (2021-)
- Chair, Search Committee for ME Endowed Chair faculty position (2021-)
- Member, Search Committee for ECE faculty position (2021-)
- Member, Search Committee for CAPS faculty position (2014–2016)
- Member, Search Committee for Sprint Eminent Scholar Chair (2013)

FAMU/FSU College of Engineering, Department of Mechanical Engineering

- Member, Faculty Evaluation Committee (2016–present)
- Member, Thermal Fluid Science Search Committee (2019)
- Chair, Tenure & Promotion Committee (2015–2017)
- Chair, Graduate Committee (2014–2016)
- Member, Graduate Committee (2012–2014)
- Chair, Awards Committee (2012–2016)
- Member, Tenure & Promotion Committee (2013–2015)

University of Florida

- Member, Faculty Senate (2008–2012)

University of Florida College of Engineering

- Member, Dean's Faculty Council (2008–2012)

University of Florida Department of Mechanical and Aerospace Engineering

- Chair, Faculty Search Committee (2008–2010)

- Member, Faculty Search Committee (2005–2007)
- Member, MAE Development Committee (2005–2007)
- Member, Graduate Recruiting Committee (2003–2005)
- Member, Faculty Search Committee (2003)

Professional Society Service

- Instructor for Von KARMAN Institute for Fluid Dynamics, "Flow Control: Techniques and Applications," May 2017
- Instructor in AIAA Professional Short Course, "Modern Flow Control," June 2011
- Instructor in AIAA Professional Short Course, "Flow Control for Specialists," January 2010
- Instructor for Von KARMAN Institute for Fluid Dynamics, "Flow Control: Fundamentals, Advances, and Applications," March 2009
- Instructor in AIAA Professional Short Course, "Modern Flow Control," January 2009
- Instructor in AIAA Professional Short Course, "Flow Control for Specialists," January 2008
- Instructor in AIAA Professional Short Course, "Modern Flow Control," January 2007
- Instructor in AIAA Professional Short Course, "Flow Control for Specialists," June 2006
- Instructor in AIAA Professional Short Course, "Modern Flow Control," January 2006
- Instructor in AIAA Professional Short Course, "Modern Flow Control," June 2004
- Member of AIAA Fluid Dynamics Technical Committee (2003–2007)
- Member of AIAA Fluid Dynamics Working Group on Architectures and Algorithms for Flow Control (2003–2005)
- Member of AIAA Advanced Measurement Technology Technical Committee (2000–2003)

Professional Societies

Fellow, AIAA (member since 1988, Associate Fellow 2003, Fellow since 2022)
Fellow, ASME (member since 1992, Fellow since 2011)
Fellow, APS (2006–present, Fellow since 2017)
Member, ASA (2000–present)
Associate Editor, Experiments in Fluids (2013–present)
Associate Editor, AIAA J (2010–2013)
Member, Editorial Board, Applied Sciences (Acoustics), September 2017– present

HONORS/AWARDS

- Elected Fellow AIAA, 2022
- Elected Fellow, Royal Aeronautical Society, 2022.
- Nominated for the Florida State University Teacher of the Year Award, 2019
- Recipient, University Eminent Scholar, FAMU/FSU College of Engineering, Mechanical Engineering, 2012.
- Nominated for the University of Florida UF Research Foundation Professorship, 2011
- Nominated for the University of Florida Outstanding International Educator Award, 2009 & 2010
- Nominated for the University of Florida Doctoral Dissertation Award, 2010
- Nominated for the University of Florida Faculty Mentoring Award, 2008
- University of Florida Doctoral Dissertation Award, 2007
- Best Paper, AIAA Ground Testing Technical Committee, 2004
- Best Paper, AIAA Aerodynamic Measurement Technical Committee, 2004
- Associate Fellow, AIAA, 2003
- Best Paper, AIAA Aerodynamic Measurement Technical Committee, 2002
- Best Paper, AIAA Aerodynamic Measurement Technical Committee, 2001
- Recipient of the 1996 NASA Team Excellence Award
- Recipient of the 1992 PSU Outstanding Graduate Research Award
- Recipient of Dean's Fellowship at PSU (1988–1992)
- Recipient of NASA GSRP Fellowship at PSU (1989–1992)
- Recipient of AFRAPT Fellowship at MIT (1986–1988)