CURRICULUM VITAE

DATE: May 14, 2016

NAME: Timothy Wu, M.D., F.A.C.S.

PRESENT TITLE: Assistant Professor of Surgery

Rutgers, the State University of New Jersey

Associate Program Director

Rutgers New Jersey Medical School

Vascular Surgery Fellowship

OFFICE ADDRESS: Rutgers New Jersey Medical School

Division of Vascular Surgery 150 Bergen Street, F102 Newark, NJ 07103

TELEPHONE NUMBER/E-MAIL ADDRESS: (973)972-6295, tim.wu@rutgers.edu

CITIZENSHIP: United States of America

EDUCATION:

A. Undergraduate

New York University New York, NY

Bachelor of Arts, Mathematics May 1999

B. Graduate and Professional

State University of New York Downstate Medical Center

Brooklyn, NY

Doctor of Medicine May 2003

POSTGRADUATE TRAINING:

A. Internship and Residencies

Staten Island University Hospital, Staten Island, NY

General Surgery July 2003-June 2008

B. Research Fellowships

None

C. Postdoctoral Appointments

The University of Chicago, Chicago, IL Vascular Surgery & Endovascular Therapy

July 2008-June 2010

MILITARY: None.

ACADEMIC APPOINTMENTS:

Department of Surgery

Rutgers, the State University of New Jersey, Newark, NJ

Assistant Professor

September 2015-Current

Department of Surgery

University of Pittsburgh, Pittsburgh, PA

Assistant Professor

August 2010-July 2015

HOSPITAL APPOINTMENTS:

Surgery/Vascular Surgery Rutgers New Jersey Medical School/University Hospital, Newark, NJ Staff Surgeon September 2015-Current

Surgery/Vascular Surgery Trinitas Regional Medical Center, Elizabeth, NJ Staff Surgeon September 2015-Current

Surgery/Vascular Surgery Jersey City Medical Center, Jersey City, NJ Staff Surgeon September 2015-Current

Surgery/Vascular Surgery University of Pittsburgh Medical Center (UPMC), Pittsburgh, PA Staff Surgeon August 2010-July 2015

CERTIFICATION:

American Board of Surgery, Vascular Surgery Board Registered Physician in Vascular Interpretation

MEMBERSHIPS, OFFICES AND COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES:

Society for Vascular Surgery
Active Member, June 2013-Current
Young Surgeons Advisory Committee, June 2013-Current
Public & Professional Outreach Committee, May 2016-Current

Vascular & Endovascular Surgery Society
Active Member, June 2012-Current
Fundraising Committee, June 2013-July 2015

American College of Surgeons
Fellow, October 2013-Current
Councilor, Southwestern Pennsylvania Chapter, June 2013-July 2015

Eastern Vascular Society Active Member September 2014-Current

Society for Clinical Vascular Surgery Active Member April 2013-Current

American Venous Forum
Active Member, April 2013-Current
Editorial Board, The Vein Specialist, December 2015-Current

Vascular Society of New Jersey Active Member August 2015-Current

New Jersey Chapter, American College of Surgeons Active Member August 2015-Current The University of Chicago Phemister Surgical Society Member July 2010-Current

HONORS AND AWARDS:

Henry T. Bahnson, M.D., Teacher of the Year University of Pittsburgh School of Medicine June 2013

Seymour Glagov Award The University of Chicago Midwest Vascular Research Forum May 2010

Research Award Staten Island Hospital Department of Surgery June 2007

BOARDS OF DIRECTORS/TRUSTEES POSITIONS: None.

SERVICE ON NATIONAL GRANT REVIEW PANELS, STUDY SECTIONS, COMMITTEES:

American College of Surgeons Scholarship Committee Ad-Hoc Reviewer for Vascular Surgery, General Surgery, and Trauma/Critical Care July 2014-Current

SERVICE ON MAJOR COMMITTEES:

A. International

None.

