

2022Sustainability Report
SDG3



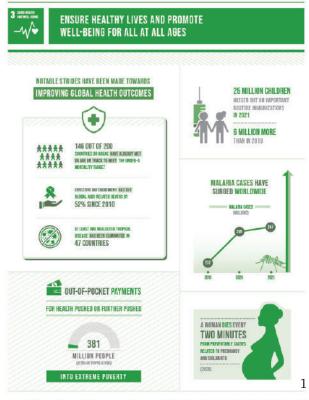
ABDULLAH GÜL UNIVERSITY





■ SDG3: Good Health and Well-being

SDG 3 aims **to ensure healthy lives and promote well-being for all at all ages**. By April 2022, the coronavirus causing COVID-19 had infected more than 500 million people and killed more than 6.2 million worldwide. However, the most recent estimates suggest that the global number of excess deaths directly and indirectly attributable to COVID-19 could be as high as three times this figure. The pandemic has severely disrupted essential health services, shortened life expectancy and exacerbated inequities in access to basic health services between countries and people, threatening to undo years of progress in some health areas. Furthermore, immunization coverage dropped for the first time in 10 years, and deaths from tuberculosis and malaria increased.



THE SUSTAINABLE DEVELOPMENT COALS REPORT 2023: SPECIAL EDITION: UNSTATS UNLORG/SDOS/REPORT/2023/

Reproductive, maternal, and child health

Based on data from 2015 to 2021, 84 per cent of births worldwide were assisted by skilled health professionals, including medical doctors, nurses and midwives, an increase from 77 per cent in 2008–2014. In sub-Saharan Africa, coverage is 20 percentage points lower. Available data do not reflect the impact of the COVID-19 pandemic on the disruption of services, which may reverse gains made over the past decades.

Between 2015 and 2020, the global under-5 mortality rate decreased by 14%, dropping from 43 deaths per 1,000 live births to 37 deaths per 1,000 live births. Similarly, the global neonatal mortality rate decreased by 12%, falling from 19 deaths per 1,000 live births in 2015 to 17 deaths per 1,000 live births in 2020.

¹ https://sdgs.un.org/goals/goal3

The proportion of women of reproductive age (15–49 years) whose need for family planning was satisfied through use of modern contraceptive methods stagnated at about 77 per cent between 2015 and 2022, while sub-Saharan Africa has seen the largest increase – almost 5 percentage points. The ongoing COVID-19 pandemic may lead to a reversal of this trend because of supply chain disruptions and decreased access to family planning services. The adolescent birth rate has fallen worldwide from 56 births per 1,000 adolescents aged 15–19 years in 2000 to 45 births in 2015 and 41 births in 2020. The largest declines are occurring in Central and Southern Asia, from 70 births per 1,000 adolescent women in 2000 to 24 births in 2020. Early adolescent childbearing, occurring in the 10–14 age group, is much more common in countries in sub-Saharan Africa, Latin America, and the Caribbean than in other parts of the world.

Infectious diseases

An estimated 1.5 million new HIV infections and 680,000 deaths from AIDS-relatecauses occurred in 2020. The incidence of HIV infections globally declined by 39 per cent between 2010 and 2020, far less than the 75 per cent target agreed by the General Assembly in 2016. Measures to slow the spread of the COVID-19 pandemic and the additional strain the new pandemic has placed on health systems have disrupted HIV-related services.

In 2020, an estimated 10 million people fell ill with tuberculosis worldwide. There was a rise in tuberculosis deaths for the first time in a decade caused by the COVID-19 pandemic, from 1.2 million in 2019 to 1.3 million in 2020 (excluding tuberculosis deaths in people with HIV). Tuberculosis incidence is currently declining at a rate of approximately 2 percent per year. However, this rate of decline falls short of the 4–5 percent annual reduction that was originally targeted to achieve the milestones set out in the 2020 goals of the End TB Strategy. 2018 and 2020, tuberculosis treatment reached 20 million people, only half of the global target.

In 2020, there were an estimated 241 million malaria cases worldwide, resulting in 627,000 deaths. This marked an increase of approximately 14 million cases and 69,000 deaths compared to the previous year. About two thirds of the additional deaths were linked to disruptions in the provision of malaria services during the pandemic. Africa was home to 95 per cent of malaria cases and 96 per cent of malaria deaths.

