MASSACHUSETTS GENERAL HOSPITAL

HARVARD MEDICAL SCHOOL

To Whom It May Concern:

It is my pleasure to write a letter of employment verification on behalf of Gueorgui Gueorguiev, in support of his application for full membership in the AAPM.

I personally supervised George in his role of Medical Physics Assistant in the Department of Radiation Oncology at Massachusetts General Hospital from 2014 until his departure in September 2017. George had previously worked in the role for several years under the direction of Peter Biggs, until Peter's retirement.

George did an outstanding job of balancing his graduate coursework in the Department of Radiological Sciences at the University of Massachusetts Lowell with his work as a Medical Physics Assistant.

George's responsibilities included but were not limited to: independently running patient-specific IMRT, VMAT, and proton beam QA for the full range of treatment sites and reporting those results to a qualified medical physicist (QMP) for final analysis; assisting QMPs with radiation protection surveys of therapeutic x-ray equipment; performing the full range of monthly mechanical and imaging checks for therapeutic x-ray equipment under the supervision of QMPs; assisting QMPs with monthly output calibrations, annual calibrations, annual machine scanning and other annual quality assurance; supporting machine commissioning efforts with both Elekta Infinity and Varian TrueBeam machines; and assisting with RayStation treatment planning commissioning. George was instrumental in the commissioning and deployment of the Compass system for patient-specific IMRT and VMAT quality assurance measurements.

In closing, I offer my fullest recommendation on behalf of George, as I believe he possesses the skills, capabilities, and ongoing interest befitting of full membership. Should you have any further questions, please do not hesitate to contact me.

Best regards,

Bruce Crawford, MS, DABR
Assistant Director of Clinical Physics, Network Operations
Department of Radiation Oncology
Massachusetts General Hospital
(617)724-0715
bcrawford1@mgh.harvard.edu

DANA-FARBER/BRIGHAM AND WOMEN'S CANCER CENTER

HARVARD MEDICAL SCHOOL

5/26/17

Julie C Hudson, MS, DABR
Medical Physicist, Dept. of Radiation Oncology
Dana-Farber/Brigham & Women's Cancer Center
@ Milford Regional Medical Center
20 Prospect Street
Milford, MA 01757
T: (508)-488-3820

To Whom It May Concern:

I am writing in reference to Gueorgui (George) Gueorguiev and his employment application. I have known George for 10 years, and during that time I had the pleasure of supervising him in many of his duties as a medical physics assistant at Massachusetts General Hospital. During that time, he assisted on many projects, including:

- patient, daily, monthly and quarterly quality assurance/calibration measurements for Varian and Elekta linear accelerators, as well as pencil beam scanning/double scattering proton therapy. Equipment used: IBA Blue Phantom with OmniPro Accept, IBA MatriXX detector, IBA Zebra with OmniPro Incline, IBA Lynx, SunNuclear ArcCheck. IBA COMPASS and MyQA systems

- acceptance, validation and commissioning of 3D quality assurance protocol for IMRT, VMAT, and SBRT using the IBA Compass device, during which he worked closely with 10 or more radiation oncologists to ensure its smooth clinical implementation.

- assistance with annual quality assurance/calibration measurements on Varian and Elekta linear accelerators, and for pencil beam scanning/double scattering proton therapy under the guidance of a qualified medical physicist.

- acceptance, testing, commissioning and shielding of Elekta Infinity, Synergy and Agility; Varian 2100 and True Beam linear accelerators, as well as acceptance testing and commissioning of the Raysearch Raystation treatment planning system.

- shadowing a qualified medical physicist during High Dose Radiation Brachytherapy (HDR) treatment planning, patient care and treatment procedures.

I have found George to be a highly intelligent and hard-working individual who is always eager to learn and assist. I think he would be an asset to your team.
Sincerely,

Julie C Hudson

MAYO CLINIC

5777 East Mayo Boulevard
Phoenix, Arizona 85054
480-515-6296
mayoclinic.org

Dear Sir or Madam,

During my career as a senior medical dosimetrist at the Massachusetts General Hospital, I had the great pleasure of working with George both in the clinic and through research collaborations. George started off as a hardworking medical physics assistant and PhD student in the department but soon distinguished himself as an exemplary junior physicist, researcher and clinical scientist. He impressed me with his ability to articulate difficult concepts in medical physics. His attention to detail, enthusiasm for his work and passion for the field of medical physics was apparent both in and out of the clinical setting. George is a talented future physicist; his advanced skills and passion for the field make him an ideal candidate for employment at your prestigious institution.

