

2021
ADMINISTRATIVE COUNCIL REPORT
MARCH 3, 2021



NEUROSCIENCES DEPARTMENT
UNIVERSITY OF SOUTH DAKOTA
SANFORD SCHOOL OF MEDICINE

NEUROSCIENCES REPORT TO THE ADMINISTRATIVE COUNCIL

NEUROLOGY

- The faculty of the Department of Neurosciences interacts with medical students during each of the students' four years (Pillars 1, 2, 3).
- In Pillar 1, the faculty participates in periodic clinical correlations in neurology as well as sessions on ethics/professionalism.
- Dr. Valentina Joseph serves as Clerkship Director for Pillar 2 students and Dr. Jennifer Kruger is the Clerkship Coordinator in Rapid City. Dr. Andrew Ridder has assumed the Campus Coordinator position for the Avera Pillar 2 students.
- The mini-block experience for the students in Sioux Falls, Rapid City and Yankton has been phased out. This effectively provides more LIC days on neurology. The FARM students still will have a week-long mini-block experience with half of them assigned to Sanford and half to Avera.
- As Yankton does not have a local neurologist, the Yankton students spend their LIC experiences in Sioux Falls, divided between the Avera faculty and the Sanford faculty.
- Various electives in neurology are currently available in Pillar 3. Fourth year medical students (Pillar 3) have the option of spending elective time on two teaching services at Sanford – a general neurology service and a stroke service. The stroke team works closely with the neuro-critical care ICU team. Also a Neuro-Critical Care elective is offered to Pillar 3 students. Additionally, Sanford, Avera and Rapid City Neurology offer general neurology electives that can be combinations of outpatient and inpatient experiences.
- Each of the major hospital systems – Avera, Sanford and Monument – now have designated neurohospitalists doing the inpatient work. This provides Pillar 2 students an opportunity to occasionally spend time in the hospital on an LIC day or during white space time.
- In 2020, 39 students opted for electives in Neurology, Neuro Critical Care and PM&R. The Pillar 3 electives offer students frequent opportunities for collaborative interaction between medical students and residents.
- The Neurosciences Department is actively involved in resident education. Residents from Internal Medicine, Psychiatry, Family Medicine and Transitional Year have clinical rotations with the Neurosciences faculty. Internal Medicine residents have a required one month rotation on Neurology and Psychiatry residents spend two months on a Neurology rotation. In Sioux Falls, the residents spend much of their neurology rotation time on the Neurology Teaching Services.
- The Student Interest Group in Neurology (*SIGN*) was established in 2014 and remains available for students. Student members of *SIGN*, as well as all Pillar 2 students, electronically receive the *Neurology Case of the Week* on D2L. Students are encouraged

to review the cases and answer the focused clinical questions that follow. This format provides an opportunity for ongoing student/faculty interaction. Such weekly interaction is empathized particularly for the FARM students and Pillar 2 students in Yankton.

- The Department is committed to achieving comparable educational experiences on all campuses. In 2020, Dr. Freeman provided a “Neurology Day” for the FARM students. Each student made a formal presentation of a case they had encountered. Dr. Freeman also continues to offer telemedicine neurology consultations to FARM sites in order to promote student involvement in the evaluation of patients with neurologic disease.
- One of our faculty members, Dr. Abdul Alchaki, has developed an extensive online neurology review course. This includes written material and test questions on the topics covered. Those subjects include the neurological examination, stroke, coma, epilepsy, headache, memory disorders, movement disorders, multiple sclerosis and neuromuscular diseases. This course was initially developed for students opting to take a neurology elective during Pillar 3. Portions of the course will also be adapted for Pillar 2 students during their LIC.

