Welcome to the
Best Practices in Neuroscience Education and Training Web Series:

Creating Individual Development Plans: Reaching Short and Long Term Career Goals

SfN Committee on Neuroscience Departments and Programs (CNDP)

Hermes H. Yeh
Chair, CNDP
William W. Brown Professor & Chair
Department of Physiology & Neurobiology
Geisel School of Medicine,
Dartmouth University

Moderator

Shelley J. Russek
Committee Member, CNDP
Professor, Pharmacology & Biology
Director, Graduate Program for
Neuroscience
Boston University School of Medicine &
Boston University

SfN
SOCIETY for NEUROSCIENCE

CNDP Mission

Advance Education & Research Training in Neuroscience

– Enhance the value SfN provides to individual and institutional members (neuroscience departments and programs) to identify and improve the quality of their training missions as well as contribute to sustainability of neuroscience as a choice profession.

– Identify best practices in neuroscience departments and programs that can serve as a resource for established training missions, as well as the formation of new training missions that can impact at both a local and global level.

– Reward the efforts of departments and programs that have developed innovative resources that improve the performance of their students in the laboratory, their enthusiasm as young mentors for the general public and advocates for science, and through professional development programs, their future success in the job market where training in neuroscience is an asset.

2013 SFN Meeting – Keith Trujillo receives award for Neuroscience Educator of the Year at the CNDP Reception

2013 SFN Meeting – Central Michigan University and University of Pennsylvania receive Neuroscience Programs-of-the-Year Awards at the CNDP Reception

SOCIETY for NEUROSCIENCE

CNDP Mission

Advance Education & Research Training in Neuroscience

- Vehicles for enhancing the success and quality of member efforts

    - Graduate School Fair
        - http://www.sfn.org/careers-and-training/higher-education-and-training/developing-training-programs-and-faculty

    - SfN Institutional Program Membership
        - http://www.sfn.org/Member-Center/Join-or-Renew/Institutional-Programs

    - Directory of Neuroscience Training Programs
        - http://www.sfn.org/careers-and-training/higher-education-and-training/training-program-directory

    - Educational Resources in Neuroscience (ERIN)
   - http://erin.sfn.org/

2013 SFN Meeting – graduate school fair brings training programs and potential graduate students together

Hermes Yeh, chair of the CNDP, thanks Joan Frye and Naomi Rosenberg for addressing an audience of 50 participants at the 2013 Spring Conference on Mentoring and Morale.

SOCIETY for NEUROSCIENCE

Creating Individual Development Plans: Reaching Short and Long Term Career Goals

Speakers
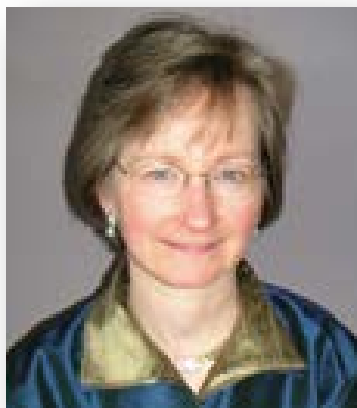
Nancy Desmond

National Institute Mental Health, NIH

Associate Director, Division of Neuroscience and Basic Behavioral Science (DNBBS) at NIMH

Ian Paul

University of Mississippi Medical Center

Professor of Psychiatry and Human Behavior

Director, Graduate Program in Neuroscience (2006-2014)

Member, Committee on Neuroscience Departments and Programs, SfN

Jennifer Stripay

Graduate Student (4th year)

University of Rochester School of Medicine and Dentistry

Member of the SfN Trainee Advisory Committee

SfN SOCIETY *for* NEUROSCIENCE

Speaker

Nancy Desmond
National Institute Mental Health, NIH
Associate Director, Division of Neuroscience and Basic
Behavioral Science (DNBBS) at NIMH

Characteristics of IDPs

- Definition: An IDP is a tool that can help individuals with career and personal development.

- Features:
  – A partnership between an individual and mentors/supervisors
  – A living document
  – Encouraged by organizations in both the private and public sector

- Purpose: help individuals reach short- and long-term career goals and to enhance current performance

NIH and IDPs

- Why does the NIH encourage IDPs?

  - IDPs were recommended by a working group of the Advisory Committee to the NIH Director on the biomedical research workforce (2012).

    - NOT-OD-13-093 and NOT-OD-14-113

  - IDPs can help assist graduate students and postdoctoral researchers achieve their career goals and contribute to the biomedical research workforce.

- For whom? NIH encourages institutions to develop IDPs for all graduate students and postdoctoral researchers supported by NIH awards.

- No specific IDP is recommended by NIH.

- Report on use of an IDP in your NIH Progress Report.

