
BIOGRAPHICAL SKETCH

NAME: H. Thomas Temple, MD

eRA COMMONS USER NAME:

POSITION TITLE: Senior Vice President for Translational Research

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
Harvard University Cambridge, Boston, MA	B.A.	1980	Medicine
Jefferson Medical College, Philadelphia, PA	MD	1986	Medicine
Walter Reed Army Medical Center, Washington, D.C		07/92	Orthopaedic Residency
Harvard University / Mass General Hospital, Boston, MA		07/93	Musculoskeletal Oncology Fellowship

A. Personal Statement

As former Senior Vice President of Translational Research and Economic Development, I was responsible for all of the research activities and collaborations between clinicians and scientists at Nova Southeastern University. In addition, I am the Chief Medical Officer of the University of Miami Tissue Bank and a practicing orthopaedic surgeon. I am also Professor Emeritus of Orthopaedics and Pathology at the University of Miami Miller School of Medicine. I received my undergraduate degree from Harvard University, and my medical degree from Jefferson Medical College in Philadelphia. I completed an Internship in General Surgery and Residency in Orthopaedic Surgery at Walter Reed Army Medical Center in Washington, D.C. I trained in Orthopaedic Oncology at the Massachusetts General Hospital and Boston Children's Hospital. I am a member of the American Academy of Orthopaedic Surgeons, the American Orthopaedic Association, the Musculoskeletal Tumor Society, the International Skeletal Society, the American Association of Tissue Banks, the Girdlestone Society and the American Orthopaedic Foot and Ankle Society. I have been a site reviewer for the Residency Review Committee and an Examiner for the American Board of Orthopaedic Surgery. I serve on the Florida Organ and Tissue Advisory Board and am an At Large Member of the Board of the American Association of Tissue Banks.

In addition to maintaining a busy clinical practice and running a university research enterprise, I have been a contributor to teaching and research efforts at the University of Miami and now, Nova Southeastern University. I received the Orthopaedic Resident Education Award in 1999 and 2014 and have hosted and chaired numerous surgical review courses. I authored over 180 scientific (including 156 referenced into Pubmed database, see link below on page 4) articles and book chapters. I am an Assistant Editor for Foot and Ankle International, a long-standing reviewer for Clinical Orthopaedics and Related Research and the Journal of Bone and Joint Surgery. As the Chief Medical Officer of the University of Miami Tissue Bank I am on the physician counsel of the American Association of Tissue Banks.

My current research interests are discovering genes associated with sarcomas, interrupting chondrosarcoma cell cycling with novel peptides and regenerative strategies in musculoskeletal surgery. I have a special interest in chondrosarcomas and cartilage repair and collaborate actively with many teams, including the VA research group (Drs Schiller, D'Ippolito), the Biomedical Engineering school of the University of Miami (Drs. Huang and Andreopoulos) as well as the INSERM U1066, located in France and specialized in drug (e.g. TGF- β 3) delivery from polymeric microspheres (dr. Montero-Menei). We all have been working together to develop new means to repair hyaline articular cartilage, such as for example multi-layered hybrid scaffold making use of the electrospinning technology. More recently, we discovered that combination of human cartilage microparticles

combined with PAMs releasing TGF- β 3 were very successful in guiding the differentiation of MIAMI cells toward a hyaline cartilage phenotype rather than a fibrocartilage phenotype.

B. Positions and Honors

Positions:

