# Questions to the political parties in context of the parliamentary elections 2017

We asked six parties (CDU/CSU, SPD, DIE LINKE, Bündnis90/Die Grünen, FDP and AfD) about their opinion regarding different aspects that are important for PhD candidates and scientists in general.

The main topics that we address are:

- I. Science in Society and Politics
- II. Graduation and a Career in Science
- III. Framework Conditions of PhD Candidates
- IV. Scientific Exchange

All the original questions and answers were in German. Since we want to make the information available for as many people as possible, we translated the document for you. The document was translated by multiple non-professional translators. Hence, we present the translation without guarantee. Please notice that any ambiguities could result from our translation.

Our aim is to inform the members of our networks as well as all scientists that are interested in these topics. We want to help everybody to make an informed decision during the parliamentary elections on the  $24^{th}$  of September 2017.

Eine gemeinsame Initiative der Promovierenden-Netzwerke in Deutschland:

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## I Science in Society and Politics

1. In which way should doctoral and postdoctoral associations be able to have an influence on decisions regarding science and higher education institutions?

**CDU/CSU:** According to federal distribution of tasks, this falls into the responsibility of each *Bundesland* or research institution, respectively.

**SPD:** Science is for people. Social progress should always be the goal. The social responsibility of science also implies obligations to society. The society has to provide a good and reliable framework that allows scientists, especially PhD candidates and graduates, to concentrate on their scientific work. To discuss and decide how this should be both generally and concretely best applied, strong unions and interest groups are needed. Your work in PhD networks especially provides an important and indispensable contribution to this dialogue.

From the political and parliamentary side, we are open for consultation and would be happy to listen to your ideas and suggestions to develop our political positions, as well provide you with parliamentary advice. We would like to welcome you to hearings and specialist panels, or invite you as experts - as has already been done several times in the past - to participate in public events and discussions. This open and reciprocal dialogue process is, from our point of view, best suited to give a variety of employees in research and science, as an interest group, an influence on relevant political decisions. We consider it indispensable that such a dialogue is transparent and comprehensive.

**DIE LINKE:** DIE LINKE supports the suggestion of the *GEW* to establish open multidisciplinary graduate schools where PhD students have a right for codetermination. In all committees PhD students and graduates would be represented equally. Support though facilities such as graduate schools, promote the individual graduation process and act as independent entity in the case of disagreement.

**Bündnis90/Die Grünen:** For us, institutional facilities such as student councils and equally represented committees at higher education institutions are of great importance. All groups should be represented and be able to partition in the democratic self-administrating process of higher education institutions. The implementation is, according to university constitution, up to each *Bundesland*.

FDP: We welcome the commitment of students and postdocs in representative councils. PhD networks make an essential contribution by pooling and articulating interests of PhD students. Another channel of expression is provided through speakers of graduate schools. We want to provide freedom to higher education institutions to enable autonomous organization and formation of different ways PhD students can participate. We are convinced that those higher education institutions, that give their students a voice, are eventually those with the greatest scientific success.

**AfD:** Of course, associations organized by students and postdocs should be heard in important political decisions regarding science and higher education institutions. We welcome improvement and more comprehensive organization of PhD students.

# 2. Which scientific areas and topics would you strengthen financially, which would you reduce? How should publicly financed research be prioritized and steered?

**CDU/CSU:** Part of the CDU/CSU guidelines regarding research and education are:

- Research and education continue to be prioritized topics of the alliance (CDU/CSU). Also in the future investments in these sectors must continue to rise.
- The federal distribution of tasks should be preserved. School education is organized by each *Bundesland*, not the federal government. The federal government will continue taking responsibility and providing incentives for national tasks.
- CDU/CSU count on quality, performance and excellence. We want to continue leading our higher education institutions and research institutions to the international top. The whole research sector profits from this.
- When promoting innovation, the result counts. We want solutions for social challenges and to focus on selected topics that are of superior importance for the future of our country. Therefore, we especially reinforce (technological) transfer. This will strengthen competitiveness of companies and secure growth and wealth.
- We value vocational and academic education equally. We will further improve and personalize both courses of education.
- International cooperations in education, science and research are the foundation for excellence and survival in international competition for innovation and solution of big global challenges. Thus, we will further promote international networking of our higher education institutions and research institutions.
- Digitalization brings special chances and challenges for science, economy, education and professional qualification. We will address this issue and contribute to the digital future.

SPD: Research needs reliable financing. The SPD wants to improve the foundations for research at universities, universities of applied sciences and research institutions: By 2025, we want to spend 3.5 percent of the gross domestic product on research and development. Within the framework of a new and lasting financing architecture for higher education institutions and research facilities, we will create reliable prospects and encourage innovation. We will continue to develop the successful *Pakt für Forschung und Innovation* (Pact for Research and Innovation) as an important and reliable pillar of this architecture, thereby strengthening cooperation between higher education institutions and non-academic research institutions. We also want to create additional opportunities for the federal government to directly promote research facilities at higher education institutions. We will double the federal government research funding for higher education institutions. For projects funded by the *Deutsche Forschungsgemeinschaft* (German Research Foundation), we plan to continue the overhead program beyond 2020. We need a national strategy for high-performance

computers to better meet the rapidly growing demand for storage and computing capacity at higher education institutions and research institutions. We will promote forward-looking technologies that combine great value creation with new jobs and improvements in everyday life, for example in health care, biotechnology and nanotechnology, environmental and climate protection technologies, materials research and robotics. Aerospace also plays an important role for Germany as a business and innovation hub and for European cooperation, which we will continue to strengthen. We want to promote the transfer of scientific knowledge to the development of products and services and to use it for better working conditions. Therefore, we will further develop transfer funding, validation research at the interface between research and application as well as work, vocational training and service research. We strengthen knowledge-based networks of science, industry, small and medium-sized enterprises and start-ups in order to address their increasing role in research and transfer. In addition, we will specifically promote medical research at higher education institutions. For answers to societal challenges, we need the creativity of researchers. They need scientific autonomy and financial planning security for their work. Researchers should also be given more room to choose and pursue their research areas independently of short-sighted prospects for benefits and exploitation opportunities. Together with the research community, we are going to create a new funding approach in which potentially disruptive innovations can be tested directly and unbureaucratically. We want to further promote independent consumer research and develop research and development programs for storage and other technologies for sectoral coupling, as well as the flexibilization and digitization for the implementation of the energy policy. We also advocated a sustainable, institutional strengthening of migration and integration research and a better networking of the researchers.

**DIE LINKE:** In increasingly knowledge-based societies such as ours, the development and dissemination of new knowledge and methods becomes the key for future viability. The *große Koalition* (Grand Coalition; CDU/CSU & SPD) has expanded the resources for science and research, but has invested mainly in market-related disciplines and technologies. Expanding research on third-party funding and contract research is countering stagnating or even declining basic budgets of higher education institutions and scientific institutions. This results in working conditions for scientists that do not reflect the importance of science. In addition, socially meaningful but more remote questions and research fields are underrepresented. DIE LINKE therefore proposes to strengthen the importance of science by emphasizing its public interest in public communication and in research promotion.

**Bündnis90/Die Grünen:** We want to create and maintain space for research and science. We therefore advocate the adequate financing of knowledge and curiosity driven basic research. We assure a high degree of autonomy and freedom of science.

We also need a holistic innovation policy, which strengthens science and research in its importance for ecological modernization. To raise its potential, we want to put sustainability and social relevance into the focus of research funding policy. This means a reorientation of the high-tech strategy. The old economic and technology-driven approach has served to innovation. Now it is important to embed goals such as economic growth and market relevance consistently into ecological and social requirements, with a view to the common good.

This way we want to enable more research for change. This means to focus research funding more towards the major challenges of our time, such as the climate crisis, dealing with scarce resources or demographic change. This also takes needs for research into account, that result from the United Nations' sustainability goals and the *Paris Climate Agreement*. We have pooled our claims in our party platform essay "Forschen für den Wandel. Für ein neues Innovationsverständnis"

(https://www.gruenebundestag.de/fileadmin/media/gruenebundestag\_de/fraktion/be schluesse/Beschluss\_Forschen.pdf) as well as in the proposal "Innovationspolitik neu ausrichten – Forschen für den Wandel befördern" (Drs / 8711).

