Status Report on the University Partnership UMBC – University of Kassel, Germany

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Motivation: UMBC and the University of Kassel, located in Kassel, Germany, have profiles that are very similar in many respects which gives the opportunity for a partnership among equals. Moreover, particularly promising opportunities for collaboration exist in several scientific areas. And there is an urgent need for U.S. students to gain demonstrated global experience, such as enabled by being involved with research collaborations and/or study abroad experiences.

Therefore, UMBC and the University of Kassel have entered into an interdisciplinary and multifaceted partnership encompassing education and research in all areas. For undergraduate and graduate students, the partnership offers streamlined programs for study abroad and short-term visits. For faculty and staff, opportunities exist for research collaboration, sabbatical stays, and research visits. A formal Memorandum of Understanding (MoU) has been signed for the period from 12/01/14 to 11/30/17 and is subject to review by 05/31/17.

Similar profiles: Like UMBC, the University of Kassel (www.uni-kassel.de), in its current form, is a relatively young institution, founded in 1971 with now more than 20,000 students, growing rapidly, and with major campus expansions under construction at its central campus close to the city center. The University of Kassel offers a wide range of Bachelors, Masters, and Doctoral programs, similar to UMBC.

The City of Kassel, population 200,000, is situated in the geographic center of Germany, on the high-speed train line between Frankfurt and Hannover. Kassel celebrated its 1,100th anniversary in 2013 and has an illustrious history. It is the long-time professional home of the Brothers Grimm, who collected their famous fairy tales in and around Kassel and who initiated the field of academic research of the German language. Kassel can boast to be first or unique in many cultural and scientific endeavors in Europe, such as first purpose-built opera house, first public museum, still unique tapestry museum, largest statue of modern times, locomotive industry, and more. The mountain park Wilhelmshöhe with its unique water arts received UNESCO World Heritage status in 2013. The city also hosts the Documenta every five years, the largest contemporary arts exhibition in the world. One of the most recognizable exhibits of Documenta 7 in 1982 is Joseph Beuys' city-wide installation "7000 Oaks" which is the inspiration for UMBC's "Joseph Beuys Sculpture Park" (inside the loop, south of the RAC behind the small forest). Combine these facts with the compact size of the city, the vibrant atmosphere of a university town due to

the high proportion of students among the residents, excellent public transit within the city and into the region, connection to national high-speed rail in the center of the country, and it is clear that Kassel is an attractive location for study abroad in Germany. Via the high-speed rail, Kassel is 1.5 hours from Frankfurt airport, the largest airport in Germany with connections to many cities in the U.S.

Short-term visits and longer-term stays:

Sabbatical stays in 2011-12 and 2013-14: In 2011-12, Dr. Gobbert spent seven months of his sabbatical at the University of Kassel. Out of this grew the on-going research collaboration with the Meister group in Kassel and the Mathematics departments' MoU from 2011 to 2014, which was the forerunner of the current university-level MoU. As part of this, Dr. Meister spent six months of his sabbatical in 2013-14 at UMBC. During 2012 and 2013, several graduate students and post-docs of both research groups stayed for periods of the time on the order of several weeks at the other institution. Most notably, three Masters students from Kassel visited UMBC in Fall 2013 as Faculty Research Assistants.

Kassel delegation visit to UMBC in September 2015: Since the signing of the institutional MoU, the University of Kassel sent a delegation of nine members to UMBC for a visit on September 28-30, 2015. The delegation met with various levels of UMBC administration from the President to the Deans, held an open meeting for all faculty, and conducted individual meetings with research counterparts. Members of the delegation also met with Undergraduate Program Directors of their counterpart departments to become familiar with each other's departmental curricula and to initiate the pre-evaluation of transfer courses. One member of the delegation was the Director of the International Education Office in Kassel, who met with her counterparts to discuss procedures regarding administering the study abroad program. The faculty in the delegation were from the Kassel counterpart of CNMS plus Economics, owing to the original faculty being from Mathematics. In addition, outreach meetings beyond CNMS took place in particular with faculty and the Chair from Visual Arts as well as from Education and several meetings with individual faculty from Mechanical Engineering. All meetings were characterized by a high level of energy and form a promising basis for follow-up collaboration.