- 1993-1997 Assistant Professor of Surgery, Uniformed Services University of the Health Sciences, Bethesda, MD
- 1997-1998 Associate Professor of University of Virginia Orthopaedic Surgery Health Sciences Center, Charlottesville, VA
- 1998- 2001 Associate Professor of Orthopaedics & Pathology, University of Miami Miller School of Medicine, Miami, FL
- 1998-present Fellowship Director, Orthopaedic Oncology, University of Miami Miller School of Medicine, Miami, FL
- 2001-present Professor of Orthopaedics & Pathology, University of Miami Miller School of Medicine, Miami, FL
- 2001-present Chief of Orthopaedic Oncology, University of Miami Miller School of Medicine, Miami, FL
- 2003-2015 Tenured Professor in Orthopaedics and Pathology, University of Miami Miller School of Medicine, Miami, FL
- 2007-present Vice Chairman, Department of Orthopaedic Surgery, University of Miami Miller School of Medicine, Miami, FL
- 2005-present Director, University of Miami Tissue Bank, Miami, FL
- 2006-present Member, Medical Advisory Board Member, Life Alliance Organ Recovery
- 2015-2019 Senior Vice President for Translational Research and Economic Development, Nova Southeastern University, Fort Lauderdale, FL
- 2015-present Professor of Orthopaedics, Nova Southeastern University, Fort Lauderdale, FL
- 2015-present Member, Cell Therapy Institute, Nova Southeastern University, Fort Lauderdale, FL
- 2015-present Member, Sarcoma Group, Moffitt Cancer Center, Tampa, FL
- 2015-present Professor Emeritus, University of Miami, Miami, FL
- 2019-present Executive Research Consultant to the University President, Nova Southeastern University, Fort Lauderdale, FL

Honors:

- 1976 Phi Eta Sigma Honor Society, University of North Carolina
- 1985 Hobard Amory Hare Honor Society, Jefferson Medical College, Thomas Jefferson University
- 1986 Alpha Omega Alpha Medical Honor Society, Jefferson Medical College, Thomas Jefferson University
- 1992 Graves Erskine Award for Outstanding House Officer Walter Reed Army Medical Center
- 1992 Juan d'Avis Award for Outstanding Surgical Resident Walter Reed Army Medical Center
- 1992 Kirk Award Semi-finalist for Research, Walter Reed Army Medical Center
- 1992 Army Achievement Medal
- 1994 Army Commendation Medal
- 1995 Army Commendation Medal
- 1996 Army Achievement Medal
- 1997 Honorable Discharge, United States Army
- 1998 Orthopaedic Resident Educator Award – University of Virginia
- 1999 Orthopaedic Resident Educator Award – University of Miami
- 2007 Best Doctors in America
- Chief Orthopaedic Oncology
- Director, University of Miami Tissue Bank, 2007
- Resident teacher of the year award, University of Virginia, 1998
- Resident teacher of the year award, University of Miami 1999
- Resident teacher of the year award, University of Miami 2015

C. Contributions to science

As former Senior Vice President for Translational Research and Economic Development, I was principally responsible for coordinating all research at NSU and maintain an active laboratory in the Cell Therapy Institute. I also have a laboratory that is involved in developing novel matrices for bone and cartilage regeneration. I collaborate with scientists at the Karolinska Institute developing translational models for CAR-NK and other stem cell models. My primary research interests focus on the treatment of sarcomas and understanding their biology, as described in the references below.

1. Thacker MM, Potter BK, Pitcher JD, **Temple HT**. Soft Tissue Sarcomas of the Foot and Ankle: Impact of Unplanned Excision, Limb Salvage, and Multimodality Therapy. *Foot Ankle Int.* 2008;29:690-8.
2. Galoian KA, Guettouche T, Issac B, Navarro L, **Temple HT**. Lost miRNA Surveillance of Notch IGFR Pathway-road to Sarcomagenesis. *Tumor Biol.* 2014;35:483-92.
3. Mahmoud O, Dosch A, Kwon D, Pitcher JD, Conway S, Benedetto P, Fernandez G, Trent J, **Temple HT**, Wolfson AH. The Impact of Perioperative Chemotherapy Timing in Conjunction with Postoperative External-Beam Radiation Therapy on Extremity Soft-Tissue Sarcomas Outcome. *Am. J. Clin. Oncol.* 2014;39:528-34.
4. Muthusamy S, Subhawong T, Conway SA, **Temple HT**. Locally Aggressive Fibrous Dysplasia Mimicking Malignancy: A Report of Four Cases and Review of the Literature. *Clin. Orthop. Relat. Res.* 2015;473:742-50.
5. Carter, A.H., Gutierrez, N., Subhawong, T.K., **Temple, H.T.**, Lesniak, B.P., Baraga, M.G., Jose, J. MR imaging of BioCartilage augmented microfracture surgery utilizing 2D MOCART and KOOS scores. *J. Clin. Orthop. Trauma* 2018;9:146-52.
6. Henderson, E.R, Keeney, B.J., Pala, E., Funovics, P.T., Eward, W.C., Groundland, J.S., Ehrlichman, L.K., Puchner, S.S.E., Brigman, B.E., Ready, J.E., **Temple, H.T.**, Ruggieri, P., Windhager, R., Letson, G.D., Hornicek, F.J. The Stability of the Hip After the use of a Proximal Femoral Endoprosthesis For Oncological Indications. *Bone Joint J.* 2017;99B:531-7.
7. **Temple HT**. Allograft Reconstruction of the Knee-Methods and Outcomes. *J. Knee Surg.* 2019;32:315-21.

