Klingenstein Third Generation Foundation

A KLINGENSTEIN PHILANTHROPY

Cultivating the next generation of child and adolescent mental health professionals

Medical Student Program Manual
2023-2024

Table of Contents

Overview & Summary

Since 2002 the Klingenstein Third Generation Foundation (KTGF) has provided funding to a coordinated network of medical schools across the country to administer the Klingenstein Medical Student Program (MSP). Each school selected to participate as an MSP carries out a unique, customized program that encourages medical students to pursue child and adolescent psychiatry as a career specialty. All programs emphasize mentorship and clinical experiences. Programs also expose medical students to research, advocacy, and other unique opportunities. The MSPs participate in many other important projects including an annual KTGF National Medical Student Conference, special lectures, and networking opportunities with child and adolescent psychiatry leaders. While some participants do not go on to pursue psychiatry, they will gain a broader perspective of behavioral/mental health from their time in the KTGF MSP.

Since the program's inception, over 1000 students have participated in the MSP at 16 medical schools. While programming at each institution is unique, all MSPs aim to incorporate the following core program components:

- Mentorship
- Clinical experiences
- Research opportunities
- Advocacy opportunities

Program Administration

The American Academy of Child & Adolescent Psychiatry (AACAP) works with KTGF to provide programmatic support in the coordination of activities and reporting across the sites. AACAP also coordinates MSP fund administration, program evaluations, and reporting activities. In addition to the monthly and ongoing program activities taking place at each KTGF program site, KTGF Program Directors participate in important activities throughout the year.

- Semi-annual Program Director conference call
- Annual individual Program Evaluation call with with AACAP and Klingenstein Philanthropies staff, including Eliot Brenner, PhD, Executive Director
- Submission of program rosters
- Participation in a longitudinal analysis by submitting Resident Match Data on program participants
- Annual KTGF National Medical Student Conference
- Face-to-face Program Director meetings (at the KTGF National Medical Student Conference and the AACAP Annual Meeting)

Reporting & Evaluation Requirements

PROGRAM EVALUATION CALLS

Every winter, KTGF Program Directors are required to participate in a program evaluation call with KTGF and AACAP. The calls are used to determine the types of program activities at each site and to determine the program's impact. The program evaluation calls also help to highlight the reach of the program by capturing the number of participating medical students, fellows, and faculty. With data from the calls, KTGF can determine common program offerings and new clinical and research training trends.

ROSTERS

Each year in January, KTGF Program Directors submit a roster of current medical student participants, using a template that includes pertinent information such as name, email address, and phone number. These rosters are critical in order to track MSP participants over time and determine which specialties and subspecialties they match into.

MATCH DATA

By April of each year, KTGF Program Directors submit Resident Match Data. The Match data should include the names of all graduating medical students who participated in the MSP. This information allows AACAP and KTGF to measure the programs' impact on resident match choices – one important measure for success.

GRANTEE PORTAL

Through its website klingenstein.org, KTGF uses a grantee portal to manage its grants. This is where KTGF Program Directors upload their KTGF proposals, grant renewal requests, and budgets. All KTGF Program Directors set up a user name and password and create an account within the Foundant System.

KTGF is extremely sensitive to the administrative burdens placed on participating programs and has over the years sought to streamline the reporting and evaluation requirements. However, because the information we receive is critical to fully understanding and improving the program, we reserve the right to request additional information from the programs, including information from program participants and directors.

Funding, Extensions, & Renewals

Each program receives $5,000 in funding support (no indirect costs may be allocated). Funding is paid out in two disbursements of $2,500 over the course of five years. MSPs receive $2,500 in the first year and $2,500 in the third year. Disbursement of funding is contingent upon submission of required materials such as budgets, program profiles, and necessary program evaluation data. Upon the 5th year of funding, schools are eligible to apply for renewed funding. The KTGF reviews each application to determine whether it will be funded.

In considering whether to issue a renewal grant to an institution, KTGF considers a variety of factors, including but not limited to:

- The extent to which the program has sought independent funding to support the MSP;
- The strength of the plan to become self-sufficient;
- The caliber of the mentorship experiences;
- The caliber of the clinical experiences;
- The types of research opportunities offered;
- The number of students reached through the program;
- The number of faculty involved in reaching those students;
- Participation in the AACAP evaluation; and
- The proposed program design.

NO-COST EXTENSIONS

Programs should request a no-cost extension at least one month prior to the close of their grant period or one month prior to the close of their most recent no-cost extension should that program have a balance of funds greater than $500.

No-cost extensions are typically granted for one year or until the program's balance of funds becomes insufficient (less than $500).

The Program Director should submit a letter of request to Sarah Hellwege, including a brief update on program activities and plans for the extension period. In addition, Program Directors should submit an updated financial statement detailing the balance of funds and an updated budget for the use of remaining funds. Requests should be submitted via e-mail to research@aacap.org.

GRANT RENEWALS

Programs may apply for grant renewal under the following circumstances:

- One month before the expiration of their original grant contract with a balance of funds less than $500;
- At any point during a no-cost extension period when the balance of funds becomes less than $500.

Programs should apply for grant renewal by completing the online program application available through the program's Foundant account.

Grant renewal contracts will be issued in the amount of $5,000 for a five-year grant period. Funding will be disbursed in two payments, each in the amount of $2,500. The first payment will be disbursed after the grant contract has been signed. The second payment will be disbursed when the program enters its third year of the contract.

KTGF National Medical Student Conference

In 2006, the tradition of the annual KTGF Games was launched, attracting about 50 medical students and mentors from five sites across the country. The Games served as an opportunity for medical students from participating schools to come together, network, present their research and clinical projects, and engage in fun competition. Beginning in 2015, the KTGF Games were renamed the KTGF National Medical Student Conference (NMSC) to emphasize the scientific content. The KTGF National Medical Student Conference has grown to attract hundreds of participants from MSPs across the country each year.

Participating MSPs volunteer to host the national conference, ensuring rotation of the conference across the country.

Programming at the NMSC includes, but is not limited to:

- Welcome reception or dinner
- Keynote lecture by a senior child and adolescent psychiatrist(s)
- Medical student oral presentations
- Medical student poster sessions
- Networking and mentorship lunch
- Team building games

The 2021 NMSC was held virtually and hosted by the University of Iowa. The 2022 NMSC was held virtually and hosted by the University of California, Davis. The 2023 NMSC will be held at Brown University in Providence, Rhode Island.

HOST INSTITUTION ROLES

The host site of the following year's conference is responsible for the overall planning and execution of the conference. Responsibilities include, but are not limited to:

- Identifying and securing an appropriate venue and breakout rooms;
- Managing conference budget;
- Ordering food/hiring a caterer;
- Inviting and confirming faculty and other speakers;
- Managing student poster and oral presentation sessions;
- Communicating all necessary meeting details with MSPs;
- Identifying and securing housing for overnight accommodations for NMSC attendees; and
- Handling all other meeting planning logistics.

PROGRAM BUDGETS

All participating schools will receive an equal amount in funding support from KTGF to offset the costs of attending the conference. Programs will have the option to book flights through Travel Leaders to limit out-of-pocket expenses. Program budgets are inclusive of any flights booked through Travel Leaders. Flights purchased with Travel Leaders incur a $33 booking fee and are non-refundable and nontransferable. Should an attendee book a flight and cancel or modify their trip, the attendee is required to reimburse KTGF for the full amount of the ticket or change fee.

MSP Directors are also asked to participate in all conference calls and/or e-mail discussions concerning the planning or execution of the meeting.

CONFERENCE EVALUATIONS

After the KTGF NMSC, all participants complete a conference evaluation. Conference evaluations provide a clear indication of participant satisfaction. The evaluation also provides important guidance for future programming.

AACAP'S ROLE

AACAP staff serve as the liaison between KTGF and Program Directors to promote the mission of the MSP and coordinate activities across sites.

AACAP staff communicate information provided by the host school to the broader group, as well as coordinate with Travel Leaders to create a booking link for all programs and track flight confirmations received to provide an estimated headcount to the host school.

AACAP Resources and Opportunities for Medical Students

JOIN

AACAP Membership is FREE for Medical Students!
Benefits include:

- Online access to the complete *JAACAP* archive library and access to published articles available before print, as well as an annual subscription to AACAP News
- Substantially reduced registration fees for AACAP's Annual Meeting as well as other AACAP-sponsored meetings
- Career advancing opportunities using JobSource, a popular members-only online resource for job searches and placement
- Online access to members-only services on AACAP.org

For more information contact membership@aacap.org

LEARN

Learn about child and adolescent psychiatry as a career:

- Be CAP-tivated! Check out: tiny.cc/captivated
- Explore CAP as a Career! Visit www.aacap.org/capcareer
- Discover resources designed for medical students! https://www.aacap.org/AACAP/Medical_Students_and_Residents/Medical_Students/Home.aspx

VOLUNTEER

AACAP's Annual Meeting Monitor Program

- Provides an opportunity for medical students to assist AACAP staff in running Annual Meeting events while receiving FREE access to the largest gathering of child and adolescent psychiatrists
- For information, contact meetings@aacap.org

CONNECT WITH AACAP'S COMMITTEES

AACAP committees are composed of child and adolescent psychiatry members and charged by AACAP leadership to create specific objectives and deliverables designed to advance the field of child and adolescent psychiatry. As a medical student you may not be able to formally join, but you are welcome to listen in on select committee calls. To get connected, email: executive@aacap.org

For Medical Students and Residents:
Committee on Medical Students and Residents (MSR)

- Participate in trainee projects by joining committee calls
- Engage and network with peers as well as leaders across the AACAP trainee community
- To join the MSR committee listserv, contact training@aacap.org

JAACAP

The *Journal of the American Academy of Child and Adolescent Psychiatry* is AACAP's flagship journal focusing on today's psychiatric research and treatment of the child and adolescent.

JAACAP OPEN

JAACAP Open is a new peer-reviewed, open-access journal of the American Academy of Child and Adolescent Psychiatry that aims to provide outstanding peer review and efficient dissemination of articles to our global readership.

JAACAP CONNECT

JAACAP Connect is an online extension of *JAACAP*.
A core mission of *JAACAP Connect* is to engage trainees and practitioners in the process of learning throughout the lifespan via readership, authorship, and publication experiences that emphasize translation of research findings into the clinical practice of child and adolescent psychiatry.

AACAP members enjoy online access to the above *JAACAP* publications, as well as four additional Elsevier Journals.

AACAP Awards for Medical Students

SUMMER RESEARCH FELLOWSHIPS

AACAP's fellowship opportunities provide medical students with the opportunity to explore a career in child and adolescent psychiatry, gain valuable work experience, and meet leaders in the field. Fellows complete 8-12 weeks of summer training under a child and adolescent psychiatry mentor and present a poster at AACAP's Annual Meeting. Award benefits include a stipend in addition to travel support to attend four days of AACAP's Annual Meeting, including airfare, hotel, and meals.

AACAP Jeanne Spurlock, MD, Research Fellowship in Substance Abuse and Addiction for Minority Medical Students, supported by the National Institute on Drug Abuse (NIDA), and AACAP's Campaign for America's Kids

- A unique opportunity for students from underserved groups, or students whose project will focus on minorities, to explore a research career in substance use in relation to child and adolescent psychiatry
- Provides up to $4,000 for 12 weeks of summer research under a child and adolescent psychiatrist researcher/mentor

AACAP Summer Medical Student Fellowship in Child and Adolescent Psychiatry, supported by AACAP's Campaign for America's Kids

- Provides up to $3,500 for 8-12 weeks of clinical or research training under a child and adolescent psychiatrist mentor

AACAP offers assistance in connecting students with a mentor of compatible clinical/research interests. Moreover, students may apply for both awards (if the project meets both requirements); however, they may only accept one award if selected for both.

TRAVEL AWARDS

AACAP Life Members Mentorship Grants for Medical Students, supported by AACAP's Life Members Committee

The Life Members are the oldest and most distinguished members of AACAP, all having been members for at least 30 years, many of whom have served as AACAP leadership and also pioneered many of the significant discoveries and developments in child and adolescent psychiatry.

- In partnership with the Mentorship Program, this travel grant introduces recipients to the field of child and adolescent psychiatry through networking opportunities, exposure to various specialties, and interaction with Life Members at AACAP's Annual Meeting
- Provides up to $1,000 in reimbursement for travel expenses to AACAP's Annual Meeting

ADDITIONAL INFORMATION

APPLICATION DEADLINES

Application deadlines vary by award and by year. Please visit www.aacap.org to determine the exact deadline for each award.

CONTACT US

For any questions, help finding a mentor, or additional support, please contact training@aacap.org.

IMPORTANT: The availability of all awards is contingent upon receipt of adequate funding.

Contacts

KTGF MSP PROGRAM DIRECTORS LEAD

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AACAP & KTGF CONTACTS

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KTGF National Medical Student Program
https://klingenstein.org/klingenstein-third-generation-foundation/

KTGF AACAP Webpage
http://www.aacap.org/grants/KTGF

Programs At a Glance

Institution	Mentor-ship	Clinical	Research	Advocacy	Other
Brown University	X	X	X	X	X
Harvard University	X	X	X	X	X
Icahn School of Medicine	X	X	X		
Mayo Clinic	X	X	X		
Stanford University	X	X	X	X	X
Tulane University	X	X	X	X	X
University of California, Davis	X	X		X	X
University of California, Los Angeles	X	X	X		
University of Illinois at Chicago	X	X	X	X	X
University of Iowa	X	X	X	X	
University of North Caro-lina	X	X	X		X
University of Vermont	X	X	X		
Washington University at St. Louis	X	X		X	X
Yale University	X	X	X		X

Brown Alpert Medical School

The KTGF Medical Student Program at Brown University consists of mentorship, local meetings, national meetings, and advocacy/service projects. Through the mentorship component, medical students (typically 1st and 2nd year) are paired with mentors for clinical and/or research experiences. Through the meetings component, medical students attend local meetings every 1-2 months on various child psychiatry-related topics. At the national level, medical students attend the Klingenstein Medical Student National Conference, AACAP Annual Meeting, and AACAP Legislative Conference. In promoting advocacy and service, students have the opportunity to participate in health education groups at the state juvenile correctional facility.

OFFICIAL PROGRAM NAME

Henrietta Leonard Medical Student Fellowship in Child & Adolescent Psychiatry

program director	Elizabeth Lowenhaupt, MD	**# of students**	25-30
associate director	Mirabelle Mattar, MD	**# of faculty**	5-10
admin. assistant	Missy Tatum		

OPPORTUNITIES

mentorship

15-20 mentors

1 student per mentor

1-5 hours of mentorship monthly

clinical

Inpatient child & adolescent psychiatry

Outpatient child & adolescent psychiatry

Medical-psychiatric treatment programs

Juvenile corrections/forensics psychiatry

Autism & developmental disabilities

research

Neuroimaging of mood disorders

Diagnosis & treatment of preschool age children

Outcomes measures of various interventions (health ed groups for incarcerated adolescents, elective seminar for med students, etc.)

Others based on student/mentor interest with significant variation

advocacy

Participate in RICCAP (AACAP regional organization meetings, initiatives, etc.)

Health education work at juvenile correctional facility

Participate in AACAP Legislative Conference

other

Service project: Group of students running health education groups at juvenile correctional facility

Participation in case discussions: ethics, forensics, etc.

Career and academic networking opportunities through Department of Psychiatry, RICCAP, etc.

Harvard Medical School

The Donald J. Cohen Klingenstein Third Generation Foundation Fellowship is a program that provides Harvard medical students with the opportunity to explore the field of child and adolescent psychiatry. It connects students with child and adolescent psychiatry fellows and faculty. It offers clinical observation, informal/formal mentorship, lunch/dinner talks, and scholarly activities related to child and adolescent psychiatry. It also provides the opportunity for medical students to explore the field of general psychiatry in a similar fashion, as most students train in general psychiatry before entering the field of child and adolescent psychiatry.

OFFICIAL PROGRAM NAME

The Donald J. Cohen Klingenstein Third Generation Foundation Fellowship

program director	Khadijah Booth Watkins, MD	**program dates**	July 1-June 30
site directors	David Rubin, MD Swathi Damodran, MD Zheala Qayyum, MD	**# of students**	10-20
		# of faculty	20+
admin. assistant	Heather Adams		

OPPORTUNITIES

mentorship

Longitudinal

Variety over time

Official/Unofficial

clinical

Inpatient psychiatry

Consultation psychiatry

Outpatient psychiatry (general clinic)

Acute residential

Early childhood outpatient

research

Join research projects and obtain mentorship

Attend research conferences/ talks sponsored by our institution

Meet with researchers and hear about their careers

other

Harvard Medical School alumni in psychiatry host events where medical students can meet HMS psychiatry alumni from the 1960s to recent graduates

advocacy

Connect with fellows and/or faculty involved in advocacy

ADDITIONAL PROGRAM HIGHLIGHTS

Klingenstein Fellows can be informal or formally paired with residents, fellows and faculty in both General Psychiatry and Child and Adolescent Psychiatry (with emphasis on the latter) from the following institutions based on request:

- Boston Children's Hospital
- Massachusetts General Hospital
- McLean Hospital
- Beth Israel Deaconess Hospital
- Brigham and Women's Hospital
- Dana Farber Cancer Institute
- Cambridge Health Alliance

KTGF Fellows may have the opportunity to shadow in the following clinical settings:

- Inpatient child and adolescent psychiatry unit
- Residential child and adolescent psychiatry unit
- Pediatric psychiatry consultation service
- Outpatient child and adolescent psychiatry clinic, including assessments, pharmacotherapy, and potentially psychotherapy using two-way mirror
- Outpatient child and adolescent psychiatry specialty clinic (e.g., Early Psychosis)
- Resident and Fellows' call experience, which could include inpatient and emergency room

Icahn School of Medicine at Mount Sinai

The Medical Student Training Program in Child and Adolescent Psychiatry at the Icahn School of Medicine at Mount Sinai began in 2005 and provides a highly personalized and robust approach to mentorship, clinical experience, and research opportunities for medical students at all levels of training interested in working with children. We expose students to rotations in different areas of child and adolescent psychiatry and encourage independent research projects that have been funded through various sources, including AACAP Pilot Research awards. Faculty and child psychiatry fellows serve as mentors and are paired with students. Students and mentors meet individually on a regular basis and monthly dinner meetings are also held with the entire group to process clinical experiences, share ideas, and listen to invited guest speakers present on a variety of topics of interest to students.

OFFICIAL PROGRAM NAME

The Beatrix Hamburg Medical Student Training Fellowship in Child and Adolescent Psychiatry

program director	Alex Kolevzon, MD	**# of students**	10-15
program dates	September 1-August 30	**# of faculty**	5

OPPORTUNITIES

mentorship

5 mentors

2 students per mentor

1-5 hours of mentorship

monthly

clinical

Inpatient

Outpatient

Consultation and Liaison

Therapeutic Nursery

Addiction Day Treatment Program

research

Autism

ADHD

Substance Abuse

Consultation and Liaison

Early Childhood

OCD

Tics/Tourette's

Trauma

ADDITIONAL PROGRAM HIGHLIGHTS

The Beatrix Hamburg Medical Student Training Fellowship in Child and Adolescent Psychiatry is designed to keep pace with the increasing breakthroughs over the past years that have revealed growing evidence of the neurobiological underpinnings of a wide range of childhood mental disorders. Our students are exposed to the full spectrum of clinical and research aspects of the field of child and adolescent psychiatry. The program provides intensive clinical exposure and pairs students with research mentors. Research electives have resulted in numerous poster presentations and papers published in peer-reviewed journals.

As an outgrowth of the MSP at Mount Sinai, one senior triple board resident and two medical students developed the StoryTime program with faculty support. StoryTime was created as an attempt to improve care for hospitalized children with limited family support. StoryTime occurs during the evening visiting hour, a stressful time of day when many patients become angry and sad because they do not receive visits from family members. Reading to children who are distressed serves a therapeutic purpose and also provides a fun and soothing activity before bedtime. The stories serve as a platform for patients to discuss issues that affect them in a way they would otherwise be hesitant to reveal directly. StoryTime also pairs medical students with residents and fellows, allowing the students to benefit from the resident's experience and fostering the resident's teaching and mentorship skills.

Mayo Clinic

The KTGF Medical Student Program at Mayo Clinic Alix School of Medicine is the only student interest group in psychiatry. The year-long program consists of talks on child and adolescent psychiatry and mental health awareness, mentorship, and participation in child and adolescent psychiatry rounds. The program has successfully increased interest in psychiatry classes, research, and projects at Mayo Clinic Alix School of Medicine.

OFFICIAL PROGRAM NAME

Klingenstein Third Generation Foundation Jane Watson Duncan Medical School Training Program at the Mayo Clinic

program director	Alastair McKean, MD	**# of students**	5-10
co-program director	Cosima Swintak, MD	**# of faculty**	1-5
co-program director	Jennifer Vande Voort, MD		
admin. assistant	Amber Pearson		
program dates	July 1-June 30		

OPPORTUNITIES

mentorship

1-5 mentors

1 student per mentor

1-5 hours of mentorship

monthly

clinical

Exposure to hospital child and adolescent psychiatry

research

Literature reviews

Working on case reports

Qualitative research

Epidemiology

Population Health

Stanford University School of Medicine

The Klingenstein Medical Student Fellowship Program is designed to expose first and second year medical students to the field of child and adolescent mental health, and to increase awareness and provide education about child and adolescent psychiatry as a career. It features a year-long program, wherein medical students take a course in child and adolescent and adult psychiatry, PSYC 225, taken for credit in the first or second year of medical school. The course meets weekly for three quarters. We interview a patient and his/her family every other week and each subsequent week engage with medical students in a discussion around the diagnostic condition and treatment approaches relevant to the patient they just met. We have found that this is a remarkably effective way to bring clinical psychiatry to our first and second year medical students who report a hunger for patient contact.

We have also implemented programs such as a collaboration with an elementary school on campus. Stanford medical students have helped teach Nixon Elementary School students physical exam skills (as part of their "Little Medical School" curriculum) and we use that encounter, which the medical students describe as a "study break," to teach the medical students about typical child development.

In addition, we have incorporated a therapy training tool, called co-therapy, which medical students, have reported to be transformative. The co-therapy model allows real-time supervision for training practitioners in the science and art of psychotherapy. The most powerful strength of co-therapy is that both therapists are in the room to see and feel every moment— every time a patient's eyes water a little, every time they tense or shift their eye contact. Being able to compare the reactions and impressions of the trainee with those of the supervisor is incredibly enriching in the training process. Klingenstein fellows, who as medical students would normally not have an opportunity to even observe, much less participate in, a private outpatient psychotherapeutic encounter, have reported that their co-therapy experiences have been powerfully engaging and inspiring.

OFFICIAL PROGRAM NAME

The Stanford Klingenstein Mentorship Program for Medical Students Interested in Child, Adolescent, and Transitional-Age Youth (TAY) Psychiatry

program director

Anita Kishore, MD

of students

40

of faculty

10

OPPORTUNITIES

mentorship

5-10 mentors

2 students per mentor

clinical

Co-therapy

Shadow a fellow or faculty member on the Consult Service or the Eating Disorders Service for a defined period, typically half a day per week over 4-8 months

research

Learn about faculty areas of interests

Engage directly with Psychiatry Department speakers (faculty and fellows)

Pursue formal research training after being introduced to a specific topic with a clinical mentor

Travel or research awards (e.g. through AACAP) to attend regional or national meetings, or to immerse them in a specific area of scholarly study

advocacy

Legislative actions

Letter writing on behalf of a specific bill

Service learning in surrounding communities

other

Course in child, adolescent, and adult psychiatry, PSYC 225, taken for credit in the first or second year of medical school. The course meets two to three times per month for three quarters with Dr. Kishore and up to 3 Teaching Assistants

Tulane University School of Medicine

The KTGF MSP at Tulane University enhances the exposure of medical students to quality child and adolescent psychiatry education through the general curriculum, enriching group activities, mentoring, and clinical exposure for interested students. Selected from the first year through a mentored application process, the students in the program will receive clinical, professional, and leadership mentorship from our faculty, fellows, and residents throughout their 4 years of medical school. In a short period of time, the program has successfully identified student leaders, increased the number of mentors and therefore decreased the student-mentor ratio. We are continuing to develop potential research, academic, and advocacy opportunities.

OFFICIAL PROGRAM NAME

Tulane Klingenstein Child and Adolescent Psychiatry (TKCAPS) Medical Student Fellowship

co-program director Brittnie Fowler, MD

co-program director Myo Thwin Myint, MD

co-program director Ashley Weiss, DO, MPH

# of students 22

# of faculty 11

OPPORTUNITIES

mentorship

11 faculty mentors

2-3 student per mentor

1-5 hours of mentorship monthly

advocacy

Participate in local mental health initiatives (ex: NAMI walk)

Under development: legislative advocacy via emails/calls, regional organization meetings, legislative conference, service learning projects (partnering with Louisiana Children's Museum)

clinical

Forensics

Primary care psychiatry/ Integrated care (Triple Board Clinic)

Tulane Infant Mental Health Services (TIMHS)

First episode psychosis clinic (EPIC-NOLA)

Community mental health / FQHC

Out of home care / foster care (Tulane Parent Education program)

Autism (Tulane Center for Autism and Related Disorders)

Telepsychiatry

Consultation/Liaison

Perinatal Psychiatry (Louisiana Mental Health Perinatal Partnership, Fourth Trimester& Beyond)

research

First episode psychosis

Integrated care

Others based on student/faculty interest

other

Opportunity to be involved with parent management trainings

Networking through Department conferences

Movie nights and socials

Q&A sessions

University of California, Davis

The KTGF Medical Student Program at UCD, established in 2005, is a faculty mentoring program that introduces medical students in their pre-clinical years to the field of child and adolescent psychiatry (CAP). The program leadership consists of 2-3 medical student leaders and two faculty program directors. The goals and objectives of the program are clearly articulated. Interested participants are required to apply through a formal application process.

OFFICIAL PROGRAM NAME

KTGF Fellowship at UC Davis

program director Robert Horst, MD

associate program director Anne McBride, MD

# of students 10-20

# of faculty 10-15

program dates November 1 - November 31 (of the following year)

OPPORTUNITIES

mentorship

15+ mentors

1-5 hours of mentorship monthly

clinical

Outpatient - insurance-based, specialty clinics, and MediCal clinics

Inpatient

Juvenile Justice

Telepsychiatry

Community Psychiatry

advocacy

Child Abuse Awareness

other

Summer Intensive Program (also a medical school course): Selected Fellows spend a month of half days immersed in the field of Child and Adolescent Psychiatry. The experience provides Fellows exposure to research and clinical practice in a wide variety of settings as well as sample opportunities to interact with faculty. Students receive medical school credit and formal evaluations.

Independent Educational Project

University of California, Los Angeles, David Geffen School of Medicine

The KTGF Medical Student Program (MSP) at UCLA works with the Psychiatry Interest Group to provide four lunch talks each year for first year students. Program participants also participate in a Career Day event for first year students, as well as an online session for second year students.

The UCLA MSP also sponsors shadowing in the clinics and wards in the first and second year, preceptorships in the third year, and career mentors in the fourth year.

In addition, the UCLA MSP sponsors research projects in all four years, and provides individual career counseling across the years.

OFFICIAL PROGRAM NAME

Dennis Cantwell Klingenstein Third Generation Foundation Fellowship

co-program director Brandon Ito, MD, MPH

co-program director Margaret L. Stuber, MD

# of students 15-20

# of faculty 5

program dates July 1—June 1

OPPORTUNITIES

mentorship

5 mentors

2-4 students per mentor

1-5 hours of mentorship monthly

clinical

Inpatient adolescent

Young child partial hospital care

Pediatric OCD and anxiety clinic

Forensic child psychiatry

C-L child psychiatry

research

School-based programs

Cross-cultural programs

Creation of educational materials

Genetics

University of Illinois College of Medicine

The KTGF MSP at the University of Illinois at Chicago is a structured mentoring program that links medical students with child and adolescent psychiatry faculty. The goals of the program are to provide medical students with meaningful exposure to the field of child and adolescent psychiatry, as well as encourage students to pursue CAP as a career path. Students and their mentors design individualized program experiences including clinical shadowing and/or research activities. The core program runs from January of M1 year through December of M2 year; however, all medical students are invited to participate on a continuing basis. There are two levels of membership in the KTGF-JGH program: fellows and associate fellows. Fellows participate in clinical and/or research activities with their assigned mentor and attend all group activities, while associate fellows attend all group activities. The program is based at the Institute for Juvenile Research, which is the oldest child mental health clinic in the country, established in 1909. Students can work with both child and adolescent psychiatrist mentors, as well as with psychologists, social workers, and nurses in various ongoing clinical and research opportunities.