Long-term stay at Kassel Spring 2016: During the Spring semester 2016, Dr. Gobbert spent four months in Kassel, accompanying the first group of UMBC students that are attending Kassel, while conducting his own research. Besides renewing contacts with members of the 2015 delegation, he reached out to and met with new contacts Prof. Dr. Kurt Geihs in Computer Science and Rektor (= Dean) Joel Baumann and Thomas Froehlich of the Kunsthochschule Kassel (= Arts Academy) during this stay and put them in touch with the corresponding UMBC departments.

Visit by UMBC Vice-Provost Dr. Antonio Moreira on March 10, 2016: Following a conference in Frankfurt, Dr. Moreira visited the University of Kassel for one full day. Guided by Prof. Dr. diFuccia, the internationalization representative of the College of Mathematics and Natural Sciences, Dr. Moreira received introductions in all technical

aspects of the study abroad program for UMBC students, from the International Office that manages visa and arrivals, the Welcome Center that provides orientation and help to all students, to the Language Center that offers the German courses. The German courses enroll about 400 students each semester, slots for UMBC students can be guaranteed, individual assessment for placement is provided, and funding of the courses for UMBC students is currently provided by a DAAD grant to Prof. Dr. Andreas Meister (ending after Summer 2017). The Welcome Center takes students on tours including government registration, foreign office registration, setup of checking account, and social events. The Welcome Center also managed the hiring of three peer mentors for the UMBC students arriving in Spring 2016, funded by the above DAAD grant; in fact, the selected peer mentors are the Kassel students who studied at UMBC in the previous Fall.

The other meetings of Dr. Moreira during the morning and afternoon were with faculty and administrators from departments including Economics, Mathematics, Biology, and Chemistry. Kassel faculty provided updates and offered opportunity for brainstorming: The Education department (involved in Kassel math education and chemistry education) is planning a two-week stay of UMBC students in Kassel in January 2017; the program will involve classroom observation in the mornings in Kassel middle and high schools and seminar work to process results in the afternoons. In addition to Prof. Dr. Ivo Bischoff, Prof. Dr. Guido Bünstorf (Economics) and Prof. Dr. Georg von Wangenheim (Economic Law) also attended. The Economics department has offerings of upper-level undergraduate courses taught in English and two Master's programs taught entirely in English; they have worked on course evaluations with UMBC's Dr. David Mitch. (Course evaluations for MATH, STAT, PHYS, and ECON are already completed by now.) The Economics department in Kassel has funding for part-time teachers, which can be used to fund UMBC visitors teaching an elective of their choice (idea: repeat an already prepared UMBC course at the 300/400 level), while conducting research with faculty in Kassel; the contact is Prof. Dr. Ivo Bischoff. Kassel faculty members Prof. Dr. Meister and Prof. Dr. Borromeo Ferri successfully competed for funding of an international internship program; Kassel has companies in various areas, including renewable energy and solar power for instance, and would welcome interest; the contact is Ms. Mirren Augustin. It was noted that UMBC participates in the U.S.-wide International Week in September. This is an opportunity to present especially the UMBC-Kassel partnership, with both Kassel and UMBC study abroad students present. Currently, several faculty and staff from Kassel are planning their visit UMBC during this time.

