Holly Hardin Zimmerman, MS, CGC
holly.zimmerman@unmc.edu

Campus Address

College of Allied Health Professions, BTH 5015
984000 Nebraska Medical Center
Omaha, NE 69198-4000
(402) 559-6954

Education

University of Southern Mississippi, August 2000 – May 2004
Bachelor of Science, Biology

University of South Carolina, August 2005 – May 2007
Master of Science, Genetic Counseling

Continuing education training

University of Nebraska Medical Center (UNMC) 2018
Health Professions Teaching & Technology coursework
HPTT 622, Cognitive Psychology
HPTT 601, Foundations in Health Professions Education

Excellent Teacher: Faculty Edition 2017
An online course offered to UMMC faculty to educate about effective teaching. Information presented includes Teaching and Communication, Curriculum Design, Feedback and Evaluation, and Ethics and Professionalism.

Academic appointments

Assistant Professor, November 2017 – present
University of Nebraska Medical Center (UNMC)
College of Allied Health Professions

Assistant Professor, June 2018 – June 2021 (courtesy appointment)
Munroe-Meyer Institute for Genetics and Rehabilitation
Department of Genetic Medicine

Assistant Professor**, September – October 2017
Instructor*, July 2011 – September 2017
University of Mississippi Medical Center (UMMC)
Department of Pediatrics
**Appointed to faculty in recognition of teaching efforts.*
***I initiated discussions with the Chair of Pediatrics, Director of Human Resources, and Chief of Faculty Affairs to discuss faculty promotion. The Chair ultimately approved my promotion request. I was offered the faculty title of Assistant Professor September 2017.In addition, I successfully advocated for faculty titles for all genetic counselors on campus.*

Certifications and licenses

Certification: American Board of Genetic Counseling, 2009 – 2019, 2020 – 2024

License: State of Nebraska, #158

Basic Life Support

Grant Support

Maternal Child Health Leadership Education in Neurodevelopmental and Related Disabilities (LEND) Interdisciplinary Training Program | 0.05 FTE | July 2019 – present

Principal Investigator: C Ellis, MD

Professional Experience

Inaugural Program Director — November 2017 – present
University of Nebraska Medical Center (UNMC), Omaha, NE
College of Allied Health Professions (CAHP)
Serve as chief executive office of the Genetic Counseling program. Oversee the design, organization, administration, and continual review of the curriculum, clinical, and research components. Establish professional relationships throughout UNMC and the Omaha medical community to support the training of genetic counseling students.

Genetic Counselor — June 2007 – October 2017
University of Mississippi Medical Center (UMMC), Jackson, MS
Department of Pediatrics
Created a position within the Division of Genetics and served as the state's only genetic counselor for four years (2007-2011) gaining experience in general, prenatal, pediatric, and cancer genetics. Established clinic operations for pediatric and prenatal clinics. Developed genetic counseling services at UMMC and doubled the number of patients seen by the genetics team. Incorporated genetic counseling services to the UMMC Fetal Center in 2010. Recruited two additional genetic counselors in 2011. Initiated licensure efforts. Developed new clinics including the Genetic Counseling Clinic and Hospital Follow-up Clinic. Developed an inpatient consultation service model coordinated by a genetic counselor. Served on several multi-disciplinary teams including Craniofacial Team, Fetal Center, Gender Medicine Team, and Inpatient Consults. Supported and supervised genetic counselors. Created a Journal Club for Genetic Counselors and initiated monthly clinic meetings for the genetic counseling team members. Implemented team-building services for the division including Birthday Club.

Genetic counselor for the following clinics:

- General/Pediatric Genetics Clinic (2007 – 2017)
- Craniofacial Clinic (2007 – 2011)
- Fetal Center (2010 – 2011)
- Genetic Counseling Clinic (2012 – 2017)
- 22q Clinic (2013-2014)
- Hospital Follow-up Clinic (2013 – 2016)
- Coordinator of Inpatient Consults (2012 – 2016)

Honors & Awards

University of South Carolina Genetic Counseling Alumni Award 2019

UMMC Trailblazer Teaching Award 2017
An award created by the Office of Medical Education to recognize and celebrate the time and effort faculty have put into educating physicians of the future.