FDP: We, as Free Democrats, are convinced that the prioritization of research should be undertaken in principle by the higher education institutions themselves. We defend the freedom of research and teaching, which is enshrined in the *Grundgesetz*, knowing that scientists themselves formulate the most relevant research questions. Research needs space; that is the only way for progression. We want to deal openly and transparently with new research areas of green biotechnology such as "Genome Editing". We reject flat-out prohibitions of new technologies before proper evaluation and instead demand a fact-based, open-ended assessment of new technologies.

We also want to introduce a tax for research funding that is open to all kinds of technology. As a result, companies in Germany receive a certain percentage of their personnel expenses for research and development (R & D) as a tax credit (Research Premium). Research and innovation are therefore indirectly promoted through the tax system. Existing funding instruments, such as direct project funding, alone are not sufficient. Because of many constrains and excessive bureaucracy the existing instruments are unattractive for small and medium-sized business. In contrast, tax based research funding is unbureaucratic, since project applications and approval procedures are no longer required.

In order to generate knowledge and progress, higher education institutions have to be able to work and especially conduct research together with other parties outside the higher education institutions. The frequently proposed general demand for a strict separation between business and academia denies this fact and is rejected by us Free Democrats.

**AfD:** On one hand, scientific research is intended to increase the efficiency of the German economy, on the other hand, to be independent of direct usability as well as to be an expression of German intellectual and cultural life. Science must be committed to the ideal of universal education; this must be the guiding principle of publicly funded research. Where research leads to direct economic advantages, for example in the field of natural sciences and technology, companies should be involved in the acquisition of third-party funding.

3. Removal of the cooperation prohibition (Art 91b GG) in 2015 increased the federal government's influence on higher education institutions. What possibilities do you see now for the federal educational system to further strengthen the higher education institutions and – if applicable – the doctoral and postdoctoral researchers? Should the federal system of education be further reduced?

**CDU/CSU:** CDU and CSU are committed to federalism and *Bundesländer* competencies. Nonetheless, the federal government and the *Bundesländer* can co-operate in the promotion of science, research and teaching on the basis of agreements in cases of supraregional importance. It is crucial that this cooperation creates a clear value of national importance.

CDU and CSU rely on excellence and individual support. The short temporary *Exzellenzinitiative* will become the long-term *Exzellenzstrategie*. We want to establish a culture of excellence at the best higher education institutions in our country. Selected excellence higher education institutions can thus become world class. This is a must in an ever-tougher international competition for knowledge and talent. We are committed to the implementation of the *Exzellenzstrategie* based on excellence and top quality.

Excellent research emerges from the minds. We therefore want to increase the number of *Alexander von Humboldt professorships* step by step up to 20 per year, significantly increase the number of *Humboldt scholarship grants* and double the number of *Sofja Kovalevskaja awards* to around 12 per year. In addition, we want to support the higher education institutions with a new program, an "excellence headhunting", to successfully attract international top talent for activity in Germany.

In addition, we will examine whether a new high-caliber program for the acquisition and promotion of such scientists from Germany and abroad, which are already established and from which breakthroughs are to be expected, can be imposed.

In addition, we want to test the introduction of special facilities jointly supported by non-academic research and higher education institutions to attract and promote outstanding young scientists (such as "Max Planck Schools"). The goal must be to strengthen such fields of research in which there is already a critical mass of excellence and which are particularly important for securing Germany's scientific and technological performance. In addition, we plan to tenfold the funding of the *Heinz Maier-Leibnitz Prize* to 200,000 EUR and develop it into an own funding program, in order to provide excellent and productive junior scientists with the most possible freedom for their research.

We will support the implementation of the "Masterplan Medizinstudium 2020" for the restructuring and improvement of medical education, the strengthening of general medicine, the adaptation of the admission procedure and the better coverage of general medical care. In addition, we refer to the answer to the following question (TenureTrack professorships).

**SPD:** We will strengthen basic funding of higher education institutions and give a reliable perspective to non-academic research. We will keep the research and higher education institution agreements for temporary funding also after 2019/20 and will transform them into reliable and permanent funding. The federal government will make use of changes in the *Grundgesetz* and together with the *Bundesländer* and research community, strengthen the basic funding of higher education institutions. PhD candidates and graduates will also benefit from this.

Furthermore, we want to completely cancel the prohibition of cooperation (Kooperationsverbot), and in the school sector as well. Wherever it is useful, the federal government must be able to help to improve education. Therefore, we want to form and bundle our power in a "national education alliance". We believe that education is a joint task of the federal government, Bundesländer and municipalities.

**DIE LINKE:** The research expenditure of the federal government is very concentrated in the areas of non-academic research institutions and project funding. In comparison, higher education institution funding is clearly underrepresented. Because of the prohibition of cooperation, the federal government limited its self to temporary pacts (*Hochschulpakt 2020* and *Pakt für gute Lehre*) or as an engine of competition between the higher education institutions (especially the *Exzellenzinitiative*). DIE LINKE calls for a stronger participation of the federal government in the basic funding of the higher education institutions, which would also benefit the doctoral students and academic staff.

Bündnis90/Die Grünen: Educational federalism does not have to be "withdrawn," but the federal government and the *Bundesländer* should deepen the chances of cooperation in favor of higher education institutions and science and their dependents in many areas. Since 2015, we have seen many ways in which the federal government can strengthen postgraduates and post-docs. We have introduced various proposals to the *Bundestag*, such as the *Hochschulpakt* (Higher Education Pact), which must be increased and sustained, thus enabling more employment in the field of teaching. We want to strengthen the infrastructures of knowledge and thus improve the working conditions for all in science, because higher education institutions as work spaces will be modernized and ready for the future. And we are committed to better career opportunities for women in science. Therefore, we intend to continue the *Professorinnen-Programm* (program to promote professorships for women) in this legislative period and to introduce an analogous program for female junior scientists. However, all these proposals were rejected by the *große Koalition* (Grand Coalition; CDU/CSU & SPD).

FDP: We, as Free Democrats, want to increase spending on education in such a way that - as measured by the *Bundesländer* budget - Germany is among the top five countries in the 35 countries of the Organization for Economic Cooperation and Development (OECD). The comprehensive modernization of the education system would overwhelm the *Bundesländer* and municipalities alone. Financing must therefore become a whole-society task.

We are committed to safeguarding the basic financial needs of higher education institutions, which stimulates competition for students. Educational vouchers make the governmental calculation of the training capacity as well as the *Bundesländer* setting of approval numbers unnecessary. If the higher education institutions receive an amount of money equal to the cost of each student, they will include as many students as they can and will expand their capacities in the event of success. Adequate applicant numbers to select suitable students will only be achieved if the quality of the study program is good. Only if the balance between quantity and quality is properly considered, the success of a higher education institution will be sustainable. The quality of the study

should not depend on the financial strength of the *Bundesland*. In order to ensure good study conditions, we want to introduce a national fund. In this fund, each country contributes according to the so-called *Königssteiner Schlüssel*. This means that the contribution of a country is calculated on the basis of tax revenue and the population. For each enrolled student, the institution receives a contribution from the fund. The money follows the students. This is how we achieve fair competition for students all over Germany.

**AfD:** Educational federalism is one of the unique features and strengths of the German economy. The possibility of the *Bundesländer*, and especially higher education institutions themselves, to set their own standards has to be preserved.

#### II Graduation and a Career in Science

1. The current number of PhD candidates in Germany has reached an all-time high whereas at the same time, permanent contracts are diminishing in number. How does your party plan to alleviate this discrepancy? Which possibilities do you see to improve predictability and security of scientific careers in Germany?