OFFICIAL PROGRAM NAME

Klingenstein Third Generation Foundation-Jay G. Hirsch Medical Student CAP Fellowship

co-program director	Adrienne Adams, MD
co-program director	Geri Fox, MD
co-program director	Kelley Volpe, MD
admin. assistant	Graciela Bernal
program dates	January 1 -December 31

# of students	15-20
# of faculty	15-20

OPPORTUNITIES

mentorship

15-20 mentors

1 student per mentor

1-5 hours of mentorship monthly

clinical

Autism

ADHD

Anxiety

Mood Disorders

General Diagnostics

research

Autism

ADHD

Anxiety

Mood Disorders

advocacy

AACAP/ICCAP Advocacy Day – Involves travel to Washington, DC or a virtual platform with ICCAP delegates and members

Illinois Psychiatric Society Advocacy Day – Involves travel to Springfield, IL with IPS and ICCAP members

other

Lecture series

Information panels

Guest speakers

An introduction to medical societies by joining AACAP/ICCAP and APA/IPS. Free memberships for students to network with national and regional leaders

ADDITIONAL PROGRAM HIGHLIGHTS

Summer CAP activities may be arranged on an individual basis with a mentor according to interest and availability. Interested students are encouraged to develop a project proposal with their mentors. This proposal can be submitted to apply for summer fellowship awards through the American Academy of Child and Adolescent Psychiatry's Campaign for America's Kids and Spurlock Awards. The award deadline is in February of each year. Those who do not get the national award are still encouraged to complete the project and to seek other funding.

University of Iowa Carver College of Medicine

The Samuel T. Orton KTGF Child Psychiatry Interest Group is dedicated to exposing medical students to the fantastic field of child psychiatry early in their careers. The KTGF MSP at the University of Iowa has monthly meetings featuring faculty speakers, patient presentations, research discussions and opportunities, and resident leaders. The program also offers medical students the opportunity to engage in clinician work directly with faculty and residents at any time during training. The program also collaborates with general psychiatry and pediatrics groups to expand interest in the field.

OFFICIAL PROGRAM NAME

Samuel T. Orton KTGF Child Psychiatry Interest Group

co-program director Hanna Stevens, MD, PhD

co-program director Carissa Gunderson, MD

co-program director Allan Andersen, MD

program dates January 1 -December 31

# of students 5-15

# of faculty 4-8

OPPORTUNITIES

mentorship

4-8 mentors

1-2 student per mentor

1-5 hours of mentorship monthly

advocacy

Annual Walk for NAMI of Johnson County

Mollie Tibbetts Memorial Fund

research

Sam Kuperman: genetic risks of Tourette syndrome and alcoholism

Jatin Vaidya: adolescent brain development, neuroimaging and risk taking

Jake Michaelson: genomic studies of developmental disabilities and learning disorders

Hanna Stevens: animal models of disruptions in brain development

Peg Nopoulos: neuroimaging and cognition in premature or neurologically impaired children

Allan Andersen: peripheral methylation patterns related to substance abuse risk in adolescents

Aaron Boes: rTMS for mood and other psychiatric disorders

Aislinn Williams: developmental neurobiology of bipolar disorder

clinical

Inpatient child and adolescent psychiatry (15 unit bed; children ages 3-18)

Eating disorder program: inpatient, partial hospital, outpatient

Diagnostic Evaluations in General Child and Adolescent Psychiatry Clinic

Telepsychiatry Clinic

Tourette Syndrome Clinic

Autism Evaluation Multidisciplinary Team

School-based psychiatry with Dr. Beyer at local elementary, middle, and high schools

Full Team Evaluations: child psychiatry, child psychology, speech pathology, and education

Pediatric Neuropsychological and psychological testing – IQ and adaptive skills evaluations

Traumatic Brain Injury assessment

Outpatient Dialectic Behavior Therapy Weekly Groups

Child and Adolescent Consultation

Developmental Disabilities Transition to Adulthood

Interdisciplinary ADHD Clinic

Psychiatric care of gender diverse youth

Adults with neurodevelopmental disabilities

University of North Carolina School of Medicine

The Robert A. Bashford Medical Student Fellowship in Child and Adolescent Psychiatry at the University of North Carolina offers group and individual mentoring as well as exposure to a variety of specialties related to child and adolescent psychiatry. Program components include inpatient and outpatient experiences, exposure to autism spectrum and developmental disabilities, peripartum psychiatry, adolescent substance abuse, pregnancy and maternal addictions, and eating disorders. In addition, the program offers volunteer experiences that have included mental health services for the homeless, a reading program for child psychiatry inpatients, and a student-run free mental health clinic. Mentors in research, clinical work, education, leadership, and service are readily available to students in the program. The program also features a monthly lunch series for the fellows and mentors as well as larger events for the student body at the medical school.

OFFICIAL PROGRAM NAME

Robert A. Bashford Medical Student Fellowship in Child and Adolescent Psychiatry

program director Erin Malloy, MD

co-program director Roberto Blanco, MD

co-program director Jimmy Chen, MD

program dates August 1 -May 31

# of students 15-20

# of faculty 1-5

OPPORTUNITIES

mentorship

5-10 mentors

3-5 students per mentor

1-5 hours of mentorship monthly

clinical

Child inpatient

Child outpatient

Eating disorders

Peripartum psychiatry

Addictions

Autism spectrum

research

Neuroimaging

Psychotic disorders

Community psychiatry

Medical education

Autism and developmental disabilities

Eating disorders

Peripartum psychiatry

other

White Coat Wednesday at State Capitol

Student-run free mental health clinic

Reading program child psychiatry inpatients

Shadowing in outpatient clinics

Adolescent unit substance use education series

(Opportunities are adjusted based on COVID-related concerns)

The University of Vermont College of Medicine

The MSP at UVM is one of the original programs funded by the KTGF. At UVM, the program falls within the Division of Child and Adolescent Psychiatry in the Department of Psychiatry. The program at UVM attempts to remain true to the core principles of the program: mentored, clinical experiences for students to introduce them to the field of child and adolescent psychiatry in hopes of instilling interest to become a child and adolescent psychiatrist. Pursuant to this goal, UVM supports research programs and clinical experiences for students. The program also holds monthly lunches and other events. There are currently 49 students in the UVM program, eight of whom have indicated a clear preference towards psychiatry or child psychiatry.

OFFICIAL PROGRAM NAME

Donald J. Cohen Medical Student Training Program at the University of Vermont

program director	Sarah Guth, MD	**# of students**	25+
co-program director	Maya Strange, MD	**# of faculty**	5-10
co-program director	Yasmeen Abdul-Karim, MD		
admin. assistant	Lisa Shappy		
program dates	October – June		

OPPORTUNITIES

mentorship

5-10 mentors

3-5 students per mentor

1-5 hours of mentorship monthly

clinical

Outpatient child psychiatry

Champlain Valley Physician's Hospital

Inpatient Child Psychiatry Unit

research

Multiple opportunities within the child psychiatry division

Washington University School of Medicine in St. Louis

The MSP at Washington University in St. Louis is geared at enrolling first-year medical students to maximize the number of students who have a longitudinal mentoring and shadowing experience in child and adolescent psychiatry, though students can join at any time. Each year student leaders outreach program students to determine what activities and components the students would like to see in that year, in addition to the continuous clinical and research shadowing and mentorship experiences and engagement with the annual KTGF conference. These events have included panels, talks, and interactive sessions with child psychiatrists, fellows, therapists, child and families, and community events.

OFFICIAL PROGRAM NAME

Washington University Klingenstein Third Generation Foundation Medical Student Program

co-program director

Alecia Vogel-Hammen, MD, PhD

co-program director

Eric Spiegel, MD

admin. assistant

Jenna Dougherty

program dates

September—June

OPPORTUNITIES

mentorship

5-10 mentors

2 students per mentor

1-5 hours of mentorship monthly

clinical

Collaborative Care

Complex Outpatient

Psychotherapy

Consult-Liaison

Inpatient

advocacy

Students started a monthly clinic

Liaison with local groups, e.g., CHADS

other

Topical lunches

Topical dinners

Yale University School of Medicine

The Donald J. Cohen Medical Student Mentorship Program was originally established in 2002 under the leadership of Dr. James F. Leckman in order to increase medical students' exposure to, and interest in, the field of child psychiatry. Named after the late Donald J. Cohen (1940-2001, Yale MD '66, Director of the YCSC from 1983 to 2001), the program was funded through the generosity of the Klingenstein Third Generation Foundation (KTGF). The program provides first- and second-year medical students not only with direct "hands on" clinical experience but also with a valuable mentoring relationship. Since its inception, the program has enrolled over 200 medical students and included 2 to 4 student leaders per cohort. The program continues to incorporate the four main elements of direct clinical experience, a monthly seminar, exposure to, and involvement in ongoing research activities, and attendance to the annual KTGF Medical Student National Conference.

OFFICIAL PROGRAM NAME

The Donald J. Cohen Medical Student Mentorship Program

co-program director Michael Bloch, MD, MS

co-program director Andrés Martin, MD, MPH

# of students 10-15

OPPORTUNITIES

mentorship

Presentations at seminar with their mentor

Clinical experiences with their mentor

clinical

Individual patients

Home and school visits

Direct care of patient under immediate supervision of assigned mentor

research

Regular presentations in monthly meetings

Yale Child Study Center

other

Monthly seminars

Appendix

KTGF Program Director & Student Resources

- Medical Student Program Flyer
- Funding, Reporting, Extensions, and Renewals

KTGF Publications

- *Enhancing Child and Adolescent Psychiatry Recruitment Through a Medical Student Mentorship Network: A Qualitative Study*
  Kishore, DiGiovanni, Sun, Kolevzon, Benoit, Martin
- *Child and Adolescent Psychiatry Perceptions and Career Preference*
  Kishore, Sun, Guth, Kolevzon, Martin
- *Increased psychiatry match rates following exposure to a CAP mentorship program*
  Himmelstein, Guth, Enenbach, Gleason, Stevens, Glowinski, Kolevzon, Martin
- *Does Early Mentorship in Child and Adolescent Psychiatry Make a Difference?*
  Stein, Althoff, Anders, et al.

Previous KTGF National Medical Student Conferences

2022 — University of California, Davis (Virtual)
2021 — University of Iowa (Virtual)
2020 — Tulane University
2019 — Stanford University
2018 — UCLA
2017 — Washington University in St. Louis
2016 — Yale University
2014 — University of North Carolina
2013 — Harvard University

KTGF MSP Sample Brochures

Donald J. Cohen Child Psychiatry Interest Group at Yale
Donald J. Cohen Medical Student Training Program at UVM
Washington University Medical Student Program

KTGF MSP Sample Student Applications

The Klingenstein Third Generation Foundation Fellowship Program at UC Davis
Tulane Klingenstein Child and Adolescent Psychiatry Medical Student Fellowship

KTGF MSP Sample Informational Materials for Students

Donald J. Cohen Klingenstein 3rd Generation Foundation Medical Student Fellowship Program in Child & Adolescent Psychiatry
The Klingenstein Third Generation Foundation Fellowship Program in Child and Adolescent Psychiatry at the University of California, Davis

KTGF MSP Roster Form

KTGF MSP Travel Expense Budget Form

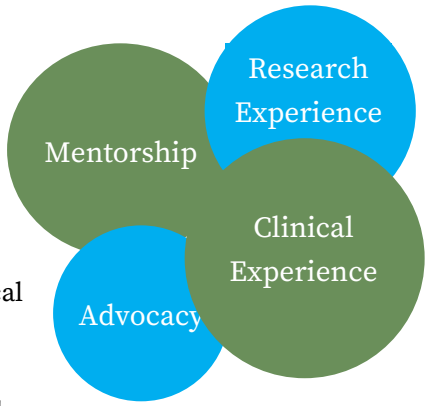
The Klingenstein Third Generation Foundation (KTGF) Medical Student Program

Supported by the American Academy of Child and Adolescent Psychiatry (AACAP)

Cultivating the next generation of child and adolescent mental health professionals

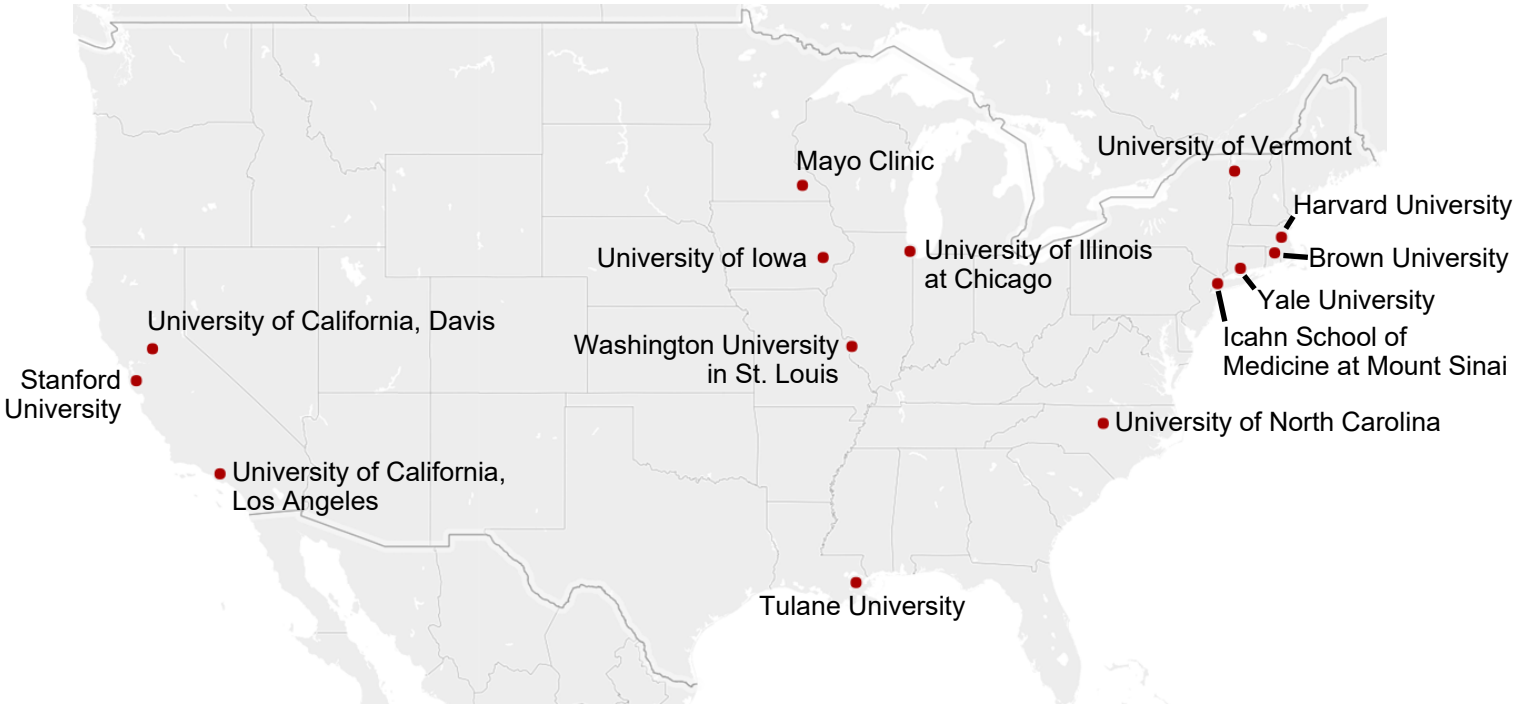
What is the KTGF Medical Student Program?

A coordinated, national network of medical schools that exposes medical students to clinical experiences in child and adolescent psychiatry through unique and customized programs. The KTGF Medical Student Program is administered by AACAP.



KTGF National Medical Student Conference

Each year, participating Medical Student Programs come together for the KTGF National Medical Student Conference at rotating program sites. The goal of the conference is to provide medical students with exceptional exposure to child and adolescent psychiatry through student oral presentations, networking, mentoring, student poster presentations, faculty presentations, and games.



What is AACAP?

A nonprofit medical association for child and adolescent psychiatrists, fellows, residents, and medical students with the mission of promoting the healthy development of children, adolescents, and families through advocacy, education, and research.

Stay Connected

Visit www.klingenstein.org & www.AACAP.org
Questions? Contact Sarah Hellwege, MEd at research@aacap.org

AACAP's Opportunities & Resources for Medical Students

Free AACAP membership includes online access to the *Journal of the American Academy of Child and Adolescent Psychiatry* (*JAACAP*) and *JAACAP Connect;* discounted rates to meetings; access to resources and networking; and access to research and travel award opportunities:

- *AACAP's Summer Medical Student Fellowships*: Provide up to $3,500-$4,000 for 12 weeks of research training and travel costs to attend AACAP's Annual Meeting; and
- *AACAP's Life Members Mentorship Grants for Medical Students*: Provide a travel grant of up to $1,000 for medical students to attend AACAP's Annual Meeting and network with leaders in the field.

Klingenstein Third Generation Foundation
Medical Student Program

Funding, Reporting, Extensions, and Renewals

Payments

When should a program anticipate payment?
Payments are disbursed in accordance with the terms of the original grant contract. Please refer to the program's contract or contact Sarah Hellwege at research@aacap.org for any questions pertaining to these dates.

Reporting

At what points is a program required to submit a written report?
Programs are required to submit written reports when requesting a no-cost extension (in brief, letter format) and at the close of a grant period (using online template provided in Foundant).

Evaluations

When will a program be evaluated?
Program evaluations will be conducted annually through a scheduled call with Eliot Brenner. Calls take place between November and January and typically last no more than 30 minutes. There is no written requirement for this evaluation.

No-Cost Extension Requests

When should a program request a no-cost extension?
Programs should request a no-cost extension at least one month prior to the close of their grant period or one month prior to the close of their most recent no-cost extension should that program have a balance of funds greater than $500.

How does a program request a no-cost extension?
The Program Director should submit a letter of request addressed to Eliot Brenner, PhD, Executive Director, including a brief update on program activities and plans for the extension period. In addition, Program Directors should submit an updated financial statement detailing the balance of funds and an updated budget for the use of remaining funds. Requests should be submitted electronically through the program's portal in Foundant or submitted via e-mail to Sarah Hellwege at research@aacap.org.

How long is the no-cost extension period?
No-cost extensions are typically granted for one year or until the program's balance of funds becomes insufficient (less than $500).

Grant Renewal

When should a program apply for grant renewal?
Programs may apply for grant renewal under the following circumstances:

- One month before the expiration of their original grant contract with a balance of funds less than $500;
- At any point during a no-cost extension period when the balance of funds becomes less than $500.

What are the closeout requirements for the original grant?
Programs must complete a final report and submit a final financial statement online through Foundant to close out their original grant before applying for grant renewal.

How should a program apply for grant renewal?
Programs should apply for grant renewal by completing the online program application available through the program's Foundant account.

Will the grant renewal contract be different from the original grant?
Grant renewal contracts will be issued in the amount of $5,000 for a five-year grant period. Funding will be disbursed in two payments, each in the amount of $2,500. The first payment will be disbursed after the grant contract has been signed. The second payment will be disbursed when the program enters its third year of the contract.

Academic Psychiatry
https://doi.org/10.1007/s40596-022-01700-6

EMPIRICAL REPORT

Enhancing Child and Adolescent Psychiatry Recruitment Through a Medical Student Mentorship Network: A Qualitative Study

Anita Kishore[1] · Madeline DiGiovanni[2] · Kevin Lee Sun[1] · Alexander Kolevzon[3] · Laelia Benoit[2] · Andrés Martin[2]

Received: 22 December 2021 / Accepted: 15 August 2022

Abstract

Objective There is a shortage of psychiatrists necessary to meet the clinical needs of children and adolescents. Efforts over the past decade to enhance the workforce have had a limited impact. This study sought to identify the critical components of a medical student mentorship network designed to increase recruitment into the subspecialty.

Methods The authors conducted interviews via synchronized videoconferencing of network site leaders and medical students at 14 schools throughout the USA. In addition, they analyzed verbatim transcripts using a thematic-phenomenological qualitative approach.

Results The authors interviewed thirty-eight program participants during seven focus group sessions: nine program directors and 29 medical students or graduates, a median of five participants per session. They constructed a framework consisting of two overarching domains, comprised of three themes each: (1) life cycle of a subspecialty mentorship network (*Origins*, *Initiation*, and *Continuity*); and (2) next steps to improve the program (*Refining goals*, *Increasing accessibility*, and *Defining a path forward*).

Conclusion Preliminary data have already documented the positive impact of participation in this mentorship program on medical student match rates into psychiatry. The qualitative model of this study provides a blueprint to develop, maintain, and optimize this and similar efforts aimed at increasing the child and adolescent psychiatry workforce.

Keywords Child and adolescent psychiatry · Mentorship · Recruitment · Qualitative

λαμπάδια ἔχοντες διαδώσουσιν ἀλλήλοις
Those who have torches will pass them on to others.
— *Plato, Republic 1.328a*

Our chief want in life is somebody who will make us do what we can.
— *Ralph Waldo Emerson*

There is a well-documented shortage of psychiatrists necessary to provide adequate health care to children and adolescents, even despite a recent increase in general psychiatry residency applicants [1–3]. Efforts over the past decade to enhance the workforce, including the creation of Triple Board Residency Programs and increased collaboration with pediatrics, have had limited impact on recruitment [4]. Addressing this shortage may require a focus on earlier stages of education, when medical students are contemplating different specialties, seeking opportunities, and asking for guidance. Tapping into these learners' initiative and dormant potential,

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faculty can initiate mentorship relationships so that students potentially identify with the traits and work of their mentors [5]. The emerging literature on a specific medical student mentorship network supports this idea.

The Klingenstein Third Generation Foundation (KTGF) has funded a mentorship network of medical school programs across the country that empower medical students to engage with the field of child and adolescent psychiatry (CAP) through mentored relationships. The Foundation supported the first site in 2002; other schools subsequently applied for funding through a competitive request for proposals. The program expanded into the current 14-site network by 2019. Using a developmentally informed approach, the KTGF Medical Student Mentorship Program National Network (MPNN) offers educational opportunities accessible from the start of medical school [6]. As early as their first year, medical students engage with CAP by being paired with mentors, observing clinical encounters with youth, and conducting subspecialty-related research, among other activities [7]. Preliminary data suggest that these early mentored experiences have affected medical students' match rates into psychiatry [8].

Another essential form of engagement with the MPNN is its annual National Medical Student Conference (NMSC), which attracts over 90 students from the Network sites and features student presentations on research, education, outreach, and creative projects. Previous research found that conference attendance improves students' perceptions of CAP and their reported likelihood of entering the field, although this effect was time-limited [9].

Given the evidence for the MPNN and NMSC's salutary effects on medical students' perspectives on CAP and match rates into general psychiatry, we sought to identify the active components of the MPNN that may facilitate recruitment into CAP. Acknowledging that differences exist between the 14 programs, we used a qualitative approach to explore student and faculty perspectives at different schools, highlight success and areas for improvement, and inform the development and optimization of similar programs.

Methods

Participants and Procedure

We conducted focus groups in the spring of 2021 via synchronized video conferencing using Zoom. For participant selection, we collaborated with program directors at all 14 sites, who recommended a selection of current and former students. AKi led semi-structured interviews for those who accepted, with two co-authors (MD, KLS) joining and contributing to all sessions. After the first two focus groups, we conducted faculty and student sessions separately to maximize candid feedback unencumbered by power differentials or social desirability. All participants provided verbal consent for digital recording of their session.

Qualitative Analysis

We transcribed digital audio files using Rev prior to analysis aided by NVivo 12 software. We used thematic analysis [10, 11] with an interpretative phenomenological approach to examine the participants' experiences [12, 13]. Three authors (AKi, MD, KLS) independently identified and organized codes before sharing them toward further refinement and finalization into a streamlined codebook. LB contributed to the framework. Multiple supporting quotes undergirded overarching domains and their underlying themes. We organized transcripts iteratively until reaching theoretical sufficiency [14] and following best practice guidelines for analyzing, drafting, and submitting qualitative studies [15, 16]. In keeping with the principles of participatory research [17], we value study subjects as co-investigators and invited all participants to review and comment on the final domains, codes, overarching conclusions, and draft manuscript.

Results

Thirty-eight former or current network participants contributed to seven focus groups (with a median of five participants per session). Students, including MD/PhD candidates, ranged in enrollment year (1st–7th), and incorporated graduates (1–13 years out of training). Faculty had a median of 6 years (range, 1–19) of experience leading their respective site and typically included a founding leader and a more recently recruited co-leader.

Based on our analysis, we developed a framework organized along two overarching domains, in turn comprised of three themes each.

The Life Cycle of a Subspecialty Mentorship Program

Origins: Why Develop a Child and Adolescent Psychiatry Mentorship Program?

Program leaders sought out participation in the MPNN not just to increase recruitment into the subspecialty but to "pay forward" quality mentorship they had received. They identified mentorship as a pivotal experience in their own histories, finding themselves "in a career and position that I never, ever imagined… that was entirely facilitated through mentorship." Specifically, the mentorship program allows participants to cultivate a specific kind of mentorship, one that emphasizes building a home base within the broader house of medicine by resorting to "just-in-time, PRN mentorship": to bite-sized wisdom accumulated informally and intermittently. Mentors

valued flexibility, noting that "part of why I think we've thrived as a network is that we have not been rigid," allowing students to customize their time commitment to the program and welcoming the ebb and flow of their engagement, "depending on their season of [medical school] life." One participant described their mentor, who "would just open the door and let me come back in, make space for me, give me a project" throughout multiple stages of their career. Participants also used negative experiences in their trajectories to guide their mentoring goals through the program, as with one mentor who now encourages "spitting out" ill-fitting partnerships after having prior research interests "frozen" for years by their mentor. Thus, in developing the program at their respective institutions, mentors shared the reflective, intentional goal of passing on the same kind of flexible guidance they valued in their careers.

In the medical student groups, participants described an eagerness to connect with experienced faculty who could provide opportunities, insight, and narratives about life in CAP. This hunger for accessible knowledge characterized all participants, regardless of whether they considered CAP as a career option at the beginning of their medical school trajectory. In addition, the notion of a multipurpose source of guidance through intermittent and varied exposures rather than a single longitudinal relationship echoed the goals of the mentor group as conducive to more effective and sustained mentorship across students' professional development.

Initiation: What Drives Students Toward a Subspecialty Mentorship Program?

In exploring decisions to join the program, we discovered an array of "hooks," both practical and abstract, that attracted students. From a practical standpoint, students appreciated the opportunity to learn more about the subspecialty; not through lectures, but through real-life experiences and stories from practitioners — and especially from patients: "Focusing on patient talks and patient experiences, that's something really missing from a lot of the preclinical classes. You get to learn all this info, but you don't learn about the human beings behind it." Echoing faculty member goals, students appreciated the flexible and non-binding nature of the mentorship component, noting that their programs allowed students to "diversify" experiences with multiple clinicians if desired. From a more abstract standpoint, students gravitated toward the program because it offered a sense of belonging, an ecological niche within the broader ecosystem of the medical community. Students frequently spoke of the joy of "finding your people" and the growing confidence to follow in their footsteps: "[They] think like me, they've probably had similar worries as me, and they've figured things out." This sense of belonging was particularly impactful for first-generation medical students, who appreciated having mentors help them map out a career blueprint in which they could see themselves (Table 1).

Another central "hook" we identified is the MPNN annual conference, which many participants cited as a core feature of their involvement. For most participants, the conference figured as a unique and early opportunity to gain experience and connections within the relatively small CAP community: "That's something really special that doesn't exist otherwise across schools: meeting your colleagues very early and growing together." Students valued the opportunity to forge connections with like-minded peers and mentors and found the conference helpful in decreasing stigma and increasing the legitimacy of psychiatry as a medical specialty: "Getting exposed to the different types of research that people are doing really showed me how cutting-edge psychiatry is." For many participants, the conference's collegiality bolstered its character not as a formal academic meeting but as emblematic of the playfulness at the discipline's core. During the annual conference, academic events are interwoven with friendly competitions and team-building exercises, cultivating an informal and accessible environment in which to become familiar with peers: "I think that's really great about the MPNN… and that's part of child psychiatry too… we like to [play and] have fun."

Mentees valued the annual conference to gain competence and validation as genuine members of the CAP community. Students identified the conference as a vehicle to gain experience in research endeavors, to present to colleagues and faculty, and to network with prestigious leaders in the field who figured as exemplars of what life in CAP could be. Multiple participants described the conference as a "low-stakes," "supportive," and "non-threatening" environment in which to make an academic presentation for the first time. This experience later proved valuable during the residency application process. Students marveled at faculty participation from other institutions "[asking] kind, genuine questions" after presentations. Sharing scholarly projects fostered connections as well: more than once, a "small connection" after a participant's presentation culminated in a publication at the encouragement of another.

Continuity: How is Program Involvement Sustained Throughout Medical Education?

