



This newsletter provides a summary of the efforts and activities within the Department of Human Genetics (DHG) that are focused on diversity, equity, inclusion, and community.

Introducing the DHG Associate Chair for Climate

A word cloud featuring various terms related to genetics and biology. The most prominent words are 'Genetics', 'DNA', 'Equity', 'Diversity', 'Justice', 'Inclusion', 'Community', 'Genome', 'Genomics', 'Exciting', 'research', 'culture', 'Allele', 'epigenetics', 'variants', 'health', 'diversity', 'impact', 'noncoding', 'coding', 'equity', 'inclusion', 'equitable', 'science', 'human', 'exons', 'single cell', 'RNA', 'transcription', 'chromosome', 'team', 'mutations', 'justice', 'culture', 'translation', 'genetics', 'epigenetics', 'welcoming', 'diversity', 'health', 'diversity', 'impact', 'noncoding', 'coding', 'equity', 'inclusion', 'equitable', 'science', 'human', 'exons', 'single cell', 'RNA', 'transcription', 'chromosome', 'team', 'mutations', 'justice', 'culture', 'translation', 'genetics', 'epigenetics', 'welcoming', 'diversity', 'health'. The words are arranged in a circular pattern, with 'Genetics' and 'DNA' being the largest and most central. Other words like 'Equity', 'Diversity', 'Justice', and 'Inclusion' are also large and prominent. The colors of the words are varied, including shades of blue, green, yellow, orange, red, and purple.

The Climate and Wellness committees are tasked with assessing the current DHG climate, identifying key areas for improvement, developing ideas for addressing issues and/or bolstering the current climate, and implementing these ideas. The goals of the Diversity and Outreach committee are (1) to develop and implement outreach programs aimed at increasing diversity within the DHG and (2) to ensure that all members of the department are fully supported and help them achieve their career goals. Many of the activities described in this newsletter are the result of thoughtful ideas, discussions, and input from these committees.

DHG Resumes In-Person, Fall 2022!

This Fall, the Department of Human Genetics transitioned back to in-person classes, seminars and events. The Human Genetics Retreat, Gelehrter Lectureship, FAST and SLOW were all held in-person. The department also enjoyed socializing at the DHG summer picnic and Happy Hours, and we look forward to continue to get back together in 2023. There is great optimism that reconnecting will positively impact our collective health, strengthen the Human Genetics community, and bolster the research and educational missions of the department. Stay tuned for additional in-person scholarly and social DHG activities!



