Rush Mentoring Programs: INVESTING IN THE FUTURE

Committing to the development of junior faculty members and postdoctoral researchers is an essential investment for academic medical centers such as Rush University Medical Center. The Office of Mentoring Programs at Rush facilitates the growth of our junior faculty and fellows, fostering independent research and career opportunities.

The success of the program, and ultimately the Medical Center overall, is measured by scholarly productivity, extramural funding, the retention and advancement of junior faculty, and the best possible placement of talented postdoctoral fellows who are ready for the next step in their careers.

Our mission is to support the success of our junior faculty as they work under the guidance and supervision of knowledgeable and committed mentors. An effective faculty mentoring program also assists in recruiting future faculty and fellows to Rush.

Mentee OUTCOMES

In fiscal year 2016, 37 mentees (62 total grants) received funding either as principal or co-investigators. Twenty-six of those grants were from the National Institutes of Health. This table shows the distribution of grants received by mentees as principal investigators and as co-investigators, and breaks down the funds received from federal and non-federal sources.

Additionally, mentees published 189 journal articles and presented 172 podium talks and 82 posters.

<table>
<thead>
<tr>
<th>TYPE OF FUNDING</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENTEE AS PRINCIPAL INVESTIGATOR</td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>$2,361,254</td>
</tr>
<tr>
<td>Non-federal</td>
<td>$963,601</td>
</tr>
<tr>
<td>Total</td>
<td>$3,324,855</td>
</tr>
<tr>
<td>MENTEE AS CO-INVESTIGATOR</td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>$3,914,969</td>
</tr>
<tr>
<td>Non-federal</td>
<td>$98,875</td>
</tr>
<tr>
<td>Total</td>
<td>$4,013,844</td>
</tr>
<tr>
<td><strong>Total federal</strong></td>
<td><strong>$6,276,223</strong></td>
</tr>
<tr>
<td><strong>Total non-federal</strong></td>
<td><strong>$1,062,476</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$7,338,699</strong></td>
</tr>
</tbody>
</table>

“Faculty mentoring is one of the bedrocks of an academic institution. For the mentor and the mentee alike, it is an incredibly rewarding experience. The investment in our junior faculty across the University as they develop their academic and career growth is an investment in our future and in the future of the many important research questions they are working to solve. And those colleagues that are providing mentorship are exemplifying the ideal characteristics of our professions.”

Larry J. Goodman, MD
CEO of Rush and President of Rush University
"The RRMP has been instrumental in helping me launch my academic career. The program provides multidisciplinary mentoring support from senior investigators who attend the regular RRMP research meetings and give feedback on our research studies and proposals. The grant-writing course offered by the program helped me submit research applications that were successfully funded. The staff is extremely respectful and supportive, always responded to my requests in a short time and always has a positive attitude."

Faraz Bishehsari, MD, PhD
Assistant Professor
Department of Internal Medicine, Section of Gastroenterology, Rush Medical College

Serving RUSH UNIVERSITY
Rush Mentoring programs served 68 mentees from across the University, including two from John H. Stroger, Jr. Hospital.

MENTEES
- Rush Medical College: 82%
- College of Health Sciences: 9%
- College of Nursing: 9%

GENDER
- Women: 37%
- Men: 63%

RESEARCH TRACKS
- Clinical: 72%
- Laboratory-based: 24%

MENTEE RANKINGS
- Assistant Professors: 75%
- Associate Professors: 13%
- Instructors: 7%
- Post-doc Fellows: 5%
As a nurse scientist, my goal is to conduct high-quality research that can advance knowledge and improve patient care. Being a part of the RRMP has provided me with valuable peer support across disciplines and allowed me to participate in grant review with senior researchers, which was critical in securing my research funding. The door to the program is always open, and the staff is always there to help me navigate the sea of independent research.

Masako Mayahara, RN, PhD
Assistant Professor
Department of Community, Systems and Mental Health, College of Nursing

“...”

