

Curriculum Vitae

Satoru Eguchi, MD, PhD, FAHA

Professor, Department of Surgery, Hypertension Kidney Center, and Heart Institute,
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Education

1987	M.D.	Tohoku University School of Medicine, Sendai, Japan
1993	Ph.D.	Tokyo Medical and Dental University, Tokyo, Japan

Postdoctoral Training

87-88	Resident in Medicine	Tokyo Medical and Dental University Hospital
88-89	Resident in Medicine	Hokushin General Hospital, Nagano, Japan
89-93	Clinical Fellow	Endocrine and Hypertension Division Tokyo Medical and Dental University Hospital
94-96	Research Fellow	Department of Biochemistry Vanderbilt University School of Medicine

License and Certification

Japanese National Board for Practical Medicine 1987

Appointments

93-94	Staff Physician	Endocrine and Hypertension Division, Department of Medicine Tokyo Medical and Dental University Hospital
96-97	Research Instructor	Department of Biochemistry Vanderbilt University School of Medicine
97-99	Staff Physician	Endocrine and Hypertension Division, Department of Medicine Tokyo Medical and Dental University Hospital
99-01	Res Assistant Professor	Department of Biochemistry Vanderbilt University School of Medicine
01-03	Res Associate Professor	Department of Biochemistry Vanderbilt University School of Medicine
02-03	Adjunct Associate Professor	Department of Anatomy and Physiology Meharry Medical College
03-10	Associate Professor	Department of Physiology & Cardiovascular Research Center (2008- tenure) Temple University School of Medicine
10-25	Professor	Department of Physiology & Cardiovascular Research Center Temple University School of Medicine

12-25	Professor	Sol Sherry Thrombosis Research Center Temple University School of Medicine
13-25	Professor	Center for Metabolic Disease Research Temple University School of Medicine
25-	Professor	Department of Surgery, Hypertension Kidney Center, and Heart Institute, Morsani College of Medicine University of South Florida

Awards and Honours

1996	Best Poster Presenter, Gordon Conference (Angiotensin).
1997	Young Investigator Travel Award, International Society of Hypertension
1998	Young Investigator Award, the Japanese Society of Hypertension
1998	Young Investigator Award, Japanese Soc. of Cardiovasc Endocrinol & Metabol
2003	Fellow (FAHA), the AHA High Blood Pressure Research
2006	American Heart Association Established Investigator Award
2010	A Superior Editorial Consultant (Circulation Research Editorial Board)
2011	A Superior Editorial Consultant/Top Reviewer Gold Club (Circulation Research)
2011-25	Top reviewers (Hypertension Editorial Board)
2022	Top 6 reviewers (Hypertension Editorial Board)
2015	Top 10 reviewers (ATVB Editorial Board)
2017	Lewis K. Dahl Memorial Award (AHA Council on Hypertension)
2020	High Impact Paper in Hypertension Fall of 2020 (Forrester et al)
2020	Top reviewers (Circ Res Editorial Board)
2021	Extraordinary reviewers (Circ Res Editorial Board)
2022	Outstanding reviewers (Circ Res Editorial Board)
2025-27	Councilor of the Japanese Society of Hypertension

Grant Support current

NIH R01AG077780

6/01/2023-02/29/2028 MPI

Roles of aging and cellular senescence in the development of intracranial aneurysm rupture
contact PI Tomoki Hashimoto, St. Joseph's Hospital and Medical Center

NIH R01HL174004

12/01/2024-11/30/2028 MPI

Vascular Pyruvate Kinase M2 in Hypertension

contact PI Eguchi

co-PI Patrick Osei-Owusu

Grant Support past (PI)

2019-2024 MPI

EGF-ADAM17 axis in the pathophysiology of intracranial aneurysm”

(contact PI Tomoki Hashimoto, St. Joseph's Hospital and Medical Center)

co-PI Eguchi 10%: NIH R01NS109382 01A1.

- 2017-21 dual PI: 20% “Inflammatory response of visceral adipose tissue microcirculation (co-PI: Rosario Scalia: 20%)
NIH R01DK111042-0A1
- 2016-20 PI “Mechanism of hypertensive vascular remodeling and end-organ damage (40%)
NIH R01HL133248-01 reviewed in HM study section
- 2015-19 PI (dual PI: 20%) “Vascular signal as therapeutic target for abdominal aortic aneurysm (co-PI: Victor Rizzo: 20%)
NIH R01 HL128324-01 reviewed by VCMB study section
- 2016-18 PI “Hypertensive vascular remodeling via a caveolae-localized ADAM17 kinase, BMX” 10%
AHA, Grant in Aid 16GRNT30410007
- 2013- 15 PI “Protease Regulation of Aortic Aneurysm” 10%
AHA, Grant in Aid 13GRNT17060036
- 2004-13 PI “ADAM Activation by angiotensin II” 35%
R01HL 076770
- 2007-12 PI “Signal cross-talk of angiotensin II in vascular cells” 10%
AHA, Established Investigator Award Proposal 0740042N
- 2007-10 PI “Reciprocal eNOS regulation by Protease-activated Receptor 1 and 2” 10%
W. W. Smith Charitable Trust #H0605
- 2001-04 PI “Signal transduction mechanism of EGF receptor transactivation and MAP kinases activation by angiotensin II” 10%
AHA Scientist Development Grant, AHA0130053N
- 2000-02 PI “Signal transduction of vascular insulin resistance: roles of vasoactive substances, angiotensin II and lysophosphatidylcholine”
P & F Program, Vanderbilt Univ. Diabetes Center

