

CURRICULUM VITAE

(Updated February 20, 2024)

BIOGRAPHICAL

Name:	Douglas William Chew	Birth Date:	April 1, 1970
Home Address:	1039 Sunview Avenue Jeannette, PA 15644	Birth Place:	Greensburg, PA
Cell Phone:	724-875-2037	Citizenship:	United States
		E-Mail:	doug@votechew4you.com
Clearances:	Current PA Child Abuse; PA Criminal History; FBI Background.		

EDUCATION and TRAINING

UNDERGRADUATE:

1992	University of Pittsburgh Pittsburgh, PA	B.S./1992	Biochemistry/ Biophysics/Chemistry
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HIGH SCHOOL:

1988	Hempfield Area Senior High School Greensburg, PA 10 th in class of 732; all AP and Honors coursework	Honors/1988	College Prep
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APPOINTMENTS and POSITIONS

PUBLIC OFFICE:

2020 - present	Westmoreland County 2 North Main Street Greensburg, PA 15601	Commissioner Elected 2019, 2023
2010 - 2015	Hempfield Township	Auditor

ACADEMIC:

2010 - 2018	University of Pittsburgh School of Medicine Department of Medicine Division of Rheumatology and Clinical Immunology Pittsburgh, PA	Instructor of Medicine
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2009 - 2014	Community College of Allegheny County North Campus Department of Sciences Pittsburgh, PA	Adjunct Instructor of Sciences
Summer 2005	The Princeton Review Pittsburgh Office Graduate Exams Pittsburgh, PA	Interim Director of Graduate Exams MCAT Instructor Certified in Biological Sciences, Organic Chemistry, and Physics
2004 - 2010	University of Pittsburgh School of Medicine Department of Surgery Pittsburgh, PA	Instructor of Surgery
2003 - 2009	The Princeton Review Pittsburgh Office Graduate Exams Pittsburgh, PA	MCAT Instructor Certified in Biological Sciences, Organic Chemistry, and Physics
2001 - 2012	Community College of Allegheny County Allegheny Campus Department of Chemistry and Physics Department of Biology and Biotechnology Pittsburgh, PA	Adjunct Instructor of Chemistry and Physics Adjunct Instructor of Biology
1993 - 2010	Westmoreland County Community College Youngwood Campus Department of Science and Technology Youngwood, PA	Adjunct Instructor of Sciences
1992 - 2004	University of Pittsburgh Faculty of Arts and Sciences College of Arts and Sciences Department of Biological Sciences Pittsburgh, PA	Instructor of Biology

NON-ACADEMIC:

1994 – 1995	Ground Round Restaurant	Dishwasher; Host
1991 - 1992	University of Pittsburgh College of Arts and Sciences Department of Biological Sciences Laboratory of Dr. Donald B. DeFranco, PhD Pittsburgh, PA Studied the role of steroid hormones and oncogenes in the regulation of gonadotropin releasing hormone gene expression	Research Technician

1990 - 1992 University of Pittsburgh Research Technician
Katz Graduate School of Business
Laboratory of Dr. Audrey J. Murrell, PhD
Pittsburgh, PA
Mainframe data analysis; data coding

1988 - 1990 Hempfield Area School District Judge
Judge, National Forensics League
Judged high school students in extemporaneous
and impromptu speaking tournaments

1981 - 2022 Family Dairy Farm Various
Worked all positions for many summers and
throughout the year until 1992; after 1992, as
needed to relieve family

OTHER TRAINING:

2023 Boy Scouts of America, adult leader training

2022 Forensic Conference, with re-entry simulation, CBHTF of CCAP

2022-2023 County Commissioners Association of Pennsylvania, Spring Conference 2022, 2023

2021 County Commissioners Association of Pennsylvania, Summer Conference 2021, 2023

2020 Pennsylvania State Association of Boroughs, Certificate in Community Planning

2019-2022 County Commissioners Association of Pennsylvania, Fall Conference 2019, 2021, 2022,
2023

2019 C.R.A., Certified Research Administrator

2019 C.C.R.P., Certified Clinical Research Professional

2017 Certificate in Clinical Research/Clinical Trials
National Council of University Research Administrators (NCURA)

2003 - 2018 Research Education Modules Certified in all areas
University of Pittsburgh

2003 Communication-across-the-Curriculum Faculty Participant
Seminar Series for Faculty
University of Pittsburgh
College of Arts and Sciences

MEMBERSHIPS in PROFESSIONAL and SCIENTIFIC SOCIETIES

2023 – present	Cub Scouts, Adult Leader, Pack 464, Westmoreland-Fayette Council
2023 – present	Forbes Trail Trout Unlimited
2023 – present	Five Star Trail Commission-RTC (lifetime membership)
2021 – present	Sewickley Creek Watershed Association
2020 – present	County Commissioners Association of Pennsylvania (CCAP)
2020 – present	Jacob’s Creek Watershed Association
2019 – present	National Rifle Association
2019 – present	Firearms Owners Against Crime (FOAC)
2017 – present	National Council of University Research Administrators (NCURA)
2009 - 2010	Biomedical Engineering Society (BMES)
2008 - 2010	North American Vascular Biology Organization (NAVBO)
2008 - 2010	Society for Physical Regulation in Biology and Medicine (SPRBM)
2006 - 2008	New York Academy of Sciences
2005 - present	Center for Vascular Remodeling and Regeneration (CVRR)
1999 - 2006	Association for Biology Laboratory Education (ABLE)