University President Prof. Dr. Reiner Finkeldey, with Director of Internationalization Katharina Linke, met with Dr. Moreira and a group of Kassel faculty and administrators and Dr. Gobbert. The strategic plan of the University of Kassel calls for sharpening the university's research profile in select areas, which inherently includes international connections in these areas. President Prof. Dr. Reiner Finkeldey called the partnership with UMBC one of a limited number of international partnerships to be pursued for this, due to the match of research areas in a number of fields. UMBC is the main North American partner that Kassel intends to develop. In turn, one of four areas in UMBC's strategic plan concerns itself with UMBC's role in the world. Vice Provost Moreira

reported that the implementation of the plan will focus on a few international partnerships that are meaningful and strong, and he stated that Kassel is one of these. Another important partnership for UMBC is the one with the University of Porto in Portugal; discussions in the meetings in Kassel indicate that the ERASMUS+ program may include an opportunity to expand bilateral cooperations into a triangle involving Porto, Kassel, and UMBC.

Visit by UMBC Vice President Dr. Karl Steiner in April 2016: VP for Research Dr. Karl Steiner visited Kassel for two days - April 28-29, 2016 (after attending the Hannover Messe). Prof. Dr. David diFuccia (Chemistry Education) and Ms. Katharina Linke (President's Office) organized an impressive show of departments and centers at the university and a Fraunhofer research institute in the community. An overview of research at Kassel was provided by his counterpart Vice President Prof. Dr. Arno Ehresmann und Dr. Edith Pfitzner from the President's Office.

Specific department meetings included Computer Science (Prof. Dr. Kurt Geihs, Prof. Dr. Arno Wacker, Prof. Dr. Gerd Stumme), Biology (Prof. Dr. Friedrich Herberg, Prof. Dr. Markus Maniak, Prof. Dr. A. Müller), Physics (Prof. Dr. Thomas Giesen). The Computer Science meeting also included Interdisciplinary Research Center for Information System Design (ITeG) and the topic of Cybersecurity. Four research centers gave formal presentations about their work: Center for Environmental System Research (CESR) by Prof. Dr. Rüdiger Schaldach, Centre for Empirical Teaching and Learning Research (ZELL) by Prof. Dr. Rita Borromeo Ferri and her colleagues, International Center for Development and Decent Work (ICDD) by Prof. Dr. Birgit Felmeden, and the Center for Nanostructure Science and Technology (CINSaT) by Prof. Dr. Johann Peter Reithmaier. In the community, we visited the Fraunhofer Institute for Wind Energy and Energy System Technology (IWES), represented by Dr. Timo Fischer and Jochen Bard. Where appropriate, several meetings included tours of their labs.

The University of Kassel has a similar emphasis on interdisciplinarity as UMBC. Particularly promising matches appear to be wind and renewable energy, cybersecurity, aspects of nanoscience, empirical research on learning and teaching, remote sensing for and geographical research on land use. The slides and/or handouts of many of the meetings and contact information are available from Dr. Matthias Gobbert (contact on top of this document).

Dr. Steiner echoed some of the earlier comments made by Dr. Moreira during his visit to Kassel. UMBC is currently implementing its new strategic plan, which includes a focus on civically engaged and global/transnational scholarship that help increase the cultural and global competencies of all students. He reiterated that the implementation of the strategic plan will require a focus on a select number of international partnerships that are meaningful and sustainable, and Kassel seems to meet many of the criteria for building a strong institutional relationship.

In addition to student exchange opportunities, there are several complementary research programs at both the University of Kassel and UMBC to encourage successful

faculty collaborations beyond the initial focus on mathematics and statistics, including high-performance computing, data analytics and cyber security, life sciences and nanosciences, and astrophysics and environmental sciences.

Kassel delegation visit to UMBC in September 2016: At the beginning of the Fall 2016 semester (August 29 to September 02, 2016), a delegation from Kassel visited UMBC again. On the UMBC side, Vice Provost Moreira timed the invitation to include the Study Abroad Fair on the first Friday of the Fall semester and also Convocation before the start of the Fall semester. The delegation had reserved front-row seats to this unique event.