Grant Support (Co-I)

- 2015-19 Co-I “Fluid shear stress-induced mitochondrial remodeling 8%
NIH, RO1 HL126952 (P.I. Park JY PhD, HM study section)
- 2014 18 Co-I “S Integrative mechanisms of adipose tissue dysfunction in obesity“ 5%
NIH, RO1 DK09652 (P.I. Scalia R PhD)
- 2009-14 Co-I “Suppression of VSMC Activation and Mechanisms of Vascular Protection by IL-19 “ 3% NIH, RO1 HL090885 (P.I. Michael Autieri PhD)
- 2009-13 Co-I “In Vivo Mechanisms of Vascular Dysfunction in Obesity with Insulin Resistance“ 5% NIH, RO1 DK064344-06A1 (P.I. Rosario Scalia MD. PhD)
- 2006-10 Co-I “AIF-1 expression in VSMC growth and arteriopathy” 5%
NIH, RO1 HL063810 (P.I. Michael Autieri PhD)

Trainees Grant Support

- Katherine J. Elliott, PhD 2015-17 AHA Postdoctoral Fellowship 15POST25550083

Tatsuo Kawai MD. PhD	2016-18	AHA Postdoctoral Fellowship 16POST30510004
Allison M. Bourne, PhD	2011-13	AHA Postdoctoral Fellowship 11POST7800000
Steven J. Forrester, PhD	2016-17	NIH Predoctoral Fellowship F31HL127971 / (2016: excused)
Hannah A. Cooper	2019-21	AHA Predoctoral Fellowship 19PRE34430037 NIH Predoctoral Fellowship F30HL146006
Michael Boyer	2019-21	AHA Predoctoral Fellowship 19PRE34430038 NIH Predoctoral Fellowship F31HL146081
Stephanie M. Cicalese	2018-22	NIH training grant T32 HL091804

Study Section

2005	NIH National Center for Research Resources, GCRC review panel: Member
2005	NIH Vascular Cell and Molecular Biology Study Section: Ad hoc reviewer
2008	NIH COBRE RFA: University of Kansas: Ad hoc reviewer
2009	NIH Molecular and Integrative Signal Transduction Study Section: Ad hoc
2009	NIH Recovery Act Challenge Grants: Ad hoc reviewer
2011	NIH Director's Early Independence Award (DP5): Ad hoc reviewer
2015-16	NIH Special Emphasis Panel, Vascular Biology AREA Ad hoc reviewer
2016	NIH Hypertension Microcirculation Study Section Ad hoc
2016	NIH Vascular Cell and Molecular Biology Study Section: Ad hoc
2017	NIH Special Emphasis Panel, Vascular and Hematology, Ad hoc reviewer
2017	NIH F10A Fellowship Physiol Pathophysiol Cardio Resp, Ad hoc
2018	NIH AICS Study Section, Ad hoc (10/2018)
2004-07	AHA Mid-Atlantic Study Section 5, Molecular Signaling: Member
2007-09	AHA National Center – Molecular Signaling: Member
2010	AHA National Center – Innovative Research Grant: Ad hoc (Round 1x2)
2011	AHA Vascular Endothelial 1: reviewer
2012	AHA Vascular Endothelial 1: reviewer
2013	AHA Collaborative Science Award LOI review Group 2
2015	AHA Focused Research Center of Excellence in Hypertension Research
2018	AHA Fellow to Faculty Transition Award, non-competitive secondary review
2021	AHA Career Development Award Vascular 2: reviewer
2021	AHA Fellowship Vascular 3: reviewer
2007	American Diabetes Association: Ad hoc reviewer
2016	P&F Diabetes Research Center Washington University: Ad hoc
2016	Diabetes Australia Research Program: Ad hoc reviewer
2006	Cancer Research UK Program Grant Application: Ad hoc reviewer
2010	Cancer Research UK Project Grant Application: Ad hoc reviewer
2008	Israel Science Foundation: Ad hoc reviewer
2006	Swiss National Science Foundation: Ad hoc reviewer
2010	Swiss National Science Foundation: Ad hoc reviewer
2012	14 Qatar National and Research Fund: Ad hoc reviewer
2014	Qatar Post-Doctoral Research Award: Ad hoc reviewer
2012	Czech Science Foundation: Ad hoc reviewer
2013	Delaware INBRE Pilot Project: Ad hoc reviewer
2018	French National Research Agency: Ad hoc reviewer

