Stanford

Matthew Wheeler

Assistant Professor of Medicine (Cardiovascular Medicine) at the Stanford University Medical Center

Medicine - Cardiovascular Medicine

CLINICAL OFFICES

- **Cardiovascular Medicine**

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  Stanford, CA 94305

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ACADEMIC CONTACT INFORMATION

- **Administrative Contact**

  Brooke Zelnik - Administrative Associate

  Email brookez@stanford.edu

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Bio

BIO

I am a physician scientist with interests in cardiomyopathies, rare and undiagnosed diseases, therapeutics and genomics. I have research training in both myocardial and skeletal muscle biology and genetics, genomics, and multi-scale networks. In addition to my research training, I am a physician with interest and experience treating patients with hypertrophic cardiomyopathy and other inherited cardiomyopathies. I have clinical training in medicine, cardiology, cardiovascular genetics, and advanced heart failure. I have extensive translational science efforts, participating in several ongoing clinical trials for hypertrophic cardiomyopathy, dilated cardiomyopathy, ATTR cardiac amyloidosis, and mechanical circulatory support. I am Co-PI of Stanford's NIH-funded Center for Undiagnosed Diseases a clinical site of the Undiagnosed Diseases Network. I am also a co-Investigator of the Bioinformatics Center of the Molecular Transducers of Physical Activity Consortium. I pursue projects and collaborations at the intersection of striated muscle genetics, genomics, and clinical investigation.

CLINICAL FOCUS

- Cardiology
- Cardiomyopathy, Hypertrophic, Familial
- Heart Failure
- Cardiovascular Disease
- Mechanical Circulatory Support
- Undiagnosed Diseases
- Myotonic Dystrophy associated Cardiomyopathy
- Cardiovascular Genetics
- Cardiac Amyloid
- Heart Transplantation
- Arrhythmogenic Right Ventricular Cardiomyopathy
- Dilated Cardiomyopathies
- Muscular Dystrophy associated Cardiomyopathy

ACADEMIC APPOINTMENTS

- Assistant Professor - Med Center Line, Medicine - Cardiovascular Medicine
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Executive Director, Center for Undiagnosed Diseases at Stanford, (2014- present)

- Adult Medical Director, Center for Undiagnosed Diseases at Stanford, (2015- present)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, American Heart Association (2012 - present)
- Member, American College of Cardiology (2017 - present)
- Member, American Society of Human Genetics (2016 - present)

PROFESSIONAL EDUCATION

- Medical Education: Pritzker School of Medicine University of Chicago Registrar (2005) IL
- Board Certification: Advanced Heart Failure and Transplant Cardiology, American Board of Internal Medicine (2014)
- Residency: Stanford University Hospital -Clinical Excellence Research Center (2007) CA
- Fellowship: Stanford University School of Medicine (2013) CA
- Fellowship: Stanford University School of Medicine (2012) CA
- Board Certification: Cardiovascular Disease, American Board of Internal Medicine (2012)
- Board Certification: Internal Medicine, American Board of Internal Medicine (2008)
- Bachelor of Arts, Williams College , History and Biology (1998)

COMMUNITY AND INTERNATIONAL WORK

- Undiagnosed Diseases - Latin America

LINKS

- Center for Undiagnosed Diseases at Stanford: http://undiagnosed.stanford.edu
- Euan Ashley Laboratory Website: ashleylab.stanford.edu
- Get a Second Opinion: https://stanfordhealthcare.org/second-opinion/overview.html

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Translational research in rare and undiagnosed diseases. Basic and clinical research in cardiomyopathy genetics, mechanisms, screening, and treatment. Investigating novel agents for treatment of hypertrophic cardiomyopathy and new mechanisms in heart failure. Cardiovascular screening and genetics in competitive athletes, disease gene discovery in cardiomyopathy and rare disease. Informatics approaches to rare disease and multiomics. Molecular transducers of physical activity bioinformatics.