The delegation was led by René Matzdorf (Associate Dean for Academic Affairs and Professor for Physics). Also Professors David diFuccia (Chemistry Education), Andreas Meister (Mathematics), Rita Borromeo-Ferri (Math Education), and Ivo Bischoff (Economics) returned from 2015. New to UMBC were delegation members Johann Peter Reithmaier (Director of the Institute of Nanostructure Technologies and Analytics), Arno Wacker (Cybersecurity and Professor for Computer Science), and Mirren Augustin (Office of International Education). Ms. Augustin is the staff point person for all contacts of the university partnership and led the presentation at the Study Abroad Fair.

The key meetings were with the College Deans Casper (CAHSS), LaCourse (CNMS), and Ross (COEIT), Provost Rous, Vice Provost Moreira, VP Young, and VP Steiner. All three Deans confirmed their strong support of the partnership initiative, citing that U.S. students need more exposure to global issues and concerns. It was identified that while COEIT students might often have a hard time fitting study abroad into their curriculum, the large cohort of Computer Science students and their larger flexibility in course selection offers a chance for recruiting. Given the expansion of Kassel departments becoming involved with the partnership, which is an opportunity for expansion of research collaborations, progress and energy were palpable in these meetings. Provost Rous and Vice Provost Moreira reaffirmed during the meeting the importance of this partnership to UMBC.

Several members of the Kassel delegation, including Mirren Augustin, René Matzdorf, and Andreas Meister, met with Keith Harmon and Mitsue Wiggs (Meyerhoff Program) and Josh Michael (Sherman STEM Teachers Scholars Program). These meetings aimed at recruiting UMBC students from these programs, since advising for their students is tightly coordinated. The delegation met with Ken Baron (Advising) in order to discuss options for publicizing the exchange program very early in the students' career for long-term planning. A meeting was also held with Christine Routzhan (Career Services) regarding opportunities in the newly created internship programs at Kassel, specifically designed with their timing (summer in U.S.) for UMBC students. Kassel secured some support for internships that is also available for UMBC students. At Kassel, Andreas Meister is leading the effort to apply for a renewal of the DAAD (German Academic Exchange Service) grant for Kassel students studying abroad at UMBC; this grant also includes support for language courses for UMBC students in Kassel, peer mentor support during study abroad in Kassel, and support for visiting UMBC faculty in Kassel. This proposal extends the DAAD support of 2015-2017 from Mathematics to all natural sciences and requires UMBC point persons in each of the corresponding UMBC departments. Already, the University of Kassel has received a grant from the Erasmus+ program for international credit mobility for the next two

years, providing a study abroad semester scholarship for one UMBC student per year, as well as funding for travels by two UMBC and two Kassel University faculty for the purpose of teaching at the partner university. Ivo Bischoff (Economics) met with Mark Thomas (Economics Department Advisor) and with BrianSouders, Interim Director of International Education Services to discuss possibilities to promote exchange of Economics students. They agreed that students should be advised at an early stage of their studies about the possibilities to study abroad for a full term. In particular, it is advisable to keep some electives open. Additionally, Ivo Bischoff met with Brigid Starkey (Acting Director of the Global Studies program) to discuss exchange in this field of studies. They agreed to develop a table of equivalencies.

Individually, several visitors had meetings with counterparts at UMBC. Specifically, Arno Wacker met with faculty at UMBC interested in Cybersecurity, including Anupam Joshi (CSEE) and Aryya Gangopadhyay (IS); initial conversations are taking place to make possible a full-semester appointment of Dr. Wacker in spring 2017. J. P. Reithmaier met with faculty including Sebastian Deffner (Physics), who already works with Kassel Physics faculty Kilian Singer and Christiane Koch and is interested in the partnership. Prof. Reithmaier additionally made contact with Jim Franson, Todd Pittman, and Jason Kestner, and the area of quantum key distribution also offers opportunity for interdisciplinary work with faculty in Cybersecurity. David diFuccia and Rita Borromeo-Ferri met again with Education faculty Christopher Rakes, Jonathan Singer, and Susan Blunk; they are concretely planning a two-week shortterm, faculty-led study program to Kassel in January 2018 by a group of Education students, to shadow teaching at German schools in the morning and to analyze the observations in the afternoon. During the visit, Prof. Ivo Bischoff gave a talk in the UMBC "Economics and Public Policy Seminar Series". He met Dennis Coates (Economics), who will visit the University of Kassel in January 2017.