HONORS

Adjunct Teaching Excellence Award Nominee, CCAC	2008, 2009, 2010, 2013
CCAC Biotechnology Steering Committee	2005-present
Who’s Who in Science and Engineering	2004
Bellet Teaching Excellence Award Finalist, University of Pittsburgh	2003
Chancellor’s Distinguished Teaching Award Nominee, University of Pittsburgh	2003
SGB Faculty Honor Roll Award, University of Pittsburgh	2000
Chancellor’s Distinguished Public Service Award, University of Pittsburgh	1999
Dean’s Honor List, University of Pittsburgh (various)	1991-1992
Provost Scholar, University of Pittsburgh	1988-1992
Honors College, University of Pittsburgh	1988-present
1 st place-Extemporaneous Speaking, National Forensics League	1988

PUBLICATIONS

REFEREED ARTICLES:

1. Brennan EP, Reing J, **Chew DW**, Myers JM, Young EJ, Badylak SF. Antibacterial Activity within Degradation Products of Biological Scaffolds Composed of Extracellular Matrix. *Tissue Engineering*, **12**:10, 2949-2955, 2006. PMID: 17518662; <http://www.ncbi.nlm.nih.gov/pubmed/17518662>
2. VanEpps JS, **Chew DW**, Vorp DA. Effects of Cyclic Flexure on Endothelial Permeability and Apoptosis in Arterial Segments Perfused Ex Vivo, *J Biomech Eng* **131**(10):101005, 2009. PMID: 19831475; <http://www.ncbi.nlm.nih.gov/pubmed/19831475>
3. Maul TM, **Chew DW**, Nieponice A, Vorp DA. Mechanical stimuli differentially control stem cell behavior: morphology, proliferation, and differentiation. *Biomech Model Mechanobiol*, **10**(6):939-953, 2011. PMID: 21253809; <http://www.ncbi.nlm.nih.gov/pubmed/21253809>
4. Haworth DJ, Kitta T, Morelli B, **Chew DW**, Yoshimura N, de Groat WC, Vorp DA. Strain-Dependent Urethral Response. *NeuroUrol Urodyn*, **30**(8):1652-1658, 2011. PMID: 21826722; <http://www.ncbi.nlm.nih.gov/pubmed/21826722>
5. Patel AM, Lupash D, **Chew D**, Levesque MC, Moreland LW. Cost-effectiveness of biologics compared with disease-modifying antirheumatic drugs in rheumatoid arthritis. *Curr Rheumatol Rep*. **13**(5):381-382, 2011. PMID: 21755323; <http://www.ncbi.nlm.nih.gov/pubmed/21755323>
6. Patel AM, Lupash D, **Chew D**, Levesque MC, Moreland LW. Inhibition of spleen tyrosine kinase for rheumatoid arthritis. *Curr Rheumatol Rep*. **13**(5):377-378, 2011. PMID: 21748415; <http://www.ncbi.nlm.nih.gov/pubmed/21748415>
7. Patel AM, Lupash D, **Chew D**, Levesque MC, Moreland LW. JAK inhibition in rheumatoid arthritis. *Curr Rheumatol Rep*. **13**(5):379-380, 2011. PMID: 21728017; <http://www.ncbi.nlm.nih.gov/pubmed/21728017>
8. Pichamuthu JE, Phillippi JA, Cleary DA, **Chew DW**, Hempel J, Vorp DA, Gleason TG. Differential Tensile Strength and Collagen Composition in Ascending Aortic Aneurysms by Aortic Valve Phenotype. *Ann Thorac Surg*. **96**(6):2147-2154, 2013. PMID :24021768; <http://www.ncbi.nlm.nih.gov/pubmed/24021768>.

REFEREED ABSTRACTS:

1. Nieponice A, Maul TM, Soletti L, **Chew DW**, Vorp, DA, "The Effect of Cyclic Stretching on Rat Bone Marrow Derived Progenitor Cells within a Three-Dimensional Fibrin Matrix," Regenerate 2005 Conference, Atlanta, GA, June 2005.
2. Vorp DA, **Chew DW**, Makaroun MS, "Association of Biophysical Forces with Impaired Abdominal Aortic Aneurysm (AAA) Wall Remodeling," BMES 2005 Annual Meeting, Baltimore, MD, October 2005.
3. Maul TM, Nieponice A, Kontos DA, **Chew DW**, Vorp DA, "Differential Dose-Response of Bone Marrow Progenitor Cells to Mechanical Stimuli," SPBRM 24th Scientific Conference, Cancun, Mexico, January 2006.
4. Haworth DJ, **Chew DW**, Yoshimura N, Chancellor MB, Vorp DA, "Urethral Augmentation: A Tissue Engineering Approach," SPBRM 24th Scientific Conference, Cancun, Mexico, January 2006.

