

## **Decisions, Decisions...ISHLT membership lays down the gauntlet to the programme committee!**

Andrew Fisher, FRCP, PhD  
Freeman Hospital  
Newcastle Upon Tyne, UK  
a.j.fisher@ncl.ac.uk

Although memories of our excellent 2015 Annual Meeting in Nice are still fresh, there is no pause in preparation for what we hope will be another successful Annual Meeting in 2016 in Washington DC. ISHLT members have once again shown their enthusiasm and commitment to the success of their Annual Meeting by submitting a record number of proposals for symposium and plenary content for 2016.

Close to 150 different proposals were received via our online portal and having reviewed them all personally, I am excited by the creativity and scientific excellence that these proposals are striving for. The challenge now falls to the members of the Symposium Planning Committee to review, refine and shortlist this wealth of submitted material into the 42 symposium slots that will make up this part of the final programme.

The Committee will meet in mid-July in a secluded venue outside London to agree on the final content and to carry forward our aim to have balanced gender, geography and generation whenever possible while delivering excellent multi-disciplinary scientific content.

I would like to convey a huge thank you to everyone who submitted proposed material, as although we will only use a proportion of this material in the final programme it all helps the Committee understand the priorities of our membership.

Now is the time to start preparing your best unpublished clinical and scientific research or fascinating cases for submission to the 2016 Annual Meeting as the abstract submission portal goes live on 3 August and will close on 3 November 2015. Remember, the programme is only as good as the abstracts submitted and so I encourage you to use ISHLT 2016 in Washington DC as a platform to showcase your best work and help us deliver an outstanding scientific programme to our membership and beyond.

---

Disclosure statement: The author has no conflicts of interest to disclose.

## **STRATEGIC PLANNING UPDATE**

A big THANK YOU to everyone who completed the Strategic Planning Survey. We received responses from 404 members whose specialties, ages, and geographic locations were very representative of the membership as a whole. We're off to a great start, but we would still like to hear from the rest of you! For those of you who did not participate in the survey but would like to provide input into the strategic planning process, you may do so by sending an email to [president@ishlt.org](mailto:president@ishlt.org) or by communicating with your Council Chair. During the month of July, each of the Council Chairs will be facilitating discussions with their Council members regarding the future direction of ISHLT. Some will do this via surveys, others via conference calls, others via discussions in the online community. The Strategic Planning Task Force encourages you to be PROACTIVE in this process. Take the initiative to give us YOUR input into the future of YOUR Society.

---

## Infection Control and Prevention Consensus for Mechanical Circulatory Support (MCS)

Shimon Kusne, MD  
Mayo Clinic  
Phoenix, AZ, USA  
kusne.shimon@mayo.edu

Infection, with significant morbidity and mortality, is a common complication after implantation of Mechanical Circulatory Support (MCS) devices. In some early series up to 80% of the patients developed at least one infection. Until recently it was impossible to compare the rates of infection complications because authors used different definitions. In 2010 the Infectious Diseases Council developed and published definitions which are now being used by investigators in and outside the US. Currently there are no established infection prevention practices and most centers are using their own protocols.

Recently the ISHLT ID council conducted a questionnaire to investigate the current infection control practices. This was an electronic survey with 137 participating centers under the direction of Dr. Kusne from Mayo Clinic in Arizona with support of ISHLT (publication in progress). The questionnaire showed us that there is a tremendous amount of variability between centers regarding their infection control and prevention practices. Because of the lack of infection prevention trials, many centers are using protocols developed by local "experts". Therefore, guidelines are needed to direct investigators in centers performing MCS operations to use common practices for prevention. At the same time, prospective clinical trials are needed between collaborating centers to explore preventive strategies in this population. The ISHLT, through the Infectious Diseases Council, is interested in bringing centers together to perform prospective trials and promote better practices in this important field of infection prevention.

The ID council has received approval to develop a reference document regarding MCS recipients which will guide clinicians in preventing and managing infections in MCS recipients. The ISHLT Infectious Diseases council, in collaboration with ICCAC, has started working on this consensus document for strategies to prevent and manage infections in MCS recipients. This is a multidisciplinary effort in collaboration with many ISHLT councils including Infectious Diseases, Cardiology, Pediatrics, Cardiothoracic Surgery, Nursing, and Pharmacy from the US and outside the US. For the purpose of this project a working team was created which includes a Chair (Shimon Kusne, Infectious Diseases) together with five co-Chairs (Lars Lund, Cardiology; George Wieselthaler, Surgery; Haifa Lyster, Pharmacy; Annemarie Kaan, Nursing, Shirish Huprikar, Infectious Diseases). Also very instrumental in putting together this effort are previous and current ID council Chairs (Fernanda Silveira, Lara Danziger-Isakov, Martha Mooney, and Paolo Grossi). The names of the potential co-authors were suggested to us by the different ISHLT subspecialty councils. Some of them are serving as writers and others are serving as reviewers. After completion, the document will undergo careful review by 8 external experts in and outside the US. The consensus document will cover the following subjects:

1. Background of the Project and Infectious Diseases evaluation of MCS candidates
2. Peri-operative management in OR and antibiotic prophylaxis
3. Post-operative management including nursing and management of infections

The creation of this document is in progress with a plan to have the first draft sometime in August 2015. The intention is to publish this consensus document in Journal of Heart and Lung Transplantation.

---

Disclosure statement: The author has no conflicts of interest to disclose.

## **Bortezomib in Highly Sensitized Patients Awaiting Heart Transplantation – A Potentially Sensitive ID Issue?**

Stephanie Pouch  
The Ohio State University  
Columbus, OH, USA  
[Stephanie.Pouch@osumc.edu](mailto:Stephanie.Pouch@osumc.edu)

Sensitization to human leukocyte antigens, which occurs through blood transfusions, previous organ transplantation, pregnancy, prior cardiac surgery with homografts, and the presence of ventricular assist devices, has historically limited access to heart transplantation [1]. However, the percentage of patients with high panel reactive antibody (PRA) listed for heart transplantation has increased over the past decade [2], and intravenous immunoglobulin, plasmapheresis, and rituximab have been shown to decrease allosensitization by reducing circulating antibodies. More recently, bortezomib has shown promise as a novel treatment strategy for antibody-mediated rejection as well as pre-transplant desensitization [1, 3].

Bortezomib, the first-in-class 26S proteasome inhibitor, is currently FDA approved for the treatment of multiple myeloma and relapsed mantle cell lymphoma. Proteasome inhibition reduces nuclear factor-kappa B activity and down-regulates peptide loading in class I major histocompatibility complex molecules, though its major effect is cell cycle arrest, resulting in plasma cell apoptosis and decreased antibody production [4-5]. As bortezomib continues to be evaluated further as a treatment strategy for highly sensitized patients awaiting heart transplantation, the question of the transplant ID provider is how this immunomodulation will impact the patient's risk for infection.

