



Ingela Schnittger, MD

Professor of Medicine (Cardiovascular)

Medicine - Cardiovascular Medicine

CLINICAL OFFICES

- **Cardiovascular Medicine**

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ACADEMIC CONTACT INFORMATION

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Bio

CLINICAL FOCUS

- Cardiovascular Disease
- Coronary artery myocardial bridge
- Echocardiography

ACADEMIC APPOINTMENTS

- Professor - University Medical Line, Medicine - Cardiovascular Medicine
- Member, Cardiovascular Institute

ADMINISTRATIVE APPOINTMENTS

- Medical Director, Stanford Echocardiography Laboratory, Stanford, (1997-2022)
- Chief of Academic Affairs and Associate Chief, Division of Cardiovascular Medicine, Stanford, (1999-2019)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Recertification Examination of Special Competence in Adult Echocardiography, Echo (2018 - present)
- The American Board of Internal Medicine, Internal Medicine, ABIM (1980 - present)
- The American Board of Internal Medicine, Cardiovascular Disease, ABIM (1983 - present)
- North American Society of Pacing & Electrophysiology, Cardiac Pacing, NASPE (1988 - present)
- Special Competence in Echocardiography Exam [ASEeXAM], Echo (1998 - present)

PROFESSIONAL EDUCATION

- Fellowship: Stanford University School of Medicine (1981) CA
- Residency: Stanford University School of Medicine (1980) CA
- Fellowship: Stanford University School of Medicine (1977) CA
- Residency: University of Connecticut Health Center (1979) CT

- Residency: Seraphimer Hospital (1978) Sweden
- Internship: Seraphimer Hospital (1976) Sweden
- Medical Education: Karolinska Institute (1975) Sweden

LINKS

- Get a Second Opinion: <https://stanfordhealthcare.org/second-opinion/overview.html>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My main research continues to be in the field of echocardiography. Several areas of research are currently being pursued:

1. Coronary artery myocardial bridge; anatomic, physiologic and hemodynamic assessment. Clinical manifestations and treatment.
2. Exercise/stress echocardiography
3. Echocardiographic evaluation of Cardiac structures and function

Publications

PUBLICATIONS

- **Colocalization of Coronary Plaque with Wall Shear Stress in Myocardial Bridge Patients.** *Cardiovascular engineering and technology*
Khan, M. O., Nishi, T., Imura, S., Seo, J., Wang, H., Honda, Y., Nieman, K., Rogers, I. S., Tremmel, J. A., Boyd, J., Schnittger, I., Marsden, A.
2022
- **Relationship Between Coronary Atheroma, Epicardial Adipose Tissue Inflammation, and Adipocyte Differentiation Across the Human Myocardial Bridge.** *Journal of the American Heart Association*
McLaughlin, T., Schnittger, I., Nagy, A., Zanelly, E., Xu, Y., Song, Y., Nieman, K., Tremmel, J. A., Dey, D., Boyd, J., Sacks, H.
2021: e021003
- **Impact of Diastolic Vessel Restriction on Quality of Life in Symptomatic Myocardial Bridging Patients Treated With Surgical Unroofing: Preoperative Assessments With Intravascular Ultrasound and Coronary Computed Tomography Angiography.** *Circulation. Cardiovascular interventions*
Hashikata, T., Honda, Y., Wang, H., Pargaonkar, V. S., Nishi, T., Hollak, M. B., Rogers, I. S., Nieman, K., Yock, P. G., Fitzgerald, P. J., Schnittger, I., Boyd, J. H., Tremmel, et al
2021; 14 (10): e011062
- **Abnormal shear stress and residence time are associated with proximal coronary atheroma in the presence of myocardial bridging.** *International journal of cardiology*
Yong, A. S., Pargaonkar, V. S., Wong, C. C., Javadzdegan, A., Yamada, R., Tanaka, S., Kimura, T., Rogers, I. S., Sen, I., Kritharides, L., Schnittger, I., Tremmel, J. A.
2021
- **Myocardial Bridge in Pregnancy: Beyond a 'Normal Anatomic Variant'.**
Joudi, N., Datoc, I., Leonard, S., Lee, C., Schnittger, I., Khandelwal, A., Bianco, K.
SPRINGER HEIDELBERG.2021: 267A
- **IMPACT OF DIASTOLIC VESSEL RESTRICTION ON CLINICAL SYMPTOMS IN PATIENTS WITH SYMPTOMATIC MYOCARDIAL BRIDGING**
Hashikata, T., Honda, Y., Wang, H., Pargaonkar, V., Hollak, M., Rogers, I. S., Yock, P., Fitzgerald, P., Schnittger, I., Boyd, J., Tremmel, J.
ELSEVIER SCIENCE INC.2021: 165
- **Invasive Assessment of Myocardial Bridging in Patients with Angina and No Obstructive Coronary Artery Disease.** *EuroIntervention : journal of EuroPCR in collaboration with the Working Group on Interventional Cardiology of the European Society of Cardiology*
Pargaonkar, V. S., Kimura, T., Kameda, R., Tanaka, S., Yamada, R., Schwartz, J. G., Perl, L., Rogers, I. S., Honda, Y., Fitzgerald, P., Schnittger, I., Tremmel, J. A.