B. National

American Venous Forum Editorial Board, The Vein Specialist December 2015-Current

Society for Vascular Surgery Young Surgeons Advisory Committee June 2013-Current

Vascular & Endovascular Surgery Society Fundraising Committee June 2012-Current

Southwestern Pennsylvania Chapter, American College of Surgeons Councilor June 2013-July 2015

C. Medical School/University

Rutgers New Jersey Medical School Graduate Medical Education Committee January 2016-Current

Rutgers New Jersey Medical School Associate Program Director, Vascular Surgery Fellowship August 2015-Current

The University of Chicago Graduate Medical Education Internal Review Committee July 2009-June 2010 State University of New York Downstate Medical Center College of Medicine Admissions Committee July 2000-June 2001

D. Hospital

Jersey City Medical Center Credentialing Committee January 2016-Current

Trinitas Regional Medical Center Operating Room Committee September 2015-Current

UPMC Presbyterian-Shadyside Cardiac Catheterization Laboratory Utilization Committee September 2010-August 2012

Staten Island University Hospital Graduate Medical Education Committee July 2007-June 2008

E. Department

The University of Chicago Department of Surgery Surgical Case Review Committee July 2009-June 2010

Staten Island University Hospital Administrative Chief Resident, Department of Surgery July 2007-June 2008

F. Editorial Boards

Clinics in Surgery March 2016-Current

The Vein Specialist, The American Venous Forum December 2015-Current

G. AdHoc Reviewer

American College of Surgeons Scholarship Committee Reviewer for Vascular Surgery, General Surgery, and Trauma/Critical Care July 2014-Current

SERVICE ON GRADUATE SCHOOL COMMITTEES: None.

SERVICE ON HOSPITAL COMMITTEES:

Jersey City Medical Center Credentialing Committee January 2016-Current

Trinitas Regional Medical Center Operating Room Committee September 2015-Current

UPMC Presbyterian-Shadyside Cardiac Catheterization Laboratory Utilization Committee September 2010-August 2012

The University of Chicago Hospitals Surgical Case Review Committee July 2009-June 2010

Staten Island University Hospital Graduate Medical Education Committee July 2007-June 2008

Staten Island University Hospital Administrative Chief Resident, Department of Surgery July 2007-June 2008

SERVICE TO THE COMMUNITY:

University of Pittsburgh Health Career Scholars Academy Clinical Preceptor and Regular Speaker August 2010-August 2015

SPONSORSHIP (Primary Mentorship) OF CANDIDATES FOR POSTGRADUATE DEGREE: None.

SPONSORSHIP (Primary Mentorship) OF POSTDOCTORAL FELLOWS:

Jason Davis, M.D., Rutgers NJMS Vascular Surgery Fellow, September 2015-June 2016 Kristin Cook, M.D., Rutgers NJMS Vascular Surgery Fellow, September 2015-June 2017 Hazeez Adigun, M.D., Rutgers NJMS General Surgery Resident, September 2015-June 2016 Nathan Liang, M.D., UPMC Integrated Vascular Surgery Resident, July 2011-August 2015 Areck Ucuzian, M.D., Ph.D., UPMC Vascular Surgery Fellow, July 2013-June 2015

TEACHING RESPONSIBILITIES:

A. Lectures or Course Directorships

Rutgers New Jersey Medical School Associate Program Director, Vascular Surgery Fellowship September 2015-Current

University of Pittsburgh School of Medicine Problem Based Learning, Gross Anatomy Module August 2010-July 2015

University of Pittsburgh School of Medicine Integrated Case Studies August 2010-July 2015

University of Pittsburgh School of Medicine Advanced Medical Interviewing August 2010-July 2015

University of Pittsburgh School of Medicine Vascular Surgery Preclinical Elective August 2010-July 2015

B. Research Training (other than Primary Mentorship)

Post Doctoral Fellows: None. Pre Doctoral Students: None.

CLINICAL RESPONSIBILITIES:

Staff Surgeon at Rutgers New Jersey Medical School, Newark, NJ, August 2015-Current Staff Surgeon at the University of Pittsburgh Medical Center (UPMC), Pittsburgh, PA, August 2010-July 2015

GRANT SUPPORT:

A. Principal Investigator

Endurant Stent Graft System Post-Approval Study (ENGAGE PAS), NCT01379222, UPMC Site Principal Investigator, \$31,924

B. Co-Investigator

An Assessment of Humacyte's Human Acellular Vessel in Patients Needing Renal Replacement Therapy: A Comparison with ePTFE Grafts as Conduits for Hemodialysis (HUMANITY), NCT02644941, Rutgers NJMS

Best Endovascular vs. Best Surgical Therapy in Patients with Critical Limb Ischemia (BEST-CLI), NCT02060630, UPMC