Earlier work evaluating the efficacy of bortezomib in patients with relapsed multiple myeloma showed a 13% incidence of herpes zoster (HZ) among those treated with bortezomib compared to a 5% HZ incidence in those treated with dexamethasone ( $p < 0.001$ ) [6]. Subsequent studies have reported an incidence of HZ ranging from 10-22% among patients with multiple myeloma receiving bortezomib, and antiviral prophylaxis is recommended in this population [7-8]. Whether this translates to highly sensitized patients awaiting heart transplantation remains uncertain; the two patient populations certainly differ in terms of underlying immunodysregulation, and bortezomib is typically provided in ongoing 3-week cycles for multiple myeloma. In a study of 7 patients with elevated anti-HLA antibodies awaiting heart transplantation, desensitization with bortezomib and plasmapheresis resulted in decreased cPRA, but appears to have been associated with an increased risk for infection following therapy. Two of 7 patients in the cohort died of sepsis, one while awaiting transplant and another in the context of post-transplant graft failure requiring augmented immunosuppression. Four line infections, 3 urinary tract infections, and a case of *C difficile* colitis also occurred among the patients in this cohort, but there were no reported episodes of viral infection [1]. Infectious complications of bortezomib use in pediatric cardiac transplant recipients with antibody-mediated rejection have included cellulitis and *Klebsiella pneumoniae* bacteremia [9].

Large multicenter studies assessing the role of bortezomib in highly sensitized patients awaiting heart transplantation are required to better evaluate the potential infectious risks associated with its use.

While small reports do suggest an increased risk of infection, particularly of bacterial etiology, a causative relationship has yet to be described, and it is unclear whether the infections reported to date were related to low immunoglobulin levels, intercurrent illness, or other host factors. As with many issues in clinical transplantation, we are left with more questions than answers. One thing is clear, though – as we work to develop new strategies aimed at improving patient outcomes, we're all in it together.

---

Disclosure statement: The author has no conflicts of interest do disclose.

#### References:

1. Patel J, Everly M, Chang D, et al. Reduction of alloantibodies via proteasome inhibition in cardiac transplantation. *J Heart Lung Transplant* 2011; 30: 1320-6.
2. Lund LH, Edwards LB, Kucheryavaya AY, et al. The Registry of the International Society for Heart and Lung Transplantation: thirty-first official adult heart transplant report – 2014; focus theme: retransplantation. *J Heart Lung Transplant* 2014; 33: 996-1008.
3. Everly MJ. A summary of bortezomib use in transplantation across 29 centers. *Clin Transpl* 2009: 323-37.
4. Everly MJ, Everly JJ, Terasaki PI. Role of proteasome inhibition in sensitized transplant candidates. *Chin Med J* 2011; 124(5): 771-4.
5. Perry DK, Burns JM, Pollinger HS, et al. Proteasome inhibition causes apoptosis of normal human plasma cells preventing alloantibody production. *Am J Transplant* 2009; 9: 201-9.
6. Richardson PG, Sonneveld P, Schuster MW, et al. Bortezomib or high-dose dexamethasone for relapsed multiple myeloma. *N Engl J Med* 2005; 352(24): 2487-98.
7. Yi Y, Chung J, Song M, et al. The risk factors for herpes zoster in bortezomib treatment in patients with multiple myeloma. *Korean J Hematol* 2010; 45(3): 188-92.
8. Nucci N, Anaissie E. Infections in patients with multiple myeloma in the era of high-dose therapy and novel agents. *Clin Infect Dis* 2009; 49(8): 1211-25.
9. Zinn MD, L'Ecuyer TJ, Fagoaga OR, et al. Bortezomib use in a pediatric cardiac transplant center. *Pediatr Transplantation* 2014; 18: 469-76.

## LVAD Infections and Post-Transplant Outcomes: A long way to go

Jorge Silva, MD

[jsilvaenciso@ucsd.edu](mailto:jsilvaenciso@ucsd.edu)

Saima Aslam, MD, MS

[saslam@ucsd.edu](mailto:saslam@ucsd.edu)

University of California, San Diego  
San Diego, CA, USA

The sixth INTERMACS annual report summarizes data from over 10,000 MCSDs implanted worldwide. (1) Up to a third of patients continue to develop infectious complications such as sepsis and driveline infection (DLI). Driveline infections continue to occur with increasing hazard associated with increasing duration of device placement. Risk factors for driveline infection include obesity, diabetes, trauma to the exit site, surgical factors such as extra-cutaneous placement of the velour portion of the driveline, and length of implantation of the device.

Some cases of DLI progress to deep DLI or bloodstream infection over time that can negatively impact survival. One study reported an increase in one-year mortality to 30% in those with DLIs; about 50% of these patients died of sepsis. (2) Predictors of death in those with bloodstream infections were the presence of postoperative right ventricular failure and infections due to non-gram positive cocci. (3) Others have identified bloodstream infection as a trigger for further events including cerebrovascular accidents, especially in those with persistent bloodstream infection. Potentially, early transplantation may be a successful approach to treat such patients and avoid further downstream complications.

The more recent HVAD system is considered to have a lower propensity for DLI thought to be due to decreased thickness of the driveline itself as well as lack of a peritoneal pocket for the device. ADVANCE bridge-to-transplant trial as well as data combined from the Continued Access Protocol demonstrated that DLIs occurred in 16.9% of patients at an incidence rate of 0.25 event per person year. Although there was no negative impact on survival in patients with DLIs, there was a trend for reduced survival in patients with sepsis events when compared to those patients without sepsis in this trial. (4) Data from the ongoing ENDURANCE trial was presented at the recent ISHLT meeting in Nice. This is a head to head randomized comparison of the HVAD system against a comparator arm (HMII) for the indication of destination therapy. Data from the presentation demonstrated a similar incidence of any infection (67.9% vs. 61.7%,  $p=NS$ ) as well as DLI specifically (18.9% vs. 14.1%,  $p=NS$ ) among the recipients of the HVAD system vs the comparator arm. Event per person year rate was similar in both arms as well (0.18 vs. 0.12,  $p=NS$ ). It seems that the only way to eliminate DLIs is to eliminate the driveline. LVADs utilizing transcutaneous energy transfer are in development though still a long way from widespread clinical adoption.

The impact of device-related infections on post-transplant outcomes has been seen as a marker for potential graft dysfunction, rejection and impact on survival. This continues to be controversial as some studies have shown no difference in outcomes. A retrospective analysis of 149 patients

reported that those with pre-transplant DLIs predicted post-transplant infection at former sites (driveline or pocket) and longer length of stay without affecting survival.(5) Of note, in this study, patients with device-related infections were transplanted less compared to those with no infections. Another retrospective analysis of 136 patients demonstrated that the presence of any infection during the period of LVAD support did not affect post-transplant survival when compared to patients transplanted without prior use of an LVAD. (6)

These results were challenged in a recent retrospective analysis of >15,000 status 1A patients from the United Network of Organ Sharing database. (7) The study compared patients with LVAD and associated complications with those without complications, and demonstrated similar survival. The subset of patients with device infection, however, had worse 1 year and 10 year post-transplant survival (79.3% vs. 83.9%,  $p=0.012$  and 27.8% vs. 47.5%,  $p=0.017$ , respectively). Class I and II panel reactive antibodies (PRA) levels were higher in the complication group as well. Higher mortality in this subset may be due to a variety of factors, including more challenging surgery and physiology in systemically ill patients, presence of additional occult infections, and possibly greater rates of allosensitization.