**CDU/CSU:** For our science and innovation system, we need the brightest minds. Therefore, CDU and CSU have created better and more manageable career paths for young scientists. Above all, they should be given the opportunity to make an earlier decision about staying in the scientific system and to identify alternative career paths in the economy, including science management or self-employment. That is why we have narrowed the scope of fixed (short) terms in the *Wissenschaftszeitvertragsgesetz*. And with the completion of the federal program for the promotion of young scientists (*Tenure-Track-Programm*), the promotion of 1,000 tenure track professorships was launched. We will consistently push ahead with this cultural change based on the findings of the Federal Report on Young Scientists in 2017, and in implementing the *TenureTrack program*, we will ensure that the *Bundesländer* comply with their commitments for the creation and further financing of additional jobs. As in the case of the *Exzellenzstrategie* and the *TenureTrack program*, we will continue to strive for the existence of convincing personnel development concepts with integrated equality measures for the promotion requirements.

The *Pakt für Forschung und Innovation* (Pact for Research and Innovation) has proven its worth. A reliable budgetary growth of the non-academic research organizations will be necessary in the future as well. The *Bundesländer* should again participate in this process, and we will continue to link them with research-oriented and verifiable objectives in order to ensure a dynamic development of the scientific system. Specifically, we focus on the following topics:

- Increase efforts to attract and maintain the best minds and promotion of young scientists, including improving talent management and personnel development.
- Development of opportunities and family-friendly structures, including the creation of new initiatives / measures for the promotion of creative scientists, to address issues, such as the dramatic loss of young women in science during the family start-up phase.

We will continue to monitor and evaluate the progress made on a qualitative basis and based on appropriate indicators in an annual monitoring report, as well as to publicize the corresponding achievements of the scientific organizations.

SPD: With the program for the promotion of young academics which was promoted by the SPD, the federal government will promote an additional 1,000 *tenure-track* professorships from 2017 over a total duration of 15 years, in order to improve the career prospects of our junior staff. In this way, we are expanding the "bottle neck" and enable the next generation of scientists to plan their future more easily and reliably.

Young talent should be able to go their way in science. That is why we want to give higher education and research institutions incentives for reliable career paths. Above all, higher education institutions need to strengthen midlevel academic positions. Therefore, we want to establish modern personnel development concepts together with the *Bundesländer* and higher education institutions, with the aim to create conditions for long-term career perspectives. The key framework for achieving these objectives is to improve the basic funding of higher education institutions. We will strengthen them and provide a reliable perspective for non-academic research. We will continue temporary funds of research- and higher education institution pacts after 2019/20 and transfer them into a reliable and permanent funding. The federal government will make use of the new possibilities in the *Grundgesetz* and, together with the *Bundesländer* and the science community, strengthen the basic funding of the higher education institutions.

By 2025, we also want to spend 3.5 percent of the gross domestic product on research and development. We will continue to develop the successful *Pakt für Forschung und Innovation* (pact for research and innovation) as an important and reliable pillar of the new, sustainable financing architecture for higher education and research institutions, thereby strengthening cooperation between higher education and non-academic research institutions. At the same time, we want to increase the scope for better supervision so that, in addition to an efficient curriculum, teaching quality can also be improved and talents can be more easily promoted. In addition, universities of applied sciences form an important part of our scientific system. We will support them with a federal program to attract additional scientific staff.

**DIE LINKE:** The lack of planning for a career represents a major obstacle to the attractiveness of the German science landscape and to the scientific capacity of young scientists. In addition, the impending dead-ends impose a great burden on individual life planning and particularly penalize women on their way to science. In the past legislature, DIE LINKE has repeatedly dealt with the problem of lack of planning security for young academics in parliamentary initiatives (cf.Bundestagsdrucksachen 18/4804 and 18/9667). Our claims include: The stabilization of the first pillar of the *Hochschulpakt 2020* (Higher Education Pact 2020) at the level of 2017, a program for the reduction of care relationships as well as a ten-year start-up program of the federal government for 10,000 permanent jobs per year.

**Bündnis90/Die Grünen:** Green science policy advocates fair career opportunities for scientists. We demand more permanent employment opportunities for researchers. Science as a profession must be more feasible, reliable and attractive and in addition, outdated staff structure should be overhauled. We have mentioned measures which should address this in our answer to the previous question.

In addition, the recommendations of the German Council of Science and Humanities and the *HRK*-statements from last year brought about the discussion of career paths, young talent and personnel structures at the universities for applied science. We welcome that. The need for action is great. A joint federal program for universities for applied science would be desirable in order to create more opportunities for young academics.

**FDP:** The increasing number of graduate students in Germany shows the growing interest in scientific work. Even if we are looking to expand the research capacities at

the higher education institutions, it is clear that not every doctoral student can remain in academia. Already during their PhD phase, doctoral students should be able to acquire additional qualifications beyond their immediate research activities, which open up fields of work beyond science, but at the same time prepare them better for the academic career. A scientific qualification is valued in increasingly large parts of the economy. Conversely, it must be easier to work outside the scientific field after the doctorate and then return to research. In Anglo-Saxon countries, the transitions are especially more permeable than in Germany. The greater the permeability, the easier it is for researchers to demand better working conditions.

**AfD:** We believe that all stakeholders are required to develop a realistic picture of the situation. Although higher education institutions can create more jobs, the doctoral students are not exempt from taking an adequate picture of the actual chances of an academic career and, if necessary, taking timely alternatives into consideration. The very large discrepancy between the number of doctoral candidates and the available positions at higher education institutions can only be reduced by a combination of these elements. We also welcome doctoral candidates coming from the work force.

2. The Wissenschaftszeitvertragsgesetz (WissZeitVG) has been adopted with the aim of improving attractiveness and predictability of scientific careers. Do you see need for improvements of the legal basis for the employment of doctoral researchers? If yes, what improvements would your party suggest?

**CDU/CSU:** CDU and CSU have restricted the possibilities of a fixed term within the *Wissenschaftszeitvertragsgesetz*. With that we have prevented inappropriately short time limits for fixed-term contracts in science and found a solution that does not harm science, but gives universities more responsibility. The most important changes since 17 March 2016 are:

- Contracts that are limited for qualification must have a reasonable duration to reach this qualification.
- The duration for fixed-term contracts from third party funding should be the same as used for a project time corresponding to the time for the third party project.
- We have deleted non-scientific personnel from the law, because for them the "Teilzeit- und Befristungsgesetz" is already sufficient, as for all other employees. The effects of this law will be evaluated in 2020.

**SPD:** The SPD has initiated the reform of the *Wissenschaftszeitvertragsgesetz* in the German parliament. Already during the 17<sup>th</sup> legislative period we handed in a bill, which was rejected by the black-yellow government coalition. After long negotiations, we got a successful reform, which led to ligation of improper short-term contracts and containment of precarious employment of many scientists, as well as other employees at German universities and non-university-research facilities. During the doctoral and Post-Doc phase, contracts now have to be linked to an aspired qualification goal. With some subject-specific exceptions, these are usually a minimum of three years. We are

convinced that we can slow down the trend for fixed-term contracts in research with the reform of the law. Nevertheless, we will escort the developments critically and evaluate them in the year 2020. If the desired changes do not set in contrary to expectations, we will take further measures into consideration. For future amendments, lifting the "Tarifsperre", and strengthening of compatibility of family and research will continue to have highest priority to SPD. Young talents should be able to make their way in research. For us, a reliable perspective and predictability of a scientific career stay in focus. We want to create incentives for universities and research facilities to create and imply a modern concept for personnel structure and personnel development. We want to fight the abuse of fixed-term contracts, without endangering the flexibility that is necessary for research. The decisive framework to reach these goals is the above-mentioned strengthening of core funding of universities, and the permanent funding architecture of universities and non-university research facilities (see question II.1). With a reliable funding, we will allow universities and non-university research facilities to establish personnel structures and to increase the amount of young scientist positions with Tenure Tracks. All this should also benefit doctoral candidates and Post Docs.