I recently focused my research interests more specifically on chondrosarcoma in an attempt to better understand the underlying cell signaling.

1. Galoian KA, **Temple HT**, Galoyan AA. Cytostatic Effect of the Hypothalamic Cytokine PRP-1 is Mediated by its Inhibition of mTOR and cMyc in High Grade Metastatic Chondrosarcoma. *Neurochem. Res.* 2011;36:812-8.
2. Galoian KA, Guettouche T, Issac B, Qureshi A and **Temple HT**. Regulation of Onco and Tumor Suppressor MiRNAs by mTORC1 Inhibitor PRP-1 in Human Chondrosarcoma. *Tumour Biol.* 2014;35:2335-41.
3. Zhang Y, Mejia AP, **Temple HT**, Trent J, Rosenberg AE. Squamous Cell Carcinoma Arising in Dedifferentiated Chondrosarcoma Proved by IDH Mutation Analysis. *Hum. Pathol.* 2014;45:1541-5.
4. Galoian K, Qureshi A, Wideroff G, **Temple HT**. Restoration of Desmosomal Junction Protein Expression and Inhibition of H3K9-Specific Histone Demethylase Activity by Cytostatic Proline-rich Polypeptide-1 Leads to Suppression of Tumorigenic Potential in Human Chondrosarcoma Cells. *Mol. Clin. Onc.* 2015;3:171-8.

I am an active investigator in developing stem/cell therapy and tissue engineering for a range of orthopaedic conditions, especially knee conditions. For example, we developed within UMTB, a Vivex company, a new allograft tissue derived from cadaveric donor for ACL repair, and we are currently developing various strategies for knee hyaline articular cartilage repair in collaboration with Drs. Schiller, D'Ippolito, Delcroix and Andreopoulos.

1. Chan DB, **Temple HT**, Latta LL, Mahure S, Dennis J, Kaplan LD. A Biomechanical Comparison of Fan-Folded, Single-Looped Fascia Lata With Other Graft Tissues as a Suitable Substitute for Anterior Cruciate Ligament Reconstruction. *Arthroscopy* 2010;26:1641-7.
2. **Delcroix GJ**, Kaimrajh DN, Baria D, Cooper S, Reiner T, Latta L, **D'Ippolito G**, **Schiller PC**, **Temple HT**. Histological, Biomechanical and Biological Evaluation of Fan-folded Iliotibial Band Allografts for Anterior Cruciate Ligament Reconstruction. *Arthroscopy* 2013;29:756-65.
3. **Delcroix GJ**, **D'Ippolito G**, Reiner T, Malinin T, **Temple HT**, Montero-Menei CN, **Schiller PC**. TGF- β 3-releasing Pharmacologically Active Microcarriers Combined with Human Cartilage Microparticles drive MIAMI Cells Toward a Hyaline Cartilage Phenotype. *CellR4* 2015;3:e1394.
4. **Delcroix GJ**, Molinari M, Reiner T, **Temple HT**, Montero RB, Andreopoulos FM, **Schiller PC**, **D'Ippolito G**. Multi-layered Scaffold to Mimic Hyaline Articular Cartilage Architecture. *Curr. Tissue Eng.* 2016;5.1:21-8.

5. Tally WC, **Temple HT**, Subhawong TY, Ganey T. Transforaminal Lumbar Interbody Fusion with Viable Allograft: 75 Consecutive Cases at 12-Month Follow-up. Int. J. Spine Surg. 2018;12:76-84.

List of Published Work in Pubmed (189 publications referenced in Pubmed):

<http://www.ncbi.nlm.nih.gov/pubmed/?term=temple+ht>

D. Research Support

UMTB internal research funds

Development grants, NSU

Overlap: None