Longer duration of LVAD support not only increases the risk for infections but also for development of antibodies. The interaction of antibodies and related post-transplant outcomes has shown that most patients with LVADs have elevated PRA likely due to blood products received post-operatively (unless leukocyte and platelet irradiated), inherent inflammation due to biomaterials from the LVAD, or possible "subclinical" or active infections. (8) Despite increasing rates of allosensitization, there have been several studies showing no difference in outcomes of rejection or mortality. (9,10) A more recent study presented at the ISHLT meeting in Nice this year, demonstrated that 10% of 78 LVAD-BTT patients developed antibodies after LVAD implantation, which incurred a higher risk for antibody mediated rejection after transplant. Cardiovascular and all-cause mortality was higher in this group although not statistically significant.

Investigators have noted that LVAD patients have compromised T cell function because of down-regulatory cytokines and increase in suppressive T cells. Moreover, after LVAD implantation, B cell hyper-reactivity is noted as well. (11) This imbalance may well lead to an increase antibody production and place the patient at increased risk of infectious complications. The interplay between device infection, allosensitization, and post-transplant outcomes is an area of active research interest.

As Socrates once said "Wonder is the beginning of wisdom" our understanding of the immunobiology and interaction with devices will grow...we just have to ride the white line.

---

Disclosure statement: The authors have no conflicts of interest to disclose.

References:

1. Kirklin JK, Naftel DC, Pagani FD et al. Sixth INTERMACS annual report: a 10,000-patient database. *The Journal of heart and lung transplantation : the official publication of the International Society for Heart Transplantation*. 2014 Jun; 33(6):555-64.
2. Koval CE, Thuita L, Moazami N, Blackstone E. Evolution and impact of drive-line infection in a large cohort of continuous-flow ventricular assist device recipients. *The Journal of heart and lung transplantation : the official publication of the International Society for Heart Transplantation*. 2014; 33: 1164-1172
3. Toda K, Yonemoto Y, Fujita T, Shimahara Y, Sato S, Nakatani T, Kobayashi J. Risk analysis of bloodstream infection during long-term left ventricular assist device support. *The Annals of thoracic surgery*. 2012; 94:1387-1393
4. John R, Aaronson KD, Pae WE et al. Drive-line infections and sepsis in patients receiving the HVAD system as a left ventricular assist device. *The Journal of heart and lung transplantation : the official publication of the International Society for Heart Transplantation*. 2014 Oct; 33(10):1066-73
5. Schulman AR, Martens TP, Russo MJ, et al. Effect of left ventricular assist device infection on post-transplant outcomes. *The Journal of heart and lung transplantation : the official publication of the International Society for Heart Transplantation*. 2009; 28:237-242
6. Sinha P, Chen JM, Flannery M, Scully BE, Oz MC, Edwards NM. Infections during left ventricular assist device support do not affect posttransplant outcomes. *Circulation*. 2000 Nov 7; 102(19 Suppl 3):III194-9.
7. Healy AH, Baird BC, Drakos SG, Stehlik J, Selzman CH. Impact of ventricular assist device complications on posttransplant survival: An analysis of the united network of organ sharing database. *The Annals of thoracic surgery*. 2013; 95:870-875
8. Drakos SG, Kfoury AG, Kotter JR, Reid BB, Clayson SE, Selzman CH, Stehlik J, Fisher PW, Merida M, 3rd, Eckels DD, Brunisholz K, Horne BD, Stoker S, Li DY, Renlund DG. Prior human leukocyte antigen-allosensitization and left ventricular assist device type affect degree of post-implantation human leukocyte antigen-allosensitization. *The Journal of heart and lung transplantation : the official publication of the International Society for Heart Transplantation*. 2009; 28:838-842
9. Joyce DL, Southard RE, Torre-Amione G, Noon GP, Land GA, Loebe M. Impact of left ventricular assist device (lvad)-mediated humoral sensitization on post-transplant outcomes. *The Journal of heart and lung transplantation : the official publication of the International Society for Heart Transplantation*. 2005; 24:2054-2059
10. Pagani FD, Dyke DB, Wright S, Cody R, Aaronson KD. Development of anti-major histocompatibility complex class i or ii antibodies following left ventricular assist device implantation: Effects on subsequent allograft rejection and survival. *The Journal of heart and lung transplantation : the official publication of the International Society for Heart Transplantation*. 2001; 20:646-653
11. Itescu S, John R. Interactions between the recipient immune system and the left ventricular assist device surface: Immunological and clinical implications. *The Annals of thoracic surgery*. 2003; 75:S58-65.

## Reflecting and Revisioning

Samantha Anthony, PhD, MSW  
Hospital for Sick Children  
Toronto, ON, Canada  
[samantha.anthony@sickkids.ca](mailto:samantha.anthony@sickkids.ca)

The year 2014 was memorable for the Nursing, Health Science and Allied Health Council. Our achievements were notable, including highlights such as: hosting the inaugural ISHLT Academy – Core Competencies in Nursing, Health Science and Allied Health; publishing a consensus report entitled “Adult Cardiothoracic Transplant Nursing: An ISHLT Consensus Document on the Current Adult Nursing Practice in Heart and Lung Transplantation” – Coleman et al. in the Journal of Heart and Lung Transplantation; awarding a Nursing, Health Science and Allied Health Research Grant, participating in the development of Guidelines for the Prevention and Management of VAD-related infections; and, contributing twelve LINKS articles that showcased the talent and experience of our members. The year culminated with the 35th Annual Meeting of the ISHLT in Nice, France: an event filled with high-quality scientific content, networking opportunities, and thought-provoking discussions. A special thank you to the 2015 Program Planning Committee Representatives, Kevin Carney and Annemarie Kaan, for all of their hard work and dedication.

A sincere thank-you to Bronwyn Levvey, the outgoing Liaison to the Board of Directors, for her leadership and advocacy over the past three years, and also to the dedicated Council Executive for their on-going commitment to moving our initiatives forward. In addition, a warm welcome to Dr. Michael Petty, who was recently nominated and awarded the position of Liaison to the ISHLT Board of Directors. As he ‘stands on the shoulders’ of great leaders, we look forward to Michael representing the unique needs of our diverse members.

The current Nursing, Health Science and Allied Health Executive Council includes the following group of dynamic and enthusiastic individuals:

Council Chair:	Samantha Anthony (Canada) <a href="mailto:Samantha.anthony@sickkids.ca">Samantha.anthony@sickkids.ca</a>
Vice Chair:	Kevin Carney (USA) <a href="mailto:Kevin.carney@uphs.upenn.edu">Kevin.carney@uphs.upenn.edu</a>
Past Chair:	Masina Scavuzzo (USA) <a href="mailto:scavuzzo.masina@bjc.org">scavuzzo.masina@bjc.org</a>
Liaison to Board of Directors:	Michael Petty (USA) <a href="mailto:mpetty1@fairview.org">mpetty1@fairview.org</a>
2016 Program Planning Committee:	Annemarie Kaan (Canada) <a href="mailto:AKaan@provincehealth.bc.ca">AKaan@provincehealth.bc.ca</a> Sabina De Geest (Switzerland) <a href="mailto:Sabina.degeest@unibas.ch">Sabina.degeest@unibas.ch</a>
Communications Workforce:	Emily Stimpson – LEADER (USA) <a href="mailto:Emily.stimpson@cshs.org">Emily.stimpson@cshs.org</a>
Education Workforce:	Caron Burch- LEADER (USA) <a href="mailto:cburch10@gmail.com">cburch10@gmail.com</a>
Standards & Guidelines Workforce:	Annemarie Kaan – LEADER (Canada) <a href="mailto:AKaan@province.bc.ca">AKaan@province.bc.ca</a>
Grants & Awards Workforce:	Oliver Mauthner – LEADER (Switzerland) <a href="mailto:oliver.mauthner@unibas.ch">oliver.mauthner@unibas.ch</a>
I2C2 Committee Representative:	Pamela Combs (USA) <a href="mailto:PSCombs@seton.org">PSCombs@seton.org</a>