**DIE LINKE:** Yes, we see further need for improvement. In our view, a further amendment of the *Wissenschaftszeitvertragsgesetz* is necessary, in which we envisage that:

- A fixed-term contract with the goal of the own scientific qualification can only include the acquisition of formal degrees (e.g. promotion, habilitation);
- The duration of fix-term contracts should not fall below 36 months (qualification positions) and a project duration of at least 24 months (third-party funded positions);
- For employment for reaching a qualification goal, the available working time for this should not fall below two thirds of the agreed working time, at least 20 hours per week;
- Different rules within collective agreements benefitting the employees should be basically possible;
- After a successful doctorate, a fixed-term contract with a qualification goal should only be permitted, if there is a contracted agreement with the concerned person that the fixed-term is omitted if the qualification goals are met (Tenure-Track);
- Employees who care for one or more children below the age of 18 and are working on a scientific qualification or in a project that is mainly third-party funded, should get an extension offered for their fixed-term contracts with a duration of two years per child;

Universities and public research facilities, which fall under the *WissZeitVG*, have to be obligated for non-limited employment, if the employee is delegated with permanent tasks and a reason for fixed-term contracts is not given according to this law or the "Teilzeit- und Befristungsgesetz".

**Bündnis90/Die Grünen:** Especially regarding family friendliness and minimum contract duration, the *Wissenschaftszeitvertragsgesetz* stays behind the necessities up to today. There was also no progress in this legislation period in the question, if collective agreements may differ from the legal provisions. In the past, we have proposed targeted amendments to delimit the weak points of the law (see e.g. resolution proposal for the law amendment 2015, <a href="http://dip21.bundestag.de/dip21/btd/18/070/1807078.pdf">http://dip21.bundestag.de/dip21/btd/18/070/1807078.pdf</a>).

Unfortunately, the coalition parties ignored these suggestions in most cases. In order to support fair working conditions in the research system, to set an end to the nuisance of fixed-term contracts, and to push family friendliness, another amendment of the *Wissenschaftszeitvertragsgesetz* is necessary.

FDP: We would like to support young scientists with employment based on "Tenure Track". But with this recruitment procedure, in which a fixed-term contract can be followed by a non-limited contract after a probation period, not only already existing contracts should be unlimited. This should also create further opportunities for starting and advancing a career.

**AfD:** The *Wissenschaftzeitvertragsgesetz* with its latest amendment from March 2016 is, in our view, a good solution in the foreseeable future.

3. How do you asses the fact that fixed term contracts are frequently combined with long term tasks (for example teaching, administrative and supervisory tasks)?

**CDU/CSU:** Here we refer you to the answer of question II.2 (*WissZeitVG*).

**SPD:** See answer to question II.2. For us, every employment in science and research has to follow the principle: Permanent tasks have to be worked on permanent positions. To improve the quality of teaching, we additionally need a better support for students. In general, we will make outstanding teaching to one of our key elements of our university politics. Good teaching also has to lead to good career perspectives.

**DIE LINKE:** DIE LINKE follows the principle: permanent positions for permanent tasks. This also means more permanent, independent and attractive positions in an employment relationship. Within all career stages after the doctorate, Tenure-Track procedures and unfixed employment have to become the rule in order to ensure transparency, performance-focus, and predictability in a career path.

**Bündnis90/Die Grünen:** Young scientists have to fight difficult circumstances in this context. Especially at universities, predictable and secure career paths are lacking. The nuisance of fixed-term positions threatens the spirit of research and thinking spaces, and squanders potential. This also has to do with the fact that basic funding of universities is in a sorry state. With measurements such as explained in previous answers, we would like to contribute to rebuild a balance between fixed-term and permanent employment possibilities.

FDP: We, as Free Democrats, advocate that a time-limit for positions usually should be in accordance to the duration of project funding. Generally, there is nothing to oppose against the collection of professional experience in the administrative field during the qualification phase, if it leaves enough time to promote the scientific qualification.

**AfD:** The mentioned permanent tasks have, in our view, to be a reasonable part of the actual scientific activity. Fixed-term positions within the framework of a qualification phase should also prepare for the overall scope of a later university career, which, unfortunately, not only exists of scientific tasks. Therefore, there are not objections to the mentioned combination.

4. At the level of doctoral researchers, the ratio of men and women is about even, but proportionally the number of women who continue to work in the sciences decreases with higher career levels. In international comparison Germany lags behind other countries regarding the number of women holding a professorship or other positions of leadership. How do you plan to approach this discrepancy?

**CDU/CSU:** We need the creativity of the best women and men as well as diversity of scientific questions and approaches for an innovative and internationally competitive scientific system. CDU and CSU continue to advocate equal opportunities as well as compatibility of a scientific career and a family. For future federal/states-agreements in the area of research and science concerning matters of personnel, we will compulsorily establish the quality of concepts for professional human resources development and for equal opportunities following the lead of the agreement for the excellence strategy. CDU and CSU want to continue the successful program for female professors under consideration of the results of the program evaluation. We want to develop it in a way that

- the program is opened as a model also for career steps next to and before the professorship. To achieve this, for example one or two positions for postdocs, e. g. female leaders of young academic groups, could be assigned to some of the professors of the program. A success of this model should be an incentive for the states to adopt respective position concepts into the regular finance scheme.
- the program is opened for measures that enable the (continuing) employment after parental leave to finalize qualification phases after the PhD interrupted due to one's family.
- to raise the program's financial resources in particular in view of the extended range of targeted groups.
- to make it a requirement for the program that the implementation of equal opportunities measures is continued after the program ends.

In the future 'pact for research and innovation' we advocate the development of equalopportunities and family-friendly structures to, among other things, reduce the dramatic loss of young women in science in the phase of founding a family. In detail, this includes initiatives/measures to promote creative female scientists.

**SPD:** The percentage of women in science is continuously too low. Despite a rise it is still at a too low level. It is our goal to establish equal opportunities in science and work against discrimination. We advocate a percentage of at least 40% in leading positions in

science. Therefore, we want a binding quota for all direct federal procedures regarding human resources. So far, institutions were to a very different level successful in achieving their self-set quota goals geared to the cascade model. In particular in disciplines with very few women throughout, new chances must be opened for female scientists. That is why we want to strengthen the early support for boys and girls to find their own strengths and skills. A dedicated orientation on jobs and university studies must take place as early as in school.

One of the most important political instruments on federal level for the promotion of equal opportunities in science and research is the female professorship program. We want to continue and advance it to be opened for career steps before the professorship and to be financially strengthened. Because far too often women drop out of the scientific system as early as their PhD and not only shortly before a professorship. Additionally, it must be ensured that universities, technical colleges as well as academies for art and music have equal chances for financial aid independent from their size. For this, mainly sufficient funds need to be provided to serve all interested universities/academies fulfilling the funding criteria.

**DIE LINKE**: DIE LINKE wants, among other things, to include gender equality into the perspective of all federal-states-programs that directly or indirectly generate additional positions. For this, fixed quota will be used for the employing of women. For programs (like the *Hochschulpakt*) that do not foresee direct funding of positions the cascade model can be appointed as reference for the aided universities and subjects. For direct funding of positions (like the pact for promotion of young scientists) a quota of 50% of all positions is to be established.

Further demands in our proposition 'Geschlechtergerechtigkeit in der Wissenschaft durchsetzen' / 'establish gender equality in science' (18/9667).

**Bündnis90/Die Grünen:** We need a higher speed to reach the goal of at least 40% of women in all levels if science and research. For this, rewarding as well as sanctioning measures are important and appropriate and should finally be seriously considered. The cascade model must be developed in a binding way, in particular with the non-university research organizations in mind. It intends to make the proportion of female scientists of each career step reach the one of the next lower qualification level.

It is furthermore important to continue the female professorship program and to introduce an analogue program for young female scientists. We also repeatedly stuck up for a separate funding focus on the research of actions for equal opportunities. To establish the best strategies leading to a sustainable change of the structures more knowledge and expertise is needed, if and which approaches are effective.