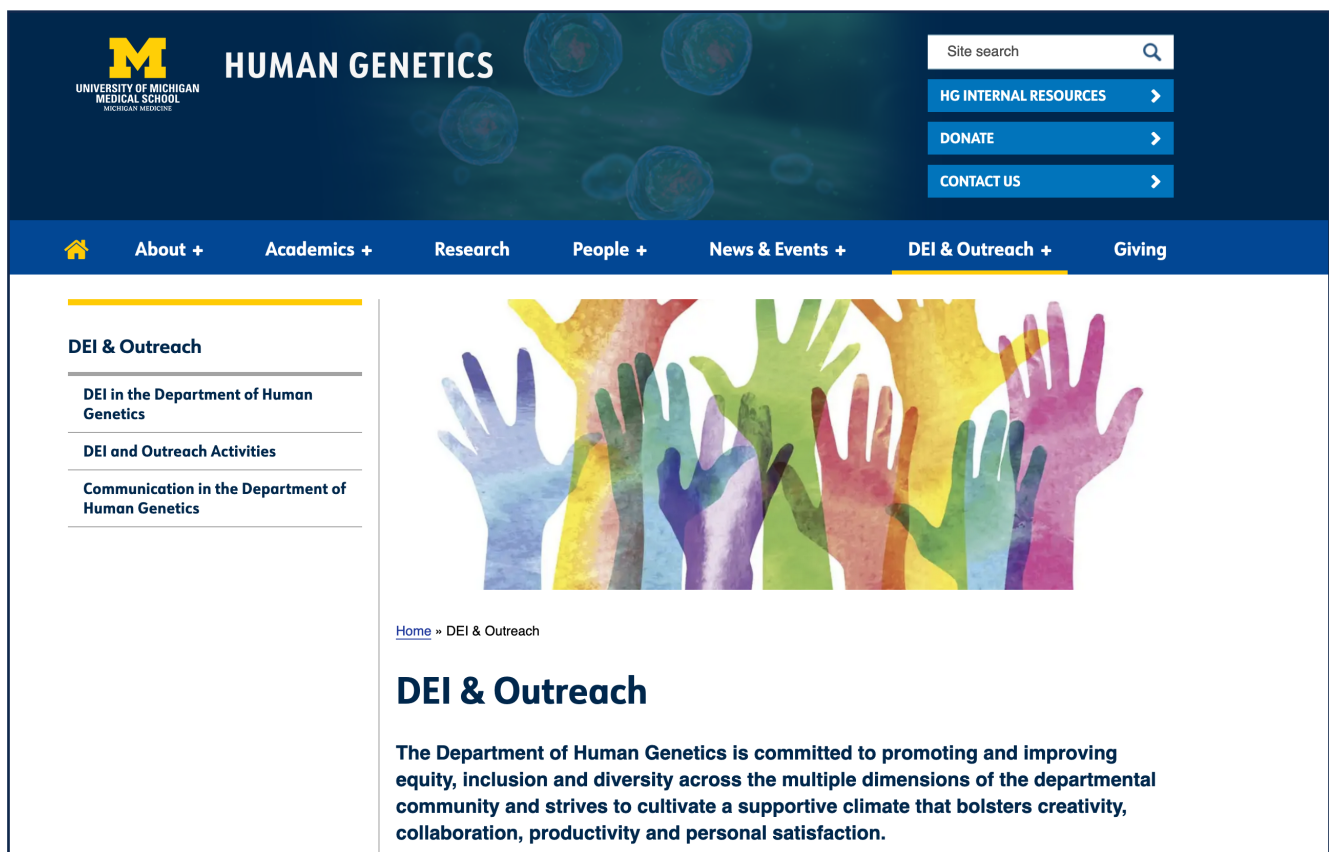
New DEI and Climate Website

The Department of Human Genetics website has a new DEI and Climate page which explores our current programs and efforts focused on diversity, equity, inclusion, and outreach.

[Check it out!](#)

The site includes information about the department's commitment to promoting and improving DEI and climate. There are links to DHG summer student programs, outreach activities, DHG reporting structure, and cohort representatives.

A special thanks to Jenny Russell for her work in designing and maintaining these pages.

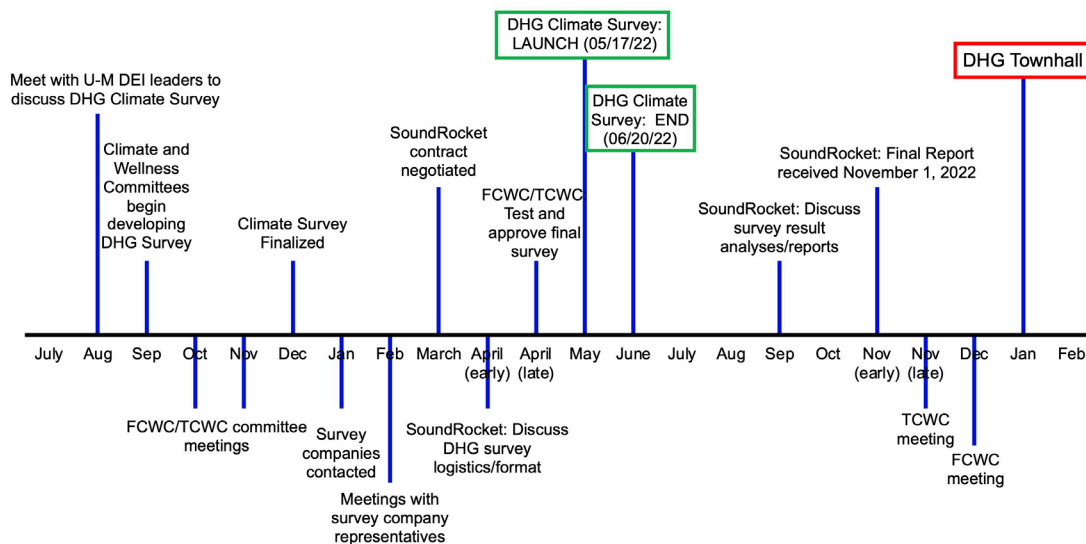


The screenshot shows the website for the Department of Human Genetics, specifically the DEI & Outreach page. The header features the University of Michigan Medical School logo and the text "HUMAN GENETICS". A search bar and navigation links for "HG INTERNAL RESOURCES", "DONATE", and "CONTACT US" are visible. The main navigation bar includes links for "About", "Academics", "Research", "People", "News & Events", "DEI & Outreach" (which is highlighted), and "Giving". The left sidebar contains a "DEI & Outreach" section with links to "DEI in the Department of Human Genetics", "DEI and Outreach Activities", and "Communication in the Department of Human Genetics". The main content area features a large graphic of colorful hands, a breadcrumb trail "Home » DEI & Outreach", and a heading "DEI & Outreach". Below the heading, a paragraph states: "The Department of Human Genetics is committed to promoting and improving equity, inclusion and diversity across the multiple dimensions of the departmental community and strives to cultivate a supportive climate that bolsters creativity, collaboration, productivity and personal satisfaction."