CLINICAL TRIALS

- A Phase 2 Study of Mavacamten in Adults With Symptomatic Non-Obstructive Hypertrophic Cardiomyopathy (nHCM), Recruiting
- A Study of ARRY-371797 in Patients With Symptomatic Dilated Cardiomyopathy Due to a Lamin A/C Gene Mutation, Recruiting
- Clinical and Genetic Evaluation of Individuals With Undiagnosed Disorders Through the Undiagnosed Diseases Network, Recruiting
- Clinical Study to Evaluate Mavacamten (MYK-461) in Adults With Symptomatic Obstructive Hypertrophic Cardiomyopathy, Recruiting
- DCM Precision Medicine Study, Recruiting
- Registrational Study With Omecamtiv Mecarbil/AMG 423 to Treat Chronic Heart Failure With Reduced Ejection Fraction, Recruiting
- Safety and Efficacy of Tafamidis in Patients With Transthyretin Cardiomyopathy, Not Recruiting
- Study of Exercise Training in Hypertrophic Cardiomyopathy, Not Recruiting
- The HeartWare™ Ventricular Assist System as Destination Therapy of Advanced Heart Failure: the ENDURANCE Trial, Not Recruiting
- Valsartan for Attenuating Disease Evolution In Early Sarcomeric HCM, Not Recruiting

Teaching

COURSES

2019-20

- Workshop For Ending Diagnostic Odysseys: MED 239 (Aut)

2018-19

- Workshop For Ending Diagnostic Odysseys: MED 239 (Aut, Win)

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Gopal Pramanik

Postdoctoral Research Mentor

Gopal Pramanik

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Cardiovascular Medicine (Fellowship Program)
- Human Genetics and Genetic Counseling (Masters Program)

Publications

PUBLICATIONS

- **Biallelic Mutations in ATP5F1D, which Encodes a Subunit of ATP Synthase, Cause a Metabolic Disorder** *AMERICAN JOURNAL OF HUMAN GENETICS*
  Olahova, M., Yoon, W., Thompson, K., Jangam, S., Fernandez, L., Davidson, J. M., Kyle, J. E., Grove, M. E., Fisk, D. G., Kohler, J. N., Holmes, M., Dries, A. M., Huang, et al
  2018; 102 (3): 494–504

- **Effect of Genetic Diagnosis on Patients with Previously Undiagnosed Disease.** *The New England journal of medicine*
  Splinter, K., Adams, D. R., Bacino, C. A., Bellen, H. J., Bernstein, J. A., Cheatle-Jarvela, A. M., Eng, C. M., Esteves, C., Gahl, W. A., Hamid, R., Jacob, H. J., Kikani, B., Koeller, et al
  2018

- **Effect of Moderate-Intensity Exercise Training on Peak Oxygen Consumption in Patients With Hypertrophic Cardiomyopathy A Randomized Clinical Trial** *JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*
  Saberi, S., Wheeler, M., Bragg-Gresham, J., Hornsby, W., Agarwal, P. P., Attili, A., Concannon, M., Dries, A. M., Shmargad, Y., Salisbury, H., Kumar, S., Herrera, J., Myers, et al
  2017; 317 (13): 1349-1357

- **Value of Strain Imaging and Maximal Oxygen Consumption in Patients With Hypertrophic Cardiomyopathy.** *The American journal of cardiology*
  Moneghetti, K. J., Stolfo, D., Christle, J. W., Kobayashi, Y., Finocchiaro, G., Sinagra, G., Myers, J., Ashley, E. A., Haddad, F., Wheeler, M. T.
  2017; 120 (7): 1203–8

- **Cost-Effectiveness of Preparticipation Screening for Prevention of Sudden Cardiac Death in Young Athletes** *ANNALS OF INTERNAL MEDICINE*
  Wheeler, M. T., Heidenreich, P. A., Froelicher, V. F., Hlatky, M. A., Ashley, E. A.
  2010; 152 (5): 276-W91

