

## MESSAGE FROM PRESIDENT BOB KUSTRA

It is with real pleasure that I write to introduce this seventh volume of the *McNair Scholars Research Journal*. The papers contained in this volume represent a remarkable breadth of scholarship that encompasses some of the best of what Boise State University has to offer. The Scholars, their faculty mentors, the staff of the McNair Program, and all of us at Boise State are justifiably proud of this work.

Congratulations to all of the 2011 McNair Scholars for your achievements over the past year. In particular, I want to acknowledge the hard work and accomplishments of the senior Scholars whose research is represented in the papers in this publication. McNair scholars work with faculty mentors who are committed to the rigors of scholarship — a working relationship that both students and faculty describe as unique and beneficial. I also want to recognize and thank all of the faculty mentors who have worked with our McNair Scholars. It is your patience, guidance, and encouragement that facilitates the transformation of these students into scholars.

The Ronald E. McNair Post-Baccalaureate Achievement Program honors the memory and achievement of the late Dr. Ronald E. McNair, a physicist and NASA astronaut. Its goal is to encourage undergraduates from underrepresented backgrounds to emulate the academic and professional accomplishments of Dr. McNair by facilitating their pursuit of doctoral degrees and academic careers in teaching and research. The McNair Scholars Research Journal is evidence that the McNair Program provides a valuable opportunity for these students to explore research on significant issues as they prepare for graduate school. Students also have access to venues such as conferences and journals where they can present their original projects.

The research presented here signals the arrival of a new group of rising scholars who will carry their talents, enthusiasm, and hard work ahead into graduate programs here and across the country. I hope that you will continue to aspire, achieve, and pursue your dreams.

Again, congratulations and best wishes.

Sincerely,



Bob Kustra  
President

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This is the seventh issue of the Boise State *McNair Scholars Research Journal*. Contained within is the work of 14 Boise State McNair Scholars, making it the most scholarly work and largest journal we have ever published. Since 2003, the Boise State McNair Scholars Program has provided guidance and support to many dedicated McNair Scholars striving to find a committed academic life beyond the completion of their Baccalaureate degree. This publication celebrates these Scholars' achievements and we offer it to our readers with pride and pleasure.

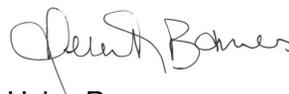
The research contained here demonstrates a significant accomplishment for each of these scholars and is the culmination of work that began approximately 20 months ago, with the bulk of research having been accomplished during the summer of 2010. These Scholars spent considerable time with faculty mentors who provided important guidance during their research experience. We are especially proud to see how these students have grown as researchers and scholars. The hard work, dedication, and persistence required in producing new knowledge through research is most evident in these articles. We commend you for this dedicated scholarship.

We would like to thank our fine group of Boise State faculty mentors whose expertise is essential to our success. Your guidance and support have allowed our Scholars to grow in meaningful ways, helped them develop a solid research experience and given them the foundation to enter graduate school with confidence.

A final thanks goes to Meredith Grubbs who committed herself to editing and formatting this journal for the last four years. Best to you in your future endeavors.



Gregory Martinez  
Director



Helen Barnes  
Program Coordinator