Nominated for NSGC Board of Directors 2016

Selected to serve as Vice Chair of the NSGC Membership Committee 2014

UMMC Exceptional Customer Service Award 2008
Nominated by a patient

S. Robert Young Outstanding Genetic Counselor Award 2007
University of South Carolina Genetic Counseling Program
Program faculty select one member of the graduating class who has performed in an exemplary manner in every facet of their professional education.

Memberships and Offices in Professional Societies

PROFESSIONAL ORGANIZATIONS

Accreditation Council for Genetic Counseling (ACGC) 2016 – present
Program Review & Site Review Committee

Association for Genetic Counseling Program Directors 2017 – present
Education Planning Committee for 2020 Virtual Summer Retreat 2020
Membership Committee 2020 – present

National Society of Genetic Counselors (NSGC) 2006 – present
Pediatric Special Interest Group (2007 – present)
Prenatal Special Interest Group (2017 – 2018)
Leadership and Management Special Interest Group (2019 – present)
Education Special Interest Group (2014-2016)

NSGC Leadership Roles
Membership Committee
Vice-chair (2014), Chair (2015), and Past Chair (2016)
Initially selected for Vice-chair position by President-Elect based on my contribution and leadership. As Chair, I led a committee of more than 20 members to address the committee charges established by the NSGC Board of Directors. Volunteered over 50 hours. Conducted monthly conference calls and improved member engagement. Received positive performance reviews from committee members and Board of Directors.

Membership Committee Member (2011-2016)

Awards Working Group, Chair (2015)
Mentor Program, Chair (2011-2014)
SIG Engagement Subcommittee (2015-2016)

Professional Status Survey Subcommittee (2010-2014)
Work Environment Leader
Student/New Member Subcommittee

Genetics Education and Outreach Network (GEON) 2010 – 2018

Southeastern Regional Genetics Group 2005 – 2017

Committee Contributions

UNMC Faculty Senate (Elected 2020)
College of Allied Health Professions
CAHP Leadership Council
CAHP Admissions Committee
CAHP Curriculum Committee
CAHP AEFIS Implementation Team
CAHP Professionalism Ceremony Planning Committee
Marshall for 2019 Convocation
Munroe Institute for Genetics and Rehabilitation
Genetic Counseling committee
Genetic Medicine/Human Genetics Laboratory Strategic Planning Committee
LEND Faculty Member

Presentations

-Regional

Genetic Testing and the Value of Genetic Counseling. Jackson Heart Study Community Monitoring Board Meeting. Jackson, MS. June 2011.

Identifying barriers to genetic referrals: How can we improve the services available to rural practice physicians who care for pediatric patients? Platform presentation. Southeastern Regional Genetics Group Meeting. Charleston, SC. July 2008.

-National

Sharing the KEYS to Engaging our Committee Members. Interactive Webinar Presentation to NSGC Committee Chairs. August 2015.

The Ups and Downs of a Diagnostic Journey. NSGC Pediatric Special Interest Group Webinar Series. October 2014.

A Bigger Piece of the Pie: Advocating for Additional Resources for Your Service. NSGC Webinar Series entitled "Business Foundations for Genetic Counselors." June 2014.

Counseling Patients Experiencing a Poor Prenatal Diagnosis. Genetic Counselor Panel. NSGC 31st Annual Education Conference. Boston, Massachusetts. October 2012.

Family Dynamics in Hunter Syndrome. Breakfast Program entitled *Three Lysosomal Storage Disorder Case Studies: Unique Counseling Consideration.* Sponsored by Shire Human Genetic Therapies. National Society of Genetic Counselors Annual Education Conference. Los Angeles, CA. November 2008.

-Invited seminar presentations (non-unmc)
Genetic Counseling Program at University of Alabama Birmingham

February 2017: *Counseling Special Populations* (3 hours) as part of GC 506: Theory and
Practice of Genetic Counseling
April 2017: *Consults 101*

-5 most significant or recent presentations
Ethical Issues in Genetic Counseling. UMMC Center for BioEthics. Summer Program in BioEthics. UMMC. July 2016.

Genetic Counseling: The field where it's A=T. Mississippi State University. Starkville, MS. February 2012.

