

February 15th, 2024

CURRICULUM VITAE

PATRYCJA M. DUBIELECKA, PhD
Business Address: Warren Alpert Medical School of Brown University
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EDUCATION

University of Wroclaw, Department of Biotechnology, Wroclaw, Poland
B.Sc., Biotechnology, 1999, *cum laude*

University of Wroclaw, Department of Biotechnology, Wroclaw, Poland
M.Sc., Biotechnology, 2001, *summa cum laude*

University of Wroclaw, Department of Biotechnology, Wroclaw, Poland
Ph.D., Biochemistry, 2005, *with honors*

POSTGRADUATE TRAINING

Lindsley F. Kimball Research Institute, New York Blood Center, New York
Post-doctoral trainee, 2005-2011

Helmholtz Center for Infectious Research Signaling and Motility Group and Cytoskeleton
Dynamics Group, Braunschweig, Germany
Visiting scientist, 2008

Department of Microbiology and Immunology and Center for Live-Cell Imaging University of
Michigan Medical School, Ann Arbor
Visiting scientist, 2010

PROFESSIONAL DEVELOPMENT HONORS AND AWARDS

Polish Ministry of Education PhD Award 3P04C09725	2003
The Socrates/Erasmus Scholarship of the European Union	2005
The Socrates/Erasmus Scholarship of the European Union	2006
Brown University DEANS Award	2016
AAMC Early Career Women Faculty Leadership Development Seminar (<i>acceptance granted by the AAMC Selection Committee</i>)	2019
2020 DCB New Grantee Workshop, National Cancer Institute, Rockville, MD	2020
Advance-CTR Mentoring Training Program	2023

ACADEMIC APPOINTMENTS

Assistant Professor of Medicine (adjunct), Boston University School of Medicine, Department of Internal Medicine, Boston, MA 2012-present

Assistant Professor of Medicine (Research), Warren Alpert School of Medicine of Brown University, Department of Medicine, Providence, RI 2013-2019

Assistant Professor of Medicine, Research Scholar, Warren Alpert School of Medicine of Brown University, Department of Medicine, Providence, RI 2019-2020

Associate Professor of Medicine, Research Scholar, Warren Alpert School of Medicine of Brown University, Department of Medicine, Providence, RI 2020-present

Co-Director of Graduate Studies, Pathobiology Graduate Program at Brown University, Providence, RI 2022-present

Co-leader of Cancer Biology Program at the Legorreta Cancer Center, Brown University Providence, RI 2023-present

HOSPITAL APPOINTMENTS

Head, Signal Transduction Lab, Department of Medicine, Roger Williams Medical Center, Providence, RI 2012-2013

Head, Signal Transduction Lab, Department of Medicine, Rhode Island Hospital, Providence, RI 2013-present

Director of Cellular Profiling, Rhode Island Hospital, Providence, RI 2020-2022

Director of Translational Hematology, Rhode Island Hospital, Providence, RI 2022-present

Vice Chair of the Lifespan Institutional Biosafety Committee (IBC) Rhode Island Hospital, Providence, RI 2022-present

OTHER APPOINTMENTS

Associate editor, *Journal of Translational Medicine* 2017-present

Associate editor, *Frontiers in Oncology* 2019-present

Associate editor, *Cancer Biology & Therapy* 2019-present

Editorial Board, *Cell Communication and Signaling* 2021-present

Editorial Board, *Cellular & Molecular Biology Letters* 2021-present

Ad hoc reviewer, NIH NCI Study Section MCT I February 2019

Ad hoc reviewer, NIH NCI Study Section MCT I June 2020

Ad hoc reviewer, NIH NCI Study Section MCT I February 2021

Regular member, NIH NCI Study Section MCTB since May 2021

Reviewer, <i>Cellular and Molecular Biology Letters</i>	since 2006
Reviewer, <i>Journal of Pediatric Biochemistry</i>	since 2010
Reviewer, <i>Bioorganic & Medicinal Chemistry Letters</i>	since 2011
Reviewer, <i>Journal of Investigative Dermatology</i>	since 2012
Reviewer, <i>International Journal of Molecular Sciences</i>	since 2016
Reviewer, <i>Oncotarget</i>	since 2016
Reviewer, <i>Journal of Translational Medicine</i>	since 2016
Reviewer, <i>Cells</i>	since 2017
Reviewer, <i>Cancers</i>	since 2017
Reviewer, <i>Molecular Oncology</i>	since 2017
Reviewer, <i>Cancer Biotherapy and Radiopharmaceuticals</i>	since 2018
Reviewer, <i>Molecular Cancer Therapeutics</i>	since 2018
Reviewer, <i>Journal of Leukocyte Biology</i>	since 2018
Reviewer, <i>Leukemia</i>	since 2018
Reviewer, <i>Clinical Cancer Research</i>	since 2019
Reviewer, <i>Theranostics</i>	since 2020
Reviewer, <i>Blood</i>	since 2020
Reviewer, <i>Blood Advances</i>	since 2023

Co-director, Novel Therapies in Hematologic Malignancies Symposium, Brown University, Providence, RI, October 2016

Reviewer, Cancer Research Section, New England Science Symposium, Harvard Medical School, Boston, MA, Saturday, April 10th, 2017

Job/chalk talk judge, Young Scholars Conference, Brown University, Providence, RI, October 2017

Co-director, Novel Therapies in Hematologic Malignancies Symposium, Brown University, Providence, RI, October 2017

Panelist, The ISE*CON: Career Conference for International Students, Brown University, Providence, RI, March 11th, 2018

Panelist, Applying to Medical School 101Panel, Brown University, Providence, RI, October 5th, 2018

Job/chalk talk judge, Young Scholars Conference, Brown University, Providence, RI, October 2018

Co-director, Novel Therapies in Hematologic Malignancies Symposium, Brown University, Providence, RI, October 2018

Reviewer, Cancer Research Section, New England Science Symposium, Harvard Medical School, Boston, MA, Saturday, April 10th, 2018

Reviewer, Cancer Research Section, New England Science Symposium, Harvard Medical School, Boston, MA, Saturday, April 8th, 2019

Co-chair, Cancer Session, 2019 Northeast Regional IDeA Conference (NERIC), Dartmouth, Hanover, NH, August 14-16, 2019