In exploring the drive behind students' continued involvement, we found that "relentless" mentorship kept many participants grounded in the CAP environment, with mentors encouraging continued networking and project development throughout medical school. Participants frequently commented on mentors as "an accelerant" or "gentle pressure" to reach for opportunities they may not have otherwise, highlighting the importance of mentor-initiated interactions as sustaining student involvement in the field. However, participants knew that sustained mentorship need not come from one lone mentor. Instead,

Table 1 The life cycle of a subspecialty mentorship network

Stage *Defining question*	Sample quote
Origins *Why develop a child and adolescent psychiatry (CAP) mentorship program?*	[We had] this radical idea that if you want med students to go into psychiatry and child psychiatry specifically, maybe they ought to see a little of it, hear a little about it, or meet some faculty who loved what they were doing, while they were in med school, because it made it more likely that they might choose it if they heard of it. *(Program leader)*
Initiation *What drives students toward a specialty mentorship program?*	I don't come from a family of physicians or know anyone who is a physician. So I think what the mentor really was showing me what my life could be, showing the ins and outs, the daily. This is what I do, and this is what I'm able to do outside of it. This is what your life could look like and showing you the way of how to get there. And I think what the program was able to do for me is almost give me that kick in the butt to go do it. *(Student participant)*
Continuity *How is program involvement sustained throughout medical education?*	When it came down to it, the program was actually a big part of why I chose to end up continuing in child psych because I felt like the community of people were people that, when I had a lot of free time during COVID, the things that I was looking into and the things that I was researching, those were the conversations that I was having at the program conferences. And then, I guess, I said it before, the community of child psychiatrists, it really appealed to me as something that years from now I would be very excited to go to conferences and stuff like that. *(Network graduate)*

multiple participants shared the view of building a team of guides to help them synthesize new knowledge of the discipline and seek out more opportunities, echoing the mentors' recurrent highlight on flexibility: "How do I assemble a team of people… who are going to go to bat for me in different ways?" Mentees described appreciation for the warmth of mentorship relationships, citing feelings of being "taken under [a mentor's] wing" or having someone "in their corner," not just to advance their recruitment into CAP, but out of genuine care for their personal and professional growth: Mentors are "there to help you become who you want to be… It's not about investment [in] your choosing a particular career that they want you to go into; it's about helping you find your path." For some participants, the strength of this mentor relationship was reason enough to stay involved in the program, even if eventually settling on another field.

Although not all participants pursued psychiatry or CAP in the post-graduate phase, mentees identified their MPNN experiences as valuable to their chosen careers since "psychiatry does leak into every specialty in medicine." Participants valued staying in touch with CAP colleagues they met at conferences, and some were even recruited into fellowships by MPNN contacts. Mentees who did pursue CAP tapped into mentors during residency at pivotal points, and several program graduates reflected on becoming mentors themselves, seeking out the MPNN at their new institutions, and continuing to attend conferences to support new students.

Evaluating Next Steps to Improve the Program

Despite consistently positive feedback, participants were thoughtful in evaluating their critiques of the program in its current form. As a result, we identified three main "growth points" (Table 2).

Refining Goals: Do the Network and Its Constituent Programs Fulfill the Intended Purpose?

The MPNN's mission is to increase recruitment into CAP through intentional and flexible mentorship, but we found that both mentors and mentees harbored doubt as to whether the program effectively advanced its specific goals. Regarding recruitment aims, mentees felt that programming is "more about supporting the already invested students" rather than genuinely increasing awareness and bringing new students into the fold. Mentors and mentees alike raised concerns about the effectiveness of outreach strategies, such as whether email listservs reach only a self-selecting audience of students who signed up for interest groups rather than the broader audience of all potentially interested students. Across institutions, the outreach challenge is complicated by an inconsistent delineation between CAP and general psychiatry interest groups; at some schools, they are the same, but at others, they are separate groups with separate listservs — at times synergizing less than competing for "market share." Finally, mentors and mentees fretted over potentially interested students who "fell through the cracks" and did not find the program until later in their education.

Despite mentors' flexibility and several mentees' success with highly invested faculty, participants from both groups identified challenges to the sustainability of high-quality mentorship, given the funding and time constraints at their institutions, as well as the concentration of available mentors in academic psychiatry. Mentors described an "uphill battle" of keeping colleagues involved as their responsibilities pulled them elsewhere, and mentees were well aware of the demand on faculty and the consequent limitations on the pool of mentors: "He's just like a really busy guy. We met once and I don't think we talked again." Mentors spoke of coordinating the MPNN on "donated time" given a lack of protected hours to dedicate to the program and

Table 2 Evaluating next steps to improve the program

Stage *Defining question*	Sample quote
Refining goals *Do the national network and its constituent programs fulfill the program's purported aims?*	Just from a faculty perspective, I think that doing a little bit more mentorship in adult residency is important because that attrition can be significant for all the reasons that all of us have talked about. I know that our mission is really for medical students, but I think that also looping in and really involving adult residents is important. *(Program leader)*
Increasing accessibility *Is the annual conference a possibility for all students?*	If [research] is a gateway that you have to get [through] to get to this conference, then there's just going to be all of these [primarily clinically oriented] people who might be interested in child psychiatry, who the program just isn't going to reach. *(Network graduate)*
A path forward *How to move toward a more effective subspecialty mentorship program?*	If there's a way… where you don't have to have research… that could just open a lot of doors, and it could maybe also show people that there's other ways to be a physician. Obviously, research is super important, but there are also ways to be a physician without being research heavy. There are physicians who are big writers, science writers, and that's important too, because you need to be able to communicate with other people about science. That could be very helpful in attracting more people and making access to the conference more equitable. *(Student participant)* In light of all of the virtual things that all of us have been participating in for the last year… I think it would be really beneficial if all the presentations that were presented at the year's previous conference were published online so that anyone that is going to conference next year has an understanding of what is possible and what is expected of them as a medical student and gives them some of those ideas of things that may not be numbers that usually are presented. *(Student participant)* Maybe [we should be] thinking about how you could make the conferences – especially now that more people are comfortable with Zoom and virtual things – more accessible to students who might not have funding from their institution or otherwise to be able to go, to still be able to connect with other programs and other opportunities for mentors at different institutions. *(Program leader)*

noted that maintaining continuity required significant effort on their part: "It falls on the laps of the faculty to be the [program] champions." Faculty attributed this challenge to yearly student leadership turnover at the preclinical-clinical transition, worsened by shortened preclinical schedules that accelerate the transition to mid-year. Mentees were equally aware of the threats to continuity, noting the constraints on participation that the clinical years created, including scheduling board exams around the annual conference and having reduced time to shadow once on clerkships. Such constraints interfered in actualizing the originally envisioned approach to flexible mentorship.

Additionally, mentees highlighted the predominance of academic psychiatry in their programs, which created a "homogenous population" of mentors, a challenge for students with CAP-related interests outside of academia: "As different as [the mentors] are, they're very similar. They're all academic child and adolescent psychiatrists, and it would be more beneficial to have other people who are from different career paths within CAP, because it can look very different." This concentration raised questions about whether the MPNN effectively recruited students interested in a range of possible career directions.

Increasing Accessibility: Is the Annual Conference Possible for All Students?

A significant barrier to the MPNN's effectiveness was the implicit messaging that research is required for conference attendance, blocking the "CAP-naïve" student population from gaining access to the NMSC and narrowing the profile of students able to access a networking resource to favor those oriented to academic psychiatry. This bias raised the question of equity in students' access to the conference, especially for those less familiar with CAP from the start, such as first-generation medical students. "If you weren't presenting research, there wasn't necessarily a place for you," remarked one mentee, with others noting that because of the predominance of research at prior conferences, presenting on non-research material, such as creative writing, advocacy, or clinical case presentations, required a greater degree of guidance into less-trodden territory. Moreover, these kinds of non-research opportunities were limited to more resource-rich schools "because they have the mentors who can support them in those presentations," compared to institutions with less established or resourced CAP divisions, again highlighting concerns about equity and access. For several, this barrier stemmed from funding challenges: Resources for conference attendance were highly variable across institutions, with research as the one consistent "ticket" to the conference, guaranteeing full or partial funding, compared to students with no research to offer. "We don't tell anybody that they can't go. We just let them know that if you're not an active presenter at the conference, then you'll have to come up with your own monetary ways of getting there." In this way, mentees identified research as a proxy for effort in their programs' quest to

fairly distribute the limited funding available, inadvertently skewing the conference roster toward research:

> It is much harder to track [a] road that hasn't been paved, especially when you're a first-year medical student trying to figure out, can you even present in the first place? It's much easier to present on numbers because I have mentors who can tell me if I'm presenting on these numbers okay, versus [the message that] "it's totally fine to present on whatever you want," but you have to have someone helping you out doing it. No first-year is coming up with that on their own.

Mentors acknowledged mentees' frustrations with the implicit requirement, agreeing that the conference's purpose is "for you to learn more about child psychiatrists and network… not necessarily just to present." Site leaders highlighted that there is a structure for transparent funding and commensurate protected time or advancement incentives for other faculty commitments like grants or committees: "If you're going to sit on this grant, you're going to get paid a certain amount; you've got to dedicate that amount of time." Some hoped for "space to enforce a bit of a structure" into the site program's leadership. Finding ways to integrate protected structure into the MPNN could broaden the resources available to the sites to support more students. Other leaders identified increased funding as necessary, less for matching protected faculty time than to enhance student conference support: "Unless there was significantly more money, paying ourselves 0.01% more is not going to make a difference. For that money, I'd rather buy one more ticket to take a student to [the conference]."

A Path Forward: Toward a More Effective Subspecialty Mentorship Program

In response to these critiques, participants offered an array of potential refinements to the subspecialty mentorship program. To improve the effectiveness of recruitment into CAP, some suggested incorporating more events into the clerkship year to reduce drop-off from clinical students, focusing on upper-year issues such as residency applications and heightened familiarity with triple board training. Students also hoped to cast a wider net for their peers by incorporating more patient-centered events, given preclinical students' hunger for these types of experiences, and by working with curricular leaders to integrate CAP content into the general preclinical curriculum so that all students are exposed to CAP regardless of interest group involvement. Finally, post-graduate mentees hoped for continued programming at their training level to reduce attrition during adult psychiatry residencies.

To better fulfill the goal of flexible, sustained mentorship, participants sought structural solutions for the constraints on mentors' availability. Rather than relying solely on faculty mentors, students suggested partnering lower- and upper-year students, or recruiting residents and fellows into the mentor list, noting that "sometimes it's harder to connect with people that are further along in their careers." Post-graduate mentees agreed, hoping for ways to stay involved in student mentorship beyond the occasional annual conference attendance. Mentees and mentors hoped for ways to protect faculty bandwidth and "feel confident that you have the time allocated to be able to implement the program," musing about changes in funding, protected time, or "just creating a culture where faculty recognize how important this is." To protect existing faculty involvement, mentors focused on increasing recognition of the program within their departments since it "does not come close to their radar." Mentors suggested having program leadership write letters of appreciation to department chairs to raise awareness of the program and its requisite funding and protected time needs. "The chairs of the departments aren't going to care about the money; we know that because it's not enough. What they would care about is putting more medical students into psychiatry – that's a feather in their cap for the department."

To increase the accessibility of the annual conference and broaden the program's focus beyond research and academic psychiatry, participants hoped for a recalibration of content to attract a more diverse student body and additional structural changes to increase opportunities during and beyond the annual conference. Everyone suggested de-emphasizing the research component of conferences, noting that "if one of the goals of [the MPNN] is to attract… a more diverse group of people to this field, I think we have to find a way where it's easier for people who aren't presenting research to come to the conference." To this end, participants recommended re-emphasizing patients and communities during the conference, given that "what we have in common is an interest in these patients' stories." In order to increase accessibility for underrepresented populations, mentors and mentees both hoped to allocate conference funding for first-generation or underrepresented medical students. Mentees also hoped for increasing conference funding in general, so that students with more clinical interests could also have a chance to attend conferences.

Beyond the conference, mentees asked for a broader scope of programming during the year, hoping to meet practitioners outside of academic psychiatry, noting that "it would be more beneficial to have other people who are from different career paths in CAP," such as private practice and public health. Mentors acknowledged these concerns, agreeing that "we're having research talks and bringing research people, and in some ways, we're alienating more clinical folks." To this end, mentors and mentees recommended utilizing their newfound facility with teleconferencing to break down institutional boundaries and create a "lending library" of mentors and

resources, "where we pool resources and each program has its constellation of strengths that we share," allowing for a wider breadth of mentor experiences to reach students at various institutions. Evidenced by one recent Zoom iteration of the annual conference, necessitated by the COVID-19 pandemic, the virtual setting increased accessibility by minimizing travel and lodging costs and allowing for better attended and more diverse presentations: "Because it was virtual, money wasn't really an issue. We opened it up to anyone in the med school that wanted to present." Participants suggested extending the benefits of the virtual conference throughout the year by leveraging synchronous videoconferencing capabilities to increase peer-to-peer collaborations, host more network-wide events, and pair students with experienced faculty at other institutions. Incorporating virtual events broadens opportunities to engage in a global CAP mentorship network, such as with one institution that invited international students into their weekly events: "It's been really fabulous having student representation from all over the world [who have] joined in for our weekly sessions. I've learned a ton from them, probably as much from the international students as I have from the patients and the class itself." Faculty participants agreed, citing the recent success of the virtual conference, hoping to leverage virtual connections not just for international collaborations, but also for local network growth, such as bringing neighboring schools to the annual conference: "With the pandemic-Zoom experience on the one hand, and with the international experience [on the other]… these are things that were unimaginable. I think that there's an opportunity here. The power that this could have at the national level, at the international level."

Discussion

Several undersubscribed specialties have used medical student mentorship programs to boost recruitment, e.g., radiology [18], as reviewed in an analysis of similar networks in other specialties [19]. The network approach has also proven helpful in some areas of academic medicine [18]. For example, a federally funded network seeks to enhance the behavioral health workforce of rural communities by relying on exposure as early as high school, marshaling the power of near-peer guidance and role modeling [20]. In undergraduate medical education, psychiatry student interest groups (PSIGs) including PsychSIGN, an APA-supported network [21], have existed since at least 2010, but their reach and impact are unclear [22].

Several key components of mentorship programs are shared across specialties: early exposure, special interest groups, first-year summer experiences, research opportunities, or clinical shadowing can each be valuable in the preclinical years, as can sub-internships or elective rotations in the clinical years [23]. Most medical student mentorship studies have focused on mentee perspectives, revealing a preference for individual over group mentorship, emphasis on frequency of meetings, and efficacy of "facilitated exposures" over "pre-assigned" pairings [24]. Mentors have in turn identified challenges with time constraints and limited exposure of their specialty within the curriculum [25].

Apart from the MPNN, we are unaware of other medical student networks specific to child psychiatry. The network's explicit goal is to increase recruitment into CAP, often through general psychiatry first. Two additional, less explicit goals include enhancing knowledge of child and adolescent mental health for students who match into non-psychiatry specialties [26], and creating a conduit toward building and maintaining a community of practice [27–30] for students who do join CAP.

Beyond elements common across specialties, we identified key points, suggestions, and challenges for a robust mentorship network (Table 3). Underlying these points are three "hooks" critical to the initiative's success: (1) *patient stories* that capture students' interest and curiosity about living experiences of young patients and their clinicians, allowing them to imagine themselves in CAP; (2) *community*, which nurtures a hunger for connection and belonging with likeminded trainees and faculty; and (3) an *annual conference* that serves as fertile ground in which to sow professional relationships, collaborations, and career paths.

Donald Kirkpatrick first posited a four-stage model to evaluate programmatic initiatives [31]. As applied to the MPNN, we have evidence for gains at each stage: (I) *reactions*, through improved perceptions and lower stigma about CAP [9]; (II) *knowledge*, through higher representation in the medical school curriculum [6]; (III) *behavioral change*; and (IV) *institutional impact*, reflected by documented increases in match rates into psychiatry [8], though not yet into CAP.

Beyond enhancing recruitment, medical student mentorship programs aim to reverse a decades-long decline in the training of clinician-scientists [32], a circumstance urgently relevant to CAP [33]. A review of 82 programs from different specialties documented an increase in research output and productivity related to early mentorship initiatives [19]. Retrospective cohort studies at single institutions, spanning a decade for radiation oncology [34] and 15 years for CAP [33], demonstrated increases in such "hard outcomes" as well as in federal funding. Apart from increases in output and productivity, mentorship programs have been shown to enhance wellbeing and decrease burnout among students, such as in emergency medicine [35].

Several participants commented on the limited range of interests, beyond research, explicitly incentivized by the MPNN. Surprisingly, although participants touched on the first-generation student population, they did not mention the diversity of other underrepresented students, including Black, Latino, and Native American. We are not the only ones to

Table 3 Key points, challenges, and suggestions: developing a mentorship network in child and adolescent psychiatry (CAP)

Key points

- A successful program allows faculty to "pay forward" high-quality mentorship and allows students to customize their engagement, with flexibility and belonging as core values.
- Students are eager for exposure to successful trajectories within psychiatry, given its relative lack of emphasis during the medical school curriculum.
- A student-focused conference creates powerful opportunities for personal and academic growth, networking, and identity-building as a member of the professional community of practice.
- A strong program fosters community that persists beyond formal medical education, given the cultivation of mentorship opportunities and relationships.

Challenges

- Advertising and recruitment of interested students may suffer from a self-selection bias in which students with limited exposure or little prior interest may "fall through the cracks" early on in medical school.
- Time pressures and structural constraints, for both mentors and students, limit the bandwidth available to dedicate to participation in the program.
- Limited funding for annual conference attendance generates an implicit (and sometimes explicit) hierarchy among interested students, in which research often becomes a "ticket" for attendance as a proxy for effort or involvement, creating concerns about equity, access, and diversity in student participation.
- The annual conference and the mentor roster do not necessarily highlight the breadth of CAP experience, often focusing on academic psychiatry, biasing student involvement toward academic research at the expense of other career paths within the discipline.

Recommendations

- Mentorship should include trainees at various levels, not just attendings, faculty, or established practitioners, in order to broaden the offerings for students and retain members beyond medical school.
- Program leaders could have protected time, increased funding, or recognition toward academic progression in order to develop their program.
- Annual conferences and yearly programming should highlight the breadth of CAP experiences and welcome student engagement across a broad spectrum of CAP experiences, to increase the range of students' interests as pertaining to the field.
- Programs should harness the synchronous videoconferencing and online platforms to increase accessibility of yearly programming and conference content, as well as to strengthen a national network and a virtual "lending library" of mentors and educational opportunities.

share this concern. Limited access to professional guidance in general and mentorship opportunities specifically are limiting yet modifiable factors contributing to the "leaky pipeline" of minority recruits [36]. Enhancing social capital, as through opportunities offered by the MPNN, could help recognize, mobilize, and enhance social, professional, and mentorship links [37]. We concede that in this study, we did not specifically address the needs of underrepresented students.

Two additional limitations include, first, self-selection bias [38], with students more likely to pursue CAP opting to participate. Despite considerable outreach, we were unsurprisingly less successful in recruiting former participants who entered other specialties and whose input would have been invaluable to address areas for improvement. Second, our study could have benefited from a mixed-methods approach incorporating quantitative data. "Hard" outcome data such as those from an earlier MPNN report [8] will be increasingly important given the long "gestation period" and many "drop-off points" toward CAP. Long-term outcomes will inform cost-benefit analysis of the network's return on investment. Social network analysis may provide additional insights, utilizing a small number of participants to determine how to optimize interpersonal connections [39].

In summary, our findings suggest that the MPNN's unique constellation of early clinical exposure, community building, common mission, annual student conference, and high-quality mentorship affords a powerful blueprint for medical student engagement in CAP. This approach could be replicated or expanded, in whole or in part, to benefit other subspecialties. Nearly two decades after its inception, the MPNN continues to generate enthusiasm from students and faculty for its ability to *CAPtivate* medical students: CAP mentorship matters.

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Declarations

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mental illnesses such as generalized anxiety disorder[4] or attention-deficit/hyperactivity disorder.[5] This remarkably high viewership may indicate a demand for such content. Therefore, it would be remiss not consider this high demand as an indication of the widespread prevalence of suicidal feelings in teenagers. The extent to which teenagers are turning to social media sites such as YouTube for support and information on teenage suicide needs further exploration. A recent systematic review found that an increasing number of young people are using social media to communicate distress.[6] This is reflected by a worrisome finding in our analysis of 2,500 comments posted on these videos: the writer of 1 out of every 15 (7.5% combined) comments expressed frank suicidal thoughts/ideation (5.4%) or was explicitly seeking help (2.1%) to ward off such thoughts. These are vulnerable individuals voicing their self-harm and suicidal thoughts out in public on the Internet.

There are multiple limitations to our study. We limited our search to videos with $\geq$1000 views only; our findings primarily apply to English-speaking viewers; and we did not use keywords that were not age specific, such as "boys" and "girls." We do not have information on the demographics of the viewers, and a small, but substantial, portion of view counts could be attributed to concerned parents and caregivers. Another limitation is that sequential viewing experience of these videos in the real world, guided by YouTube algorithm-based video suggestions, may reveal negative themes, which are not apparent during individual video analyses in the research setting. Similarly, the search engines may be using algorithms based on factors that are not the same as individual teens searching on their computers. Most importantly, the view counts and comments are dynamic and ever-changing, which may impact the results in the future.

In conclusion, although this study was encouraging, ongoing research into social media and its risks and benefits as well as how mental health professionals, parents, and concerned adults can protect youths engaged in social media is warranted.

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Child and Adolescent Psychiatry Perceptions and Career Preference: Participation in a National Medical Student Conference Improves Outcomes

To the Editor:

Since 2002, the Klingenstein Third Generation Foundation (KTGF) has supported a network of medical schools across the country with the explicit aim of enhancing interest in, and eventual recruitment into, the field of child and adolescent psychiatry (CAP). An active component of the KTGF network has been its annual National Medical Student Conference (NMSC).

The Thirteenth Annual NMSC, supported by the KTGF, was held at Stanford University on February 8 and 9, 2019. We designed a 17-item survey with five underlying themes (balance, finances, patients, systems, and stigma), intended to quantify students' perceptions of the field of CAP. We also rated students' prospective career choices. Surveys were electronically collected at baseline, after the NMSC, and 90 days later.

Our baseline sample consisted of 79 students (57% women) from 14 medical schools. We found improvements over time in overall perceptions of child psychiatry ($F_{2,206} = 7.5$, $p < .001$) and in 4 of 5 domain scores ($F_{2,206} \geq 3.6$, $p \leq .03$). Prospective career preferences increased over time

for CAP ($F_{2,206} = 3.9$, $p = .02$), although the effect was time limited and did not persist after 90 days. We found no change in preference for psychiatry or pediatrics over time.

An intensive, 2-day conference dedicated entirely to CAP content had salutary effects among medical students in improving their perceptions about the field, and in their reported likelihood of pursuing CAP after graduation.

BACKGROUND

The shortage of specialists in child and adolescent psychiatry (CAP) necessary to meet current and projected clinical demands has been recognized for more than two decades. By the conservative estimates of the Taskforce on Workforce Needs of the American Academy of Child and Adolescent Psychiatry (AACAP), if funding and recruitment remain unchanged, by the year 2020 there will be approximately 4,300 fewer child and adolescent psychiatrists that are needed to maintain already suboptimal levels.[1,2]

Many of the efforts to enhance recruitment to date have focused on improving graduate medical education in the specialty. Paradigmatic of this approach was the creation in 1986 of Triple Board Residency Programs by the American Board of Psychiatry and Neurology (ABPN). Similarly, curriculum requirement changes have been recently proposed that are aimed at facilitating entry into the subspecialty, having greater collaboration with pediatricians,[3] or establishing a shorter training track that is "not in lock-step" with general psychiatry.[4] Welcome as these and other efforts have been, it is clear that engagement with the specialty should start much earlier. If we are to recruit a greater number of physicians into CAP, we must make concerted efforts to attract them early on in their medical education.

Initiatives targeting medical students do exist, but they largely enrich the experiences of individual students already interested in psychiatry. For example, the Academy has Life Member mentorship grants and summer medical student fellowships. A less formal way of increasing interest comes in the form of psychiatry student interest groups (PSIGs), which are specifically tailored to medical student needs and schedules. However, there is wide variation in the availability and characteristics of PSIGs,[5] as each medical school's group is independently organized by its students. For more general exposure, at least one network of medical students interested in psychiatry seeks to include "those with a rough interest in the brain and mind to those already in the residency application and match process" (http://www.psychsign.org).

Here, we describe a comparable medical student network that, to our knowledge, is the only one specific to CAP. Beginning in 2002, the Klingenstein Third Generation Foundation (KTGF) has supported a network of medical schools across the country with the explicit aim of enhancing interest in, and eventual recruitment into, the field of CAP. KTGF initially funded a single site in 2002; the Foundation later invited other schools to apply through a competitive request for proposals. This led to an expansion into a network of 6 schools by 2004, 10 schools by 2006, and the current 13-school network by 2012 (a 14th school, not part of the KTGF Network, joined the 2019 conference).

The KTGF network uses a developmentally informed approach that focuses on medical students, particularly those in the early (preclinical) stage of their careers.[6] For more than a decade, an active component of the KTGF network has been its annual National Medical Student Conference (NMSC).

METHOD

The Thirteenth Annual NMSC, supported by the KTGF, was held at Stanford University, Palo Alto, CA, on February 8 and 9, 2019. Participants included 97 medical students and 22 faculty members from 14 accredited medical schools across the country, and 2 staff members from AACAP. The NMSC program included medical student−led and −organized oral presentations, dedicated poster sessions, mentorship, as well as creative and social activities.

We designed a 17-item questionnaire intended to quantify students' perceptions of the field of CAP. The survey addressed overall perceptions of the field, as well as five domain areas that we considered relevant to recruitment efforts and career choice decisions: work−life balance, finances, patient care, stigma, and dealing with systems relevant to children's lives. We also inquired about students' prospective career choices.

We used a 5-point Likert scale for all perception items: (1) I have serious concerns about this / an unaddressable limitation of the field; (2) I have some concerns about this/a hard-to-address limitation of the field; (3) I am ambivalent/think my concerns stem from the misperceptions of others; (4) I think this is a likely addressable issue/addressing this could be an appeal of the field; and (5) I think this is a definitely addressable issue/addressing this could be a definite appeal of the field.

For items regarding career preference, we used the following anchor points: (1) Not at all—would never pursue (this field); (2) Curious, but unlikely to pursue; (3) Ambivalent—thinking about it, but have doubts; (4) Interested—good chance I'll pursue; and (5) Committed—will almost certainly pursue.

We obtained approval from the Stanford School of Medicine's Institutional Review Board (#49325) before starting data collection. The study was deemed exempt from review, with completion of the survey implying tacit consent.

TABLE 1 Students' Baseline Perceptions of Child and Adolescent Psychiatry as a Potential Career Choice (N = 79)

Number	Item	Mean	SD	Theme
1	Quality of life and life−work balance	4.2	1.0	Balance
2	Ability to help patients	4.1	1.1	Patients
3	Collaboration with other colleagues (MDs, RNs, SWs, psychologists)	3.9	1.0	Balance
4	Attachment to patients	3.6	1.1	Patients
5	Dealing with parents	3.4	1.0	Patients
6	Role as a "complete" physician	3.3	1.2	Balance
7	Financial compensation	3.3	1.0	Finances
8	Role as a "medication prescriber"	3.2	1.1	Stigma
9	Scientific basis of the field	3.2	1.0	Patients
10	Research funding	3.2	0.8	Finances
11	Dealing with systems (eg, schools, state agencies)	3.2	1.1	Systems
12	Perception of field by friends and family	3.1	1.0	Stigma
13	Stigma of patients with mental illness	3.1	1.1	Stigma
14	Perception of field by other medical colleagues	2.8	0.9	Stigma
15	Stigma of the field	2.8	0.9	Stigma
16	Emotional toll/vicarious trauma	2.6	1.0	Patients
17	Dealing with insurance	2.1	0.8	Systems
..	CAP overall	3.2	0.5	..

Note: Items are ranked by mean score on a 5-point Likert scale ranging from 5 (highest) to 1 (lowest). CAP = child and adolescent psychiatrist; MD = medical doctor; RN = registered nurse; SW = social worker.

To track individuals' responses over time, each student provided a deidentified and anonymous unique code. Demographic variables of the sample, such as sex composition or school of origin, are provided only for descriptive purposes of the group as a whole, as they were not analyzed at the individual level. Students entered responses securely through their Wi-Fi−enabled personal devices into the electronic interface Qualtrics (Provo, UT). We collected surveys at baseline and after the NMSC (median days between assessments, 12; range, 2−18); we collected data for a third time 90 days after the NMSC (median, 92; range, 90−96).