2021 Nevada INBRE Pilot Project: Ad hoc reviewer
 2023 CCDS Grant in Aid Louisiana State University: Ad hac reviewer
 2024 CCDS Grant in Aid Louisiana State University: Ad hac reviewer
 2013- 14 **Co-Chair:** AHA Vascular Endothelial 1
 2015- 16 **Chair:** AHA Vascular Endothelial 1
 2018 **Co-Chair:** AHA Fellowship Vascular Endothelial Biology Basic

Professional Association and Activities

Member: AHA, Council for High Blood Pressure Research
 Member: AHA, Council on Arteriosclerosis, Thrombosis and Vascular Biology
 Member: Biochemical Society

Conference Committee

Gordon Research Conference Angiotensin, Steering Committee 2008-2014
 AHA HBPR Program Committee 2014-2016
 AHA HBPR Scientific & Clinical Education Lifelong Learning (SCILL) committee 2016-2019

Session Chair

AHA Scientific Sessions 16, Cardiovascular Toxicology of Anti-Cancer Drugs (moderator)
 AHA HBPR 14, Session: Vascular Biology (moderator)
 AHA Scientific Sessions 13, Session: Growth factor, cytokine (Poster Professor)
 AHA Scientific Sessions 12, Session: Hot Topics in Hypertension: Experimental (moderator)
 AHA HBPR 10, Session: Molecular and Cellular Physiology (moderator)
 AHA Scientific Sessions 09, Session: Signaling Pathways Affecting the Vasculature (moderator)
 AHA HBPR 09, Session: Autacoids and Vascular Signaling Mechanisms (moderator)
 AHA Scientific Sessions 07, Session: Mediators of vascular injury and dysfunction (moderator)
 AHA Scientific Sessions 06, Session: NO Synthase Activity (moderator)

Abstract Reviewer

AHA Scientific Session 2012-2025
 AHA High Blood Pressure Research 2009-2025

Other Scientific Activities

Ad hoc reviewer: President’s Award for Outstanding Research, Memorial University, Canada 09
 Ad hoc reviewer: Temple University Faculty Senate Seed Money Fund 2009
 Ad hoc reviewer: LKSOM Internal Grant Reviewer for Jun Yu (RO1) 2016
 Mentor: NIH: K01 HL76575-01 (04-09), PI: Gerald D. Frank, Vanderbilt University
 Mentor: NIH: KO8, PI: Emily Tsai (12-14), Temple University
 Judge: Onsite Trainee Poster Competition AHA Hypertension Meeting 2018, 22

Associate Editor: Clinical Science 2011-
Consulting Editor: Inter Heart J 2015-
International Editor Hypertension Research 2022-

Editorial Board: Circulation Research 2009-
 Arterioscler Thromb Vasc Biol 2008-

Hypertension	2006-
Am J Physiol Cell Physiol	2003-
Am J Physiol Heart Circ Physiol	2014-
Am J Hypertension	2012-
Austin Hypertension Function (APS)	2016- 2020-
Clinical Science	2008-11
The Open Atheroscler Thromb J	2009-12

Training of postdoctoral fellows Past 10 years

Youjie Zhang PhD	9/2025-
Yuki Nakayama MD, PhD	11/1/2023-
Keiichi Torimoto MD PhD	9/2022-3/9/2023
Keisuke Okuno MD. PhD	11/2019-9/2022
Chieko Saito PhD	9/2017-11/2019
Kyle Preston PhD	6/20/2016-6/21/2018 (co-mentor 75%)
Katherine J. Elliott, PhD	7/1/2015-6/31/2017
Tatsuo Kawai MD. PhD	9/1/2014-6/31/2020

Supported with the Osaka Medical Research Foundation for Intractable Diseases sponsored by Eguchi
Awarded AHA Scientific Session 2015 ATVB Travel Award for Young Investigator

Training of graduate students Past 10 years

Stephanie M. Cicalese	18-22	PhD Biomedical Science LKSOM (Eguchi/Scalia) AHA Hypertension 2019 TAC New Investigator Travel Award AHA Hypertension 2020 TAC New Investigator Travel Award Postdoctoral Fellow, Merck Research Laboratories
Hannah A. Cooper	17-20	MD. PhD. LKSOM (Eguchi/Rizzo) AHA Hypertension 2018 Yong Investigator Travel Award Resident, Massachusetts General Hospital
Michael J. Boyer	16-20	PhD Biomedical Science LKSOM (Eguchi/Rizzo) Postdoctoral fellow, Princeton University Advisor: William Sessa
Steven J. Forrester, PhD	14-17	PhD Temple Univ (School of Health Profession) ATVB Travel Award for Young Investigators 2016 AHA Hypertension 2015 Onsite Poster Competition Award Postdoctoral fellow, Emory University Advisor: Kathy Griendling

