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Dear members of the National HAB Committee,

It is my honor to write this letter of nomination for Dr. Hans Paerl as a recipient of the 2022 National HAB Committee Lifetime Research and Service Award. Also included in this nomination package are two letters of support from Dr. Steven W. Wilhelm and Dr. George S. Bullerjahn, as well as Dr. Paerl's C.V. and letter of acknowledgement for his nomination.

It is hard to think of anyone more deserving of recognition for his 50 years of dedication to advancing the science of HABs. His enclosed C.V. could easily suffice as the sole piece of evidence necessary for consideration, as it includes several seminal papers that every scientist in our field has read, cited, and used for inspiration at various points in their careers. My colleagues' letters of support highlight his numerous research accolades and contributions, all of which are impressive and rival the accomplishments of the previous recipients of this award. You would have to read between the lines of his remarkable record of funding, publications, and honors to see that Dr. Paerl never hesitates to vocally advance the latest findings in HAB research and mitigation strategies. When our field was more narrowly focused on the impact of nutrients, his name became synonymous with the phrase "Blooms like it hot," giving more widespread acknowledgment of the important role of climate change in driving both freshwater and marine HAB events. Furthermore, he continues to make HAB science accessible to everyone, not just members of the research community; he was featured just this month in a video piece on freshwater HABs for [accuweather.com](https://www.accuweather.com/en/videos/climate-change-development-fueling-toxic-algae/XF1EZXH) (<https://www.accuweather.com/en/videos/climate-change-development-fueling-toxic-algae/XF1EZXH>). He is also the face of HABs for every undergraduate microbiology student who uses the *Brock Biology of Microorganisms* textbook, as his picture is prominently featured in the opening of the chapter on microbial ecology. Without his tireless voice, it is unlikely that the spotlight on HABs that fuels funding and support for mitigation efforts would be as bright as it is today, both in the United States and internationally.

One of the things that sets Dr. Paerl's contributions apart is his dedication to advancing the careers of younger scientists. From my own experience, I can tell you that it is second nature to Dr. Paerl to treat even the greenest graduate students as colleagues, including them in sometimes intense debates on research questions or giving a reassuring smile and head nod during their first international talk. Despite the vast topics that Hans has covered in his research portfolio since his first publication in 1972, he has never been territorial when it comes to his ideas. In fact, he has responded with enthusiasm and excitement when his work on the role of heterotrophic bacteria in bloom development has recently been revisited by a younger generation of faculty in our field. His instincts to collaborate and welcome, rather than compete and exclude, have opened opportunities to members of our research community who range from full distinguished

professors to undergraduate students currently applying for graduate programs. He will never hesitate to write a letter of recommendation, review a paper, or defer to another's expertise, even when he is always the most experienced person in the room. This aspect of his legacy is much harder to quantify than his direct contribution to research, as there is no H-index for mentorship and inclusion. Although I think we can all agree that his is impressive and sets a bar so high that most of us cannot dream to match it in a single lifetime.

Dr. Paerl's lifetime of contributions has been recognized by several other scientific societies and organizations. As someone who sees Hans as a mentor, colleague, and friend, I am excited to submit this nomination so that he can take his place among the other leviathans in our field who have received this honor and celebrate his decades of service and success.

A handwritten signature in black ink that reads "Morgan Steffen". The signature is written in a cursive style with a large, stylized flourish at the end.

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