Data analysis progressed in two stages. First, we used analysis of variance with Bonferroni post hoc tests to compare means over time. We compared these analyses to a general linear model repeated-measures approach for the subsample of students (n = 33) who had complete data at all three time points. We found no significant differences between the two approaches, and present only the analysis of variance approach. We summarize results as means ranging from 1 to 5 (least to most favorable, respectively). All analyses were conducted with IBM SPSS Version 25 (Armonk, NY).

RESULTS

Complete baseline information was provided by 79 of 97 participants, for a response rate of 81%. Characteristics of the respondents included more women (57%) than men, a modal age bracket of 25 to 29 years (60%), more first- and second-year students (61%), and a third of students who had already completed a clinical clerkship in psychiatry (31%). Most students had participated in some prior KTGF-related activity (68%), including meetings with a primary mentor (64%), clinical encounters with patients or families (50%), or attendance to earlier NMSCs (22%).

Our perception scale had a robust Cronbach α coefficient of 0.868. Table 1 describes the scale's 17 component items and five summary themes, and Table 2 summarizes metric changes over time. We found improvements over time in overall perceptions of child psychiatry ($F_{2,206} = 7.5$, $p < .001$), and in 4 of 5 domain scores ($F_{2,206} \geq 3.6$, $p \leq .03$). For the overall score and 2 domains (finances and stigma), ratings increased after attendance at the NMSC, and plateaued by 90 days. Two domains increased after the NMSC (patients and systems) but regressed to baseline by 90 days. Prospective career preferences increased over time for CAP ($F_{2,206} = 3.9$, $p = .02$), although the effect was time limited and did not persist after 90 days. We found no change in preference for general psychiatry or pediatrics over time.

DISCUSSION

Recruitment into CAP continues to be insufficient to meet current and future public health needs. Our findings highlight some of the concerns that prospective applicants face in considering joining the field. Stigmatized views of the profession and of the patients whom we serve remain a particularly insidious challenge to overcome. Additional concerns identified include the time-consuming need to deal with multiple systems and stakeholders, and to interface with insurance carriers. Emotional toll and vicarious trauma may be especially relevant (and addressable) concerns for students considering a field dedicated to working with vulnerable children. Research funding emerged as another area giving students pause, but we are not able to determine whether this is a concern specific to CAP or a broader reflection of current biomedical research funding trends.

TABLE 2 Change in Medical Students' Perceptions and Career Preferences After Participation in National Conference

	Phase (n)							
	Baseline (n = 79)		Post (n = 76)		90 Days (n = 54)		ANOVA	
	Mean	SD	Mean	SD	Mean	SD	*F*	*p*
Perception								
CAP overall	3.2[a]	0.5	3.6[b]	1.6	3.4[b]	0.6	7.50	.001
Balance	4.0[a]	0.9	4.2	0.2	4.4[b]	0.6	3.02	NS
Finances	3.3[a]	0.7	3.6[b]	0.2	3.6[b]	0.7	5.79	.001
Patients	3.3[a]	0.8	3.7[b]	0.6	3.6	0.9	3.62	.03
Stigma	3.1[a]	0.7	3.4[b]	0.7	3.4[b]	0.7	5.01	.01
Systems	2.9[a]	0.8	3.3[b]	0.4	3.1	0.8	4.50	.01
Preference								
CAP	3.8[a]	0.8	4.2[b]	0.7	4.1	0.9	3.87	.02
Pediatrics	3.0	1.2	3.1	1.2	3.2	1.3	0.67	NS
Psychiatry	4.1	0.9	4.3	0.8	4.2	1.0	0.46	NS

Note: df = 2,206; means with different superscript letters differ from each other at the .05 level (Bonferroni). ANOVA = analysis of variance; CAP = child and adolescent psychiatry; NS = not significant (p > .05).

Students also identified areas of attraction to the field, which centered on working closely with, and being able to help, children and families. The profession is viewed favorably with regard to work–life balance and its inherently collaborative, team-based, and multidisciplinary nature. Financial compensation emerged as a neutral item, suggesting that it is not necessarily a major factor influencing career choice, at least in this sample.

The most important finding from our study is that perceptions about the field, whether negative or positive, were favorably influenced during a brief and intensive medical student conference specifically tailored around child psychiatry content. We think that critical to the NMSC's efficacy and success was designing it with as extensive medical student input as we had, with most presentations led by the students themselves. The stigma literature has shown that social contact–based interventions usually achieve short-term (but less clearly long-term) attitudinal improvements.[7] In the case of the NMSC, several of the presentations were rich in clinical material reflective of the daily practice of child and adolescent psychiatry and the patients and families whom we serve. We believe that our findings show a beneficial (ie, stigma-reducing) short-term effect of attendance at the NMSC, which is crucial, as previous studies have found lower medical student stigma toward mental illness to be associated with the likelihood of pursuing psychiatry as a specialty.[8] In addition to favorable changes in perceptions about the field, we found that students reported a higher likelihood of pursuing CAP after the conference (but no change in their likely pursuit of pediatrics or general psychiatry). These are especially notable findings, given that the students who participated in the NMSC already came with a pre-existing interest in CAP.

We believe that, independent of eventual career choice, the opportunities provided at each of the KTGF sites are critical for nurturing interest among those naive to the field. Most of the participants in the NMSC were first- or second-year medical students, who would otherwise have had minimal (if any) exposure to children with psychiatric illnesses and their families. One of the stronger "pulls" of these programs, varied as they may be from one institution to another, is their ability to expose interested medical students to an otherwise "specialized," "off-limits," or "rarified" patient population. Equally important, KTGF programs provide a space for medical student retention, in which those with an interest in CAP can have their interests cultivated and strengthened over time. It is noteworthy that almost 1 in 4 students had participated in prior iterations of the NMSC, with their return to subsequent meetings likely deepening their interest or commitment to the field.

The active components of the NMSC are likely different, yet synergistic and complementary, with those of the KTGF network sites. In an earlier article by the KTGF Medical Student Network,[9] students had identified mentorship and patient interactions as the 2 most important components after participating in their respective programs for 1 year. As a 2-day event, the NMSC did not allow for longitudinal or repeat experiences; instead, it provided an intensive immersion not only into the thematic and clinical content of the field but, perhaps as importantly, exposure to

a large number of like-minded peers and senior mentors from around the country.

We recognize as shortcomings our small sample size, response attrition over time, and limited generalizability—particularly to medical schools without philanthropic support to underwrite such a conference, or without sufficient local CAP expertise and infrastructure. Selection and attrition biases are other possible limitations, as we do not have information from nonresponders. For example, nonresponders may have had lower initial views of the field, or worsening ones over time, leading them to "vote with their feet" by not being as invested in completing the surveys (there were nonresponse rates of 19%, 21%, and 44% at baseline, endpoint, and 3 months, respectively). We also recognize that some of the beneficial effects of the conference did not endure over time, highlighting the need for booster efforts and additional initiatives to maximize recruitment efforts.

We have yet to address the critical question of whether participating in a KTGF program or the NMSC increases the likelihood of completing a CAP fellowship. The lengthy trajectory from medical school enrollment until matching into CAP (with a mode of 8 years), combined with the small number of potential CAPs per graduating medical school class, translates into the long lag time necessary for match rate studies to be meaningfully conducted. We have a separate study now underway to see whether exposure to the NMSC and to other components of the KTGF network's mentorship model have effects on eventual career choice as reflected by residency match rates.

In sum, we found that an intensive, 2-day conference dedicated entirely to CAP content had salutary effects among medical students in improving their perceptions about the field and in their likelihood of pursuing it after graduation. Our findings suggest that preserving, refining, and expanding programs of early clinical exposure in CAP for medical students, such as the KTGF and its flagship NMSC, would be a good investment of time and resources toward the urgent goal of enhancing recruitment into the underserved field of child and adolescent psychiatry.

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Psychiatry Match Rates Increase After Exposure to a Medical Student Mentorship Program: A Multisite Retrospective Cohort Analysis

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EMPIRICAL REPORT

Psychiatry Match Rates Increase After Exposure to a Medical Student Mentorship Program: A Multisite Retrospective Cohort Analysis

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Abstract

Objective Since 2002, the Klingenstein Third Generation Foundation (KTGF) has supported a network of medical student mentorship programs (MSMPs) across the USA with the explicit aim of enhancing interest in, and eventual recruitment into the field of child and adolescent psychiatry (CAP). The authors conducted a multisite, retrospective cohort analysis to examine the impact of the program on career selection, as reflected by graduation match rates into psychiatry or pediatrics.

Methods The authors collected graduating match information (2008–2019) from fourteen participating medical schools (Exposed) and thirteen non-participating schools (Control). Control schools were selected based on region, comparable student body and faculty size, national standing, and rank in NIH funding. Match rates into psychiatry and pediatrics were compared between Exposed and Control groups.

Results Exposed schools had significantly higher match rates into psychiatry as compared to unexposed schools (6.1% and 4.8%, respectively; OR [95%CI] = 1.29 [1.18, 1.40]; $X^2 = 32.036$, $p < 0.001$). In contrast, during the same time period, exposed schools had significantly lower match rates into pediatrics than unexposed ones (11.6 and 10.5%, respectively; OR [95%CI] = 0.89 (0.83, 0.95); $X^2 = 12.127$, $p < 0.001$). These findings persisted even after adjustment for secular trends in match rates.

Conclusions Seventeen years after its inception, the KTGF medical student mentorship program network has had a positive impact on match rates into general psychiatry. Future studies will address whether these results translate to trainees' eventual selection of careers in CAP.

Keywords Mentorship · Medical students · Recruitment · Workforce · Match rates · Psychiatry · Pediatrics · Child and adolescent psychiatry

Recruitment into psychiatry will remain a challenging priority in the coming decades. Because of steady population growth and the retirement of more than half the current workforce, it is anticipated that the US psychiatric workforce will continue to contract through 2024, leading to a significant shortage of psychiatrists [1]. Even as psychiatry residency slots have increased during the past decade [2], medical students filling those slots increased only slightly during the same period. For example, data from the National Resident Matching Program (NRMP) showed a change from 5.1% of medical school graduates in 2013 to 5.3% in 2017 [3]. These modest changes in match rates will not lead to a substantial proportional gain in the future psychiatric workforce.

Difficulties in psychiatric recruitment are magnified when considering subspecialty training. There already is a shortfall in the number of specialists dedicated to addiction, consultation-liaison, child and adolescent, and geriatric psychiatry. This shortage is compounded by the fall in applications to

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fellowship programs [4], which will further impact the pipeline of practitioners dedicated to the care of vulnerable populations in high need of specialized services.

Against this backdrop, it is imperative to find novel ways of attracting medical students into the field of psychiatry and its subspecialties in order to meet current and future public health demands. Medical schools with an educational climate and culture favorable to psychiatry can impact recruitment positively [5]. Exposure of medical students to meaningful and high-yield clinical, didactic and research activities can enhance interest in the field [6]. Psychiatry student interest groups (PSIGs) are one way to complement curricular initiatives in an effort to further expose students to the specialty [7]. The Psychiatric Student Interest Group Network (psychsign.org) is one such initiative, led by medical students and organized under the auspices of the American Psychiatric Association.

As child and adolescent psychiatrists (CAPs) working in academic medical centers charged with training the next generation of practitioners, we are aware that 37% of programs nationally did not fill their classes in 2017 (ranging from 28 to 39% during the previous decade) [3]. Despite a recognized shortage of CAPs, the number of residents in psychiatry choosing the subspecialty has not changed significantly since 1995 [8]. According to the American Medical Association, there were approximately 8,000 child and adolescent psychiatrists in the USA in 2013. The US Bureau of Health Professions estimates the need for more than 12,600 specialists by 2020 in order to meet the growing demand for children's mental health care. On average, slightly more than 300 physicians become board certified in CAP each year. After accounting for retirements, the workforce shortfall by 2020 will total 4,300, or approximately 70% of the conservatively estimated overall need [9, 10].

Despite the insufficient growth in the number of CAPs, there are few initiatives to enhance medical student recruitment into the field. Current exposure to the specialty is inconsistent, institution-dependent, and relies on educational supplements to an already overburdened medical school curriculum [11]. In an effort to address these challenges, we have been part of a national network seeking to enhance medical student recruitment into CAP through its most common portal of entry – residency training in general psychiatry.

In this report, we present findings from a multisite, retrospective cohort analysis that examined the impact of this network on medical students' career selection, as reflected by graduation match rates into psychiatry or pediatrics. To the best of our knowledge, this is the first large-scale report on the impact of a medical student program on match rates in psychiatry.

Methods

The Klingenstein Third Generation Foundation (KTGF) has provided funding since 2002 to medical schools across the country to administer a medical student mentorship program (MSMP). Schools with clinical, training, and research presence in CAP have been invited to apply through competitive requests for proposals. The purpose of the MSMP is to encourage students to explore the field of CAP through mentorship, early clinical exposure, research, and advocacy throughout medical school. A 2007 study of the program demonstrated that the MSMP improved perceptions and understanding of the field for participants [12]. More recent data from a KTGF-sponsored national conference showed that perceptions of child psychiatry improved, and perceptions of stigma decreased, among medical students who attended the intensive two-day meeting [13].

The National MSMP Network has grown to include by now 14 programs based on AAMC-accredited medical schools around the country. All MSMPs participating in the Network have utilized four main components to various degrees [14]: (**a**) direct clinical experience working with children, adolescents and their families; (**b**) a seminar series, with a mode of 6 annual meetings, co-organized by medical students and CAP faculty, adapted to each program's unique needs and interests; (**c**) exposure to, and involvement in ongoing clinical and/or scholarly activities; and (**d**) attendance to an annual conference (the 14th such reunion took place in January 2020).

We matched medical schools with an MSMP (hereafter "Exposed") to non-participating schools ("Control"), based on region, school size, and research rank according to US News and World Report [15]. We obtained match rates into pediatrics (including medicine-pediatrics) and psychiatry (including triple board and psychiatry-CAP combined-track programs) for medical school cohorts between 2008 and 2019. We specifically explored match rates into pediatrics given that medical students in the Network are typically interested in working with children. We obtained these anonymized and pooled data from publicly posted sources: (1) "Results and Data, Main Residency Match®" reports from the National Resident Matching Program® website (nrmp.org) [3]; and (2) School-specific match information from each of the 27 schools' websites (typically through their respective office of the registrar). We extracted, for each school-year cohort, the number of graduating students and the number of those matching into psychiatry or pediatrics. Given that the year of MSMP inception varied among participating schools, we established an "after implementation period" starting two years after the school began participating; two years was considered the minimum amount of time for a program to potentially influence the choices of graduating students.

This study was deemed exempt by the Yale Human Research Protection Program's Human Investigations Committee (protocol #2000026782).

We first used Chi-square statistics and odds ratios (ORs) to compare match rates into psychiatry or pediatrics between

Exposed and Control schools. We then applied binary logistic regression models to explore the independent effects of program exposure, before and after their implementation. We obtained adjusted ORs and 95% confidence intervals (95%CI) using match status (yes/no) as dependent variable, and program exposure (yes/no) and timing of implementation (after/before) as independent variables. We included an exposure-by-implementation interaction and conducted analyses separately for psychiatry and pediatrics. We used SPSS 25.0 (Armonk NY) as our statistical package.

Results

Data were collected from 14 Exposed and 13 Control medical schools. A median of 11 years of complete data per school were available for analysis (range, 10–12). This yielded 68 years of pre-implementation and 218 years of post-implementation data, with information on 39,316 individual students overall. As summarized in Table 1, in unadjusted models Exposed schools had significantly higher match rates into psychiatry than Control schools (6.1 vs 4.8%, OR [95%CI] = 1.29 [1.18, 1.40]; $X^2 = 32.036$, $p < 0.001$). In contrast, Exposed schools during the same time period had lower match rates into pediatrics than Controls (10.5 vs 11.6%; OR [95%CI] = 0.89 (0.83, 0.95); $X^2 = 12.127$, $p < 0.001$).

In an adjusted binary logistic regression model summarized in Table 2, timing of the program was significant, revealing a higher match rate two years after its implementation (OR [95%CI] = 1.43 [1.23, 1.66], p < 0.001). This effect was evident regardless of exposure to the program, as reflected by the non-significant exposure-by-timing interaction term. In other words, all schools, whether exposed to the program or not, showed higher match rates in the years following implementation, consistent with a secular trend that was independent of program participation. After controlling for this secular trend, exposure to the program still resulted in significantly higher match rates in psychiatry (OR [95%CI] = 1.86 [1.60, 2.16], $p < 0.001$). By comparison, none of the corresponding adjusted analyses were significant for the match outcomes for pediatrics (data not shown).

Discussion

These findings suggest that exposure to a MSMP increased match rates into psychiatry, but not pediatrics, in a large sample of graduating medical students spanning over a decade. This effect was specific to schools exposed to the program and persisted after taking into account a secular trend toward higher psychiatry match rates during the later years of the observation period [8]. This decade-long trajectory in career choice may be related to millennials' prioritization of values, to medicine's wellbeing movement, or to the renewed promise of understanding brain mechanisms in the service of clinical care [16–18].

Even as our findings support the salutary role of the MSMP toward recruitment into psychiatry residencies, it is important to acknowledge that there was a difference in psychiatry match rates between Exposed and Control schools that predated program adoption (5.0 vs 3.9%, respectively). This suggests that MSMP-participating schools may already have had a culture of prioritizing exposure to psychiatry, or a greater focus on the field [5]. Beyond that difference, the effect of program exposure was

Table 1 Medical students matching into psychiatry or pediatrics, according to exposure to mentorship program and timing of its implementation

Programs	Students (*n*)				OR (95% CI)	
	Matched	Unmatched	Total	Match rate (%)		
	Psychiatry				Exposure	Timing
Unexposed	1,008	20,021	21,029	4.8	Reference	..
Exposed	1,113	17,174	18,287	6.1	1.29 (1.18, 1.40)***	..
Before	452	10,156	10,608	4.3	..	Reference
Two years after implementation	1,669	27,039	28,708	5.8	..	1.39 (1.25, 1.54)***
Total	2,121	37,195	39,316	5.4	..	..
	Pediatrics					
Unexposed	2,438	18,591	21,029	11.6	Reference	..
Exposed	1,918	16,369	18,287	10.5	0.89 (0.83, 0.95)***	..
Before	1,224	9,384	10,608	11.5	..	Reference
Two years after implementation	3,132	25,576	28,708	10.9	..	0.94 (0.88, 1.01)
Total	4,356	34,960	39,316	11.1	..	..

***$p < 0.001$

Table 2 Adjusted binary logistic regression model of students matching into psychiatry, according to exposure to mentorship program and timing of its implementation

Predictor	B	S.E.	Wald (df = 1)	df	*p*	Exp(B)
Exposure (1 = yes; 0 = no)	0.621	0.076	66.154	1	< 0.001	1.86 (1.60, 2.16)
Timing (1 = two years after implementation; 0 = before)	0.356	0.078	21.01	1	< 0.001	1.43 (1.23, 1.66)
Exposure-by-timing interaction	−0.045	0.108	0.170	1	ns	..
Constant	−3.595	0.036	..	..	..	..

significant even after controlling for the underlying secular increase in psychiatry match rates. Notably, Exposed schools with KTGF programs had lower rates of matching into pediatrics. Although caution should be exercised in interpreting this inverse relationship, we can conclude that the effect of exposure to the MSMP appears to be unique to psychiatry. Continued follow-up of this unique cohort will clarify whether the MSMP effect extends into CAP recruitment.

Despite these welcome changes in psychiatry match rates, CAP slots continue to go unfilled [8]. Over the past 30 years, there has been a substantial decrease in interest in subspecialty training between the fourth year of medical school and the fourth year of psychiatry residency [19]. Underlying extrinsic reasons may include resident burnout, which could make another 1–2 years of training unbearable, or student debt and the requisite delay of repayment and earning potential [20]. Intrinsic reasons specific to the field may also contribute: caring for children and families involves a significant amount of unreimbursed time, and the emotional toll of working with difficult socioeconomic conditions, childhood trauma and familial psychopathology can be taxing. All of these factors may conspire against medical students' perception of CAP as a viable option. Medical students' decisions to opt away from CAP have shown among the top considerations: salary concerns, stigma, lack of respect within medical colleagues, and limited exposure to the field [21].

The question persists as to how and when best to introduce child psychiatry to students in order to foster their interest during medical school and residency training. CAP exposure early in the medical school curriculum can be decisive [11, 14], as students with previous coursework and clinical opportunities in the field show higher interest in CAP as a career choice [22]. This is in keeping with our earlier experience with the MSMP [11, 14].

There are limitations inherent to the use of retrospective, pooled data, and our design precluded the ability to establish causality. We were unable to obtain student-level information, which limited our ability to draw conclusions between actual student participation in the program and eventual residency choice. In addition, we acknowledge the compromises inherent to matching schools while balancing size, region, research rank, and availability of data. Given how the computerized ranking algorithm works, it is possible that some graduates matched into psychiatry if another (preferred) field was not available; although we have no way to quantify these possible outcomes, we consider them to be rare, and unlikely to vary according to MSMP exposure status. Importantly, we were unable to directly study our main outcome of interest: selection of CAP as a subspecialty. The long lag time between medical school matriculation and graduation from CAP fellowship, as well as the small number of students selecting the subspecialty, make it challenging to sufficiently power such a quantitative study at this time.

Despite such limitations, our results suggest that exposure to this specific mentorship program in CAP is associated with a higher likelihood of students pursuing psychiatry careers. This and similar mentorship programs may be an important first step toward addressing the shortage of psychiatrists in general, and of subspecialists in particular. The MSMP provides a unique and replicable model for exposing medical students to the field of CAP, exposure that is not routinely offered during undergraduate medical training [14]. The program itself [12], and its associated annual conference [13] have already been found to improve perceptions of the field among medical students and will allow those entering non-psychiatric specialties to also contribute to the mental health care of children.

Seventeen years after its inception, the KTGF medical school mentorship program network has had a positive impact on match rates into general psychiatry. Future studies will evaluate whether these findings translate into trainees' subsequent selection of careers in CAP. Qualitative studies of exposed and unexposed students selecting into or out of CAP training may also prove a fruitful next step in assessing key factors that may help recruit students to, or deter them from careers in CAP.

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Compliance with Ethical Standards

Ethical Considerations This study was deemed exempt by the Yale Human Research Protection Program's Human Investigations Committee (protocol #2000026782).

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Does Early Mentorship in Child and Adolescent Psychiatry Make a Difference? The Klingenstein Third-Generation Foundation Medical Student Fellowship Program

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Objective: *There is a critical shortage of child and adolescent psychiatrists in the United States. Increased exposure, through mentorship, clinical experiences, and research opportunities, may increase the number of medical students selecting child and adolescent psychiatry (CAP) as a career choice.*

Method: *Between 2008 and 2011, 241 first-year participants of a program to increase exposure to CAP, funded by the Klingenstein Third-Generation Foundation (KTGF) at 10 medical schools completed baseline surveys assessing their opinions of and experiences in CAP, and 115 second-year participants completed follow-up surveys to reflect 1 year of experience in the KTGF Program.*

Results: *Students reported significantly increased positive perception of mentorship for career and research guidance, along with perceived increased knowledge and understanding of CAP.*

Conclusions: *Results suggest that the KTGF Program positively influenced participating medical students, although future studies are needed to determine whether these changes will translate into more medical students entering the field of CAP.*

Academic Psychiatry 2013; 37:321–324

There is a critical shortage of child and adolescent psychiatrists in the United States. Detailed estimates from the 1980s and 1990s placed the supply of child and adolescent psychiatrists at 10%−45% of the level required to meet the mental health needs of U.S. youth (1–4). The field of Child and Adolescent Psychiatry (CAP) has sought innovative solutions to address this shortage, yet many of these solutions are directed at graduating students who already have an interest in psychiatry (5, 6). Another approach focuses on medical students, who may not have decided on a career path. The Klingenstein Third-Generation Foundation (KTGF) Medical Student Fellowship Program (MSFP) is an example of such a program (for details, see *http://ktgf.org/msp_description.html*). Although psychiatric interest groups are present in many medical schools, the KTGF/

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MSFP focuses primarily on CAP and has grown to include 10 medical schools and a total of 647 medical-student participants nationally since its initiation in 2002. The KTGF/MSFP was established with the short-term goals of providing medical students with: 1) early clinical experiences in CAP; and 2) mentoring from child and adolescent psychiatrists. The long-term goal has been to recruit more medical students into CAP to meet more adequately the growing numbers and needs of children affected by mental illness.

Although each MSFP site operates independently and is given freedom to design its own curriculum, all programs share in common the two goals of providing fellows with a clinical experience in CAP and a CAP mentor. Opportunities for clinical experiences vary across a wide array of settings within CAP; these include outpatient, inpatient, consultation–liaison, therapeutic nursery, community-based clinics, subspecialty clinics, and clinical research settings.

Results presented here represent Phase 1 of the programs' evaluation: assessing outcomes after 1 year of student participation in the KTGF/MSFP, from 2008–2011. In this Phase 1 evaluation, we compared students' attitudes, experiences, and interest in CAP before and after participation in the MSFP for the year. Phase 2 will examine the longitudinal impact of the program, specifically, whether participation in the KTGF/MSFP is associated with a greater likelihood of students' matching into CAP. These data are not currently available because the majority of participants are not yet eligible to begin training in CAP.

Method

Baseline surveys were distributed by e-mail, using Survey Monkey, an online survey tool, to all students who were identified by site coordinators as beginning the KTGF/MSTP in 2008, 2009, or 2010. These surveys were completed within 60 days of beginning the MSFP. Follow-up surveys were then completed 1 year later (2009–2011) by the same individuals. Surveys were collected anonymously, and we can therefore only compare pre- and post-survey responses for the group as a whole. Survey questions were designed to assess a variety of outcomes, including students' attitudes, experiences, and interest in CAP, as well as the importance of mentorship to achieve career goals.

Students were asked at baseline and follow-up about their level of interest, on a scale from No Interest (rated 1) to Enormous Interest (rated 7), in each of the following: desire to become a pediatrician, an adult psychiatrist, a child and adolescent psychiatrist, or to engage in CAP research. Students were asked to rate the importance of mentorship for career guidance, research guidance, and as a way to learn medicine. Using a scale from No Knowledge Or Understanding (rated 1) to Solid Knowledge And Understanding (rated 7), students were also asked about their level of knowledge and understanding of key concepts in CAP, including child development, pediatric psychosocial issues, and strategies in working with children.

We were especially interested in learning whether specific factors were more influential in students' perception of CAP as a possible career. Using a 3-point scale, from Negatively Influenced (rated 1) to No Influence (rated 2), to Positively Influenced (rated 3), we queried various factors, including lifestyle, stigma, patient interaction, emotional stress, scientific foundation, availability of funding, intellectual stimulation, earning potential, prestige, ability to help patients, presence of the physical aspects of medicine, and advancements in the field. Finally, several open-ended questions were posed to explore other potential factors that encourage or discourage students from careers in CAP. We also explored whether participation in the KTGF/MSFP was associated with an increase in clinical encounters with children with mental health issues, an increase in lectures in CAP, and an increase in exposure to child and adolescent psychiatrists.

SPSS Software, Version 18.1, was used for analysis. Given that all surveys were anonymous, responses from only first-year students were used as baseline data and only from second-year students as follow-up data. This assured that any change from baseline to follow-up represented 1 year of program participation. The Mann-Whitney *U* test was used to analyze the ranked cross-sectional variables; baseline and follow-up samples were treated as independent. An alpha level of 0.05 was used to determine statistical significance.

Results

Baseline and follow-up surveys were sent to a total of 359 students; 241 first-year KTGF participants completed the baseline survey between 2008 and 2010; 115 second-year KTGF participants completed the follow-up survey between 2009 and 2011. All 10 schools were represented in data from both surveys.

When queried at baseline as to why they joined the KTGF/MSFP, 81% reported seeking an early clinical experience; 68% wanted to learn how to interact with children; and 63% stated that they were specifically interested in CAP.

There was no significant change between baseline and follow-up responses in the level of interest in becoming a child and adolescent psychiatrist, a pediatrician, a general psychiatrist, or engaging in CAP research. However, after

TABLE 1. Mean Effects of 1 Year's Experience in KTGF on Student Perceptions

No Effect; 4: Moderate Effect; 7: Maximum Effect	Baseline	Follow-Up	p
Desire to become a pediatrician	4.26	4.30	0.78
Desire to become a general psychiatrist	4.63	4.49	0.41
Desire to become a child and adolescent psychiatrist	4.44	4.56	0.51
Desire to engage in CAP research	4.30	4.22	0.65
Mentorship as a way for me to learn medicine	5.72	5.68	0.72
Mentorship as a way for me to get career guidance	5.72	5.91	0.04*
Mentorship as a way to provide me with research guidance	4.94	5.33	0.02*
Knowledge of child development	3.70	4.54	0.00**
Knowledge of pediatric psycho-social issues	3.68	4.66	0.00**
Knowledge of the field of CAP	3.58	4.77	0.00**
Knowledge of strategies to interact with CAP patients	3.33	4.55	0.00**
Factors that could influence the choice to enter CAP	**Baseline**	**Follow-Up**	**p**
1: Negative Impact; 2: No Impact; 3: Positive Impact			
Stigma	1.96	1.95	0.83
Patient interactions	2.84	2.93	0.08
Ability to help patients	2.86	2.95	0.03*
Prestige of CAP	1.97	1.99	0.55
Emotional stress	1.88	1.98	0.19
Aspect of physical medicine	1.98	1.96	0.79
Intellectual aspect	2.79	2.77	0.72
Funding sources	2.01	2.10	0.00**
Scientific foundation	2.09	0211	0.71
Earning potential	2.03	2.09	0.21
Lifestyle	2.54	2.60	0.42
Advancements in the field of CAP	2.28	2.45	0.02*

*$p < 0.05$; **$p < 0.01$.

program participation, students noted increased positive perception of a number of factors that influence the possibility of choosing CAP as a potential career (see Table 1).