Over the past several years the International Society for Heart and Lung Transplantation has experienced remarkable growth in its membership. As a result, it has become increasingly necessary to operate in a

more systematic manner, as demonstrated with purposeful changes to the Committee and Council structures. While embracing these changes, the Nursing, Health Science and Allied Health Council will continue to focus on our prioritized goals of enhanced communication and enriched collaborations, which will include working as a community to create opportune initiatives to:

- 1) Facilitate relationships among members who hold similar visions and interests, and share our combined skills and expertise to achieve targeted goals;
- 2) Encourage the development of formal partnerships with other professional groups, where mutual benefits can be attained and common goals addressed; and,
- 3) Improve the visibility of Nursing, Health Science and Allied Health members by actively pursuing participation in new and on-going projects, including the compilation of clinical guidelines and consensus statements.

The Nursing, Health Science and Allied Health Council strives to be inclusive and meet the needs of our members; we will continue to review our strategic direction and refine our objectives. We welcome members to become involved in the various activities within our Council and encourage them to contact us and help contribute to the future of our Council. We look forward to an exciting and productive 2015!!

---

Disclosure statement: The author has no conflicts of interest to disclose.

## Lung Transplant Clinical Year in Review at the ATS 2015

Tereza Martinu, MD  
Toronto General Hospital  
Toronto, ON, Canada  
[tereza.martinu@uhn.ca](mailto:tereza.martinu@uhn.ca)

I had the pleasure to present the Clinical Year in Review session on lung transplantation at this year's American Thoracic Society (ATS) annual meeting in Denver, in May. It really was a "clinical 3 years in review," since our topic was last presented in 2012. That made the choosing of the top articles that much more impossible.

My task was to select and discuss the 6 most important articles in lung transplantation published since 2012. I was allowed to further highlight another 15 articles. I have to admit that this was an incredibly difficult task, over which I agonized for many weeks. During my talk at the ATS I acknowledged all the hard work and dedication of so many members of our lung transplant community who have advanced the research in our field. There are so many other relevant articles that deserved discussion but that I couldn't cover in my 30-minute session.

The somewhat vague criteria that I used for my article selection were: novelty of the findings, multi-center collaboration, and clinical significance for lung transplant patients and providers. I chose articles that covered a wide range of important topics: candidate selection, expansion of the donor pool, anti-HLA antibodies, chronic lung allograft dysfunction and the emergence of new phenotypes, as well as a qualitative aspect of lung transplantation such as exercise and physical functioning. This allowed me to describe these important concepts to the general audience at the ATS.

These are the 6 main articles presented and discussed:

1) Weill D, Benden C, Corris PA, Dark JH, Davis RD, Keshavjee S, Lederer DJ, Mulligan MJ, Patterson GA, Singer LG, Snell GI, Verleden GM, Zamora MR, Glanville AR. **A consensus document for the selection of lung transplant candidates: 2014-An update from the Pulmonary Transplantation Council of the International Society for Heart and Lung Transplantation.** J Heart Lung Transplant 2015; 34:1-15.

This is an international expert consensus that outlines recommendation for lung transplant candidate selection. In this iteration, the authors discuss the role of extra-corporeal life support and retransplantation in transplant candidacy. During the discussion, I emphasized the importance of early referral, especially in the case of interstitial lung diseases and pediatric candidates. I also explained that the decision to list a patient for transplant depends significantly on the overall clinical and psycho-social picture of the patient, centre-specific experience and comfort with issues at hand, as well as the local allocation system and expected waiting times.

2) Krutsinger D, Reed RM, Blevins A, Puri V, De Oliveira NC, Zych B, Bolukbas S, Raemdonck DV, Snell GI, Eberlein M. **Lung transplantation from donation after cardiocirculatory death: a systematic review and meta-analysis.** J Heart Lung Transplant 2014; 34:675-684.

The use of donors after cardiocirculatory death is increasing but brain death donors are still favoured. This is a key article showing that using DCD donors is a safe and effective method to increase the donor pool. However, additional long-term data is needed.

3) Tinckam KJ, Keshavjee S, Chaparro C, Barth D, Azad S, Binnie M, Chow CW, de Perrot M, Pierre AF, Waddell TK, Yasufuku K, Cypel M, Singer LG. **Survival in sensitized lung transplant recipients with perioperative desensitization.** Am J Transplant 2015;15:417-26.

This article builds upon many other high-quality manuscripts on anti-HLA antibodies and desensitization. The authors show that patients can be safely transplanted against donor-specific antibodies. The advantage of the described desensitization protocol is that it is administered in the operating room at a time when the donor HLA typing is known. The use of this protocol will increase the donor pool for highly sensitized patients.

4) Meyer KC, Raghu G, Verleden GM, Corris PA, Aurora P, Wilson KC, Brozek J, Glanville AR; ISHLT/ATS/ERS BOS Task Force Committee; ISHLT/ATS/ERS BOS Task Force Committee. **An international ISHLT/ATS/ERS clinical practice guideline: diagnosis and management of bronchiolitis obliterans syndrome.** Eur Respir J. 2014;44:1479-503.

I introduced this topic by describing the current concept of chronic lung allograft dysfunction and the potential phenotypes, including BOS, that fall under the CLAD umbrella. This manuscript by Meyer et al. is a result of a multi-year multi-societal endeavour to develop comprehensive guidelines in the diagnosis and treatment of bronchiolitis obliterans syndrome. The authors describe the known risk factors for BOS and outline potential therapies, although the level of evidence for these therapies is low and the recommendations remain conditional. One important recommendation is that *against* the use of augmented immunosuppression for BOS (in the absence of concurrent acute rejection). The article devotes a large section to discuss many unanswered questions with regards to BOS and outlines important research needs for the future.

5) Todd JL, Jain R, Pavlisko EN, Finlen Copeland CA, Reynolds JM, Snyder LD, Palmer SM. **Impact of forced vital capacity loss on survival after the onset of chronic lung allograft dysfunction.** Am J Respir Crit Care Med 2014;189:159-66.

This article focuses on the restrictive phenotype of CLAD, first described as restrictive allograft syndrome (RAS). The authors redefine this restrictive phenotype by using spirometric data alone. The advantage of this approach is that it is applicable to all centers around the world that do not measure post-transplant lung volumes on a routine basis. This study confirms that restrictive CLAD, defined by a 20% FVC drop at CLAD diagnosis, is associated with worse outcomes, interstitial infiltrates on radiologic studies, and parenchymal fibrosis and organizing pneumonia on pathology.