- **Extracutaneous manifestations in phacomatosis cesioflammea and cesiomarmorata: Case series and literature review** *AMERICAN JOURNAL OF MEDICAL GENETICS PART A*
  Kumar, A., Zastrow, D. B., Kravets, E. J., Beleford, D., Ruzhnikov, M. Z., Grove, M. E., Dries, A. M., Kohler, J. N., Waggott, D. M., Yang, Y., Huang, Y., Mackenzie, K. M., Eng, et al
  2019; 179 (6): 966–77

- **Targeted Long-Read RNA Sequencing Demonstrates Transcriptional Diversity Driven by Splice-Site Variation in MYBPC3.** *Circulation. Genomic and precision medicine*

Dainis, A., Tseng, E., Clark, T. A., Hon, T., Wheeler, M., Ashley, E.

2019; 12 (5): e002464

- **Developing a genomics rotation: Practical training around variant interpretation for genetic counseling students** *JOURNAL OF GENETIC COUNSELING*

  Grove, M. E., White, S., Fisk, D. G., Rego, S., Dagan-Rosenfeld, O., Kohler, J. N., Reuter, C. M., Bonner, D., Wheeler, M. T., Bernstein, J. A., Ormond, K. E., Hanson-Kahn, A. K., Undiagnosed Dis Network

  2019; 28 (2): 466–76

- **A toolkit for genetics providers in follow-up of patients with non-diagnostic exome sequencing** *JOURNAL OF GENETIC COUNSELING*

  Zastrow, D. B., Kohler, J. N., Bonner, D., Reuter, C. M., Fernandez, L., Grove, M. E., Fisk, D. G., Yang, Y., Eng, C. M., Ward, P. A., Bick, D., Worthey, E. A., Fisher, et al

  2019; 28 (2): 213–28

- **Extracutaneous manifestations in phacomatosis cesioflammea and cesiomarmorata: Case series and literature review.** *American journal of medical genetics. Part A*

  Kumar, A., Zastrow, D. B., Kravets, E. J., Beleford, D., Ruzhnikov, M. R., Grove, M. E., Dries, A. M., Kohler, J. N., Waggott, D. M., Yang, Y., Huang, Y., Undiagnosed Diseases Network, Mackenzie, K. M., et al

  2019

- **Targeting ferroptosis: A novel therapeutic strategy for the treatment of mitochondrial disease-related epilepsy** *PLOS ONE*

  Kahn-Kirby, A. H., Amagata, A., Maeder, C. I., Mei, J. J., Sideris, S., Kosaka, Y., Hinman, A., Malone, S. A., Bruegger, J. J., Wang, L., Kim, V., Shrader, W. D., Hoff, et al

  2019; 14 (3)

- **Regional Variation in RBM20 Causes a Highly Penetrant Arrhythmogenic Cardiomyopathy** *CIRCULATION-HEART FAILURE*

  Parikh, V. N., Caleshu, C., Reuter, C., Lazzeroni, L. C., Ingles, J., Garcia, J., McCaleb, K., Adesiyun, T., Sedaghat-Hamedani, F., Kumar, S., Graw, S., Gigli, M., Stolfo, et al

  2019; 12 (3)

- **Regional Variation in RBM20 Causes a Highly Penetrant Arrhythmogenic Cardiomyopathy.** *Circulation. Heart failure*

  Parikh, V. N., Caleshu, C., Reuter, C., Lazzeroni, L. C., Ingles, J., Garcia, J., McCaleb, K., Adesiyun, T., Sedaghat-Hamedani, F., Kumar, S., Graw, S., Gigli, M., Stolfo, et al

  2019; 12 (3): e005371

- **Identification of rare-disease genes using blood transcriptome sequencing and large control cohorts.** *Nature medicine*

  Frésard, L., Smail, C., Ferraro, N. M., Teran, N. A., Li, X., Smith, K. S., Bonner, D., Kernohan, K. D., Marwaha, S., Zappala, Z., Balliu, B., Davis, J. R., Liu, et al

  2019

- **Athletic Remodeling in Female College Athletes: The "Morganroth Hypothesis" Revisited.** *Clinical journal of sport medicine : official journal of the Canadian Academy of Sport Medicine*

  Kooreman, Z., Giraldeau, G., Finocchiaro, G., Kobayashi, Y., Wheeler, M., Perez, M., Moneghetti, K., Oxborough, D., George, K. P., Myers, J., Ashley, E., Haddad, F.

