*Holcman, David*

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To the hiring committee,

I have known David Holcman for about a year. He is currently a Sloan Foundation post-doc at UCSF, working in physiology, and a visiting scholar here in the Berkeley math department. Last year he, I, and Stefan Sigmund created a small seminar on ODE's, and we jointly proved some results about stability in a non-autonomous context, that answered some conjectures brought forward by Sigmund. Holcman's contributution, using delays, was the key to the solution.

This year, Holcman and I have been working in differential geometry. Our results concern sufficient conditions on the Ricci curvature that imply a complete Riemann manifold is compact. They generalize results of Myers, Cheeger-Gromov-Taylor, and Boju-Funar. We go on to propose a sharp boundary in Ricci curvature space between compact Riemann manifolds and non-compact, complete Riemann manifolds.

David Holcman is an enthusiastic mathematician, who also brings to the table a good knowledge of analysis (including lots of PDE's with Ivan Kupka of Paris that I know little about) and an ability to complete lengthy calculations correctly. I think Holcman would make an interesting and useful appointment, not only as a mathematician, but also as a bridge to medical research.

I recommend Holcman highly.

Sincerely,

Charles Pugh
professor of mathematics