6) Langer D, Burtin C, Schepers L, Ivanova A, Verleden G, Decramer M, Troosters T, Gosselink R. **Exercise training after lung transplantation improves participation in daily activity: a randomized controlled trial.** Am J Transplant 2012;12:1584-92.

I cited the study by Langer et al. to emphasize the focus on functional and quality of life outcomes post lung transplantation. It is not all just about survival. This study randomized post-transplant patients to 3 months of supervised exercise training vs. no intervention. The authors demonstrated that exercise training was associated with improved strength, increased daily walking and 6 minute

walk distance, better self-reported physical functioning, as well as lower blood pressure, compared to the control group. This study stresses the importance of post-transplant exercise and physical conditioning in improving post-transplant health and quality of life.

Finally, I highlighted 15 additional studies:

#### **ISHLT REGISTRY REPORT:**

Yusen et al. The registry of the International Society for Heart and Lung Transplantation: thirty-first adult lung and heart-lung transplant report--2014; focus theme: retransplantation. *J Heart Lung Transplant* 2014;33:1009-24.

**EXTRA-CORPOREAL LIFE SUPPORT AS BRIDGE TO TRANSPLANT:** Fuehner et al. Extracorporeal membrane oxygenation in awake patients as bridge to lung transplantation. *Am J Respir Crit Care Med* 2012;185:763-8.

#### **LUNG ALLOCATION SCORE:**

- Gottlieb et al. Introduction of the lung allocation score in Germany. *Am J Transplant* 2014;14:1318-27.
- Tsuang et al. An acute change in lung allocation score and survival after lung transplantation: a cohort study. *Ann Intern Med* 2013;158:650-7.

#### **EX-VIVO LUNG PERFUSION**

Tikkanen et al. Functional outcomes and quality of life after normothermic ex vivo lung perfusion lung transplantation. *J Heart Lung Transplant* 2014. In Press.

#### **PRIMARY GRAFT DYSFUNCTION**

Diamond et al. [Clinical risk factors for primary graft dysfunction after lung transplantation](#). *Am J Respir Crit Care Med* 2013;187:527-34.

#### **POST-TRANSPLANT FUNCTIONAL / COGNITIVE STATUS**

Smith et al. Neurobehavioral functioning and survival following lung transplantation. *Chest* 2014;145:604-11.

#### **PATHOLOGY OF REJECTION**

Berry et al. Pathology of pulmonary antibody-mediated rejection: 2012 update from the Pathology Council of the ISHLT. *J Heart Lung Transplant*. 2013;32:14-21.

#### **ADVANCES IN IMMUNOLOGICAL PHENOTYPING**

Greenland et al. Bronchoalveolar lavage cell immunophenotyping facilitates diagnosis of lung allograft rejection. *AJT* 2014;14:831-40.

#### **BIOMARKERS OF LUNG ALLOGRAFT INJURY**

Neujahr et al. Bile acid aspiration associated with lung chemical profile linked to other biomarkers of injury after lung transplantation. *Am J Transplant* 2014;14:841-8.

### **MICROBIOME**

Willner et al. Reestablishment of recipient-associated microbiota in the lung allograft is linked to reduced risk of bronchiolitis obliterans syndrome. *Am J Respir Crit Care Med* 2013;187:640-7.

### **ANTIBODIES**

Snyder et al. Implications for human leukocyte antigen antibodies after lung transplantation: a 10-year experience in 441 patients. *Chest* 2013;144:226-33.

### **RANDOMIZED CONTROLLED TRIALS**

- Snell et al. A randomized, double-blind, placebo-controlled, multicenter study of rabbit ATG in the prophylaxis of acute rejection in lung transplantation. *Am J Transplant* 2014;14:1191-8.
- Glanville et al. Three-year results of an investigator-driven multicenter, international, randomized open-label de novo trial to prevent BOS after lung transplantation. *J Heart Lung Transplant* 2015;34:16-25.

### **EFFECT OF AIR POLLUTION**

Bhinder et al. Air pollution and the development of posttransplant chronic lung allograft dysfunction. *Am J Transplant* 2014;14:2749-57.

---

Disclosure statement: The author has no conflicts of interest to disclose.

## Soldiering On With US Presidents

Vincent Valentine, MD  
University of Texas Medical Branch  
Galveston, TX, USA  
[vgvalent@utmb.edu](mailto:vgvalent@utmb.edu)

Perhaps it's no accident that the first six Presidents were from the original permanent English settlements of the New World: Virginia in 1607 at a place named Jamestown and Massachusetts in 1620 a place called Plymouth. As informed or forewarned in the prior issue of the links, we continue our very brief study of the U.S. Presidents. After George Washington, we start with John Adams and finish with John Quincy Adams. The first five Presidents represent the Founding Fathers and the sixth President the son of a Founding Father and a child witness of the American Revolution. The Father-son Adams clan balance out the Virginia dynasty which in a contradictory fashion represented a remnant of aristocracy within a new democracy. They were originally born British subjects. We will conclude with a few other notable founding fathers for their brilliance and contribution to the Declaration of Independence and US Constitution.

First, there is John Adams of Braintree, Massachusetts, a town just outside Boston. He was born on October 19, 1735. Adams was known as the "**Atlas of Independence**," and he demanded of himself that "*I must study politics and war that my sons may have liberty to study mathematics and politics.*" He graduated from Harvard College in 1755 and became a top lawyer. In 1765, he argued against British taxation without representation and in 1770 as a man of principles, he ensured that the British soldiers involved in the Boston Massacre received a fair trial.

Although Adams was the second President of the United States, he was the first President to live in the White House. In the State Dining Room of the Executive Mansion he inscribed – "*May none but honest and wise men ever rule under this roof.*" As a leading patriot, Adams devoted his life to his country. He argued brilliantly for independence and helped write the Declaration of Independence. He was never a popular figure and was considered according to one historian, "*an independent tough-minded, somewhat opinionated and irritable Yankee-but always a courageous patriot and scholar.*" Along with Thomas Jefferson, John Adams died on July 4, 1826, the 50<sup>th</sup> anniversary of the Declaration of Independence most likely from heart failure related to arteriosclerosis. His last words were "Thomas Jefferson still survives." Jefferson actually died five hours earlier at Monticello.

Thomas Jefferson was born on April 13, 1743 on his family's plantation in western Virginia. He attended William and Mary, studied law and was considered one of America's most brilliant legal scholars. Jefferson is the "**Father of the Declaration of Independence**" and was known as the "**Sage of Monticello.**" He was an architect, a musician, inventor and a scientist who embodied many paradoxes. He championed State's rights, and felt that the federal government should be limited. He was America's foremost champion of freedom and democracy, yet he was a slave-owner. He was best known as author of the Declaration of Independence. He served as governor of Virginia, minister to France, Secretary of State, and Vice President under John Adams. Along with Patrick Henry he authored the *Anti-Federalist Papers*. He was elected third President of the United States in

1800. The highlight of his two terms was his decision to pay France \$15 million for the Louisiana Purchase, doubling the size of America in 1803. During his retirement he founded the University of Virginia and designed many of its buildings. He is considered the "**American Sphinx**".

