Why a Poster?
Why You Should Vote For Barack Obama

First off, I want to make it clear that I respect everyone’s right to vote for who they want. I simply wanted to explain why I strongly feel that Obama is the best candidate. No matter what candidate you support, I urge you to at least read this and give him a chance. It took me a while to determine who I was going to vote for because I wanted to take all aspects into account and hear everyone’s case before I supported someone prematurely. I look that you do the same.

There seems to be an overwhelming amount of support for Ron Paul on this message board, and on the Internet in general, so I’ll address that first. I think it’s safe to say he isn’t going to get the Republican nomination. He’s too different from all of the neo-cons currently running, and the Republican party has changed too much to ever accept his views. After the laws and New Hampshire primaries, it’s clear to me that either McCain, Romney, or Huckabee will win for the Republicans. This will become even clearer after the SC primary. So why not support the next best candidate who actually has a chance of winning? I don’t know about you, but given the choice, I’d rather see Obama than Hillary or any of the Republicans.

Whether you agree with Ron Paul’s positions or not, virtually no one else in Washington shares them. Maybe it would be nice to have such a different kind of president, but you have to consider how the presidency works and whether Ron Paul would actually be able to put into action the changes he is proposing. The president can’t just pass laws by himself. Even if he did try to introduce all these different bills, they would have to be approved by both houses of congress first, meaning a majority vote. Sure he has a lot of influence, but a lot of other people’s minds are going to have to be changed also. Ron Paul is essentially a Libertarian. Considering both the Senate and House of Representatives have always been almost 100% Republican/Democrat, I don’t think Paul is going to get much done in office. He can veto whatever he wants, but it’s going to take other politicians who share his views to actually see progress made. It has become obvious to me in all the Republican debates that Ron Paul is way too disagreeable and combative to ever fulfill the job of president adequately.

What we need is a president who can work together with others and is compatible with Congress. Someone who’s able to see things from someone else’s view... someone who can negotiate and not simply put up a stubborn wall. Only then will we be able to make the important changes we need. Who fits this requirement better than Barack Obama? Throughout his campaign, he’s been talking about bringing down the party lines and coming together for a common good. He has several endorsements from senators and representatives across the country, and even Republicans are commending him for his message of unity and working together. For once, we have a candidate who doesn’t see everything from an “us vs. them” point of view. There’s no doubt in my mind that Obama has the ability to reverse the damage Bush has done to this country and bring everyone together to work for a common good.

This election, perhaps more than any other, has been about change. It’s certainly been Obama’s campaign slogan from the beginning, and other candidates have also adopted it. Obviously, the general consensus is that we need someone far different and much more capable than Bush. To me, none of the Republican candidates, besides Ron Paul, seem very different than Bush. Are we forgetting that Bush has the lowest approval rating of any president in the last 50 years and that more than 2/3 of the population opposes the Iraq War? Again, none of the Republican candidates besides Ron Paul support a timetable for withdrawal. Not to mention the horrible condition our economy is in. It seems to me that the Republican party has gone astray... statistics show that the party has gotten smaller in the last few years, and I think more people are starting to see that the last thing we need is another neo-con president. If Ron Paul actually stood a chance, I would consider voting for him. But the Republicans have gone too far astray to ever nominate him, and the only other candidate who makes any sense would be a Democrat.

So why Obama over Clinton or Edwards? Well for one, Clinton and Edwards both supported the Iraq War in the beginning. But for me, the main reason is because Obama has “stepped up to the plate” so to speak, more than the others. He came out of nowhere and worked his way up to frontrunner status when originally, Hillary was expected to get the Democratic nomination for sure. He wasn’t a well-known politician before this election began, and the fact that he’s come this far says a lot about his character. Clinton, on the other hand is riding on her “experience” as First Lady. In reality, if it wasn’t for her husband, no one would know who she is right now. Obama has risen to his current popularity completely out of his own accomplishment.

A lot of critics say he’s too young and doesn’t have enough experience, but I think we need to rethink the kind of experience we’re actually looking for. Dick Cheney had more experience in Washington than just about anyone, and look at the job he’s done as VP. The fact that Obama has had so little time in office should be seen as a good thing considering how popular he has become. It proves that what you stand for matters more to the American people than what you’ve had the chance to accomplish in the past. What we really need are new faces and fresh ideas. Are we forgetting that Thomas Jefferson was only 33 years old when he wrote the Declaration of Independence? Not to mention Roosevelt, JFK, and Clinton were all younger than Obama when they assumed office. Unless you have some extreme conflict with Barack Obama’s political positions, I see no reason to vote for someone else. It has become clear to me that he is best suited for the job, and I think you’ll agree if you watch some of his speeches/debates and consider the grand scheme of things. He supports a responsible withdrawal from Iraq, talking to our enemies to prevent a crisis, universal health care, and reducing greenhouse emissions just to name a few things.

I’m not trying to say he’s perfect... no politician ever will be, but he’s by far the lesser of evils in this election.

Oh, and by the way, he would end federal raids on medical marijuana patients/growers and supports a state’s right to legalize medical marijuana. Also, he would work to reduce sentences for non-violent crime and have our law enforcement and court systems focus on more serious criminals. Just thought I’d throw that in there.