Students reported increased positive perception of the value of mentorship for research guidance ($p < 0.05$) and an increased positive perception of mentorship for career guidance ($p < 0.05$). There was no significant change in opinion about the value of mentorship in learning medicine.

Over 1 year of participation, the KTGF/MSFP also provided students with significantly increased exposure to the field of CAP. Students reported nearly a doubling of the number of encounters with children and adolescents with mental health issues, as compared with their baseline level of experience (11 versus 6 encounters). They also reported a similar increase in the number of lectures about CAP, as compared with their baseline experience (5 versus 3 lectures). Finally, participation in the KTGF/MSFP was associated with increased exposure to child and adolescent psychiatrists, as compared with baseline (4 versus 2 providers).

Discussion

Specialty-specific extracurricular programs have been used by a variety of medical specialties to attract medical students to specific fields (7, 8). These programs have had varying degrees of success, and, to our knowledge, the KTGF/MSFP is the first such program specifically designed for CAP and organized at a national level. Results from data collected through pre- and 1-year post-participation surveys suggest that the KTGF/MSFP has been effective in a number of areas.

Although the surveys were not able to demonstrate a significant increase in interest in choosing CAP as a career, it is too early in the program's history to be able to assess how many participants will ultimately enter CAP. Students were clearly influenced by their mentorship experience and early clinical exposure to shift their perceptions and knowledge of the field in positive directions. Students became aware that mentorship was an important means to gain career advice and research guidance. This result was consistent with previous studies that have shown mentorship to be paramount in eventual career selection (9, 10).

Moreover, whatever career choice students may ultimately pursue, increased knowledge and understanding of CAP suggests that the MSFP experience may well benefit their care of patients. MSFP participants may be more likely to recognize and refer children in their practices with mental health problems to appropriate resources. These predictions

are especially likely for those students who remain in the MSFP for 3 or 4 years of their medical school experience and do not select CAP training as their career choice. Improved student knowledge and attitudes about childhood mental disorders should motivate other schools to support an MSFP insofar as it may contribute to the academic growth of students, irrespective of final career choice.

Several limitations of this study should be considered. First, the surveys were anonymous, and we were unable to track individual students' trajectory of change over the year. This limitation was addressed by the inclusion of only first-year and second-year MSFP participants for analysis. Second, response bias may exist because the survey was distributed to all 359 participants in the program, and only 241 first-year students completed the baseline survey, and 115 second-year students completed the follow-up response. The response bias might suggest that those students who responded had stronger opinions about the program, whether positive or negative, and may have felt more compelled to complete their evaluation than students who were less involved. Third, selection bias also may have influenced the results. Students who volunteered to participate in the KTGF/MSFP may have been more interested in CAP at baseline, so their attitudes and knowledge about CAP may not have been representative of a randomly-selected sample of medical students. Nevertheless, despite the cross-sectional study design, the significant changes in perception noted over time are genuine. Fourth, the nature of our survey instrument and the duration of measurement may have been insufficient to detect meaningful changes in some parameters. In particular, follow-up surveys were distributed to students who were mainly in their second year of medical school, a time before career decisions are typically solidified. Finally, these data do not provide any information on the likelihood that increased interest in or understanding of CAP will ultimately lead to CAP as a career choice. Follow-up analyses of match data will address this question in the future.

Results of this study suggest that the KTGF/MSFP may be a successful model to positively shift attitudes and perceptions about childhood mental disorders and CAP in medical students. Such a shift should benefit the future care of all children with mental disorders, regardless of which career path the students choose. Exposure to CAP early in medical school may also help reduce stigma associated with childhood psychiatric illness and potentially attract more medical students to careers in CAP. Future work will focus on tracking the longitudinal career course of KTGF/MSFP participants to determine whether these positive outcomes translate into more child and adolescent psychiatrists entering the field.

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KTGF 2022

KLINGENSTEIN THIRD GENERATION FOUNDATION NATIONAL MEDICAL STUDENT CONFERENCE

HOSTED BY: UC DAVIS SCHOOL OF MEDICINE

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SCHEDULE

ALL TIMES ARE POSTED FOR PACIFIC STANDARD TIME (PST)

FRIDAY - FEBRUARY 11TH, 2022
CHOOSE YOUR OWN ADVENTURE

Join Zoom Meeting
https://ucdavishealth.zoom.us/j/96131648572?pwd=YTFaK0hud25JVWNhN3l4cGErZ3hhdz09

Meeting ID: 961 3164 8572
Passcode: ktgf

5:00PM - Virtual Beer Tasting
- **see separate flyer in email, or appendix* at the bottom for instructions**
- **in the breakout room**

6:00PM - Game Night
- **featuring Codenames**
- **in the breakout room**

6:00PM - Movie Night
- **Ladybird**
- **will feature discussion throughout**
- **in the main zoom room!**

SATURDAY - FEBRUARY 12TH, 2022

Join Zoom Meeting
https://ucdavishealth.zoom.us/j/95156317442?pwd=clgxeVJnNUxVZSszRWwwcStjcEoOUT09

Meeting ID: 951 5631 7442
Passcode: ktgf

8:30 - 8:45 - Morning Welcome/Intros

8:45 - 9:30 - Game 1

9:30 - 10:15 - Student oral presentation, session 1 [1-3] (3 people)

10:15 - 10:30 - Break

10:30 - 11:15 - Keynote Presentation - Dr. Shim (45 minutes)

11:15 - 11:30 - Break - grab food for mentor lunch

11:30 - 12:40 - Lunch/Mentor Tables

12:40 - 1:25 - Student Presentations, session 2 [4-6] (3 people)

1:25 - 1:40 - Break

1:40 - 2:05 - Poster Session A (see Poster Roster for assignments)

2:05 - 2:30 - Poster Session B (see Poster Roster for assignments)

2:30 - 2:50 - Break
- **2:30-3:15 KTGF Program Director Meeting**

2:50 - 3:15 - Game 2

3:15 - 4:00 - Student Presentations, session 3 [7-9] (3 people)

4:00 - 4:20 - Close

ORAL PRESENTATION ROSTER

ALL TIMES ARE POSTED FOR PACIFIC STANDARD TIME (PST)

SATURDAY - FEBRUARY 12TH, 2022

9:30 - 10:15 - STUDENT ORAL PRESENTATION, SESSION 1 (3 PEOPLE)

"Resilience Protective Factors and Youth Interactions with the Police"
by Ericka Wheeler

"Enhancing child and adolescent psychiatry recruitment through a medical student mentorship network: a qualitative study"
by Madeline DiGiovanni & Kevin Lee Sun

Neighborhood quality and internalizing and externalizing behaviors in the Adolescent Brain Cognitive Development Study
by Logan Nicole Beyer

12:40 - 1:25 - STUDENT PRESENTATIONS, SESSION 2 (3 PEOPLE)

Providing Culturally Competent Care to Transgender and Gender-Diverse Patients
by Ananya Nrushimha

“Spawn of Satan”: Parenthood as Psychological Horror in Film
by Isaiah Thomas

Psychosis with Agitated Catatonia in the Context of Undiagnosed Autism Spectrum Disorder
by Sophia Rotman

3:15 - 4:00 - STUDENT PRESENTATIONS, SESSION 3 (3 PEOPLE)

An Uptick in Triggers: A Narrative Review of Tic Disorders in the Pandemic Era
by Allison T Ong

Screen and Intervene: The Importance of Supporting Secure Attachment for Improving Maternal and Infant Mental Health
by David Adams

Protection, Pain, and Pride: The Experiences of Parenting And Building Mother-Child Relationships in the Setting of Domestic Violence
by Lillie Reed

MENTORSHIP TABLES

ALL TIMES ARE POSTED FOR PACIFIC STANDARD TIME (PST)

SATURDAY - FEBRUARY 12TH, 2022

Breakout Room Topics	Faculty Member
Academic Psychiatry/Medical Education	Dr. Erin Malloy
Cultural Psychiatry	Dr. Shashank V. Joshi
Psychotherapy	Dr. Geri Fox
Perinatal/Reproductive Psychiatry	Dr. Maegen Vincent
Research 1	Dr. Allan Andersen, Dr. Alecia Vogel
Research 2	Dr. Alex Kloevzon, Dr. Hanna Stevens
Transitional Age Youth	Dr. Jennifer L. Vande Voort
Diversity Equity and Inclusion (DEI)	Dr. Khadijah Booth Watkins
Forensic Psychiatry	Dr. Anne McBride
Consult Liaison/Med-Psych	Dr. T. Eric Spiegel, Dr. Mirabelle Mattar
Triple Board	Dr. Myo Thwin Myint
Early Career Psychiatry	Dr. Rebecca Cross, Dr. Anu Gupta
Developmental Disabilities, Latino Mental Health	Dr. Roberto Blanco
International Child Psychiatry Mentorship	Dr. Anita Kishore
Systems of Care	Dr. Khushbhu Shah

Other faculty members who may float will include:
Dr. Andres Martin
Dr. Tom Anders
Dr. Robert Horst

Assorted KTGF Faculty members at Stanford KTGF 2019.
Photos courtesy of Shelly Tran and Anita Kishore

POSTER ROSTER

ALL TIMES ARE POSTED FOR PACIFIC STANDARD TIME (PST)

POSTER SESSION A: 1:40-2:05

Breakout Room

01: Nealie Tan Ngo

02: Nathen Spitz

03: Juhee Agrawal

04: Sina Sadeghzadeh & Akshay Swaminathan

05: Shammah Ike

06: Benjamin McMahon

07: Miranda Liang

08: Maxime Kok

09: Dhatri Abeyaratne

10: Kelly B Ahern

11: Max Clary (1)

12: King Fok

13: Celeste Bouman

14: Louise Pigeaud

15: Lillie Reed

16: Kelly Utz

17: Matina Kakalis

18: Mohammed Wali & Zeynep Tek

19: Tatsumi Yanaba

20: Maria Kamceva

21: Chelsea Li, Nathaniel Porter, Justin Li

22: N/A

POSTER SESSION B: 2:05-2:30

Breakout Room

01: Roberto Infante Rosado

02: Aniqa Hussain

03: Parisa Fani - Molky

04: Ryan J. Elliot

05: Zoe Geannopoulos

06: Daniel Bernstein

07: Charbel Bou-Khalil

08: Jeremiah Stout

09: Vinita Shivakuma

10: Yash Bhatia

11: Max Clary (2)

12: Elizabeth Farkouh

13: Ivan Lopez

14: Jessica Blanks, Aaron Fox

15: Emily Thomas-Tran

16: Jane Thomas-Tran

17: Claire Veldkamp & Maaike Fasel

18: Anneliese Mair

19: Valerie Braddick

20: Rebecca George

21: Mihai Dumbrava

22: Lisa S. Gorham

SEE FOLLOWING PAGES FOR ABSTRACTS

Klingenstein Third Generation Foundation
National Medical Student Conference

Hosted Virtually by University of Iowa
February 26-27, 2021

Day/Date	Time (CST)	Session	Zoom Link and Description
Friday, Feb 26th	7pm-9pm	Game Night	https://uiowa.zoom.us/j/92831041557?pwd=NzZEYn **MEETING ID: 928 3104 1557** Get to know you activities/games in Zoom game break out rooms that will be hosted by student and faculty volunteers. Concurrent sessions - feel free to join or leave at any time.
Saturday, Feb 27th	10am-11am	Intro	https://uiowa.zoom.us/j/95206276875?pwd=dUpFZE **MEETING ID: 952 0627 6875** Intro and interaction among all 150+ attendees from 15+ medical schools
		Oral Sessions	https://uiowa.zoom.us/j/94797314443?pwd=RS9iYk1m **MEETING ID: 947 9731 4443** In these concurrent sessions faculty discussants will be grouped with 4-5 students who will give oral presentations. Presentations should last 8-10 minutes so the group will have 10+ minutes for discussion at the end. We expect a typical powerpoint style presentation will work best for most people, but feel free to get creative. Faculty/students not assigned to one of these sessions will be free to join or leave the sessions at any time.
	11am-12pm	Oral Session - Block A	
	11am-12pm	Oral Session - Block B	
	11am-12pm	Oral Session - Block C	
		Poster Sessions	https://uiowa.zoom.us/j/94906300461?pwd=NCtvS2 **MEETING ID: 949 0630 0461**
	12pm-1pm	Poster Session - Block A	In these concurrent sessions one or two faculty will be grouped with 3 students who will give oral presentations. Presentations should last approximately 5 minutes and will be followed by approximately 5 minutes of discussion time. We expect a typical "poster" format will work best for most people, but feel free to get creative. Following the initial presentations and discussion the remainder of the hour may be spent on additional presentions and Q&A with "visitors" who join and leave the sessions. Faculty and students not assigned to a session may join or leave any session at any time.
		Poster Session - Block B	
		Poster Session - Block C	
		Poster Session - Block D	
		Poster Session - Block E	
		Poster Session - Block F	
		Poster Session - Block G	
		Poster Session - Block H	
		Poster Session - Block I	
		Poster Session - Block J	
		Poster Session - Block K	

	Poster Session - Block L		
1pm-2pm	Lunch/Mentoring Session - Multiple	https://uiowa.zoom.us/j/96268607276?pwd=U1VJNk	**MEETING ID: 962 6860 7276**
		In these concurrent mentoring/networking sessions, one or two faculty will be assigned to rooms with a given topic or theme. All students will be free to select the room that fits best with their interest for the hour and engage in mentoring/networking.	
2pm-3pm	Keynote Address	https://uiowa.zoom.us/j/92408474548?pwd=Y0JpU1	**MEETING ID: 924 0847 4548**
		Dr. Peg Nopoulos, Chair of Psychiatry will present "Human Brain Development: Implications for Health and Disease" Single session for all conference participants.	
3pm-4pm	Diversity, Equity, and Inclusion Panel	https://uiowa.zoom.us/j/92985725807?pwd=bTBEbU	**MEETING ID: 929 8572 5807**
		Panel discussion led by Drs. Nicole Del Castillo, Nancy Beyer, and Elizabeth Homan who will be joined by UIowa residents/fellows Panelists will briefly present their background and efforts toward DEI followed by group discussion. Single session for all conference participants.	
4pm-430pm	Wrap up	https://uiowa.zoom.us/j/92985725807?pwd=bTBEbU	**MEETING ID: 929 8572 5807**
		Following the DEI presentation we will wrap up with announcements from the conference organizers and others	
	BREAK		
7pm-9pm	Movie Night & Discussion	https://uiowa.zoom.us/j/93750266846?pwd=em1rejI	**MEETING ID: 937 5026 6846**
		We will have a group viewing of "The Beauty Inside" by Zoom followed by a discussion with faculty facilitated by UIowa fellow Dr. Oluwemimo Adeyanju Optional single session for all conference participants.	

14TH ANNUAL KLINGENSTEIN CONFERENCE
TULANE UNIVERSITY SCHOOL OF MEDICINE
JANUARY 24-25, 2020

Friday, January 24th, 2020

12:30 – 4:30 PM	Optional service activity at Louisiana Children's Museum (15 Henry Thomas Drive, in New Orleans City Park) *Sign up email with further details/instructions to be sent
6:00 – 10:00 PM	Welcome Reception (Rooftop Terrace, 12th Floor of The Jung Hotel)

Saturday, January 25th, 2020

8:00 – 8:30 AM	Morning session poster presenters set up their posters (131 S. Robertson Street, 2nd Floor, Room 220) Check In & Continental Breakfast (131 S. Robertson Street, 2nd Floor, DeBakey Center)
8:30 – 8:45 AM	Welcome & Introductions Maegen Vincent, MD, Myo Thwin Myint, MD, & Mary Margaret Gleason, MD, Tulane KTGF Program Directors MS4s Taylor Blanding & Isabel Clark Carmen Thornton, AACAP Director of Research, Workforce, and Grants
8:45 – 9:30 AM	Keynote Address Charles H. Zeanah, Jr., MD *Mary Peters Sellars-Polchow Chair of Psychiatry* *Vice Chair, Child and Adolescent Psychiatry* *Professor of Psychiatry and Pediatrics, Tulane University School of Medicine* *Executive Director, Tulane Institute of Infant & Early Childhood Mental Health* Introduction by Thomas F. Anders, MD *Distinguished Professor of Psychiatry and Behavioral Sciences (Emeritus), UC Davis M.I.N.D. Institute, and Adjunct Professor, Psychiatry and Human Behavior, Brown University. Senior Research Scientist, Rhode Island Consortium for Autism Research and Treatment (RI-CART). Past President, American Academy of Child and Adolescent Psychiatry (AACAP).*
9:30 – 9:45 AM	Break
9:45 – 10:30 AM	Student oral presentations, session 1
10:30 – 11:15 AM	Student poster presentations, morning session
11:15 AM – 12:00 PM	Student oral presentations, session 2
12:00 – 1:15 PM	Lunch and mentoring groups
1:15 – 1:45 PM	Morning session poster presenters take down their posters Afternoon session poster presenters set up their posters Games, round 1
1:45 – 2:30 PM	Student oral presentations, session 3
2:30 – 3:15 PM	Student poster presentations, afternoon session

3:15 – 4:00 PM	Games, round 2
	KTGF program directors meeting
4:00 – 4:15 PM	Conference conclusion, passing the trophy to next year's conference hosts!
4:30 PM	Optional social activity for medical students (TBD)

ORAL PRESENTATIONS

Session 1, 9:45-10:30 AM

1. Prevalance of Social Determinants of Health in Early Childhood Mental Health Consultation Screening. Samuel Eggers, Tulane.
2. Delayed Diagnosis of Developmental Delay in a Cambodian-American Adolescent: Lessons Learned and Barriers Identified. Zachary Gold, Brown.
3. From Objects to Subjects: Child Psychiatry and Adult Anxieties in The Twilight Zone. Isaiah Thomas, Yale.
4. A Study of the UNC Eating Disorders Unit Volunteering Program. Shantal Jayawickreme, UNC.

Session 2, 11:15 AM – 12:00 PM

1. Child and Youth Psychiatry Organization: Kleine Hans Amsterdam. Liza Karim, Sanne Hesseling, and Maud Hottentot, Kleine Hans Amsterdam.
2. Preschool Age Predictors of Borderline Personality Symptoms. Benjamin Geselowitz, Washington University in St. Louis.
3. Psychosis and Spirituality: How Patients Define Their Mental Illness Within the Context of Religion and Spirituality. Katherine Lyman, Stanford.
4. A Comparative Study of Spell Behavior in Postural Orthostatic Tachycardia Syndrome Patients and Psychogenic Non-epileptic Spell Patients. Hannah Case, Mayo.

Session 3, 1:45 – 2:30 PM

1. Closing the Research Literacy Gap: How a National Child Psychiatry Journal Club Can Reach Medical Student Trainees. Jacqueline Williams, Thadeus Odom, Britany Reddish, and Steven Lam, UC Davis.
2. Theatrical Vignettes as an Educational Tool to Improve Communication in Asian American Families. Jason Li, Harvard.
3. The Role of Attachment Styles in the Link between Childhood Trauma and Social Functioning in Personality Disorders." Sharely Fred Torres, Mount Sinai.

POSTER PRESENTATIONS

Morning Session, 10:30-11:15 AM

1. Examining Pathways to Care to the Early Psychosis Intervention Clinic of New Orleans. Isabel Clark and Spencer Steadman, Tulane.
2. Insurance Policy Trends in Adoption of Mental Health Evaluation as a Criterion for Gender-Affirming Surgery. Anthony Almazan, Harvard.
3. The Role of Digital Phenotyping in Child and Adolescent Psychiatry. Danny Linggonegoro, Harvard.
4. The Natural History of Psychogenic Non-epileptic Spells. Hannah Case, Mayo.
5. Younger Age is Associated with Worse Outcomes after Anti-NMDA Receptor Encephalitis (Anti-NMDARE). Raia Blum, Mount Sinai.
6. Assessing the Quality of a Psychosocial Intervention Implemented on an Adolescent Psychiatric Unit. Pauline Bagatelas, Brown.
7. Trends of Young Adult Emergency Department Utilization for Psychiatric Diagnoses – Effect of California's Early Affordable Care Act Coverage Expansion, 2005-2014. Kathrine Casillas, Stanford.
8. Leveraging Neuropixels probes and virtual reality to better understand the mechanisms underlying ketamine's effect on spatial memory. Francis Kei Masuda, Stanford.
9. Factitious Disorder in the Setting of Sickle Cell Disease. Jeffrey Edwards, Stanford.
10. Aculture-Asian: a Youtube Series Curriculum for Engaging Asian-American Youth. Shannon Choi and Bright Zhou, Stanford.
11. Psychiatry Clerkship Effect on Perceived Readiness for Future Patient Engagement. Oluwatomilona "Tomi" Ifelayo and Kafayat Oyemade, Mayo.
12. Medical and Socioeconomic Risk Factors Predict within-DMN Connectivity in Children Born Very Preterm. Simona Sarfinovska, Washington University in St. Louis.
13. Functional brain mapping in preschool-age children with high-density diffuse optical tomography. Kalyan Tripathy, Washington University in St. Louis.
14. Contribution of Genetic Copy-Number Variation to Obsessive-Compulsive Disorder. Sarah Abdallah and Emily Olfson, Yale.
15. Children's Environmental Health in the Digital Era: Assessing Caregivers' Attitudes and Knowledge Towards Sleep Behavior and Screen Exposure. Candice Wolf, UVM.
16. Reflections on a psychosocial support program for HIV+ adolescents in Lesotho. Ryan Elliott, UCLA.
17. Effects of Alcohol Drinking on the Prefrontal Cortex Proteome of Adolescent C57BL/6J Mice. Katarina Swaim, UNC.
18. Maternal 15q11-q13 Duplication Syndrome with ASD: Mood Stabilization by Carbamazepine. Christopher Viamontes, UIC.
19. Negative Symptoms and Spoken Language in Youths at Clinical High Risk (CHR) for Psychosis using Automated Analysis. Emma Stanislawski, Mount Sinai.
20. Ovarian hormones, reward response, and binge eating in bulimia nervosa. Christopher Trennepohl, UNC.
21. Refining Taxonomies of Psychopathology. Vincent Nocera, UVM.

Afternoon Session, 2:30-3:15 PM

1. Mental Health care for children from 0 to 18 years old in The Netherlands. Liza Karim, Sanne Hesseling, and Maud Hottentot, Kleine Hans Amsterdam.
2. Mosaic Trisomy 20 in Capital Crimes Sentencing: Review and Case Report. Erica Lee, Brown.
3. The Social, Psychological, and Educational Impact of Prolonged Home Isolation on Adolescents with Tuberculosis in Lima, Peru: A Qualitative Study. Victoria Oliva Rapoport, Brown.
4. HIV and Gender-Based Violence Prevention Program for Zambian Teens. Lillie Reed, Stanford.
5. Reflections from a Pediatric Diabetes Clinic: The Role of Child & Adolescent Psychiatric Care. Gabriela Ruiz Colón, Stanford.
6. Trends in references to death and dying in popular music. Vinita Shivakumar and Jimmy Zheng, Stanford.
7. Animal-assisted therapy: an analysis of best practices for clinical use. Emily Trimm, Stanford.

8. Music Therapy's Effect on Pediatric Populations with Autism, Epilepsy, and Trisomy X. Christine Xu, Stanford.
9. Generalizability of Behavioral Research: Looking Beyond the "Limitations" Section. Lily Offit, Harvard.
10. Overcoming Barriers and Facilitating Mental Health Help-Seeking Through a Novel, High School-Based, Mental Health Psychoeducation Video. Hannah Case and Valeria Melo, Mayo.
11. Rapid functional disconnection in brain disuse. Dillan Newbold, Washington University in St. Louis.
12. The relationship between resting-state functional connectivity and executive function in very preterm children. Anna Dowling, Washington University in St. Louis.
13. Refugee Status and Psychopathology among Adolescents in Cameroon's Extreme North. Olivia Herrington, Yale.
14. Lasting Effects of Minding the Baby® Home Visiting Program for Young Families. Amalia Londono Tobon, Yale (Stanford KTGF alum).
15. Increased psychiatry match rates follow exposure to a mentorship program: a multisite retrospective cohort analysis. Russell Himmelstein, UVM.
16. The Impact of an Interdisciplinary Neurogenetics Clinic on Antipsychotic Use in Neurodevelopmental Disorders. David Adams, UCLA.
17. Child Marriage Under Humanitarian Contexts: An Analysis of the Kobe Refugee Camp in Ethiopia. Vidhya Balasubramanian, UNC.
18. Stressors Affecting Mental Health in Migrant Workers in Eastern Iowa. Amanda Mclearn-Montz, Iowa.
19. Ecological Validity of the Map Task in Assessing Cognitive Capacity in Autism. Duy Nguyen, UC Davis.
20. Nonsuicidal Self-Injury: Providing Trainees with an Educational Curriculum in Medical School. Harinee Maiyuran, Mount Sinai.

13TH ANNUAL KLINGENSTEIN CONFERENCE FEBRUARY 8TH-9TH, 2019
AT STANFORD UNIVERSITY

AGENDA

Thursday, February 7th, 2019

10:00 AM – 5:00 PM	Those that need to rent bikes for the Break the Stigma ride Palo Alto to Pacifica loop do so at Bike Connection (2011 El Camino Real, Palo Alto)
6:00 PM	Informal dinner gathering at Dr. Anita Kishore's Stanford West Neighborhood Club Room (700 Clark Way)

Friday, February 8th, 2019

7:00 AM– 3:00 PM	Break the Stigma Palo Alto to Pacifica loop bike ride begins. Meet at Bike Connection (2011 El Camino Real, Palo Alto)
3:30 – 4:00 PM	Stanford Break the Stigma Campus Bike Shop (459 Lagunita Drive, Stanford) check in
4:00 – 5:00 PM	Stanford Break the Stigma campus bike ride
5:30 – 8:00 PM	Welcome mixer and dinner Old Union, Cardinal Ballroom

Saturday, February 9th, 2019

7:00 – 7:30 AM	Poster presenters set up their posters
7:30 – 8:15 AM	Welcome breakfast Oak West, Tressider
8:15 – 8:30 AM	Commencement of the conference! Anita Kishore, MD & Shashank Joshi, MD, Stanford program directors Lisell Perez-Rogers, AACAP research & grants manager
8:30 – 8:45 AM	Official welcome to the conference Tom Anders, M.D. Distinguished Professor of Psychiatry and Behavioral Sciences (Emeritus), UC Davis M.I.N.D. Institute, and Adjunct Professor, Psychiatry and Human Behavior, Brown University. Senior Research Scientist, Rhode Island Consortium for Autism Research and Treatment (RI-CART). Past President, American Academy of Child and Adolescent Psychiatry (AACAP). Victor G. Carrión, M.D. John A. Turner Endowed Chair of Child and Adolescent Psychiatry Professor and Vice-Chair, Department of Psychiatry and Behavioral Sciences Director, Early Life Stress and Pediatric Anxiety Program Alan Louie, M.D. Professor, Associate Chair - Education, Stanford Department of Psychiatry and Behavioral Sciences
8:45 – 9:15 AM	Klingenstein games, round 1
9:15 – 10:00 AM	Student poster presentations
10:00– 11:00 AM	Student presentations, round 1
11:00 – 11:30 AM	Games, round 2
11:30 – 1:00 PM	Lunch and mentoring groups

13TH ANNUAL KLINGENSTEIN CONFERENCE FEBRUARY 8TH-9TH, 2019
AT STANFORD UNIVERSITY

1:00 – 2:00 PM	Student presentations, round 2
2:00 – 2:30 PM	Games, round 3
2:30– 3:30 PM	Tour of Stanford campus (students) KTGF program directors meeting
3:30 – 4:20 PM	Student presentations, round 3
4:20 – 4:45 PM	KTGF Closing: Alumni Perspectives Speakers: Desiree Li, MD and Mamatha Challa, MD Klingenstein program graduate (Stanford), Stanford PGY1 psychiatry resident (Dr. Li) and Klingenstein program graduate (UIC) and Stanford PGY2 psychiatry resident (Dr. Challa)
4:45 – 4:50 PM	Official close to the conference Antonio Hardan, M.D., Professor of Psychiatry and Behavioral Sciences, Stanford University Medical Center. Director, Autism and Developmental Disabilities Clinic. Chief of the Division of Child and Adolescent Psychiatry and Child Development
4:50 – 5:00 PM	Conference conclusion, passing the trophy to next year's conference hosts!
5:00 – 5:15 PM	Conference evaluation (opportunity to complete conference survey)
5:15 – 9:00 PM	Arts Show and Dinner Reception Oak East, Tressider

13TH ANNUAL KLINGENSTEIN CONFERENCE FEBRUARY 8TH-9TH, 2019
AT STANFORD UNIVERSITY

ORAL PRESENTATIONS

10:00 – 11:00 AM	Sarthak Angal, Stanford: Emotional processing in depressed and anxious youth at high risk for bipolar disorder.
	Lauren Stone, Yale: Chronic Ghrelin resistance: a newly discovered consequence of chronic stress, with implications for stress-associated mental illness.
	Nikki Haddad, Brown: A biopsychosocial approach to school refusal in pediatric patients.
	Simona Sarafinovska, Wash U: Effects of early-life adversity on depression candidate gene expression in mouse pups.
	Samuel Rouleau, Mayo: Creative writing as an intervention for adolescents hospitalized in an acute psychiatric setting.
	Kelsey Saddoris, U Iowa: Pediatric Psycho-Oncology: The neurocognitive and neurobehavioral effects of treating childhood cancer
1:00 – 2:00 PM	Natalia Birgisson, Stanford: Bestselling novels and protagonists from foster care: adolescent mental health in popular literature.
	Sarah Abdallah, Yale: Post zygotic variants are associated with obsessive-compulsive disorder.
	Pranav Aurora, Brown: Structural violence and conversion disorder: A case of a DREAMer with unexplained tremor.
	Helen Liljenwall, Wash U: Maternal and paternal predictors of ADHD symptoms in very preterm children age 5 years.
	James Lee, Mayo: Online sexual solicitation of youth: A clinical perspective.
	Russell Dulman, UIC: Adolescents vs. Adults: Differential motor response to acute ethanol intoxication in rats.
3:30 – 4:20 PM	Rahul Dhodapkar, Yale: Identifying adolescence-specific risk factors for major depressive events: a survey-wide association study.
	David Adams, UCLA: A principal components analysis reveals overlap of autistic and obsessive-compulsive tendencies within a subclinical sample.
	Amir Jabr, UNC: How to create a realistic psychiatric OSCE.
	Corey Horien, Yale: Functional connectome fingerprinting in the developing brain.
	Margaret Duncan, Wash U: Ecological daily needs assessment for mHealth Treatment Development.

