I. GENERAL BIOGRAPHICAL INFORMATION

A. Personal

Name: Katarzyna Anna Cieslik, Ph.D
Office phone: 713-798-8375
Email address: cieslik@bcm.edu
Academic rank: Associate Professor
Citizenship: USA, Poland

B. Education

1. Undergraduate Education

1987-1992 B.Sc. and M.Sc., the Jagiellonian University, Institute of Molecular Biology, Krakow, Poland (Dr. Jaroslaw Tomecki, advisor).

Thesis: “Qualitative and Quantitative Analysis of Secreted Arachidonic Acid Metabolites by Neoplastic Cells and Activated Macrophages; Contribution of PGE_2 Prostaglandin in Anti-Neoplastic Response.”

2. Graduate Education

2003 Ph.D., the Jagiellonian University, Department of Pharmacology, Krakow, Poland (Dr. Stefan Chlopicki, advisor).

Thesis: “Molecular Mechanism of Anti-inflammatory Properties of Salicylate in RAW264.7 Macrophages; the Effect of Salicylate on NOS-2 and COX-2 Gene Expressions.”

3. Postgraduate Training

2003-2005 Postdoctoral Associate, University of Texas, Department of Internal Medicine Division of Hematology and Brown Foundation Institute of Molecular Medicine, Houston, TX, (Dr. Kenneth K. Wu, PI).

2005-2006 Postdoctoral Fellow, Developmental Cardiology Section, Baylor College of Medicine, Houston, TX, (Dr. Karen Niederreither, PI).

C. Academic Appointments

1. Faculty position at BCM:

2008-2011	Instructor, Baylor College of Medicine, Department of Medicine Division of Cardiovascular Sciences, Houston, TX.
2011-2013	Assistant Professor, Baylor College of Medicine, Department of Medicine, Division of Cardiovascular Sciences, Houston, TX.
2013-2019	Assistant Professor Tenure Track, Baylor College of Medicine, Department of Medicine, Division of Cardiovascular Sciences, Houston, TX.
2019-present	Associate Professor Tenure Track, Baylor College of Medicine, Department of Medicine, Division of Cardiovascular Sciences, Houston, TX.

2. Previous faculty position at other institutions

1992-1996	Instructor, the Jagiellonian University, Department of Pharmacology, Krakow, Poland.
2006-2008	Instructor, University of Texas Health Science Center at Houston, Department of Pediatrics, Division of Neonatal-Perinatal Medicine.

3. Non-faculty position

1996-2003	Research Assistant, Research Associate, University of Texas, Department of Internal Medicine, Division of Hematology and Brown Foundation Institute of Molecular Medicine, Houston, TX.
2006	Research Scientist, University of Texas Medical School, Department of Pediatrics, Division of Neonatal-Perinatal Medicine, Houston, TX.

D. Other information

Awards

2005	Travel Award, The 7th Annual Winter Eicosanoid Conference, Baltimore
2019	Fellow of the American Heart Association

II. RESEARCH INFORMATION

A. Research Support:

- Source: The Medallion Foundation
  Title: Defining the Trafficking of TGF beta Receptor in Aged Cardiac Fibroblasts
  Role: PI
  Period: 12/19/18-12/18/19
  Total: $82,500
- Source: NIH/NIA 1R01AG059500-01
  Title: Interaction of Mesenchymal and Myeloid Fibroblasts in Inflammatory-based Fibrosis in the Aging Heart
  Role: co-PI (other PI: Dr. Mark Entman)
  Period: 9/30/2018 – 5/31/22
  Per year: $299,467 (direct cost)

- Source: NIH 1R42HL144342-01
  Title: Development and Non-clinical GLP Testing of a New Anti-atherosclerosis Gene Therapy Delivered by Engineered Adeno-associated Viral Vectors
  Role: co-Investigator (PI: Drs. Chiriva-Internati and Taffet)
  Period: 9/1/2018 – 8/30/19
  Total: $850,531

- Source: The Medallion Foundation
  Title: The Role of T and B Lymphocytes in the Development of Fibrosis in the Aging Heart
  Role: PI
  Period: 7/01/16-12/31/2018
  Total: $50,000

- Source: Cardiovascular Research Institute; pilot grant
  Title: Trafficking Leukocytes in the Aging Mouse Heart
  Role: co-PI (other PI: Dr. Robia Pautler)
  Period: 10/31/17-06/30/2018
  Total: $15,000