  2019; 29 (3): 224–31

- **A toolkit for genetics providers in follow-up of patients with non-diagnostic exome sequencing.** *Journal of genetic counseling*

  Zastrow, D. B., Kohler, J. N., Bonner, D., Reuter, C. M., Fernandez, L., Grove, M. E., Fisk, D. G., Yang, Y., Eng, C. M., Ward, P. A., Bick, D., Worthey, E. A., Fisher, et al

  2019; 28 (2): 213–28

- **A Patient with Sjogren's Syndrome and Subsequent Diagnosis of Inclusion Body Myositis and Light-Chain Amyloidosis.** *Journal of general internal medicine*

  Hom, J., Marwaha, S., Postolova, A., Kittle, J., Vasquez, R., Davidson, J., Kohler, J., Dries, A., Fernandez-Betancourt, L., Majcherska, M., Dearlove, J., Raghavan, S., Vogel, et al

  2019

- **Defining genotype-phenotype relationships in patients with hypertrophic cardiomyopathy using cardiovascular magnetic resonance imaging.** *PloS one*

  Miller, R. J., Heidary, S., Pavlovic, A., Schlachter, A., Dash, R., Fleischmann, D., Ashley, E. A., Wheeler, M. T., Yang, P. C.

  2019; 14 (6): e0217612

- **Developing a genomics rotation: Practical training around variant interpretation for genetic counseling students.** *Journal of genetic counseling*

  Grove, M. E., White, S., Fisk, D. G., Rego, S., Dagan-Rosenfeld, O., Kohler, J. N., Reuter, C. M., Bonner, D., Wheeler, M. T., Bernstein, J. A., Ormond, K. E., Hanson-Kahn, A. K.

2019

- **The Incremental Value of Right Ventricular Size and Strain in the Risk Assessment of Right Heart Failure Post - Left Ventricular Assist Device Implantation.** *Journal of cardiac failure*

  Aymami, M., Amsallem, M., Adams, J., Sallam, K., Moneghetti, K., Wheeler, M., Hiesinger, W., Teuteberg, J., Weisshaar, D., Verhoye, J., Woo, Y. J., Ha, R., Haddad, et al

  2018; 24 (12): 823–32

- **Expansion of the Human Phenotype Ontology (HPO) knowledge base and resources.** *Nucleic acids research*

  Kohler, S., Carmody, L., Vasilevsky, N., Jacobsen, J. O., Danis, D., Gourdine, J., Gargano, M., Harris, N. L., Matentzoglu, N., McMurry, J. A., Osumi-Sutherland, D., Cipriani, V., Balhoff, et al

  2018

- **A Premature Termination Codon Mutation in MYBPC3 Causes Hypertrophic Cardiomyopathy via Chronic Activation of Nonsense-Mediated Decay.** *Circulation*

  Seeger, T., Shrestha, R., Lam, C. K., Chen, C., McKeithan, W. L., Lau, E., Wnorowski, A., McMullen, G., Greenhaw, M., Lee, J., Oikonomopoulos, A., Lee, S., Yang, et al

  2018

- **Evolving Decisions: Perspectives of Active and Athletic Individuals with Inherited Heart Disease Who Exercise Against Recommendations.** *Journal of genetic counseling*

  Subas, T., Luiten, R., Hanson-Kahn, A., Wheeler, M., Caleshu, C.

  2018

- **Tafamidis Treatment for Patients with Transthyretin Amyloid Cardiomyopathy.** *The New England journal of medicine*

  Maurer, M. S., Schwartz, J. H., Gundapaneni, B., Elliott, P. M., Merlini, G., Waddington-Cruz, M., Kristen, A. V., Grogan, M., Witteles, R., Damy, T., Drachman, B. M., Shah, S. J., Hanna, et al

  2018

- **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

- **Genome Sequencing in HypertrophicCardiomyopathy.** *Journal of the American College of Cardiology*

  Ashley, E. A., Reuter, C. M., Wheeler, M. T.