Department of Human Genetics Climate Survey

In May 2022, the DHG participated in an internal, department-wide Climate Survey. The purpose of the survey was to collect as much information as possible on how department members view our current culture and to do so in a manner that allowed everyone's voice to be heard. Administrative staff, research staff, students, postdocs, and faculty were invited to participate, and of the 149 invitations sent, 74 department members submitted a completed survey (49.7%).

The DHG Climate Survey involved multiple consultations with DEI leaders and climate survey experts throughout the U-M campus. Questions relevant to the DHG community were refined through discussions between JoAnn Sekiguchi (ACC), departmental leadership, and the internal Climate and Wellness Committees comprised of representatives for primary faculty at all levels (Assistant, Associate, Full Professor), joint faculty, clinical faculty, research track faculty, graduate students from the Ph.D., M.S. and Genetic Counseling graduate programs, and postdoctoral fellows. SoundRocket, a survey company, was contracted to confidentially administer the survey and return an analysis of deidentified and unlinked responses. A timeline for the development, implementation and final analysis of the DHG Climate Survey is provided below:



The goals of conducting the survey are to identify areas for improvement, reinforce areas of strength, and develop specific and achievable action items to promote a more cohesive, inclusive, and equitable community. The DHG leadership looks forward to sharing the results with the department and is optimistic that this effort will lead to discussions and changes that will improve DEI and climate in the department.

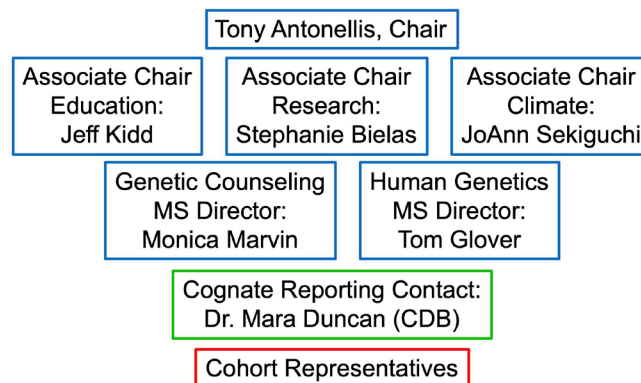
Save the Date!
DHG Climate Survey Townhall
January 5, 2023 at 4:00pm
BSRB Seminar rooms A,B,C

Department of Human Genetics Reporting Structure

All members of the DHG share responsibility for improving our scientific and educational missions and ensuring that we have a healthy, productive and safe departmental climate. To promote communication within the department, a Reporting Structure has been developed detailing procedures for how all DHG members can share their general feedback as well as report unprofessional and/or inappropriate behavior. The DHG Reporting Structure can be found [HERE](#) and includes documents describing the following:

- Mechanisms to share general ideas, comments, and suggestions with departmental leadership
- Clear and distinct guidance for reporting concerns regarding academic or professional integrity, discrimination or harassment (not sexual or gender-based), and sexual or gender-based misconduct
- Selection of Cohort Representatives (CR) who serve as intermediaries between members of each cohort and departmental leadership

Department of Human Genetics Reporting Contacts



The following Cohort Representatives were selected in Fall, 2022:

Name	Title	Contact	Reporting Obligations*
Breanna McBean	Ph.D. Student Cohort Representative	bmcbean@umich.edu	No
Mashiat Rabbani	Ph.D. Student Cohort Representative	mrabbani@umich.edu	No
Charles DeLuca	GCP Student Cohort Representative	delucac@med.umich.edu	No
Shelby Hemker	Postdoc Cohort Representative	hemkersl@umich.edu	Yes
Leonard Cheung	Research Faculty Cohort Representative	lycheung@med.umich.edu	Yes
Lev Prasov	Assistant Prof. Faculty Cohort Representative	lprasov@umich.edu	Yes
Sue Hammoud	Associate Prof. Faculty Cohort Representative	hammou@med.umich.edu	Yes
Beverly Yashar	Full Professor Faculty Cohort Representative	yashar@med.umich.edu	Yes
Michelle Brinkmeier	Research Staff Cohort Representative	rollerm@med.umich.edu	Yes
Shaina Vera	Administrative Staff Cohort Representative	shainad@med.umich.edu	Yes