- Source: NIH: 2R01HL089792
  Title: Role of Blood-Borne Fibroblast Precursors in Ischemic Cardiomyopathy
  Role: co-Investigator (PI: Dr. Mark Entman)
  Period: 09/30/07 – 11/30/17
  Per year: $250,000 (direct cost)

- Source: The Medallion Foundation
  Title: A Spontaneous Mutation in Nnt Gene Promotes Cardiac Fibrosis in the Aging Heart

Role: PI
Period: 7/1/2015-6/30/2016
Total: $47,960

- Source: The Medallion Foundation
  Title: Contribution of Proinflammatory Mesenchymal Fibroblasts to Myeloid Dependent Fibrosis
  Role: PI
  Period: 7/01/13-6/30/2015
  Total: $220,000

- Source: The Medallion Foundation
  Title: Molecular Mechanisms of Dysfunction in the Aging Heart
  Role: co-Investigator (PI: Dr. Trial)
  Period: 01/07/11-12/31/12
  Total: $200,000

- Source: Huffington Center on Aging: pilot grant
  Title: AMPK Dependent Rescue of Defective TGFβ Signaling in the Aged Heart and its Role in Scar Formation after Myocardial Infarction
  Role: PI
  Period: 01/01/12 – 6/30/12
  Total: $10,000

- Source: Department of Pediatrics, UTHSC, pilot grant
  Title: Optimization of a Neonatal Cardiomyocyte Culture
  Role: PI
  Period: 02/01/07-01/31/08
  Total: $15,000

B. National and International Scientific Participation

1. Review panels

Journals:

2011-present	Plos One
2013-present	Journal of Molecular and Cellular Cardiology
2013-present	Purinergic Signaling
2014-present	Journal of the American Aging Association
2014-present	Cardiology

2014-present Cell Biology and Toxicology
2014-present International Journal of Cardiology
2015-present Canadian Journal of Physiology and Pharmacology
2016-present Translational Research
2016-present Arteriosclerosis, Thrombosis, and Vascular Biology
2018-present Circulation
2019-present Current Molecular Medicine

Grants

2015- State of Israel, Ministry of Science, Technology and Space
2016- National Science Center (Poland / European Union)
2016- Natural Sciences Research Council of Canada, Discovery Grant Program
2018- NIH, Cardiac Contractility, Hypertrophy and Failure study section

Meeting Abstracts:

2016 Scientific Sessions, American Heart Association
2017 Scientific Sessions, American Heart Association
2018 Scientific Sessions, American Heart Association
2019 Scientific Sessions, American Heart Association

2. Professional societies

1994-1996 Polish Pharmacological Society
2001-2005 Nitric Oxide Society
2001-2005 American Physiological Society
2008-present American Heart Association
2015-present Society for Leukocyte Biology
2015-present The American Association of Immunologists

3. Invited lectures, presentations, seminars

a) International

1. Fibroblasts in the Aging Murine Heart. Microbiology and Genetics Society Scientific Seminar, Maria Curie-Sklodowska University in Lublin, Poland, April 2012.

b) Regional

1. Control of COX-2 and NOS-2 Transcriptional Activation by Salicylates. Institute of Molecular Medicine, UTHSC, Houston, TX, April 2005.

2. 14-3-3 epsilon Knockout Leads to Cardiac Defect and Inhibition of Cell Cycle Progression. Department of Pediatrics seminar, University of Texas Health Science Center at Houston, TX, May 2008.
3. Deletion of 14-3-3 epsilon Leads to Inhibition of Cell Cycle in Cardiomyocytes. Cardiovascular Sciences Seminar, Baylor College of Medicine, May 2008.
4. Fibroblasts and their Stem Cell Precursors in the Aging Post-ischemic Heart. Cardiovascular Basic Science Seminar, Texas Heart Institute, Houston, TX, March 2013.
5. Fibroblasts and their Stem Cell Precursors in the Aging Post-ischemic Heart. Huffington Center on Aging seminar, Baylor College of Medicine, Houston, TX, April 2013.
6. Inflammatory Fibroblasts and their Role in Adverse Fibrosis in the Aging Heart. Atherosclerosis and Vascular Biology Training Center, Department of Medicine, Baylor College of Medicine, Houston, TX, June 2014.
7. Inflammatory Fibroblasts in the Aging Heart. Department of Molecular Physiology and Biophysics Seminar Series, Baylor College of Medicine, Houston, TX, December 2014.
8. Fibrosis in the Aging Heart. Nephrology Division Seminar, Baylor College of Medicine, May 2015.
9. Cellular and Molecular Mechanisms of Inflammation in the Aging Heart. Huffington Center on Aging, Baylor College of Medicine, November 2015.

