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MESSAGE FROM PRESIDENT BOB KUSTRA

It is with real pleasure that I write to introduce this eighth 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 2012 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. Students are also provided access to conferences and graduate schools where they can present their original projects and meet doctoral faculty. This formula has proven very successful for a vast majority of those who have participated in McNair since it began on our campus in 2003.

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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May 2012

We are very pleased to present our eighth issue of the Boise State McNair Scholars Research Journal. The collective excellence of these projects is a testament to the hard work of our Scholars and the tremendous support of faculty mentors who supervised these projects. The McNair Scholars Program at Boise State strives to create meaningful academic experiences that will enable our students to succeed at the next level. The research component of the McNair Program has two specific goals: First, engage students in the research enterprise at the undergraduate level, so they develop the analytical and methodological skills, academic sophistication, and confidence that will make them successful students in graduate school. Second, provide students an opportunity to publish their research, so the scholars gain an early understanding of the critical role that publishing will play in their academic careers. In this respect, the McNair Scholars Research Journal is a key component in the preparation of our scholars for careers in research and teaching.

This year's graduates, as those of the past, have maintained a high standard for themselves. Their dedicated work has translated to high levels of success for our program which to date has delivered more than 80% of our Scholars to excellent graduate programs. It is fitting that all this effort culminates in deserved recognition of their work through this journal. We are especially proud to see how these students have grown as researchers.

The research articles you hold culminates the Scholars work over the last 20 months and provides extensive proof of the impressive undergraduate research that can be accomplished with collaborative efforts. These Scholars worked many hours in seminars with staff, with faculty mentors and each other in order to do the work necessary to develop meaningful research and to turn graduate school into a reality in their lives.

We extend our deepest gratitude to our faculty mentors, whose guidance and support has allowed our Scholars to grow in meaningful ways, while giving them the foundation to enter graduate school with confidence and solid research experience. We would also like to thank Jon Schneider for his masterful work editing our journal this year.

Gregory Martinez
Director

Helen Barnes
Program Coordinator