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Podcast Transcript  
Episode 31

Hello “Mollie Medcast” listeners and welcome back to another episode of The Mollie Medcast. Mollie Medcast is the podcast for the biomedical journal, *Molecular Medicine*. My name is Margot Puerta, I’m the Managing Editor here at *Molecular Medicine* and your podcast host. In this week’s podcast we’ll try “Clamping Down On Placental Vascular Disease,” drinking some green tea to fight off colon cancer [“Green Tea For Colon Cancer”], and we’ll look at a review paper dealing with “Defending Peptides” in infection and wound healing.

I’ve just spent a lovely two weeks in Scotland on holiday but I’m happy to be back here at *Molecular Medicine*, podcasting, and ready to go our mission again to remind you why we do what we do here. Our mission is to publish novel work that’s concerned with understanding the pathogenesis of disease at the molecular level, and we do this so that we might be able to design specific molecular tools, which we could use in disease diagnosis, disease treatment, or even disease prevention. If you’re interested in submitting a manuscript to us for peer review, please visit our website for information, [www.molmed.org](http://www.molmed.org). The first paper we’re going to review this week is:

**Clamping Down On Placental Vascular Disease**

The placenta plays an important role in the acceptance of the fetal-placental unit by the maternal immune system. Placental vascular disease can induce complications during human pregnancy, and these can be things like as preeclampsia or fetal intrauterine growth restriction. Endothelial cell injury and activation occur in the placenta during placental vascular disease and Dr. Yanxia Liu and colleagues from the Departments of Hematology, Obstetrics and Gynecology and the Central Laboratory at the Provincial Hospital, Shandong University, China investigated some of the risk factors and signal transcription pathways involved in placental vascular disease. The title of their paper is, “HSP70 Is Associated with Endothelial Activation in Placental Vascular Diseases.” The results indicate that the heat shock protein 70, which can be expressed as a result of stressful stimuli, including temperature, may mediate endothelial activation and play a role in placental vascular disease pathogenesis. Knowing what goes on in placental vascular disease, and looking at some of the mechanisms and signal transduction pathways, which may include heat shock protein 70, may enable us to develop some sort of a blockade to prevent these things from occurring.

The next primary research paper that we have for this episode deals with green tea and colon cancer:

**Green Tea For Colon Cancer**

Colorectal cancer causes significant mortality in Western countries and it’s the second most common fatal cancer site. Over half of the new colorectal cancer cases diagnosed are in people with no known risk factors, aside from being over the age of 50.<sup>1</sup> Epigallocatechin gallate which we call EGCG for short, so I don’t have to say that again, is an active ingredient in green tea and it exhibits anti-carcinogenic effects. Dr. Jun-Hua Yuan and colleagues from China investigated EGCG’s potential in the prevention of early morphological alterations of colon carcinogenesis. Results indicate that dose-response administration of EGCG results in increasing preventive effects in an animal model of colon cancer. This EGCG polyphenol from green tea may offer an effective and inexpensive preventive strategy for patients predisposed to colon cancer. So I say a cup of green tea today may help keep the colon cancer away.

This week's review paper is:

### **Defending Peptides**

Skin and soft tissue infections account for about 7-10% of hospitalizations and they represent one of the most common indications for antimicrobial therapy in the United States. Wound infections and sepsis are an increasing cause of death in severely ill patients, and the treatment of chronic and complex wounds puts a significant burden on the health care system and on the economy as a whole. In this review paper, Dr. Lars Steinstraesser and colleagues from Germany focus on the current knowledge of host defense peptides affecting wound healing and infection.

That's it for this week's episode of the "Mollie Medcast". Join us next time when we burn up over cytokines and try to stop the vicious cycle of bipolar disease. You can find all of the papers that I discussed and many more of them on our website, [www.molmed.org](http://www.molmed.org) that's [www.m-o-l-m-e-d.org](http://www.m-o-l-m-e-d.org). If you have any questions or comments about this podcast, send me an email at: [margot@molmed.org](mailto:margot@molmed.org).

If you have a moment, check out our podcast page [molmed.org/podcast](http://molmed.org/podcast). You can play around with our frappr map and see where other *Molecular Medicine* readers are coming from, I'm so excited because we've gotten our first frappr member from Australia – thank you Dr. Harrison for putting your pin on the map and that's a very dashing picture you have there. One of my goals is to have Mollie Medcast listeners on all the continents. So right now, I don't have anyone from Africa. If you're from Africa, and you're listening help me expand the frappr map members, go to [molmed.org/podcast](http://molmed.org/podcast) and put your pin on the map. You might just be our very first person from Africa.

This podcast is available on [molmed.org](http://molmed.org) but it's also up in iTunes. To find us in iTunes, go to the search bar and put in "Mollie Medcast". I'm actually working on getting us up in Zune and in a few other podcast aggregators as well, so look for that in the future.

From Long Island, New York, this is [margot@molmed.org](mailto:margot@molmed.org), thanks for listening!

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#### References:

1. Prevent Cancer Foundation, [http://www.preventcancer.org/colorectal2c.aspx?id=1060&ekmense1=15074e5e\\_94\\_0\\_1060\\_9](http://www.preventcancer.org/colorectal2c.aspx?id=1060&ekmense1=15074e5e_94_0_1060_9) Accessed August 5, 2008.