Despite disruptions caused by the COVID-19 pandemic, the global number of people needing treatment for neglected tropical diseases decreased from 2.19 billion in 2010 to 1.73 billion in 2020. Notably, 48 per cent of the total population of least developed countries, required treatment and care for neglected tropical diseases in 2020, down from 79 per cent in 2010.

Non-communicable diseases, mental health, and environmental risks

Globally, 74 per cent of all deaths in 2019 were caused by non-communicable diseases. The probability of dying from any of the four main non-communicable diseases (cardiovascular disease, cancer, diabetes or chronic respiratory disease) between 30 and 70 years of age declined from 19.9 per cent in 2010 to 17.8 per cent in 2019. This rate of decline is insufficient to meet the Sustainable Development Goal target. Tobacco use rates have declined in 150 countries, contributing to the decline of the global average prevalence rate from 24.4 per cent in 2015 to 22.3 per cent in

2020. In 15 countries, tobacco use rates are either steady or still going up. The global suicide death rate declined by 29 per cent from 13.0 deaths per 100,000 population in 2000 to 9.2 deaths per 100,000 in 2019. Although the available data do not show an increase in suicide rates during the first months of the COVID-19 crisis, the pandemic has had a severe impact on the mental health and well-being of people around the world. In 2020, there was a 25 per cent increase in the prevalence of anxiety and depression worldwide.

Health Systems and Funding

The COVID-19 pandemic and its related disruptions have led to the failure to vaccinate 22.7 million children, which is 3.7 million more than in 2019, representing the highest number of missed vaccinations since 2005. Moreover, 17.1 million children did not receive vaccines through the routine immunization programme, an increase from 13.6 million. Measles is a highly contagious disease and the current coverage levels of 70 per cent with two doses of the vaccine are insufficient to prevent measles outbreaks and illness, disability and deaths caused by complications associated with the disease. In 2020, the human papillomavirus (HPV) vaccine, aimed at preventing cervical cancer and targeted for girls aged 9–14, was made available in 111 countries. However, it has yet to reach the poorest nations.

Improvements in essential health services, as measured by the universal health coverage service index, increased from a global average of 45 out of 100 in 2000 to 67 out of 100 in 2019, with the highest score in Europe and Northern America (81) and the lowest in sub-Saharan Africa (45). The pandemic is likely to halt the continuous progress made in service coverage expansion over the past 20 years, as health systems face challenges with respect to ensuring the continuity of essential health services.

Even before the pandemic, the global proportion of the population spending over 10 percent of their household budget on out-of-pocket health expenses had risen, surpassing 13 percent. With the combined health and economic impacts of the COVID-19 pandemic, people are likely to face greater financial constraints on access to care and among those paying out of pocket for health, financial hardship is likely to worsen further, particularly among already disadvantaged populations. Healthcare and care workers have been at the forefront of the COVID-19 pandemic response. Between January 2020 and May 2021, the pandemic may have claimed the lives of 115,500 of these workers worldwide.

Data for 2014–2020 show that the density of nursing and midwifery personnel remains highest in Northern America, at over 152 per 10,000 population, which is close to 4 times the global average of 40 per 10,000, over 15 times the figure for sub-Saharan Africa, and 8 times that for Northern Africa and Southern Asia. Despite a global increase in the density of medical doctors per 10,000 population, regional disparities persist. For instance, Europe has approximately 40 medical doctors per 10,000 population, while sub-Saharan Africa has only 2 per 10,000²

AGU'S POLICIES AND PRACTICES

Ensuring healthy lives and promoting well-being at all ages is essential to sustainable development. There is a need to fully eradicate a wide range of diseases and address many different persistent and emerging health issues. AGU organizes various programs, projects, and courses (which include student volunteering programs) to improve or promote health and well-being, including hygiene, nutrition, family planning, sports, exercise, aging well, and other health and well-being related topics.

AGU gives importance to the health and well-being of its students and employees. AGU's <u>Medical Center</u> is located on campus and provides all AGU members and guests with primary healthcare services as well as free sexual and reproductive health-care services and education. AGU's health center is equipped with cabinets having first aid equipment at

a level that can provide first aid to our students and staff when necessary. In addition, within the scope of Occupational Health and Safety in the Sümer Campus of our University, these cabinets undergo regular inspections to ensure the availability of necessary health supplies. Any deficiencies are promptly addressed. The AGU Medical Center is open to service two days a week. Service days and hours are announced to all staff and students through e-mail.