Dexamethasone Infusion to the Adventitia to Enhance Clinical Efficacy After Femoropopliteal Revascularization (DANCE), NCT 01507558, UPMC

Pivotal Trial of a Novel Paclitaxel-Coated Percutaneous Angioplasty Balloon (ILLUMENATE), NCT01858428, UPMC

SuperNOVA Clinical Stenting Trial, NCT01292928, UPMC

Evaluation of Predictors of Aortic Aneurysm Growth and Rupture, NCT02022436, University of Pittsburgh

Clinical Implications of Genetic Variations of Venous Stasis Ulceration, NCT02034396, University of Pittsburgh

A Multicenter, Open Label, Prospective, Non-Randomized Study of the InCraft Stent Graft System in Subjects with Abdominal Aortic Aneurysms (INSPIRATION), NCT01664078, UPMC

PRESERVE-Zenith Iliac Branch Clinical Study, NCT01208415, UPMC

C. Pending

None

PUBLICATIONS:

- A. Refereed Original Article in Journal
 - 1. CS Bartlett, BE Rapuano, DG Lorich, **T Wu**, RC Anderson, AE Tomin, JF Hsu, JM Lane, DL Helfet. Early changes in prostaglandin precedes bone formation in a rabbit model of heterotopic ossification. *Bone* 2006 Mar; 38(3):322-32.
 - 2. **T Wu**, J Prema, G Zagaja, A Shalhav, HS Bassiouny. Total laparo-robotic repair of abdominal aortic aneurysm with sac exclusion & obliteration, aortofemoral bypass: case report & review of the literature. *Annals of Vascular Surgery* 2009 Sep-Oct; 23(5):686.e11-6.
 - 3. **T Wu**, JG Carson, CL Skelly. Use of internal endoconduits as an adjunct to EVAR in the setting of challenging aortoiliac anatomy. *Annals of Vascular Surgery* 2010 Jan; 24(1):114.e7-11.
 - 4. AE Leake, TH You, **T Wu**, L Fish, ED Dillavou, RA Chaer, SA Leers, MS Makaroun. AV grafts are associated with earlier catheter removal and fewer catheter days in the USRDS population. *Journal of Vascular Surgery* 2015 Jul; 62(1):123-7.
 - 5. ES Hager, CB Washington, A Steinmetz, **T Wu**, MJ Singh, ED Dillavou. Perforator closure: factors that influence immediate closure rates using radiofrequency, laser, and foam sclerotherapy. *Journal of Vascular Surgery Venous & Lymphatic Disorders* 2016 Jan; 4(1):51-6.

B. Books, Monographs and Chapters

- 1. TR Desai, **T Wu**. Raynaud's Phenomenon. In SW Ashley, PS Barie, WH Pearce, WG Cance, JH Pemberton, GJ Kurkovich, NJ Soper, LR Kaiser, eds: *ACS Surgery: Priniples & Practice*, 7th Edition, BC Decker, Inc. 2010. Section 6, Chapter 24.
- T Wu, HS Bassiouny. Criteria for carotid stenosis and plaque characteristics. In MK Eskandari, MD Morasch, WH Pearce, JST Yao, eds: *Vascular Surgery – Therapeutic Strategies*, People's Medical Publishing House, Inc. 2010. Chapter 56, pp. 723-736.
- 3. **T Wu**, R Chaer. Subclavian, Vertebral, and Upper Extremity Arterial Occlusive Disease. In DP Slovut, SM Dean, eds: *Comprehensive Review in Vascular and Endovascular Medicine*, Cardiotext Publishing, 2012. Part 2, Chapter 5.

None.

- D. Other Articles (Reviews, Editorials, etc.) In Journals; Chapters; Books; other Professional Communications
 - 1. **T Wu**, RA Chaer, NL Salvo. Building effective partnerships between vascular surgeons and podiatrists in the effective management of diabetic foot ulcers. *In Press, Journal of the American Podiatric Medical Association*.
 - 2. V Chandra, NO Glebova, **T Wu.** Building effective partnerships between vascular surgeons and podiatrists in the development and management of a wound care center. Joint professional practice memorandum prepared on behalf of the Society for Vascular Surgery and the American Podiatric Medical Association. *Submitted*, March 2016, Society for Vascular Surgery.