Finally, it should be studied if a female proportion of 40% should be defined for funding programs relating to personnel. We formulated these and further demands in the proposition 'Wissenschaftsfreiheit fördern, Geschlechterforschung stärken, Gleichstellung in der Wissenschaft herstellen' / 'promote freedom of science, strengthen gender studies, establish gender equality in science'

(http://dipbt.bundestag.de/doc/btd/18/114/1811412.pdf).

FDP: We, as Free Democrats, advocate equal opportunities for women and men. We want that every man and every woman can find suitable framework conditions to fully develop their own potential and to shape their life after their own ideas. We see concrete possibilities for an improvement of the chances of female and male scientists who want to commit to their family as well as their job in an increase of the number of non-limited positions, in double careers for leading female scientists and researchers as well as their partners and in a better child care.

AfD: The proportion of women in German professorships rose from ca. 14% to ca. 22% in the last ten years. The absolute number of male professorships grew by 10% in the same time, the one of female professors by 100%. We find this development towards a more even usage of employment chances generally pleasant and expect that it develops further efficiently with the current laws and statutory rules.

5. Working in the sciences is highly demanding requiring flexibility and mobility of the individual employee. This is often hard to reconcile with the wish to start a family. What measures does your party plan to implement to improve the opportunities for combined family and working life?

**CDU/CSU:** The compatibility of family and job is a necessary requirement for young scientists to decide for a scientific career. Therefore, we campaign to push the expansion of child care and family-specific services in cooperation with the states, universities and research institutes as well as in view of the respective competencies. In particular, we want to develop and test concepts in a model project together with research organizations and/or universities which allow scientists to adapt their working hours more flexibly and autonomously to the needs of their respective life phase (*Lebensphasenarbeitszeit* / life phase working hours). It is our goal to keep young scientists being in their qualification phase in the scientific system, also during and after founding a family by accommodating their special life situation.

SPD: We fight for good work – also in science. That's why we improved the working conditions and predictability of scientific careers by the reform of the *Wissenschaftszeitvertragsgesetz* (law on limited contracts in science) and by the pact for the promotion of young scientists (tenure-track program). Nonetheless, there is still potential to open easier ways for young researchers into a scientific career path. In particular, women are affected by limited and part-time contract above average and are regularly burdened stronger by founding a family. Therefore, we want to strengthen the base funding of universities, so they can offer more reliable working conditions and develop more family-friendly structures. Only with the necessary security and predictability of one's career, we can keep mothers and fathers in the system during their qualification phase and enable them to later claim top positions.

**DIE LINKE:** To create more family-friendly framework conditions for scientists, significant structural changes in the scientific system are necessary. The long phases of limited contracts with a high level of dependence and a strong competition for the few permanent positions in science in combination with the non-binding family-politics

component in the *Wissenschaftszeitvertragsgesetz* (law on limited contracts in science) created a situation in which starting a family is hardly possible. This is one of the reasons why many women terminate their scientific career after the PhD. Therefore, the family-politics component is to be fixed in the *WissZeitVG* and the number of permanent contract is to be significantly increased.

**Bündnis90/Die Grünen:** We want to make scientific careers – as stated above – more predictable and reliable. That is important for families. Additionally, we want to improve the *Wissenschaftszeitvertragsgesetz* (law on limited contracts in science). The family-specific funding possibilities of the law need to be strengthened. This means specifically, the options for a contract prolongation need to be made more binding for scientists taking care of children. During the qualification phase, meaning during and after the PhD, this should be at least two years.

FDP: We want to achieve a better compatibility of academic employment and the specific challenges of a family. For this, we need to create, among other things, more places for child care also at universities. We want to support researchers with children to reduce teaching duties and to transfer their work focus to research for a given time. This way, also parents can advance their scientific career. Additionally, we want to support the universities to enable double careers for top-researchers as well as their partners at or in the environment of a university.

AfD: Family needs predictability. Therefore, it is necessary to increase the number of permanent positions and offer limited positions for longer periods. Existing child care facilities at universities are to be extended. Furthermore, it needs to be checked continuously if the multiply demanded mobility is actually based on scientific reasons and where it is only a trend in university culture, that unallowably equalizes mobility and quantity of publications with quality.

6. Disabled or chronically ill employees encounter particular challenges. Which areas of action do you identify with regards to supporting disabled or chronically ill employees working in the sciences?

**CDU/CSU:** It has been defined in the *Wissenschaftszeitvertragsgesetz* (law on limited contracts in science) that the maximum period of limited contracts is increased by two years for scientists with a disability or a grave chronic illness.

**SPD:** We want an inclusive society that naturally provides a cooperation of persons with and without a disability.

Via the *Bundesteilhabegesetz* (federal law on equal access) we significantly improved the situation of handicapped persons in academia. So far, it was not task of the inclusion support agency to enable the best possible job education to handicapped persons. Consequently, financial support of any form of 'additional educational measures' were excluded. This affected also persons who wanted to start a PhD.

It was now, by the *Bundesteilhabegesetz*, clarified for the first time that equal access to education is a rehab service. This way, the funding of school-based and academic job

education subsequent to a dual or school-based job education (master craftsman, bachelor study) as well as the funding of a purely academic (further) education (master study subsequent to bachelor) are possible. In case it is necessary for the accomplishment of the job goal in well-founded individual cases, the financial support for an academic further education for a job can now also include support for a PhD. This way, we could achieve an important step towards a more inclusive education. We want to continue this way in the coming period of legislation.

**DIE LINKE:** DIE LINKE, together with the states and in cooperation with organizations/unions self-representing handicapped persons, demands to work out an inclusion pact for the universities that is tailored to respective needs and incorporates, among others, the following corner stones:

- introduction of an investigation program with a volume of at least two billion Euro from which universities can apply for an amount according to their requirements for constructional and other actions,
- strengthening and extension of competencies of representatives for handicapped persons at all universities (and colleges) as well as providing sufficient personnel and funding to them,
- creation of university positions for student agents for de-handicapping on the level of the institutes. These agents should be independent and have the right to speak and to make proposals in all committees, analogous to the agents for equal opportunities,
- increase of positions of teaching personnel and in particular of professors to reach a sufficient student-to-teacher ratio and to enable a personal supervision by the teachers for all students,
- programs on further education and qualification for all teachers to sensitize them for the interests of persons with impairments affecting their studies, and them to learn and practice inclusive handling.

More in the proposal 'Ausbau inklusiver Hochschulen fördern' / 'promote the extension of inclusive universities/colleges' (18/9127).

**Bündnis90/Die Grünen:** We want equal opportunities for handicapped persons and persons with a chronic illness in science. Many ways should be open to them as they are to other (young) scientists. This means a disability or a chronic illness must not be crucial for the decision if a PhD student works via a stipend or a position. Therefore, we advocate that universities use the possibilities created in the

Wissenschaftszeitvertragsgesetz (law on limited contracts in science) to employ persons working on a PhD or a *Habilitation* (qualification for a German professorship) for a longer duration when their work takes longer because of a disability or illness. If they do not do this we will consider binding requirements. We will apply a similar approach to organizations funding young scientists using federal funds. We will promote to private foundations to incorporate the interests of handicapped persons and persons with a chronic illness as well. Independent from this, we will touch up the *Bundesteilhabegesetz* (federal law on equal access) that was passed by Union and SPD in 2016; among other

things, there must be a non-restrictive legal claim to financial aid for the needs originating from the disability also during a PhD.

FDP: We advocate better (equal) access possibilities on the regular job market which includes science. Handicapped persons should have the freedom of choice of their individual life arrangements. We call for a right to funding for equal access, e. g. a free choice of the place to live and the housing form, self-financing within a given budget. We want to make the personal budget simply and non-bureaucratically usable such that everyone can decide for themselves on their support. Additional costs, e. g. for working equipment or conference participations, must be covered for PhD students with a handicap or a chronic illness.