13TH ANNUAL KLINGENSTEIN CONFERENCE FEBRUARY 8TH-9TH, 2019
AT STANFORD UNIVERSITY

POSTER PRESENTATIONS

1. Depictions of psychiatric disorders in children's film. Hilary Wright and Isabel Clark, Tulane.
2. Exercise and perceived stress and anxiety symptomatology in pregnant women with Medicaid and Private Insurance. Jessica Sikka, UVM.
3. Maternal mental health and emotional response to infant cues during pregnancy. Emily Vancor, Yale.
4. Impact of previous strabismus surgery on pre-operative anxiety and information-seeking in pediatric patients. Jamie Moffa, Wash U.
5. Assessment of agitation in the pediatric emergency department. Nicholas Nissen, Brown.
6. Psychometric study of the social responsiveness scale in Phelan-McDermid Syndrome. Kellie Gergoudis, Mt. Sinai.
7. Child abuse and trauma: Improving the coordination of mental health services for children following sexual abuse. Surya Manickam, Brown.
8. Bimodal role for nucleus accumbens dynorphinergic neurons in aversion and reward. Gavin Schmitz, UNC.
9. The child and adolescent psychiatry mentorship program: providing early, independent exposure for medical students. Lauren Webb and Katharine Linder, Mayo.
10. Effect of "warm handoffs" on outcomes in an integrated behavioral health program for adolescents with depression. Megan Heeney, Mayo.
11. Assessing Rodent Sex in Neuroscience Literature: Chase Thompson, UNC
12. A literature review on the efficacy of the ECMHC Model: Keyuree Satam and Namita Ravi, Yale.
13. Connect Soccer Academy: A model for building resiliency in refugee youth through trauma-informed coaching: Bryan Rego, Brown.
14. Impact of an educational initiative on genetic testing rates in an inpatient child psychiatry unit: Joshua Sadik, UCLA.
15. Evidence of Solitary Play Behavior in Juvenile Black Mexican Howler Monkeys (*Alouatta Pigra*): Jane Thomas, Stanford.
16. Effects of an after school activity program in SPA 6 on cognitive function in children with ADHD: Vincent Arriola, UCLA.

12TH ANNUAL KLINGENSTEIN CONFERENCE FEBRUARY 9TH-10TH, 2018

AGENDA

Friday, February 9th, 2018

7:00 – 9:00 PM	Welcome mixer and dinner STK at the W Hotel, outdoor patio 930 Hilgard (see map)

Saturday, February 10th, 2018

7:30 – 8:15 AM	Welcome breakfast David Geffen School of Medicine 885 Tiverton Drive, room B-36 (see map)
8:15 – 8:30 AM	Commencement of the conference! Michael Enenbach, MD & Margi Stuber, MD, UCLA program directors Lisell Perez-Rogers, AACAP research & grants manager Kathleen Pomerantz, KTGF vice-president
8:30 – 8:45 AM	Official welcome to the conference James McCracken, MD Director, Division of child and adolescent psychiatry
8:45 – 9:15 AM	Klingenstein games, round 1
9:15 – 9:45 AM	Speaker: Scott Hunter, MD Klingenstein program graduate (Yale), child and adolescent psychiatrist and addiction fellow, UCLA
9:45 – 10: 15 AM	Break, mingling
10:15– 11:00 AM	Student presentations, round 1
11:00 – 11:30 AM	Games, round 2
11:30 – 1:00 PM	Lunch, student poster presentations and mentoring groups
1:00 – 1:45 PM	Student presentations, round 2
1:45 – 2:15 PM	Speaker: Anne McBride, MD Klingenstein program graduate (UC Davis), training director (UC Davis)
2:15– 3:30 PM	Tour of UCLA campus (students) KTGF program directors meeting
3:30 – 4:oo PM	Student presentations, round 3
4:00 – 4:30 PM	Games, round 3
4:30 – 4:45 PM	Conference conclusion, announcement of game winners!
7**:00 – 9:00 PM**	**Optional informal gathering at the home of Dr. Michael Enenbach (619 N. West Knoll Dr., West Hollywood, CA)**

12TH ANNUAL KLINGENSTEIN CONFERENCE FEBRUARY 9TH-10TH, 2018

ORAL PRESENTATIONS

10:15 – 11:00 AM

Harish Pudukodu, UNC: Analysis of A-to-I RNA Editing in Schizophrenia Risk Gene MIR137.

Max Rolison, Yale: Social context modulates resting state brain activity.

Kellie Gergoudis, Mt. Sinai: Psychometric study of patient reported outcome measures in Phelan-McDermid syndrome.

Jacob Lister, Yale: The development of excitatory-inhibitory network balance and functional connectivity in mouse models of Fragile-X syndrome.

1:00 – 1:45 PM

Kevin Sun and Bright Zhou, Stanford: Mapping mental health resources for LGBTQ homeless youth: a model for queer competency training through community engagement.

Lauren Behlke, Wash U: The role of psychosocial trauma in an obstetric population and its implications for intergenerational psychiatric care.

Emily Lelchuk, UIC: Positive use of digital technology in the modernized era.

Katherine Lyman, Stanford: Children's mental health in the West Bank: improving care through school-based interventions.

3:30 – 4:00 PM

Kathrine Casillas, Stanford: Trends of young adult emergency department utilization for psychiatric diagnoses under California's Early Affordable Care Act Medicaid expansion, 2005-2014.

John Cannon, Stanford: A draft curriculum for medical student and resident telehealth training for child and adolescent psychiatry.

Frances Javier, Yale: Mental health and resilience in medicine: combating burnout by being honest with ourselves.

12TH ANNUAL KLINGENSTEIN CONFERENCE FEBRUARY 9TH-10TH, 2018

POSTER PRESENTATIONS

1. Insomnia in juvenile corrections: a review. Deanna Nardella and Ella Sorscher, Brown.
2. Providing healthcare to a pediatric patient with discriminatory parents. James Lee, Mayo.
3. Positive allosteric modulation as a potential therapeutic strategy in Anti-NMDAR encephalitis. Samuel Brunwasser, Wash U.
4. Brain reorganization after disuse. Dillan Newbold, Wash U.
5. Psychosocial functioning in transition-age youth with bipolar disorder. Erica Lee, Brown.
6. Pediatric mental health in East Harlem schools: mapping an uneven playing field. Cameron Kiani, Mt. Sinai.
7. “Incredible Years Parent Group” leader training: a model for the education of pediatric physicians-in-training on parenting strategies. Maya Ayoub, Brown.
8. First episode psychosis in the New Orleans community: overcoming barriers on patients’ pathways to care. Ashabair “Sav” Nayak, Tulane.
9. Impact of parent relationship status on adolescent depression scores. Annabelle Soares, Mayo.
10. GABAB correlates of resting-state functional connectivity in adolescents. Irena Balzekas, Mayo.
11. Can N-Acetyl Cysteine rescue the effects of prenatal stress on behavior and the brain?: James Chambliss, U Iowa

Friday, March 3, 3017
Welcome Dinner and KTGF Games
7:00-9:00 p.m. Bar Italia Ristorante
13 Maryland Plaza
St. Louis, Missouri 63108

Saturday, March 4, 2017
8:00 a.m.-4:30 p.m.
King Center
7th Floor, Bernard Becker Library
660 S. Euclid Avenue

Agenda

8:00-8:30 a.m. Check-In / Registration / Breakfast / Mingle

8:30-8:45 Welcome remarks by Dr. Charles Zorumski
Chair, Department of Psychiatry at Washington University

8:45-8:55 Conference Logistics Overview
Dr. Anne Glowinski, MD, MPE, and Dr. Eric Spiegel, MD

8:55 to 9:45 Student Oral Presentations Part I

9:45-10:15 **Break**

10:15-11:30 Student Oral Presentations Part II

11:45-1:45 p.m. **Lunch** / Mentoring and Poster Session
FLTC Hearth (2nd Floor)
520 S. Euclid Avenue

1:45-2:30 **Medical Students:** Please choose from one of the two options below:

Tour of WUSM campus, including child division clinic and administrative offices	or	*Lift for Life* and *Fitness for Life:* an introduction to community programs for underserved children (King Center)

Train-ing Directors: Re-main in Farrell Learn-ing and Teaching Center for Training Director Meeting Room 214 A/B

Return to King Center

2:30-3:00 Ryan Bogden, Ph.D.
Assistant Professor Psychological & Brain Sciences
Identifying genetic and neural mechanisms of risk for childhood psychiatric disorders

3:00-4:00 John Constantino, MD and Mini Tandon, DO
The SYNCHRONY Project: Preventing child abuse/neglect recidivism for children in foster care

4:00-4:30 Game Winners

4:30-4:45 Goodbyes / See you in California next year
Optional: fun activities planned for guests staying through Sunday

Washington University in St. Louis
SCHOOL OF MEDICINE

660 S. Euclid Avenue
Saint Louis, Missouri 63110

2017 KTGF National
Medical Student Conference
Friday, March 3-Saturday, March 4, 2017

Hosted by

Washington University in St. Louis
SCHOOL OF MEDICINE

2017 Participating KTGF Medical Student Programs

Brown University
Henrietta Leonard Medical Student Fellowship in Child & Adolescent Psychiatry

University of California, Los Angeles, David Geffen School of Medicine
Dennis Cantwell Klingenstein Third Generation Foundation Fellowship

Harvard Medical School
The Donald J. Cohen Klingenstein Third Generation Foundation Fellowship

Mayo Clinic
Klingenstein Third Generation Foundation Jane Watson Duncan Medical School Training Program at the Mayo Clinic

Icahn School of Medicine at Mount Sinai
The Beatrix Hamburg Medical Student Training Fellowship in Child and Adolescent Psychiatry

Stanford University School of Medicine
The Klingenstein Foundation Medical Scholars Program in Clinical Developmental Mental Health at Lucille Salter Packard Hospital

Tulane University School of Medicine
Tulane Klingenstein Child and Adolescent Psychiatry (TKCAP) Medical Student Fellowship

University of Illinois College of Medicine
Klingenstein Third Generation Foundation-Jay G. Hirsch Medical Student CAP Fellowship

University of Iowa Carver College of Medicine
Samuel T. Orton KTGF Child Psychiatry Interest Group

University of North Carolina School of Medicine
Robert A. Bashford Medical Student Fellowship in Child and Adolescent Psychiatry

Washington University in St. Louis School of Medicine
Washington University Klingenstein Third Generation Foundation Medical Student Program

Yale University School of Medicine
The Donald J. Cohen Medical Student Mentorship Program

Student Oral Presentations

8:55-9:10 Katherine Dickerson, Stanford University School of Medicine
Memory and Planning in Children with Autism Spectrum Disorders

9:10-9:25 Hannah Leo, David Geffen School of Medicine at UCLA
Characterization of a Subpopulation of Foster Youth with Medical Concerns

9:25-9:40 Peppar Cyr, Washington University in St. Louis School of Medicine
Potential Biomarkers of Dyslexia Risk in Neonates

9:40-9:55 Courtney L. James, Grace Kim, Sydney Larkin, Mayo Clinic College of Medicine
Influence of Psychological Factors on Functional Outcomes among Adolescents Attending a Pain Rehabilitation Program

10:15-10:30 Jack L. Turban III, Yale University School of Medicine
The Evolving Management of Transgender Y+outh

10:30-10:45 Danielle Pohl, University of Iowa
Sex Differences in the Consequences of Prenatal Stress of Neurobiology and Behavior: Habit Learning and Locomotion

10:45-11:00 Theodore Zaki, Yale University School of Medicine
The Effect of Insurance Type on Trauma Patient Access to Psychiatric Care Under the Affordable Care Act

11:00-11:15 Aakash Amin, Tulane University
Adverse Childhood Experiences: A Brief Overview with Emphasis on Pathophysiological Mechanisms Leading to Cardiovascular Disease

11:15-11:30 Alexa Pohl, Washington University in St. Louis School of Medicine
Positive and Negative Experiences of Mothers with Autism

Student Posters

Clinical Overviews or Reviews

1 Sarah M. Azer, John P. Welby, and Jennifer L. Vande Voort, Mayo Clinic
Pharmacogenomic testing in guiding treatment for pediatric ADHD

2 Irena Balzekas, John Lee, Editt Nikoyan, Paul Croarkin, Mayo Clinic
Treating Adolescent Major Depressive Disorder with rTMS: Current Practices and Future Directions

3 Megan Heeney, Reese Imhof, Jennifer Schildmeyer, Mayo Clinic
Integrated Behavioral Health: Adapting an Adult Approach to a Pediatric Population

4 Aliza Grossberg, Brown University
Bridging the Gap: Confronting Health Disparities & Advancing Care for Transgender and Gender Nonconforming Adolescents

5 Heide Kuang, Jessica A. Johnson, Jilian M. Mulqueen, Michael H. Bloch, Yale University School of Medicine
The Efficacy of Benzodiazepines as Acute Anxiolytics in Children: A Meta-Analysis

6 Elias Saba, Taylor Thomas, Rohin Aggarwal, Bridget Biggs, Mayo Clinic
Review of Evidence-Based Treatment Methods for Obesity in Children and Adolescents

7 Aunika Swenson, Simrit Warring, Kenneth Valles, Paul Croarkin, Mayo Clinic
Pacified or Provoked: An Evaluative Review of Disruptive Mood Dysregulation Disorder

8 Olivia Crum, Lipi Sahoo, James Lee, Bridget Biggs, Mayo Clinic
Somatic effects of peer-victimization

9 Claire Cambron, Alice Huang, David Ivanov, Jennifer Schildmeyer, Mayo Clinic
Using pharmacogenomics to optimize the individualized approach to anti-depressant treatment in pediatric patients

Student Posters (cont'd)

Mentored Research

10 Anna Najor, Catherine Gao, Daniel Witt, Christi Patten, Mayo Clinic
Rates of Tobacco Use and Cessation Interventions in Low SES Alaskan Native Pregnant Mothers: A Focus on Adolescent and Young Adult Women

11 Michelle Han, et al, Stanford University School of Medicine
Structural Bases of Language Impairment in Children with Autism

12 Jeremie Oliver, Amanda Porter, Benjamin Mundell, Mohamad Bydon, Mayo Clinic
Prevalence of Post-Injury Psychiatric Diagnoses in Pediatric Patients with and with out Pre-Injury Psychiatric Diagnoses after Traumatic Brain Injury: A Multi-Institutional Retrospective Study

13 Kristen Durbin, Anne Walters, Teresa Preddy, Katharine Musella, Brown Univ.
Assessing the Long-Term Impact of a Children's Psychiatric Partial Hospitalization Program

14 Asif Khan, Madison Hayes, Andrea Eisen, Nathan Hollister, University of North Carolina School of Medicine
Refugee Community Partnership: a trauma-informed and relationship-based approach to develop community-based support system for resettled refugee families

15 Jonathan Heinzman, et al, University of Iowa Carver College of Medicine
Telomere length relative to glucocorticoid dose within saliva and blood of epilepsy patients

16 Allison M. Lake, Joseph D. Dougherty, Washington University in St. Louis
Predicting Affected Neural Cell Types in Psychiatric Disorders Using Single-Cell Transcriptomic Profiling Data

17 Samuel Brunwasser, et al, Washington University in St. Louis School of Medicine
CSF From an Anti-NMDAR Encephalitis Patient Depresses Glutamate Neurotrans mission

18 Alyssa Vela, Fary Cachelin, Virginia Gil-Rivas, Ph.D., Jasmine Sinkhada, University of North Carolina School of Medicine
Binge Eating Disorder in Latinas: What They are Eating and When

19 Leonard Hickman, et al, Washington University in St. Louis School of Medicine
Associations between hippocampal volume and altered functional connectivity in children with a history of depression

20 Bernard Mulvey, Joe Dougherty, Dionnet Bhatti, Washington University
Sex Differences in Gene Expression and Activity of Noradrenergic Neurons in the Mouse Locus Coeruleus

21 Francesca Cardello, Cecilia Webb, Ashley Weiss, Tulane University
Emerging Schizophrenia: Assessing Medical Student Understanding of First-Episode Psychosis

22 Erin Klein, Curtis Austin, Washington University in St. Louis School of Medicine
Medical Student Comfort and Preparedness to Address Mental Health Concerns in LGBT Populations

23 Erin Klein, Anastasia Evanoff, Washington University in St. Louis
Innovative Approaches to Speaking about Mental Health with Youth in Detention

24 Giuseppe D'Amelio, Anne Glowinski, Washington University in St. Louis
Saturday Neighborhood Health Center: A student run specialty clinic

Lunch Mentoring Sessions

2 - 1/2 hour sessions per student

Session 1: 11:45-12:15; Session 2: 12:15-12:45

201 - RSRCH: Paths to a combined clinician-researcher career
Mentor: Michael Bloch

202 - RSRCH: Psychology-based human/patient research (from a clinician-researcher perspective)
Mentor: James Leckman

203 - RSRCH: Human/patient-based genetics research (from a clinician-researcher perspective)
Mentors: Hanna Stevens & Jennifer Vande Voort

204 - RSRCH: Clinical research (e.g., trials comparing effectiveness of drugs, clinical trials, evidence-based medicine)
Mentors: Michael Enenbach & Alex Kolevzon

205 - CLIN: Adolescent/young adult psychiatry (ages 15+)
Mentors: Anita Kishore & Alastair McKean

206 - CLIN: Seeing both child and adult patients as part of Practice
Mentors: Robert Brady & Erin Malloy

207 - CLIN: Psychiatry + pediatrics (e.g., practicing as both a general pediatrician and psychi-atrist, how pediatric health and psychiatric disease interplay)
Mentor: Elizabeth Lowenhaupt & Myo Thwin Myint

208 - CLIN: Public health/epidemiology
Mentor: Anne Glowinski & Andres Martin

209 - CLIN: Open-ended discussion on early onset/ pediatric mood and anxiety disorders
Mentor: Carissa Gunderson & Eric Spiegel

210 - CLIN: Early childhood psychiatry (less than maybe age 8 or so)
Mentor: Robert Kitts

KTGF History & Mission

The KTGF, or Klingenstein Third Generation Foundation established in 1993, is trusteed by the Klingenstein's grandchildren, via the Esther and Joseph Klingenstein Fund.

The overall mission of the KTGF is to support entry of talent into the field of Child & Adolescent Psychiatry through research and educational programs for high-quality medical students and young investigators.

The SYNCHRONY Project

The SYNCHRONY Project addresses untreated or inadequately treated behavioral or developmental disorders of young children in foster care by providing comprehensive child psychiatric care and state-of-the-art parenting education for birth families who are working toward reunification with their children.

Afternoon Oral Presentations

14.30 Donald Cohen Auditorium, YCSC

14.30 **Genes, Environment and Developmental Disorders (AKA: You Name It, Child Psychiatry Has It and Needs You to Help Figure it Out)**
Hanna Stevens (Iowa)

15.00 **Child Psychiatry Takes the Lead: Using Genomics and Neuroscience to Inform Prevention**
Robert Althoff (Vermont)

15.30 **Life on the Balance: Having It All (Though Not Necessarily at the Same Time)**
Margi Stuber (UCLA)

15.50 **Coda and Segway to Final Session: Learning From, and With Our Patients and Their Families**
Linda Mayes (Yale)

16.00 Break

16.15 **I Have Autism and Am Proud of It: What Is *Your* Superpower?**
Paul M. and his family

17.00 **Send-off to the Eleventh 'Games': See You in St. Louis in 2017!**
Anne Glowinsky (Washington University)

17.15 **Closing Comments**
Andrés Martin (Yale)

Evening Fun

17.30 Walk Over To Bar

18.00 **Dinner, Drinks, and Fun**
BAR Restaurant, 254 Crown Street

21.30 **Dancing, and / or Walking Tour of Yale Campus**
BAR Restaurant / Yale Campus

Participating Institutions

David Geffen School of Medicine at the University of California, Los Angeles (UCLA)

Harvard Medical School

Icahn School of Medicine at Mount Sinai

Mayo Medical School

Stanford University School of Medicine

University of California Davis School of Medicine

University of Illinois at Chicago College of Medicine

University of North Carolina School of Medicine

University of Vermont College of Medicine

Warren Alpert Medical School of Brown Univeristy

Washington University School of Medicine

Yale University School of Medicine

2016 Medical Student Training Program Conference
Supported by The Klingenstein Third Generation Foundation
in coordination with The American Academy of Child and Adolescent Psychiatry

Klingenstein Third Generation Foundation

February 27, 2016
Child Study Center
Yale School of Medicine
New Haven, CT

2016 Medical Student Conference

The Tenth Annual "Games"

Morning Oral Presentations

8.00 Donald Cohen Auditorium, YCSC

8.00 **Registration & Light Breakfast**

9.00 **Welcome to the 2016 Games at Yale!**
Andrés Martin, Michael Bloch, Gerrit Van Schalkwyk, Libby Cummings, Katherine Epstein, Corey Horien, and Sadie Meller (Yale)

9.05 **Beyond Grades: How to Get Ahead in Medicine**
John Schowater (Yale)

9.35 **Non-Medical Use of Prescription Pain Relievers in Adolescents**
Emily Olfson (Washington University)

9.55 **Cannabis and the Developing Brain: From Neurobiology to Policy**
Nikhil "Sunny" Patel (Mayo)

10.15 **Autism and Gender Identity**
Cordelia Ross (Vermont)

10.35 Break

10.45 **BE REAL about Health: A Health Outreach Program for Incarcerated Youth**
Jeannine Rider and Matthew Santos (Brown)

11.05 **Provider Perspectives on College Mental Health: Evaluating Structural Barriers to Care from the Inside**
Danielle Mohabir (North Carolina)

11.25 **Stereotype Threat in Adolescents and the Role of Cultural Spaces in Constructing Alternative Narratives**
Ronnye Rutledge (Yale)

11.45 **Inclusion and Belonging: Aspirin for Mental Health**
James Comer (Yale)

11.55 **Morning Session Wrap-Up**
Andrés Martin (Yale)

Lunch & Networking Session

12.00 Café Med, YSM

Poster Session

13.15 Harkness Ballroom, YSM

A Tapering Opioid Prescriptions and Reducing Polypharmacy for Inpatients with Spinal Cord Injury at Rancho Los Amigos National Rehabilitation Center

B Distinguishing Pediatric Diagnoses with Structural MRI: Cortical Thickness Differences Between Primary Bipolar Disorder and Primary Attention-Deficit Hyperactivity Disorder

C Mental Health Awareness for Youth in Detention

D Whole-Gene Sequencing Investigation of SAT1 in Attempted Suicide

E Caring for Transgender Youth: Physical and Mental Health Risks, Disparities, and Outcomes

F Does MAOA Increase Susceptibility to Adverse Prenatal Exposures in Young Children?

G Utilizing Mobile Technologies as Large-Scale Mental Health Interventions

H Chronic Intermittent Pattern of Alcohol Use Promotes Degradation of HDAC5 in the Rat Striatum and Enhances Compulsive Cocaine Self-Administration

I EPIC-NOLA: Establishing the Early Psychosis Clinic

J Salivary Cortisol as a Measure of Stress Reactivity in Psychiatric Disorders

K Behavioral and Emotional Variability Among Preschoolers Within and Between Societies: An Empirical International Comparison

L Ventriculoperitoneal Shunt Outcomes for Hydrocephalus and Spina Bifida in Tanzania

M The Value of an AACAP Membership

N Trends and Symptom Profiles of Adolescent Synthetic Cannabinoid Use: A Literature Review

Poster Session

O Brain Volumetric Changes in Youths with Primary Bipolar Disorder or Primary Attention-Deficit/Hyperactivity Disorder

P Sex Trafficking: The Healthcare Provider's Role

Q Quantitative Autistic Trait Measurements Index Background Genetic Risk for ASD in Hispanic Families

R An Exploration of Various Conceptualizations of Pathological Exercise and Their Relationship to Eating Disorders

S Cell-Type Specific RNASeq of Mouse Brain Suggests Gender-Dimorphic Expression Patterns in Noradrenergic, but Not Serotonergic, Neurons

T Pediatric Mental Health in East Harlem Schools: Mapping an Uneven Playing Field

U Readers of Histone Lysine Acetylation Are Importantly Involved in the Development of Cocaine-induced Behaviors

V Global Attitudes and Perceived Needs of Child and Adolescent Psychiatry: A Qualitative Study

W Characterization of Problem Behavior in Phelan-McDermid Syndrome Compared to Idiopathic Autism Spectrum Disorder Using the Aberrant Behavior Checklist

X The Me Everybody Should Know: Healthcare Narratives of Urban Adolescents

Y Long Term Psychiatric Sequelae Following Pediatric Traumatic Brain Injury

Z "Holy Psychotherapy, Batman!" Diagnosing & Treating Mental Illness in Superheroes

AA Editorial Mentorship Facilitates Early Authorship Through a Scholarly Journal's Online Companion: JAACAP Connect

BB Psychiatric Disorders in Adolescents With Critical Congenital Heart Disease After The Fontan Procedure

CC What to Tell Parents About Prenatal Illicit Substance Exposure and Psychiatric Outcomes in Young Children

DD Discovery of Differential HDAC4 Methylation Sites in Eating Disorders

Program

The Klingenstein Games

February 1, 2014

The University of North Carolina School of Medicine

Chapel Hill, North Carolina

Presented by ***The Klingenstein Third Generation Foundation*** *and*
The ***American Academy of Child and Adolescent Psychiatry***

2014 Klingenstein Games

Who will win the Games this year????