E. Abstracts

- CS Bartlett, BE Rapuano, JM Lane, JF Hsu, T Wu, DL Helfet. Evaluation of the biochemical mediators of heterotopic ossification. 2nd Joint Meeting, American Society of Bone & Mineral Research/International Bone & Mineral Society, San Francisco, CA December 1998
- 2. **T Wu**, JT Riley, G Miller, R Moufid, G Chandra, T Panetta. Minimally invasive limited ligation endoluminal-assisted revision (MILLER) of arteriovenous fistulas to correct steal syndrome: results and clinical outcomes at one year. Vascular Annual Meeting, Society for Vascular Surgery, Baltimore, MD June 2007
- 3. **T Wu**, JT Riley, G Miller, R Moufid, G Chandra, T Panetta. Balloon angioplasty maturation of arteriovenous fistulae: a new paradigm for surveillance, maintenance, and improved function. Vascular Annual Meeting, Society for Vascular Surgery, Baltimore, MD June 2007
- JT Riley, R Moufid, T Wu, F Tarantini, W Rodino, T Panetta. Subintimal angioplasty and stent grafting of long segment femoropopliteal occlusions: technical considerations and four year results. Vascular Annual Meeting, Society for Vascular Surgery, Baltimore, MD June 2007
- T Hara, J Shiraishi, T Wu, D Fukuoka, H Bassiouny, K Doi. Quantitative 3D Analysis of Stenosis Rate for Carotid Artery on CT Angiograms. 51st Annual Meeting, American Association of Physicists in Medicine, Anaheim, CA July 26, 2009
- T Wu, D Gangdharamurthy, T Karrison, HS Bassiouny. Carotid artery plaque burden and calcification in ≥ 50% NASCET stenosis in relation to symptomatic outcome. Vascular Annual Meeting, Society for Vascular Surgery, Boston, MA June 2010
- T Wu, S McCormick, F Loth, D Biswas, N Ambati, HS Bassiouny. CTA quantitative analysis of carotid bifurcation plaque burden and calcification in relation to symptomatic outcome. 34th Annual Meeting, Midwestern Vascular Surgical Society, Indianapolis, IN September 2010
- 8. AE Leake, TH Yuo, **T Wu**, L Fish, ED Dillavou, RA Chaer, SA Leers, MS Makaroun. Arteriovenous graft (AVG) is associated with increased secondary procedures but lower catheter use than arteriovenous fistula (AVF). Vascular & Endovascular Surgery Society Spring Meeting, in conjunction with the Society for Vascular Surgery, Vascular Annual Meeting, Boston, MA June 2014
- 9. **T Wu**. Outcomes of Lower Extremity Revascularization in Young Patients. 12th Annual Pittsburgh Vascular Symposium, Pittsburgh, PA October 2014
- E Hager, A Steinmetz, CB Washington, T Wu, MJ Singh, TS Kenkre, ED Dillavou. Factors that influence immediate perforator vein closure rates using radiofrequency ablation, laser ablation, or foam sclerotherapy. 27th Annual Meeting, American Venous Forum, Palm Springs, CA February 2015
- 11. A Taha, LK Marone, E Avgerinos, T Wu, G Al-Khoury, MJ Singh, G Jeyabalan, MS Makaron, RA Chaer. Initial experience with infrageniculate access for retrograde endovascular interventions (REI) for chronic lower extremity ischemia. 43rd Annual Symposium, Society for Clinical Vascular Surgery, Miami Beach, FL April 2015

- 12. L Lajoie, J Escribano, C Sangiovanni, F Padberg, A Dhadwal, M Curi, T Wu, A Kunac, J Huang. Incidence and Outcomes of Vascular Pathology Unrelated to Trauma Found on Computed Tomography Scans for Trauma. 44th Annual Symposium, Society for Clinical Vascular Surgery, Las Vegas, NV March 2016
- 13. RM Libera, C Sangiovanni, T Wu, AK Dhadwal, JT Huang, FT Padberg, Jr., MA Curi. Endovascular-first strategies in revascularization for critical limb ischemia improves likelihood of ambulation following secondary major amputations. Vascular Society of New Jersey, 38th Annual Scientific Meeting, Belleville, NJ March 2016
- 14. JT Huang, R Gulati, FT Padberg, Jr., AK Dhadwal, T Wu, MA Curi. Prosthetic arterial bypasses are durable in patients undergoing vascular reconstruction during lower extremity sarcoma resection. Eastern Vascular Society, 30th Annual Meeting, Philadelphia, PA September 2016

F. Reports

None.