Poster judge, Brown University Pathobiology Graduate Program Retreat, August 27th, 2019

Reviewer, Cancer Research Section, New England Science Symposium, Harvard Medical School, Boston, MA, Saturday, April 10th, 2020

Member, Brown University Karen T. Romer Undergraduate Teaching and Research Awards (UTRAs) Review Committee, March 2020

Mentor, Brown University Leadership Alliance Program, July-August, 2020

Reviewer, Cancer Biology Section Pilot Grants, Brown University, October 7th-8th, 2020

Reviewer, COBRE Stem Cells and Aging Pilot Grants, Rhode Island Hospital, December 9th, 2020

Reviewer, Cancer Research Section, New England Science Symposium, Harvard Medical School, Boston, MA, Saturday, April 24th, 2021

Mentor, Brown University Leadership Alliance Program, July-August, 2021

Reviewer, Cancer Research Section, New England Science Symposium, Harvard Medical School, Boston, MA, Saturday, April 29th-30th, 2022

Mentor, Brown University Leadership Alliance Program, July-August, 2022

Mentor, American Society of Hematology, Minority Medical Student Award Program, July 2022-present

Reviewer, Cancer Research Section, New England Science Symposium, Harvard Medical School, Boston, MA, Saturday, April 1st-2nd, 2023

HOSPITAL COMMITTEES

Member, Institutional Biosafety Committee 2014-2022

Vice Chair of the Lifespan Institutional Biosafety Committee (IBC)
Rhode Island Hospital, Providence, RI 2022-present

UNIVERSITY COMMITTEES

Member, *Nelly Valkov* PhD Thesis Committee 2014-2017

Member, *Zachary Willson* PhD Thesis Committee 2015-2018

Elected Member, Brown University Resources Committee 2018-2021

Chair, *Liz Hernandez-Borrero* PhD Thesis Committee 2019-2020

Member, Pathobiology Graduate Program Admission Committee 2019-2020

Member, Brown University Summer Undergraduate Teaching and Research Awards
Selection Committee 2020-2022

Chair, *Kristina Hinman* MD-PhD Thesis Committee 2020-2023

Member, <i>Emily Vistica-Sampino</i> MD, Scholarship Oversight Committee	2020-2022
Member, <i>Samantha Borys</i> PhD Thesis Committee	2021-present
Member, <i>Lindsey Carlsen</i> PhD Thesis Committee	2021-2024
Member, <i>Gabriel Monteiro Da Silva</i> PhD Thesis Committee	2021-present
Member, <i>Kelsey Huntington</i> PhD Thesis Committee	2021-2023
Chair, <i>Kimberly Meza</i> , PhD Thesis Committee	2021-present
Chair, <i>Mai Huynh</i> , PhD Thesis Committee	2021-present
Chair, <i>Ash Uruchurtu</i> , PhD Thesis Committee	2022-present
Member, <i>Noe Mercado</i> , PhD Thesis Committee	2023-present
Member, <i>Andrea Schmidt</i> , PhD Thesis Committee	2023-present
Member, <i>Janet Joseph</i> , PhD Thesis Committee	2024-present
Chair, Pathobiology Graduate program, Diversity and Inclusion Committee	2022-present
Biomed Biostat Task Force	2023

MEMBERSHIP IN SOCIETIES

American Association for Cancer Research	2008-present
Society for Experimental Biology and Medicine	2008-present
American Society for Cell Biology	2009-present
American Association of Immunologists	2011-present
American Society of Hematology	2013-present

ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

* indicates trainee in *Dubielecka* lab

indicates senior authorship

1. **Dubielecka P**, Potoczek S, Jazwiec B, Miloszevska J, Kuliczkowski K, Sikorski AF. The Effect of Chemotherapy with Fluodarabine/Mitoxantrone/Dexamethasone on The Distribution of Spectrin In Lymphocytes of Non-Hodgkin Lymphoma Patients. *Cellular & molecular biology letters*. 2001; 6(2):200. PMID:11544653
2. Zhao H, **Dubielecka PM**, Söderlund T, Kinnunen PK. Interactions of adriamycin, cytochrome c, and serum albumin with lipid monolayers containing poly(ethylene glycol)-ceramide. *Biophysical journal*. 2002; 83(2):954-67. PMID: 12124277, PMCID: PMC1302199
3. **Dubielecka PM**, Stebelska K, Jaźwiec B, Sikorski AF. Cystocyte and lymphocyte derived fusomes/spectrosomes: analogies and differences: a mini-review. *Cellular & molecular biology letters*. 2003; 8(1):221-9. PMID: 12655376
4. Hryniewicz-Jankowska A, Bok E, **Dubielecka P**, Chorzalska A, Diakowski W, Jezierski A, Lisowski M, Sikorski AF. Mapping of an ankyrin-sensitive, phosphatidylethanolamine/phosphatidylcholine mono- and bi-layer binding site in erythroid beta-spectrin. *The Biochemical journal*. 2004; 382(Pt 2):677-85. PMID: 15171729, PMCID: PMC1133825
5. Grzybek M, Kozubek A, **Dubielecka P**, Sikorski AF. Rafts--the current picture. *Folia histochemica et cytobiologica*. 2005; 43(1):3-10. PMID: 15871556
6. **Dubielecka PM**, Jaźwiec B, Potoczek S, Wróbel T, Miłoszevska J, Haus O, Kuliczkowski K, Sikorski AF. Changes in spectrin organisation in leukaemic and lymphoid cells upon chemotherapy. *Biochemical pharmacology*. 2005; 69(1):73-85. PMID: 15588716

