



## MEDICAL PHYSICS GRADUATE PROGRAM ALUMNI NEWSLETTER

July 2007

### ***From the Program Director:***

I am pleased to provide you with the second issue of the *Medical Physics Graduate Education Program Alumni Newsletter*. We sent the first issue, which was very well received, one year ago to provide our alumni with updates on the Program. Keeping with the primary goals set forth in that issue, in this issue we have provided updates on our entering class, current trainees, new and retiring faculty members, and recent graduates. We have also provided highlights of information accumulated as we finalized our self-study documentation required as part of our upcoming CAMPEP reaccreditation review.

As you review the newsletter, I think you will agree that the Program has had another successful year. This is due, of course, to the efforts of the faculty, support staff, and students. I would like to particularly thank George Starkschall, Deputy Program Director, and the members of the Program Steering Committee. In addition, the efforts of Georgeanne Moore and the support staff who contribute many hours to the Program are gratefully acknowledged.

I hope you enjoy this second issue of the newsletter, and please don't hesitate to let me or Georgeanne know if you have suggestions for future issues!

Ed Jackson

### ***Admissions Update:***

We are pleased to report the results of another successful recruitment cycle. Furthering the trend of increased enrollment, we admitted a total of 10 trainees for Fall Semester 2007. Such successful recruiting, of course, requires the help from everyone involved in the Program, including the faculty, current trainees, Education Program staff, and the GSBS. Also, we note that alumni certainly

continue to contribute to our recruitment by their recommendations. We extend our thanks to everyone who participated!

### ***Recruitment Statistics for Admitted Trainees to the Medical Physics Program for the Last Ten Years:***

Year	PhD Program	SMS Program
1998	2	2
1999	3	4
2000	2	1
2001	5	3
2002	5	4
2003	4	2
2004	4	2
2005	4	4
2006	6	5
2007	6	4

### ***2007 Admitted Applicant Data for the Specialized Masters and PhD Programs:***

Program	Verbal GRE	Quantitative GRE	Analytical GRE	GPA
SMS	558	773	4.0	3.6
PhD	578	792	4.4	3.6

### ***Members of the Incoming Class for Fall 2007:***

#### ***SMS in Medical Physics Program***

Triston Dougall / University of Texas - Arlington  
Georgi Georgiev / Sofia University  
Ryan Grant / University of Texas - Austin  
Katie West / Duke University

#### ***PhD Program in Medical Physics***

Moiz Ahmad / University of Texas – Austin  
Douglas Caruthers / Washington University  
Cheuk Kai Hui / University of Arizona, UT - Austin  
Justin Mikell / University of Illinois  
Joshua Yung / Duke University  
Rui Zhang / Rice University

## **Recent Graduates:**

The following trainees completed their degree requirements in the 2006-07 academic year.

### *SMS in Medical Physics Program*

*None to report*

### *(MS)PhD Program in Medical Physics*


#### *MS*

- *Dustin Ragan* / Continuing on for his PhD

#### *PhD*

- *Nicholas Koch* / Assistant Professor, Medical University of South Carolina, Charleston
- *Stephen Kry* / Instructor, UTMDACC, Houston, TX
- *Rebecca Milman Marsh* / Resident, UTMDACC, Diagnostic Imaging Physics Residency Program, Houston, TX
- *Christopher Nelson* / Instructor, Physicians Network, Houston, TX

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***Feedback from alumni is always welcomed by the Program! Please send all suggestions or comments to [gmoore@mdanderson.org](mailto:gmoore@mdanderson.org).*** 

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## ***Honors and Awards During the 2006-07 Academic Year:***

*Jonas Fontenot* (Mentor: Wayne Newhauser)

- ❖ Recipient of the Heavy Particle Therapy Research Graduate Student Travel Award, July 2007. (This award was established by a former graduate of the program.)
- ❖ Finalist in the AAPM John R. Cameron Young Investigators Competition for 2007

*Stephen Kry* (Mentor: Mohammad Salehpour)

- ❖ Recipient of the Rosalie B. Hite Fellowship
- ❖ 2007 President's Research Scholar Award
- ❖ 2007 Sylvan Rodriguez / Cancer Answers Scholarship
- ❖ 2007 Sowell Huggin's Scholarship

*Rebecca Marsh* (Mentor: John D. Hazle)

- ❖ 2005-06 Keck Center for Computational Biology

*Christopher Nelson* (Mentor: George Starkschall)

- ❖ Recipient of the American Legion Auxiliary Award, Fall 2006

*Jennifer O'Daniel* (Mentor: Lei Dong)

- ❖ Recipient of the 2007 Aaron Blanchard Award in Medical Physics

## ***New Program Faculty and Program Associates for 2006-07:***

Clearly, the Program cannot succeed without the commitment of its faculty. We are happy to report that the following individuals have recently joined our Program faculty.