SECTION OF ETHICS AND HUMANITIES

- The Neuroscience Department’s Section of Ethics and Humanities has a diverse and active faculty committed to developing a strong curriculum for Pillars 1, 2 and 3. Dr. LuAnn Eidsness continues to serve as the Chair of the Section. Gretchen Spars, MA, MDiv and Ann Cook, PhD serve as coordinators for the Bioethics program and teach the online courses.
- Four sessions focusing on ethics/professionalism are conducted for Pillar 1 students during their first eight months.
- The Section provides a required online course, *Clinical Ethics*, for all Pillar 2 students throughout the state (the three major campuses and the FARM sites). The students are divided into 4 cohorts, each with an assigned faculty mentor. This curriculum promotes discussions centered around all major clinical disciplines. In addition to the online teaching component of the *Clinical Ethics* course, the students have small group Zoom meetings in their 5th week and a seminar in the 12th week that focuses on moral courage and includes a panel of five physicians of varying specialties. The weekly themes of this course are aligned with the ethics and social competencies highlighted in the step 2 USMLE examinations.
- The department offers three core online electives for Pillar 3 students – *Advanced Studies in Bioethics*; *Ethical Foundations for Clinical Research*; and *Ethics, Professionalism and Leadership*. These courses serve as the foundation for the Bioethics Certificate (12 elective hours) that is offered by the Section of Ethics and Humanities. Another core online class has been developed - *Bioethics, Medicine and Law*. This will be offered for the first time during 2021. There are 14 students in the graduating class of 2021 projected to obtain the Bioethics Certificate. Courses applicable to the 12 credit requirement include the one credit online *Clinical Ethics* course that all Pillar 2 students take.

- During 2020, the faculty willingly adapted to adding and moving classes to accommodate students who were held out of clinical activities because of the covid pandemic.
 - *Humanities and Medicine* (NEUR 825 - April 2020) – 8 students enrolled (This class is usually scheduled to be held in February and this April course was added due to the pandemic)
 - *Advanced Studies in Bioethics* (NEUR 850 - February 2020) – 22 students enrolled
 - *Advanced Studies in Bioethics* (NEUR 850 - March/April 2020) – 51 students enrolled (This class was added due to the pandemic)
 - *Ethics, Professionalism and Leadership* (NEUR 851 - March 2020) – 25 students enrolled
 - *Ethical Foundations for Clinical Research* (NEUR 852 - October 2020) – 12 students enrolled
 - The start of the Pillar 2 *Clinical Ethics* was moved from the scheduled time in August to March to accommodate the students during the pandemic.
- Various other Pillar 3 electives in bioethics are offered. *Ethical Issues in Medicine* offers the student's time to expand knowledge of bioethics in clinical settings and by reading/discussing issues with interdisciplinary Section faculty. Special sessions of this course were offered during the spring of 2020 because of the pandemic. Currently the framework of this course is being refined and expanded to provide added structure for students going forward. *Spirituality & Medicine* explores the role spirituality and religion play in a patient's healing and how a physician's own beliefs may influence the approach to illness, healing and personal life. The course has been facilitated by Dr. Michael Elliott (Chief Medical Officer, Avera McKennan Hospital). *Humanities and Medicine* is a course that utilizes short stories, poetry, essays, video and music to explore aspects of illness and caregiving. For 2021, this course is being offered during February and is entirely online. Nineteen students are enrolled. The core faculty for this course are Jerome Freeman, MD, Ellen Schellinger, MA and Peter Hoelsing, PhD.
- Members of the Section continue to work closely with the DeGroot Center at Sanford USD Medical Center. The Center is dedicated to bioethics education, humanities and the healing arts. The mission of the Center parallels and complements the work being done by the Section. The principle goal of the Center is education. The faculty of the Center are also active faculty members with the Section of Ethics and Humanities. Ellen Schellinger has received extensive training in Mindfulness Based Stress Reduction (MBSR) through the University of Massachusetts Center for Mindfulness. She teaches a formal MBSR course and also participates in periodic lectures for Pillar 1 and Pillar 2 students.

SSOM KINDNESS PROJECT

The Kindness Project has been recognized and embraced by students, faculty and staff throughout the state. An ongoing effort is being made to actively promote discussions of kindness between faculty and students. A qualitative study of student perceptions of kindness is being conducted by Jamie Messerli and other faculty in the Section of Ethics and Humanities. The healthcare systems (including Avera, Monument and Sanford) have expressed interest in and support for the Kindness Project. Activities during the past year to support the Kindness Project include:

- White Coat Ceremony and Orientation Week
- Neurosciences has provided a grant of \$2500 to each campus with the request that students design kindness activities appropriate to their communities.
- November 13th, 2020 was World Kindness Day (as noted by Dr. Susan Anderson). Through a collaboration with Jason Kemnitz, EdD a kindness video was developed that includes comments from faculty and students. This video can be seen on YouTube: <https://youtu.be/wTo4X15eatQ>
- The periodic Medical Student Affairs Connections regularly includes a comment from Dean Bragg about some element of kindness.
- Dr. Pat Manzerra has incorporated a question about kindness that is posed to medical school applicants.
- In the Pillar 2 *Clinical Ethics* course and in the Pillar 3 Bioethics electives, students and faculty regularly integrate reflections on kindness with the ethical issues that are considered.
- Dr. William Mayhan has expressed an interest in developing a kindness component to the Research and Scholarship aspect of the Strategic Plan.