  2018; 72 (4): 430–33

- **Applying current normative data to prognosis in heart failure: The Fitness Registry and the Importance of Exercise National Database (FRIEND)** *INTERNATIONAL JOURNAL OF CARDIOLOGY*

  Moneghetti, K. J., Hock, J., Kaminsky, L., Arena, R., Lui, G. K., Haddad, F., Wheeler, M., Froelicher, V., Ashley, E., Myers, J., Christle, J. W.

  2018; 263: 75–79

- **Electrocardiographic left atrial abnormalities predict cardiovascular mortality** *JOURNAL OF ELECTROCARDIOLOGY*

  Ha, L., Grober, A. F., Hock, J., Wheeler, M., Elbadawi, A., Biniwale, N., Baig, B., Froelicher, V.

  2018; 51 (4): 652–57

- **Large Q and S waves in lead III on the electrocardiogram distinguish patients with hypertrophic cardiomyopathy from athletes.** *Heart (British Cardiac Society)*

  Chen, A. S., Bent, R. E., Wheeler, M., Knowles, J. W., Haddad, F., Froelicher, V., Ashley, E., Perez, M. V.

  2018

- **ClinPhen extracts and prioritizes patient phenotypes directly from medical records to expedite genetic disease diagnosis.** *Genetics in medicine : official journal of the American College of Medical Genetics*

  Deisseroth, C. A., Birgmeier, J., Bodle, E. E., Kohler, J. N., Matalon, D. R., Nazarenko, Y., Genetti, C. A., Brownstein, C. A., Schmitz-Abe, K., Schoch, K., Cope, H., Signer, R., Martinez-Agosto, et al

  2018

- **A New Approach to Rare Diseases of Children: The Undiagnosed Diseases Network.** *The Journal of pediatrics*

  Reuter, C. M., Brimble, E., DeFilippo, C., Dries, A. M., Enns, G. M., Ashley, E. A., Bernstein, J. A., Fisher, P. G., Wheeler, M. T.

  2018

- **PHACOMATOSIS PIGMENTOVASCULARIS: A CASE WITH SOMATIC MUTATION IN GNAQ AND ATYPICAL PHENOTYPIC FEATURES**
  Kumar, A., Zastrow, D., Prybol, C., Manning, M., Huang, Y., Fisher, P., Ashley, E., Teng, J., Wheeler, M., Bernstein, J.
  BMJ PUBLISHING GROUP.2018: 202

- **Athletic Remodeling in Female College Athletes, the "Morganroth Hypothesis" Revisited.** *Clinical journal of sport medicine : official journal of the Canadian Academy of Sport Medicine*
  Kooreman, Z., Giraldeau, G., Finocchiaro, G., Kobayashi, Y., Wheeler, M., Perez, M., Moneghetti, K., Oxborough, D., George, K. P., Myers, J., Ashley, E., Haddad, F.
  2018

- **Exercise for Patients With Hypertrophic Cardiomyopathy Reply** *JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*
  Saberi, S., Wheeler, M., Day, S. M.
  2017; 318 (5): 481–82

- **Repeats and Survival in Myotonic Dystrophy Type 1** *CIRCULATION-CARDIOVASCULAR GENETICS*
  Wheeler, M. T.
  2017; 10 (3)

- **Accuracy in Wrist-Worn, Sensor-Based Measurements of Heart Rate and Energy Expenditure in a Diverse Cohort.** *Journal of personalized medicine*
  Shcherbina, A., Mattsson, C. M., Waggott, D., Salisbury, H., Christle, J. W., Hastie, T., Wheeler, M. T., Ashley, E. A.
  2017; 7 (2)