Community Service & Outreach

e-Module: EBeats
Career Day for Native American STEM group
StepUp Omaha
Creighton University: Exploring Health Professions Expo
High School Alliance

APPENDIX B: Publications

Articles published in scholarly journals

Chemin, J., Siquier-Pernet, K., Nicouleau, M., Barcia, G., Ahmad, A., Medina-Cano, D., Hanein, S., Altin, N., Hubert, L., Bole-Feysot, C., Fourage, C., Nitschké, P., Thevenon, J., Rio, M., Blanc, P., Vidal, C., Bahi-Buisson, N., Desguerre, I., Munnich, A., Lyonnet, S., Boddaert, N., Fassi, E., Shinawi, M., Zimmerman, H., Amiel, J., Faivre, L., Colleaux, L., Lory, P., Cantagrel, V. (2018). De novo mutation screening in childhood-onset cerebellar atrophy identifies gain-of-function mutations in the CACNA1G calcium channel gene. *Brain,* Jun 5 [Epub] doi: 10.1093/brain/awy145

Wang, H., Salter, C.G., Refai, O., Hardy, H., Barwick, K.E.S., Akpulat, U., Kvarnung, M., Chioza, B.A., Harlalka, G., Taylan, F., Sejersen, T., Wright, J., Zimmerman, H.H., Karakaya, M., Stüve, B., Weis, J., Schara, U., Russell, M.A., Abdul-Rahman, O.A., Chilton, J., Blakely, R.D., Baple, E.L., Cirak, S., Crosby, A.H. (2017). Choline transporter mutations in severe congenital myasthenic syndrome disrupt transporter localization. *Brain, 140*(11), 2838-2850.

Eldomery, M.K., Akdemir, Z.C., Vögtle, F.N., Charng, W.L., Mulica, P., Rosenfeld, J.A., Gambin, T., Gu S., Burrage, L.C., Al Shamsi, A., Penney, S., Jhangiani, S.N., Zimmerman, H.H., Muzny, D.M., Wang, X., Tang, J., Medikonda, R., Ramachandran, P.V., Wong, L.J., Boerwinkle, E., Gibbs, R.A., Eng, C.M., Lalani, S.R., Hertecant, J., Rodenburg, R.J., Abdul-Rahman, O.A., Yang, Y., Xia, F., Wang, M.C., Lupski, J.R., Meisinger, C., Sutton, V.R. (2016). MIPEP recessive variants cause a syndrome of left ventricular non-compaction, hypotonia, and infantile death. *Genome Medicine, 8*(1), 106.

Abrams, A.J., Hufnagel, R.B., Rebelo, A., Zanna, C., Patel, N., Gonzalez, M.A., Campeanu, I.J., Griffin, L.B., Groenewald, S., Strickland, A.V., Tao, F., Speziani, F., Abreu, L., Schüle, R., Caporali, L., La Morgia, C., Maresca, A., Liguori, R., Lodi, R., Ahmed, Z.M., Sund, K.L., Wang, X., Krueger, L.A., Peng, Y., Prada, C.E., Prows, C.A., Schorry, E.K., Antonellis, A., Zimmerman, H.H., Abdul-Rahman, O.A., Yang, Y., Downes, S.M., Prince, J., Fontanesi, F., Barrientos, A., Németh, A.H., Carelli, V., Huang, T., Zuchner, S., Dallman, J.E. (2015). Mutations in SLC25A46, encoding a UG01-like protein, cause an optic atrophy spectrum disorder. *Nature Genetics, 47*(8), 926-32.

Schilter, K.F., Reis, L.M., Schneider, A., Bardakjian, T.M., Abdul-Rahman, O., Kozel, B.A., Zimmerman, H.H., Broeckel, U., Semina, E.V. (2013). Whole-genome copy number variation analysis in anophthalmia and microphthalmia. *Clinical Genetics, 84*(5), 473-81.

Veerapandiyan, A., Abdul-Rahman, O.A., Adam, M.P., Lyons, M.J., Manning, M., Coleman, K., Kobrynski, L., Taneja, D., Schoch, K., Zimmerman HH, Shashi V. (2011). Chromosome 22q11.2 deletion syndrome in African-American patients: a diagnostic challenge. *American Journal of Medical Genetics, 155A*(9), 2186-95.

Carr, C.W., Zimmerman, H.H., Byrd, A.C., Lese Martin, C., Vikkula, M., and Abdul-Rahman, O.A. (2011). 5q14.3 *Neurocutaneous Syndrome*: A novel continguous gene syndrome caused by simultaneous deletion of RASA1 and MEF2C*. American Journal of Medical Genetics, 155A*(7), 1640-5.