7. Stebelska K, **Dubielecka PM**, Sikorski AF. The effect of PS content on the ability of natural membranes to fuse with positively charged liposomes and lipoplexes. *The Journal of membrane biology*. 2005; 206(3):203-14. PMID: 16456715
8. **Dubielecka PM**, Trusz A, Diakowski W, Grzybek M, Chorzalska A, Jaźwiec B, Lisowski M, Jezierski A, Sikorski AF. Mitoxantrone changes spectrin-aminophospholipid interactions. *Molecular membrane biology*. 2006; 23(3):235-43. PMID: 16785207
9. Bok E, Plazuk E, Hryniewicz-Jankowska A, Chorzalska A, Szmaj A, **Dubielecka PM**, Stebelska K, Diakowski W, Lisowski M, Langner M, Sikorski AF. Lipid-binding role of betaII-spectrin ankyrin-binding domain. *Cell biology international*. 2007; 31(12):1482-94. PMID: 17716929
10. **Dubielecka PM**, Cui P, Xiong X, Hossain S, Heck S, Angelov L, Kotula L. Differential regulation of macropinocytosis by Abi1/Hssh3bp1 isoforms. *PLoS one*. 2010; 5(5):e10430. PMID: 20479892, PMCID: PMC2866655
11. **Dubielecka PM**, Grzybek M, Kolondra A, Jaźwiec B, Draga A, Aleksandrowicz P, Kołodziejczyk M, Serwotka A, Dolińska-Krajewska B, Warchoń J, Kuliczkowski K, Sikorski AF. Aggregation of spectrin and PKCtheta is an early hallmark of fludarabine/mitoxantrone/dexamethasone-induced apoptosis in Jurkat T and HL60 cells. *Molecular and cellular biochemistry*. 2010; 339(1-2):63-77. PMID: 20058056
12. **Dubielecka PM**, Machida K, Xiong X, Hossain S, Ogiue-Ikeda M, Carrera AC, Mayer BJ, Kotula L. Abi1/Hssh3bp1 pY213 links Abl kinase signaling to p85 regulatory subunit of PI-3 kinase in regulation of macropinocytosis in LNCaP cells. *FEBS letters*. 2010; 584(15):3279-86. NIHMSID: NIHMS219611 PMID: 20598684, PMCID: PMC2917628
13. **Dubielecka PM**, Ladwein KI, Xiong X, Migeotte I, Chorzalska A, Anderson KV, Sawicki JA, Rottner K, Stradal TE, Kotula L. Essential role for Abi1 in embryonic survival and WAVE2 complex integrity. *Proceedings of the National Academy of Sciences of the United States of America*. 2011; 108(17):7022-7. PMID: 21482783, PMCID: PMC3084068
14. **Dubielecka PM**, Hwynn N, Sengun C, Lee S, Lomas-Francis C, Singer C, Fernandez HH, Walker RH. Two McLeod patients with novel mutations in XK. *Journal of the neurological sciences*. 2011; 305(1-2):160-4. NIHMSID: NIHMS369660 PMID: 21463873, PMCID: PMC3337778
15. Hossain S, **Dubielecka PM**, Sikorski AF, Birge RB, Kotula L. Crk and ABI1: binary molecular switches that regulate abl tyrosine kinase and signaling to the cytoskeleton. *Genes & cancer*. 2012; 3(5-6):402-13. PMID: 23226578, PMCID: PMC3513786
16. Xiong X, Chorzalska A, **Dubielecka PM**, White JR, Vedvyas Y, Hedvat CV, Haimovitz-Friedman A, Koutcher JA, Reimand J, Bader GD, Sawicki JA, Kotula L. Disruption of Abi1/Hssh3bp1 expression induces prostatic intraepithelial neoplasia in the conditional Abi1/Hssh3bp1 KO mice. *Oncogenesis*. 2012; 1:e26. PMID: 23552839, PMCID: PMC3503296
17. Zhang L, Chen B, Zhao Y, **Dubielecka PM**, Wei L, Qin GJ, Chin YE, Wang Y, Zhao TC. Inhibition of histone deacetylase-induced myocardial repair is mediated by c-kit in infarcted

hearts. *The Journal of biological chemistry*. 2012; 287(47):39338-48. PMID: 23024362, PMCID: PMC3501087

18. Michalczyk I, Sikorski AF, Kotula L, Junghans RP, **Dubielecka PM**. The emerging role of protein kinase C θ in cytoskeletal signaling. *Journal of leukocyte biology*. 2013; 93(3):319-27. PMID: 23192428, PMCID: PMC3579025

19. Toporkiewicz M, Grzybek M, Meissner J, Michalczyk I, **Dubielecka PM**, Korycka J, Seweryn E, Sikorski AF. Release of an ~55kDa fragment containing the actin-binding domain of β -spectrin by caspase-8 during FND-induced apoptosis depends on the presence of protein 4.1. *Archives of biochemistry and biophysics*. 2013; 535(2):205-13. PMID: 23578573

20#. Bartos A, **Dubielecka PM#**. The emerging role of Bcr-Abl-induced cytoskeletal remodeling in systemic persistence of leukemic stem cells. *Current drug delivery*. 2014; 11(5):582-91. PMID: 23517626

21#. Chorzalska A*, Salloum I*, Shafqat H*, Khan S*, Marjon P*, Treaba D, Schorl C, Morgan J, Bryke CR, Falanga V, Zhao TC, Reagan J, Winer E, Olszewski AJ, Al-Homsi AS, Kouttab N, **Dubielecka PM#**. Low expression of Abelson interactor-1 is linked to acquired drug resistance in Bcr-Abl-induced leukemia. *Leukemia*. 2014; 28(11):2165-77. NIHMSID: NIHMS574506 PMID: 24699303, PMCID: PMC4185277

22#. Chorzalska A*, **Dubielecka PM#**. New Abelson interactor-1 (Abi-1)-driven mechanism of acquired drug resistance. *Leukemia supplements*. 2014; 3(Suppl 1):S7-8. PMID: 27175273, PMCID: PMC4851279

23. Du J, Zhang L, Wang Z, Yano N, Zhao YT, Wei L, **Dubielecka-Szczerba P**, Liu PY, Zhuang S, Qin G, Zhao TC. Exendin-4 induces myocardial protection through MKK3 and Akt-1 in infarcted hearts. *American journal of physiology. Cell physiology*. 2016; 310(4):C270-83. PMID: 26739490, PMCID: PMC4864970

24. Michalczyk I, Toporkiewicz M, **Dubielecka PM**, Chorzalska A, Sikorski AF. PKC- θ is a negative regulator of TRAIL-induced and FADD-mediated apoptotic spectrin aggregation. *Folia histochemica et cytobiologica*. 2016; 54(1):1-13. PMID: 27094638

25#. Chorzalska A*, Kim JF*, Roder K, Tepper A*, Ahsan N, Rao RSP, Olszewski AJ, Yu X, Terentyev D, Morgan J, Treaba DO, Zhao TC, Liang O, Gruppuso PA, **Dubielecka PM#**. Long-Term Exposure to Imatinib Mesylate Downregulates Hippo Pathway and Activates YAP in a Model of Chronic Myelogenous Leukemia. *Stem cells and development*. 2017; 26(9):656-677. PMID: 28103766, PMCID: PMC5421616