*Contacts with Reporting Obligations are obliged to report Prohibited Conduct, including incidents of sexual and gender-based or Title IX misconduct, to the [Equity, Civil Rights and Title IX Office \(ECRT\)](#)

DIVERSITY, EQUITY, & INCLUSION

ABRCMS Conference

The Department of Human Genetics hosted an exhibitor booth at the 2022 Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS), November 9-12 in Anaheim California. There were approximately 2,500 attendees, who were primarily university and community college undergraduates and post baccalaureates.

The DHG representatives were Tony Antonellis (DHG Chair), Amber Abram (dual Genetic Counseling M.S. and Health Behavior and Health Education M.P.H. student), and Cecilia Gavilan (Human Genetics M.S. graduate, Pathway to Doctorate awardee and current Genomics and Genetics Ph.D. student). They judged student poster presentations, attended scientific sessions, and shared information about research in the department, our Ph.D., M.S. and Genetic Counseling Programs, as well as the Human Genetics Master's Merit Award and Genetics Training Program.



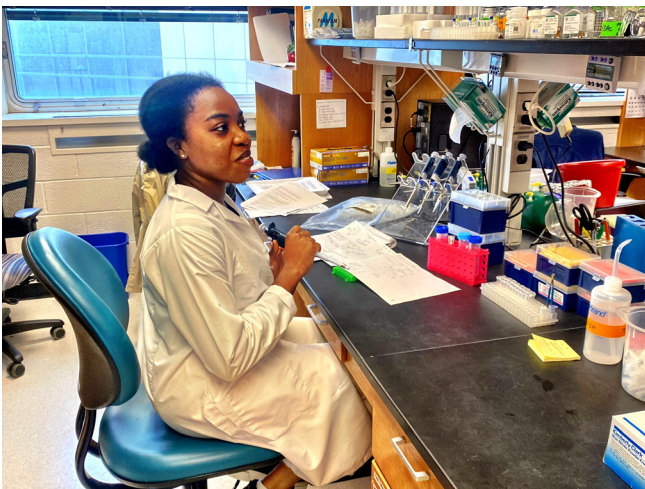
The Human Genetics Department would like to thank Cecilia and Amber for being fantastic ambassadors for the department! Their enthusiasm and engagement at ABRCMS led to connections with many undergraduates interested in genetics research. Please contact JoAnn (sekiguch@umich.edu) if you're interested in participating in this important outreach opportunity in 2023.



Genetics Immersion Program

The Genetics Immersion Program (GIP) launched in Summer 2022 and was spearheaded by Genetics and Genomics Ph.D. graduate students (Callie Swanepoel, Ann Marie Lawson, Sheila Marte, and Anthony Nguyen) with strong support from many faculty, trainees and staff. The GIP immerses high school students in a 6-week program of hands-on genetics research and provides transportation, meals for the day, and a summer stipend. The GIP aims to introduce high school students to genetics and genomics, build their problem-solving skills, and explore their potential as scientists.

GENETICS IMMERSION PROGRAM



The department welcomed four enthusiastic and talented students from the Wayne-Westland School District from June to August. They were matched with Human Genetics graduate student mentors who guided them throughout the summer. Each student developed their own research project, performed experiments, and presented their findings at the end of the program. Students learned about a wide array of genetics career paths through weekly career chalk talks, participated in clinical case studies with genetic counselors, and toured the clinical cytogenetics lab.

Many thanks to the engaged and effective Ph.D. student mentors who were instrumental to the success of GIP 2022!

Feedback from GIP Students:

"The GIP program has made me interested in pursuing a career that is based on genetics"

"It opened my mind on the kind of path I can take in my studies, as well as it made me think of the background performance that goes on while targeting a certain project around the world."

"It helped me see science outside of school and realize how scientists actual study. It definitely made me like science more, being taught in a more fun way."



DHG Summer Student Program for Undergraduate and Post-baccalaureate Students



Each summer, Human Genetics faculty members welcome students with broadly diverse backgrounds, experiences, and interests to our labs for a summer research experience.