5. Maul T, Nieponice A, Kontos D, **Chew D**, Vorp D, "Differential Dose-Response of Bone Marrow Progenitor Cells to Mechanical Stimuli," ISACB 2006, La Jolla, CA, March 2006. (oral presentation)
6. Maul T, Nieponice A, Kontos D, **Chew D**, Vorp D, "Differential Dose-Response of Bone Marrow Progenitor Cells to Mechanical Stimuli," World Congress of Tissue Engineering, Pittsburgh, April 2006.
7. Haworth D, Dulabon R, **Chew D**, Prantil R, Yoshimura N, Chancellor M, Vorp D, "Bioengineered Urethral Augmentation: Preliminary Results," World Congress of Tissue Engineering, Pittsburgh, April 2006.
8. Haworth DJ, Dulabon R, **Chew DW**, Prantil RL, Yoshimura N, Chancellor M, Vorp DA, "Bioengineered Urethral Augmentation: Preliminary Results," Society for Biomaterials, Pittsburgh, PA, April 2006. (poster presentation)
9. Vorp DA, **Chew DW**, Sakamoto N, Sakamoto M, Makaroun MS, "Association of biophysical forces with impaired remodeling mechanisms of the abdominal aortic aneurysm wall," 5th World Congress of Biomechanics, Munich, Germany, July-August 2006; *J Biomech* 2006; Vol 39 Suppl 1, page S289. (oral presentation)
10. Haworth DJ, **Chew DW**, Kim DK, Kaiho Y, Yoshimura N, Chancellor M, Vorp DA, "The Effects of Culture Conditions and Implantation on the Structural and Mechanical Characteristics of a Tissue Engineered Urethral Wrap," Hilton Head Engineering Tissues Workshop, Hilton Head, SC, March 2007. (poster presentation)
11. Maul T, **Chew D**, Nieponice A, Vorp DA, "Mesenchymal Progenitor Cells Differentially Respond to Mechanical Stimulation: Morphology, Proliferation, Gene and Protein Expression," Annual Hilton Head Engineering Tissues Workshop, March 2007. (oral presentation)
12. VanEpps S, **Chew D**, Vorp DA, "Local Variations in Shear and Mural Stress Influence Endothelial Permeability and Gene Expression in Arterial Segments Exposed to Cyclic Axial Stretch *Ex Vivo*," Arteriosclerosis, Thrombosis, and Vascular Biology Annual Conference, Chicago, IL, April 2007. (poster presentation)
13. Haworth DJ, **Chew DW**, Kim DK, Miyazato M, Yoshimura N, Chancellor M, Vorp DA, "The Effects of Culture Conditions and Implantation on the Structural and Mechanical Characteristics of a Tissue Engineered Urethral Wrap," Engineering and Urology Society Meeting, Anaheim, CA, May 2007. (moderated poster)
14. LoSurdo JL, **Chew DW**, Vorp DA, "Mechanical Stimulation of Bone Marrow Progenitor Cells within a Three-dimensional Fibrin Matrix," Tissue Engineering and Regenerative Medicine International Society North America 2007 Conference and Exhibition, Toronto, Canada, June 2007. (poster presentation)
15. Haworth DJ, **Chew DW**, Kim DK, Miyazato M, Yoshimura N, Chancellor M, Vorp DA, "The Effects of Culture Conditions and Implantation on the Structural and Mechanical Characteristics of a Tissue Engineered Urethral Wrap," Tissue Engineering and Regenerative Medicine International Society North America 2007 Conference and Exhibition, Toronto, Canada, June 2007. (oral presentation)
16. Haworth D, **Chew D**, Kim DK, Miyazato M, Yoshimura N, Chancellor M, Vorp DA, "The Effects of Culture Conditions and Implantation on the Structural and Mechanical Characteristics of a Tissue Engineered Urethral Wrap," ASME Summer Bioengineering Conference, June 2007. (oral presentation)
17. Maul T, **Chew D**, Nieponice A, Vorp DA, "Mesenchymal Progenitor Cells Differentially Respond to Mechanical Stimulation: Morphology, Proliferation, Gene and Protein Expression," ASME Summer Bioengineering Conference, June 2007. (poster presentation)