SfN SOCIETY *for* NEUROSCIENCE

NIH BEST Programs

- BEST = Broadening Experiences in Scientific Training
    - Goal: to strengthen the biomedical research workforce by preparing early career scientists for a variety of career options in the biomedical workforce
    - http://commonfund.nih.gov/workforce/index
- IDPs are an integral component of BEST award programs.
- Include exposure to varied career paths that use PhD training via externships, internships, informational interviewing and other approaches.

Graduate Students and IDPs

- Graduate students with a laser-like focus on a research-intensive career

  – Research-intensive options?

  – What is the best next step & what skills are needed?

- Graduate students who begin graduate school interested in neuroscience but not in research

  – Research-related options?

  – Career exploration

- Graduate students who are enthusiastic about neuroscience but uncertain about future direction(s) for their career

  – Research-intensive options?

  – Research-related options?

Postdocs and IDPs

- Postdocs with a laser-like focus on a research-intensive career

    - Research-intensive options?

    - Academic path vs. pharma/biotech/industrial path

- Postdocs who begin a postdoc intending a research-intensive career but decide not to follow that path

    - Research-related options?

    - Science policy, NGOs/foundations, science advocacy, entrepreneurial options, science communication, etc.

An IDP is an Ongoing Activity

- The process of developing an IDP can help you identify
    - Your strengths
    - Long-term career goals and options
    - Short-term goals to enhance your current opportunity
    - Milestones to achieve your objectives
- Using an IDP may also benefit those who are no longer in training.

SfN | SOCIETY for NEUROSCIENCE

Resources

- MyIDP, an online tool to help scientists prepare their own individual development plan (http://myidp.sciencecareers.org)

- NIH Office of Intramural Training and Education: online resources, YouTube videos, videocasts & podcasts of OITE workshops

    - https://www.training.nih.gov/for_trainees_outside_the_nih

- National Postdoctoral Association: career planning resources

    - http://www.nationalpostdoc.org/careers-24/career-planning-resources

- IDP for postdoctoral fellows developed by FASEB

    - http://www.faseb.org/portals/2/pdfs/opa/idp.pdf

- U.S. Office of Personnel Management IDP

    - http://www.opm.gov/wiki/training/Individual-Development-Plans.ashx

SOCIETY for NEUROSCIENCE

Speaker

Ian Paul
University of Mississippi Medical Center
Professor of Psychiatry and Human Behavior
Director, Graduate Program in Neuroscience (2006-2014)
Member, Committee on Neuroscience Departments and Programs, SfN

Using IDPs Effectively - Outline

- Why is the IDP different from all other questionnaires?

- What's in it for me?

- What's in it for my trainees?

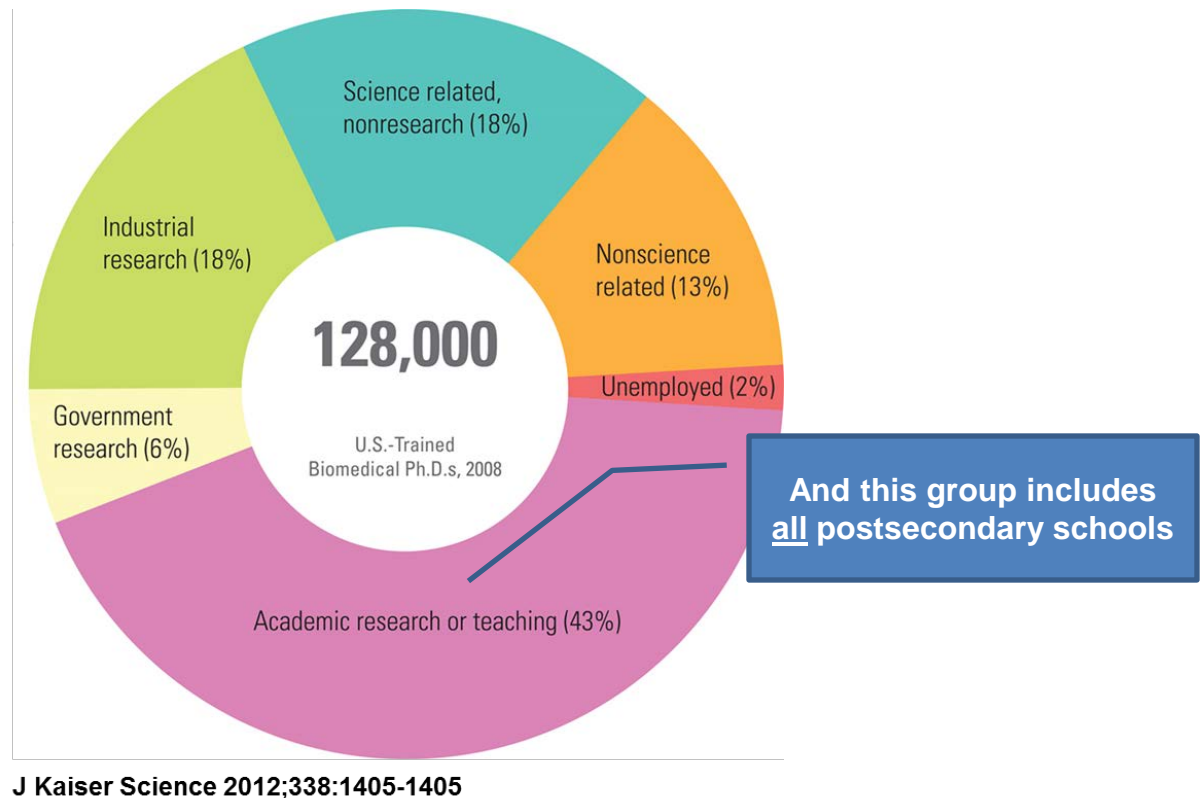- Why should my training program want to use it?