As a nurse scientist, my goal is to conduct high-quality research that can advance knowledge and improve patient care. Being a part of the RRMP has provided me with valuable peer support across disciplines and allowed me to participate in grant review with senior researchers, which was critical in securing my research funding. The door to the program is always open, and the staff is always there to help me navigate the sea of independent research.

Masako Mayahara, RN, PhD
Assistant Professor
Department of Community, Systems and Mental Health, College of Nursing

Program RESOURCES

A variety of resources are made available to mentees and mentors of the Mentoring Programs, including the following:

GRANT-WRITING COACHING

A course is offered to help clarify the grant-writing process. Participants learn the components and rhetorical structure of an aims page, understand the logic flow of specific aims and learn best writing practices to enhance document readability. In addition, participants are taught funding agency criteria for significance, innovation and approach, and how to connect those criteria directly to their research goals. Participants also learn best practices for using figures, graphs and tables.

Submitted proposals from those who have received writing coaching have achieved a 75 percent success rate and garnered more than $11 million in funding.

COHN FELLOWSHIP GRANTS

The Cohn Family Foundation provides grant support that is distributed equally to five mentees who are selected through a competitive process. The funding allows mentees to gather preliminary data for research proposals and for their continued engagement in research activities.

SCIENCE WRITING AND EDITING

Science writers and editors provide help with conference abstracts, manuscripts and grant applications.

STATISTICAL CONSULTING

Internal or external statistical assistance is provided as research or scholarship projects are clarified. Support includes clarifying analytic goals, consulting on the data analysis section of applications, interpreting output results and contributing to manuscripts.

COMMUNICATION SKILLS WORKSHOPS AND COACHING

Effective presentation skills workshops are offered to help develop effective, engaging presentations using PowerPoint or posters.

GRAPHICS CONSULTATION

A graphic design expert is available to help mentees and mentors refine graphs, figures and tables for presentations and publications.

ANNUAL RESEARCH SYMPOSIUM

The Mentoring Programs Research Symposium highlights the excellent research being conducted at Rush. With about 120 attendees, 10 presentations and 40 posters, the symposium offers a venue to stimulate interdisciplinary and interdepartmental collaboration.
I began participation in the Rush Research Mentoring Program as I transitioned from postdoctoral to assistant professor status at Rush. The services and guidance provided by the Mentoring Programs contributed to my professional development, including development of mentoring capabilities and successfully competing for NIH awards. I look forward to continued participation in the program as a junior mentor.

Hannah Lundberg, PhD
Assistant Professor
Department of Orthopedic Surgery,
Rush Medical College

TRAVEL AWARDS
Travel awards are granted to the symposium’s abstract winners and to the Mentee of the Year, who is selected through a competitive process.

WEEKLY MENTEE WRITING GROUPS
Peer groups provide mutual support and accountability, as mentees work toward increasing writing productivity while decreasing stress. Peers help each other set reasonable goals and share strategies for success.

MONTHLY RESEARCH TRACK MEETINGS
Monthly research track meetings provide valuable feedback from mentors and peers on specific aims and summary statements.

SEMINARS AND WORKSHOPS
A large variety of seminars and workshops are offered to enhance the professional development of members of each group. Most activities are open to all faculty, students and staff at Rush. In fiscal year 2016, there were 85 seminars and workshops offered, with 1,365 people attending.

LENDING LIBRARY
A series of books is available for mentees and mentors to borrow.
The Cohn Family Foundation provides $100,000 in grant support that is distributed equally to five mentees who are selected through a competitive process. The funding allows mentees to gather preliminary data for research proposals and for their continued engagement in research activities. In fiscal year 2016, the recipients were as follows.

JAMIE A. CVENGROS, Ph D, an assistant professor in the Department of Behavioral Sciences, has two primary lines of research: strategies to assess and improve communication and clinical reasoning skills among medical students and physicians, and strategies to improve patient adherence to treatment for chronic disease. Her Cohn Fellowship research focused on the “Development and Validation of Tools for Assessment of Integrated Clinical Skills.”