He died on the 50<sup>th</sup> anniversary of the Declaration of Independence on July 4, 1826 of unknown causes ranging from natural causes to sepsis.

James Madison was born in Virginia on March 16, 1751. Because of his key role in framing the document that created the U.S. government graced by his words, "*We the people...*," he is known as the "**Father of the Constitution**." Among many of his ideas from the 1787 Constitutional Convention in Philadelphia, he strongly advocated for a strong federal government and encouraged the states to approve the constitution by helping write the series of essays known as *The Federalist Papers*. Out of a compromise with the anti-Federalists, the Bill of Rights (originally drafted by him as the first 10 amendments) was included in the US Constitution. He became the 4<sup>th</sup> US President and under his term, America fought the British in the War of 1812, termed by his enemies as "Mr Madison's War." He and his wife, Dolley, left Washington in 1814 when British troops burned the White House. On June 28, 1836, he was apparently found dead in his bedroom, sitting in front of his untouched breakfast tray, six days short of the 60<sup>th</sup> anniversary of the Declaration of Independence. It has been pointed out "that even in the 1800s, breakfast trays were handed to patients without realizing they were dead?"

James Monroe was born in Virginia on April 28, 1758. He was the 5<sup>th</sup> President of the United States from 1817-1825, a time of national expansion and optimism. This period was known as "**the Era of Good Feeling**." Thomas Jefferson praised Monroe, "*He is a man whose soul might be turned wrong side outwards, without discovering a blemish.*" His most important achievements as President were in foreign affairs. An agreement had been achieved with England over the disputed border between the US and Canada. He bought Florida from Spain and limited Russian expansion along the Pacific Coast. There was the Monroe Doctrine of 1823 which he was best known for warning that the US would not allow European nations to establish new colonies in the Americas or to interfere in the affairs of the Western Hemisphere. He supported the anti-slavery movement but also the Missouri Compromise which allowed Missouri to be admitted as a slave state while Maine a free state. He quoted, "*let us by wise and constitutional measures promote intelligence among the people as the best means of preserving our liberties.*" He died of heart failure and tuberculosis on July 4, 1831, and he was the last of the Founding Fathers elected President, of which three died on the Fourth of July.

John Quincy Adams was born in Braintree (Quincy), Massachusetts on July 11, 1767. He was among the first unpopular Presidents. John Quincy, son of the second President John Adams and Abigail Adams, always did what he thought was best for America even if it angered others. Alongside his mother, he witnessed the Battle of Bunker Hill from Penn's Hill near the family farm. He frequently accompanied his father on missions to Europe seeking help for the colonies. As an heir apparent with experience, he was appointed by Presidents George Washington and James Madison to be minister to several European countries – remnants of Old World aristocracy in a newly developed democratic nation. He represented Massachusetts in the Senate from 1803 to 1808 and was later President

Monroe's Secretary of State. He was among the first true American politicians, especially when supporters of Andrew Jackson accused Adams and Henry Clay of having made a "corrupt bargain." During the 1824 election, Adams finished second to Jackson in the popular vote. Since none of the candidates received enough electoral votes to win, the decision for president fell to the House of Representatives. Clay gave his support to Adams who was then elected. As a result, he was known as the "**Accidental President**." As an ineffective President, he was easily beaten by Jackson in 1828. Following his loss, he did serve 17 years in congress where he earned admiration for his passionate opposition to slavery. Notably, as Secretary of State under Monroe's administration, Adams wrote the Monroe Doctrine which effectively ended European influence in the Western Hemisphere. This allowed the United States a greater degree of independence on the world stage. He died on February 23, 1848 after suffering a massive cerebral hemorrhage.

Benjamin Rush was not a President but he was a physician, social reformer and patriot. He was a Founding Father born on December 24, 1757 in Pennsylvania just outside Philadelphia. Because hundreds perished from yellow fever and many others fled the city to avoid this deadly disease, Philadelphia was a ghost town in the summer of 1793. Dr Benjamin Rush remained despite the danger, treating nearly 125 patients a day. He was one of the American colonies' leading physicians and the first professor of chemistry at the College of Philadelphia. He wrote one of the first works on personal hygiene: *Sermons to Gentlemen on Temperance and Exercise*, published in 1772. Rush advocated for the improvement of education for girls, prison reform, humane treatment for the mentally ill and an end to slavery and capital punishment. As a Pennsylvania delegate to the Continental Congress, he signed the Declaration of Independence and served as surgeon general in the Continental Army. He established the first free clinic in the United States. He was later named treasurer of the U.S. Mint and served from 1797 until he died of typhus on April 19, 1813.

Thomas Paine was born in England January 29, 1737. He was a hero of the American Revolution for his writing, not for his bravery as a soldier. Initially, he believed the colonies should make peace with England, but later changed his mind after the battles of Lexington and Concord. He became a patriot and wrote a pamphlet, *Common Sense*, the first American best-seller, which sold more than 100,000 copies in three months which motivated Americans to declare independence and carry on the war. When things were looking bad for the Americans, Paine wrote, "*These are the times that try men's souls.*" He emphasized that independence was worth the suffering. He apparently suffered with alcoholism and died June 8, 1809.

Alexander Hamilton was born on the West Indian Island of Nevis, January 11, 1755. He was a statesman and first Secretary of Treasury. Along with James Madison and John Jay, he was the chief author of the Federalist's Papers arguing over the importance of establishing a strong central government. These Papers were an influential series of essays supporting ratification of the Constitution. This arose out of his fear that the "*violence and turbulence of the democratic spirit*" would undermine the newly independent United States. He ranked among the most influential of the Founding Fathers. As Washington's Secretary of Treasury, he created a national bank. He was killed by his political rival, Aaron Burr in Weehawken, New Jersey, in the most famous duel in American history. During which, Hamilton deliberately fired into the air while Burr aimed at his foe with deadly accuracy on July 11, 1804. He died the next day on July 12.

Disclosure statement: The author has no conflicts of interest to disclose.

References:

1. Middlekauf, *American Revolution*
2. Ron Chernow, *Alexander Hamilton*
3. David McCullough, *John Adams*
4. Joseph Ellis, *The American Sphinx: The Character of Thomas Jefferson*
5. Merrill Peterson, *Thomas Jefferson and the New Nation*
6. Garry Willis, *Inventing America: Jefferson's Declaration of Independence*
7. Irving Brant, *The Fourth President: The Life of James Madison*
8. W. P. Cresson, *James Monroe*
9. Samuel Flagg Bemis, *John Quincy Adams Vols 1 & 2*
10. Steven W Allen, *Founding Fathers: Uncommon Heroes*
11. Joseph Ellis, *Founding Brothers: The Revolutionary Generation*

## Rising Impact of the JHLT - New Metrics Released 2015

Mandeep Mehra, MD, FACC, FACP, FRCP  
Brigham & Women's Hospital  
Boston, MA, USA  
mmehra@partners.org

Dear Colleagues,

I am pleased to inform the members of the **ISHLT** that the **JHLT** (*Journal of Heart and Lung Transplantation*) has received its highest ever **Impact Factor** (IF) of **6.650**, in the most recent 2014 release of the metrics. The Journal is now ranked **FIRST** in the **transplantation** category (1<sup>st</sup> / 25) and **THIRD** in all of **surgical** journals (3<sup>rd</sup> / 214). In addition, we are now ranked in the **TOP TEN** in the **cardiovascular** journal category, a highly competitive landscape. Additional comparative metrics are attached for your more detailed review, reflecting our rankings in the two most comprehensively relevant categories.