18. VanEpps JS, **Chew D**, Vorp DA, "Biological Markers of Atherogenesis Correlate with Both Shear and Mural Stress in Perfused Arterial Segments Exposed to Cyclic Axial Stretching *Ex Vivo*," ASME Summer Bioengineering Conference, June 2007. (poster presentation)
19. Vorp DA, Maul TM, **Chew DW**, Nieponice A, "Mechanical Stimulation Differentially Controls Proliferation, Morphology, and Vascular Gene and Protein Expression in Mesenchymal Progenitor Cells," AHA Scientific Sessions 2007, November 2007. (poster presentation)
20. VanEpps JS, **Chew DW**, Vorp DA, "Combined Experimental and Computational Study of Remodeling in Arterial Segments Undergoing Dynamic Deformations Consistent with the Coronary Arteries," SES 2007 44th Annual Technical Meeting, October 2007. (oral presentation)
21. Maul TM, **Chew DW**, Nieponice A, Vorp DA, "Morphology, Proliferation, and Gene and Protein Expression Changes in Bone Marrow Mesenchymal Stem Cells following Mechanical Stimulation," SPRBM 26th Scientific Conference, January 2008. (oral presentation)
22. **Chew DW**, Shah SR, Cleary DA, Sanders LR, Makaroun MS, Vorp DA, "Association of mechanical wall stress with impaired remodeling mechanisms in abdominal aortic aneurysms," SPRBM 26th Scientific Conference, January 2008. (oral presentation)
23. **Chew DW**, Sakamoto N, Sakamoto M, Sanders LB, Makaroun MS, Vorp DA, "Association of Hypoxia with Impaired Remodeling Mechanisms in the Abdominal Aortic Aneurysm Wall," NAVBO Scientific Conference, April 2008. (oral presentation)
24. **Chew DW**, Maul TM, Nieponice A, Vorp DA, "Mechanical Stimulation Differentially Controls Proliferation, Morphology, and Vascular Gene and Protein Expression in Mesenchymal Stem Cells," NAVBO Scientific Conference, April 2008. (poster presentation)
25. Maul TM, **Chew DW**, Nieponice A, Vorp DA, "Temporal Changes in Gene Expression for Mesenchymal Stem Cells Exposed to Mechanical Stimuli," NAVBO Scientific Conference, April 2008. (oral presentation)
26. Haworth DJ, Miyazato M, Furuta A, Kim DK, **Chew DW**, Yoshimura N, Chancellor M, Vorp DA, "*In vivo* effects and *ex vivo* characteristics following implantation of a tissue engineered urethral wrap," ASME Summer Bioengineering Conference, June 2008. (poster presentation)
27. Haworth DJ, VanEpps JS, Maul TM, **Chew DW**, Vorp DA, "Implementation of a novel multi-chamber bioreactor for a tissue engineered urethral wrap," ICMMB16, July 2008. (oral presentation)
28. Haworth DJ, VanEpps JS, Maul TM, **Chew DW**, Vorp DA, "Implementation of a novel multi-chamber bioreactor for a tissue engineered urethral wrap," TERMIS NA, San Diego, CA, December 2008. (poster presentation) (Note: This poster was selected as a finalist for the Student Poster Competition)
29. Haworth DJ, Miyazato M, Furuta A, Kim DK, **Chew DW**, Yoshimura N, Chancellor MB, Vorp DA, "Evaluation of a tissue engineered urethral wrap following implantation," TERMIS North America Annual Conference and Exposition. San Diego, CA, December 2008. (oral presentation)
30. Gaitan DL, Schmidt DE, **Chew DW**, Vorp DA, Sacks MS, "3D structural information of soft tissues using small angle light scattering," McGowan Institute for Regenerative Medicine Annual Retreat, Farmington, PA, March 2009. (poster presentation)
31. Patel SN, Haworth DJ, Xavier AE, **Chew DW**, Vorp DA, "Characterization of isolated urethral smooth muscle cells and their incorporation into a tissue engineered urethral wrap," McGowan Institute for Regenerative Medicine Annual Retreat, Farmington, PA, March 2009. (poster presentation)
32. He W, Proto J, **Chew DW**, Huard J, Vorp DA, "Response of human adult muscle-derived stem cells under cyclic stretch," McGowan Institute for Regenerative Medicine Annual Retreat, Farmington, PA, March 2009. (poster presentation)

33. Patel SN, Haworth D, Xavier A, **Chew D**, Vorp DA, "Characterization of isolated urethral smooth muscle cells and their incorporation into a tissue engineered urethral wrap," ASME Summer Bioengineering Conference, Lake Tahoe, CA, June 2009. (poster presentation)
34. Gaitan DL, Schmidt DE, **Chew DW**, Vorp DA, Sacks MS, "3D structural information of soft tissues using small angle light scattering," ASME Summer Bioengineering Conference, Lake Tahoe, CA, June 2009. (oral presentation)
35. Gaitan DL, Schmidt DE, **Chew DW**, Vorp DA, Sacks MS, "3D Structural Information of Soft Tissues Using Small Angle Light Scattering," Annual Fall Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009. (oral presentation)
36. Gaitan DL, Cleary D, **Chew DW**, Hempel J, Gupta N, Rhee R, Chaer R, Cho J-S, Leers S, Makaroun M, Vorp DA, "Hydroxyproline and Calcium Content in Abdominal Aortic Aneurysm (AAA) Wall," Annual Fall Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009. (poster presentation)
37. Haworth D, Kitta T, **Chew DW**, Yoshimura N, de Groat W, Vorp DA, "The Effect of Rat Strain on Leak Point Pressure and Urethral Biomechanics," Annual Fall Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009. (oral presentation)
38. Patel SN, Haworth DJ, Artim D, Xavier A, St.Croix C, **Chew DW**, deGroat W, Vorp DA, "Characterization of Urethral Smooth Muscle Cells and their Incorporation into a Urethral Wrap," Annual Fall Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009. (oral presentation; presented by **Chew DW**)
39. Viglione G, **Chew DW**, Dillavou E, Chaer RA, Vorp DA, "Database Design for Translational Research: From Tissue Banking to Clinical Parameters," Annual Fall Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009. (poster presentation; presented by **Chew DW**)
40. Xavier AE, **Chew DW**, Makaroun MS, Vorp DA, "Differential Gene Expression in the Abdominal Aortic Aneurysm (AAA) Wall: Preliminary Results," Annual Fall Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009. (poster presentation; presented by **Chew DW**)
41. Kim YS, **Chew DW**, Rhee R, Makaroun MS, Vorp DA, "Spatial Variation of Elastolytic Activities in Abdominal Aortic Aneurysm (AAA) Wall," Annual Fall Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009. (poster presentation; presented by **Chew DW**)
42. Phillippi JA, Kubala AA, Eskay MA, **Chew DW**, Gaitan D, Hempel J, Vorp DA, Watkins SC, and Gleason TG, "Disrupted Collagen Homeostasis in Thoracic Aortic Aneurysms in Patients with Bicuspid Aortic Valve," ISACB 2010, Boston, MA, September 2010.
43. Wang Q, Hong Y, He W, **Chew DW**, Rendemonti J, Wagner WR, Vorp DA, "Compliance-Matched Arterial Vein Grafts via an External, Electrospun, Biodegradable Elastomeric Wrap," Annual Fall Meeting of the Biomedical Engineering Society, Austin, TX, October 2010. (oral presentation)
44. Flinchbaugh EC, **Chew DW**, Xavier A, Cleary DA, Muthu J, Vorp DA, "Validation of Suitable Endogenous Control Genes for Quantitative Real-Time PCR Studies of Human Abdominal Aortic Aneurysm Tissue," Annual Fall Meeting of the Biomedical Engineering Society, Austin, TX, October 2010.
45. Pichamuthu JE, Phillippi JA, Cleary DA, **Chew DW**, Hempel J, Gleason TG, Vorp DA, "Association of Mechanical Properties and Collagen Content with Valve Morphology in Ascending Thoracic Aortic Aneurysm," ASME Summer Bioengineering Conference, Farmington, PA, June 2011.