MAHBOOBEH (MAHA) MAHDAVINIA, MD, PhD, is an assistant professor in the Section of Allergy and Immunology. Her research interest includes racial differences in people who have chronic rhinosinusitis. She is also interested in pathogenesis of adult food allergy and eosinophilic esophagitis. Mahdavinia has received several awards for her research, including the 2014 AAAAI-IRSOC interest section award and the 2007 AACR-WICR interest section award. Her Cohn Fellowship research focused on “Chronic Rhinosinusitis, Microbiome and Race.”

RACHEL E. MILLER, PhD, is an assistant professor in the Division of Rheumatology within the Department of Internal Medicine. During her doctoral studies at the Massachusetts Institute of Technology, she worked on developing novel concepts to induce cartilage repair in the knee using protein- and tissue-engineering methodologies. During her postdoctoral work at Rush, she gained experience in the study of molecular pathways associated with osteoarthritis pain. Her Cohn Fellowship research focused on “Biomechanical Pathways Involved in Osteoarthritis Pain.”

JITESH PRATAP, PhD, is an assistant professor in the Department of Anatomy and Cell Biology. The focus of his research is to understand the molecular basis of bone metastasis, with special emphasis on the role of signaling networks in cancer cell survival. He aims to identify novel regulatory pathways in breast cancer cells using various molecular approaches and animal models to develop targeted therapies for bone metastasis. Pratap is a member of many professional societies, including the American Association for Cancer Research and the American Society for Bone and Mineral Research. His Cohn Fellowship research focused on “Novel Regulatory Mechanisms of Cell Survival in Bone Metastasis.”

NATALIE R. STEVENS, Ph D, is an assistant professor in the Department of Behavioral Sciences. Her primary research focus is on psychological and medical interventions to improve pregnancy outcomes in underserved populations. Her intervention program — called Trauma-Sensitive Obstetric Care to Promote Control, Anxiety-Reduction and Empowerment (TO-CARE) — aims to train obstetric practitioners to deliver trauma-sensitive medical care throughout pregnancy. Her Cohn Fellowship research focused on “Improving Pregnancy Outcomes Using Trauma-Sensitive Obstetric Care for Abuse Survivors.”

As of July 31, 2016, 10 mentees have completed their fellowship and four of have already received NIH (three K awards) and foundation grants to continue their research endeavors. Five additional mentees were selected to begin their fellowship in fiscal year 2017.
The Office of Mentoring Programs offers three additional programs that provide professional development and resources to our faculty.

**RUSH POSTDOCTORAL MENTORING PROGRAM**

The Rush Postdoctoral Society (RPS) was founded in 2013 to facilitate community building for postdoctoral scholars at Rush University. At the local level, we provide education to assist new postdoctoral scholars transitioning to Rush and support those leaving Rush as they embark on new careers. We provide a community where postdoctoral scholars can share ideas and concerns, and socialize with their peers.

The RPS has a committee comprised of Rush postdocs who meet once a month to organize career development seminars, workshops and social events. Some examples of these scholarly seminars include the following: “Successful F31/F32 Grant Writing, How to Build an Effective CV, Academic Job Interviews, Preparing an Academic Cover Letter and Effective Presentation Skills.” The RPS also collaborates with other institutions, such as the University of Chicago, Northwestern University, the University of Illinois at Chicago and Argonne National Laboratory to help create a sense of community for Chicago-area postdocs.

The RPS is the Rush University representative for the National Postdoctoral Association (NPA). As such, the Office of Mentoring Programs supports the national goals of NPA. The RPS provides access to the NPA network and all of the associated resources available to members.

Since Rush is a sustaining member of the NPA, all postdoctoral scholars and research fellows are encouraged to join the NPA free of charge. Each year, the NPA celebrates National Postdoc Appreciation Week to recognize the significant contributions that postdoctoral scholars make to U.S. research and discovery. The Office of Mentoring Programs helps to create awareness by hosting a campus-wide event in celebration. The NPA also hosts an annual meeting, which is the largest meeting and networking event in the postdoctoral community. Each meeting is highly engaging and productive for postdoctoral scholars, administrators, and others working to enhance the postdoctoral experience.

