



**10<sup>th</sup> World Biomaterials Congress**  
May 17-22, 2016 | Montreal, QC Canada

Dear Rosa Maria Quispe Siccha,

Thank you very much for having submitted an abstract to the WBC 2016. With approximately 3,600 submitted abstracts, which will be categorized into ~ 1,100 oral presentations and ~ 2,500 poster presentations with formal oral discussion times, this promises to be THE biomaterials event of the year.

We are pleased to inform you that your abstract ID#2128 entitled "**Controlled dehydration of polyvinyl alcohol as a method for seeding and preservation of alive cells**" has been accepted as a **Poster Presentation with formal oral discussion times**. Congratulations! The unprecedented size of the meeting is bringing outstanding visibility to your work in the field and has warranted the organizers to ensure that the Poster presentations have a significant oral discussion time, visual time and engagement time, since there are more than 2 times as many outstanding posters accepted for this meeting. In most cases it was very challenging to distinguish the quality of abstracts accepted for the meeting (regardless of their assignment as oral or poster), so the program committee arranged the abstracts in a manner that would best present the authors work at the meeting. With the face time provided to your abstract below, we sincerely hope that you feel that your poster will have excellent visibility at the Congress.

WBC 2016 is giving poster presenters a great spotlight for oral presentation and discussion of the posters within the program schedule and in the mobile web app (Launching March 2016). We have planned the program to allow for ample time to network and for structured poster sessions in the middle of each afternoon where presenters have the chance to be at their poster and orally present their work to those attending their poster session. Your poster will be displayed for a full two days of this congress, giving significant exposure time for your work to the attendees. Furthermore, you will have the chance to upload a digital poster which will keep your work "live" online until May 2017 and gives participants an opportunity to connect with you pre- and post-congress, and onsite. Please monitor your emails and our web app messages in the 3-4 weeks before the congress, as well as onsite, as some participants may contact you through the web app. Your poster presentation consists of two key components.

- **Physical Printed Poster** to be on display for two days. Poster presenters must be present at their poster during their obligatory oral presentation and discussion session

(see date and time below). We encourage you to also be at your poster during lunch and coffee breaks since we expect the Congress participants to spend a significant fraction of their breaks where the posters are located as this is where the hospitality venues will be.

- **Optional E-Poster** (A PDF version of a PowerPoint presentation up to 6 slides summarizing the poster) to be uploaded 3-8 weeks prior to the congress for delegates to view and download. This PDF version will be available on the congress webapp for 12 months.

Please take a few minutes to read this email and to take the necessary actions.

## **1. SESSION DETAILS**

Poster Mounting Date & Time	May 18, 2016 between 06:30 and 08:30
Poster Oral Networking Session	May 19, 2016 between 15:00 and 16:30 <b>(OBLIGATORY)</b>
Poster Viewing Times	May 18, 2016 and May 19, 2016 during morning coffee breaks and lunch (Optional)
Poster Dismantling Date & Time	May 19, 2016 between 18:30 and 19:30
Poster Number:	This will be communicated in February 2016.
Submitter Name:	Rosa Maria Quispe Siccha
Presenter Name:	Rosa Maria Quispe Siccha
Poster Dimensions	This will be communicated in February 2016.

### Details about your Acceptance

- This acceptance does not imply any financial assistance.
- Presenters must complete and pay their own Congress registration, hotel and travel arrangements.
- If you require a letter of invitation for visa purposes, you may generate this online once you complete and pay your registration.
- Trainee awards and developing country award confirmation notices will be sent by email by mid December.
- **IMPORTANT NOTE:** If the submitter is not the presenter of this lecture, please provide the presenter name via email to [abstracts@cm.wbc2016.org](mailto:abstracts@cm.wbc2016.org). Please note that in order for us to change the presenter of the abstract, he/she must be registered to the Congress by January 21, 2016.

## **2. CONFIRMATION (Deadline: December 21, 2015)**

### **STEP 1 (by December 21, 2015):**

Please accept your abstract assignment through our Management System at <https://cm.wbc2016.org> by logging in and clicking on the "My Presentations" followed by "Confirm Acceptance".

**STEP 2 (by January 21, 2016):**

Register and pay your registration through our Management System at <https://cm.wbc2016.org> by logging in and clicking on the "Register to the Congress" button and following the steps. Immediate payment is accepted for VISA or MasterCard only.

Your abstract will be removed from the program if you do not complete steps 1 and 2 according to the timelines.