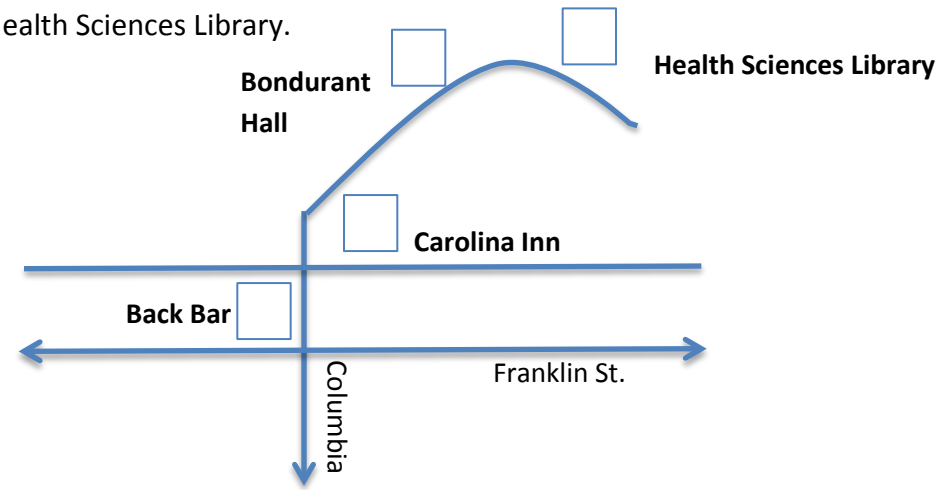
The Robert A. Bashford Medical Student Fellowship in Child Psychiatry—the University of North Carolina's KTGF program—is excited to host the 2014 Klingenstein Games! Events begin with a welcome reception on Friday evening, January 31. "The Games" span Saturday, February 1 with a continental breakfast, lunch, and afternoon closing reception. Enjoy some Southern Hospitality while learning from your colleagues' creativity, scholarly pursuits and abilities to problem-solve in a team.

Schedule of Events

Friday, January 31	
7:00-10:00 PM	Welcome Reception at **Back Bar** (lower level of Top of the Hill)
10:00 PM-	Recreational Highlights of Downtown Chapel Hill
Saturday, February 1	**All Events at Bondurant Hall, UNC School of Medicine**
8:30 AM-9:30 AM	Continental Breakfast with Ice-Breaker
9:30 AM-9:45 AM	Welcome: Robert A. Bashford, MD
9:45-10:30 AM	Poster Session
10:30-11:45 AM	KTGF Fellow Presentations
11:45 AM-12:15 PM	Resident Panel
12:15 PM-1:15 PM	Mentoring Lunch
1:15 PM-2:30 PM	KTGF Fellow Presentations
2:30 PM-3:00 PM	Games
3:00 PM-4:00 PM	Program Evaluation, Awards Ceremony, Reception

Getting Around

Both Back Bar at Top of the Hill and Bondurant Hall are easy walks from the Carolina Inn. Back Bar at Top of the Hill is at the Corner of Columbia (one of the Carolina Inn entrances) and Franklin Street. Walking is highly recommended due to one-way streets and parking issues. Bondurant Hall is on Columbia Street in the opposite direction of Franklin Street, next to the easily-spotted Health Sciences Library.



2014 Klingenstein Games Oral Presentations

Leanna Karp
Brown University Medical School
Co-Authors: Jane Eisen, Sarita Warrier

Can Empathy Be Taught? An Evaluation of a Counseling Training Workshop For First-Year Medical Students

Takahiro Soda
Harvard Medical School
Co-Authors: Jason J. Wolff, Ryan Scotton, Martin A. Styner, Joseph Piven, on behalf of the IBIS Network

The Trajectory of Corpus Callosum Development in Infants with Autism, and those at Low/ High Risk for Autism

Anjali Varigonda
University of Vermont College of Medicine
Co-Authors: Michael Bloch, Ewgeni Jacubovski

Treatment Responses of SSRIs in Pediatric Depression and Obsessive-Compulsive Disorder

Rushil Patel
University of North Carolina School of Medicine
Co-Authors: Jonathan Gerkin, Jason Tatreau, Kenan Penaskovic, Anna Brandon

Mindfully Targeting Burnout: An Open-Label Trial of a Mindfulness-based Curriculum for Psychiatry Residents

Matthew L. Baum
Harvard Medical School

How Should We Conceptualize Mental Disorder?: Dichotomy, Probability, and the DSM-V

Julia Katz
University of North Carolina School of Medicine
Co-Authors: Edward S. Brodkin

Effect of Glutamatergic Modulation on Sociability in Juvenile Protocadherin-10 Gene Haploinsufficient Mice, a Genetic Mouse Model of Autism

Nikhil "Sunny" Patel
Mayo Medical School

Parent-Mediated Intervention for Autism Spectrum Disorders in South Asia (PASS): A Model for a Global Mental Health Intervention

2014 Klingenstein Games Poster Session

Rebecca Dago The University of Illinois College of Medicine Co-Authors: Toya Clay	***Who's Calling?: A Study of Provider Traits and Reasons for Calling the Illinois DocAssist Consultation Service***
Keith Miller and Kristen Nguyen Mayo Medical School	***Resilience in Adolescents: Experiences with Rochester Better Chance***
Mary Katherine (Katie) Weinel University of North Carolina School of Medicine	***The Effect of Interoceptive Awareness and Diagnosis of Anorexia Nervosa on Susceptibility to the Rubber Hand Illusion***
Imraan Qureshi Yale University School of Medicine Co-Authors: Riyadh Al-Jammaly, Michael H. Bloch	***Systematic Review: Pharmacological Treatment of SSRI-Induced Sexual Dysfunction***
Rushil Patel University of North Carolina School of Medicine Co-Authors: Jonathan Gerkin, Jason Tatreau, Kenan Penaskovic, Anna Brandon,	***Mindfully Targeting Burnout: An Open-Label Trial of a Mindfulness-based Curriculum for Psychiatry Residents***
Nicole Noronha Brown University Medical School	***Supporting Children of Parents with Addiction in Rhode Island: An Overview of Community Resources***
Elise M. Stephenson University of North Carolina School of Medicine Co-Authors: Marina Spanos, Linmarie Sikich	***Criterion-Related Validity of the Sociability Factor Among Children with Autsim Spectrum Disorder***
Nikhil "Sunny" Patel Mayo Medical School	***Parent-Mediated Intervention for Autism Spectrum Disorders in South Asia (PASS): A Model for a Global Mental Health Intervention***

Special Thanks To:

The Klingenstein Third Generation Foundation

American Academy of Child & Adolescent Psychiatry

Harvard Medical School

Dr. Robert Kitts

Dr. Jon Alpert

Jennifer Smialek

Harvard Klingenstein Games Steering Committee:
Matthew Baum
Noor Beckwith
Christina Cruz
Julian Thomas
Erin West
Haining Yu

Klingenstein Games 2013

Harvard Medical School
February 2nd, 2013

Welcome

WELCOME TO THE 2013 KLINGENSTEIN GAMES

2013 KTGF Sites:

Brown Alpert Medical School
David Geffen School of Medicine at UCLA
Harvard Medical School
Mayo Medical School
Mount Sinai School of Medicine
Stanford University School of Medicine
University of California Davis School of Medicine
University of Illinois College of Medicine
University of Maryland School of Medicine
University of North Carolina at Chapel Hill School of Medicine
University of Vermont College of Medicine
Yale University School of Medicine

Friday Evening

7:00 PM - Informal Reception, with food, beverages and games

Joseph B. Martin Student Lounge
Vanderbilt Hall
107 Louis Pasteur
Boston, MA 02115

Saturday Morning

All activities located in:
Tosteson Medical Education Center (TMEC)
260 Longwood Ave.
Boston, MA 02115
Individual Rooms listed separately

8:30 A.M.	Breakfast (TMEC Atrium)
9:00 A.M.	Welcome and introductions (TMEC Atrium)
9:15 A.M.	Team building activities (TMEC Atrium)
10:15A.M.	Team building debriefing (TMEC 227)

Saturday Morning

10:30 A.M. Medical student oral presentations (TMEC 227)

1. Current perspectives on juvenile bipolar disorder
   Brooke Rosen and Keith Miller – Mayo Medical School
2. The neural circuitry of suicidality in adolescents with bipolar disorder
   Amanda Wallace – Yale School of Medicine
3. Recognizing depression and other consequences of rootlessness in third culture kids
   Quincy Nang and Jessica Saw – Mayo Medical School

11:15 A.M.	Break
11:30 A.M.	Keynote Speaker (TMEC 227)

Paula K. Rauch MD
Associate Professor of Psychiatry
Harvard Medical School
Director – Marjorie E. Korff PACT Program
(Parenting At a Challenging Time)
Program Director, Family Support and Outreach
Red Sox Foundation/MGH Home Base Program
Massachusetts General Hospital

Afternoon

12:00 P.M.	Career panel and lunch (TMEC Atrium)
12:45 P.M.	Medical student poster session (TMEC Atrium)
1:30 P.M.	Medical student oral presentations (TMEC 227)

4. Determining the effectiveness of the Autism Mental Status Examination (AMSE) online training curriculum
   Erin Li – Mount Sinai School of Medicine
5. Encountering patients with eating disorders through snack passes
   Annie Kelly and Megan Wilson – UNC Chapel Hill School of Medicine

2:00 P.M.	GAMES (TMEC Atrium)
3:30 P.M.	Innovation challenge (TMEC Atrium)
4:15 P.M.	Innovative challenge debriefing (TMEC 227)
4:30 P.M.	Awards ceremony (TMEC 227)
4:45 P.M.	Speed networking followed by wine, dessert and cheese celebration (TMEC Atrium)

Optional social outing after the games.

Presentation 1

Current Perspectives on Juvenile Bipolar Disorder

Brooke Rosen, Keith Miller
Mayo Medical School

Currently, pediatric bipolar disorder is characterized by two primary presentations – severe non-episodic irritability and episodic mania. The increasing application of bipolar diagnoses to youth has created great controversy over the diagnostic criteria and true prevalence of the disorder. While the symptom criteria for bipolar disorder in the DSM IV are identical for adults and children, the manifestation of symptoms can be obscured by normal childhood behavior as well as development. In addition, variable features of pediatric manic or hypomanic episodes have raised questions about clinical and physiological differences between the various phenotypes of pediatric bipolar disorder. Therefore, this presentation seeks to clarify the diagnosis of pediatric bipolar disorder such that treatment is not withheld from those that truly have the disorder, while preventing unnecessary diagnosis and exposure to psychotropic drugs.

The presentation will further delineate the phenotype of severe non-episodic irritability as investigated in Dr. Ellen Leibenluft's Bipolar Spectrum Disorders research group at the National Institute of Mental Health, in which Brooke conducted research for two years prior to medical school. The session will discuss key data from longitudinal clinical, behavioral, neuroimaging, and family studies that distinguish children with severe non-episodic irritability from those with the classic episodic presentation of bipolar disorder.

Presentation 2

The Neural Circuitry of Suicidality in Adolescents with Bipolar Disorder

Amanda Wallace
Yale School of Medicine

For adolescents and young adults, suicide is the 3rd leading cause of death, taking the lives of more than 4000 adolescents and young adults in the U.S. each year. Amongst those individuals who commit suicide, ninety percent have a mental disorder. Bipolar Disorder (BD) in particular, has one of the highest rates of completed suicide, estimated at 20%, highlighting the importance of understanding the development of suicidality in BD. The identification of biomarkers of suicidality in adolescents and young adults with BD would not only help in the development of new methods for early detection, but would provide insight into the mechanisms that underlie the development of suicidality in this age group as well as their future risk in adulthood, and aid in the design of new interventions that specifically target these mechanisms.

In this study we used diffusion tensor imaging (DTI) to examine structural differences in the white matter (WM) that provides connections in the brain circuits that regulate emotions and impulses between BD adolescents with a history of suicide attempts (BD-ATT) and BD adolescents with no history of attempt (BD-NATT). We observed significant decreases in a DTI measure of the structural integrity of WM, fractional anisotropy (FA), in the BD-ATT group compared to BD-NATT group bilaterally in the region of the uncinate fasciculus (the WM structure that provides the highest proportion of connections within key nodes of the neural circuitry that subserves emotional regulation, i.e. between the amygdala and ventral frontal (VF) regions). A decrease in FA was also observed in a more rostral and lateral right VF WM area. In exploring associations between clinical factors that might contribute to the regional FA decreases and risk for suicide attempts, we noted an inverse association between the magnitude of reported emotional abuse (as reported on the Childhood Trauma Questionnaire) and FA in the right VF region. The findings suggest that abnormalities in the development of the connections within corticolimbic brain circuitry may be associated with the development of risk for suicide attempts in adolescents and young adults with BD, and that history of emotional abuse may be a factor that contributes to this risk.

Presentation 3

An Exercise in Screening for Mental Health: Recognizing Depression and Other Consequences of Rootlessness in Third Culture Kids (TCKs)

Quincy Nang, Jessica Saw
Mayo Medical School

Globalization and increased emigration flows means a larger number of children following their parents find themselves transplanted into unfamiliar environments (Dewaele and van Oudenhoven, 2009). Understanding cross-cultural upbringing and its impact on childhood development has thus been increasingly crucial to mental health professionals internationally. An important subset of these children has been primarily studied. Identified as Third Culture Kids (TCKs), Pollock and Van Reken (2001) define them as:
A person who has spent a significant part of his or her developmental years outside the parents' culture. The TCK builds relationships to all of the cultures, while not having full ownership in any.

As TCKs have become more prominent in recent years, physicians should expect to see more of them in their practice and should gain awareness of the emotional and psychological impact of this experience on their personalities.

While TCKs tend to be significantly more open-minded, culturally competent, and easily adaptable to new environments, their feeling of rootlessness is often linked to lower self-esteem with higher rates of depression and anxiety (Diler, Avci, & Seydaoglu, 2003).

The goal of this presentation is to introduce this subset of children within the light of their psychosocial singularities. We will then present a brief video interview of one such TCK. The audience will be given the opportunity to practice recognizing relevant TCKs' mental health characteristics.

Presentation 4

Determining the effectiveness of the Autism Mental Status Examination (AMSE) online training curriculum in improving medical students' inter-rater reliability in their administration of the AMSE

Erin Li
Mount Sinai School of Medicine

Background:
- Autism spectrum disorders (ASD) are very prevalent, and are characterized by a variety of social, communicative, and cognitive deficits.
- Early detection and treatment of ASD is correlated with better outcomes in patients.
- The standard examinations for diagnosis of ASD require extensive training and time to administer, which presents a challenge for widespread detection of ASD.
- The recently developed AMSE appears to reliably detect ASD, and can be easily administered by clinicians with little training in the context of a general clinical examination.

Specific Aims:
- To characterize medical students' ability to administer the AMSE before and after completing an online training.
- To determine the inter-rater reliability of those medical students in their administration of the AMSE.

Methods:
- The online curriculum requires subjects to complete a training consisting of a manual explaining the AMSE, 2 pre-tests, a training module, and 2 post-tests.

Presentation 5

Encountering Patients with Eating Disorders through Snack Passes

Annie Kelly, Megan Wilson
UNC School of Medicine

The goals of this program include:

- To provide 1st and 2nd year medical students an opportunity to learn about diagnosis and treatment of eating disorders through multiple clinical encounters across a continuum of care.
- To provide general psychiatry residents the opportunity to present didactic material about eating disorders and therapeutic meal support as well as mentor students interested in psychiatry.
- To provide patients suffering from severe eating disorders opportunities to take on the expert role, to put into practice tools they are developing in treatment, and to gain confidence in their ability to engage in healthy interactions that involve eating.

Program details:
Medical students attend a two-hour interactive training session presented by a general psychiatry resident that covers basic information about diagnosis, medical and psychiatric treatment of eating disorders; the eating disorders program at UNC; providing therapeutic meal support; and the logistics of the Snack Pass program. At the conclusion of the training students commit to scheduling four snack passes that are thirty minutes each. Students are paired with a patient on the eating disorders unit or in the partial hospitalization program. Priority is given to patients who are approaching a transition in care so that the student will be able to follow them across the care continuum. The initial snack pass occurs in a highly structured environment, such as on the unit or in the partial program dining area. Subsequent passes occur throughout the UNC hospital dining areas.

Outcomes:
Our program is in the pilot phase with 5 students paired with adult and adolescent patients. At the conclusion of the pilot program students and patients will complete a Qualtrics survey to assess if goals were achieved, perspectives were impacted, and to illicit suggestions for improvement going forward. We anticipate targeting an increase to 10 participant pairs.

Poster 1

Open Label Clinical Trial of Vitamin D_3 Dosage Tolerability, and Effect on Behavioral Measures in Children with Autism

Faith Rohlke
University of Illinois College of Medicine

Objectives: Vitamin D is vital for neurodevelopment, and deficiency has been linked to psychiatric dysfunction. Recent evidence suggests that vitamin D deficiency may be correlated with autism, but interventional high dose vitamin D_3 (D_3) replacement in the ASD population has not been investigated. This study aims to report on the tolerability of high dose D_3 supplementation in ASD children, and secondarily, its efficacy in improving the core features of autism in a small sample.

Methods: 20 ASD patients with serum 25(OH)D concentrations below 30 ng/ml, ages 3-8, are treated with high dose D_3 for 12 weeks in an open-label trial. Subjects receive 10,000 IU D_3 for 10 days. At weeks 2, 4 and 8, dosage is titrated based on weight and 25(OH)D levels to achieve a concentration at the high end of the reference range (30–100 ng/ml). Statistical analysis will compare pre vs post assessments for improvements in the core features of autism, and correlate results with changes in 25(OH)D concentration. Ability of the protocol's dosages to reach goal 25(OH)D will be evaluated.

Results: We predict that D_3 supplementation will be well tolerated and improvements in baseline to final outcome measures will be apparent in subjects reaching serum 25(OH)D concentrations near 90 ng/ml.

Conclusion: All subjects may not reach 25(OH)D levels near 90 ng/ml. However, since the aim of this pilot study is to evaluate monitored high dose D_3 supplementation in pediatric ASD patients, all well tolerated 25(OH)D levels below the level of toxicity (150 ng/ml) support the hypothesis. Results demonstrating safety of interventional high dose D_3 will justify a large sample RCT.

Poster 2

The Other String Theory: A Medical Student, Her Ukulele and the Patient Encounter

Linda Drozdowicz
Mayo Medical School

When I purchased a "decorative" ukulele to hang on my wall during a pre-medical-school family vacation to Hawaii, I never imagined that it would shape my entire medical school experience. In an unexpected 2.5 year long (and counting) fit of procrastination, I taught myself to play the flamboyant little instrument and, beyond that, became a well-known presence around Mayo Clinic as a result of frequent musical performances. Many positive ukulele-tinged patient encounters – including a number of child psychiatry mentorship experiences – inspired this presentation.

Poster 3

Analysis of the Expressed and Latent Content of Popular Internet Pornography and its Potential Clinical Effects on Adolescent Development

Lisa Jacobs
Brown Alpert Medical School

Objective**:** Evaluate the portrayal of sexuality on a free, popular pornographic website to document patterns and representations of sexuality. Assess potential clinical implications of adolescent pornography exposure.

Methods: We performed a content analysis of expressed and latent themes of the top 30 most viewed video clips of all time (as of May 15, 2012) on a free website, youporn.com. Clips were both professional and amateur. Youporn.com was chosen for its popularity, and because it is free to visit and easily accessible to minors. The top 30 most popular clips since the website was launched in 2006 were chosen because of their exceptionally large viewership – each clip had 20 to 55 million views, with 842 million combined hits – and because they were thought to best represent the tastes of viewers.

Each clip was analyzed by the primary author for the presence of: condom use, force or violence, male in power position, female in power position, wanted sexual advance, verbal objection or physical resistance to sexual advance, expression of pain or distress, fellatio, and cunnilingus. The concluding act of each scene was detailed. The following time intervals were calculated: total time, time to verbal expression of female sexual pleasure, duration of fellatio and cunnilingus.

Realism was assessed subjectively based on the filmmakers' addition of elements of plot, dialogue, and scenery to make the encounter seem believable. Scenes that exclusively showed sexual acts without preceding interaction were not

Results:

Of the 30 video clips, 25 featured welcomed sexual advances. Sex between one man and one woman was featured in 25 of 30 clips. Condom use was present in only 1 clip. Force or violence was in 8 of 30 clips, but only two women expressed pain. Only one woman physically resisted, and one verbally objected. All eventually consented to sex. Filmmakers added elements of plot and dialogue to 17 of the 30 clips to make them seem real.

Fellatio was present in 25 clips, occupying 13% of total screen time. Cunnilingus was in 10 clips, occupying 5% of screen time. In 29 of 30 clips, women expressed sexual pleasure within the first two minutes of the video. The conclusion to 17 of 30 clips was the man stopping intercourse to ejaculate on the woman's face.

Poster 4

Development of motor inhibition impairment in bipolar disorder

Judah Weathers
Yale University School of Medicine

Objective:

Despite increased interest in the developmental trajectory of the pathophysiology mediating bipolar disorder, few studies have compared adults and youths with bipolar disorder. Deficits in motor inhibition are thought to play an important role in the pathophysiology of the illness across the age spectrum. The authors compared the neural circuitry mediating this process in bipolar youths relative to bipolar adults and in healthy volunteers.

Method:

Participants were pediatric (N=16) and adult (N=23) patients with bipolar disorder and healthy child (N=21) and adult (N=29) volunteers. Functional MRI (fMRI) data were acquired while participants performed the stop-signal task.

Results:

During failed inhibition, an age group-by-diagnosis interaction manifested in the anterior cingulate cortex, with bipolar youths exhibiting hypoactivation relative to both healthy youths and bipolar adults, and bipolar adults exhibiting hyperactivation relative to healthy adults. During successful inhibition, a main effect of diagnosis emerged in the right nucleus accumbens and the left ventral prefrontal cortex, with bipolar patients in both age groups showing less activation than healthy subjects.

Poster 5

Evaluating the Prevalence of Psychiatric Illness in Pediatric Oncology

Jacquelin Rankine
Mount Sinai

Previous research has revealed elevated rates of comorbid depression, anxiety, and other psychiatric disorders in children receiving treatment for life-threatening illnesses.

This study assessed the prevalence of psychiatric disorders in patients of the pediatric hematology/oncology clinic at Mount Sinai Hospital through the use of semi-structured interviews.

Results of this research showed that a significant and currently unmet need for mental health services exists among pediatric hematology/oncology patients at Mount Sinai. 8 of 18 participants (44.4%) met criteria for a psychiatric disorder. 6 of 18 participants (33%) met criteria for adjustment disorder with depressed mood, 1 (6%) for major depressive disorder, and 1 (6%) for bipolar I disorder. Only 2 of 8 (25%) participants with psychiatric disorders were currently receiving treatment. There was no significant relationship between time since medical diagnosis or age at medical diagnosis with the development of a psychiatric comorbidity. This study has clarified the psychiatric needs of this population at Mount Sinai and may serve as an easily replicable model for psychiatric assessment in pediatric patients with chronic and life-threatening illnesses at other medical centers.

Poster 6

Exposure to Drug-Related "People, Places, and Things" Through Online Social Networking Sites Among Adolescents in Substance Abuse Treatment Programs

David Tran
David Geffen School of Medicine at UCLA

Purpose: The current study collected pilot data to assess the impact of online social network use and exposure to drug-related cues among a convenience sample of youth attending a community substance abuse treatment program.
Methods: 37 adolescents undergoing substance abuse treatment completed a 20-question survey.
Results: 89% (N=33) use online social networking sites with a majority using Facebook. Of those, 88% (N=29) report marijuana as his/her drug of choice. 44% (N=14) of youth reported posting drug-related content on social networking sites while 94% (N=30) reported that their friends post drug-related content. In contrast, only 22% (N=7) of youth reported that their friends post recovery-oriented content on social networking sites. 66% (N=21) reported that a post had caused them to have an urge or craving for drugs.
Conclusion: Our study highlights the negative influence that online social networking sites may have on youth via exposure to drug users and cues. The low rate of exposure to recovery-oriented content suggests a missed opportunity to use the power of social media to support recovery among youth.

Poster 7

Framework for Determining Costs of School-Based Crisis Intervention Services

Christina Cruz
Harvard Medical School

We are interested in determining the costs of school-based mental health services. Advocates have proposed mental health services delivered in schools as a financially feasible approach to support families and students with mental health needs. However, well-documented data and research on the costs of school-based mental health programs remains limited (Chatterji, et al., 2004). In our work, we propose a methodology for comparing the cost of school-based initial mental health crisis interventions to the cost of the same services delivered in an emergency department.

Poster 8

The Games People Play: Understanding Massively Multiplayer Online Role Playing Game Engagement within a Sample of Psychiatric Adolescent Inpatients

Kevin A. Coughlin
Brown Alpert Medical School

OBJECTIVES: The aims of this study are to identify and explore the clinical factors and motivations underlying engagement with "massively multiplayer online role playing games," (aka MMOs such as World of Warcraft) within a clinically impaired population of adolescent psychiatric inpatients, and to identify how MMO use is associated with measures of psychopathology.
METHODS: Participants admitted to an inpatient psychiatric unit for adolescents were asked to complete a series of self-report measures, including the "Motivations for Online Gaming Questionnaire" (MOGQ) which explored motivating factors underlying video game use, and the "Problematic Video Game Use Survey," (PVGUS) which assessed the consequences and reinforcing factors of past-year video game use. Demographic characteristics were recorded, as well as type of game played, average length of daily gaming, and results from psychometric testing.
RESULTS: Of 219 consecutive admissions to the adolescent inpatient units at Bradley Hospital, 132 were video gamers. Of those 132 gamers, 82 played at least one game which involved an online component (i.e. connection to other users through the internet to compete or cooperate in gameplay). Of these 82 online-gamers, 25 self-identified as users of MMO games. MMO users within this population played an average of 2.5 hours of video games daily, compared to 1.9 hours for general online gamers ($p = 0.017$). MMO users also scored significantly higher on the "Trauma Symptoms Checklist for Children" parameters for depression, dissociation/fantasy, and anger. MMO gamers were significantly more likely to engage in gaming for reasons of escape, coping, and fantasy when examining MOGQ results. Further analysis of PVGUS, MOGQ, and psychometric data is pending.
CONCLUSIONS: A select portion of inpatient psychiatric adolescents engage with MMOs. Early data suggests these games represent a unique and novel media format presenting both risks and benefits to a clinically impaired population. We predict that this unique study population is motivated to engage with MMOs as a means of fantasy, for coping purposes, and to escape from real life stress. The extent to which this engagement can be labeled "problematic" is yet to be determined.

Donald J. Cohen Child Psychiatry Interest Group at Yale

Supported by the Klingenstein Third Generation Foundation

Tues, Sep 10
4:30 PM, Harkness Ballroom

Fall Activities Fair
Find our booth in Harkness Ballroom!

Mon, Oct 7
5:30 PM, Child Study Center Outpatient Clinic (364 George St)

Baby as Professor: (Parents as Supporting Cast)
Meet Dr. Linda Drozdowicz and her adorable son to learn about babies and development.

Wed, Nov 20
11 AM, Hope Room#

Across the Lifespan Autism Seminar
Meet Paul, one of Dr. Martin's patients, to learn about his experiences with autism.

Fri Jan 24- Sun Jan 26

Klingenstein Games @ Tulane NOLA

Join us at the annual Klingenstein games conference! Funding available for presenters and select additional students.

Mon, Sep 16
5:30 PM, Winchester 1

Shadowing
Visit to Winchester 1 (Inpatient child psychiatry unit) with Dr. Andres Martin.

Tues, Nov 5
5:30 PM, Cohen Auditorium

From Objects to Subjects: Child Psychiatry and Adult Anxieties in the Twilight Zone

Isaiah Thomas, MS2, shares his work exploring the historical development of child psychiatry through the show The Twilight Zone.

Mon, Dec 9
5:30 PM, Cohen Auditorium

Three Identical Strangers – Screening
Join us for a movie and dinner discussion of the acclaimed documentary Three Identical Strangers.

Mon, Feb 3
5:30 PM, Cohen Auditorium

Three Identical Strangers – Panel Discussion
A panel discussion to follow our December screening. Sponsored by the Program in Medical Ethics.

2019-2020

Questions? Contact olivia.herrington@yale.edu or may.shum@yale.edu

Our Goals...

The goals of the program, in keeping with the mission of the Department of Psychiatry and the Division of Child and Adolescent Psychiatry within the Vermont Center for Children, Youth, and Families:

1) to create positive mentoring relationships between medical students and child psychiatrists

2) to teach empirically-based and family-centered assessment

3) to encourage students to consider a career in child and adolescent psychiatry

This program has been funded through the generous support of the Klingenstein Third Generation Foundation and the Department of Psychiatry. One goal of the KTGF Foundation is to increase the number of child psychiatrists by supporting training programs that expose medical students to the field. UVM is one of 14 sites around the country to benefit from their generosity and their vision.

The Vermont Center for Children, Youth, and Families is a multidisciplinary group of child and adolescent psychiatrists, psychologists, social workers and researchers who have as their common goal the understanding of both normal child development and child psychiatric illness. The aim of the Center is to study and to practice methods of keeping well children well, identifying children at risk, and treating children in need, using a family-based and wellness-centered approach

SARAH GUTH, M.D.