Students from U-M, across the state of Michigan, throughout the country, and around the world immerse themselves in projects that span many different areas of human genetics research. To further enrich and enhance their learning experiences, all students were invited to participate in the DHG Summer Student Program.

Summer 2022 marked the inaugural year of the program. Approximately 25 learners in the department were invited to participate in events throughout the summer, including the DHG Summer Picnic, a celebration of Gregor Mendel's 200th birthday, and discussions of interesting and engaging genetics topics. They also met the DHG Chair, Directors of the Ph.D., M.S., Genetic Counseling M.S., and M.D./PhD. programs, clinical and research faculty, and graduate students from each of our programs.



Over 25 DHG faculty, students, and postdocs participated in these events throughout the summer. Plans are already underway for new and expanded events for Summer 2023, including discussions of impactful and exciting research discoveries in genetics as well as additional social activities.

DHG Outreach to Native American Communities

The DHG Diversity and Outreach Committee has been working on innovative ideas to spark interest in genetics amongst students who are underrepresented in STEM. One effort, spearheaded by David Burke, has focused on the Native American communities in Michigan. Dave has begun to establish connections with the JKL Bahweting Anishinaabe middle school and explore ways to move forward with an outreach program that is meaningful for their students.

The JKL Bahweting Anishinaabe school is on the land of the Sault Ste. Marie Tribe of Chippewa [Ojibwa] Indians, and the majority of its student body (~60%) is registered as Native American. Dave traveled to the upper peninsula for multiple meetings with school administrators and teachers and initiated conversations about cultivating relationships between their students and U-M students and faculty. He learned that, to their knowledge, zero graduates of JKL and zero Ojibwa graduates of the high school have come to the University of Michigan.



We are excited about the opportunity to partner with JKL, which is considered the best elementary/middle school in the Sault Ste. Marie area. Our vision is that these efforts will establish a pipeline for JKL students to attend U-M by providing personal faculty and student guides who facilitate their introduction to U-M, STEM and genetics.



Human Genetics Master's Merit Award

The Department of Human Genetics strives to attract highly motivated students from broadly diverse backgrounds and underrepresented groups in the field of human genetics. We are also committed to develop, support, and engage a diverse graduate student body. To advance these goals, the Department of Human Genetics initiated the Human Genetics Master's Student Merit Award (HGMMA) Program, which offers financial assistance to eligible students who might not otherwise be able to attend our Master's program and aims to reduce disparities in graduate education. We are excited to have awarded the HGMMA in 2021 and 2022 to outstanding students: Jennifer Moreno, M.S. (2021) and Lovelyn Epelle (2022).



Jennifer Moreno, M.S.
2021 HGMMA Recipient

Jennifer Moreno received her bachelor's degree in Biology, Health, and Society and Evolutionary Anthropology from the University of Michigan. Prior to joining the Human Genetics M.S. program, she worked as a Research Assistant at the University of Michigan Rogel Cancer Center. She also volunteered at the Detroit Partnership Day where she worked to foster community learning and engagement on topics such as economic disparities and participated in community improvement projects. During her Master's training, Jennifer conducted research in the Sekiguchi lab and graduated with her M.S. degree in May 2022. She plans to pursue a career as a Physician's Assistant.



Ibiere (Lovelyn) Epelle
2022 HGMMA Recipient

Lovelyn Epelle received a B.S. degree in Molecular Biology at the University of Michigan-Flint. She received several scholarships and awards, including the U-M Center for the Education of Women Scholarship, the U-M Global Distinguished Scholarship, and the U-M Freeman International Scholarship. Lovelyn worked as a research assistant for the UM-Flint Department of Chemistry and Biochemistry and as a laboratory technician for the Flint Water Lab. She also worked as a peer educator for the Women's Educational Center, where she held workshops to educate fellow students about sexual violence. Lovelyn is currently working on her Master's thesis research with Dr. Stephen Parker. Her project is focused on examining Type 2 Diabetes state-specific transcription factor binding in skeletal muscle tissue.

Pathway to Genetics and Genomics Doctorate Program

The Pathway to Genetics and Genomics Doctorate Program provides outstanding students in the Human Genetics Master's program with an opportunity to directly transition to the Genetics and Genomics Ph.D. program. Human Genetics M.S. students frequently enter the program with minimal or no research experience and take advantage of the opportunity to work on a thesis research project with Human Genetics faculty. They also complete all of the required core coursework for the Genetics and Genomics Ph.D. program. Thus, students accepted into the Pathway Program bypass the lengthy PIBS admissions process and have an accelerated timeline to advance to candidacy. Since the program was initiated in 2021, three outstanding HG M.S. students have joined the Genetics and Genomics Ph.D. program through the Pathway program.