Plan Your Poster
Who is Your Audience?
How Much Room?
Who Cares?
Explain in 3-5 minutes?
Would You Read it?
Design
THINK
BIG
Sketch it Out
Organize Your Poster
USE PLAIN FONTS

Use Plain Fonts
Breathing Room
Investigating signaling and metabolism of PLC- and PLD-derived phosphatidic acid in the root apical meristem of Arabidopsis thaliana

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Abstract

Our experiment examined the role that two different phospholipases play in the development of Arabidopsis thaliana root apical meristem architecture. This phospholipase C (PLC) and phospholipase D (PLD) both synthesize phosphatidic acid (PA), a lipid second messenger, but go about it differently. We were interested in whether the PA derived from either PLC or PLD is more important for proper meristem development. We observed that certain PLC and certain PLD treatments caused a difference in transcription factor levels (and thus cell identity) and root architecture. However, certain doubts about the specificity of the treatments mean that we cannot definitively attribute our observations to our proposed pathway. The data collected suggest many interesting future projects.

Introduction

The principal focus of the Heredia lab (Departamento de Ingeniería Genética, IINVESTAV-IPN) in Irapuato, Mexico, is how plants acquire phosphorus and use it efficiently. The lab uses Arabidopsis thaliana mutants and mutant lines to study the physiological mechanisms by which plants obtain sufficient phosphorus (P) when P is scarce.

Interestingly, the abundance of phospholipide decreases during P-starvation, while the abundance of other lipids increases. We hypothesize that phospholipids are broken down to phosphatidic acid (PA) during P-starvation to make phosphorus available for metabolic functions, and/or to trigger stress-response processes.

Our project examines the effect of manipulating PA levels synthesized by different pathways on a group of naturally invasive cells in the root apical meristem, called the quiescent center (QC) (Fig. 1).

Since this was a “fishing” experiment, rather than predicting which pathway will prove more important in controlling cell identity and organization, we opted to dispense with the null hypothesis. That the pathways are equally important.

Central Questions

What adaptive responses occur in the root meristem as a result of changes in P availability, specifically in the quiescent center (QC)?

Is the PA that functions as a lipid second messenger in the QC produced primarily from PLC or PLD in the pathway?

Who cares?

The PLD pathway maintains metabolism and function, and the effect of manipulation on phospholipid pathways.

Methods

We exposed 5-day-old Arabidopsis seedlings to four different treatments (Fig. 2) for 24 hours to visualize the differential effects of manipulating aspects of the two pathways of PA synthesis. Effects were assessed based on QC identity, general root architecture (Fig. 3), and expression of a transcription factor marker called GUS. We used two promoter lines to stain specific regions of the root with GUS: pPLT7:GUS and pQC46:GUS. The PLC protein is expressed throughout the root apical meristem, most densely in the QC and columnar, QC is a specific identity marker of the QC, whose gene function is unknown.

Future Directions

Test sensitivity in Nasturtium. We had assumed that MP1 exclusively targets the PLD pathway, but there is some evidence that MP1 non-specifically induces genes through heteromeric G-protein (Legendre et al., 1993). To test this, we will cross a heteromeric G protein loss of function mutant and QC46:GUS (experiment under way). If division of QC cells is observed in the absence of functional G proteins, then the MP1 functionality observed in this division is not introduced to the cell via G protein. If division of QC cells is not observed, then the MP1 is delivered by G protein. The next steps is to identify the downstream receptors, is PLC, PLD, or another route responsible.

Does Nasturtium act via Inhobiting HSP Phosphatase (IP)? We will treat QC46/GUS roots with Nasturtium and IP. If the double treatment restores the QC46:GUS phenotype, then the inhibition was due to a decrease in IP, rather than a decrease in PLC-derived PA. If the results of the previous experiment find that PLC acts indiscriminately upon heteromeric G proteins, then we expect treatment of QC46/GUS with IP, and MP1 to yield similar phenotypes.

Acknowledgements

I am very grateful to my research mentor at IINVESTAV, Dr. Alfredo Ortiz-Hernández, for his guidance and support in and out of the lab throughout the summer. Thanks also to Dr. Luis Heredia Estrella, Alejandra Colón López, Francisco Ruiz, Dr. Andrés Ortiz Hernández, Alexi Pérez, Mariluz Amezúa, and the rest of the Heredia lab for the support and critical feedback for their comments. Thanks to Karen Hicks and Sam Hernandez for assistance in the editing of this report and poster.

Fig. 1. Diagram of Arabidopsis root showing QC location. QC is at the tip. PLD pathway is shown.

Fig. 2. PA production pathways. Adapted from Mirkov and Hühns (2001).

Dotted lines indicate interactions proposed as a result of these experiments. Turquoise ovals indicate our treatments.
Remove Everything
Extra
Planning Your Poster

Important Questions to Ask Yourself Before you Start:

• Who is your audience? How much explanation will they need?
• How much room do you have to work with?
• Why should anybody care about your topic?
• Can you explain your poster in 3-5 minutes?
• Would you read your poster?
Use Color
Use Pictures
Not Too Busy
Edit.
Evaluate.
Show Others.
Image Resolution