Mentoring Visiting Professors

Yuka Taniguchi PhD	25-	Assistant Professor Kobe Gakuin University
Ryohei Kuroda MD PhD	20-21	Assistant Professor University of Tokyo
Masashi Miyao MD PhD	18-19	Assistant Professor Kyoto University School of Medicine

Past 10 years**Graduate student committee**

Amanda St. Paul	18-23	PhD course (Biomedical Science)
Christine Vrakas	16-19	PhD course (Biomedical Science)
Allison Herman	16-19	PhD course (Biomedical Science)
Ji-Seok Kim	15-16	PhD course (Kinesiology, College of Health Profession)
Lindsey Coleman	14-15	Master course (Biomedical Science), Advisor
Shuchi Guo	14-18	PhD course (Biomedical Science)
Latricia Bowman	14-15	Master course (Biomedical Science)
Lixiao Zhang	14-17	PhD course (Pharmacology)
Taseer Bhatti	14-16	PhD course (Biomedical Science)
Boa Kim	13-14	PhD course (Kinesiology, College of Health Profession)
Bhanukanth Manne	13-15	PhD course (Physiology)
Zienab A. Etwebi	13-18	PhD course (Biomedical Science)
Kevin J Crawford	12-14	PhD course (Cell Biology)

Past 10 years**Other committee**

- 05- Member: Graduate Course Committee (Department of Physiology)
- 06- Member: Research Committee (Department of Physiology)
- 06 Member: Temple University Biochemistry Chairperson Search Committee
- 07 Member: Dean of Temple University Japan Search Committee
- 11 Member: Promotion Committee, Anatomy & Cell Biology (Rizzo V PhD)
- 12 Evaluator: Promotion for Dr. J Soboloff to Associate Professor, Biochemistry
- 12- The BMSC/PhD Course admissions committee
- 18 Referee: Recruitment of Tenured Faculty, Peking University School of Basic Science

PhD Course/Lecture

- 2004 Angiotensin and cardiovascular regulation (Cardiovascular Physiology, 2h)
Nitric Oxide and its biology (Cardiovascular Physiology, 2h)
Vascular Signal Transduction (Experimental Physiology, 2h)
AT1 signal transduction, its pathophysiological significances (MD.PhD course, 2h)
- 2005 Signal Transduction (Cell Biology course, 4 h)
Vascular Signal Transduction (Experimental Physiology, 2h)
- 2006 Cardiovascular Endocrinology Course directed (14 h, 2 credits course for Physiology)
Endocrinology (Advanced Physiology, 2h)
Vascular Signal Transduction (10/31 Experimental Physiology, 2h)
AT1 signal transduction (12/06 MD PhD course, 2h)
- 2007 Endocrinology (Advanced Physiology, 2h)

- 2008 Endocrinology (Advanced Physiology, 2h)
Control of blood pressure/mechanisms of hypertension (2 credits)
Metabolic syndrome and diabetes (2 credits)- Molecular Mechanisms of Cardiovascular Disease Course
Vascular Signal Transduction -Experimental Physiology (2h)
- 2009 Endocrinology (Advanced Physiology, 2h)
Experimental Physiology (1h)
- 2010 AngII signal transduction in VSMCs (MDPhD course 1h)
Control of blood pressure/mechanisms of hypertension (2 credits)
Metabolic syndrome and diabetes (2 credits)- Molecular Mechanisms of Cardiovascular Disease Course
- 11-14 Control of blood pressure/mechanisms of hypertension (2 credits)
Metabolic syndrome and diabetes (2 credits)- Molecular Mechanisms of Cardiovascular Disease Course
- 13- Calcium channels in vascular smooth muscle cells (2 credits)- Molecular Physiology of Ion signaling
- 14- Cardiovascular Pathophysiology: Mechanism of Hypertension
- 14-23 Organ System: laboratory approach: Endocrine System
- 14-23 Organ System: laboratory approach: Cardiovascular System