26. Zhang L, Du J, Yano N, Wang H, Zhao YT, **Dubielecka PM**, Zhuang S, Chin YE, Qin G, Zhao TC. Sodium Butyrate Protects -Against High Fat Diet-Induced Cardiac Dysfunction and Metabolic Disorders in Type II Diabetic Mice. *Journal of cellular biochemistry*. 2017; 118(8):2395-2408. NIHMSID: NIHMS845733 PMID: 28109123, PMCID: PMC5462877

27. Lim SH, **Dubielecka PM**, Raghunathan VM. Molecular targeting in acute myeloid leukemia. *Journal of translational medicine*. 2017; 15(1):183. PMID: 28851395, PMCID: PMC5576374

28. Wu KQ, Muratore CS, So EY, Sun C, **Dubielecka PM**, Reginato AM, Liang OD. M1 Macrophage-Induced Endothelial-to-Mesenchymal Transition Promotes Infantile Hemangioma

Regression. *The American journal of pathology*. 2017; 187(9):2102-2111. PMID: 28710904, PMCID: PMC5809337

29. Liang OD, So EY, Egan PC, Goldberg LR, Aliotta JM, Wu KQ, **Dubielecka PM**, Ventetuolo CE, Reginato AM, Quesenberry PJ, Klinger JR. Endothelial to haematopoietic transition contributes to pulmonary arterial hypertension. *Cardiovascular research*. 2017; 113(13):1560-1573. PMID: 29016733, PMCID: PMC5852529

30. Wang H, Zhao YT, Zhang S, **Dubielecka PM**, Du J, Yano N, Chin YE, Zhuang S, Qin G, Zhao TC. Irisin plays a pivotal role to protect the heart against ischemia and reperfusion injury. *Journal of cellular physiology*. 2017; 232(12):3775-3785. NIHMSID: NIHMS851709 PMID: 28181692, PMCID: PMC5550372

31#. Chorzalska A*, Ahsan N, Rao RSP, Roder K, Yu X, Morgan J, Tepper A*, Hines S*, Zhang P, Treaba DO, Zhao TC, Olszewski AJ, Reagan JL, Liang O, Gruppuso PA, **Dubielecka PM#**. Overexpression of Tpl2 is linked to imatinib resistance and activation of MEK-ERK and NF- κ B pathways in a model of chronic myeloid leukemia. *Molecular oncology*. 2018; 12(5):630-647. PMID: 29485707, PMCID: PMC5928369

32. Zhang L, Wang H, Zhao Y, Wang J, **Dubielecka PM**, Zhuang S, Qin G, Chin YE, Kao RL, Zhao TC. Myocyte-specific overexpressing HDAC4 promotes myocardial ischemia/reperfusion injury. *Molecular medicine (Cambridge, Mass.)*. 2018; 24(1):37. PMID: 30134825, PMCID: PMC6050730

33#. Chorzalska A*, Morgan J, Ahsan N, Treaba DO, Olszewski AJ, Petersen M*, Kingston N*, Cheng Y, Lombardo K, Schorl C, Yu X, Zini R, Pacilli A, Tepper A*, Coburn J, Hryniewicz-Jankowska A, Zhao TC, Oancea E, Reagan JL, Liang O, Kotula L, Quesenberry PJ, Gruppuso PA, Manfredini R, Vannucchi AM, **Dubielecka PM#**. Bone marrow-specific loss of *ABI1* induces myeloproliferative neoplasm with features resembling human myelofibrosis. *Blood*. 2018; 132(19):2053-2066. PMID: 30213875, PMCID: PMC6236464

34. Zhang LX, Du J, Zhao YT, Wang J, Zhang S, **Dubielecka PM**, Wei L, Zhuang S, Qin G, Chin YE, Zhao TC. Transgenic overexpression of active HDAC4 in the heart attenuates cardiac function and exacerbates remodeling in infarcted myocardium. *Journal of applied physiology (Bethesda, MD: 1985)*. 2018; 125(6):1968-1978. PMID: 30284520

35. So EY, Sun C, Reginato AM, **Dubielecka PM**, Ouchi T, Liang OD. Loss of lipid phosphatase SHIP1 promotes macrophage differentiation through suppression of dendritic cell differentiation. *Cancer biology & therapy*. 2019; 20(2):201-211. PMID: 30277839, PMCID: PMC6343724

36. Zhao YT, Wang J, Yano N, Zhang LX, Wang H, Zhang S, Qin G, **Dubielecka PM**, Zhuang S, Liu PY, Chin YE, Zhao TC. Irisin promotes cardiac progenitor cell-induced myocardial repair and functional improvement in infarcted heart. *Journal of cellular physiology*. 2019; 234(2):1671-1681. PMID: 30171682

37. Zhao YT, Du J, Yano N, Wang H, Wang J, **Dubielecka PM**, Qin G, Zhang LX, Zhuang S, Liu PY, Chin YE, Zhao TC. PRAK plays a pivotal role in protecting the heart against ischemia/reperfusion injury and myocardial infarction. *Am J Physiol Cell Physiol*. 2019 Jul 10. doi: 10.1152/ajpcell.00122.2019. PubMed PMID: 31291142.