46. **Chew DW**, Patel AM, Amity CL, Frydrych LM, McBride D, Jones DM, Goudeau D, Eng HF, Kyle D, Saul M, Solomon DH, Wisniewski SR, Levesque MC, and Moreland LW, for the RACER Physicians Group. Serum Amyloid A (SAA) Levels are Lower in Rheumatoid Arthritis (RA) Patients Treated with TNF Antagonists Compared to Other Anti-Rheumatic Therapies. Department of Medicine Research Day Abstract, 2012.
47. **Chew DW**, Metes ID, Patel AM, Amity CL, Frydrych LM, McBride D, Jones DM, Goudeau D, Eng HF, Kyle D, Saul M, Solomon DH, Wisniewski SR, Levesque MC, and Moreland LW, for the RACER Physicians Group. Etanercept therapy in early rheumatoid arthritis patients lowers serum amyloid A and C-reactive protein levels to a greater extent than oral disease-modifying anti-rheumatic drugs. Department of Medicine Research Day Abstract, 2013.
48. Metes ID, **Chew DW**, Patel AM, Balasubramani GK, Bridges SL, Jr., Curtis JR, Wisniewski SR, Moreland LW, and Levesque MC. Anti-Tumor Necrosis Factor α Therapy (Etanercept) Plus Methotrexate Lowers Serum Amyloid A Levels to a Greater Extent Than Triple Oral Disease Modifying Anti-Rheumatic Drug Therapy In Early Rheumatoid Arthritis Subjects. Arthritis Rheum (Suppl) 2013 (poster presentation)
49. Metes ID, **Chew DW**, Patel AM, Balasubramani GK, Curtis JR, Bridges SL, Jr., Wisniewski SR, Moreland LW, and Levesque MC. Serum Amyloid A Levels Model Rheumatoid Arthritis Disease Activity Better Than C-Reactive Protein Levels Especially During Treatment With Anti-Tumor Necrosis Factor α Therapy (Etanercept). Arthritis Rheum (Suppl) 2013 (oral presentation)
50. Liang KP, Aggarwal R, Feng J, Lyons J, Eng H, Wisniewski S, Saul M, Landsittel D, **Chew DW**, Aiyer A, Moreland LW: Low Rates of Cardiovascular Risk Factor Modification Among High-Risk Rheumatoid Arthritis Patients: Barrier to Cardiovascular Prevention Strategies? Arthritis Rheum 2014, 66(11 Suppl). (poster presentation)

REVIEWS, INVITED PAPERS, PROCEEDINGS, MONOGRAPHS, BOOKS AND BOOK CHAPTERS:

1. Haworth DJ, **Chew DW**, Kim DK, Miyazato M, Yoshimura N, Chancellor M, Vorp DA, "The Effects of Culture Conditions and Implantation on the Structural and Mechanical Characteristics of a Tissue Engineered Urethral Wrap," Proceedings of the 2007 Summer Bioengineering Conference, ASME, Keystone, CO, June 2007.
2. Maul TM, **Chew DW**, Nieponice A, Vorp DA, "Mesenchymal Progenitor Cells Differentially Respond to Mechanical Stimulation: Morphology, Proliferation, Gene and Protein Expression," Proceedings of the 2007 Summer Bioengineering Conference, ASME, Keystone, CO, June 2007.
3. VanEpps JS, **Chew DW**, Vorp DA, "Biological Markers of Atherogenesis Correlate with Both Shear and Mural Stress in Perfused Arterial Segments Exposed to Cyclic Axial Stretching *Ex Vivo*," Proceedings of the 2007 Summer Bioengineering Conference, ASME, Keystone, CO, June 2007.
4. Haworth D, Miyazato M, Furuta A, Kim DK, **Chew DW**, Yoshimura N, Chancellor M, Vorp DA, "*In Vivo* Effects and *Ex Vivo* Characteristics Following Implantation of a Tissue Engineered Urethral Wrap," Proceedings of the 2008 Summer Bioengineering Conference, ASME, Marco Island, FL, June 2008.
5. LoSurdo JL, **Chew DW**, Nieponice A, Vorp DA, "Mechanical and Chemical Stimulation of Bone-Marrow Stem Cells in a Three-dimensional Fibrin Matrix: Preliminary Results," Proceedings of the 2008 Summer Bioengineering Conference, ASME, Marco Island, FL, June 2008.

PROFESSIONAL ACTIVITIES

TEACHING:

Course	Summary	Number of Students	Type	Lecture Hours (hrs/wk)	Lab Hours (hrs/wk)	Office Hours (hrs/wk)	Frequency Taught
Medicine	AAA mini-elective for MS-1 2-hour lecture on biochemistry of AAA wall weakening	6	G	3	0	0	3
Medicine	AAA mini-elective for MS-2 2-hour lecture on biochemistry of AAA wall weakening	6	G	3	0	0	3
BioSci 1830	Biochemistry Lab Methods Primary instructor	12	UG	2	8	3	14
BioSci 1831	Biochemistry Lab Writing Practicum Primary instructor	5	UG	1	0	1	8
CHM-120	Bio-Organic Chemistry Primary instructor CCAC course	16	UG	3	3	1	25
BIO-110	Biotechnology Laboratory I Primary instructor CCAC course	6	UG	3	5	2	3
BioSci 1511	Cell Biology Lab Writing Practicum Primary instructor	5	UG	1	0	1	2
BioSci 1510	Cell Biology Laboratory 1 of 2 primary instructors	12	UG	0	4	2	11
BioSci 2280B	Cell Biology Techniques Primary instructor	12	G	10	30	10	1
BioSci 2280A	DNA Techniques Primary instructor	12	G	10	30	10	11
FS 0001	Freshman Studies Primary instructor	12	UG	1	0	1	4
BIO-151	General Biology I Primary instructor CCAC course	16	UG	3	3	1	3
Bio 156	General Biology II Primary instructor WCCC course	16	UG	3	0	1	2
Bio 056	General Biology II Laboratory Primary instructor WCCC course	16	UG	0	3	1	2
CHM-151	General Chemistry I Primary instructor CCAC course	16	UG	3	3	1	2
BioSci	High School Biology Research Camp Primary instructor	12	HS	10	30	10	3

BioSci 1904	Honors Undergraduate Research Gerald Nora, BPhil Committee Chair: Douglas W. Chew	1-2	UG	2	10	NA	3
BIO-162	Human Anatomy and Physiology II Primary instructor CCAC course	16	UG	3	3	1	22
Bio 107	Human Biology Primary instructor WCCC course	16	UG	3	0	1	4
Bio 162	Human Physiology II Primary instructor WCCC course	16	UG	3	0	1	2
Bio 062	Human Physiology II Laboratory Primary instructor WCCC course	16	UG	0	3	1	2
CHM-110	Introduction to Chemistry Primary instructor CCAC course	16	UG	3	0	1	4
CHM-111	Introduction to Chemistry Laboratory Primary instructor CCAC course	16	UG	0	3	1	2
PSU	Molecular Biology Techniques Workshop Primary Instructor Pennsylvania State University	12	G	3	3	0	2
BioSci 1950	Molecular Genetics Primary instructor and co-taught	12	UG	1	5	3	14
BioSci 1951	Molecular Genetics Writing Practicum Primary instructor	5	UG	1	0	1	6
PHY-123	Physics for the Health Sciences Primary instructor CCAC course	16	UG	3	3	1	5
CAS/CGS	Summer High School Institute in DNA Technologies Primary instructor	4	HS	2	5	2	1
BIO-150	Survey of Biotechnology Primary instructor CCAC course	6	UG	3	0	1	2
CAS 1900	Undergraduate Internship	1-2	UG	2	5	NA	2
BioSci 1903	Undergraduate Research	1-2	UG	2	5	NA	3
BioSci 1690	Undergraduate Teaching Experience	1-2	UG	2	5	NA	5
BIOE 3025	Vascular Biomechanics and its Role in Pathobiology 1 of 2 primary instructors	5	G	3	0	1	1

VISITING PROFESSORSHIPS:

“Molecular Biology Techniques Workshop for High School Teachers”

One-Week Visiting Professorship

The Pennsylvania State University, Uniontown, PA, June 1999

“Molecular Biology Techniques Workshop for High School Teachers”
 One-Week Visiting Professorship
 The Pennsylvania State University, Uniontown, PA, June 1998