C. Publications

1. Full papers in Peer reviewed Journals

a) Published

1. Kordowiak Anna M., Tomecki Jaroslaw, **Cieslik Katarzyna**, Procyk Katarzyna. Modulation of immune response by stimulated macrophages via eicosanoids release. *Applied Biology Communications* 1991,1/5, 221-224.
2. Tomecki J., **Cieslik K**., Kordowiak A.M., Barot R. Immunomodulatory activities of Nocardia opaca. *Acta Microbiologica Polonica* 1993; 42(2): 151-6.
3. Gunnar Karup, Herbert Preikschat, Ellen Sloth Wilheelmsen, Soren Bols Pedersen, Ewa Marcinkiewicz, **Katarzyna Cieslik**, Ryszard J. Gryglewski. Mesoionic oxatriazole derivatives - a new group of NO-donors. *Polish Journal of Pharmacology* 1994; 46: 541-552.
4. R. Korbut, E. Marcinkiewicz, **K. Cieslik**, R.J. Gryglewski. The effect of nitric oxide donors on the release of plasminogen activator inhibitor from rabbit platelets in vivo. *Journal of Physiology and Pharmacology* 1995; 46:37-44.

5. Oszajca J., Stochel G., Wasylewska E., Stasicka Z., Gryglewski R.J., Jakubowski A., **Cieslik K**. Cyanonitrosylmetallates as potential NO-donors. *J. Inorg. Biochem*. 1998, 69, 121-7.
6. **Katarzyna Cieslik**, Artur Zembowicz, Jih-Lu Tang and Kenneth K. Wu. Transcriptional Regulation of Endothelial Nitric Oxide Synthase by Lysophosphatidylcholine. *J. Biol. Chem*. 1998, 273, 14885-14890.
7. **Katarzyna Cieslik**, Chii-Ming Lee, Jih-Lu Tang and Kenneth K. Wu. Transcriptional Regulation of Endothelial Nitric Oxide Synthase by Interaction between Casein Kinase 2 and Protein Phosphatase 2A. *J. Biol. Chem*, 1999, 274, 34669-34675.
8. **K. Cieslik**, C.S., Abrams, K.K. Wu. Upregulation of endothelial nitric oxide synthase promoter by PI3K gamma/Jak2/MEK1-dependent pathway. *J.Biol.Chem*. 2001, 276, 1211-1219.
9. **Katarzyna Cieslik**, Ying Zhu and Kenneth K. Wu. Salicylate suppresses macrophage nitric-oxide synthase-2 and cyclo-oxygenase-2 expression by inhibiting CCAAT/enhancer-binding protein-beta binding via a common signaling pathway. *J. Biol. Chem*. 2002, 277; 49304-49310.
10. Stefan Chlopicki, **Katarzyna Cieslik**. Aspirin in cardiovascular diseases. *Educational notebooks. Cardiology.* [Zeszyty edukacyjne. Kardiologia po dyplomie]. 2005, 2: 4-15.
11. Kenneth K. Wu, Jun-Yang Liou, **Katarzyna Cieslik**. Control of COX-2 Transcriptional Activation by Proinflammatory Mediators. *Arterioscler Thromb Vasc Biol*. 2005, 25: 679-85.
12. **Katarzyna A. Cieslik**, Ying Zhu, Mikhail Shtivelbald, Kenneth K.Wu. Inhibition of p90 ribosomal S6 kinase-mediated C/EBPbeta activation and COX-2 expression by salicylate. *J Biol Chem*. 2005,280:18411-7.
13. Alonso-Escolano D, Medina C, **Cieslik K**, Radomski A, Jurasz P, Santos-Martinez MJ, Jiffar T, Ruvolo P, Radomski MW. Protein kinase C delta mediates platelet-induced breast cancer cell invasion*. J Pharmacol Exp Ther*. 2006;318(1):373-80.
14. **Cieslik KA**, Deng WG, Wu KK. Essential role of C-Rel in nitric oxide synthase-2 transcriptional activation: time-dependent control by salicylate. *Mol Pharmacol*. 2006, 70, 2004-14.
15. Luca Brunelli, **Katarzyna A. Cieslik**, Joseph L. Alcorn, Matteo Vatta, Antonio Baldini. Peroxisome proliferator-activated receptor-delta upregulates 14-3-3 epsilon in human endothelial cells via CCAAT/enhancer binding protein-beta. *Circ Res*. 2007; 100 (5):e59-71. Ultrarapid communication.
16. **Cieslik KA**, Taffet GE, Carlson S, Hermosillo J, Trial J, Entman ML. Immune-inflammatory dysregulation modulates the incidence of progressive fibrosis and diastolic stiffness in the aging heart. *J Mol Cell Cardiol*. 50, 2011, 248-256.
17. **Cieslik K.A**., Trial J., Entman M.L. Defective myofibroblast formation from mesenchymal stem cells in the aging murine heart. Rescue by activation of the AMPK pathway. *American Journal of Pathology* 2011, 179, 1792-1806.
18. Crawford J. R., Haudek S. B., **Cieslik K. A**., Trial J., and Entman M. L. Origin of developmental precursors dictates the pathophysiologic role of cardiac fibroblasts. *Journal of Cardiovascular Translational Research* 2012, 5, 749-59.