2020

- **Effect of ranolazine on symptom and quality of life in patients with angina in the absence of obstructive coronary artery disease: A case control study.** *International journal of cardiology*
Pargaonkar, V. S., Tremmel, J. A., Schnittger, I., Khandelwal, A.
2020
- **Accuracy of a novel stress echocardiography pattern for myocardial bridging in patients with angina and no obstructive coronary artery disease - A retrospective and prospective cohort study.** *International journal of cardiology*
Pargaonkar, V. S., Rogers, I. S., Su, J., Forsdahl, S. H., Kameda, R., Schreiber, D., Chan, F. P., Becker, H., Fleischmann, D., Tremmel, J. A., Schnittger, I.
2020
- **Off-Pump Mini Thoracotomy Versus Sternotomy for Left Anterior Descending Myocardial Bridge Unroofing.** *The Annals of thoracic surgery*
Wang, H. n., Pargaonkar, V. S., Hironaka, C. E., Bajaj, S. S., Abbot, C. J., O'Donnell, C. T., Miller, S. L., Honda, Y. n., Rogers, I. S., Tremmel, J. A., Fischbein, M. P., Mitchell, R. S., Schnittger, et al
2020
- **Computed Tomographic Angiography-Based Fractional Flow Reserve Compared With Catheter-Based Dobutamine-Stress Diastolic Fractional Flow Reserve in Symptomatic Patients With a Myocardial Bridge and No Obstructive Coronary Artery Disease.** *Circulation. Cardiovascular imaging*
Jubran, A. n., Schnittger, I. n., Tremmel, J. n., Pargaonkar, V. n., Rogers, I. n., Becker, H. C., Yang, S. n., Mastrodicasa, D. n., Willeminck, M. n., Fleischmann, D. n., Nieman, K. n.
2020; 13 (2): e009576
- **A Step Back in the Diagnosis and Management of Myocardial Bridging.** *The Annals of thoracic surgery*
Schnittger, I., Boyd, J. H., Tremmel, J. A.
2019
- **Impact of Myocardial Bridging on Long-Term Outcomes After Heart Transplantation: Risk Stratification With IVUS-Determined Anatomical Properties**
Okada, K., Nishi, T., Tanaka, S., Luikart, H., Yock, P. G., Yeung, A. C., Hibi, K., Kimura, K., Schnittger, I., Khush, K., Fearon, W., Honda, Y.
ELSEVIER SCIENCE INC.2019: B342
- **EXPRESS: Myocardial Bridge - An Unrecognized Cause of Chest Pain in Pulmonary Arterial Hypertension.** *Pulmonary circulation*
Rajmohan, D. n., Sung, Y. K., Kudelko, K. n., Perez, V. i., Haddad, F. n., Tremmel, J. n., Schnittger, I. n., Zamanian, R. T., Spiekerkoetter, E. F.
2019: 2045894019860738
- **Surgical unroofing of hemodynamically significant myocardial bridges in a pediatric population.** *The Journal of thoracic and cardiovascular surgery*
Maeda, K., Schnittger, I., Murphy, D. J., Tremmel, J. A., Boyd, J. H., Peng, L., Okada, K., Pargaonkar, V. S., Hanley, F. L., Mitchell, R. S., Rogers, I. S.
2018
- **MYOCARDIAL BRIDGE MUSCLE INDEX (MMI): A MARKER OF DISEASE SEVERITY AND ITS RELATIONSHIP WITH ENDOTHELIAL DYSFUNCTION AND SYMPTOMATIC OUTCOME IN PATIENTS WITH ANGINA AND A HEMODYNAMICALLY SIGNIFICANT MYOCARDIAL BRIDGE**
Pargaonkar, V., Schnittger, I., Rogers, I., Tanaka, S., Yamada, R., Kimura, T., Boyd, J., Tremmel, J.
ELSEVIER SCIENCE INC.2018: 160
- **Myocardial bridging is associated with exercise-induced ventricular arrhythmia and increases in QT dispersion.** *Annals of noninvasive electrocardiology : the official journal of the International Society for Holter and Noninvasive Electrocardiology, Inc*
Nishikii-Tachibana, M. n., Pargaonkar, V. S., Schnittger, I. n., Haddad, F. n., Rogers, I. S., Tremmel, J. A., Wang, P. J.
2017
- **Myocardial Bridges on Coronary Computed Tomography Angiography - Correlation With Intravascular Ultrasound and Fractional Flow Reserve.** *Circulation Journal*
Forsdahl, S. H., Rogers, I. S., Schnittger, I., et al
2017
- **Myocardial bridges: Overview of diagnosis and management.** *Congenital heart disease*
Rogers, I. S., Tremmel, J. A., Schnittger, I. n.
2017
- **Surgical Unroofing of Hemodynamically Significant Left Anterior Descending Myocardial Bridges.** *Annals of thoracic surgery*
Boyd, J. H., Pargaonkar, V. S., Scoville, D. H., Rogers, I. S., Kimura, T., Tanaka, S., Yamada, R., Fischbein, M. P., Tremmel, J. A., Mitchell, R. S., Schnittger, I.