Of course, the Impact Factor is only one metric of the success of the JHLT and while its relevance is often questioned in this digital era, it does reflect an important standing of the relevance of the scientific voice that emanates from JHLT. We value, above all, the readership reactions and immediate relevance to our membership and direction of the ISHLT. In this regard, The JHLT editors are constantly evolving new ways to engage emerging trends in social media, digital footprints, enhanced online capability as well as close attention on capitalizing on the vigor of our members including young and emerging leaders.

We are grateful to you all for your confidence in the JHLT as this editorial term draws to its first 5 year close by reaching this important milestone. Our editors, senior consultants, reviewers, publishers and volunteers deserve enormous credit for shaping the JHLT to its current stature. Thank you all for your support and ownership of the JHLT.

Sincerely yours,

**Mandeep R. Mehra, MD FACC FACP FRCP**  
***Editor in Chief, The Journal of Heart and Lung Transplantation***  
***Past President, The International Society For Heart and Lung Transplantation***

---

Disclosure statement: The author has no conflicts of interest to disclose.

## The Declaration of Independence: America's Birthday

Vincent Valentine, MD  
University of Texas Medical Branch  
Galveston, TX, USA  
[vgvalent@utmb.edu](mailto:vgvalent@utmb.edu)

From the perspective of King George and his British government, the Americans resisted the king's officials in their lawful pursuit of policies intended to benefit the British Empire as a whole. The primary reason for this resistance was the unwillingness of the Americans to pay their fair share of taxes. The rebellious spirit of the Americans rose to a level such that they refused to be governed by the authority of Parliament. This was treason. Harsh measures were taken to break the rebellion in the American colonies. Massachusetts was initially singled out as the seat of rebellion in April 1775.

Edmund Burke commented, *"the great contests for freedom were, from the earliest times, chiefly upon the question of taxes."*

To make Americans pay their fair share of taxes, Parliament passed a series of laws. However, the primary issue brought forth by John Adams was *"taxation without representation."* The Americans insisted that they must be geographically represented in Parliament. The colonial assemblies, not Parliament, were the proper legislative body for the internal affairs, including taxation, of each colony. It was in September 1775 when King George declared the American colonies to be in open rebellion and outside his protection. The Declaration of Independence was planned and created.

The Declaration of Independence, the Constitution and Lincoln's Gettysburg Address are the three founding documents of the United States. By the skillful pen of Thomas Jefferson, the Declaration of Independence was and remains a masterpiece of rhetoric on the art of persuasion. Jefferson crafted this declaration into three main parts: 1) a statement of fundamental principles on which the new nation was founded, 2) a list of specific grievances against King George that forced the Americans to declare independence and 3) an appeal for justice of the American rebellion and commitment of the signers to struggle for independence.

The United States was the only nation in history founded on principles rather than historical circumstances or ethnic identity. It began with an appeal to history: *"When in the course of human events, it becomes necessary for one people to dissolve the political bonds which have connected them with another..."* The principle of self-determination allowed the Americans to have the right to decide for themselves that they are a separate people and have a right to establish a country for themselves – distinct from the English. The declaration invoked the principle of natural law. Natural law is self-evident on which the new nation was founded and that all humans are endowed by their Creator with unalienable rights, including life, liberty and the pursuit of happiness. Also, the government must rest on the consent of the governed and have the right and duty to overthrow that government and establish a new one. It invoked a right to revolution justified by the specific actions of King George who demonstrated his intention of establishing tyranny over the Americans.

The grievances against King George were carefully organized beginning with smaller incidents to a rising crescendo of indictments against the king. Among the grievances included an indictment of the king for interfering with the laws of the colonies, interfering with legislative assemblies, attempting to destroy prosperity of his people, interfering with judicial process and attempting to establish a standing army as his vehicle of tyranny.

The conclusion of the Declaration established an attempt of the Americans and the refusal of the king to settle the rebellion peaceably. It established King George as a tyrant. It established that Americans tried to tell the British of the injustice and that the British and the king refused to listen. It called upon God as the supreme judge of the justice of their cause and declared God as the author of natural law. The final sentence forcefully declared the "*mutual pledge to each other our lives, fortunes and sacred honor.*" Today, the Declaration of Independence is one of the most influential writings in world history with ideas that have changed history, the course of the events.

Congress approved the Declaration of Independence. At the time of the signing on July 4, 1776, the American colonies had been at war with England for 15 months. The declaration provided an explanation for the world to understand why the colonies had revolted and why they wanted to be free and independent states. Members of the Continental Congress met in Philadelphia and carefully studied Jefferson's declaration to see if they agreed that these were the principles they were fighting for. They agreed, unanimously.

An official version of the declaration was embossed on parchment. In all, 56 members put their names on the document. The first to sign it was the President of the Continental Congress with his flowery and legendary "John Hancock." Hancock advised, "*We must all hang together,*" to which Benjamin Franklin quipped, "*Yes, we must, indeed, all hang together, or most assuredly we shall all hang separately.*" The rebellious Americans were now publicly and irreversibly enemies of the empire they had originally embraced. John Adams proclaimed, "*We are in the very midst of a revolution, the most complete, unexpected and remarkable of any in the history of nations.*"

---

Disclosure statement: The author has no conflicts of interest to disclose.

References:

1. Middlekauf, *American Revolution*
2. David McCullough, *1776*
3. Garry Willis, *Inventing America: Jefferson's Declaration of Independence*
4. *The Declaration of Independence*

## Remember the Ladies: The Stage of Liberty and Justice for All

Vincent Valentine, MD  
University of Texas Medical Branch  
Galveston, TX, USA  
[vgvalent@utmb.edu](mailto:vgvalent@utmb.edu)

Hundreds of letters have provided us clear pictures of Abigail Adam's character, marriage and everyday life from colonial Massachusetts and revolutionary America to the courts of Europe and the new democratic republic of America. She was upright, moralistic, devout, and possessed all the Yankee virtues of prudence, thrift, hard work and sobriety. She was widely read, headstrong and fascinated by the changing world around her. She described her experiences in writings to her husband, friends and relatives. At a time when women had no political rights, she raised the possibility that a revolutionary nation might consider the idea. At a time when slavery was all around her, she was one of the first critics of slavery. She was the first woman to live in the White House. Abigail and Martha Washington set the stage that American First Ladies have followed in American history.

She was born Abigail Smith on November 11, 1744 in Weymouth, Massachusetts. She was from a distinguished family where her father, a learned man, Congregationalist minister and an important figure, provided home schooling for Abigail and her two sisters. As a teenager, she was wooed by John Adams. Her family did not believe he, a farmer's son and a lawyer was good enough for her. Despite family tensions, the strong-minded and determined 20-year-old married John in 1764. They had five children, their second, John Quincy later became secretary of state and President. She was the first, First Lady in many respects and to have a son as President of the United States.