UNDERGRADUATE STUDENTS:

Student	Focus	Times
Joseph Rendemonti	LabView System and Data Acquisition Design	2010
Christopher Rovensky	Analysis of GAG Levels in AAA tissue	2009 - 2010
Margaret Stevenson	Microscopy and Image Analysis in TEUW Tissue Engineering	Summers of 2008, 2009
Shawn Adhya	Student Worker	2008 - 2010
Vivian Allahyari	Student Worker	2008 - 2010
Ricardo Londono	BioE REU: Biological Assessment of a Novel Cyclic Bending Device for <i>Ex Vivo</i> Vascular Organ Culture	2006
Sean McGuire	PTEI Summer Intern: Histological and Mechanical Evaluation of a Tissue Engineered Urethral Wrap	2006
Jon Puposar	PTEI Summer Intern: Effects of Cyclic Strain and TGFβ-1 Stimulation on Bone Marrow Derived Progenitor Cells	2005
Adam Martinez	PTEI Summer Intern: Cyclic Pressure Effects on Bone Marrow Progenitor Cells' Proliferation Kinetics	2004
Gerald Nora	Supervised his undergraduate BPhil thesis; committee chair	2002

TEACHING AS COUNTY COMMISSIONER:

18 “Town Halls”
 Various topics; delivered via Zoom
 2021 to present

“County Government”
 Afternoon Presentation
 Greater Latrobe Laurel Valley Chamber of Commerce Leadership Program

“County Government”
 15-min presentation for AOL achievement
 AOL/Webelos 2; Cub Scouts Pack 464; Westmoreland-Fayette Council

RESEARCH:

Grants received as primary investigator or co-investigator (previous funding):

Grant No.	Source	Grant Title	% effort	Years, inclusive
M2008-0066	The Pittsburgh Foundation/Richard S. Caliguiri Fund for Amyloidosis Research	Amyloidosis Research/Anti-TNF Therapies PI: Larry W. Moreland, MD Role: co-I	25%	10/1/2010-01/31/2014

CTPG-11-07	ACR REF Planning Grant	Comparative Effectiveness of Biologics in Rheumatoid Arthritis Patients who have Failed one Anti-TNF (COEBRA) PI: Larry W. Moreland, MD Role: Program Manager	10%	05/01/2011-4/30/2012
R01-HL-79313	NIH	Bioengineering and Biologic Studies of Aneurysm Weakening PI: David A. Vorp Co-Investigator: Douglas W. Chew, key personnel, directing molecular studies	50%	7/1/08 – 5/31/10
R21-EB006318	NIH	Bioengineered Urethral Augmentation PI: David A. Vorp Co-Investigator: Douglas W. Chew	15%	12/01/06 – 11/30/08
R01-AR-053603	NIH	Cell Recruitment Induced by ECM Scaffold Degradation PI: Stephen F. Badylak Co-Investigator: Douglas W. Chew	7.5%	9/28/06 – 08/31/08
Not funded	NSF-SEPA	Stem Cells and Developmental Biology PI: Kaufmann and Miller Co-Investigator: Douglas W. Chew	5%	
NA	Pitt UHC	Honors Teaching Fellowships PI: Douglas W. Chew Student: various	various	various
NA	Pitt BioSci Dept; HHMI	HHMI Undergraduate Fellowship PI: Douglas W. Chew Student: Gerald Nora	various	various
NA	Pitt UHC	Brackenridge Research Fellowships PI: Douglas W. Chew Student: various	various	various

Invited Conference Presentations:

“Biomechanical and Biological Studies of Abdominal Aortic Aneurysmal Wall Weakening,” 2009 CVRR Retreat, University Club, Pittsburgh, PA, May 2009 (invited poster presentation)

“Role of Physical Environment on Remodeling of Abdominal Aortic Aneurysm Wall,” 2008 CVRR Retreat, Pittsburgh’s Grand Hall, Pittsburgh, PA, May 2008 (invited oral presentation)

“MCAT and Testing Strategies,” 2006 University of Pittsburgh School of Medicine Summer Undergraduate Research Program for Minority Students, Pittsburgh, PA, July 2006 (invited oral presentation)

“MCAT and Testing Strategies,” 2005 University of Pittsburgh School of Medicine Summer Undergraduate Research Program for Minority Students, Pittsburgh, PA, July 1, 2005 (invited oral presentation)

“Career Day Presentation,” Quaker Valley High School, May 2004 (invited oral presentation)

“Teaching Biotechnology to High School Students: Supplies, Equipment, Exercises, and Set-up,” Carnegie Museum of Natural History, Pittsburgh, PA, October 2003 (invited oral presentation)

“Medical Biochemistry Seminar, given to incoming medical students at University of Pittsburgh’s School of Medicine, Pittsburgh, PA July 2003 (declined invitation)

“Advances in Biotechnology,” Jeannette Rotary International, Jeannette, PA, July 29, 2002 (invited oral presentation)

“Medical Biochemistry Seminar,” given to incoming medical students at University of Pittsburgh’s School of Medicine, Pittsburgh, PA July 2002 (declined invitation)

“General Biology Lessons for Homeschooled Children,” given to Northeastern PA Home School Association, Scranton, PA, March 2002 (invited oral presentation)