2016

- **Myocardial Bridge and Acute Plaque Rupture.** *Journal of investigative medicine high impact case reports*
Perl, L., Daniels, D., Schwartz, J., Tanaka, S., Yeung, A., Tremmel, J. A., Schnittger, I.
2016; 4 (4): 2324709616680227-?
- **Functional Versus Anatomic Assessment of Myocardial Bridging by Intravascular Ultrasound: Impact of Arterial Compression on Proximal Atherosclerotic Plaque** *JOURNAL of AMERICAN HEART ASSOCIATION*
Yamada, R., Tremmel, J., Tanaka, S., Lin, S., Kobayashi, Y., Hollak, M., Yock, P., Fitzgerald, P., Schnittger, I., Honda, Y.
2016; 20 (5(4))
- **Exercise Strain Echocardiography in Patients With a Hemodynamically Significant Myocardial Bridge Assessed by Physiological Study.** *Journal of the American Heart Association*
Kobayashi, Y., Tremmel, J. A., Kobayashi, Y., Amsallem, M., Tanaka, S., Yamada, R., Rogers, I. S., Haddad, F., Schnittger, I.
2015; 4 (11)
- **Invasive physiologic and anatomic multimodality assessment of myocardial bridging** *Coronary Artery Disease*
Schwartz, J., Tanaka, S., Schnittger, I., Tremmel, J., et al
2015: 38-40
- **Myocardial bridging.** *Journal of the American College of Cardiology*
Tremmel, J. A., Schnittger, I.
2014; 64 (20): 2178-2179
- **Histological characteristics of myocardial bridge with an ultrasonic echolucent band. Comparison between intravascular ultrasound and histology.** *Circulation Journal*
Yamada, R., Turcott, R., Connolly, A., McConnell, M., Schnittger, I., et al
2014; 78 (2): 502-4
- **A novel stress echocardiography pattern for myocardial bridge with invasive structural and hemodynamic correlation.** *Journal of the American Heart Association*
Lin, S., Tremmel, J. A., Yamada, R., Rogers, I. S., Yong, C. M., Turcott, R., McConnell, M. V., Dash, R., Schnittger, I.
2013; 2 (2)
- **High-Throughput Precision Phenotyping of Left Ventricular Hypertrophy With Cardiovascular Deep Learning.** *JAMA cardiology*
Duffy, G., Cheng, P. P., Yuan, N., He, B., Kwan, A. C., Shun-Shin, M. J., Alexander, K. M., Ebinger, J., Lungren, M. P., Rader, F., Liang, D. H., Schnittger, I., Ashley, et al
2022
- **Deep learning evaluation of biomarkers from echocardiogram videos.** *EBioMedicine*
Hughes, J. W., Yuan, N., He, B., Ouyang, J., Ebinger, J., Botting, P., Lee, J., Theurer, J., Tooley, J. E., Nieman, K., Lungren, M. P., Liang, D. H., Schnittger, et al
2021; 73: 103613
- **Initial Invasive or Conservative Strategy for Stable Coronary Disease.** *The New England journal of medicine*
Maron, D. J., Hochman, J. S., Reynolds, H. R., Bangalore, S. n., O'Brien, S. M., Boden, W. E., Chaitman, B. R., Senior, R. n., López-Sendón, J. n., Alexander, K. P., Lopes, R. D., Shaw, L. J., Berger, et al
2020
- **Health-Status Outcomes with Invasive or Conservative Care in Coronary Disease.** *The New England journal of medicine*
Spertus, J. A., Jones, P. G., Maron, D. J., O'Brien, S. M., Reynolds, H. R., Rosenberg, Y. n., Stone, G. W., Harrell, F. E., Boden, W. E., Weintraub, W. S., Baloch, K. n., Mavromatis, K. n., Díaz, et al
2020
- **Time based versus strain based myocardial performance indices in hypertrophic cardiomyopathy, the merging role of left atrial strain.** *European heart journal cardiovascular Imaging*
Kobayashi, Y., Moneghetti, K. J., Bouajila, S., Stolfo, D., Finocchiaro, G., Kuznetsova, T., Liang, D., Schnittger, I., Ashley, E., Wheeler, M., Haddad, F.
2018
- **Optimizing right ventricular focused four-chamber views using three-dimensional imaging, a comparative magnetic resonance based study.** *The international journal of cardiovascular imaging*
Amsallem, M., Lu, H., Tang, X., Do Couto Francisco, N. L., Kobayashi, Y., Moneghetti, K., Shiran, H., Rogers, I., Schnittger, I., Liang, D., Haddad, F.

