Season’s Greetings AIMS Family!

I want to wish each and every one of you a Merry Christmas this month!! This is a season of celebration! I pray that you are in good health and spirits. Remember the reason for the season!

The staff is busy finishing up the semester and planning for our upcoming workshops and summer component! We want to offer you the best educational opportunities that we can to assist you through school and beyond!!! Please take advantage of all of the opportunities (workshops, webinars, tutoring, and ECT.).

I am still looking for a few more students to join the Scholars Bowl team!!! Please contact me at declarksarr@murraystate.edu if interested! We have a tradition to uphold! Get involved today!!!

I look forward to seeing some of you at the upcoming outing this month to the Variety Show and Patti’s! Take care and I will talk with you soon!

Doris Clark-Sarr, Ph.D.
**COORDINATOR’S CORNER—AIMS I**

Season’s Greetings!
The holidays have quickly found us and I have to admit that I love all the food, smells, kindness, and giving of the season! I also love the opportunity to give and do acts of kindness for those who are less fortunate or may be in need. The holidays always gives us the opportunity to reflect on what we have and how we can share a little piece of ourselves with mankind. Don’t be afraid to give and share of yourself this holiday season. It doesn’t always require money; a smile and a hug can be worth millions to someone who feels all alone.

With the dawn of the new year comes new members to our families, new expectations, new summer staff employees, and new resolutions for the year. I hope you all are approaching the new year with resolutions of being the best and brightest students you can be and to make yourselves proud of the accomplishments and achievements along your journey.

Bridge students, we are in crunch time! Evan and I are here to assist you, but you have to take the initiative to be certain all tasks are completed on time. I will not and cannot hold your hand because there are 21 of you and I need you to take responsibility. The fact that you are about to attend college means you must become an adult. The AIMS Staff acts as your guide, but you must be the captain of your ship.

Again, Happy Holidays and I wish you all the best for the new year! Peace, Joy, and Love during this holiday season. This is my wish for each of you!

Sincerely,

Stephen D. Keene

**COORDINATOR’S CORNER—AIMS II**

Happy Holidays!

I hope you all had a great Thanksgiving with your family and friends. It is that time of year when we reflect, spend time with loved ones, and just take life a little easier. I am looking forward to it and I am sure you all are, too. Strive to maintain an attitude of gratefulness throughout the year – not just around the Holidays! We are all very blessed and fortunate to live where we do and to have what we have. Sometimes we get caught up in the trivial things in life while people in other countries just want to drink water without it making them sick. We are truly blessed – spend some time thinking about this. Be grateful and content and find the joy in this. Tell people you love them and mean it – don’t take them for granted. Not one of us are promised tomorrow.

Again, enjoy the Holiday season and I look forward to seeing some of you before Christmas break.

Evan O’Neal
On January 28, 1986, the seven crew members of the space shuttle Challenger set out on a mission to broaden educational horizons and promote the advance of scientific knowledge. In the aftermath of the Challenger accident, the crew’s families came together still grieving from their loss, but firmly committed to the belief that they must carry on the spirit of their loved ones by continuing the Challenger crew’s educational mission. In March of 1986, June Scobee Rodgers, widow of Challenger Shuttle Commander Dick Scobee, hosts a meeting in her Houston home with family members of the STS 51-L crew. They resolve to create a living memorial to the Challenger crew. The idea of the Challenger Learning Centers was born. In August of 1988 the first Challenger Learning Center opened at the Houston Museum of Natural Science. The national organization, Challenger Center for Space Science Education, consists of a network of approximately 50 centers across the nation and the world. For more information about the CCSSE visit www.challenger.org

The Challenger Learning Center at Paducah is a result of a partnership between Paducah Junior College, Inc. and West Kentucky Community and Technical College. With strong financial support from federal and state government as well as members of the local community, ground was broken for the construction of the CLC in April of 2001. The Challenger Learning Center at Paducah officially opened on August 16, 2002, as the 44th member of the national Challenger Center for Space Science Education network. Since the inaugural mission, Rendezvous With a Comet™ on September 16, 2002, the Challenger Learning Center at Paducah has flown over 2,000 missions and added programming such as summer camps, scouting workshops, after school programs and professional development for area teachers. The center celebrated its 10th anniversary in August 2012.