38. Olszewski AJ, Chorzalska AD*, Kim AS, Quesenberry PJ, Lopresti ML, Fenton MA, Reagan JL, Butera JN, Sahin I, Hamel C, Robison J, Petersen M*, **Dubielecka PM**. Clonal haematopoiesis of indeterminate potential among cancer survivors exposed to myelotoxic chemotherapy. *British journal of haematology*. 2019; PMID: 30859554
39. So EY, Sun C, Wu KQ, Driesman A, Leggett S, Isaac M, Spangler T, **Dubielecka-Szczerba PM**, Reginato AM, Liang OD. Lipid phosphatase SHIP-1 regulates chondrocyte hypertrophy and skeletal development. *J Cell Physiol*. 2020 Feb;235(2):1425-1437. doi: 10.1002/jcp.29063. Epub 2019 Jul 9. PubMed PMID: 31287165; PubMed Central PMCID: PMC6879780.
40. Yano N, Zhang L, Wei D, **Dubielecka PM**, Wei L, Zhuang S, Zhu P, Qin G, Liu PY, Chin YE, Zhao TC. Irisin counteracts high glucose and fatty acid induced cytotoxicity by preserving AMPK-insulin receptor signaling axis in C2C12 myoblast. *Am J Physiol Endocrinol Metab*. 2020 Mar 17. doi: 10.1152/ajpendo.00219.2019. PubMed PMID: 32182124.
41. Wang J, Zhao YT, Zhang L, **Dubielecka PM**, Zhuang S, Qin G, Chin YE, Zhang S, Zhao TC. Irisin Improves Myocardial Performance and Attenuates Insulin Resistance in Spontaneous Mutation (*Leprdb*) Mice. *Front Pharmacol*. 2020 Jun 3;11:769. doi: 10.3389/fphar.2020.00769. PMID: 32581784; PMCID: PMC7283381.
42. Ollila TA, Kurt H, Waroich J, Vatkevich J, Sturtevant A, Patel NR, **Dubielecka PM**, Treaba DO, Olszewski AJ. Genomic subtypes may predict the risk of central nervous system recurrence in diffuse large B-cell lymphoma [published online ahead of print, 2020 Sep 2]. *Blood*. 2020, doi:10.1182/blood.2020007236
43. So EY, Jeong EM, Wu KQ, **Dubielecka PM**, Reginato AM, Quesenberry PJ, Liang OD. Sexual dimorphism in aging hematopoiesis: an earlier decline of hematopoietic stem and progenitor cells in male than female mice. *Aging (Albany NY)*. 2020 Dec 9;12(24):25939-25955. doi: 10.18632/aging.202167. Epub 2020 Dec 9.
44. Pando A, Fast LD, **Dubielecka PM**, Chorzalska A*, Wen S, Reagan JL. Murine Leukemia Derived Extracellular Vesicles Elicit Antitumor Immune Response. *J Blood Med*. 2021 May 17;12:277-285. doi: 10.2147/JBM.S308861. eCollection 2021. PMID: 34040472
45. Olszewski A, Chorzalska A*, Petersen M*, Ollila T, Zayac A, Kurt H, Treaba T, Reagan J, Hsu A, Egan P, Butera J, Niroula R, Vatkevich J, Robison J, Sahin I, Jacob A, Mullins C, **Dubielecka PM**. Detection of clonotypic DNA in the cerebrospinal fluid as a marker of central nervous system invasion in lymphoma. *Blood Advances*. *Blood Adv*. 2021 Sep 22;bloodadvances.2021004512. doi: 10.1182/bloodadvances.2021004512. Online ahead of print.
46. Zhang L, Wang J, Zhao YT, **Dubielecka P**, Qin G, Zhuang S, Chin EY, Liu PY, Zhao TC. Deletion of PRAK Mitigates the Mitochondria Function and Suppresses Insulin Signaling in C2C12 Myoblasts Exposed to High Glucose. *Front Pharmacol*. 2021 Oct 4;12:698714. doi: 10.3389/fphar.2021.698714. eCollection 2021. PMID:34671252
47. So EY, Sun C, Wu KQ, **Dubielecka PM**, Reginato AM, Liang OD. Inhibition of lipid phosphatase SHIP1 expands myeloid-derived suppressor cells and attenuates rheumatoid arthritis in mice. *Am J Physiol Cell Physiol*. 2021 Sep 1;321(3):C569-C584. doi: 10.1152/ajpcell.00433.2020. Epub 2021 Jul 21. PMID:34288720

48. Cohen JT, Danise M, Hinman KD, Neumann BM, Johnson R, Wilson ZS, Chorzalska A, **Dubielecka PM**, Lefort CT. Engraftment, Fate, and Function of HoxB8-Conditional Neutrophil Progenitors in the Unconditioned Murine Host. *Front Cell Dev Biol.* 2022 Jan 20;10:840894. doi: 10.3389/fcell.2022.840894. PMID:35127689
49. Jeong EM, Pereira M, So EY, Wu KQ, Del Tatto M, Wen S, Dooner MS, **Dubielecka PM**, Reginato AM, Ventetuolo CE, Quesenberry PJ, Klinger JR, Liang OD. Targeting RUNX1 as a novel treatment modality for pulmonary arterial hypertension. *Cardiovasc Res.* 2022 Jan 9:cvac001. doi: 10.1093/cvr/cvac001. PMID:35018410
- 50#. Treaba DO, Bonal DM*, Chorzalska A*, Oakes A*, Pardo M*, Petersen M*, Schorl C, Hopkins K, Melcher D, Zhao TC, Liang O, So EY, Reagan JR, A Olszewski AJ, Butera J, Anthony DC, Rintels P, QuesenberryPJ, **Dubielecka PM#**. Transcriptomics of AML core bone marrow biopsies reveals distinct therapy response-specific osteo-mesenchymal profiles. *British Journal of Haematology.* 2022 Nov 10. doi: 10.1111/bjh.18513.
- 51#. Vistica Sampino E*. , Morgan J., Chorzalska A*. , Nguyen L. *, Yu C. , Rodriguez A. *, Bonal, D. *, Kim M., De Vito R., Lulla RR., **Dubielecka PM#**. Comparative flow cytometry-based immunophenotyping analysis of peripheral blood leukocytes before and after fixation with paraformaldehyde. *Journal of Immunological Methods* 2022 Dec;511:113379. doi: 10.1016/j.jim.2022.113379. Epub 2022 Oct 21. PMID: 36279962
- 52#. Petersen M*, Chorzalska A*, Pardo M*, Rodriguez A*, Morgan J, AhsanN, Zhao T, Liang O, Kotula L, Gruppuso PA, **Dubielecka PM#**. Proximity proteomics reveals new roles of Abelson interactor 1 in TNFalpha/TAK1/IKK signaling. *Mol Oncol.* 2023 Jan 12. doi: 10.1002/1878-0261.13374. Online ahead of print. PMID: 36635880
- 53#. Oh A*, Pardo M*, Rodriguez A*, Yu C*, Nguyen L*, Liang O, Chorzalska A*, **Dubielecka PM#**. NF- κ B Role in Epithelial to Mesenchymal Transition in Cancer. *Cell Communication and Signaling* *Accepted*
54. Baggett BC, Murphy KR, Sengun E, Mi E, Cao Y, Turan NN, Lu Y, Schofield L, Kim TY, Kabakov AY, Bronk P, Qu Z, Camelliti P, **Dubielecka P**, Terentyev D, Del Monte F, Choi BR, Sedivy J, Koren G. Myofibroblast senescence promotes arrhythmogenic remodeling in the aged infarcted rabbit heart. *Elife.* 2023 May 19;12:e84088. doi: 10.7554/eLife.84088.
- 55#. Oakes A*, **Dubielecka PM#**. Complement or Insult: the emerging link between complement cascade deficiencies and pathology of myeloid malignancies. *In revision*
- 56#. Petersen M*, **Dubielecka PM#**. Adaptor protein Abelson interactor 1 in homeostasis and disease. *In revision*
57. Wang L, Kulthinee S, Slate-Romano J, Zhao T, Shanmugam H, **Dubielecka PM**, Zhang LX, Qin G, Zhuang S, Chin YE, Zhao TC. Inhibition of integrin alpha v/beta 5 mitigates the protective effect induced by irisin in hemorrhage. *Exp Mol Pathol.* 2023 Dec;134:104869. doi: 10.1016/j.yexmp.2023.104869. Epub 2023 Sep 27. PMID: 37690529
58. Siamwala JH, Pagano FS, **Dubielecka PM**, Ivey MJ, Guirao-Abad JP, Zhao A, Chen S, Granston H, Jeong JY, Rounds S, Kanisicak O, Sadayappan S, Gilbert RJ. IL-1 β -mediated adaptive reprogramming of endogenous human cardiac fibroblasts to cells with immune