If our students want to receive full-fledged health services, they can easily reach Kayseri City Hospital by buses passing in front of our campus. In addition, the Family Health Center is 100 meters from our campus and 112 Emergency Center is two km away. Our campus is 1-2 km away from many private hospitals in Kayseri.





AGU Health Center

² https://unstats.un.org/sdgs/files/report/2022/secretary-general-sdg-report-2022--EN.pdf/

One certified psychologist offers free psychological counselling and support (<u>PCG Office</u>) to both students and staff. PCG Office aims to:

- facilitate student adaptation to university life,
- help the social, emotional, mental and behavioral development of students and contribute to their personal improvement,
- help students gain the necessary competencies so that they can overcome aca demic, personal, and social hardships which they might face in their daily lives.

PCG Office conducts its work in various ways to reach this goal:

- Individual counseling is offered by specialists so as to help students solve their personal problems,
- Group work is carried out in personal development classes where methods and knowledge regarding time management, stress management, effective study techniques, learning styles, test anxiety, and communication skills are shared with students to support them,
- They are encouraged to start clubs to gain certain skills that will support their social development, and they are supported while carrying out club activities.

AGU students and staff can contact AGU PCG Office by filling out the <u>application form</u> at https://od-tr.agu.edu.tr/pdr-randevu and make an appointment.

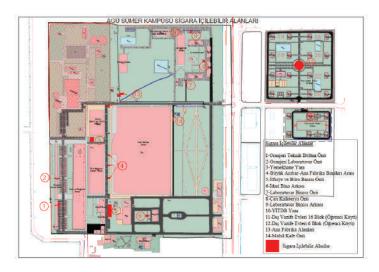






AGU's Smoke-Free Policy, initially established in 2010, was revised and extended in 2022. This policy limits smoking on campus to designated areas.

Smoke-Free Campus



Smoke-Free Campus

On the University's Sümer Campus, there is a fitness center, a football field, and a multipurpose court for basketball, volleyball, and tennis. At the Student Village, there is a basketball court, a tennis court, a football field, and several outdoor table tennis tables. There are also two pool tables and five indoor table tennis tables at the common areas of the University. The General Public can access the campus and use its <u>sports facilities</u>.

Within the scope of the <u>protocol</u> signed between our University and Kayserispor in 2021, Kayserispor was allowed to use the Fitness Centre of our University until the end of 2022.

AGU also has a protocol with the Kayseri Provincial Directorate of Youth and Sports to collaborate on areas of culture, arts, sports, and education. Click to see the <u>protocol</u>.

















Sports Areas at AGU

Along with these sport facilities, AGU Fitness Center has many applications for the use of disabled people.



Smart hearing system application



Tactile surface application



Call button app with drawstring



Warning signs on glass surface



Disabled ramp



Emergency call button application

AGU'S PROGRESS

AGU tracks publications, courses, projects, theses, dissertations, congress and symposium participation continuously for all SDGs through AVESIS (<u>Academic Data Management System</u>).

Statistics



RESEARCH AND PROJECTS

AGU faculty members conduct collaborative research on improving health and well-being. AGU's research collaborations in 2022 are stated in the Table below.

Research collaborations in 2022

Type of Research	Researchers	Institutions	Country	Research Name	Date
Conference Paper	Durak A., Uğur Z. B.	Abdullah Gül University, Anka- ra Social Science Institute	Türkiye	Does Social Context Impact the Well-Be- ing Consequences of Unemployment?	13–15 May 2022
Publication	Sulak M., Turgut G. C., ŞEN A.	Pamukkale University, Abdullah Gül University	Türkiye	Cerium Oxide Nanoparticles Biosynthesized Using Fresh Green Walnut Shell in Microwave Environment and their Anticancer Effect on Breast Cancer Cells	2022
Publication	Baspınar Tuncay E., Köken E., Kılınçarslan Ş.	Süleyman Demi- rel University, Abdullah Gül University	Türkiye	Estimation of Concrete Strength Properties Through the Response Surface Methodology, Genetic Algorithm, and Artificial Neural Networks	2022