- **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

- **The Undiagnosed Diseases Network: Accelerating Discovery about Health and Disease** *AMERICAN JOURNAL OF HUMAN GENETICS*
  Ramoni, R. B., Mulvihill, J. J., Adams, D. R., Allard, P., Ashley, E. A., Bernstein, J. A., Gahl, W. A., Hamid, R., Loscalzo, J., McCray, A. T., Shashi, V., Tifft, C. J., Wise, et al
  2017; 100 (2): 185-192

- **Simultaneous ramp right heart catheterization and echocardiography in a ReliantHeart left ventricular assist device.** *World journal of cardiology*
  Banerjee, D., Dutt, D., Duclos, S., Sallam, K., Wheeler, M., Ha, R.
  2017; 9 (1): 55-59

- **in a patient with a complex connective tissue phenotype.** *Cold Spring Harbor molecular case studies*
  Zastrow, D. B., Zornio, P. A., Dries, A., Kohler, J., Fernandez, L., Waggott, D., Walkiewicz, M., Eng, C. M., Manning, M. A., Farrelly, E., Fisher, P. G., Ashley, E. A., Bernstein, et al
  2017; 3 (1)

- **Autoantibody profiling on a plasmonic nano-gold chip for the early detection of hypertensive heart disease.** *Proceedings of the National Academy of Sciences of the United States of America*
  Li, X., Kuznetsova, T., Cauwenberghs, N., Wheeler, M., Maecker, H., Wu, J. C., Haddad, F., Dai, H.
  2017; 114 (27): 7089–94

- **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

- **Contractile reserve and cardiopulmonary exercise parameters in patients with dilated cardiomyopathy, the two dimensions of exercise testing.** *Echocardiography (Mount Kisco, N.Y.)*
  Moneghetti, K. J., Kobayashi, Y., Christle, J. W., Ariyama, M., Vrtovec, B., Kouznetsova, T., Wilson, A., Ashley, E., Wheeler, M. T., Myers, J., Haddad, F.
  2017

- **Functional Cardiac Recovery and Hematologic Response to Chemotherapy in Patients With Light-Chain Amyloidosis (from the Stanford University Amyloidosis Registry).** *The American journal of cardiology*
  Tuzovic, M., Kobayashi, Y., Wheeler, M., Barrett, C., Liedtke, M., Lafayette, R., Schrier, S., Haddad, F., Witteles, R.
  2017; 120 (8): 1381–86

- **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., Ashely, E., Haddad , F.

  2017

- **Long-read genome sequencing identifies causal structural variation in a Mendelian disease.** *Genetics in medicine : official journal of the American College of Medical Genetics*

  Merker, J. D., Wenger, A. M., Sneddon, T., Grove, M., Zappala, Z., Fresard, L., Waggott, D., Utiramerur, S., Hou, Y., Smith, K. S., Montgomery, S. B., Wheeler, M., Buchan, et al

  2017

- **Repeats and Survival in Myotonic Dystrophy Type 1.** *Circulation. Cardiovascular genetics*

  Wheeler, M. T.

  2017; 10 (3)

- **Exercise restrictions trigger psychological difficulty in active and athletic adults with hypertrophic cardiomyopathy** *OPEN HEART*

  Luiten, R. C., Ormond, K., Post, L., Asif, I. M., Wheeler, M. T., Caleshu, C.

  2016; 3 (2)

- **Sports genetics moving forward: lessons learned from medical research.** *Physiological genomics*

  Mattsson, C. M., Wheeler, M. T., Waggott, D., Caleshu, C., Ashley, E. A.

  2016; 48 (3): 175-182

- **Athlome Project Consortium: a concerted effort to discover genomic and other "omic" markers of athletic performance.** *Physiological genomics*

  Pitsiladis, Y. P., Tanaka, M., Eynon, N., Bouchard, C., North, K. N., Williams, A. G., Collins, M., Moran, C. N., Britton, S. L., Fuku, N., Ashley, E. A., Klissouras, V., Lucia, et al

  2016; 48 (3): 183-190

- **Medical implications of technical accuracy in genome sequencing.** *Genome medicine*

  Goldfeder, R. L., Priest, J. R., Zook, J. M., Grove, M. E., Waggott, D., Wheeler, M. T., Salit, M., Ashley, E. A.