### **Program Faculty**

*Sam Beddar, PhD, Associate Professor, Radiation Physics*



*Research Interests:* 1) patient dosimetry and respiratory-gated radio-therapy for GI cancers, and 2) using respiration information to improve the localization of liver tumors.

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*William Erwin, MS, Senior Medical Physicist, Imaging Physics*



*Research Interests:* Quantitative gamma camera imaging; septal penetration, scatter and attenuation correction; iterative SPECT reconstruction; hybrid SPECT/CT imaging; yttrium-90 bremsstrahlung imaging; internal radionuclide dosimetry; radionuclide therapy treatment planning.

*Michael Gillin, PhD, Professor and Deputy Chair,  
Radiation Physics*



*Research Interests:* Clinical application of protons; clinical trials; information management; calibration of radiation beams.

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*John Rong, PhD, Assistant Professor, Imaging Physics*



*Research Interests:* Radiation dosimetry; medical image quality evaluation and measurement; computed tomography; and digital x-ray imaging.

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*Donna Stevens, MS, Senior Medical Physicist,  
Imaging Physics*



*Research Interests:* developing optimal imaging protocols for new scanning platforms, determining dose associated with scout (pilot or topogram) views, and investigating various methods of determining dose associated with CT systems having wider x-ray beams, such as volume CT.

### **Program Associates**

*Tina Briere, PhD, Instructor, Radiation Physics*

*Kyle Jones, PhD, Instructor, Imaging Physics*

*Ramaswamy Sadagopan, MS, Senior Medical Physicist,  
Radiation Physics*

*Sastry Vedam, PhD. Assistant Professor, Radiation Physics*

### **Farewell and Thank-you to Retiring Faculty Members:**

The following individuals, who each made substantial contributions to the Program, recently left MDACC to pursue other interests or announced their retirement by the end of this academic year. We express our thanks to each of them for their years of service to both the institution and the Program.

José BenComo, PhD



Srikanth Mahankali, MD



### **Medical Physics Program up for Reaccreditation by CAMPEP:**

We thought you might be interested in the following information that demonstrates some of the significant changes that have occurred since our previous CAMPEP reaccreditation in 2002. These

highlights were taken from the self-study recently submitted for CAMPEP reaccreditation review:

- (1) appointment of a new Program Director, Dr. Edward Jackson, and transition of the administrative support from the Department of Radiation Physics to the Department of Imaging Physics,
- (2) growth in the number of program faculty (from 25 to 57), including 37 Program Faculty and 20 Program Associates
- (3) growth in the number of program students (from 27 to 33) resulting from additional funding sources and increase in program faculty,
- (4) improved coordination of curriculum and addition of new courses,
- (5) maintenance of 100% funding of PhD students and partial to full funding for all Specialized MS students even as the stipend levels increased an average of 27%,
- (6) expansion of the number of Specialized MS students enrolled per year (from 2 to 4) and number of PhD students (from 3-4 to 6), resulting in an average increase of 36% and 100% in the number of SMS and PhD students, respectively,
- (7) expansion of the number of graduates (MS and PhD) from an average of 4.4 per year (1997-2002) to the current level of 7.2 per year (2003-2007),
- (8) addition of the MS bypass option for students matriculating into the PhD Program without a thesis option MS degree,
- (9) expansion of the Program Steering Committee membership to include a non-medical physicist (in addition to a biomathematics representative),
- (10) expansion of research opportunities, and additional research grant and sponsored research agreement support, in both the Department of Radiation Physics and the Department of Imaging Physics,
- (11) the opening of the state-of-the-art MDACC Proton Therapy Facility,
- (12) establishment of the M.D. Anderson Cancer Center *Small Animal Imaging Facility*,

- which now houses 4.7T and 7.0T Bruker MR systems; specimen CT, microCT, and flat panel CT systems; gamma camera, SPECT, SPECT/CT, and microPET systems; faxitron specimen x-ray systems,
- (13) creation of the MDACC Department of Experimental Diagnostic Imaging, charged with the development of a wide range of molecular imaging capabilities,
  - (14) start of construction of a 6-story *Center for Advanced Biomedical Imaging Research*, which will have a full floor assigned to Imaging Physics research programs and a fully equipped translational imaging facility (CT, PET/CT, PET, 3.0T MR) and an animal imaging facility,
  - (15) substantial expansion of web-based educational capabilities based on a web server purchased and maintained by Program faculty members,
  - (16) opening of the M.D. Anderson Cancer Center *Mays Clinic/Ambulatory Clinical Building* and the *Cancer Prevention Building*, containing substantial new resources in diagnostic imaging and radiation therapy as well as new classroom and office space, and connected by crosswalk to the main MDACC campus buildings,
  - (17) opening of the M.D. Anderson Cancer Center *George Mitchell Basic Research Science Building*, which is connected to the main MDACC campus buildings and now houses the GSBS administration and its excellent classroom resources, including classrooms with full video/web conferencing capabilities,
  - (18) receipt of a five year T32 training grant (*Medical Physics Training Program in Imaging Guided Therapy*) from the National Cancer Institute.