**Vision Statement**

We envision the Challenger Learning Center at Paducah as a regional premier source for science, technology, engineering and math education by:

- **Promoting** the importance of science, math, and technology in daily living.
- **Providing** quality programming for educators, students, businesses and the community.
- **Using** real-life experiences as a bridge between knowledge and the use of knowledge.
- **Anticipating** a changing world and cultivating the future generation of scientists and engineers.

**Mission Statement**

The mission of the Challenger Learning Center at Paducah is to improve the quality of science, technology, engineering and math education by providing opportunities for all in our region to participate in quality real-life experiences, attain knowledge and become life-long learners.

**DECEMBER BIRTHDAYS!**

Rafiel Banks
Jeankyrean Shaw

Eddie Maxwell
Trisha Stinson

Sasha Montgomery
Justus Wilson
Complex robots aboard the International Space Station have inspired medical technology that is changing the lives of patients. This technology, along with a few of the many benefits provided by research performed on the space station, is highlighted in NASA’s new video feature “Benefits for Humanity: In Their Own Words.”

Making waves in neurosurgery, the neuroArm was adapted from the Canadian Space Agency’s Canadarm, Canadarm2 and the Special Purpose Dextrous Manipulator (Dextre). These robots helped to build and maintain the space station and provide heavy-lifting and spacecraft berthing capabilities. The first patient to benefit from the neuroArm technology, Paige Nickason, has neurofibromatosis, a medical condition that caused a complex tumor to grow underneath the front part of her brain. This condition gave her intense pain and nearly confined her to bed rest full-time.

Dr. Garnette Sutherland, a neurosurgeon and professor at the University of Calgary in Canada, approached space robot engineers and scientists at MacDonald, Dettwiler and Associates, Ltd., with an idea to bring the technology of space down to Earth. “If they could build complex robots, perhaps in collaboration with medicine, we could build a robot that could operate inside an MRI machine,” explained Sutherland. The result was neuroArm, an instrument that operates inside a magnetic resonance imaging (MRI) machine to show detailed brain images while operating on the brain with the precision and accuracy of a neurosurgeon.

According to Sutherland, neuroArm operates at a level of precision “that is overwhelmingly superior to what the best surgeon may be able to do.” A grateful, healthy Nickason remarked, “I’m glad that it helped people who have my disease, and I hope it helps people who need surgery in the future.”

This is one of the many examples of the impact of space station research on the lives of the people on Earth. With its 15-year anniversary in 2013 and continued operations until at least 2020, and likely beyond, there are many more benefits to look forward to from space station research. The space station has the potential to improve and change lives on Earth with each investigation and technology test that takes place in orbit. With collaboration from the original international partnerships to the insights of inventors and integrators of the research and technology on the ground, we can anticipate continued space station benefits for humanity.

Paige Nickason, the first patient to have brain surgery performed by neuroArm, smiles as she discusses her life after surgery using technology adapted from the International Space Station.

Image Credit: NASA

GREETINGS FROM THE ADMINISTRATIVE ASSISTANT

Hello Everyone!

I just can’t believe that it’s almost Christmas! It seems only a few days ago the Summer Program was in full swing and now we are getting ready for our 2015 AIMS Summer Program. Where does the time go? Let me know when you find out!

I’m just wishing everyone a safe and fun Holiday Season!

From the paper pusher,

Gail Woolridge
PARENTS’ CORNER: Parental involvement in education

There is a question which always arises in the minds of parents, teachers and the administration of schools — “Why is there a need for parents to be involved in school life as it is after all the child who attends the school, and not the parents?”

It is a well understood and researched fact that when parents involve themselves in their children’s education, the learning positively of the children relates to higher achievements. So, the more intensively parents are involved in their children’s learning, the more beneficial are the achievements and their effects with a long-lasting impact.

There are strong indications that the most effective forms of parental involvement are those which engage parents in working directly with their children on learning activities. Programmes which directly involve parents with their children like helping them with their reading, writing, homework, etc., while tutoring them using materials and instructions provided by the teachers, show particularly impressive results.

Likewise, any activity which provides parents the opportunity to take part in decision making about school programmes is also a form of involvement. This may include being a school board member, a participant on a parent advisory committee or a local school improvement council, or an active member of the Parent Teacher Association (PTA). Areas/programmes in which parents can help to make decisions include goal setting, development and implementation of programme activities, assessment, personnel decisions and fund allocations, etc.