**AfD:** Like the field of the increase of the proportion of women, also handicapped persons are generally privileged by law in hiring procedures. It must be possible to offer additional financial aid in the case of special burden and disability to overcome these obstacles.

#### III Framework Conditions of PhD Candidates

1. There are various ways how PhD Candidates finance their living. Currently, more than 10% of the PhD Candidates live below the poverty line. Which forms of financing do you find in general appropriate? Which deficits and opportunities do you see in specific financing and employment models for PhD Candidates in Germany?

**CDU/CSU:** The federal and state responsibilities are regulated in the cooperative scientific federalism. The states are responsible for the basic funding and the situation of the universities' employees. The federal state is relieving the states stronger than ever before so that the states have the respective financial freedom, for example through the full absorption of the 'BAföG'; which means annually 1.2 Billion Euros in addition for the states. Apart from that, we refer to the answer in question II.1.

**SPD:** Doing one's doctorate is part of a qualification phase. The SPD advocates the development of quality standards in the doctoral phase, e.g. an individual supervision contract, additional customized qualification offers or also a stricter separation of supervision and grading of the doctoral endeavor. The participation in structured doctoral programs plays an important role in this respect and is supported by us: They lead to a smaller workload, more reliability and planning capability.

The decisive framework conditions to achieve these goals lay in strengthening the universities' basic financing and a long-term financing architecture for universities and research facilities (see question II.2). With good financing, we want to create incentives and put the universities and extramural research institutions into a position, in which their ability to take strategic action and establish personnel structure and personnel development concepts is strengthened. All of this should also benefit the doctoral students and postdocs.

Moreover, the SPD achieved a strengthening of the doctoral scholarships of the organizations for the promotion of young talent. A scholarship should allow the fulfillment of the research endeavor as well as making a living during this period. It should not replace a regular income.

**DIE LINKE:** Especially in the lingual, cultural and social sciences, which are less heavily third-party funded, doctoral students have to expect part-time employment. Because they do not only work on their own project, but usually also for their chair, receiving a salary way below the effort and their qualification. Moreover, the insecure perspectives about remaining at the university after completing their doctorate cause them to work on their doctorate for a longer period. Even full time doctoral positions do not enable serious pension provision.

Only a reform of the staff structure at the universities can provide remedy. DIE LINKE already suggested to also introduce the category of the employed researcher at universities. With this, the performance of the scientific offspring would be reflected appropriately.

**Bündnis90/Die Grünen:** Scholarships are offering some benefits, but have also disadvantages. We want to increase the number of positions to such a degree, that doctoral students generally have the choice, whether they want to do their doctorate with a position or on a scholarship. Unemployment and retirement insurance contributions are among the benefits of a position. With respect to scholars' health insurance, a solution has to be found that includes coverage, the costs of which cannot only be left to the doctoral students.

Parenthood, childcare and care for relatives are key elements of a family friendly working environment, which have to result in an extension of a scholarship. An extension up to the disputation is certainly desirable. As far as our assessment goes, such a regulation could weaken the wish of many doctoral students to quickly defend their thesis and would, therefore, not be in their interest.

FDP: Principally, we, as Free Democrats, see the variety of different forms of financing of doctoral students positively. Graduate schools, positions in research and teaching as well as "external" ways of doing one's doctorate based on scholarships and positions in the economy offer very different ways, which offer own benefits and disadvantages in each case. Multiple of those forms of financing can be combined with each other, so that the number of possibilities grows even further. Generally, an active integration in a research project or teaching activities has to be weighed up with the greater independence but lower compensation of a scholarship. A combination of the two seems optimal. In the interest of the doctoral students we want to maintain and expand the flexibility. Raising the ceiling for the permissible additional income is, for example, worth considering.

**AfD:** Unfortunately, there exists too little transparency and too many discipline-specific and regional differences with respect to this question. In our view, those questions have to be solved on the level of university self-administration and in the individual disciplines. Principally, we appreciate it if doctoral students write their dissertation while pursuing working careers at the same time.

2. Will you advocate for appropriate social insurance (health, unemployment and pension insurance) especially for PhD Candidates with a scholarship? How can appropriate maturities for scholarships be realized that enclose e.g. the PhD disputation or parenting?

**CDU/CSU:** CDU and CSU especially want to continue to support high performers, because the scholarship system is an important contribution to more educational justice. The 13 organizations for the promotion of young talent will have our full support in the future. This applies in the same way for the *'Deutschlandstipendium'*, which is firmly established in the German funding landscape for engaged students and should be continued as successful private-public partnership in the educational sector.

**SPD:** see answer to question II.1.

**DIE LINKE:** Doctoral students with a scholarship are especially faced with the problem of missing social benefits. From our perspective, the payments of the organizations for the promotion of young talent have to be increased in such a way that the fees for health and retirement insurance can be paid with the scholarship. To give doctoral students the status of a full student would be an alternative. Because DIE LINKE advocates the recognition of the time working on the doctorate as career start, they consider this suggestion to be a wrong and to be also a problematic change, of course, with respect to social security. Ultimately, the problem of missing unemployment insurance remains in every scholarship model. Also with respect to the integration into the scientific community, scholarships have to be subordinated to positions. Therefore, promoting more positions instead of scholarships remains the central starting point for us.

#### Bündnis90/Die Grünen: See answer for question I.1.

FDP: The social security of doctoral students with scholarships is often problematic if they do not additionally pursue employment. We want to check, how such employment possibilities can be facilitated within and outside science. Raising the scholarship rates is also worth considering in order to compensate for the rising costs especially with respect to health insurance. Regarding the time from handing in the dissertation to defending it, this needs to be checked, insofar as how the period can be shortened at the universities. At the moment, this period comprises often more than half a year, which cannot be in the interest of the doctoral students.

**AfD:** It should be checked, whether the admission for the doctoral procedures could be a possibility to access the artists' social insurance, in which also scientific authors are members.

3. What is your position on the common practice to employ PhD Candidates on 50%-65% TvöD E13 or related contracts/stipends with realistic full working time (eventually plus overtime hours)?

**CDU/CSU:** A reliable and sufficient financing of the universities and their staff is and will remain in the responsibility of the states, which have been fully relieved not only with the BAföG-reform. Through the BAföG-reform the states got 1.2 Billion Euros annually in addition. The states have committed themselves to use this additional money in the areas of universities and schools.

**SPD:** see answer to question II.1.

**DIE LINKE:** As already explained, we advocate more doctoral studies based on positions than scholarships. Full working time has to be compensated fully.

**Bündnis90/Die Grünen:** We think that the agreed working time in the framework of the doctoral positions should already leave time for all dimensions of qualification; hence for working on the dissertation as well as all other qualifying tasks. However, this is not always clearly distinguishable. In every case it should be clear, however, that the employer does not obligate the doctoral student to teach or fulfill other services beyond the agreed part-time capacity.

FDP: We, as Free Democrats, advocate that doctoral students, who perform tasks in the framework of their contract, which are not immediately serving their qualification, do not have to work more than the time agreed on in their contract. In every case it has to be guaranteed that the qualification position promotes the scientific qualification of the holder of a position and does not hinder it.

**AfD:** Self-evidently, the compensation has to be oriented after the actual working time. We stand up for that.

#### 4. What is your opinion on the right to award doctorates for technical colleges?

**CDU/CSU:** We want to retain the varieties of ways to do one's doctorate. We illustrate this in our support. The individual way to do one's doctorate cannot be allowed to be degraded as obsolescent model. The right to award doctorates at universities of applied science is regulated by the legislature in the respective state, not on federal level. Next to the already existing classical structures to do one's doctorate, here, Bavaria is migrating to the combined way to do one's doctorate, in order to enable graduates and employees a reliable, barrier free and plannable way to do one's doctorate. The Bavarian model guarantees a close cooperation between universities and schools for applied sciences, which represents a substantial development of the cooperative ways to do one's doctorate so far.