MD Course: Lecture and Workshop

- 2006 Integrated salt and water balance, Block 4 (1 h)
- 2007 Cardiac Function Workshop, Block 3 (8 h)
ECG Lab, Block 3 (8 h)
- 2008 Cardiac Function Workshop, Block 3 (8 h)
ECG Lab Workshop, Block 3 (8 h)
Vascular Function Workshop, Block 3 (8h)
- 2009 Cardiac Function Workshop, Block 3 (4 h)
ECG Lab Workshop, Block 3 (4 h)
Vascular Function/Blood Flow Workshop, Block 3 (8h)
- 2010 Cardiac Function Workshop, Block 3 (8 h)
ECG Lab Workshop, Block 3 (6 h)
Vascular Function/Blood Flow Workshop, Block 3 (4h)
Integrated Cardiovascular Function Workshop, Block 3 (4h)
- 2011 Cardiac Function Workshop, Block 3 (4 h)
Vascular Function/Blood Flow Workshop, Block 3 (4h)
Integrated Cardiovascular Function Workshop, Block 3 (4h)
- 2012 Cardiac Function Workshop, Block 3 (4 h)
Vascular Function/Blood Flow Workshop, Block 3 (4h)
Integrated Cardiovascular Function Workshop, Block 3 (4h)
- 2013 Cardiac Function Workshop, Block 3 (4 h)
Vascular Function/Blood Flow Workshop, Block 3 (4h)
Integrated Cardiovascular Function Workshop, Block 3 (4h)
- 2014 Cardiac Function Workshop, Block 3 (4 h)
Vascular Function/Blood Flow Workshop, Block 3 (4h)
Integrated Cardiovascular Function Workshop, Block 3 (4h)

- 2015 Blood Pressure Workshop (2H)
Vascular Function/Blood Flow Workshop, Block 3 (4h)
Clinical Reasoning Session Cardiac Function (4H)
2016- Block 3 workshop Cardiovascular System (12 h)

Graduate Course Rotation Past 10 years

James Hsia	2024 (MD PhD course)
No'ad Shanas	2020 (Biomedical Science PhD)
Nadina Latchman	2018 (Biomedical Science PhD)
Stephanie Cicalese	2018 (Biomedical Science PhD)
Peace Park	2017 (Biomedical Science PhD)
Hannah A Cooper	2016 (MD PhD course)
Matthew K Hoffman	2016 (MD PhD course)
Michael J Boyer	2016 (Biomedical Science PhD)

Yokohama City University School of Medicine LKSM exchange program summer students

- 2019 Ayaka YUKIMORI
2019 Rio SHIBATA
2022 Shino Yamaguchi
2022 Takayuki Iizuka
2023 Yuzuki Muso
2024 Sumire Iwase
2024 Momo Kani

Publications: 207 articles published or in press. (This list contains **134** original research articles, **35** review articles, **26** editorial comments, **4** letters to the editor, and **8** book chapters.)

Original Articles

135. Cicalese S, Torimoto K, Okuno K, Nakayama Y, Rizzo V, Akiyama T, Kimura Y, Hashimoto T, **Eguchi S**. Smooth muscle glucose regulated protein 78 mitigates angiotensin II-induced vascular remodeling in mice *Cardiovasc Res* 2025 under revision.
134. Torimoto K, Nakayama Y, Terada Y, Okuno K, Cicalese S, Mangano B, Akiyama T, Kimura Y, Utsunomiya H, Hashimoto T, O-Uchi J, Osei-Owusu P, **Eguchi S**. Inositol requiring enzyme 1 α mediates hypertension and vascular remodeling. *Hypertension* 83:651-661, 2026. <https://www.ahajournals.org/toc/hyp/83/3>
133. Nakayama Y, Utsunomiya H, Eguchi K, Elliott KJ, Hashimoto T, Osei-Owusu P, Eguchi S. A Mouse Model of Hypertension Induced by Sucrose. *Hypertension Research* 2025 Doi.org/10.1038/s41440-025-02278-w.
132. Torimoto K, Vari HR, Nakayama Y, Utsunomiya H, Takeda M, Hashimoto T, Rizzo V, Wang ZV, **Eguchi S**. Vascular glucose transporter 1 is dispensable for abdominal aortic aneurysm induced by angiotensin II. *J Vasc Surg Vasc Sci* 6.100270, 2025.
131. Preston KJ, Kawai T, Torimoto K, Kuroda R, Nakayama Y, Akiyama T, Kimura Y, Scalia R, Autieri MV, Rizzo V, Hashimoto T, Osei-Owusu P, **Eguchi S**. Mitochondrial fission inhibitor protects against hypertension induced by angiotensin II. *Hypertension Research* 47:1338-1349, 2024
130. Ishiguro T, Furukawa H, Polen K, Take Y, Sato H, Kudo D, Morgan J, Uchikawa H, Maeda T, Cisneros O, Rahmani R, Ai J, Eguchi S, Lawton M, and Hashimoto T. Pharmacological inhibition of epidermal growth factor receptor prevents intracranial aneurysm rupture by reducing endoplasmic reticulum stress. *Hypertension* 81:572-581, 2024.
129. Okuno K, Torimoto K, Kuroda R, Cicalese S, Okuno Y, Kono R, Marumoto S, Utsunomiya H, **Eguchi S**. Infused juice concentrate of Japanese plum *Prunus mume* attenuates inflammatory vascular remodeling in a mouse model of hypertension induced by angiotensin II. *Hypertension Research* 46:1923-1933, 2023.
128. Okuno K, Torimoto K, Cicalese S, Preston K, Rizzo V, Hashimoto T, Coffman TM, Sparks MA, **Eguchi S**. Angiotensin II type 1a receptor expressed in smooth muscle cells is required for hypertensive vascular remodeling in mice infused with angiotensin II. *Hypertension* 80:668-677, 2023
127. Okuno K, Torimoto K, Cicalese S, Preston K, Hashimoto T, Sparks MA, Rizzo V, **Eguchi S**. Smooth muscle angiotensin II type 1A receptor is required for abdominal aortic aneurysm formation induced by angiotensin II plus β -aminopropionitrile. *J Mol Cell Cardiol* 176:55-57, 2023.
126. St Paul A, Corbett C, Peluzzo A, Kelemen S, Okune R, Haines DS, Preston K, Eguchi S, Autieri MV. FXR1 regulates vascular smooth muscle cell cytoskeleton, VSMC contractility, and blood pressure by multiple mechanisms. *Cell Rep*. 2023 Apr 11;42(4):112381. doi: 10.1016/j.celrep.2023.112381.
125. Corbett CB, St Paul A, Leigh T, Kelemen SE, Peluzzo AM, Okune RN, Eguchi S, Haines DS, Autieri MV. Genetic Deletion of FXR1 Reduces Intimal Hyperplasia and Induces Senescence in Vascular Smooth Muscle Cells. *Am J Pathol*. 2023 May;193(5):638-653. doi: 10.1016/j.ajpath.2023.01.006.PMID: 37080662
124. Cicalese S, Torimoto K, Okuno K, Elliott KJ, Rizzo V, Hashimoto T, **Eguchi S**. Endoplasmic Reticulum Chemical Chaperone 3-Hydroxy-2-Naphthoic Acid Reduces Angiotensin II-Induced Vascular Remodeling and Hypertension In Vivo and Protein Synthesis In Vitro. *J Am Heart Assoc* 23:e028201, 2022
123. Miyao M, Kawai C, Kotani H, Minami H, Abiru H, Hamayasu H, Eguchi S, Tamaki K. Mitochondrial fission in hepatocytes as a potential therapeutic target for nonalcoholic steatohepatitis. *Hepatol Res*. 2022 Aug 24. doi: 10.1111/hepr.13832. Online ahead of print. PMID: 36001355
122. Shin J, Hong SG, Choi SY, Rath ME, Saredy J, Jovin DG, Sayoc J, Park HS, Eguchi S, Rizzo V, Scalia R, Wang H, Houser SR, Park JY. Flow-induced endothelial mitochondrial remodeling mitigates mitochondrial reactive oxygen species production and promotes mitochondrial DNA integrity in a p53-dependent manner. *Redox Biol*. 2022 Apr;50:102252. doi: 10.1016/j.redox.2022.102252. Epub