Because of John Adams' rapid rise to power kept her apart from John through revolutionary America, a massive compilation of correspondence with one another became and remains available. She was vehemently in favor of the American Revolution. After the Battles of Lexington and Concord, she was determined that America will declare its independence.

She wrote to her husband after hearing the minister preacher for the need of reconciliation in church:

*"I could not join today in the petitions of our worthy pastor for a reconciliation between our no longer parent state, but tyrant state and these colonies. Let us separate: they are unworthy to be our brethren. Let us renounce them; and instead of supplications, as formerly, for their prosperity and happiness, let us beseech the Almighty to blast their counsels, and bring to naught all their devices."*

When the United States finally declared its independence in July 1776, Abigail was delighted, then she reminded her husband in a joking (with an obvious undercurrent of seriousness) letter:

*"Just as America was now declaring its independence from the British tyrant, so the time might be coming when women would declare their independence from their Husband"*

*tyrants. I long to hear that you have declared an independency. And, by the way, in the new Code of Laws which I suppose it will be necessary for you to make, I desire you would **remember the ladies** and be more generous and favorable to them than your ancestors. Do not put such unlimited power into the hands of the husbands. Remember, all men would be tyrants if they could. If particular care and attention is not paid to the ladies, we are determined to foment a rebellion, and will not hold ourselves bound by any laws in which we have no voice or representation."*

In response, John wrote:

*"As to your extraordinary Code of Laws, I cannot but laugh. We have been told that our struggle has loosened the bands of Government everywhere. That children and apprentices were disobedient-that schools and Colleges were grown turbulent-that Indians slighted their guardians and Negroes grew insolent to their Masters. But your Letter was the first intimation that another Tribe more numerous and powerful than all the rest were grown discontented. This is rather too coarse a Compliment but you are so saucy. I won't blot it out."*

Now Abigail also had serious doubt that the Virginians, as slave owners, could really be dedicated to liberty. She represents the northern point of view as she wrote:

*"I have sometimes been ready to think that the passion of liberty cannot be Equally Strong in the Breasts of those who have been accustomed to deprive their fellow Creatures of theirs. Of this I am certain that it is not founded upon the generous and Christian principal of doing to others as we would that others should do unto us."*

She supported voting rights and education for girls as well as boys. She grieved over the fact that she had no formal education.

*"If we mean to have Heroes, Statesmen and Philosophers, we should have learned women..., after all it's the women who begin the early Education of youth and it may advantageous to start out at the highest possible level."*

There was a list of individuals Abigail did not like among those were John Hancock and Benjamin Franklin. She thought John Hancock as flashy and vulgar with his "big" signature. He was all too eager to profit from his service to the nation. While in Europe she met Ben Franklin. She pointed out that Franklin was constantly flirting with much younger women. She called him the "old sorcerer" and described him as a "disreputable rogue wandering about Paris."

It was in Europe, now accompanying John on his diplomatic missions, where she developed a great deal of social poise and confidence, she would have never gained had she remained confined to America. Despite her Puritan upbringing, she was fascinated by the theater but shocked by the scantily **CLAD** (not chronic lung allograft dysfunction) dancing girls on stage. She felt her delicacy was wounded. She learned the self-discipline required to be a diplomatic hostess. This was her

training ground to be a future first Vice-President's wife and future First Lady. She learned how to make the innocuous small talk even when she did not care for someone would attend events she hosted.

Abigail became First Lady at age 52 when John Adams was elected president in 1796. She was nervous about Alexander Hamilton who she suspected was plotting against her husband as wrote to John:

*"Beware that spare Cassius (Hamilton), has always occurred to me when I have seen that cock sparrow. O, I have read his heart and wicked eyes many times. The very devil is in them. They are lasciviousness itself or I have no skill in physiognomy."*

With her refined and dignified behavior she gave us a glimpse of the sense of duty necessary to be the First Lady.

*"My feelings are not those of pride or ostentation upon the occasion. They are solemnized by a sense of obligations, the important trusts and numerous duties connected with it. That you may be enable to discharge them with honor to yourself, with justice and impartiality to your country, and with satisfaction to this great people, shall be the daily prayer of your Abigail."*

Abigail was a better hostess than Martha Washington. Martha had no interest in politics, and she was always worried about George's personal welfare. After her extensive "training in Europe" as a diplomatic wife, Abigail sparkled as a hostess and was in the know. Just about everyone who attended the receptions were impressed how welcoming and politically savvy she was.

When John Adams and Abigail finally moved to Washington DC in the last year of his Presidency in November, 1800 they began to wander about the in the forest and got lost because of the primitive and backward conditions of the Federal City. DC was just a clearing in the swampy woods with no roads, plenty stumps everywhere and muddy tracks. They were shocked by the raw, unfinished and unrefined capital with no running water and firewood which had to be carried in from miles away. She lamented, *"Here we are surrounded by forests, but no wood?"* She was the first female occupant of the White House. After every rain, the unpaved streets became rivers of red mud and along with the nearby swamps, malaria and yellow fever became rampant during the hot and humid summers. Most took the conditions in stride, but it was the First Lady Abigail who commented on the incomplete White House, *"the more I view of it, the more I am delighted with it."* Also, this brief time in Washington, DC cemented her antipathy towards slavery.

With her husband's loss to Jefferson in 1800, John and Abigail were finally able to live together for their remaining years. But what endured was the stage she set as First Lady, now an esteemed part of American tradition.

A First Lady defined by Abigail must be loyal to her husband, represent the ideal wife and mother, and should offer implicit, not explicit, support for his policies. She should not appear to be too

political. Jackie Kennedy embodied this role as the glamorous and beautiful wife, yet a devoted mother. Her name was never implicated on any particular policies President Kennedy pursued. However, a few broke the rules. Edith Wilson became notorious after Woodrow Wilson became disabled by a stroke. Word got out that Mrs Wilson had taken over and that America was suffering from "Petticoat Government." It was inappropriate for a First Lady to have such a role. Bill Clinton gambled by giving the First Lady a new kind of role. Hillary was tasked to try popularizing the idea of a national health service which failed.

Above all, the First Lady must represent a very high moral tone. There is a lot of literature in American History about the moral superiority of women. The best example of high moral conduct came from First Lady Lucy Hayes, wife of the 19<sup>th</sup> President, Rutherford B Hayes. She was a prohibitionist and to her husband's dismay she insisted that no alcohol will be served in the White House. A famous letter from a British Ambassador stated, "*The water flowed like champagne in the Hayes White House.*"

First Ladies were most successful when they conducted campaigns of symbolic good work such as: Lady Bird Johnson's beautification of the highways, Nancy Reagan's "Just Say No" anti-drug campaign, Laura Bush's Education and Michelle Obama on Childhood Obesity.

Abigail died on October 28, 1818. John Quincy Adams summed up his mother's life:

*"She had been fifty-four years the delight of my father's heart, the sweetener of all his toils, the comforter of all his sorrows, the sharer and heightener of all his joys."*

---

Disclosure statement:

References:

1. Charles W. Akers, *Abigail Adams: An American Woman*.
2. David McCullough, *John Adams*
3. L. H. Butterfield et al, eds, *The Book of Abigail and John: Selected Letters of the Adams Family*.
4. Lynne Withey, *Dearest Friend: A Life of Abigail Adams*.