**3. CONDITIONS**

- A. You must **confirm your acceptance by December 21, 2015** at the latest.
- B. You must **register and pay your registration fee by January 21, 2016** at the latest.
- C. Those who do not comply with A and B above will have their abstract automatically withdrawn.
- D. Policies regarding abstract submission (including publication and embargo) which you agreed to upon submission are listed on our website (<http://wbc2016.org/index.php/program/abstract-submission>)

**4. DETAILED POSTER GUIDELINES:**

Detailed instructions will be available in early 2016.

Please contact the Congress Secretariat ([abstracts@cm.wbc2016.org](mailto:abstracts@cm.wbc2016.org)) with any questions. On behalf of the Organizing Committee, we offer you our most sincere congratulations on your congress assignment and we look forward to welcoming you to Montreal!

**NOTE ON VISA AND ELECTRONIC TRAVEL AUTHORIZATION – IMPORTANT FOR ALL COUNTRIES!!!**

Starting March 15, 2016, visa-exempt foreign nationals who fly to or transit through Canada will need an Electronic Travel Authorization (eTA). Exceptions include U.S. citizens and travellers with a valid visa. Read about the changes and how they may affect you.

For more information, please read here: <http://www.cic.gc.ca/english/visit/>

We encourage participants from countries that require a visa to apply as early as possible. Visa processing times vary by country. Please consult this website: <http://www.cic.gc.ca/english/information/times/temp.asp>

**NOTE ON REGISTRATION FEES**

Information on our all-inclusive registration fees is available here: <http://wbc2016.org/index.php/registration/registration-fees>

Please visit this page ahead of time in order to look at all the different activities that you can sign up to. Keep in mind that reservations for a Lunch & Learn session are first come first

## Controlled dehydration of polyvinyl alcohol as a method for seeding and preservation of alive cells

Rosa Maria Quispe Siccha<sup>1</sup>, Adolfo Martínez Tovar<sup>2</sup>, Irma Olarte Carrillo<sup>2</sup>, Juan J Montesinos Montesinos<sup>3</sup>, Juan C López Alvarenga<sup>1</sup>.

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**Introduction:** The polyvinyl alcohol (PVA) is a polymer of great interest because of their desirable characteristics specifically for various pharmaceutical and biomedical applications i.e. tissue implants. For this, the cells must remain intact and housed within the material and having sufficient permeability to let the exchange of various substances. PVA is a hydrogel that allows the diffusion of substances through the pores, which are caused by the physical crosslinking of the polymer after several freezing/ thawing cycles. However to hold the greatest number of cells within the scaffold, it is necessary to remove the water contained in the pores of the biomaterial. Therefore, the scaffold was subjected to a controlled dehydration process, some weight lost was recorded due to the decreased amount of water but its structure was not modified, and throughout the process a sterility protocol was conducted. To keep the cell survival within the scaffold, the size and porosity distribution were controlled to allow enough permeability to achieve the exchange of various biochemical substances.

**Materials and Methods:** We constructed PVA scaffold using two molecular weights  $M_w = 85\ 000$  to  $146\ 000$  of 95% degree hydrolysis and two concentrations weight 5% and 7% by physical method of several freezing/ thawing cycles; obtaining a size and distribution of porosity ranging from 25 nm to 100  $\mu\text{m}$ . The cell lines used for this trial were the SUB-15 derived from acute lymphoblastic leukemia and MM.1R cell line derived from a multiple myeloma. The scaffold was subjected to 7 cycles of dehydration, losing weight but maintaining its structure. It was concluded that in the fourth cycle, the scaffold has the best conditions to host the greatest amount of cells which receive enough nutrients for their survival.

**Results:** The scaffold derived from PVA with dehydration cycles was able to maintain the cells inside; the nutrients permeate through its pores and maintain the survival of 95% of the cells under controlled cultivation. The cells proliferated and did not change their morphology.

**Discussion:** The main issue for transplantes, is that cells must remain inside the material avoiding incompatibility of tissues and immune system involvement. PVA is a biocompatible material that protects cells of the immune system entirely, this being an extremely important factor in clinical applications. The scaffold guarantees the interaction among cell and nutrient migration derived from the cell lines SUB-15 and MM.1R.

**Conclusions:** These results demonstrate that building a biocompatible scaffold that interacts with cells and keep them in optimal conditions is of great importance, as it could be used for multiple applications in clinical, mainly in the transplants.

*Dirección de Investigación del Hospital General de Mexico "Dr. Eduardo Liceaga" (N° project: DI/14/204/03/057).  
Conacyt (N° project: 206574).*