121. Torimoto K, Okuno K, Kuroda R, Shanas N, Cicalese SM, Eguchi K, Elliott KJ, Kawai T, Corbett CB, Peluzzo AM, St Paul AK, Autieri MV, Scalia R, Rizzo V, Hashimoto T, **Eguchi S**. Glucose consumption of vascular cell types in culture; toward optimization of experimental conditions. *Am J Physiol Cell Physiol*. 322, C73-C85, 2021, PMID: 34817269
120. Yokosuka K, Rutledge C, Kamio Y, Kuwabara A, Sato H, Rahmani R, Purcell J, Eguchi S, Baranoski JF, Margaryan T, Tovmasyan A, Ai J, Lawton MT, Hashimoto T. Roles of Phytoestrogen in the Pathophysiology of Intracranial Aneurysm. *Stroke* 52: 2661-2670, 2021.
119. Korai M, Purcell J, Kamino Y, Mitui K, Furukawa H, Yokosuka K, Miyamoto T, Sato H, Eguchi S, Ai J, Lawton MT, Hashimoto T. Neutrophil extracellular traps promote the development of intracranial aneurysm rupture. *Hypertension* 77:2084-2093, 2021. doi: 10.1161/HYPERTENSIONAHA.120.16252. Online ahead of print.
118. Cooper HA, Cicalese S, Preston KJ, Kawai T, Okuno K, Choi ET, Kasahara K, Uchida HA, Otaka N, Scalia R, Rizzo V, **Eguchi S**. Targeting mitochondrial fission as a potential therapeutic for abdominal aortic aneurysm. *Cardiovasc Res* 117(3):971-982, 2021. doi: 10.1093/cvr/cvaa133
117. Cicalese S, Okuno K, **Eguchi S**. Detection of protein aggregation and proteotoxicity induced by angiotensin II in vascular smooth muscle cells. *J Cardiovasc Pharmacol* Method Article 2021;77:43-48.
116. Cicalese S, Okuno K, Elliott KJ, Kawai T, Scalia R, Rizzo V, **Eguchi S**. 78 kDa glucose-regulated protein attenuates protein aggregation and monocyte adhesion induced by angiotensin II in vascular cells. *Int J Mol Sci* 2020 Jul 15;21(14):4980. doi: 10.3390/ijms21144980.PMID: 32679678
115. Forrester SJ, Preston KJ, Cooper HA, Boyer MJ, Escoto KM, Poltronetti AJ, Elliott KJ, Kuroda R, Miyao M, Sesaki H, Akiyama T, Kimura Y, Rizzo V, Scalia R, **Eguchi S**. Mitochondrial fission mediates endothelial inflammation. *Hypertension* 76:267-276, 2020. DOI:10.1161/HYPERTENSIONAHA.120.14686.
114. Miyao M, Cicalese S, Kawai T, Cooper HA, Boyer MJ, Elliott KJ, Forrester SJ, Kuroda R, Rizzo V, Hashimoto T, Scalia R, **Eguchi S**. Involvement of senescence and mitochondrial fission in endothelial cell proinflammatory phenotype induced by angiotensin II. *Int J Mol Sci* 21(9), 3112, 2020; <https://doi.org/10.3390/ijms21093112>
113. Boyer MJ, Kimura Y, Akiyama T, Baggett AY, Preston KJ, Scalia R, **Eguchi S**, Rizzo V. Endothelial cell-derived extracellular vesicles alter vascular smooth muscle cell phenotype through high-mobility group box proteins. *J Extracell Vesicles* 9:1, 1781427, 2020; <https://doi.org/10.1080/20013078.2020.1781427>
112. Liew M, Traynham CJ, de Lucia C, Pflieger J, Piedepalumbo M, Roy R, Petovic J, Landesberg G, Forrester SJ, Hoffman M, Grisanti LA, Yuan A, Gao E, Dorsatos K, **Eguchi S**, Scalia R, Tilley DG, Koch WJ. Loss of dynamic regulation of G protein-coupled receptor kinase 2 by nitric oxide leads to cardiovascular dysfunction with aging. *Am J Physiol Circ Physiol* doi: 10.1152/ajpheart.00094.2020.
111. Mokhashi N, Choi RY, Cicalese S, Eguchi K, Boyer MJ, Cooper HA, Kimura Y, Akiyama T, Scalia R, Rizzo V, **Eguchi S**. Transduction Efficiency of Adenovirus Vectors in Endothelial Cells and Vascular Smooth Muscle Cells. *J Cardiovasc Pharmacol* 2020 Jun;75(6):603-607. doi: 10.1097/FJC.0000000000000821.
110. Peshkova IO, Aghayev T, Fatkhullina AR, Makhov P, Titerina EK, **Eguchi S**, Tan YF, Kossenkov AV, Khoreva MV, Gankovskaya LV, Sykes SM, Koltsova EK. IL-27 receptor-regulated stress myelopoiesis drives abdominal aortic aneurysm development. *Nat Commun*. 2019 10(1):5046. doi: 10.1038/s41467-019-13017-4.
109. Preston KJ, Rom I, Vrakas C, Landesberg G, Etwebi Z, Muraoka S, Autieri M, **Eguchi S**, Scalia R. Postprandial activation of leukocyte-endothelium interaction by fatty acids in the visceral adipose tissue microcirculation. *FASEB J* 71:761-770, 2019.
108. O'Brien S, Johnstone EK, Devost D, Conroy J, Reichelt ME, Purdue BW, Ayoub MA, Kawai T, Inoue A, **Eguchi S**, Hébert TE, Pflieger KD, Thomas WG. BRET-based assay to monitor EGFR transactivation by the