LIFECIRCLE SOUTH DAKOTA

The Academic Work group consists of interdisciplinary faculty representing medicine, nursing, chaplaincy, social work and pharmacy. This group is responsible for the Interdisciplinary Palliative Care (IPC) seminar (started in 1999) with the goal to improve care at the end-of-life. This Seminar occurs in three ½ day sessions that begin with home visits in inter-professional dyads, followed by large group didactic education, and then small group discussion. Didactic content also occurs on an online platform through Desire2Learn. In addition, the Seminar is to promote mutual recognition and value the inter-professional roles. Currently, students in medicine, nursing, pharmacy, social work and chaplaincy/ministry are participating in the seminar. This seminar is required for medical students to learn how to care for patients and their families at the end of life. The Seminar occurs in Sioux Falls, Rapid City and Yankton; the FARM students participate in their FARM community.

With the COVID restrictions in 2020, the home visits were done via Zoom or WebEx with a small number done in person; and the didactic portion of the Seminars were held via Zoom. Even with these challenges, the feedback from the medical students remained positive as noted by their comments in their journals.

The Public Policy Work Group focuses on legislative activities. Its most recent focus was on POLST. To accomplish this, the LifeCircleSD Advisory Group was broadened to include state agencies, professional organizations, religious groups, and interested health care professionals. The process included two years of education regarding POLST and discussion with culmination of a bill introduced in the 2019 legislature, which passed, and SD MOST became law on July 1, 2019.

Education occurs state-wide through the Quarter Conference Calls. Any topic pertinent to end of life care is presented through audio conferencing statewide. In 2020 we focused on religious and cultural diversity. We had guest speakers representing Native Americans, Hispanics, Muslims, and African Americans and Blacks.

NEUROSCIENCES FACULTY

Sanford Health

Abdul Alchaki, MD	Emily Hutchinson, CMP
Nessim Amin, MD	Christopher Janssen, MD
Susan Assam, MD	Fanny Jaquez, MD
Thomas Boetel, DO	Peter Johnson, MD
Molly Clark, PharmD, MHA	Valentina Joseph, MD
Erica DeBoer, MA, RN	Jae Kim, MD
Lisa Docken, RN	Eugenio Matos, MD
Kathryn Florio, DO	Divyajot Sandhu, MD
Jerome Freeman, MD	Nnamdi Uhegwu, MD
John Hansen, MD, MPH	Michelle Van Demark, RN, MSN
	Xiyan Yi, MD

Cross Appointments to Neurology

J. Jeffery Baka, MD (Radiology)	Thomas Free, DO (Radiology)
David Brechtelsbauer (Family Medicine)	Troy Gust, MD (Neurosurgery)
Aaron Berg, MD (Radiology)	Julie Johnson, MD (Pediatrics)
Larry Burris, DO (Internal Medicine)	Shawn Vuong, MD (Neurosurgery)
Edward Czarnecki, MD (Radiology)	Bryan Wellman, MD (Neurosurgery)

Monument Health - Neurology & Rehabilitation – Rapid City

Robert Finley, MD	Craig Mills, MD
Steven Hata, MD	Matthew Simmons, MD
Jennifer Kruger, MD	Brian Tschida, MD

Monument Health Rapid City Hospital

Rebecca Holso, BSN

The Rehab Doctors – Rapid City

Trevor Anderson, MD	Brett Lawlor, MD
Christopher Dietrich, MD	Peter Vonderau, MD

Avera Medical Group Neurology

Jeffrey Boyle, MD	Andrew Ridder, MD
Yunis Mayasi, MD, MS	William Rossing, MD
Carol B. Nelson, MD	Lisa Viola, DO
Justin Persson, MD	Todd Zimprich, MD