Publication	Kuloğlu M. E., Yildiz S.	Abdullah Gül University, Bolu Abant İzzet Bay- sal University	Türkiye	Undergraduates' Attitudes Towards Distance Education and Perceptions of Readiness for E-Learning During the Covid-19 Pandemic	2022
Publication	Erdoğan Orhan I., Şenol Deniz F. S., Salmas R. E., Irmak S., Acar O. O., Turgut G. C., Sen A., Zbancioc A., Luca S. V., Skiba A., Skalicka-Wozniak K., Tataringa G.	Gazi University, University of London, Pamukkale University, Abdullah Gül University, Grigore T Popa University of Medicine & Pharmacy, Technical University of Munich, Medical University of Lublin	Türkiye, England, Romania, Germany, Poland	Evaluation of Anti-Alzheimer Activity of Synthetic Coumarins by Combination of in Vitro and in Silico Approaches	2022
Publication	Polat A. Y., Aysan A. F., Tekin H., Tunali A. S.	Abdullah Gül University, Hamad Bin Khalifa University-Qatar, Karabuk University, Middle East Technical University	Türkiye, Qatar,	Bitcoin-specific fear sentiment matters in the COVID-19 out- break	2022
Publication	Mujwar S., Sun L., Fidan Ö.	Maharishi Markandesh- war University, Jiangsu Second Normal Universi- ty, Abdullah Gül University	India, China, Türkiye	In silico evaluation of food-derived carotenoids against SARS-CoV-2 drug targets: Crocin is a promising dietary supplement candidate for COVID-19	2022
Publication	Kourtit K., Ni- jkamp P., Östh J., Türk U.	Open Universite- it, Uppsala Uni- versitet, Abdullah Gül University	Nether- lands, Sweden, Türkiye	Airbnb and COVID-19: SPACE-TIME vulner- ability effects in six world-cities	2022
Publication	Babacan Cevik S., Kahraman K., Ekici L.	Erciyes University, Abdullah Gül University	Türkiye	Production of oven-baked wheat chips enriched with red lentil: an optimization study by response surface methodology	2022
Publication	Muğaloğlu E., Polat A. Y., Tekin H., Kilic E.	Abdullah Gül University, Karabük Univer- sity	Türkiye	Assessing the impact of Covid-19 pandemic in Türkiye with a novel economic uncertainty index	2022
Publication	Kayışoğlu B., Salman F. S., Yücel E., Demir M. H., Kayı İ., Kıavash P.	Abdullah Gül University, Koç University, TOBB University of Economics and Technology, Izmir University of Economics	Türkiye	Fair and efficient location, routing and allocation models to support large - scale vaccination	2022

Publication	Kurt Kizil- doğan A., Celik G., unsaldi E., Özcan S., Ayaz Güner Ş., Özcengiz G.	Middle East Technical University, Erciyes University, Abdullah Gül University	Türkiye	An integrative-omics analysis of an industri- al clavulanic acid-over- producing Streptomy- ces clavuligerus	2022
Publication	Bayram N. N., Topuzoğullari M., İşoğlu İ. A., Dinçer İşoğlu S.	Abdullah Gül University, Yıldız Technical University	Türkiye	RAFT-synthesized POEGMA-b-P4VP block copolymers: preparation of nano- sized micelles for anti- cancer drug release	2022
Publication	Akbaş A., Buyrukoğlu S.	Abdullah Gül University, Çankırı Karatekin University	Türkiye	Efficiency of Ensemble Learning Algorithms in the Analysis of Effects of Covid-19 Pandemic on Electricity Con- sumption in Türkiye	2022
Conference Paper	Kayışoğlu B., Salman F. S., Yücel E., Demir M. H., Kayı İ., Kiavash P.	Abdullah Gül University, Koç University, TOBB University of Economics and Technology, Izmir University of Economics	Türkiye	Efficient and Fair Vaccine Distribution During Pandemic	2022
Publication	Akbaş A., Buyrukoğlu S.	Abdullah Gül University, Çankırı Karatekin University	Türkiye	Machine Learning based Early Prediction of Type 2 Diabetes: A New Hybrid Feature Selection Approach us- ing Correlation Matrix with Heatmap and SFS	2022
Publication	Erdem İ., Çakır Ş.	Abdullah Gül University, Erci- yes University	Türkiye	Green Synthesis of Silver Nanoparticles Using Walnut Shell Powder and Cynara sp. and their Antibac- terial Activities	2022
Publication	Chanyasak T., Koseoglu M. A., King B., Aladağ Ö. F.	Chiang Mai Hotels, Metropolitan State University, The Hong Kong Polytechnic University, Abdullah Gül University	Thailand, United States Of America, Japan, Türkiye	Business model adaptation as a strategic response to crises: navigating the COVID-19 pandemic	2022
Publication	Bakir-Gungor B., Lar H. H., Jabeer A., Nalbantoğlu Ö. U., Aran O., Yousef M.	Abdullah Gül University, Erciyes University, Bo- gazici University, Zefat Acad Coll	Türkiye, Israel	Inflammatory bowel disease biomarkers of human gut microbiota selected via differ- ent feature selection methods	2022