  2016; 8 (1): 24-?

- **Systems Genomics Identifies a Key Role for Hypocretin/Orexin Receptor-2 in Human Heart Failure** *JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY*

  Perez, M. V., Pavlovic, A., Shang, C., Wheeler, M. T., Miller, C. L., Liu, J., Dewey, F. E., Pan, S., Thanaporn, P. K., Absher, D., Brandimarto, J., Salisbury, H., Chan, et al

  2015; 66 (22): 2522-2533

- **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

- **Limitations of Current AHA Guidelines and Proposal of New Guidelines for the Preparticipation Examination of Athletes** *CLINICAL JOURNAL OF SPORT MEDICINE*

  Dunn, T. P., Pickham, D., Aggarwal, S., Saini, D., Kumar, N., Wheeler, M. T., Perez, M., Ashley, E., Froelicher, V. F.

  2015; 25 (6): 472-477

- **Letter by Wheeler et al Regarding Article, "Recognition and Significance of Pathological T-Wave Inversions in Athletes"** *CIRCULATION*

  Wheeler, M. T., Adelfattah, R., Froelicher, V. F.

  2015; 132 (14): E180

- **Sequence to Medical Phenotypes: A Framework for Interpretation of Human Whole Genome DNA Sequence Data** *PLOS GENETICS*

  Dewey, F. E., Grove, M. E., Priest, J. R., Waggott, D., Batra, P., Miller, C. L., Wheeler, M., Zia, A., Pan, C., Karzcewski, K. J., Miyake, C., Whirl-Carrillo, M., Klein, et al

  2015; 11 (10)

- **Systematic Comparison of Digital Electrocardiograms From Healthy Athletes and Patients With Hypertrophic Cardiomyopathy.** *Journal of the American College of Cardiology*

Bent, R. E., Wheeler, M. T., Hadley, D., Knowles, J. W., Pavlovic, A., Finocchiaro, G., Haddad, F., Salisbury, H., Race, S., Shmargad, Y., Matheson, G. O., Kumar, N., Saini, et al

2015; 65 (22): 2462-2463

- **Examining QRS amplitude criteria for electrocardiographic left ventricular hypertrophy in recommendations for screening criteria in athletes.** *Journal of electrocardiology*

  Singla, V., Jindal, A., Pargaonkar, V., Soofi, M., Wheeler, M., Froelicher, V.

  2015; 48 (3): 368-372

- **Computerized Q wave dimensions in athletes and hypertrophic cardiomyopathy patients** *JOURNAL OF ELECTROCARDIOLOGY*

  Bent, R. E., Wheeler, M. T., Hadley, D., Froelicher, V., Ashley, E., Perez, M. V.

  2015; 48 (3): 362-367

- **Outcomes after heart transplantation for amyloid cardiomyopathy in the modern era.** *American journal of transplantation*

  Davis, M. K., Kale, P., Liedtke, M., Schrier, S., Arai, S., Wheeler, M., Lafayette, R., Coakley, T., Witteles, R. M.

  2015; 15 (3): 650-658

- **Hypertrophic cardiomyopathy: can the horse be put back in the barn?** *Journal of the American College of Cardiology*

  Wheeler, M. T., Ashley, E. A.

  2015; 65 (6): 570-572

- **Personalized preventive medicine: genetics and the response to regular exercise in preventive interventions.** *Progress in cardiovascular diseases*

  Bouchard, C., Antunes-Correa, L. M., Ashley, E. A., Franklin, N., Hwang, P. M., Mattsson, C. M., Negrao, C. E., Phillips, S. A., Sarzynski, M. A., Wang, P., Wheeler, M. T.

  2015; 57 (4): 337-346

- **BEST IN PHYSICS (THERAPY) - Stereotactic Radiotherapy for Renal Sympathetic Ablation for the Treatment of Refractory Hypertension**

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