2018

- **EFFECT OF RANOLAZINE ON SYMPTOMS AND QUALITY OF LIFE IN PATIENTS WITH ANGINA IN THE ABSENCE OF OBSTRUCTIVE CORONARY ARTERY DISEASE: A RETROSPECTIVE COHORT STUDY**
Pargaonkar, V., Tremmel, J., Schnittger, I., Khandelwal, A.
ELSEVIER SCIENCE INC.2018: 161
- **Long-term prognostic value of invasive and non-invasive measures early after heart transplantation.** *International journal of cardiology*
Kobayashi, Y. n., Kobayashi, Y. n., Yang, H. M., Bouajila, S. n., Luikart, H. n., Nishi, T. n., Choi, D. H., Schnittger, I. n., Valantine, H. A., Khush, K. K., Yeung, A. C., Haddad, F. n., Fearon, et al
2018; 260: 31–35
- **Accuracy of non-invasive stress testing in women and men with angina in the absence of obstructive coronary artery disease.** *International journal of cardiology*
Pargaonkar, V. S., Kobayashi, Y. n., Kimura, T. n., Schnittger, I. n., Chow, E. K., Froelicher, V. F., Rogers, I. S., Lee, D. P., Fearon, W. F., Yeung, A. C., Stefanick, M. L., Tremmel, J. A.
2018
- **Long-Term Prognostic Value of Invasive and Non-Invasive Measures Early after Heart Transplantation**
Kobayashi, Y., Kobayashi, Y., Luikart, H., Nishi, T., Choi, D., Schnittger, I., Fearon, W.
ELSEVIER SCIENCE INC.2017: B273
- **Load Adaptability in Patients With Pulmonary Arterial Hypertension.** *The American journal of cardiology*
Amsallem, M., Boulate, D., Aymami, M., Guihaire, J., Selej, M., Huo, J., Denault, A. Y., McConnell, M. V., Schnittger, I., Fadel, E., Mercier, O., Zamanian, R. T., Haddad, et al
2017; 120 (5): 874-882
- **Incremental value of right heart metrics and exercise performance to well-validated risk scores in dilated cardiomyopathy.** *European heart journal cardiovascular Imaging*
Moneghetti, K. J., Giraldeau, G., Wheeler, M. T., Kobayashi, Y., Vrtovec, B., Boulate, D., Kuznetsova, T., Schnittger, I., Wu, J. C., Myers, J., Ashley, E., Haddad, F.
2017
- **Right Heart End-Systolic Remodeling Index Strongly Predicts Outcomes in Pulmonary Arterial Hypertension: Comparison With Validated Models.** *Circulation. Cardiovascular imaging*
Amsallem, M., Sweatt, A. J., Aymami, M. C., Kuznetsova, T., Selej, M., Lu, H., Mercier, O., Fadel, E., Schnittger, I., McConnell, M. V., Rabinovitch, M., Zamanian, R. T., Haddad, et al
2017; 10 (6)
- **Dynamic changes in aortic impedance after transcatheter aortic valve replacement and its impact on exploratory outcome.** *international journal of cardiovascular imaging*
Kobayashi, Y., Kim, J. B., Moneghetti, K. J., Kobayashi, Y., Zhang, R., Brenner, D. A., O'Malley, R., Schnittger, I., Fischbein, M., Miller, D. C., Yeung, A. C., Liang, D., Haddad, et al
2017
- **Left atrial function and phenotypes in asymmetric hypertrophic cardiomyopathy.** *Echocardiography (Mount Kisco, N.Y.)*
Kobayashi, Y., Wheeler, M., Finocchiaro, G., Ariyama, M., Kobayashi, Y., Perez, M. V., Liang, D., Kuznetsova, T., Schnittger, I., Ashley, E., Haddad, F.
2017
- **Investigating the value of right heart echocardiographic metrics for detection of pulmonary hypertension in patients with advanced lung disease.** *The international journal of cardiovascular imaging*
Amsallem, M., Boulate, D., Kooreman, Z., Zamanian, R. T., Fadel, G., Schnittger, I., Fadel, E., McConnell, M. V., Dhillon, G., Mercier, O., Haddad, F.
2017
- **Incremental value of right heart metrics and exercise performance to well-validated risk scores in dilated cardiomyopathy** *European Heart Journal - Cardiovascular Imaging*
Moneghetti, K. J., Giraldeau, G., Wheeler, M. T., Kobayashi, Y., Vrtovec, B., Boulate, D., Kuznetsova, T., Schnittger, I., Wu, J. C., Myers, J., Ashley, E., Haddad, F.
2017
- **Load Adaptability in Patients With Pulmonary Arterial Hypertension.** *Am J Cardiol*
Amsallem, M., et al