Director, Donald J. Cohen MSTP
Box 364SJ 3, FAHC
1 South Prospect
Burlington, VT 05401

Phone: 802-338-0030 Fax: 802-847-7998
E-mail: sara.guth@uvmhealth.org

The Vermont Center for Children, Youth, and Families

Maya Strange, M.D., Interim Director

Donald J. Cohen Medical Student Training Program

Funded by the Klingenstein Third Generation Foundation

A PROGRAM FOR MEDICAL STUDENTS TO ALLOW FOR EARLY MENTORED EXPERIENCE WITH CHILDREN AND FAMILIES

Do you have an interest in the mental health of children?

The Donald J. Cohen Medical Student Training Program

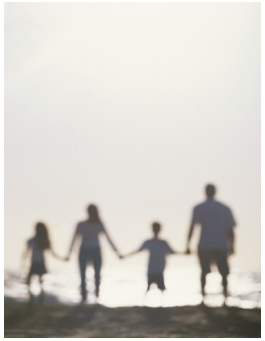
We are accepting applications for a new medical student training program at the University of Vermont COM. This program offers:

Mentoring by child and adolescent psychiatrists. A mentor will be assigned to you and available throughout your 4 years and will have regular meeting with you to discuss cases and career plans.

Continuity of participation over 3-4 years. Your mentor will stay with you throughout the 4 years and will help make research and clinical opportunities in child and adolescent psychiatry open to you.

Clinical, supervised exposure and experiences. You will get exposure to clinical and research experiences in child and adolescent psychiatry from the first year forward. You will accompany your mentor in the clinic with a plan to see some cases continually throughout your 4 years. Where appropriate, your mentor will encourage you to have interaction with the child and the family during the assessment and treatment planning stages.

Socializing experiences with students and faculty. You will be invited to monthly lunch meetings and twice yearly dinners with the mentors and other students. Students will direct the agenda for these meetings, which may include discussion of an interesting case, a recent article, a piece in the lay press, a recent meeting, or a topic of interest.



Mentors:

Robert R. Althoff, M.D., Ph.D., *Chair, Department of Psychiatry*
Yasmeen Abdul-Karim, M.D., *Co-Director, Donald J. Cohen MSTP*
Maya Strange, M.D., *Interim Director, Division of Child and Adolescent Psychiatry; Director, Child and Adolescent Psychiatry Fellowship; Co-Director, Donald J. Cohen MSTP*
Jeremiah Dickerson, M.D., *Director, Psychiatry Residency*
Andrew Rosenfeld, M.D., *Director, Pediatric Psychiatry Clinic at the VT Center for Children, Youth, and Families*
Michael Hoffnung, M.D., *Assistant Professor*
Dhruv Shah, D.O., *Assistant Professor*
Haley McGowan, D.O., *Medical Director, Child, Adolescent, and Family Division, VT Dept of Mental Health; Co-Director, Child and Adolescent Psychology and Psychiatry Consultation-Liaison Service*
Colleen Victor, M.D., *Assistant Professor*
Eve Spratt, M.D., M.S.C.R., *Professor*
James Edwards, M.D., *Professor*

Application Form

NAME:

ADDRESS:

YEAR AT UVM COM:

PHONE:

EMAIL:

Please state any special interests so that we can best match you with a mentor

While applying for this training program offers exposure to child psychiatry, it does not commit you to entering the field. It should be an opportunity, not a burden.

☐ Check here if you don't want to be a "fellow" in the program and assigned a mentor, but would rather be a "participant-observer" and come to meetings but not be assigned a mentor.

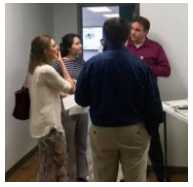
Signature

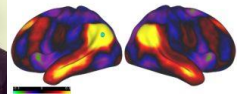
Fax or mail to:

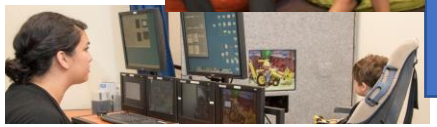
SARAH GUTH, M.D.
Director, Donald J. Cohen MSTP
Box 364SJ 3, FAHC
1 South Prospect
Burlington, VT 05401

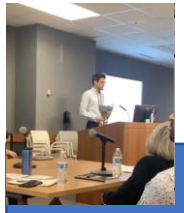
Phone: 802-338-0030 Fax: 802-847-7998
E-mail: sara.guth@uvmhealth.org

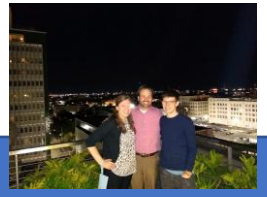
Washington University KTGF Medical Student Program in Child and Adolescent Psychiatry









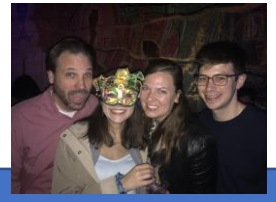


What is it?

A group for any Wash U medical student interested in learning more about Child and Adolescent Psychiatry (CAP).

Why Child and Adolescent Psychiatry?

- Psychiatric illnesses are one of the leading causes of morbidity and mortality; it's estimated that 70% of psychiatric illnesses start in childhood or adolescence.
- There are currently less than 10,000 child and adolescent psychiatrists in the country… not enough to serve the growing need.
- There's increasing research on how brain development, genetic and epigenetic factors, and environmental influences like trauma and adversity impact psychiatric illness. This puts CAP at the frontier of both understanding brain development and early intervention.
- Playing with kids is part of the job!

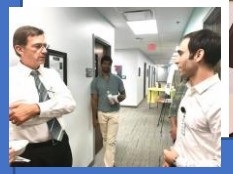


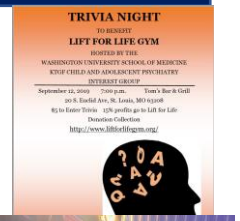
What is the KTGF conference?

Every year, the KTGF sponsors a 2 day event at one of the participating medical schools where students have the opportunity to meet and hang out with students interested in CAP from all over the country and sometimes all over the world. Students also have the opportunity to present their work and meet CAP faculty from the other 14 KTGF medical schools.

At the Jan 2020 conference sponsored by Tulane in New Orleans, several 2nd year WUMS presented talks or posters, we heard a film analysis of the developmental perspective on the Twilight Zone from a Yale medical student, saw New Orleans jazz with the training directors from Wash U, Yale, and Mt. Sinai, met CAP trainees from the Netherlands and Australia, and had an impromptu "second-line" celebration.

The KTGF (Klingenstein Third Generation Foundation) is a national organization dedicated to recruiting high quality physicians to the field of child and adolescent psychiatry, funding medical student organizations and young investigators.





Why join KTGF?

- Meet child and adolescent psychiatrists, fellows, and other students who are interested in CAP.
- Spend time in the CAP outpatient clinics shadowing or volunteer at related events.
- Attend the annual KTGF conference – one of the only national conferences specifically dedicated to medical students.

What's the commitment?

It's up to you – some students come just for the panel discussions, some students sign up to shadow in the clinics, some students meet a CAP mentor, attend and even present at the annual KTGF conference.

How do I join?

The student leader (Alice Jiang, and Carolina Badke D'Andrea) will have a sign ups at the activity fair and by class email. You can also email Them directly at alice.j@wustl.edu, and carolinab@wustl.edu subject: "Sign me up for the KTGF MSP".

How is this different than the other psychiatry and neuroscience interest groups?

The KTGF complements them – we work with Psych-SIGN, (for all students interested in psychiatry generally), and many students also volunteer at the SNHC-Psychiatry Nights. However, we have unique events geared toward learning more about the development of psychopathology and treating psychiatric illnesses during childhood and adolescence.

The Klingenstein Third Generation Foundation Fellowship Program in Child and Adolescent Psychiatry at the University of California, Davis

APPLICATION FOR FELLOWSHIP
2022/2023

♦ Robert Horst, M.D., Program Director ♦
♦ *Contact Person*: Deb Matsumoto ♦
♦ UC Davis Dept of Psychiatry, Sacramento, CA 95817♦
♦ Fax number: 916-734-0849 ♦ Phone number: 916-734-5514♦E-mail: dmatsumoto@ucdavis.edu ♦

UC DAVIS HEALTH
PSYCHIATRY AND BEHAVIORAL SCIENCES

To The Klingenstein Third Generation Foundation Fellowship Program at the University of California, Davis:

I Hereby Make Application for Fellowship in The Klingenstein Third Generation Foundation Fellowship Program.

PLEASE TYPE OR PRINT YOUR RESPONSES.

*** IMPORTANT: Both pages are required for this application to be considered complete and ready for processing**

Name: _____ ☐**MD** ☐_____

Student ID: _____

Please state your level of interest *at this time* in the following specialties:

1 = no interest 2 = some interest 3 = a lot of interest 4 = high possibility as career choice

☐ **Family Practice** ☐ **Internal Medicine** ☐ **OB/Gyn** ☐ **Pediatrics** ☐ **Surgery**

☐ **Psychiatry** ☐ **Child/Adolescent Psychiatry** ☐ **Other:**_____

CONTACT INFORMATION ADDRESS BELOW: [ ] HOME [ ] OFFICE

Street: _____ **Suite/Apt#:**_____

City: _____ **State:** _____ **Zip:**_____

Phone:_____ _____ **Fax:**_____

Cell:_____ _____ **Pager:**_____

Undergraduate degree & Institution:
_____ **Email:**_____

I understand that this information will be forwarded to the American Academy of Child and Adolescent Psychiatry (AACAP) and I agree to apply for active membership in this organization via the AACAP website. I am giving consent for information to be shared with these organizations and consent for these organizations to contact me. There is no fee required for student membership in AACAP.

SIGNATURES: (Application not valid unless signed. Only long hand signatures are accepted)

Applicant's Signature: _____ **Date:** _____

Program Oversight Committee Signature: (Program Director and/or Secretary) **Date:**

_____ _____

The Klingenstein Third Generation Foundation
Fellowship Program in Child and Adolescent Psychiatry
at the University of California, Davis

APPLICATION FOR FELLOWSHIP – continued- pg 2
2022/2023

UCDAVIS HEALTH
PSYCHIATRY AND BEHAVIORAL SCIENCES

Applicant Name:_____

In no more than 250 words, please describe why you are interested in The Klingenstein Third Generation Foundation Fellowship Program in Child and Adolescent Psychiatry.

I have read the above notice and agree to the terms stated. **(Signature required for applicant to be considered.)**

Signature: _____ **Date:** _____ **Reviewed By:** _____

The Klingenstein Third Generation Foundation Fellowship Program in Child and Adolescent Psychiatry at the University of California, Davis

Student Packet

Revised October 19th, 2022

Fellowship Program in Child and Adolescent Psychiatry (CAP) at the University of California, Davis

Year-long
Fellowship Program
(Must be part of fellowship program to apply for CAP summer program or the longitudinal medical school course.)

Intensive 2-4 week
Summer Course
(optional-add'l app. required)
(max 2 fellows)
Apply April, 2023

MENTORING/ CLINICAL EXPERIENCES

- Exposure to all aspects of CAP
- Discuss Clinical Experiences
- Choose focused topic for educational project
- Professional Development

EDUCATIONAL PROJECT

- Literature Review
- Creation of teaching module
- Presentations to academic and community groups

FELLOWSHIP MEETINGS

- Monthly meetings
- Discuss Clinical Exp.
- Discuss Progress on Educational Project
- Professional Speakers
- Optional Movie Nights

EVALUATIONS

- Complete program evaluations
- AACAP Surveys

Application Guidelines

- Any first year medical student, in good standing, attending UC Davis School of Medicine is eligible for a fellowship.
- Applications may be submitted beginning October 2022 for the mentoring program. Student leaders will set application deadline in November 2022.
- An additional application will be required for the summer course in April, 2023. If accepted for the summer course, student will need to enroll in this medical school elective course through the registrar/department of psychiatry. This course is dependent on current COVID restrictions and availability.
- Fellows may also enroll in a longitudinal medical school elective course. This course is a pass/fail course and provides medical school credit. Responsibilities are the same as for the informal fellowship but activities will be tracked more carefully to ensure the fellow receives a passing grade.

Summary of Fellow's Responsibilities

- As representatives of the fellowship program, it is expected that fellows will conduct themselves with the highest degree of professionalism.
- Shadow at least 3 of the mentors and have at least 6 clinical experiences per year.
- Attend fellowship meetings on a regular basis.
- Complete an educational project on a focused topic of choice.
- Present educational project in at least one academic and one community setting.
- Complete interval evaluations of program and AACAP surveys (annual).

BACKGROUND

What is The Klingenstein Third Generation Foundation?

The Klingenstein Third Generation Foundation (the Foundation) was established in 1993. The Foundation has funded programs and post-doctoral research in children's mental health, primarily in the areas of childhood/adolescent depression and ADHD. The Foundation has also supported training programs that expose medical students to the field of Child and Adolescent Psychiatry (CAP).

What is The Fellowship Program in CAP at UC Davis (TKTGF)?

The Klingenstein Fellowship at UCD, established in 2005, is a faculty mentoring program that introduces medical students in their pre-clinical years to the field of Child and Adolescent Psychiatry (CAP). The program leadership consists of 2-3 medical student leaders, a psychiatry resident leader and a faculty program director. The goals and objectives of the program are clearly articulated. Those who are interested apply by means of a formal application.

Accepted candidates gain access to a pool of mentors comprised of volunteer clinical faculty, child psychiatry residents and full-time faculty. The mentor/fellow relationships are designed to accomplish several objectives. First, mentors are available to meet with fellows to arrange clinical experiences including both shadowing and direct patient care. There is opportunity for students to experience a wide variety of clinical settings and career options in Child and Adolescent Psychiatry. Second, mentor/fellow meetings allow for professional development, discussion of cases, and education in child and adolescent psychiatry. Third, the mentors help the Fellows choose an educational topic and can serve as advisors for an educational project.

Each Fellow chooses a focused topic of interest. This might be a specific child psychiatric disorder, a treatment model, or an aspect of normal development. The Fellow will review literature and have hands-on experience with the focused topic. Then, working independently or in a group of two or three students, the Fellow develops a teaching module. Each module is reviewed by peers and faculty. Each Fellow will be expected to present the topic to both their peers and a community audience. Possible community forums include parent and teacher organizations and the module will be added to a library for possible future use by other medical students.

In addition to these activities, Fellows will meet monthly as a group to discuss their clinical experiences and progress on their teaching modules. They will have the opportunity to share experiences, hear visiting child psychiatrists speak, and meet with faculty. The students are also invited to attend special lecture series and case conferences pertinent to child psychiatry held at UC Davis.

A limited number of Fellows (maximum 2-4) will have an opportunity to apply for an intensive, four week CAP summer clinical experience between their first and second years of medical school. 2 weeks of this "mini-clerkship" will consist of mornings on an inpatient child psychiatry unit and the other two weeks will consist of afternoons in various child psychiatry clinics, exposing the fellow to a wide variety of child psychiatry settings. This is a medical school elective course. Fellows will also have the opportunity to enroll in a formal longitudinal elective course. Students who choose to enroll will receive medical school credit and will be more closely monitored to insure they meet the minimum requirements to pass the course. Both the longitudinal course and the summer course are graded as pass/fail.

Evaluation of the Program

There are 3 primary methods of evaluation of the Klingenstein Medical Student Fellowship Program at UC Davis. First, all Fellows will complete evaluations of their experiences and adjustments will be made wherever possible.

Second, each Fellow's educational project will be evaluated by the peer group, the collective mentor group, and by the program leadership. When the educational module is finished, the Fellow will present the project to fellow students and community agencies.

Finally, future enrollment (student interest) and the ultimate career choices of participating Fellows (into first general and subsequently into child and adolescent psychiatry) will be monitored by the student leadership and the American Academy of Child and Adolescent Psychiatry via annual online surveys. These surveys are extremely important to complete and participation is mandatory.

Klingenstein Annual Conference

Years ago, two of the Foundation's funded medical student programs, Yale and Harvard, generated a friendly academic exchange during the traditional Harvard-Yale football weekend. As the Foundation funded more medical student programs, Yale and Harvard invited the rest of the funded schools to participate. At this conference, formerly known as the "Klingenstein Games", students from the attending schools present their work to one another and engage in a variety of socializing and networking events. This grantee-inspired event has developed into a tradition in which students come together in January or February of each year. Fellows are encouraged to attend the conference which will be held at Brown University in February

The Tulane Klingenstein Child and Adolescent Psychiatry Medical Student Fellowship (TKCAPS)

Fellowship Description: This competitive, grant supported fellowship has been developed to support and foster medical student interest in mental health issues facing children and adolescents. We offer a longitudinal experience, beginning in the first year of medical school, which will evolve into upper level leadership/mentorship roles. This program is designed to provide medical students with mentorship and exposure to clinical experiences, research, and advocacy.

Who should apply?

We welcome applications from students with strong work ethic and curiosity about how early childhood experiences affect development, health, and influence risk for psychiatric illnesses. If you are interested in pursuing psychiatry, child psychiatry, pediatrics, or triple board as a residency, you are strongly encouraged to apply. However, students with a general interest in health and mental well-being of children are encouraged to apply as well. This experience will give comprehensive exposure to normal psychological development, to the impact of trauma in our community on child mental health, and to the crucial role played by families in health of growing children.

Program Components:

1. Clinical shadowing experiences with faculty child psychiatrists (4-6 visits annually).
2. Mentorship: From Child and Adolescent Psychiatry and Triple Board faculty and fellows, General Psychiatry residents, and upper level fellowship students.
3. Community service and advocacy activities. These experiences will explore the unique environments the children in our community experience and explore potential mental health risks they face.
4. Informal socials hosted by faculty. Opportunities to meet and network with other medical students, CAP fellows, Triple Board and Psychiatry residents, and faculty.
5. Q&A sessions on special topics (e.g., mentorship, research and scholarly activities, applying to residency) with faculty mentors, fellows/residents, and upper level fellowship students.
6. The opportunity to attend and present at the annual KTGF National Medical Student Conference aka "The Games." Many of those who have participated in the conference have gone on to serve in a leadership capacity for the fellowship.
7. Opportunities to attend Tulane Child Psychiatry weekly grand rounds, as well as support for attendance at Tulane conferences (Brain and Behavior, Forensic Psychiatry).
8. An optional mentored academic/research project.
9. Support for participation in national organizations (such as AACAP), support for applications for medical student awards to national and regional meetings focused on child psychiatry, and support for other student fellowship or award programs.

Requirements:

1. Most recent CV.
2. Letter of interest (500 words or less).

If you would like to apply, please email the above requirements with the subject "TKCAPS Application" to Dr. Brittnie Fowler via bfowler3@tulane.edu. For more information and/or any questions, please contact Dr. Fowler.

Donald J. Cohen Klingenstein 3rd Generation Foundation Medical Student Fellowship Program in Child & Adolescent Psychiatry

Updated 4/1/16

What the Fellowship is: The Fellowship is a flexible program that enables Harvard Medical Students to explore the field of Child and Adolescent Psychiatry and even General Psychiatry. It is open to any Harvard Medical Student at any stage of training, including those who are taking the time to conduct research, and is designed to accommodate students' interests, goals, and schedules. It also attempts to promote the patient-doctor interaction from a psychiatrist's perspective.

What the Fellowship is not: The Fellowship is not a formal curriculum with a project requirement although presenting a poster or talk at the annual national Klingenstein Conference is encouraged. The primary requirement is having an interest (big or small) in exploring the field of Child and Adolescent Psychiatry and a commitment to participating in one of a range of mentored activities/educational opportunities.

Who would benefit from the Fellowship?

- Those who would like to increase their comfort working with child and adolescent patients
- Those who are not sure what they would like to do after medical school, but would like a flexible way of exploring fascinating areas of clinical work and/or research at the interface of psychiatry, neurology and pediatrics
- Those who would like more in depth mentored exposure to the patient-doctor relationship
- Those who may be interested in a scholarly project related to child and adolescent psychiatry, human development or the developing brain
- Those who are potentially interested in child and adolescent psychiatry or working with young adults and would like to explore this career option further at Boston Children's Hospital, BIDMC, Brigham and Women's Hospital, MGH, McLean Hospital, and/or Cambridge Health Alliance

What the Fellowship has to offer (nothing is mandatory):

- A mentor matched based on clinical and/or academic interest
- An opportunity to meet child and adolescent psychiatrists involved in different areas of clinical work and/or academic work (e.g., global mental health, psychiatric consultation liaison to the medical/surgical floors, emergency psychiatry, outpatient psychiatry, etc.)
- A chance to meet and potentially shadow child and adolescent psychiatry fellows and/or general psychiatry residents who are interested in child and adolescent psychiatry
- A fun and informal way to meet and socialize with other medical students interested in general psychiatry and child and adolescent psychiatry at HMS
- Invited to attend the annual national Klingenstein Conference where medical students interested in Child and Adolescent Psychiatry from over a dozen medical schools participate in collegial and academic activities
- Opportunity to learn more about the different residency and fellowship programs in psychiatry at Harvard
- Talks related to child and adolescent psychiatry and/or the developing brain

Duration of Fellowship:

One year is the usual length though all prospective candidates will meet with the Fellowship Director to develop an individualized experience based on interests and schedule.

If interested or if you have questions, please email Heather Adams at Heather_Adams@hms.harvard.edu

Klingenstein Offerings Elaborated

Klingenstein Fellows can be informal or formally paired with residents, fellows and faculty in both General Psychiatry and Child and Adolescent Psychiatry (with emphasis on the latter) from the following institutions based on request:

- Boston Children's Hospital
- Massachusetts General Hospital
- McLean Hospital
- Beth Israel Deaconess Hospital
- Brigham and Women's Hospital
- Dana Farber Cancer Institute
- Cambridge Health Alliance

Klingenstein Fellows may have the opportunity to shadow in the following clinical settings:

- Inpatient child and adolescent psychiatry unit
- Residential child and adolescent psychiatry unit
- Pediatric psychiatry consultation service
- Outpatient child and adolescent psychiatry clinic, including assessments, pharmacotherapy, and potentially psychotherapy using two way mirror (e.g., Parent Child Interactive Therapy)
- Outpatient child and adolescent psychiatry specialty clinic (e.g., Early Psychosis)
- Resident and Fellows' call experience, which could include inpatient and emergency room

Klingenstein Fellows are invited to attend regular talks, panels and dinners, at Harvard Medical School, including but not limited to the following:

- Annual Klingenstein Kick-off Dinner with the Psychiatry Student Interest Group, where medical students meet residents, fellows, and faculty interested or involved in Child and Adolescent Psychiatry
- Annual HMS Alumni in Psychiatry Dinner (graduates of HMS from 1960s to recent graduates who are now residents in psychiatry)
- Career panels for Psychiatry
- Career panels specifically for Child and Adolescent Psychiatry
- Career panels for different opportunities to work with children, including General Pediatrics, Adolescent Medicine, Pediatric Neurology, Developmental Pediatrics, and Child and Adolescent Psychiatry
- Evening with an expert faculty in Child and Adolescent Psychiatry
- Evening child psychiatry cinema events with CAP Fellows and Attendings
- Lunch talks with psychiatrists, including Child and Adolescent Psychiatrists, in collaboration with the Psychiatry Student Interest Group

Klingenstein Fellows are invited to attend other scholarly activities held at Harvard Medical School or HMS Affiliated Hospitals including but not limited to the following:

- Harvard Medical School Annual Psychiatry Research Day, Poster Session, and Mysell Lecture
- McLean Annual Research Day
- Department of Psychiatry Grand Rounds
- Department or Division of Child and Adolescent Psychiatry Grand Rounds

The Klingenstein Third Generation Foundation Fellowship Program in Child and Adolescent Psychiatry at the University of California, Davis

Ridwa Abdi and Robert Horst, MD

UC DAVIS
UNIVERSITY OF CALIFORNIA

Program Structure

The Klingenstein Fellowship at UC Davis features strong student leadership. Fellows in the program volunteer as senior medical students to serve as Fellowship leaders. The leaders recruit first year medical students into the fellowship and mentor them through their year-long exposure to Child and Adolescent Psychiatry.

Leadership Components

- Encourage mentoring experiences based on areas of mutual interest and background.
- Solicit faculty and psychiatrists from the community for monthly discussions with Fellows.
- Provide direction and guidance on student educational projects.
- Gather input from fellows to continuously attend to student needs and improve the program over time.

Relationships

- Each Fellow chooses from a list of dedicated mentors to shadow and build relationships with over the course of the year.
- The Fellow works with mentors to explore areas of shared clinical, research, and professional interest.
- Monthly dinner meetings with faculty are held to discuss training pathways, trends in the field, and practice opportunities. Topics and speakers are chosen to allow students to learn both the aspirational future of the field and the current daily reality.

Resources

- The fellowship program allows broad exposure to Child and Adolescent Psychiatry through a wide variety of clinical sites affiliated with UC Davis.
- A formal medical school course option is available to interested fellows allowing for medical school course credit and formal evaluation.

Research

- The year culminates with an educational project of the student's choosing.
- Work is presented to interested academic, professional, and/or community audiences. The project is a product of a year's worth of work and experiences.

Student Experiences

Student Experiences

"Without the Klingenstein fellowship, I would have had absolutely no exposure to child psychiatry if I had followed the regular curriculum in medical school. I had a wonderful mentor who showed me a variety of different cases: anything from schizophrenia to selective mutism to ADHD and autism. "

"My mentor let me interview patients at the MIND Institute while he watched through the one-way mirror. It really helped me gain confidence talking to patients in a controlled, safe environment."

"*I loved the comradery in my group of classmates during the meetings, the chance to meet faculty, and liked doing a project that made a difference in the community."*

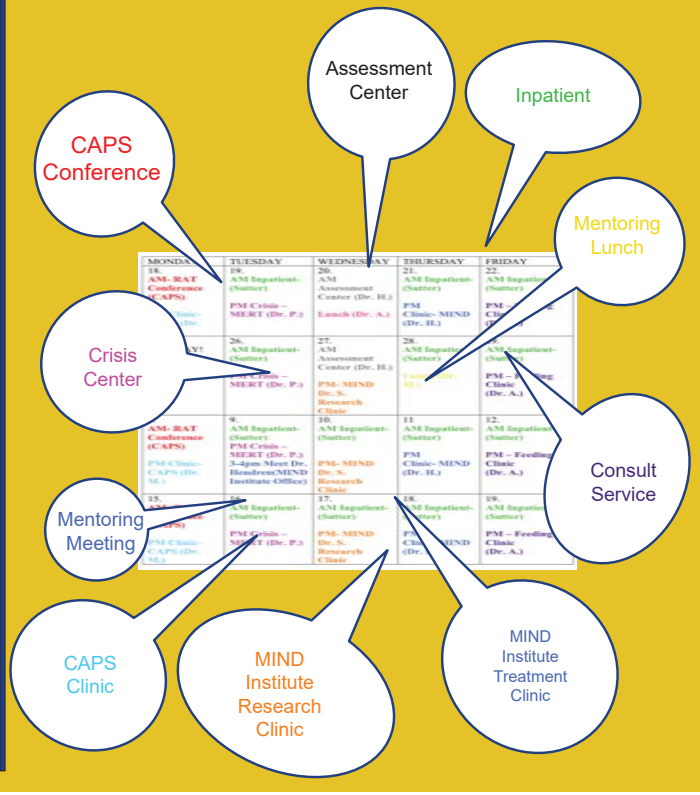
"The Klingenstein summer program was a great introduction to how the third year psychiatry clerkship might be. I was excited to work in both the inpatient and outpatient settings. The fellows and attendings are so eager to teach and make you feel like part of the team."

"Being a part of the Klingenstein Fellowship as a first year medical student was an indispensible experience. Through shadowing activities and meeting a variety of psychiatrists with diverse expertise, I have gained insight that will help me in the clinical years to come and beyond."

Summer Course

The KTGF program at UCD offers a formal medical school summer course between the 1st and 2nd years of medical school. Selected Fellows spend a month of half days immersed in the field of Child and Adolescent Psychiatry. The experience provides Fellows exposure to research and clinical practice in a wide variety of settings as well as ample opportunities to interact with faculty. Students receive medical school credit and formal evaluations.

Sample Rotation Sites



2022-2023 KTGF Medical Student Program Roster

Institution Name: ___________________________

Program Name: ___________________________

Name (First, Last)	E-mail Please use permanent if graduating	Phone	School Year	Program Position

Expense Budget Form - 2023

2023 National Medical Student Conference

The Klingenstein Third Generation Foundation

February 3-4, 2023: Brown University

Institution:							
Address:							
Primary Contact Name:				Telephone:			Date:
Email Address:							
First Name	**Last Name**	**List Classification i.e. Program Director, MS1, MS2, MS3, MS4**	**Email**	**Expense type**	**Expense amount**	**Total for Line**	**Comments**
TOTALS				0	$0.00	$0.00	

Original receipts must be provided for any expense over $10

Please email receipts and paperwork to shellwege@aacap.org.