*Some Highlights of New Home for UT-Houston Graduate School of Biomedical Sciences*



Mitchell Basic Science Building, New Home of the GSBS



GSBS Library



GSBS Reception Area

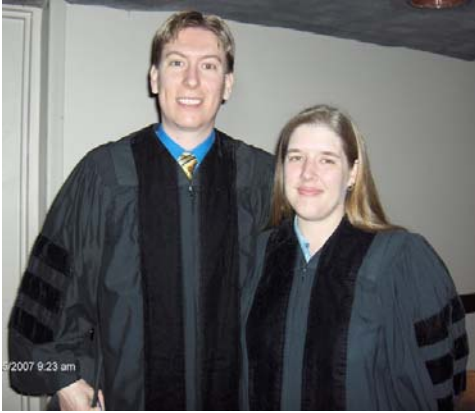


GSBS Small Classroom



GSBS Computer Lab

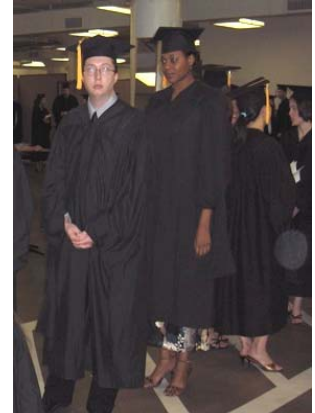
*Selected 2007 GSBS Graduation Highlights*



*Nicholas Koch received his PhD Degree in Medical Physics at the same time his wife, Joanna Koch, received her PhD in another program*



*Rebecca Marsh received her PhD Degree in Medical Physics*



*Blake Cannon lines up to get the graduation program in motion*



*Adam Melancon listens intently as Dean Stancel speaks to the graduating class*



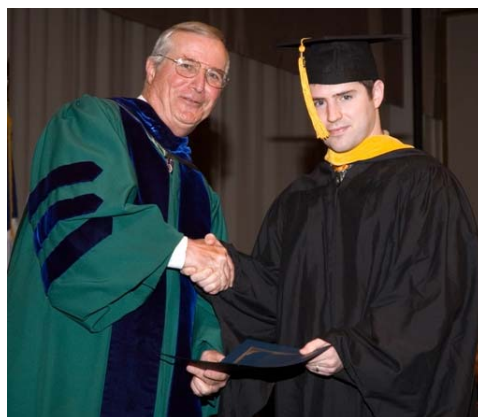
*Dr. Stancel welcomes family and graduates*



*Dr. White, Donna Stevens, MS, and Dr. Newhauser*



*Blake Cannon is all smiles as he receives the SMS in Medical Physics Degree*



*Adam Melancon shakes the hand of Dr. Stancel as he receives the MS Degree in Medical Physics*



*Dustin Ragan receives his MS Degree in Medical Physics*

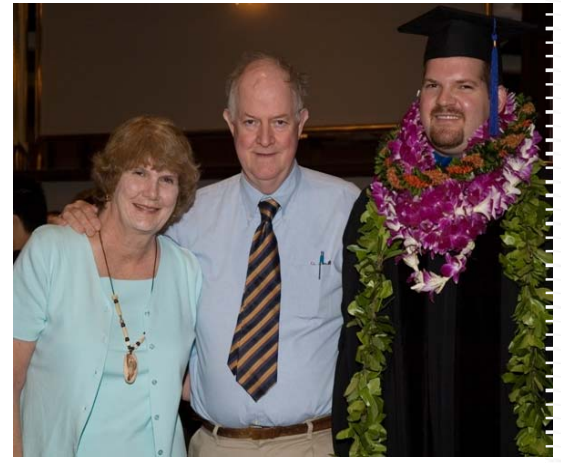




*Stephen Kry received the PhD Degree in Medical Physics with many honors*



*Jennifer O'Daniel smiles for the camera as she walks the stage to receive her PhD degree in Medical Physics*



*Christopher Nelson celebrates receiving his PhD Degree in Medical Physics with his family*

Our sincere thanks to our alumni, current students, faculty, and staff for another successful year for the Medical Physics Program!