Visit the National Postdoctoral Association’s website for full details.

Additional MENTORING PROGRAMS

The Office of Mentoring Programs offers three additional programs that provide professional development and resources to our faculty.

**RUSH POSTDOCTORAL MENTORING PROGRAM**

The Rush Postdoctoral Society (RPS) was founded in 2013 to facilitate community building for postdoctoral scholars at Rush University. At the local level, we provide education to assist new postdoctoral scholars transitioning to Rush and support those leaving Rush as they embark on new careers. We provide a community where postdoctoral scholars can share ideas and concerns, and socialize with their peers.

The RPS has a committee comprised of Rush postdocs who meet once a month to organize career development seminars, workshops and social events. Some examples of these scholarly seminars include the following: “Successful F31/F32 Grant Writing, How to Build an Effective CV, Academic Job Interviews, Preparing an Academic Cover Letter and Effective Presentation Skills.” The RPS also collaborates with other institutions, such as the University of Chicago, Northwestern University, the University of Illinois at Chicago and Argonne National Laboratory to help create a sense of community for Chicago-area postdocs.

The RPS is the Rush University representative for the National Postdoctoral Association (NPA). As such, the Office of Mentoring Programs supports the national goals of NPA. The RPS provides access to the NPA network and all of the associated resources available to members.

Since Rush is a sustaining member of the NPA, all postdoctoral scholars and research fellows are encouraged to join the NPA free of charge. Each year, the NPA celebrates National Postdoc Appreciation Week to recognize the significant contributions that postdoctoral scholars make to U.S. research and discovery. The Office of Mentoring Programs helps to create awareness by hosting a campus-wide event in celebration. The NPA also hosts an annual meeting, which is the largest meeting and networking event in the postdoctoral community. Each meeting is highly engaging and productive for postdoctoral scholars, administrators, and others working to enhance the postdoctoral experience.

Visit the National Postdoctoral Association’s website for full details.

It was not until I joined the Mentoring Programs that I started to succeed. Most impactful was the grant-writing workshop. I learned how to write a compelling proposal, which led to a funded pilot study and eventually to a successful R01 application. The Mentoring Programs also provided me a forum where I can communicate with my peers and senior faculty at Rush.

Robin Poussel, PhD (left) Assistant Professor Department of Orthopedic Surgery, Rush Medical College

It was not until I joined the Mentoring Programs that I started to succeed. Most impactful was the grant-writing workshop. I learned how to write a compelling proposal, which led to a funded pilot study and eventually to a successful R01 application. The Mentoring Programs also provided me a forum where I can communicate with my peers and senior faculty at Rush.

Robin Poussel, PhD (left) Assistant Professor Department of Orthopedic Surgery, Rush Medical College
The Mentoring Program fostered great connections with researchers in other departments, which have developed into productive lines of research for me and my colleagues.

Megan Hood, PhD
Assistant Professor
Department of Behavioral Sciences, Rush Medical College

The Rush Mentoring Program is a true gem. I suggest all department chairs advocate that their junior faculty members who are serious about a research career apply for the program. The program’s faculty and staff are committed to setting people on the right path in their journey to achieve academic research success.

Raj C. Shah, MD
Associate Professor
Department of Family Medicine and Rush Alzheimer’s Disease Center

EDUCATIONAL MENTORING PROGRAM

The Rush Educational Program (REMP) provides experienced and dedicated mentorship for educators and educational scholars who engage in scholarly activities in support of Rush University’s mission. The program offers a comprehensive range of resources designed to strengthen the educator’s teaching portfolio and support educational scholarship.

Once a year, Rush faculty have an opportunity to enhance and improve their teaching skills through a teaching excellence course sponsored by the Office of Mentoring Programs. The course consists of a core module and three elective tracks, and will be adding a fourth track on clinical teaching in the fiscal year 2017 session. The core includes interactive sessions on learning theories, adult learning, curriculum design, learner management and assessment, and course evaluations.

