CARNEGIE INSTITUTION

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November 10, 2005

To: Members of the Search Committee

From: Kathryn Barton

Re: Venu Gonehal (Venu Reddy)

Dear Member of the Search Committee,

I am writing in support of Dr. Venu Gonehal's application for a faculty position. Venu is an exceptionally strong scientist who has already done very important work in the area of plant developmental biology.

I first met Venu at a small meeting on Plant Development sponsored by FASEB. Since then, I have met and interacted with him at several meetings. Each time he has impressed me as a mature and thoughtful scientist who is willing to take on some of the most fundamental problems in plant developmental biology.

His recent work (just out in Science) is a nice example of this. For more than a decade, the *clavata* mutants of *Arabidopsis* have been known to have more cells present in their apical meristems. It has however been unclear whether the CLAVATA gene product (part of an intercellular signaling system) regulates the rate of production of new stem cells in the meristem or whether it changes the size of the niche in which stem cells reside. Venu's latest experiments show unequivocally that it is the latter. In order to show this, he first developed an experimental system in which the living meristem could be imaged and in which he could generate *clavata* mutant sectors within the meristem in a controlled fashion. This was not a trivial undertaking and it is very satisfying to see how well the techniques have worked. Likely, other labs (including my own) will be following Venu's lead in using these techniques to answer a wide range of questions regarding development at the apical meristem.

In sum, Venu is a talented investigator willing to take on big questions even if it means that he must develop new technology to do so. I have been extremely impressed with his work and anticipate that he will continue to be a highly productive and creative researcher.

Best regards,

Kathryn Barton