2017; 874–82

- **GDF-15 (Growth Differentiation Factor 15) Is Associated With Lack of Ventricular Recovery and Mortality After Transcatheter Aortic Valve Replacement.** *Circulation. Cardiovascular interventions*
Kim, J. B., Kobayashi, Y. n., Moneghetti, K. J., Brenner, D. A., O'Malley, R. n., Schnittger, I. n., Wu, J. C., Murtagh, G. n., Beshiri, A. n., Fischbein, M. n., Miller, D. C., Liang, D. n., Yeung, et al
2017; 10 (12)
- **Incremental Value of Deformation Imaging and Hemodynamics Following Heart Transplantation: Insights From Graft Function Profiling.** *JACC. Heart failure*
Kobayashi, Y. n., Sudini, N. L., Rhee, J. W., Aymami, M. n., Moneghetti, K. J., Bouajila, S. n., Kobayashi, Y. n., Kim, J. B., Schnittger, I. n., Teuteberg, J. J., Khush, K. K., Fearon, W. F., Haddad, et al
2017; 5 (12): 930–39
- **Myocardial Bridges on Coronary Computed Tomography Angiography - Correlation With Intravascular Ultrasound and Fractional Flow Reserve.** *Circulation journal : official journal of the Japanese Circulation Society*
Forsdahl, S. H., Rogers, I. S., Schnittger, I. n., Tanaka, S. n., Kimura, T. n., Pargaonkar, V. S., Chan, F. P., Fleischmann, D. n., Tremmel, J. A., Becker, H. C.
2017
- **Challenging the complementarity of different metrics of left atrial function: insight from a cardiomyopathy-based study.** *European heart journal cardiovascular Imaging*
Kobayashi, Y., Moneghetti, K. J., Boralkar, K., Amsallem, M., Tuzovic, M., Liang, D., Yang, P. C., Narayan, S., Kuznetsova, T., Wu, J. C., Schnittger, I., Haddad, F.
2016
- **Impact and pitfalls of scaling of left ventricular and atrial structure in population-based studies** *JOURNAL OF HYPERTENSION*
Kuznetsova, T., Haddad, F., Tikhonoff, V., Kloch-Badelek, M., Ryabikov, A., Knez, J., Malyutina, S., Stolarz-Skrzypek, K., Thijs, L., Schnittger, I., Wu, J. C., Casiglia, E., Narkiewicz, et al
2016; 34 (6): 1186-1194
- **Impact of Septal Reduction on Left Atrial Size and Diastole in Hypertrophic Cardiomyopathy** *ECHOCARDIOGRAPHY-A JOURNAL OF CARDIOVASCULAR ULTRASOUND AND ALLIED TECHNIQUES*