Meeting at the University of Porto, Portugal: On October 6, 2016 Professor Rüdiger Faust joined Vice Provost Antonio Moreira and Dr. Brian Souders during their week-long visit to the University of Porto. The goal for Prof. Faust to join the team for one day was to initiate conversations among UMBC, the University of Kassel and the University of Porto about potential opportunities to develop collaborative programs among the three institutions. A meeting was held with representatives from the International Division of the University of Porto to share information among the attendees about the current collaboration programs available through the EU.

Visit by Representatives of the German Embassy in Washington: On October 26, 2016, Dr. Robin Mishra, Minister Counselor for Science and Technology and Dr. Karsten Hess, Counselor for Science and Technology, from the German Embassy in Washington, visited UMBC. VP Dr. Steiner invited them to learn about various activities at UMBC related to growing meaningful relationships with Germany. Attendees from UMBC included Dr. Curtis Menyuk and Dr. Michael Nance, who were or will be in Germany on an Alexander von Humboldt fellowships, or faculty with German background such as Dr. Sebastian Deffner and Dr. Gobbert. A particular focus was our growing partnership with the University of Kassel.

Dr. Mishra and Dr. Hess followed up on an earlier visit by Dr. Steiner to attend a US-German Science Leadership Breakfast in September 2016 in the ambassador's

residence that included representatives of German research societies, universities, and government and members of the German Bundestag. Attendees in this small breakfast meeting included the Presidents of the German Research Foundation (DFG), the German Academy of Sciences Leopoldina, the Max-Planck-Society (MPG), the Leibniz Association (WGL), the Helmholtz Association (HGF), the German Academic Exchange Service (DAAD) and the German Rector's Conference (HRK) as well as the Secretary General of the Alexander von Humboldt Foundation (AVH) and a Member of the Executive Board of the Fraunhofer Society (FhG). The Director of the National Science Foundation and the Director of the National Institute of General Medical Sciences at the NIH and other leaders of US research institutions and universities participated on the US side.

The discussion, a formal kickoff event to the German Academic International Network (GAIN) Conference (http://www.gain-network.org/GAIN2016) was focused on the observation that the scientific communities in Germany and the US are faced with similar tasks: In light of their growing roles in overcoming national and international challenges, it is crucial they have sufficient research infrastructure and financial resources. During this meeting, Dr. Steiner had the opportunity to highlight the growing relationship with Kassel with leaders of the DFG, the DAAD, and the Fraunhofer Gesellschaft.

Undergraduate exchange program: One of the key components of the university partnership is an undergraduate exchange program. The University of Kassel has internationalization as one of its strategic goals and has a strong desire to attract international students and researchers. The university already hosts students from around the world and its International Education Office offers a wide variety of services and programs for international students and visitors (including student housing for Bachelors students and short-term apartments for doctoral students and researchers).

Fall 2015: The first group of three Kassel students attended UMBC in Fall 2015:

- Lorena Schnopp (major Math Education, 2nd year student),
- Samira Boddin (Mathematics, 3rd year student), and
- Armaury Bodet (Math Education, 4th year student).

The Kassel students were extremely outgoing and happy to serve as ambassadors of the exchange program. They worked as teaching assistants by leading the Conversation portion of several German classes and thus were available to UMBC students in these classes as role models.

Spring 2016: The first group of three UMBC students studied in Kassel in Spring 2016:

- Marie Blurton-Jones (B.S. Computer Science and minor in German, Sophomore, has completed GERM 201),
- Joseph Eller (B.S. Computer Science, Junior, completed GERM 102), and
- Laura Sharp (B.A. MLL German and minor in History, Senior, completed GERM 301).