features during fibrotic remodeling. *Commun Biol.* 2023 Nov 25;6(1):1200. doi: 10.1038/s42003-023-05463-0.PMID: 38001239

PUBLICATIONS SUBMITTED OR IN PREPARATION

58#. Sadler B, Chorzalska A*, Bonal D*, Haller G, Liu Y, Oakes A*, Zhu V*, Petersen M*, Olszewski A, Reagan J, Treaba D, Simon-Ponte, Hobbs G, Uzun E, Oh S, Di Paola J, **Dubielecka PM#**. Whole Genome Sequencing Identifies Mutation in Complement Factor I (CFI) in Primary Myelofibrosis (PMF). *In preparation for submission*

59#. Chorzalska A*, Simon-Ponte D, Morgan J, Treaba DO, Olszewski AJ, Petersen M*, Bonal D*, Reagan JL, Liang O, **Dubielecka PM#**. Abelson interactor-1 deficiency regulates engraftment of hematopoietic stem cells and development of myeloproliferative disorder in mice. *In preparation for submission*

60#. Chorzalska A*, Bonal D*, Petersen M*, Olszewski A, Reagan J, Olilla T, Eagan P, Barth P, Butera J, Niroula R, Quesenberry M, Treaba D, Hobbs G, **Dubielecka PM#**. Transcriptomic profiling reveals gain of leptin receptor and loss of insulin receptor signaling in CML stem cells. *In preparation for submission*

SCHOLARLY WORK PUBLISHED IN OTHER MEDIA

Bio-Med Program Helps Mentor Young Minds

<http://www.ny1.com/content/122345/bio-med-program-helps-mentor-young-minds?ap=1&MP4>
07/19/2010 06:42 PM

INVITED ORAL PRESENTATIONS (selected)

REGIONAL

1. Brown University School of Medicine, Division of Hematology/Oncology, Grand Rounds, May, 7th, 2012, talk entitled: 'Downregulation of Abi1 is associated with drug resistance phenotype of CML cells and their increased aggressiveness'
2. Boston University School of Medicine, Hematology/Oncology, Grand Rounds, October 4th, 2012, talk entitled: 'Mechanisms of increased aggressiveness of TKI-refractory Bcr-Abl positive leukemias'
3. The North East Regional IDeA Conference August 16-18, 2017, Burlington, Vermont, 'Beyond JAK/STAT: Signaling Pathways Contributing to the Pathogenesis of Myeloproliferative Neoplasm', featured speaker
4. 2018 Rhode Island Idea Symposium, June 8th, 2018, 'Loss of Abelson interactor-1 is linked to accelerated aging of hematopoietic system and malignant transformation'
5. 2019 Northeast Regional IDeA Conference, August 14-16, 2019, Omni Mount Washington Bretton Woods, New Hampshire, 'Beyond JAK/STAT: new inflammatory disease drivers that contribute to malignant transformation of hematopoietic stem cells and development of myeloproliferative neoplasm'
6. Cancer Biology Group Meeting, Brown University, November 8th, 2019, 'Inflammation and Myeloproliferative Neoplasms'
7. Hematological Malignancies Cancer Translational Research Disease Group (TRDG) Meeting, Brown University, March 11th, 2020 'Inflammation in the pathogenesis of myeloproliferative neoplasms'

8. Cancer Biology Group Meeting, Brown University, July 24th, 2020, 'New Determinants in the Pathogenesis of Myeloproliferative Neoplasms'
9. Hematology/Oncology Grand Rounds, October 15th 2020, 'The Tole of the Complement System in Cancer'.
10. Hematology/Oncology Division Meeting 'High-throughput Cellular Profiling of Oncological Samples – Institutional Initiative', November 5th, 2020
11. Molecular and Cellular Biology Graduate Program at Brown University, 'Inflammaging and Cancer', February 24th, 2021
12. COBRE Center for Stem Cells and Aging Program scientific meeting guest speaker. Rhode Island Hospital, Providence, RI. September 13th, 2021. "TurboID-based proximity labeling identifies roles of Abelson Interactor 1 in centrosome function and inflammatory signaling"
13. COBRE Center for Stem Cells and Aging Program scientific meeting guest speaker. Rhode Island Hospital, Providence, RI. October 11th, 2021. "Elucidating the role of non-hematopoietic bone marrow cells in presence of the JAK2V617F mutant disease clone"
14. Providence Area Aging Research Forum (PAARF). October 18th, 2021. "TurboID-based proximity labeling identifies roles of Abelson Interactor 1 in centrosome function and inflammatory signaling"
15. Cardiovascular Research Center (CVRC) data club guest speaker. February 23rd, 2022. "TurboID-based proximity labeling identifies roles of Abelson Interactor 1 in centrosome function and inflammatory signaling"
16. COBRE Center for Stem Cells and Aging Program scientific meeting guest speaker. March 21st, 2022 "Whole Genome Sequencing Identifies a Recurrent Mutation in Complement Factor I (CFI) in Primary Myelofibrosis (PMF)."
17. Pathobiology Journal club. April 26th, 2022 "Elucidating the role of non-hematopoietic bone marrow cells in presence of the JAK2V617F mutant disease clone".
18. Molecular Biology of Aging Training Program Retreat Saturday, October 29, 2022. "Aging, chronic inflammation and myeloproliferative neoplasms"
19. Cancer Biology Program Retreat February 23, 2023, "Aging, chronic inflammation and myeloproliferative neoplasms"