As a medical physics assistant at MGH, George often performed the quality assurance tests on many of my own clinical plans. Sometimes these plans would get approved very late in the afternoon on the day prior to the patient starting treatment. On many occasions I noticed George staying well beyond clinical hours to ensure each patient was quality assured to the highest degree. Even under these stressful, time-constrained situations, George always remained patient, graceful and with a cheerful demeanor. George was also a very motivated researcher at MGH; he produced some extraordinary work in the field of quality assurance. Some notable projects of his include comparing a novel transmission detector and establishing 3D QA protocols. Some of these research projects required tailored treatment plans of various techniques and disease sites in order to property test their methods. I taught George the fundamentals of photon treatment planning with IMRT, VMAT, and SBRT across all major disease sites. Treatment planning came very intuitively to George as within a short amount of time he was effortlessly producing high quality treatment plans on both Raystation and XIO, all of which followed our institution's guidelines. In another project studying tumor motion with protons, I trained George on proton planning for head and neck, prostate and thoracic disease sites on both XIO and Astroid planning systems. Not only were his plans flawless but his knowledge of treatment planning across multiple disease sites, techniques, planning systems and modalities makes his application very well rounded.

George has my highest recommendation for employment within you department. His cheerful nature, tremendous knowledge and impressive learning ability will serve him very well in his career and beyond. He has demonstrated excellence in all that he puts his mind to, whether it's designing a research project, treatment planning, performing QA or going above and beyond his requires duties. His intellectual curiosity, combined with his willingness to learn, leads me to believe there will be no limit to his growth and achievements in his career as a medical physicist.

Sincerely,

Fazal Khan
Senior Proton Dosimetrist

To whom it may concern, 07/01/2020

My name is Daniel Murff. I worked with George Georg at Ackerman Cancer Center in Jacksonville, FL, between 2016 – 2018. I now work as a medical physicist with the Alyzen Medical Physics group. Without reservations I recommend George as a medical physicist.

First, I will comment on George as a person. I find George to be a man of character and integrity. Honest, kind, and sincere are words that readily come to mind when I think of George. I remember George to be relatable, personable, and sociable. He was a great team member. It was clear that he saw himself as a part of a team, and he proved willing to sacrifice his personal interests or comforts for the good of the team. For example, he often volunteered for QA duties or department projects that other team members tried to avoid.

George worked hard and gained a lot of experience. Ackerman was booming during the years we worked there together, with patient loads reaching upwards of 75 patients per day at the main site alone across two photon accelerators, one proton accelerator, an HDR unit, and an AccuBoost unit. The proton unit volumes were commonly so high that we were obliged to run a graveyard shift. George rotated through this shift on a tri-weekly basis. George showed a resilience to bounce back after those late-night weeks to get right back into the day shift.

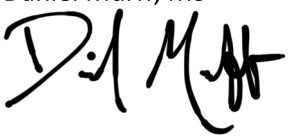
No one on the team did more quality assurance work than George. Machine QA, patient QA, acceptance testing, return-to-service procedures, chart checks, and more, he seemed to be always present and engaged when it came to the task at hand. In addition to routine physics work, George was also heavily involved in special procedures. For example, George was one of our principal planners for SRS treatments using BrainLab's iPlan software for treatment planning. He also did daily SRS QA, and oversaw setup and treatment for SRS patients. George also did significant work in HDR brachytherapy. George led efforts on custom plaque creation, treatment planning using Oncentra software, and daily setup and monitoring of patients during treatment. George interviewed and educated many patients on regarding I-131 treatment. George was skilled at treatment planning using Raystation software. He oversaw treatment planning and reviewed hundreds of proton versus photon plans for comparison and quality assurance. George also did routine QA on our Philips Gemini PET-CT.

George gained experience in all facets of medical physics work at Ackerman. For example, in 2017, He and I worked together to re-commission an Elekta Synergy machine in advance of commissioning the same for BrainLab cones. I remember many nights spent together with George setting, up the IBA blue phantom 3D-tank, and then taking hour after hour of beam scans to satisfy the data needs for commissioning and beam modeling. On the proton side, George and I also worked together closely on a project to commission and model a secondary MU calculation algorithm for patient-specific QA on the proton unit. Once again, many nights, and not-a-few weekends, were spent acquiring the data needed for this project. Projects with George were well-planned, calculated, and methodical. George's overall professional demeanor seemed to match that theme.