19. Yasuhiro Kosaka*, **Katarzyna Cieslik***, Ling Li, George Lezin, Colin Maguire, Yukio Saijoh, Kazuhito Toyo-oka, Michael Gambello, Matteo Vatta, Anthony Wynshaw-Boris, Antonio Baldini, H. Yost, and Luca Brunelli). 14-3-3ε Plays a Role in Cardiac Ventricular Compaction by Regulating the Cardiomyocyte Cell Cycle. *Molecular and Cellular Biology* 2012*,* 32, 5089-102.
    * equal contribution
20. **Cieslik K.A**.*, Trial J., Carlson S., Taffet G.E., Entman M.L.. Aberrant differentiation of fibroblast progenitors contributes to fibrosis in the aged murine heart: role of elevated circulating insulin levels. *FASEB Journal* 2013, 2: 1761-1771.
    * denotes corresponding author
21. Trial J, **Cieslik KA**, Haudek SB, Duerrschmid C, Entman ML. Th1/M1 conversion to Th2/M2 responses in models of inflammation lacking cell death stimulates maturation of monocyte precursors to fibroblasts. *Frontiers in Immunology* 2013, 4:287.
22. **Cieslik KA***, Taffet GE, Crawford JR, Trial J, Mejia Osuna P, Entman ML. AICAR dependent AMPK activation improves myofibroblast maturation and scar formation in the infarcted aged murine heart. *Journal of Molecular and Cellular Cardiology* 2013, 63:26-36.
    * denotes corresponding author
23. **Cieslik KA***, Trial J, Crawford JR, Taffet GE, Entman ML*. Adverse fibrosis in the aging heart depends on signaling between myeloid and mesenchymal cells; role of inflammatory fibroblasts. *Journal of Molecular and Cellular Cardiology* 2014*,* 70:56-63.
    * denotes corresponding author
24. **Cieslik K.A***., Trial J., Entman M.L. Mesenchymal stem cell-derived inflammatory fibroblasts promote monocyte transition into myeloid fibroblasts via an IL-6-dependent mechanism in the aging mouse heart. *FASEB Journa*l 2015; 29: 3160-70.
    * denotes corresponding author
25. Trial J., Entman M.L., **Cieslik K.A**. Mesenchymal stem cell-derived inflammatory fibroblasts mediate interstitial fibrosis in the aging heart. *Journal of Molecular and Cellular Cardiology:* 2016, *91:28-31*. Invited review.
26. Trial J., **Cieslik K.A**., Entman M.L. Phosphocholine-containing ligands direct CRP induction of M2 macrophage polarization independent of T cell polarization: implication for chronic inflammatory states. *Immunity, Inflammation and Disease*, 2016, 4: 274-88.
27. Trial J, Heredia CP, Taffet GE, Entman ML, **Cieslik KA.** Dissecting the role of myeloid and mesenchymal fibroblasts in age-dependent cardiac fibrosis. *Basic Research in Cardiology*: 2017,112(4):34.
28**. Cieslik KA**, Trial J, Entman ML. Aicar treatment reduces interstitial fibrosis in aging mice: Suppression of the inflammatory fibroblast. *Journal of Molecular and Cellular Cardiology* 2017, 111:81-85.
29. **Cieslik KA**, Sekhar RV, Granillo A, Reddy A, Medrano G, Heredia CP, Entman ML, Hamilton DJ, Li S, Reineke E, Gupte AA, Zhang A, Taffet GE. Improved Cardiovascular Function in Old Mice After N-Acetyl Cysteine and Glycine Supplemented Diet:

Inflammation and Mitochondrial Factors. *J Gerontol A Biol Sci Med Sci*. 2018, 73: 1167-1177.

30. Trial J, **Cieslik KA**. Changes in Cardiac Resident Fibroblast Physiology and Phenotype in Aging. *Am J Physiol Heart Circ Physiol.* 2018: 315:H745-H755. Invited review.

2. Abstracts Given During Last Three Years

1. Pena Heredia C, **Cieslik K**, Trial J, Pham T, Karim S, Entman ML, Taffet GE. Aging of C57BL/6J compared to C57BL/6N mice: the role of age-related diastolic dysfunction. The sixth Annual Roy M. Huffington Distinguished Lecture and Poster Session, May 2017.
2. S Karim, **KA Cieslik**, T Pham, C Pena Heredia, PA Taffet, ML Entman, GE Taffet. Cardiac Aging of C57BL/6J Compared to C57BL/6N Mice: Insights into the Aging Process. Journal of the American Geriatrics Society, 2017, 65, S230.
3. Trial J and **Cieslik KA**. The effect of aging on leukocyte infiltration in the mouse heart. The sixth Annual CVRI Symposium, April 2018.

3. Book chapters

Mark L. Entman, **Katarzyna A. Cieslik**, Signe Carlson, Sandra B. Haudek, JoAnn Trial. 2012. Myeloid Fibroblast Precursors In Cardiac Interstitial Fibrosis – The Origin Of Fibroblast Precursors Dictate The Pathophysiologic Role. Richard Bucala (editor). Fibrocytes in Health and Disease Editor: Rick Bucala. World Scientific Press.

4. Other Works Communicating Research Results to Scientific Colleagues

September 2018, podcast discussion with Drs. Lindsey and Czubryt regarding recent publication published in *Am J Physiol Heart Circ Physiol.*

III. TEACHING INFORMATION

A. Didactic Coursework

Courses Taught at Other Institutions

1994-1996	Teaching “Basic Pharmacology” class to second year medical students, the Jagiellonian University, Krakow, Poland.

B. Non-didactic Teaching while at BCM

1. Mentoring post-doctoral trainees

2013-2014	Marta Lishnievsky postdoctoral trainee: teaching laboratory techniques such as histology and immunofluorescence staining.
2014-2015	Yana Kisarova postdoctoral trainee: teaching laboratory techniques such as histology, immunofluorescence staining, qPCR, choosing antibody panels for flow cytometry. Current position: embryologist, Texas Children's Hospital, Houston, TX.
2019-present	Aude Angelini postdoctoral trainee: help with design and interpretation of experiments.
2019-present	Organizer and primary presenter in weekly scientific meetings for the Cardiovascular Sciences group.

2. Mentoring medical, undergraduate and graduate students during laboratory rotations

2010- 8 weeks rotation	David Beaver BCM MD/PhD student Project: Defective Lamin Processing in Aged Cardiac Fibroblasts Current position: Cardiology Fellowship, University of Michigan
2012- 8 weeks rotation	Krystal Lau, Rice University undergraduate student Project: Use of Aliskerin and Valsartan in the Prevention of Diastolic Dysfunction Current position: PhD candidate, Imperial College, London
2013- 8 weeks rotation	Timothy Farinholt, BCM, PhD student Project: Expression of Various AMPK Isoforms in Fibroblasts Derived from Young and Aged Hearts Current position: PhD candidate BCM
2019- 10 weeks internship	Sharonya Shetty, Houston Pre-Medical Academy, University of Houston undergraduate student

IV. SERVICE CONTRIBUTION

A. Administrative Assignments and Committees

April 2018- Poster Judging Committee- The sixth Annual CVRI Symposium
April 2019- Poster Judging Committee- The sixth Annual CVRI Symposium