Finocchiaro, G., Haddad, F., Kobayashi, Y., Lee, D., Pavlovic, A., Schnittger, I., Sinagra, G., Magavern, E., Myers, J., Froelicher, V., Knowles, J. W., Ashley, E.
2016; 33 (5): 686-694
- **Functional Versus Anatomic Assessment of Myocardial Bridging by Intravascular Ultrasound: Impact of Arterial Compression on Proximal Atherosclerotic Plaque.** *Journal of the American Heart Association*
Yamada, R., Tremmel, J. A., Tanaka, S., Lin, S., Kobayashi, Y., Hollak, M. B., Yock, P. G., Fitzgerald, P. J., Schnittger, I., Honda, Y.
2016; 5 (4)
- **Comparison of left ventricular manual versus automated derived longitudinal strain: implications for clinical practice and research** *INTERNATIONAL JOURNAL OF CARDIOVASCULAR IMAGING*
Kobayashi, Y., Ariyama, M., Kobayashi, Y., Giraldeau, G., Fleischman, D., Kozelj, M., Vrtovec, B., Ashley, E., Kuznetsova, T., Schnittger, I., Liang, D., Haddad, F.
2016; 32 (3): 429-437
- **Regional right ventricular dysfunction in acute pulmonary embolism: relationship with clot burden and biomarker profile** *INTERNATIONAL JOURNAL OF CARDIOVASCULAR IMAGING*
Tuzovic, M., Adigopula, S., Amsallem, M., Kobayashi, Y., Kadoch, M., Boulate, D., Krishnan, G., Liang, D., Schnittger, I., Fleischmann, D., McConnell, M. V., Haddad, F.
2016; 32 (3): 389-398
- **Addressing the Controversy of Estimating Pulmonary Arterial Pressure by Echocardiography** *JOURNAL OF THE AMERICAN SOCIETY OF ECHOCARDIOGRAPHY*
Amsallem, M., Sternbach, J. M., Adigopula, S., Kobayashi, Y., Vu, T. A., Zamanian, R., Liang, D., Dhillon, G., Schnittger, I., McConnell, M. V., Haddad, F.
2016; 29 (2): 93-102
- **Impact and pitfalls of scaling of left ventricular and atrial structure in population-based studies** *JOURNAL of HYPERTENSION*
Kuznetsova, T., Haddad, F., Tikhonoff, V., Kloch-Badelek, M., Ryabikov, A., Knez, J., Malyutina, S., Stolarz-Skrzypek, K., Thijs, L., Schnittger, I., Wu, J., Casiglia, E., Narkiewicz, et al
2016; 34 (5): 1186-94