I would like to once again recommend George as an outstanding medical physicist. Both personally and professionally, I feel that he would be a solid addition to any physics team. Should you have any other questions regarding my interactions with George, please email me at djmur@outlook.com, or call my cell phone at 904-377-6217.

Sincerely,

Daniel Murff, MS



ACKERMAN™
Cancer Center

Scot Ackerman, M.D. | Ryan Perkins, M.D. | Paul Ossi, M.D.
Babita Jyoti, M.D. | William Peters, M.D., Ph.D. | Gaelyn Scuderi, M.D.

To Whom It May Concern,

It gives me great pleasure to write this letter of recommendation for George Georg (Gueorgui Gueorguiev). George has worked as a Medical Physicist at Ackerman Cancer Center since 2017. I have had the privilege of working under the guidance and direction of George this past year as an Assistant Medical Physicist. I am currently completing an American Society of Radiologic Technologists approved Radiation Therapy Degree program and will enroll in a Masters' of Science in Medical Physics Degree program in the Fall of 2020.

Ackerman Cancer Center is a private practice radiation oncology treatment center located in Jacksonville, Florida in the United States of America. The treatment center is the first private, physician-owned proton therapy center in the world and comprises of a team of oncologists with more than 25 years of experience. The treatment center specializes in radiation therapy for a variety of cancer diagnoses, through proton therapy, external beam radiation therapy, and brachytherapy.

I am currently an Assistant Medical Physicists responsible for quality assurance on treatment plans, devices, and equipment under the guidance and direction of George and the Physics Department. George ensures the Assistant Medical Physicists are trained and well versed in performing quality assurance responsibilities, such as capturing measurements and conducting analysis on treatment plans and equipment. George has been instrumental in providing instructions for dimensional analysis on apertures, operation of PET-CT GE scanner, and the use of computer operating software, such as dotDecimal, myQA (IBA), and MapCHECK (Sun Nuclear SRS), to perform quality assurance on compensators and analysis on patient treatment plans for photon, electron, and proton therapy. I have learned how to capture measurements for reference data utilizing the water tanks and cylindrical ionization chamber in solid water and water phantom, and how to utilize ionization chamber detector array devices such as the MatriXX (IBA) and Zebra (IBA). George has taught me how to safely operate various radiation therapy treatment machines and their software in QA mode, such as the Synergy (Elekta), Versa HD (Elekta), and Mevion S250. He has also allowed me the opportunity to conduct monthly and annual quality assurance and mechanical checks on these radiation therapy treatment machines. I have been fortunate to work under George who made it possible for me to witness and assist in the commissioning of the Elekta Versa HD.

George is dedicated and committed to our patients, the treatment center and our success. He is an integral part of the treatment center and has played a vital role in the leadership and development of our team of Assistant Medical Physicists. He has taken ownership and has been successful in training our team, who previously possessed no medical physics experience. George is very thorough and efficient and has taken the shortest amount of time to prepare us, constantly providing feedback and bridging the gap between the Bachelors' and PHD level. He continues to work long and late hours, many times over the weekends, to ensure we understand our responsibilities and provide accurate results. He has always made himself available to answer questions and clear up any confusion.

10881 San Jose Boulevard
Jacksonville, Florida 32223
o 904.880.5522 | F 904.880.5533
ackermancancercenter.com

Jacksonville | Amelia Island

George is a great mentor and gets excited at every opportunity to teach us new things. I especially appreciate that he takes whatever time is needed to show us new ways of collecting data and analyzing information but also provides us the opportunity to practice and gain real-world experience. The more we learn, the more we do, the more proficient we become, the more responsibilities he gives us, and we learn more and grow more, the cycle continues. George's unselfishness and initiative has allowed us to become a competent, efficient, and well-balanced team of Assistant Medical Physicists.

I am very appreciative of George and everything he has thought me and continues to teach me. I will attend graduate studies this Fall and will have a much better grasp and understanding of medical physics and graduate level studies. Working with George motivates me and makes me extra excited and impatient to attend graduate school and learn more about medical physics and radiation therapy.