- AT1R reveals Gq/11 protein-independent activation and AT1R-EGFR complexes. *Biochem Pharmacol* 158:232-242, 2018.
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11. Obama T, **Eguchi S**. MicroRNA as a component of the tissue renin angiotensin system. *J Mol Cell Cardiol* 75:98-99, 2014.
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1. Suzuki H, **Eguchi S**. Growth Factor Receptor Transactivation in Mediating End Organ Damage by Angiotensin II. *Hypertension* 47:339-40, 2006

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4. **Eguchi S**, Forrester SJ, Rizzo V. Controversy of caveolin-1 deficient mouse phenotypes with or without hypertension. *Hypertension* 67:623 e1860, 2016
3. Eguchi A, **Eguchi S**. Tilley DG, Unexpected cardiac hypertrophy by epidermal growth factor receptor silencing. *Hypertension* 61:e46, 2013
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1. Bourne AM, **Eguchi S**. The Functional Significance of the Epidermal Growth Factor Receptor in Vascular Biology (electronic response to “Consequences of Epidermal Growth Factor Receptor (ErbB1) Loss for Vascular Smooth Muscle Cells From Mice With Targeted Deletion of ErbB1”). *Arterioscler Thromb Vasc Biol* eletter: 28 April 2011 (ATVBAHA.111.223537v1#12589)