The UMBC students all had access to appropriate German classes that can transfer back as language credits (or Culture GEP credit for GERM 202). Dr. Gobbert accompanied the UMBC students during the Spring 2016 from February to June, which includes the first half of the German Summer semester that runs from April to July. The students took a wide range of classes ranging from Mathematics to Psychology, including a class on international perspectives of the Brothers Grimm, in addition to German language classes. Many of the classes are in English, but the students also take classes in German for experiencing this; this is particularly an option, since it turns out that many classes have their material (slides, books, articles, etc.) in English, even if the lecture is in German, in addition to the ability to ask questions in English.

Fall 2016: The exchange program starts its second year with a group of three Kassel students visiting UMBC:

- Lisa Gertenbach (major math education, 2nd year student),
- Ernst Reschetnikow (math major, 3rd year student),
- Kevin Szostek (major elementary education, 2nd year student).

Like the students in past Fall, they are supported by a DAAD grant for mathematics students with PI Andreas Meister.

Spring 2017: Susanne Sutton and Matthias Gobbert were able to recruit five students for Spring 2017:

- Emma Sampson (B.A. Media and Communication Studies, junior, has completed GERM 301),
- Caroline Greer (B.A. Global Studies, minor in Economics, junior, has completed GERM 301),
- Justin Taylor (B.S. Mechanical Engineering, Mathematics minor, has completed GERM 201, Meyerhoff Scholar),
- Sara (Skylar) Pardue (B.A. Mathematics, minor in Linguistics, junior, has completed GERM 301 and 309, Honors College),
- Angela Reed (B.A. Philosophy and English, sophomore, has completed GERM 301 and 303).

As of this writing (November 2016), these students are accepted for the exchange by UMBC's International Education Office. With the increase from three to five students since 2016, we hope to grow the size of the exchange deliberately and continuously each year.

Basic information on the exchange program: The exchange program is administered (on the UMBC side) through the Office of International Education Services. UMBC students need to apply by October 10 for the following Spring semester and March 10 for the following Fall semester or academic year. Participants in the exchange program register for 12 credits of AWAY 098 at UMBC, but actually take classes equivalent to (at least) the equivalent of a full-time course load at the host institution abroad. The courses abroad must be pre-evaluated for transfer to UMBC (VOT form). UMBC students pay full-time regular tuition and fees during the semester abroad. Federal financial aid, state aid, and UMBC merit scholarships are portable to this exchange program.

The students have access to dormitories/apartments at the University of Kassel as well as to their state-subsidized food services (full warm self-serve lunch about \$3 for students). Local transit and hourly bike rental is included in the student fees of about \$300. Given the excellent public transit and small size of the city, there is no need to own a car in Kassel. The cost of living in Kassel and particularly the cost of housing tend to be cheaper than around UMBC. Airfare to Frankfurt, Germany, runs \$1200 to \$1400.

The University of Kassel partner Dr. Andreas Meister has received a grant from the German Academic Exchange Service (DAAD) that includes funding for the German courses in Kassel for the UMBC students, undergraduate peer mentors, and more. In fact, the UMBC students going to Kassel for Spring 2016 and prospective students for 2017 already met with the Kassel students at UMBC in Fall 2015, and these same students were hired as peer mentors in Spring 2016.

Special Opportunities for STEM Majors: The Mathematics departments have established a pre-evaluated list of course equivalences for transfer which includes courses ranging from sophomore to the Masters level. Also the Physics departments have already agreed on such a list for the lower-division level. The faculty in the Mathematics department in Kassel have offered to teach classes in English, if UMBC students are involved in them. By using particular Math classes that are taken at UMBC by large numbers of STEM majors, students from a wide range of departments at UMBC can benefit from the study abroad program in Kassel.