PRESENTATIONS:

A. Scientific:

- CS Bartlett, BE Rapuano, JM Lane, JF Hsu, T Wu, DL Helfet. Evaluation of the biochemical mediators of heterotopic ossification. 2nd Joint Meeting, American Society of Bone & Mineral Research/International Bone & Mineral Society, San Francisco, CA December 1998
- 2. **T Wu**, JT Riley, G Miller, R Moufid, G Chandra, T Panetta. Minimally invasive limited ligation endoluminal-assisted revision (MILLER) of arteriovenous fistulas to correct steal syndrome: results and clinical outcomes at one year. Vascular Annual Meeting, Society for Vascular Surgery, Baltimore, MD June 2007
- 3. **T Wu**, JT Riley, G Miller, R Moufid, G Chandra, T Panetta. Balloon angioplasty maturation of arteriovenous fistulae: a new paradigm for surveillance, maintenance, and improved function. Vascular Annual Meeting, Society for Vascular Surgery, Baltimore, MD June 2007
- 4. JT Riley, R Moufid, **T Wu**, F Tarantini, W Rodino, T Panetta. Subintimal angioplasty and stent grafting of long segment femoropopliteal occlusions: technical considerations and four year results. Vascular Annual Meeting, Society for Vascular Surgery, Baltimore, MD June 2007
- 5. **T Wu**, JG Carson, CL Skelly. EVAR in a patient with TASC D aortoiliac occlusive disease and a symptomatic AAA. 19th Annual Winter Meeting, Peripheral Vascular Surgery Society, Steamboat Springs, CO January 31, 2009
- T Wu, JG Carson, HS Bassiouny. Robotic abdominal aortic aneurysm repair lesions learned. 16th Annual Charles B. Huggins Research Symposium, The University of Chicago Pritzker School of Medicine, Chicago, IL March 14, 2009
- T Hara, J Shiraishi, T Wu, D Fukuoka, H Bassiouny, K Doi. Quantitative 3D Analysis of Stenosis Rate for Carotid Artery on CT Angiograms. 51st Annual Meeting, American Association of Physicists in Medicine, Anaheim, CA July 26, 2009
- 8. **T Wu**, HS Bassiouny. Criteria for carotid stenosis and plaque characteristics. 34th Annual Northwestern Vascular Symposium, Northwestern University Feinberg School of Medicine, Chicago, IL December 10, 2009
- 9. **T Wu**, HS Bassiouny. Hybrid repair of thoracoabdominal aortic aneurysms. 6th Annual Congress, Vascular Society of Egypt, Sharm El-Sheikh, Egypt March 2010
- T Wu, T Karrison, HS Bassiouny. Surrogate markers for vulnerable carotid occlusive lesions on CT arteriography and relation to symptomatic outcome. 17th Annual Charles B. Huggins Research Symposium, The University of Chicago Pritzker School of Medicine, Chicago, IL March 27, 2010
- 11. **T Wu**, S McCormick, F Loth, D Baswas, N Ambati, D Gangdharamurthy, HS Bassiouny. Carotid plaque burden and calcification in symptomatic and asymptomatic patients. 1st Annual Seymour Glagoy Midwest Vascular Research