“Medical Biochemistry Seminar,” given to incoming medical students at University of Pittsburgh’s School of Medicine, Pittsburgh, PA July 2001

“Learning Molecular Biology with Group II Introns,” given to Junior ACS, Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, January 24, 1997 (invited oral presentation)

Professional meetings attended without presentation:

National Council of University Research Administrators (NCURA), Washington D.C., August 2017
Atherosclerosis, Thrombosis, and Vascular Biology, Chicago, IL, April 2008

Grant Review Experience:

Summer 2009 Secondary reviewer, NIH, Challenge Grants, Abdominal Aortic Aneurysms and Vascular Biology

Article Review Experience:

Circulation
The Lancet

SERVICE

- | | |
|-------------|---|
| 2005 | Minority Aviation and Education Administration (MAEA) Microbiology Series, worked with about 1900 students, over the course of 2005 |
| 2005 | Cub Scout Pack 268 Science Belt Loop Projects |
| 2004 - 2008 | Teacher for Carnegie Museum of Natural History’s CSI Overnights |
| 2004 - 2008 | Advisor to Carnegie Museum of Natural History’s Biotechnology Overnight Series |
| 2004 - 2009 | Pittsburgh Tissue Engineering Initiative Summer Internship Program Selection Committee |

2003 - 2004 Biological Sciences Undergraduate Research Committee

1999 - 2003 University of Pittsburgh's Chancellor's Distinguished Public Service Award Selection Committee

1999 - 2001 Board of Medical and Scientific Advisors at Diagen, Inc. (formerly Millennium Medical Technologies, Inc.)

1997 - 2000 Biological Sciences Undergraduate Curriculum Committee

1992 - 2003 Founded many of the Outreach activities still in place in Department of Biological Sciences

2023 - Adult leader, Cub Scout Pack 464, Fort Allen, Westmoreland-Fayette Council

SERVICE IN ELECTED OFFICE

2020 - Vice-Chairman, Board of Commissioners, Westmoreland County

2020 - Vice-Chairman, Westmoreland County Salary Board

2020 - Vice-Chairman, Westmoreland County Industrial Development Corporation

2020 - Vice-Chairman, Westmoreland County Retirement Board

2020 – 2022, 2024 Vice-Chairman, Westmoreland County Election Board (not in 2023)

2021 - Chairman, Westmoreland County Prison Board

2020 - Member, Local Emergency Planning Committee

2020 - Treasurer, Board of Directors, River Art Works

2020 - Member, Board of Directors, Westmoreland Conservation District

2020 - Member, Southwestern Pennsylvania Commission

2023 – present Member, Southwestern Pennsylvania Commission Executive Committee

2020 - Member, Westmoreland County Records Improvement Fund Board

2020 - Member, Elder Abuse Task Force

2019 - Member, County Commissioners Association of PA (CCAP)

2022 - Member, CCAP, Comprehensive Behavioral Health Task Force

2022 - Member, CCAP, Energy, Environment, and Land Use Policy Committee

2020 - Member, Westmoreland County Chamber of Commerce

2020 - Member, Board of Directors, Westmoreland County Land Trust

2022 Member, Executive Board, Westmoreland County Land Trust

2020 - Member, Board of Directors, Westmoreland Community Action (WCA)

2020 - Member, WCA, PPP Committee

2021 - Member, Pennsylvania Farm Bureau

2008 - 2015 Member, Westmoreland County Republican Committee

2020 – Member, Westmoreland County Republican Committee, Executive Board, *ex officio*

2010 - 2013

2010 - 2013 Chairman, Westmoreland County Republican Committee, District 5, Hempfield Township

2023 - Adult leader, Cub Scout Pack 464, Fort Allen, Westmoreland-Fayette Council

Vice-Chairman, Westmoreland County Industrial Development Corporation

Member, Local Emergency Planning Committee

Treasurer, Board of Directors, River Art Works

Member, Board of Directors, Westmoreland Conservation District

Member, Southwestern Pennsylvania Commission

Member, Southwestern Pennsylvania Commission Executive Committee

Member, Elder Abuse Task Force

Member, County Commissioners Association of PA (CCAP)

Member, CCAP, Comprehensive Behavioral Health Task Force

Member, CCAP, Energy, Environment, and Land Use Policy Committee

Member, Westmoreland County Chamber of Commerce

Member, Board of Directors, Westmoreland County Land Trust

Member, Board of Directors, Westmoreland Community Action (WCA)

Member, WCA, PPP Committee

Member, Pennsylvania Farm Bureau

Member, Westmoreland County Republican Committee, Executive Board, *ex officio*

Adult leader, Cub Scout Pack 464, Fort Allen, Westmoreland-Fayette Council

Cub Scouts, Adult Leader, Pack 464, Westmoreland-Fayette Council

Forbes Trail Trout Unlimited

Five Star Trail Commission-RTC

Sewickley Creek Watershed Association

County Commissioners Association of Pennsylvania (CCAP)

Jacob's Creek Watershed Association

National Rifle Association

Firearms Owners Against Crime (FOAC)

Pennsylvania Farm Bureau

Westmoreland County Chamber of Commerce