NATIONAL

1. Stem Cell Biology and Myeloproliferative Disorders Conference, Brown University Medical School, Providence, RI, 2014 'New Candidate Mechanism of Chemoresistance in Leukemic Stem Cells'
2. Myeloid Malignancies Symposium, Brown University Medical School, Providence, RI, April 6th, 2016, talk entitled: 'New Signaling Mechanisms in Myelofibrosis'
3. Therapies for Myeloid Malignancies Symposium, Brown University Medical School, Providence, RI, September 15th, 2017, 'Beyond JAK/STAT: Signaling Pathways Contributing to the Pathogenesis of Myeloproliferative Neoplasm'
4. Novel Therapies in Hematologic Malignancies Symposium, Brown University Medical School, Providence, RI, October 12th, 2018 'Role of accelerated aging of hematopoietic system in malignant transformation'
5. Department of Microbiology, Biochemistry, and Molecular Genetics, Rutgers New Jersey Medical School, September 23rd, 2019 'Signaling at the Crossroads: from Inflammaging to Cancer'
6. Department of Hematology/Oncology, Washington University Medical School in St. Louis. October 18th, 2019. 'Non-canonical immunomodulatory signaling in myeloproliferative neoplasms'
7. State University of New York, 'Signaling at the Crossroads: from Inflammaging to Cancer', December 16th, 2020

8. Boston University Medical School, 'Role of Inflammation in pathogenesis of Myeloproliferative Neoplasms' March 25th, 2021
9. Keystone Symposia on *Hematopoiesis*, February 25-29, 2024, in Keystone, CO, USA; presenter PhD Student Makayla Pardo: First 10x Spatial Transcriptomics of Human AML Core Bone Marrow Biopsies Reveals the Complex Remodeling of the Non-Hematopoietic Stromal Microenvironment Post-Treatment

INTERNATIONAL

1. Emerging Pathways in Cytoskeletal Communication Conference, University of Umea, Umea, Sweden, 2004, talk entitled: "The Effect of Chemotherapy with Fludarabine/Mitoxantrone/Dexamethasone on the Distribution of Spectrin in Lymphocytes of Non-Hodgkin Lymphoma Patients'
2. Charles University in Prague, Faculty of Medicine in Hradec Kralove, Department of Medical Biology and Genetics, Hradec Kralove, Czech Republic, 2005, talk entitled: 'Changes in spectrin organization in leukemic and lymphoid cells upon chemotherapy'
3. Helmholtz Center for Infectious Research, Braunschweig, Germany, 2008, talk entitled: 'Differential regulation of macropinocytosis by Abi1/Hssh3bp1 isoforms'
4. Max-Planck Institute of Molecular Cell Biology and Genetics Symposium, 30 May – 1 June 2011, Königstein (Saxon Switzerland), Germany, talk entitled 'Abelson interactor 1 in Bcr-Abl signaling'
5. 2016 American Society of Hematology Meeting, Chicago, IL, September 15-16, 2016, talk entitled: 'Bone marrow-specific loss of ABI1 induced myelofibrosis through a mechanism involving activation of NF-κB'
6. Scientific Workshop on Myeloid Development at the 58th American Society of Hematology Annual Meeting, San Diego, CA. December 3-6, 2016, talk entitled: 'Bone marrow-specific loss of ABI1 induced myelofibrosis through a mechanism involving activation of NF-κB'
7. 58th American Society of Hematology Annual Meeting, San Diego, CA. December 3-6, 2016, oral abstract entitled: 'Bone marrow-specific loss of ABI1 induced myelofibrosis through a mechanism involving activation of NF-κB'
8. 63rd American Society of Hematology Annual Meeting, Atlanta Georgia, Friday Scientific Workshop on Germline Predisposition to hematopoietic malignancies and Bone marrow failure Dec 10th, 2021, talk entitled: 'Whole Genome Sequencing Identifies a recurrent Mutation in Complement Factor I (CFI) in Primary Myelofibrosis (PMF)'
9. 2nd Annual Marie Sklodowska-Curie Symposium on Cancer Research and Care, September 8-10, 2022, talk entitled: 'Complement as a Chronic Inflammation Modulator in Myeloproliferative Neoplasms'

GRANTS

CURRENT SUPPORT

NIH/NIGMS P20GM145500 (Quesenberry, Dubielecka)
 'Stem Cells and Aging'. Pilot Projects Program
 Role: Project Director

07/01/2023-06/30/2028

NIH/NCI R01CA218079 (Dubielecka) 07/01/2019-06/30/2024
 'The role of Abelson interactor 1 (Abi-1) in hematopoietic stem cell self-renewal and malignant transformation'

NIH/NCI 3R01CA218079-02W1 (Dubielecka) 09/01/2020-06/30/2024
 'The role of Abelson interactor 1 (Abi-1) in hematopoietic stem cell self-renewal and malignant transformation' DIVERSITY SUPPLEMENT

Legorreta Cancer Center Pilot Grant 04/01/2022-12/31/2024
 'The role of complement system in the pathogenesis of myeloproliferative neoplasms'

NIH/NIGMS P20GM119943 (Quesenberry, Dubielecka) 07/01/2017-06/30/2024 (NCE)
 'Stem Cells and Aging'. Project 1: 'Interrogating the Role of Abelson Interactor 1 in Age-Related Myelofibrosis.'
 Role: Project Leader