**SPD:** Schools for applied sciences are an important pillar of our scientific system. In a federal-state-program, we will support them to find additional scientific staff. In addition, we will support them in developing and implementing a strategy for internationalization. We will double the research promotion of the union of schools for applied sciences. We will, furthermore, urge universities to open themselves more strongly for cooperation with schools for applied sciences in the framework of new doctoral thesis models.

**DIE LINKE:** DIE LINKE principally advocates the right to award doctorates at schools for applied sciences. The schools for applied sciences' teachers render services in teaching as well as in research and have the necessary qualification suitability because of their double qualification (doctorate and multiple years of practical experience).

Therefore, we will support all states, which want to implement this by pushing through a stronger contribution of the federal government to the basic financing of the schools for applied sciences in the framework of the reformed article 91b in the constitution. With these additional resources, the schools for applied sciences can create positions for their own scientific offspring.

**Bündnis90/Die Grünen:** We advocate opening up fair chances of access for doing one's doctorate, e.g. through cooperative ways of doing one's doctorate. The regulation of the right to award doctorates, however, does not lay in the hands of the federal government. But the federal government can and should enhance and stabilize the research strength of the schools for applied sciences. When this is achieved, the post-graduate's interest

for doing one's doctorate at a school for applied science will increase and through that more possibilities will be created because the basics for the necessary possibilities are already set in almost all 'Landeshochschulgesetze' ('state laws for higher education'). However, attention should be paid to the fact that the usual teaching load of professors at schools for applied sciences is complicating an intensive supervision. Here, structural changes in the states would have to be made. These could be pushed and supported by the federal government through the announced special program of the federal ministry for education and science for the schools of applied sciences. However, the long-term guarantee would remain a task of the states.

**FDP:** Research-intensive disciplines at schools for applied sciences should get the right to award doctorates. Furthermore, we appreciate cooperation models between schools for applied sciences and universities in the doctoral programs. Graduates from schools of applied sciences should be able to do their doctorate at universities easier than so far.

**AfD:** We reject an independent right to award doctorates. However, cooperation between schools of applied sciences and universities at individual doctoral projects are conceivable.

## **IV Scientific Exchange**

1. What is your position on Open Access, i.e. the free (of charge) access to scientific findings and data? Should research that was funded by public agencies be accessible by the public? Which possibilities (besides Open Access) do you see to promote and to increase the circulation of knowledge?

**CDU/CSU:** CDU and CSU want to combine the Open Access strategy of the *BMBF* with concrete support activities so that the demand can become reality. We want to improve the flow of information in science and we want to ensure that research findings that were funded by public agencies lead to innovation. Therefore, we advocate for establishing a national competence and networking center for open access which holds information offers for scientists and is the junction of a national network. In addition, we want to expand the support of funding opportunities for open access publication costs and the support of transferring towards open access via modern licensing models. The aim is, to make open access a standard of scientific publishing using a stepwise approach. This will be, besides others, supported by the fact that the *BMBF* includes open access as a concept in their project support. The dissemination of the open access concept should be presented in an accompanied and transparent manner. Not least, it should be examined whether the open access concept should be, beyond the strategical concept of text publications, expanded towards research data which is acquired in the framework of a research support that is funded by the public. Protection-worthy interests will be considered in an appropriate way by the CDU and CSU. Together with the universities, scientific organizations and research institutes we want to develop and establish a network for systematical scientific data management and for the access to research data as well as services and software. The aim is, to use the full potential of the data, to gain new knowledge and to support innovation. On a European level, we stand up for the optimal use of the potential and the chances of digitalization in science. This entails, besides others, the support of the development of an "European Open Science Cloud" based on the "European Cloud Initiative" suggested by the European Commission. Because the access to first-class data infrastructures and cloud-based services becomes more and more an essential factor for success in the global knowledge society. An appropriate level of security, data protection, data portability and interoperability must be ensured. In addition, the European Commission initiated the adjustment of the European copyright law in regard of the needs of digitalization and networking as well as the increased support of "Open Science" including "Open Access to Publication". These steps are important and should be supported. In this context, we should build on existing and planned national initiatives and we should connect them in an intelligent way with the European initiatives. Overall goal must be to equip Europe with an optimal infrastructure for excellent research and a possibly unhindered information flow in science to make it a world-class location in our digital age.

**SPD:** Education and science should be able to use the chances of digitalization. We want to support open channels for scientific communication and publication (Open Access). We want to achieve that at least scientific findings that come from projects that were

funded by public agencies are accessible for other scientists as well as public for free and in an easy way via the internet. In our opinion, the current open access strategies of the government are too vague, non-binding and limited to appeals. Concrete action plans and forward-looking strategies are completely missing. We formulated concrete suggestions and stand up for a prompt and modern realization of the open access strategies.

Important is in addition a science friendly copyright law. After intensive dispute with our coalition partner, we could enforce a reform of the copyright law. It realizes legal clarity and built a practical legal framework for the use of scientific publications and teaching material in teaching and education.

We stand up for an increase of high quality online teaching offers at universities to make a study program more and more flexible in place and time. For this purpose, we will start an initiative to equip universities to help them to digitalize their campus-system and to support their teaching platforms. We will improve the networking of universities in regard of digitalization.

**DIE LINKE:** DIE LINE supports the open access strategy for science and for a long time stands up for an amendment of the copyright law. Research that was funded by public agencies must be publicly available. In addition to a general education and research barrier we think that an expansion of the secondary publication law and a regulation regarding the renting and shipping of electronical books and journals should be in the focus of an amendment of the copyright law.

**Bündnis90/Die Grünen:** Open access facilitates and fastens the scientific exchange, the visibility, the access, the processing and the management of scientific information. At the same time, open access supports interdisciplinary and international collaborations. Open access facilitates scientific transfer towards the society and thereby contributes to technical, social and cultural innovations. The goal of green science and research politic is to make scientific publications that come from teaching and research activities that were funded by public agencies, publicly available (Open Access).

We have advertised practical solutions with parliamentary initiatives that should facilitate open access publications (e.g. "Urheberinnen und Urheber stärken – Urhebervertragsrecht reformieren" (Drs. 18/7518)). In the 17th legislative period we demanded that public funding should be bound to the condition that publication of findings that resulted from these projects must be publicly available latest 12 months after the first publication (Drs 17/7031). Knowledge increases if it is shared. Hence, we stand up for establishing a common education and research border. In our opinion, this is the optimal way to establish a copyright law for research, education and learning in the digital age.

FDP: We, as Free Democrats, demand the public accessibility of research that was funded by public agencies. Germany has powerful minds in research. We want that the community benefits from their findings and hence we stand up for open-access-politics: findings and publications that were funded by public agencies should be available by the public under the consideration of first-window rights. Furthermore, we request the online availability of lecture and teaching material in the context of university teaching,

provided that the rights of third parties are not violated. The digital revolution allows a revolution as well in teaching and research.

Lecture material, livestreaming or online-access of research allows teachers and students to work individually and flexible on the content.

In addition, we support innovative educational platforms such as "Open Universities" that allow citizens regardless of their qualification to get access. Their educational content should be accessible online via "Massive Open Online Courses" (MOOCs). A standardized assessment and certification system allows courses to be acknowledged by the employer. Furthermore, we want to examine whether online certificates of MOOCs can be classified as course credit for study programs.

**AfD:** We regard the copyright law as an essential cultural achievement and are concerned about the current trend towards open release of scientific publications. In our view, this reduces the incentive of further research and publications.

2. How important is, in your opinion, the exchange between the scientific community and the public community about research and scientific findings, especially in regard of phenomena like "fake news" or "alternative facts"? Which form of exchange should be highlighted and which role should PhD Candidates have in this regard?

**CDU/CSU:** Already today, the society is involved as a central actor in the high-tech-strategy (keywords are: openness for new technologies, social innovations, civil dialogue and citizen science). This should enable the research funding to be transparent. In addition, the implementation of the high-tech-strategy is accompanied by the high-tech-forum – a political innovative consulting committee. It consists of representatives from economy, science and societal groups. In order to improve the visibility of the high-tech-strategy, we will increase public relations work and we will focus on the findings and success of the support.