However, the area of parental involvement in daily educational activities has been one of the most controversial issues. Some parents would like to play a more active role in this type of involvement, whereas most school administrators and teachers exhibit great reluctance to encourage parents to become partners in governance and they assume it an unnecessary interference and hindrance to the smooth functioning of schools.

Therefore, it is very much critical to remove the misconceptions parents, school administration and teachers may have about another another’s motives, attitudes, intentions and abilities. So, it is important to create such an atmosphere that these stakeholders may sit together by keeping the students achievements a top priority in their views. It is important for schools to arrange conversation programmes for parents at all times. They need to be aware that they are not only being approached to communicate the weaknesses of their child and the problems of the school, but also for the fun and other aspects as well.

If the aforesaid form of parental involvement is accepted and initiated then it may lead to the growth of parents’ ability to serve as resources for the academic, social and psychological development of their children with the potential for long-lasting influence, as the direct involvement of parents in their children’s learning positively relates to higher achievements and long-lasting impact.

Furthermore, this kind of parental involvement in education through interaction with their children and their schools may increase the parents’ own individual skills as well as confidence thus turning them into improved role models for their children. On the other hand, this involvement may see more parents serving as advocates and promoters for the schools, throughout the community and area.

To practically implement this form of parental involvement, initially, schools have to repeatedly communicate the message to parents that their involvement and support makes a great deal of difference in their children’s school performance, and that they need not be highly educated with much time on their hands to involve themselves in their children’s academic progress.

If this encouragement and involvement is initiated from the time the children first entered school, making the parents aware of their child’s initial development, then it will have a long-lasting impact, because parents, too, would have passed on information about the child to his/her teachers, which will allow them to build on the attitude, skills and knowledge attained already.

Besides giving encouragement, schools should manage programmes to teach parents activities such as reading to their children, which will surely increase the children’s interest in learning. They should also develop programmes, orientations and training for the parents, which should all include a focus on parental involvement in instruction — conducting learning activities with children at home, assisting with homework, and monitoring and encouraging the learning activities of their children.

Secondly, it is a huge responsibility of schools to make special efforts to engage the parents of disadvantaged students, who stand out to benefit the most from parents’ participation in their learning, but whose parents are often found to be reluctant to become involved. But schools have to continuously emphasize that parents are partners of the school and that their involvement is needed and much valued.

Concluding this paper I must say that the benefits of parental involvement in education are of many folds. Parental involvement is a combination of commitment, trust between the stakeholders and active participation on the part of the parents while on the part of the school welcoming behaviour, assuming parents as school partners and to ready sharing and accepting parents’ active participation and initiating parental awareness programmes. This partnership will surely lead to a successful school in terms of improved students achievements and outcomes and improved institutional capacity, which used to be the major objective of establishing a school.

By Darvesh Karim
### SCHEDULE AT-A-GLANCE

**December**
- Summer Staff Positions Advertised/Applications Accepted
- 6th SAT Test Date
- 13th ACT Test Date
- 16th AIMS Christmas Dinner @ Patti’s 1880’s Settlement and Variety! Christmas Spectacular 2:00pm (By Invitation Only)

**January**
- Summer Staff Interviews TBD
- Bridge Workshop III 9:00am—1:00pm Room 251 Blackburn Science Bldg

**February**
- Summer Staff Interviews TBD

**March**
- Summer Hire Offers—TBD
- Bridge Workshop IV 9:00am—1:00pm Room 251 Blackburn Science Bldg
- AIMS Application Deadline for Summer Component Consideration
- MSU Spring Break

**April**
- 10-13 43rd SAEOPP Annual Conference in Biloxi, MS
- 13 Blind Boys of Alabama Concert @ WKCTC
- 27-28 TRiO Day and Scholars Bowl @ EKU

**May**
- AIMS Orientation 9:00am—1:00pm 251 Blackburn Science Bldg

---

**AIMS STAFF**

- Dr. Doris Clark-Sarr  clarksarr@murraystate.edu
- Mr. Stephen Keene  skeene@murraystate.edu
- Mr. Evan O’Neal  eoneal@murraystate.edu
- Gail Woolridge  gwoolridge@murraystate.edu

---

**Contact Information**

AIMS
240 Blackburn Science Building
Murray, KY 42071
Phone: 1-877-424-6777
Fax: 270-809-4351

We’re on the Web! murraystate.edu/aims