Avera Medical Group Physical Medicine & Rehabilitation

Thomas Ripperda, MD	Jose Santos, MD
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Yankton Medical Clinic

Judith Peterson, MD

Veteran's Administration

Xuesheng Feng, MD, PhD (Sioux Falls, SD)	Laurie Weisensee, MD (Fort Meade, SD)
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Other

Mei He, MD
Misty Jensen, PharmD
Kathleen Kovarik, PhD

Robert MacLachlan, MD
Adil Shaikh, MD

Faculty with Appointments/Cross Appointments to Section of Ethics and Humanities

Sheila Agee, MFA	Peter Hoelsing, PhD (Dakota State University)
Cameo Anders, JD (Anders Law Office)	Wendell Hoffman, MD (Internal Medicine)
Matthew Barker, MD (Obstetrics/Gynecology)	Kenneth Kirton, MD (Family Medicine)
Jordan Baye, PharmD, MA (Sanford Health)	Jamie Messerli, MS (Sanford Research)
Mark Beard, MD (Family Medicine)	Beth Mikkelsen, MD (Internal Medicine)
Lora Black, RN, MS (Sanford Health)	Ann Pederson, ThD (Augustana University)
Ann Cook, PhD (University of Montana)	Shelley Nielson, MD (Obstetrics/Gynecology)
LuAnn Eidsness, MD (Internal Medicine)	Ellen Schellinger, MA (Sanford Health)
Michael Gibbs, MHA (Avera Health)	Matthew Simmons, MD (Neurology)
Catherine Hajek, MD (Internal Medicine)	Gretchen Spars, MDiv, MA (Sanford Health)
Daniel Heinemann, MD (Family Medicine)	Tiffany Von Wald, MD (Obstetrics/Gynecology)

NEUROSCIENCES CASE CONFERENCE 2020–2021

This clinical and teaching session is held each Monday from 12:00-1:00 PM at Sanford USD Medical Center. For the past year these sessions have been done by teleconferencing rather than with a large in-person group.

STUDENT RECOGNITIONS

- In 2021, the Section of Ethics and Humanities has nominated four students for bioethics scholarships: Kaitlyn Dorn and Avery Olson (Freeman Scholarship for Excellence in Bioethics); Boggy Anton (Excellence in Neurosciences Award); and Kindra Sullivan (Bioethics Leadership and Service Award)
- The department provides funding, as requested, to allay expenses for medical students to attend the annual meeting of the American Academy of Neurology.

PUBLICATIONS 2020

Articles:

1. **Alchaki A**, Goodman A. MS Minute; Ibutilast in multiple sclerosis. Practical Neurology. Jan 2020
2. Shivamurthy VKN, Koul P, **Alchaki A**, Baisre A, Hillen ME. (2020) Intraventricular Neurocysticercosis Presenting as Rapidly Progressive Dementia. Infect Dis Diag Treat 4: 140. DOI:10.29011/2577-1515.100140.