George is of great character, honest and trustworthy. He understands the importance of a well balance life. George has a wealth of knowledge of medical physics and has always been a true professional. He has made himself an invaluable asset to Ackerman Cancer Center and our team, and I am confident he will do the same and have a positive impact wherever he works. Thank you so much for your consideration and please contact me at +1-910-297-3439 or cedenoj96@yahoo.com if you have any questions.

Sincerely,

Joel Cedeno, B.S.
Assistant Medical Physicist

ACKERMAN™
Cancer Center

Scot Ackerman, M.D. | Ryan Perkins, M.D. | Paul Ossi, M.D.
Babita Jyoti, M.D. | William Peters, M.D., Ph.D. | Gaelyn Scuderi, M.D.

To Whom It May Concern,

I am writing to give my highest recommendation for Dr. George Georg (Gueorgui Gueorguiev). My name is Robert J. Dawson and I am a medical physicist assistant (MPA) at Ackerman Cancer Center (ACC), a private oncology clinic in Jacksonville, Florida. I have been working under the supervision of Dr. Georg over the past year, following my graduation from Cornell University with degrees in physics and mathematics.

Dr. Georg earned his Ph.D. in Medical Physics at the University of Massachusetts (BMEBT therapeutic medical physics program track), a CAMPEP (Commission on Accreditation of Medical Physics Education Programs) accredited program. During his graduate studies, George also served as an MPA at Massachusetts General Hospital for 10 years, and in 2017 arrived at ACC, where he serves as medical physicist.

At the clinic, Dr. Georg leads a four-person cohort of MPAs, all of whom possess a degree in physics and intend to pursue an advanced degree in medical physics. When I reflect on the things I have learned as an MPA, I realize that almost all of them are the direct result of George's guidance: practical operation of sophisticated medical equipment, bedside manner when treating cancer patients, communication and integration with other departments within the clinic, and the ability and persistence to tackle fundamental and applied problems in medical physics. George has single handedly instructed us on the operation, maintenance and quality assurance protocols for a Mevion S250 Proton Therapy system, an Elekta Versa HD system, an Elekta Synergy system, and a Philips Gemini TF 64 PET/CT system.

As MPAs, our primary responsibility is quality assurance (QA) of patient treatment plans for the various radiation therapy modalities practiced at the clinic. Dr. Georg has taught us the proper procedures for ion chamber measurements (both in water phantoms and solid water equivalent material), measurements using ionization chamber detector array devices such as the IBA MatriXX, IBA Zebra, and Sun Nuclear's SRS MapCHECK, as well as associated software such as IBA's myQA, Elekta's MOSAIQ, and Sun Nuclear's SNC Patient.

10881 San Jose Boulevard
Jacksonville, Florida 32223
o 904.880.5522 | F 904.880.5533
ackermancancercenter.com

Jacksonville | Amelia Island

My experiences at ACC, and more specifically the mentorship I have received from Dr. Georg, have greatly influenced my desire to pursue a career in medical physics. This past year, I applied to and was accepted at several of the top CAMPEP accredited medical physics graduate programs in the United States, including those at the University of Pennsylvania, Duke University, and Columbia University. I credit George with a great deal of my success—I have had many mentors in various clinical and research settings, and I absolutely consider George to be the most influential. Even among the brilliant scientists and clinicians within the Physics Department at ACC, George stands out as an expert, and I am certain that this opinion is shared by most of his colleagues. He unselfishly devotes his time and energy to teaching our group of MPAs about the theory behind proton and linear accelerator therapies, and provides practical insight into how treatment plans are created and how clinically relevant treatment parameters are calculated. On many occasions, George has stayed working with us into the early hours of the morning to ensure that treatment plans are perfect; he leads by example, and his actions demonstrate that his ultimate focus truly is to provide patients with the best care possible.

Dr. Georg is everything that a scientist, clinician, and leader should be, and I cannot overstate the impact that my relationship with him has had on my life and the lives of my peers. Please contact me if you have any questions and thank you very much for your consideration.

Respectfully,

Robert J. Dawson
Medical Physicist Assistant

rjd277@cornell.edu

ACKERMAN
Cancer Center
Leaders in Proton Therapy

10881 San Jose Boulevard | Jacksonville, Florida 32223