Publication	Akkurt S. B., Çoymak A., Koç Y.	Abdullah Gül University, Rijksuniversiteit Groningen	Türkiye, Nether- lands	Psychosocial Perspectives on Community Responses to Covid-19 Re-Constructing the Meaning of Aid through the Politicisation of Communities in a Welfare State: The Psychological Responses to the Governmental Aid Plans against Covid-19 in Türkiye	2022
Project	Ülger H., Adan A.	Erciyes University, Abdullah Gül University	Türkiye	Investigation of the Effects of Titanium Dioxide Nanoparticles on Ehrlich Ascites Tumor Cells	2022

Click for more Research and Projects on Health and Well-being.

Academic Audio Library Project

The 'Academic Audio Library' project is dedicated to enhancing the involvement of blind individuals in academic activities. While there are voice recordings of literary texts, there's a notable absence of an academic library featuring audio versions of scholarly texts. In response to this gap, students at AGU are taking the initiative

to create this library, driven by the goal of promoting equal opportunities. The project commenced with 'Diction Training for Volunteers' on December 15, 2021, involving 21 participants in a five-week training program. Following this, volunteers received. specific training on how to accurately voice tables and graphics in academic documents.









EDUCATIONAL PROGRAMS AND COURSES

The GLB 203 Good Health & Well-being Course is designed to introduce information on global issues related to good health and well-being. The course is designed to address contemporary and future health-related issues and potential solutions, considering a range of diverse perspectives. Health is one of the most important criteria for sustainable development. Scientific breakthroughs in this field improve life expectancy and quality. However, with increasing population, environmental challenges, new types of health issues are occurring. In this course, students discuss topics that will challenge society in the future such as obesity, diabetes, vaccines, biomaterials, age-related diseases, personal and economical behaviors, emotions, attitudes, and well-being. The course expects students to bring their disciplinary knowledge in conversation to advance treatment and prevention options to "ensure healthy lives and promote well-being at all ages."

In the Fall semester of 2022–2023 academic year, the AGU Office of Health, Culture, and Sports introduced a variety of courses to allow students to make productive use of their extracurricular time and foster personal and social development. These courses, including sign language, diction, first aid, marbling art, and charcoal drawing, garnered significant interest from students. Upon completion of these courses, which were conducted by trainers from the Public Training Center, participants received certificates.



AGU Student Courses

COOPERATION AND EVENTS

AGU collaborates with health institutions through protocols to enhance health and well-being outcomes. This cooperation allows AGU staff and students to access health institutions at discounted rates. The table below lists AGU's 2022 collaborations with health institutions as well as ongoing partnerships.

Collaborations with health institutions in 2022

	Starting Date	Finishing Date	Protocol link
Erciyes Hospital	2022	2023	Protocol link
Uzman Dental Hospital	2022	-	Protocol link
Kayserident Oral and Dental Polyclinic	2022	2023	Protocol link
System Hospital	2022	-	Protocol link
Nuh Naci Yazgan University Faculty of Dentistry	2021	2022	Protocol link

The AGU Office of Health, Culture, and Sports negotiates with various organizations to gain free access for AGU members at sports facilities in the city (e.g., Erciyes Ski Center) and aims to increase the practice of diverse sports among AGU members.

AGU works with the Turkish Red Crescent on a national scale. International students in need were provided with accommodation and cash support by the Red Crescent. In addition, there is the Youth Red Crescent student club at AGU. Through the club, volunteer students carry out activities by working with the parent organization.

AGU's activities related to SDG3 Good Health and Well-Being in 2022 are described below.



AGU Youth Red Crescent Student Club Members

1. Public Education Seminar Series

AGU faculty member Dr. Aysun Cebeci Aydın participated in our open to the <u>public education seminar series</u> and gave training on health problems related to nutrition, nutrition types, and healthy foods.