- **Impact of Septal Reduction on Left Atrial Size and Diastole in Hypertrophic Cardiomyopathy** *ECHOCARDIOGRAPHY*
Finocchiaro, G., Haddad, F., Kobayashi, Y., Lee, D., Pavlovic, A., Schnittger, I., Sinagra, G., Magavern, E., Myers, J., Froelicher, V., Knowles, J., Ashley, E.
2016; 33 (5): 686-94
- **Addressing the Controversy of Estimating Pulmonary Arterial Pressure by Echocardiography.** *J Am Soc Echocardiogr*
Ansalleem, M., Sternbach, J., Adigopula, S., Kobayashi, Y., Vu, T., Zamanian, R., Liang, D., Dhillon, G., Schnittger, I., McConnell, M., Haddad, F.
2016; 29 (2): 93-102
- **Addressing the Controversy of Estimating Pulmonary Arterial Pressure by Echocardiography.** *Journal of the American Society of Echocardiography : official publication of the American Society of Echocardiography*
Ansalleem, M., Sternbach, J. M., Adigopula, S., Kobayashi, Y., Vu, T. A., Zamanian, R., Liang, D., Dhillon, G., Schnittger, I., McConnell, M. V., Haddad, F.
2015
- **Gender Differences in Ventricular Remodeling and Function in College Athletes, Insights from Lean Body Mass Scaling and Deformation Imaging** *AMERICAN JOURNAL OF CARDIOLOGY*
Giraldeau, G., Kobayashi, Y., Finocchiaro, G., Wheeler, M., Perez, M., Kuznetsova, T., Lord, R., George, K. P., Oxborough, D., Schnittger, T., Froelicher, V., Liang, D., Ashley, et al
2015; 116 (10): 1610-1616
- **Exercise Strain Echocardiography in Patients With a Hemodynamically Significant Myocardial Bridge Assessed by Physiological Study** *JOURNAL OF THE AMERICAN HEART ASSOCIATION*
Kobayashi, Y., Tremmel, J. A., Kobayashi, Y., Ansalleem, M., Tanaka, S., Yamada, R., Rogers, I. S., Haddad, F., Schnittger, I.
2015; 4 (11)
- **Invasive physiologic and anatomic multimodality assessment of myocardial bridging.** *Coronary artery disease*
Schwartz, J. G., Tanaka, S., Schnittger, I., Tremmel, J. A.
2015; 26: e38-40
- **Right Heart Score for Predicting Outcome in Idiopathic, Familial, or Drug- and Toxin-Associated Pulmonary Arterial Hypertension** *JACC-CARDIOVASCULAR IMAGING*
Haddad, F., Spruijt, O. A., Denault, A. Y., Mercier, O., Brunner, N., Furman, D., Fadel, E., Bogaard, H. J., Schnittger, I., Vrtovec, B., Wu, J. C., Perez, V. D., Vonk-Noordegraaf, et al
2015; 8 (6): 627-638
- **Prevalence and Prognostic Role of Right Ventricular Involvement in Stress-Induced Cardiomyopathy** *JOURNAL OF CARDIAC FAILURE*
Finocchiaro, G., Kobayashi, Y., Magavern, E., Zhou, J. Q., Ashley, E., Sinagra, G., Schnittger, I., Knowles, J. W., Fearon, W. F., Haddad, F., Tremmel, J. A.
2015; 21 (5): 419-425
- **Cardiopulmonary responses and prognosis in hypertrophic cardiomyopathy: a potential role for comprehensive noninvasive hemodynamic assessment.** *JACC. Heart failure*
Finocchiaro, G., Haddad, F., Knowles, J. W., Caleshu, C., Pavlovic, A., Homburger, J., Shmargad, Y., Sinagra, G., Magavern, E., Wong, M., Perez, M., Schnittger, I., Myers, et al
2015; 3 (5): 408-418
- **Septal curvature is marker of hemodynamic, anatomical, and electromechanical ventricular interdependence in patients with pulmonary arterial hypertension.** *Echocardiography (Mount Kisco, N.Y.)*
Haddad, F., Guihaire, J., Skhiri, M., Denault, A. Y., Mercier, O., Al-Halabi, S., Vrtovec, B., Fadel, E., Zamanian, R. T., Schnittger, I.
2014; 31 (6): 699-707
- **Exercise capacity and paroxysmal atrial fibrillation in patients with hypertrophic cardiomyopathy.** *Heart*
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