German area of MLLI: The German area in MLLI at UMBC has evaluated equivalences to GERM 101, 102, 201, 202, and more. This offers the opportunity to satisfy the UMBC GEP requirement for a foreign language by taking courses in Kassel as well as of a Culture GEP using GERM 202. For instance, a student could take GERM 101 at UMBC in the Fall semester and then complete the equivalent of GERM 102 and 201 in Kassel, finishing the 201-level foreign language requirement. Alternatively, a student who has completed GERM 101 and 102 at UMBC can complete the equivalent of GERM 201 and 202 in Kassel, finishing the foreign-language requirement and use GERM 202 as one Culture GEP class.

Visual Arts: The Documenta exhibit, held every five years in Kassel for 100 days, is the world's largest contemporary art event. The university partnership can give access to this major international event through an inside track of contact with local Arts faculty in Kassel. This would be of significant interest to both students and faculty. The outreach meeting during the visit by the Kassel delegation in September involved Chair Preminda Jacob and faculty members Margaret Re (who has been to Kassel before) and Guenet Abraham (who was previously involved with a study abroad program at another university in Germany). In Spring 2016, Dr. Gobbert met with the Dean of the Arts Academy Joel Baumann and Thomas Froehlich, and put them in touch with the faculty at UMBC.

Education: The faculty from Education involved in the meeting in September 2016 included Christopher Rakes (Math Education), Susan Blunk (Elementary Science education), and Jonathan Singer (Chair and Science Education), along with Program

Manager Marta Seres. Both Dr. Rakes and Dr. Singer met with their scientific counterparts from Kassel, Prof. Dr. Rita Borromeo-Ferri and Prof. Dr. David diFuccia, respectively, in September 2016. The departments met to discuss opportunities for UMBC students to spend a short-term study abroad program of two weeks in Kassel during the UMBC January term; regulations regarding teacher certification seem to preclude full-length visits to Kassel during regular UMBC semesters. The plans for Winter 2018 are for a group of 8 to 10 UMBC education students, accompanied by UMBC faculty, to participate in a short-term program in Kassel. The students will visit middle- and high schools in the morning along with Kassel PhD students and discuss results of the teaching observations during seminars in the afternoon. The Education Department will run this program as a short-term faculty-led program with the Ms. Caylie Zidwick, Assistant Director of Study Abroad in the International Education Services Office leading the UMBC side.

History: There are several faculty in the History department who research German or European affairs. UMBC has a specific connection in Kassel through Dr. Rebecca Boehling (research on the Holocaust in Germany, among other areas), who held the position of Director of the International Tracing Service in Bad Arolsen from 2013 to 2015, a town only about 30 miles west of Kassel.

Computer Science and Computer Engineering: In February, 2016, Dr. Gobbert and his colleague Prof. Dr. Andreas Meister met with Prof. Dr. Kurt Geihs of Computer Science. Since then, Prof. Geihs has evaluated some UMBC courses for equivalencies in Kassel. Many courses are taught only in German; however, in many cases, the course material (slides, books, articles, etc.) are already in English, and English is available for questions and answers from teaching staff. We will continue to evaluate options for collaboration, possibly based on research or on lab visits. In meetings during the visit by Karl Steiner, also Prof. Dr. Stumme and Prof. Dr. Wacke participated, and there seem to be many possible connections, e.g., Cybersecurity.

Economics: The Economics department in Kassel offers two Master's programs entirely in English and has deep experience with international students. Additionally, there is a number of junior and senior level undergraduate courses taught in English. Prof. Dr. Bischoff has worked with UMBC Economics department chair Dr. David Mitch to establish a list of pre-evaluated equivalences.

Partners Emeriti: We acknowledge in the strongest terms two former partners who played a big role in getting this initiative underway: Brigitte May, *retired Senior Lecturer*, *German area in MLLI*, and Diane M. Lee, *retired Vice Provost and inaugural Dean of Undergraduate Academic Affairs*.