Hussain, S.A., Zimmerman, H.H., Abdul-Rahman, O.A., Hussaini, A.M., Parker, C., Khan, M. (2011). Optic nerve enlargement in Krabbe disease: a pathophysiologic and clinical perspective*. Journal of Child Neurology*; *26*(5), 642-644.

Carr, C.W., Moreno-De-Luca, D., Parker, C., Zimmerman, H.H., Ledbetter, N., Lese Martin, C., Dobyns, W.B., Abdul-Rahman, O.A.. (2010). Chiari I malformation, delayed gross motor skills, severe speech delay, and epileptiform discharges in a child with FOXP1 haploinsufficiency*. European Journal of Human Genetics, 18*(11), 1216-20.

Abstracts

Wang H, Hardy H, Refai O, Barwick K, Zimmerman HH, Weis J, Baple E, Crosby A, Cirak S. Recessively-acting choline transporter mutations associated with severe neurodevelopmental delay and congenital hypotonia. Abstracts of the 52nd Workshop for Pediatric Research: Frankfurt, Germany. 27-28 October 2016. *Molecular and Cellular Pediatrics*, 4(Suppl 1), 5. http://doi.org/10.1186/s40348-017-0071-0

Lobo R, Zimmerman HH. Let's put it to the test: Using maternal urine as a prenatal screen for Smith-Lemli-Opitz syndrome (SLOS). *J Genet Couns* 2012; 21: 970.

Zimmerman HH, Abdul-Rahman O. A De Novo Balanced Complex Chromosomal Rearrangement in a Non-Dysmophic Male with Normal Growth Parameters and Development. Presented at the Annual Educational Conference for the National Society of Genetic Counselors. *J Genet Couns* 2010; 19(6): 712.

Abdul-Rahman OA, Zimmerman HH, Adam MP, Lyons MJ, and Shashi V. 22q11.2 deletion syndrome in the African American population: A diagnostic challenge. Presented at the David W. Smith Workshop on Malformations and Morphogenesis. August 29, 2010. Union, Washington.

Yatsenko AN, Zhang S, Abdul-Rahman O, Zimmerman HH, Pursley A, Wong LJ. A novel mtDNA mutation, 1630A>G, in the tRNA Val gene is associated with a neuromuscular phenotype. Presented at the Annual Meeting of American College of Medical Genetics. November 12, 2008. Philadelphia, Pennsylvania.

Zimmerman HH, Abdul-Rahman O, Justice N, Lese-Martin C. Haploinsufficiency of FOXP1 is associated with Chiari I malformation and speech/language disorder. *J Genet Couns* 2008; 17(6): 627.

Abdul-Rahman OA, Zimmerman HH, Ledbetter N, Lese-Martin C. Haploinsufficiency of

FOXP1 is associated with Chiari I malformation and speech/language disorder. Presented at the Annual Meeting of the David W. Smith Workshop. August 10, 2008, Mount Tremblant, Quebec, Canada.

Yu CW, Evans OB, Huang H, Thompson C, Abdul-Rahman OA, Hardin HM. Identification of mosaic partial trisomy 12p (Pallister-Killian Syndrome) by FISH analysis. Presented at the Annual Meeting of the American Society of Human Genetics, October 26, 2007, San Diego, CA.

APPENDIX C: TEACHING ACTIVITIES

UNMC Genetic Counseling Program

Courses taught

GENC 610 (offered Fall 2019 and 2020 – 3 credit hours)
GENC 611 (offered Spring 2020 and 2021 – 3 credit hours)
GENC 708 (offered Fall 2019/2020 and Spring 2020/2021 – 1 credit hour)
GENC 710 (offered Fall 2020 – 2 credit hours)
GENC 711 (offered Spring 2020 – 2 credit hours)
GENC 718 (offered Spring 2020 – 3 credit hours)
GENC 720 (offered Spring 2020 – 1 credit hour)

Courses created

GENC 645 Embryology & Teratology

Worked with Dr. Keely Cassidy and Beth Conover

All courses listed in the "Courses taught"

Capstone Project Committees

Sierra Clark, 2020-2021
Erin Loughney, 2020-2021
Emily Toering, 2020-2021

UNMC Faculty Development Sessions

Facilitator, The Art of Thinking on Your Feet 2020