Dominic Bazzano, M.S.

2021 Pathway to Genetics and Genomics Ph.D. Awardee

Dominic Bazzano received a B.S. degree in Biochemistry and Molecular Biology from Michigan State University. He worked as an undergraduate researcher for the MSU Forensic Biology Laboratory and as a research technician for the University of Michigan Department of Pathology. Dominic's Human Genetics Master's thesis research was focused on developing a novel *in vivo* assay to map DNA double-strand break repair intermediates with base-pair precision in yeast. His work culminated in a first-author Nucleic Acids Research publication in 2021 with the Breakthrough Article distinction. As a Genetics and Genomics Ph.D. student, Dominic is working with Dr. Sue Hammoud. His dissertation research is focused on elucidating the roles of the ZCW1 histone reader in facilitating homolog pairing during meiotic recombination. He achieved candidacy in January 2022 and subsequently joined the Career Training in Reproductive Biology NIHT32 training program in May.



Bailey Masser, M.S.

2022 Pathway to Genetics and Genomics Ph.D. Awardee

Bailey Masser received a B.S. in Biology with a concentration in Molecular Biology and minors in Biochemistry, Healthcare Ethics, and Public Health from Duquesne University in 2021. She worked as an undergraduate researcher for Duquesne University Department of Biology and received a Duquesne University Academic scholarship. As a Human Genetics M.S. student, her thesis research explored the contributions of Pou3f4 dysregulation to combined pituitary hormone deficiency pathogenesis. Her current Ph.D. dissertation research with Dr. Haley McLoughlin focuses on characterizing mutations underlying ITPR1-associated ataxias and developing novel antisense oligo-based therapeutic strategies to improve disease symptoms. Bailey advanced to candidacy in December, 2022.

Pathway to Genetics and Genomics Ph.D. Program, cont'd.



Marcia Cecilia Gavilan, M.S.
2022 Pathway to Genetics and Genomics Ph.D. Awardee

Maria Cecilia Gavilan attended the Universidad Nacional Asunción in Paraguay and received a Bachelor's degree in Biochemistry. Before joining the Human Genetics M.S. program as a Fulbright International Scholar, Cecilia worked as a Lead Scientist for the Cyrlab Laboratory, as an undergraduate researcher in the School of Chemical Sciences, and was on the faculty of Universidad Nacional Asunción as a Professor of English. Cecilia's Master's thesis project focused on developing an assay system in lymphocytes to study the effect of disease-causing Artemis mutations on DNA repair, recombination, and genome stability. Cecilia is a recipient of the Rackham Graduate Research Award and was selected as a DHG ABRCMS conference student representative. Cecilia's Ph.D. thesis research with Dr. Shigeki Iwase focuses on determining the roles of PHF21A, a histone-binding component of the BRAF-HDAC complex, on regulation of DNA virus repression. Cecilia advanced to candidacy in December, 2022.

Improving Accessibility Within & Around the Department

Accessibility challenges in and around the MSII and Buhl buildings were brought to the attention of the department leadership last year. To address these issues, JoAnn Sekiguchi (ACC) and Jeff Holden (Department Administrator) held meetings to discuss solutions with representatives from the U-M Equity, Civil Rights, and Title IX Office, Architecture-Engineering and Construction Office, Key Office, Medical School Space and Facilities and outside contractors. The U-M ADA Director, Christina Kline, and Associate Director, Megan Marshall, also met with individual department members to learn about their personal experiences.

Issues that were discussed included:

(1) Entry doors to North, South and West Lecture Halls in MSII; (2) Accessibility to stage in MSII lecture halls; (3) West entrance to DHG office area (4909 Buhl); (4) Entry door between MSII and the Taubman Health Sciences Library; and (5) Accessibility to MSII restrooms. Wheels are currently in motion to resolve some of these issues. Installation of power door operators, card readers, and a resolution to improve lecture stage accessibility are under review by the appropriate offices and may be completed in the next year. Issues requiring significant structural alterations, i.e., restroom renovations, will be reassessed when major building renovations are planned (5-10 years).



Special thanks to Alexandra Santiago-Lindsay who helped with all aspects of the newsletter, Jenny Russell (newsletter design), and everyone who contributed text and photos for the newsletter.