

## From The Chair

Greetings,

I hope everyone is enjoying the summer.

This issue of the Student Working Group ST-WG newsletter comes at the halfway point of the year. We are also at the halfway point in the term of the elected members of the Executive Committee. With this in mind, the Nominations Committee has been working to prepare for the upcoming elections. This committee, led by Mustafa Ozkaynak, Tiffany Kelley, and Laverne Snow, have elicited nominations for the five open positions.

The Executive Committee is also looking forward to an exciting Fall AMIA Symposium. The National Meetings Committee, led by Rupa Valdez, has planned our working group meeting to be a shortened business meeting this year. During this time we will also have some delicious food. Afterward, we will adjourn for some good times getting to know one another in the city. On Monday or Tuesday during the lunch break, we'll continue our business meeting more informally. We'll spend this time determining our priorities for the coming year. We hope that you'll all be able to join us!

Lastly, we are working on some new initiatives. We hope to have some exciting announcements soon.

Take care,

Paulina

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## From The Editors

We are very happy to present you another issue of the student working group newsletter. The editorial team is working hard to ensure that the newsletter enhances the network among AMIA student members and supports their professional careers. We know you're doing interesting things, and we want to hear about them.

Last spring, we conducted a survey to get feedback on the newsletter. Fifteen student working group members and three non-members responded. Eleven responders found the newsletter either useful or very useful (Six responders were undecided). These responders were also asked an open question on what they like the most about the newsletter. They reported that they enjoy hearing about what students do (e.g. interests, research activities, and publications). Twelve of the participants mentioned that they consider submitting an article to the newsletter to promote their ideas and find collaborators. Responders also reported that their busy schedule is the biggest challenge to submit an article. We would like to thank to those who filled out the survey. We will work harder for a better newsletter and to encourage submission. We will also think about ways to collect news and views from you in a more efficient way so that students can participate in the creation of the newsletter in a more time efficient manner.

You can always provide us more feedback my emailing us. (Mustafa: [mozkaynak@gmail.com](mailto:mozkaynak@gmail.com); Edmond [edmond.ramly@gmail.com](mailto:edmond.ramly@gmail.com))

Stay informed!

The Editors

The AMIA Working Group News is published 3-4 times a year by the Student Working Group of the American Medical Informatics Association. Visit our web site for more information or to learn how to get involved.

<http://www.amia.org/programs/working-groups/student>

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## Member Contributions

### Resident Time Sinks

I recently finished my surgery rotation at a Level 1 Trauma Hospital in Philadelphia and amidst the ephemeral eight weeks I quickly realized the immense demands of a surgical residency. So, as an avid technology enthusiast and a team member, I took note of inefficient workflows with potential for technology driven solutions. By discussing the observed inefficiencies and potential solutions I hope to inspire others to do the same and keep the conversation going.

#### **The Data Acquisition Time Sink**

Acquisition of critical patient data (vital signs, labs, prior admissions and imaging) is the single greatest time sink for surgery teams. After eight-weeks of calculating the time to accomplish certain tasks, my findings are as follows:

1. 40 – 50% of time spent per patient was dedicated to data gathering, 40 – 50% for patient interaction, and 5 – 10% for case discussion
2. Hand writing of the identical information must occur at least three times for each patient

Such inefficiencies present multiple problems; perhaps the most obvious is the potential for error. Additionally, repetitive and cumbersome work extends an already impressive resident workload. Furthermore, a workflow that requires significant time for data gathering minimizes time for learning more important skills like the physical exam and clinical pathophysiology. I strongly believe a web-centric and workflow oriented solution can re-balance the scale in favor of efficiency where 70% of time is spent on the patient interaction, 25% on case discussion, and 5% or less on data gathering!

#### **Technologically Driven Solution**

The hospital in this scenario uses a rudimentary EMR, which allows data retrieval and order entry only. Furthermore, the hospital uses disjoint systems for imaging, labs and prior admission data. To address the Data Acquisition Time Sink in a hospital that depends upon an archaic system architecture, a web-based solution should be considered. In the proposed model, existing legacy data systems will not be discarded, nor will they be used directly by clinicians. Instead a new web-portal will

beautifully (read intuitively) display the combined patient data after querying those legacy data systems. Additionally, the web-portal will allow medical providers to type progress notes for printing or sending to an EMR. To ensure pervasive adoption, the product will place significant emphasis on elegant and efficient user design/experience (ala Apple). The only requirement to access the web-portal will be a simple Internet connection from any device.

With the new system a residents would open their tablet/iPad, log onto the web-portal, and select patients to follow. As patient data populates the clinician can proceed to the physical exam and then write the progress note. Much more time to see the patient, just a few minutes for gathering data and no more redundant writing on paper. A typing-friendly tablet would be perfect for this (see iPad ClamCase (<http://clamcase.com/>)).

Thankfully, some of the ideas discussed here are implemented by a web-app called TheList (<https://www.thelist.md/>) by TouchConsult. Their product is already in use at University of Cincinnati and Carolinas Medical Center. In my conversation with Dr. DiPaola, TheList is used for sign-out during shift change; however, their web-app can be a great inspiration for the above ideas. Today, their main challenge is not technical, and rather it is the mindsets of healthcare administrators.

I encourage clinicians everywhere to continue this discussion and provide more evidence of inefficiencies that need to change. Atul Gawande, said it best in Better, “Find something to change...Write about it. See if you can keep the conversation going.”

*Disclaimer:* I am in no way affiliated with or compensated by any company or product mentioned.

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## AMIA Educational Meetings

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**XXIII International Conference of the  
European Federation for Medical Informatics**

<http://www.mie2011.org>  
August 28 - 31, 2011  
Radisson Blu Scandinavia Hotel  
Oslo, Norway

**AMIA 2011 Annual Symposium**

<https://www.amia.org/amia2011>  
October 22-26, 2011  
Hilton Washington & Towers  
Washington, District of Columbia

**NI 2012**

<http://www.ni2012.org/>  
June 23-27, 2012  
Hilton Montreal Bonaventure  
Montreal, Canada

**AMIA 2012 Annual Symposium**

November 3-7, 2012  
Hilton Chicago  
Chicago, Illinois