COMPLETED SUPPORT

NIH/NCRR P20RR018757 (Falanga, Dubielecka) 01/01/2012-04/01/2013
 'Role of Abi1 in retention of quiescent drug-resistant leukemic stem cells in the bone marrow niche'
 Role: Project Leader

Rhode Island Foundation No. 20133980, (Dubielecka) 03/01/2014-08/31/2015
 'New mechanism of chemoresistance in leukemic stem cells'

Brown Biomed Division DEANS Award (Dubielecka, Oancea) 07/31/2015-12/31/2016
 'New mechanisms of Chemoresistance in Leukemic Stem Cells'

NIH/NIGMS P30GM110759 (Ramratnam) 10/01/2015-04/30/2017
 'Interrogating the druggable targets in the Abelson interactor 1 signaling network'
 Role: Pilot project PI

NIH/NHLBI T32HL116249 (Quesenberry) 08/01/2013 – 7/31/2018
 Hematology Post-Doctoral Training
 Role: Mentor

NIH/NIGMS U54GM115677 (Olszewski) 10/01/2017-09/30/2018
 'Clonal hematopoiesis in recipients of myelotoxic therapy for solid tumors.'
 Role: Pilot project Co-I

Lura Cook Hull Trust Award (Dubielecka) 01/01/2021-12/31/2022
 'Role of complement in pathobiology of myeloproliferative neoplasms.'

Brown Physician C-TRI Award (Dubielecka) 01/01/2022-06/30/2022
 'Role of complement in pathobiology of myeloproliferative neoplasms.'

PATENTS

1. U.S. Provisional Patent Application No. 61/357,475, Regulation of macropinocytosis by p85-Abi1
2. Polish National Patent Office: Patent No. P.382191 “Fast Chemotherapy Efficiency Test with Spectrin Involvement”

UNIVERSITY TEACHING, ADVISING AND MENTORING ROLES

UNIVERSITY OF WROCLAW, DEPARTMENT OF BIOTECHNOLOGY, WROCLAW, POLAND

Teaching role

- 2001-2002 Instructor, *Cell Biology: Apoptosis*. University of Wroclaw, Department of Biotechnology, Wroclaw, Poland, ~100 undergraduate students, 85h per year
- 2002-2003 Instructor, *Cell Biology: Immunochemistry*. University of Wroclaw, Department of Biotechnology, Wroclaw, Poland, ~100 undergraduate students, 85h per year
- 2003-2004 Instructor, *Biochemistry: Lipids*. University of Wroclaw, Department of Biotechnology, Wroclaw, Poland, ~100 undergraduate students, 85h per year
- 2004-2005 Instructor, *Biochemistry Sugars*. University of Wroclaw, Department of Biotechnology, Wroclaw, Poland, ~100 undergraduate students, 85h per year

LINDSLEY F. KIMBALL RESEARCH INSTITUTE, NEW YORK BLOOD CENTER, NEW YORK

- 2008-2011 Instructor, New York Blood Center Research Internship Program

BROWN UNIVERSITY, PROVIDENCE, RI

Advising/mentoring role

1. POSTDOCTORAL TRAINEES

2012-present Dr. Anna Chorzalska

2023-present Dr. Max Petersen

2. GRADUATE STUDENTS

2014-2015 Jasmina Suko, M.Sc. student, Brown University Pathobiology Master in Science Program

2018-2023 Max Petersen, Ph.D. student, MPP Graduate Program, Brown University

2020-present Dennis Bonal, Ph.D. student, Pathobiology Graduate Program, Brown University

2020-present Alissa Oakes, PhD. student, MPP Graduate Program, Brown University

2021-present Makayla Pardo, Ph.D. student, Pathobiology Graduate Program, Brown University

3. UNDERGRADUATE STUDENTS

Within 1950/1960 Biology course, Brown University

2013-2014 Dixon Johns

2013-2014 Katharine Groetzing

2013-2014 Basem Awad

2013-2014 Jasmina Suko

2013-2015 Javier Flores Kim,

- Honors Thesis
- Recipient of Undergraduate Teaching and Research Award

2013-2015 Nathan Kingston

- Honors Thesis
- Recipient of Undergraduate Teaching and Research Award

2014-2016 Jovita Byemerwa

- Recipient of Dana Farber Cancer Institute best poster award at the New England Science Symposium
- Oral presentation and travel award at the International Student Congress of (bio)Medical Sciences in 2016 at the University of Groningen in Netherlands

2015-2018 Steven Hines

- Recipient of Undergraduate Teaching and Research Award

2015-2018 Alex Tepper

- Honors Thesis
- Recipient of Undergraduate Teaching and Research Award

2018-2019 Valerie Zhu

- Honors Thesis

2019-2020 Youkie Shiozawa

2019-2020 Kristina Shum

2019-2022 Anaelena Rodriguez

2019-2022- Connie Yu

2019-2022t Lisa Nyugen (Summer UTRA recipient)

- Honors Thesis

2020-present Amy Oh

2020 summer Leadership Alliance Program - Kyra Robinson

2021 summer Leadership Alliance Program – Damali Simon-Ponte

2022 summer Leadership Alliance Program – Valeria Brown

2022-2023 Zoe Creane

2022-2023 Diego Rodriguez

2022-present Seo-Ho Lee

2023-present Michael Clarke

2024-present Gerardo Santizo

Teaching role

2016-2017 Co-director, *Cancer Biology 1290*, Brown University/Pfizer, ~ 30 undergraduate/graduate students, 18h

2019 Guest lecturer, *Cancer Biology 1290*, Brown University, ~50 graduate students, 2h

2022-2023 Co-director, *Cancer Biology 1290*, Brown University/Pfizer, ~ 30 undergraduate/graduate students, 18h

HOSPITAL TEACHING, ADVISING AND MENTORING ROLES

ROGER WILLIAMS MEDICAL CENTER/BOSTON UNIVERSITY SCHOOL OF MEDICINE

2012-2013 Mentor, 84h per year, RWMC residents:

- Dr. Ibrahim Salloum
- Dr. Sunil Swami

2012-2013 Mentor, 84h per year, RWMC fellows:

- Dr. Philip Marjon

RHODE ISLAND HOSPITAL/ALPERT MEDICAL SCHOOL OF BROWN UNIVERSITY

2020-present RIH Department of Pediatrics fellow:

- Dr. Emily Vistica-Sampino
- Dr. Caitlin Fogarty