- Symposium, The University of Chicago Pritzker School of Medicine, Chicago, IL May 7, 2010
- 12. T Wu, CL Skelly. Challenging Iliac Access and EVAR in a patient with TASC D aortoiliac occlusive disease. 1st Annual William H. Baker, M.D., Vascular Surgery Lectureship Day, Loyola University Chicago Stritch School of Medicine, Maywood, IL May 19, 2010
- 13. **T Wu**, D Gangdharamurthy, T Karrison, HS Bassiouny. Carotid artery plaque burden and calcification in ≥ 50% NASCET stenosis in relation to symptomatic outcome. Vascular Annual Meeting, Society for Vascular Surgery, Boston, MA June 2010
- 14. T Wu, S McCormick, F Loth, D Biswas, N Ambati, HS Bassiouny. CTA quantitative analysis of carotid bifurcation plaque burden and calcification in relation to symptomatic outcome. 34th Annual Meeting, Midwestern Vascular Surgical Society, Indianapolis, IN September 2010
- 15. AE Leake, TH Yuo, T Wu, L Fish, ED Dillavou, RA Chaer, SA Leers, MS Makaroun. Arteriovenous graft (AVG) is associated with increased secondary procedures but lower catheter use than arteriovenous fistula (AVF). Vascular & Endovascular Surgery Society Spring Meeting, in conjunction with the Society for Vascular Surgery, Vascular Annual Meeting, Boston, MA June 2014
- E Hager, A Steinmetz, CB Washington, T Wu, MJ Singh, TS Kenkre, ED Dillavou. Factors that influence immediate perforator vein closure rates using radiofrequency ablation, laser ablation, or foam sclerotherapy. American Venous Forum, 27th Annual Meeting, Palm Springs, CA February 2015
- 17. A Taha, LK Marone, E Avgerinos, T Wu, G Al-Khoury, MJ Singh, G Jeyabalan, MS Makaron, RA Chaer. Initial experience with infrageniculate access for retrograde endovascular interventions (REI) for chronic lower extremity ischemia. Society for Clinical Vascular Surgery, 43rd Annual Symposium, Miami Beach, FL April 2015
- L Lajoie, J Escribano, C Sangiovanni, F Padberg, A Dhadwal, M Curi, T Wu, A Kunac, J Huang. Incidence and Outcomes of Vascular Pathology Unrelated to Trauma Found on Computed Tomography Scans for Trauma. Society for Clinical Vascular Surgery, 44th Annual Symposium, Las Vegas, NV March 2016
- RM Libera, C Sangiovanni, T Wu, AK Dhadwal, JT Huang, FT Padberg, Jr., MA Curi. Endovascular-first strategies in revascularization for critical limb ischemia improves likelihood of ambulation following secondary major amputations. Vascular Society of New Jersey, 38th Annual Scientific Meeting, Belleville, NJ March 2016
- JT Huang, R Gulati, FT Padberg, Jr., AK Dhadwal, T Wu, MA Curi. Prosthetic arterial bypasses are durable in patients undergoing vascular reconstruction during lower extremity sarcoma resection. Eastern Vascular Society, 30th Annual Meeting, Philadelphia, PA September 2016

B. Professional:

- T Wu, TR Desai. Peripheral arterial disease. Department of Medicine Conference, The University of Chicago Prtizker School of Medicine, Chicago, IL November 13, 2009
- 2. **T Wu**, R Williams, TR Desai. Informed consent in aortic aneurysm repair. The MacLean Center for Clinical Medical Ethics Conference, The University of Chicago, January 21, 2010
- T Wu, E Grossman, TR Desai. Urgent decision making in vascular surgery. The MacLean Center for Clinical Medical Ethics Conference, The University of Chicago, March 18, 2010
- 4. **T Wu**. Vena Cava Filters: Who really needs one? 11th Annual Pittsburgh Vascular Symposium, Pittsburgh, PA September 2013
- T Wu. Diagnosis and Treatment of Venous Wounds. 14th Annual Podiatry Conference and 2nd Annual American Society of Podiatric Surgeons Conference, Pittsburgh, PA June 2014
- 6. **T Wu**. Update on Venous Disease and Outcomes of Minimally Invasive Treatment. UPMC Passavant CME Conference, Pittsburgh, PA August 2014

- 7. **T Wu**. Vascular Laboraotry Testing & Vascular Surveillance, American Podiatric Medical Association Residency Education Conference September 2014
- 8. **T Wu**. Endovascular Techniques to Revascularize Lower Extremities, American Podiatric Medical Association Residency Education Conference September 2014
- 9. **T Wu**. Outcomes of Lower Extremity Revascularization in Young Patients. 12th Annual Pittsburgh Vascular Symposium, Pittsburgh, PA October 2014
- T Wu. Minimally Invasive Endovascular Techniques to Revascularize Extremities. Advances in Wound Healing, UPMC Passavant, Cranberry Township, PA October 2014
- 11. **T Wu**. Peripheral arterial disease as a coronary risk equivalent. 3rd Annual Health Forum, Pittsburgh Chapter of the Chinese Association for Science & Technology, Pittsburgh, PA December 2014