Participants also choose one elective track (simulation in health professions education, online teaching, active learning strategies or clinical teaching) based on their particular field and areas of interest. Participants receive continuing education credits and a certificate of completion at the end of the course.

The outcomes of the course are directly related to Rush’s I CARE values:

I: Innovation — Participants are given the opportunity to bring new ideas and methods to their teaching.
C: Collaboration — Participants work in multidisciplinary teams throughout the program.
A: Accountability — Participants complete individual and group projects, demonstrating their learning and ability to implement it in practice.
R: Respect — Participants with diverse backgrounds and experiences learn about and respect differences of opinions.
E: Excellence — Excellence of the program is ensured through promoting and modeling best practices.

More than 100 faculty members have taken the course since its debut in 2013. The alumni meet every six months to discuss best practices, accomplishments and challenges related to their teaching endeavors, which aids in enhancing the program from year to year.

A second group of faculty, educational scholars, focuses on conducting educational research, publishing and acquiring funding. Their main objective is to transition from philosophy to designing and executing research endeavors that will benefit Rush’s students or the patient community at large. Active members are committed to attending regular monthly meetings, participate in monthly reading assignments, conduct a research project proposal over a six-month period and report their research progress during the monthly meetings. The education scholars are encouraged to utilize the resources provided by the Office of Mentoring Programs while pursuing their educational research.
RUSH WOMEN MENTORING PROGRAM

The Office of Faculty Affairs, in collaboration with the Office of Mentoring Programs, established the Rush Women Mentoring Program (RWMP). The RWMP’s objective is to create and sustain a comprehensive program that facilitates women faculty members’ pursuit of career goals within a supportive and engaging environment at Rush University Medical Center.

The RWMP equips female faculty members with skills to help them manage a wide range of interpersonal and professional interactions through the following:

- Fostering a coherent system of professional development that accounts for individual needs and career pathways
- Adding to the scholarly knowledge base regarding learning styles in the medical sciences through reinforcement of infrastructure
- Using peer mentoring to nurture a sense of community among women faculty members
- Supporting a culture that is conducive to interprofessional collaboration and partnership
- Assisting women faculty in their promotion through academic ranks and into leadership positions
- Supporting a culture that is conducive to interprofessional collaboration and partnership
- Increasing visibility of women faculty and their successes within the Rush community
- Facilitating development of policies and concrete tools to promote work flexibility and work-life balance

The program has two facets. First, junior women faculty are matched with senior women faculty based on their profile preferences survey. Guidelines are provided to help maximize their meeting productivity and create objectives based on the mentees’ specific needs. The relationship is driven by the junior faculty. Currently, 37 junior-senior pairs participate in the program, and this group meets every six months to celebrate successes, discuss challenges and transform areas for improvement.

The second facet of the program is to enhance a sense of belonging among women faculty. The program fosters that by bringing together the group once a month through a seminar series that targets professional and career development. More than 600 have been in attendance at the seminars. The RWMP is increasing diversity awareness at Rush and starting new initiatives to retain and advance more women at Rush.
The mentoring program has been an outstanding platform for advancing my career, particularly when it comes to improving my grant-writing skills, developing great collaborations, and participating in professional and research development activities.

Jitesh Pratap, PhD
Assistant Professor
Department of Anatomy and Cell Biology

Giselle Sandi, PhD
Director, Mentoring Programs
(312) 563-3146
giselle_sandi@rush.edu

Kristi Menick
Project Assistant
(312) 563-3130
kristi_sabatka@rush.edu

Susan Chubinskaya, PhD
Associate Provost
(312) 942-8306
susanna_chubinskaya@rush.edu

Special thanks to: Rush Leadership, Board of Governors, Cohn Family Foundation.

RUSH MENTORING PROGRAMS
Kidston Building, 630 S. Hermitage Ave., Suite 606
www.rushu.rush.edu/researchmentoringprogram