2. "Discover Mount Erciyes" Conferences

"<u>Discover Mount Erciyes</u>" conferences were organized by the Office of Health, Culture, and Sports. Dr. Murat Cahid Cingi participated as a presenter in conferences hosted by AGU, which were open to the public and attended by AGU staff, students, and the general public. These conferences focused on topics related to skiing sports, the Erciyes ski resort, and winter tourism.





3. "New Era in Combating Rare Diseases" Seminar

AGU organized a seminar titled 'New Era in Combating Rare Diseases' as part of its public education series, which was also broadcast live on YouTube. The seminar, related to SDG 3 Good Health and Well-Being, featured a speech by Dr. Oktay Kaplan from the Faculty of Life and Natural Sciences.



4. "Adolescence Problems and Risk Behaviors Colloquium" Seminar

The "Adolescence Problems and Risk Behaviors Colloquium" has been held as part of the Public Education Seminars in collaboration with the Psychology Departments of Abdullah Gül University, Nuh Naci Yazgan University, Yahya Kemal Beyatlı Secondary School, and Melikgazi Guidance and Research Center. The panel covered various topics, including emotion regulation, anxiety, coping with anxiety in adolescents, attention deficit hyperactivity disorder in adolescents, communication and conflict resolution in adolescence, and approaches to addiction.



5. "Social-Psychology of Vaccine Intentions: The Mediating Role of Institutional Trust in Combating Covid-19 in Polarized Societies" Webinar

AGU hosted a webinar titled 'Social-Psychology of Vaccine Intentions: The Mediating Role of Institutional Trust in Combating Covid-19 in Polarized Societies.' The webinar featured Assist. Prof. Dr. Ayşenur DAL and Assist. Prof. Dr. Efe TOKDEMİR as speakers.





6. "Sports Festival"

In cooperation with the Office of Health, Culture, and Sports and Kayseri Sports Inc. a "Sports Festival" was organized at the Sümer Campus. The festival was open to the public and included stage performances, wooden games, and sports exercises.





7 The Role of Psychological Counseling in the Relationship between Sustainable Development Goals (SDGs) and Education" Panel

A panel on "The Role of Psychological Counseling in the Relationship between Sustainable Development Goals (SDGs) and Education" was organized at AGU. During the panel, psychological counselors in primary and secondary education were educated about the SDGs. The speakers included Prof. Dr. Burak Asiliskender, Assoc. Prof. Dr. Ahmet Çoymak, Assist. Prof. Dr. Sinan Akyüz, and Dr. Sümeyra Ayık.

8. Meeting event of the "AGU Academic Audio Library" Project

The meeting event of the "<u>AGU Academic Audio Library</u>" Project was organized for visually impaired university students with the contributions of volunteer students from AGU Library, Youth Factory, Business Club, and Society of Women Engineers clubs. During the event, SDG 3 Good Health and Well-being was also discussed.



9. "The World Disability Day Awareness" Program

"The World Disability Day Awareness" Program was organized at AGU in cooperation with Kocasinan District Directorate of National Education. During the program, special education students staged music, dance, and poetry performances.



10. "Conflicting Multiple Identities of Disadvantaged and Marginalized Groups" Presentation

Sümeyra Bengisu Akkurt, a research assistant at AGU, gave a presentation titled "Conflicting Multiple Identities of Disadvantaged and Marginalized Groups" in Offenburg, Germany as part of the "Youth in Europe: Offenburg Talks" series supported by Jügend für Europa.



11. Migrants Workshop

<u>Migrants Workshop</u> was organized in partnership with AGU, Gaziantep University, Gazi University and Royal Holloway University of London. Research findings will be transmitted to policy makers and other target audiences through panels, workshops, national and international publications.





12. CRISPR Cas9 Technology Speech

Dr. Oktay Kaplan gave a speech on the Nobel Prize-winning CRISPR Cas9 technology, which is widely used in the treatment and research of various diseases, at the invitation of the Azerbaijan Sapiens Academy.



Speech on CRISPR CAS9 Technology

13. Assignment as Tournament Referee for BILL JEAN KING CUP

Assist. Prof. Dr. İsmail AKÇOK from department of bioengineering request to be appointed as referee in the BILL JEAN KING CUP tournament to be held at Antalya Megasaray Tennis Academy between 11-16 April 2022, in accordance with Article 29 of the 3289 Law on the Organization and Duties of the General Directorate of Sports, has been accepted.





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