3. **Anders C.** Individual and Institutional Religious Exemptions from Vaccines Federal Law and Catholic Teaching. *The National Catholic Bioethics Quarterly* 2020 Autumn; 20(3):501-523. doi.org/10.5840/ncbq202020346
4. Ellithi M, **Baye J**, Wilke RA. *CYP2C19* genotype-guided antiplatelet therapy: promises and pitfalls. *Pharmacogenomics*. 2020 Aug;21(12):889-897. doi: 10.2217/pgs-2020-0046. Epub 2020 Jul 29. PMID: 32723143; PMCID: PMC7444625.
5. **Baye JF**, Petry NJ, Jacobson SL, Moore MM, Tucker B, Shaaban S, Massmann AK, Clark NM, Schultz AJ. Malignant hyperthermia susceptibility: utilization of genetic results in an electronic medical record to increase safety. *Pharmacogenomics*. 2020 Nov;21(17):1207-1215. doi: 10.2217/pgs-2020-0088. Epub 2020 Oct 29. PMID: 33118445.
6. Powell SF, Gold KA, Gitau MM, Sumey CJ, Lohr MM, McGraw SC, Nowak RK, Jensen AW, Blanchard MJ, Fischer CD, Bykowski J, Ellison CA, **Black LJ**, Thompson PA, Callejas-Valera JL, Lee JH, Cohen EEW, Spanos WC. Safety and Efficacy of Pembrolizumab With Chemoradiotherapy in Locally Advanced Head and Neck Squamous Cell Carcinoma: A Phase IB Study. *J Clin Oncol*. 2020 Jul 20;38(21):2427-2437. doi: 10.1200/JCO.19.03156. Epub 2020 Jun 1. PMID: 32479189; PMCID: PMC7365766.
7. **Black L**, Kulkarni D. Perspectives of Oncology Nursing and Investigational Pharmacy in Oncology Research. *Semin Oncol Nurs*. 2020 Apr;36(2):151004. doi: 10.1016/j.soncn.2020.151004. Epub 2020 Apr 4. PMID: 32265165.
8. **Cook A, Freeman J, Spars G.** Medical Students' View of Kindness: What Really Matters? *S D Med*. 2020 Apr;73(4):148-149. PMID: 32445300.
9. **Freeman J.** The Legacy (and Kindness) Corridor. *S D Med*. 2020 Feb;73(2):52. PMID: 32135051.
10. **Freeman J.** The Eyes of March: Reflections on the Face Mask Culture. *S D Med*. 2020 Jun;73(6):275. PMID: 32580261.
11. Devasahayam J, Oliver T, **Joseph V**, Nambiar S, Gunasekaran K. Pulmonary hypertension in end-stage renal disease. *Respir Med*. 2020 Apr;164:105905. doi: 10.1016/j.rmed.2020.105905. Epub 2020 Feb 19. PMID: 32094103.
12. Heiberger CJ, Mehta T, **Kim J, Sandhu D.** Remote ischemic conditioning: the brain's endogenous defense against stroke. *Neural Regen Res*. 2020 Dec;15(12):2249-2250. doi: 10.4103/1673-5374.284987. PMID: 32594041.
13. Miller MM, Dakay K, Henninger N, **Mayasi Y**, Mahta A, Yakhkind A, Hannoun A, Thompson BB, Wendell LC, Carandang R. Association of Dexamethasone with Shunt Requirement, Early Disability, and Medical Complications in Aneurysmal Subarachnoid Hemorrhage. *Neurocrit Care*. 2020 Aug 26. doi: 10.1007/s12028-020-01059-2. Epub ahead of print. PMID: 32851604.
14. Gusdon, A. M., Cho, S. M., **Mayasi, Y.**, Malani, R., Püttgen, H. A., Duffield, A., Bolaños-Meade, J., & Lim, M. (2020). Chronic Lymphocytic Leukemia Resulting in Hemorrhagic Brain Masses After Sepsis. *The Neurohospitalist*, 10(1), 64–68. <https://doi.org/10.1177/1941874419859758>
15. Cho SM, Ziai W, **Mayasi Y**, Gusdon AM, Creed J, Sharrock M, Stephens RS, Choi CW, Ritzl EK, Suarez J, Whitman G, Geocadin RG. Noninvasive Neurological Monitoring in Extracorporeal Membrane Oxygenation. *ASAIO J*. 2020 Apr;66(4):388-393. doi: 10.1097/MAT.0000000000001013. PMID: 31045914.
16. **Mayasi Y**, Puttgin HA, Nelson S. Residents and Fellows in Neurocritical care. *Current clinical neurology*. doi: 10.1007/978-3-030-3654-6_29
17. Kazi S, Lommen M, **Persson J.** Acute Flaccid Myelitis in an Adult. *Neurologist*. 2020 Sep;25(5):148-150. doi: 10.1097/NRL.000000000000287. PMID: 32925488.

18. Busch C, Otta J, **Sandhu D**, Pudenz M. Painful Post-traumatic Trigeminal Neuropathy Occurs After Third Molar Extraction. *SD Medicine*. 2020 Sep; 73(9):414-419. PMID: 33260281.
19. Draine J, **Simmons M**. A Case of Copper Deficiency Myeloneuropathy Precipitated by Zinc Ingestion and Bariatric Surgery. *S D Med*. 2020 Apr;73(4):178-180. PMID: 32445306.
20. Ferrell K, Rohlf A, Hansen K, **Von Wald T**. Endometriosis and Infertility. *S D Med*. 2020 Aug;73(8):350-355. PMID: 32809293.