Book Chapters

8. Elliott KJ, **Eguchi S**. In vitro assays to determine smooth muscle cell hypertrophy, protein content, and fibrosis. In *The renin angiotensin aldosterone system: Methods and Protocols*. Springer Protocols. Humana Press. *Methods Mol Biol* 1614:147-153, 2017.
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Invited Presentations

- 2026 1st International Renin Angiotensin Aldosterone Conference, Prato Italy.
- 2025 Heart Institute, Morsani College of Medicine and USF Health
- 2024 Ground Round, Department of Surgery, Morsani College of Medicine, University of South Florida
- 2023 Department of Clinical Pharmacology, Vanderbilt University School of Medicine
- 2023 Tulane hypertension & renal center of excellence/Department of physiology, Tulane University Sch Med
- 2022 Gordon Conference Angiotensin
- 2022 Department of Medicine, Yokohama City University School of Medicine, Japan
- 2019 Department of cardiovascular medicine, Kyoto Prefectural University of Medicine
- 2018 Department of the Pharmacology and Nutritional sciences, University of Kentucky, COM
- 2018 Cardiovascular and Metabolic Disorders Signature Research, Duke-NUS Medical School, Singapore
- 2018 Renal Grand Rounds, Lewis Katz School of Medicine at Temple University
- 2018 Gordon Conference Angiotensin (Discussion Leader)
- 2017 Department of Pharmacology, RJ and LA Carver College of Medicine University of Iowa
- 2017 Department of Pharmacology and Toxicology, University of Mississippi Medical Center
- 2017 Lewis K. Dahl Memorial Award (AHA Council on Hypertension)
- 2017 Department of Pharmacology, University of Tennessee School of Medicine
- 2017 Department of Medicine, Yokohama City University School of Medicine, Japan
- 2017 Research Center for Advanced Science and Technology, Tokyo University, Japan
- 2017 Department of Cardiology, Kagoshima University School of Medicine, Japan
- 2016 Vascular Biology Center, Augusta University, Medical College of Georgia
- 2016 Cardeza Center for Vascular Biology, Thomas Jefferson University
- 2016 Department of Pharmacology, Tulane University School of Medicine
- 2015 Dep. of Pharmacology and Chemical Biology, University of Pittsburgh School of Medicine
- 2014 Dep. of Pharmacology and Physiology, Drexel University College of Medicine

2013 Dep. of Biochemistry, Vanderbilt University School of Medicine
2013 Center for Translational Medicine/Pharmacology, Temple University School of Medicine
2013 Department of Pharmacology, Louisiana State University School of Medicine
2012 AHA Scientific Session, Educational Session
2012 Medical Research Institute, Kitano Hospital, Japan
2012 Cardiovascular Research Center, University of Kentucky
2011 Department of Pharmacology, New York Medical College
2010 Temple University Thrombosis Center
2009 AHA 63rd High Blood Pressure Research Conference Workshop Program
2009 XVIIIth Meeting of the Inter-American Society of Hypertension, Belo Horizonte, Brazil
2008 Gordon Conference Angiotensin
2008 Department of Physiology, Tulane University School of Medicine
2008 Biomedical Research Department, Alfred I. duPont Hospital for Children
2007 The 8th meeting of New Wave unofficial satellite symposium of AHA scientific Session
2007 Department of Molecular Physiology, Thomas Jefferson University
2006 Dep. of Cellular and Integrative Physiology, University of Nebraska Medical Center
2006 Institute for Molecular and Cellular Regulation, Gunma University, Japan
2006 Cardiology, Kyusyu University School of Medicine, Japan
2006 Morehouse School of Medicine, Cardiovascular Research Institute
2005 Temple University Cardiology Ground Rounds Lecture
2004 Gordon Conference Angiotensin
2004 Institute for Insulin Resistance Studies, Nassau
2004 Temple University Thrombosis Center
2003 Biochemical Society Meeting 679, University of Essex
2003 NIH-NHLBI
2003 Cardiovascular Research Center, Temple University School of Medicine
2002 Gordon Conference Angiotensin, Italy
2002 Japanese Circulation Society Meeting, Sapporo
2002 Center for Cardiovascular Research, University of Rochester School of Medicine
2002 Department of Medicine, Saitama Medical University, Japan
2001 Department of Pharmacology, Vanderbilt University School of Medicine
2001 Department of Medicine, Tohoku University School of Medicine, Japan
2001 Department of Physiology, Kanazawa University School of Medicine, Japan
2001 Division of Endocrinology, Department of Medicine, Vanderbilt University
2000 Symposium for 73rd Japanese Society of Biochemistry Meeting
2000 Department of Biochemistry, Osaka University School of Medicine, Japan
2000 Department of Pathology, Wakayama Medical College, Japan
2000 Department of Drug Discovery, Research Institute, Tanabe Pharmaceutical Co. Japan
2000 Department of Research Planning, Research Institute, Sankyo Co. LTD. Japan