**SPD:** If we don't fight efficiently against and pursue false alarm reports that were made on purpose, propaganda and the increasing amount of hate speaks threaten the peaceful collaboration and the free, open and democratic society.

In addition to the question of how one would deal with illegal content, there is the question of how we should deal with the brutalization of the social discourse to reestablish a respectful culture of debate. The fact that people disseminate hate via the internet cannot solely be solved by the law. Politics and society must stress that they don't accept hate speaks and infringing statements – online as well as offline. We must firmly disagree, if discussions attack the dignity of people or defames them. In this regard, we can think of installing, for instance, support programs and structures that support the culture of objections. PhD candidates then would have, like all the other scientist, an important position.

We want to strengthen citizens acceptance of new technologies. Transparency, information and participation will reduce fears. The civil society will be integrated in the innovation dialog of the German government. The output of the dialogues will be published.

**DIE LINKE:** DIE LINKE set itself the goal to involve the civil society more strongly than before in research politics. Currently, there are too little cooperation's between science and society. This primarily results from missing resources in the civil society and the increasing pressure on science to produce economically valuable innovations. First, DIE LINKE wants to enable an aimed capacity-building of civic organizations by restructuring institutional and project funding. Second, DIE LINKE wants to free the universities from the dirigiste system that expects them to legitimate their existence by continuously producing economically valuable findings.

**Bündnis90/Die Grünen:** The exchange between science and society about topics like research content, findings and processes is more important than ever. Knowledge and the ability to reason strengthen the resistance against Fake News and against the illegal influence on the democratic formation of opinion. Democratic knowledge based societies rely on the contact with science, but also modern science relies on the contact with society. Therefore, we need more space for communication and meetings between science and society. Possibilities entail "long nights", joint dialogue conferences and participation formats. Examples for lived exchange are citizen science or "real laboratories" where researchers work together with citizens. Furthermore, there should be more possibilities for societal groups and business representatives to contribute to the focus of research funding.

FDP: We, as Free Democrats, think that the exchange between science and society is crucial. The current debates about "fake news" and "alternative facts" show that this exchange between science and society has been lost. Already a couple of years ago, many universities tried to improve this and founded science communication centers. These centers communicate scientific findings to the public and help scientists to make their findings understandable for the public. We welcome this very much. PhD Candidates play an important role and should be trained in this regard because they become the next generation of leading researchers. New formats, for instance science blogs, enable early career researchers to gain a big purview beyond academic groups. We would like to see that this becomes more and more important for future jobs and appeal processes.

**AfD:** Exchange and dissemination of scientific findings are essential components of cultural and social development. This should be achieved via specialist publications of any kind, congresses and of course, if possible, as well via mainstream media. This is, for instance, an area where the billion-scale public-law media complex largely fails. Here exists an area of responsibility were PhD candidates could and should particularly become active.

3. How important is, in your opinion, the further development of the "Europäischer Forschungsraum" and the "Europäischer Hochschulraum"? How should Germany contribute?

**CDU/CSU:** The "euorpäischer Forschungsraum" and the support of research and innovation via the European Union must contribute more than ever to the excellence

quality support, to the strengthening of the efficiency of the European science and innovation systems and to the reduction of the research and innovation cleft between the EU member countries and other regions in Europe. Especially the Brexit challenges science, research and education in Europe.

CDU and CSU stand up for further development of the "europäischer Forschungsraum" to further strengthen Europe's scientific efficiency and to expand its innovative capability. This process should be driven by member states and should consider the subsidiarity principle – strong partnership between the European commission as we as science and so-called stakeholder organizations.

Within the "Europe 2020" strategy, the goal was set that the research and development investments should be max. 3 percent of the joint gross domestic product. This goal needs to remain standard and motivation for all EU member states and needs to be adjusted for economically strong countries such as Germany. The follow-up program of the "Horizon 2020" should entail the same amount of money as the originally planned budget that was estimated for the "Horizon 2020" program – this means without the cuts that were performed in the last couple of years. Excellence needs to stay a high priority in the context of EU funding distribution. Other focuses of the follow-up program must be the courage to prioritize according to thematic concentration, clarity of the structure, transparency and continuity of the existing instruments as well as the consequent continuation of the current efforts and facilitations.

The "European Research Council" (ERC) must maintain and strengthen its position as flagship of the European top-level research. In addition, the "European Innovation Council" (EIC) that was proposed by the European Commission in context of the "Open Innovation" prioritization, should be developed as a platform for excellence and innovation. Like the ERC it should not only provide financial support but as well be a prestigious trademark. Possible concrete actions and goals of an EIC are the implementation of economically thinking and action in the universities and public research institutes for a substantial strengthening of transfers, the support of excellent KMU with global growth perspectives as well as high prize money ("Challenge" or "Inducement" prizes) as strong incentive for the development of innovative solutions for big societal challenges.

**SPD:** We want the success of the Bologna reform. To reach this aim, we need to establish quality incitements.

The beginning of study phases must be more flexible, the freedom to individually shape the own study program must be improved and the increase of specialization as well as the inflation of German study programs must be reduced. In a first step, we want to realize the right of a place in a master program for students who want to become teachers.

A functioning European research room strengthens the Europe unity. To reach this, all the European educational and research institutes as well as universities need to be included in making the according arrangements. During the finance and economy crises, the focus of the EU research frame program was too one-sided focused on economic growth. In the future, we want to establish a more equal distribution of interest in research findings and applied science within the European research support system. Therefore, the universities need to become more important in the architecture of

support programs. In the future, a research frame program should focus more on the humane and social sciences.

Bureaucratic borders should be reduced to make funding from "Horizon 2020" and following programs more easily accessible by universities. In addition, technical colleges should be considered more frequently in the future. Overall, we still have the goal to support and to strengthen the collaboration and communication between European universities.

DIE LINKE: DIE LINKE welcomes the plan for a united "europäischer Forschungsraum" and "europäischer Hochschulraum", the plan to increase mobility of teachers and students and the plan to support international communication. But the Bologna program offers increased mobility only for a small elite. The mobility of students still strongly depends on their social background. Another problem is that university staff (scientific staff, professors) who teaches and does research abroad loses in the worst case his retirement benefit rights. This means that we cannot talk about real mobility. To support the internationalization of universities, the Bologna-process must be rerouted. We want more freedom to individually shape the own study program and financial support for students to enable mobility.

We want for researchers that also social benefits and pension payments become mobile. In addition, we stand up for an increase of knowledge transfer into poorer regions of the world. If knowledge and innovation are crucial for prosperity, we should share our knowledge with those regions. For this purpose, we need to rethink our politic in the context of "intellectual property", we need to establish open access publications as well as increase the cooperation with the specific countries. This entails to focus on the cooperation with the applicant countries who are currently underrepresented in the European research development and research funding.

**Bündnis90/Die Grünen:** Both fields differ in the degree of communitarisation. Both fields live on the mobility of their members. Here rely the challenges of the next couple of years, not only because of the unforeseeable effects of the Brexit-decision. Mobility must be ensured both juristically and financially. In this regard, Germany must improve the portability of social right demands on national level and on European level. Chances for development in both fields rely in the negotiation of common research goals and programs. We stress to put the focus on research on global and social challenges, especially in regard of the current and future European research frame program and of international research cooperation's that are funded by the public.

FDP: Nowadays, top-level research can less and less be achieved only on a national level but can be achieved on an international level. Hence, we, as Free Democrats, support the "Euopäischer Hochschulraum" and the "Europäischer Forschungsraum". The earlier students and researchers are mobile on an international level, the easier a scientific carrier will become for them later.

**AfD:** Unfortunately, the development of the "*Europäischer Hochschulraum*" didn't lead to the positive development that was hoped for. Here, as well as at other positions, we want a transfer of the decision-making power in terms of the principle of subsidiarity,

i.e. transfer to the country levels and the universities. This is a target that G should pursue.	ermany