An IDP is a Map

- "If you don't know where you're going, you're likely to end up somewhere else."

- Being employed with a PhD in 2014 vs whenever you got your PhD.

- In **1983**, when I started graduate school, there were essentially <u>two</u> options.
  - Clone yourself as your advisor and enter academics (Yay!)
  - Become an industry scientist (Couldn't hack academia, huh?)
  - **As a result, the map was very simple. It had one starting point and two end points.**

- In **2014**, only one quarter of biomedical PhDs find a job in academics.
  - Funding levels for academic science have dropped.
  - *?!%! Baby boomers won't retire!
  - **This complicates the map. A lot.**

Today: What are My Options???

- What do the 75% of biomedical PhDs who don't become academic scientists do?????

- Teaching
- Industry
- Public policy
- Regulatory agencies
- Intellectual property
- Law
- Government advisors
- Think tanks
- Entrepreneurial opportunities
- ?????

Science related, nonresearch (18%)

Nonscience related (13%)

Industrial research (18%)

128,000

U.S.-Trained Biomedical Ph.D.s, 2008

Unemployed (2%)

Government research (6%)

Academic research or teaching (43%)

And this group includes **all** postsecondary schools

J Kaiser Science 2012;338:1405-1405

SOCIETY for NEUROSCIENCE

Students have varying goals

- **You have one job as a mentor: <u>Help your trainee reach his/her goals</u>.**

- Your job as a mentor **is not** to mold them to fit your goals.

- Your grant renewal is important, but it won't necessarily help your trainee reach his/her goals.

- It's a delicate balance – like balancing a see-saw on roller skates.

Unhappy or unfocused trainees are unproductive

- An IDP is a way to advance your trainee's long-term goals.

- An IDP is <u>also</u> a way to spell out <u>your</u> goals.

- It is often a compromise – an agreement by mutual consent.

- It makes clear what is needed from the trainee and the mentor.

How is an IDP Structured?

Annual Goals	Summary of expectations and responsibilities for each stage of training with links to tips and resources.
Part 1	Initiating the IDP: State your career goals and evaluate progress made during the past year.
Part 2	Skills assessment: Conduct an assessment of your strengths, weaknesses, and skills; ask your mentor/colleague to also provide an assessment.
Part 3	Set goals for the next year: List individual goals, methods to achieve goals, methods to assess progress, and develop a time management plan.
Part 4	Implementing your IDP: Set an appointment with your mentor. Discuss your IDP with your mentor; implement the steps in your IDP; periodically review progress with your mentor.

KELLOGG SCHOOL
OF SCIENCE AND TECHNOLOGY
at The Scripps Research Institute

SfN
SOCIETY for
NEUROSCIENCE

How Does an IDP Work?

- Identification of goals

- Guided self-assessment

- Mapping

- Milestones

- Periodic revisions

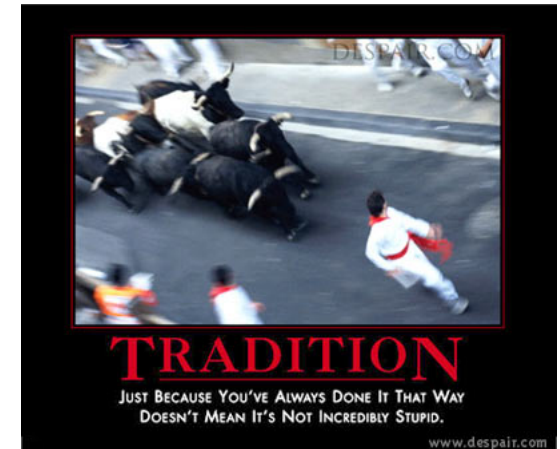Jeffy's ongoing struggle with obsessive-compulsive disorder
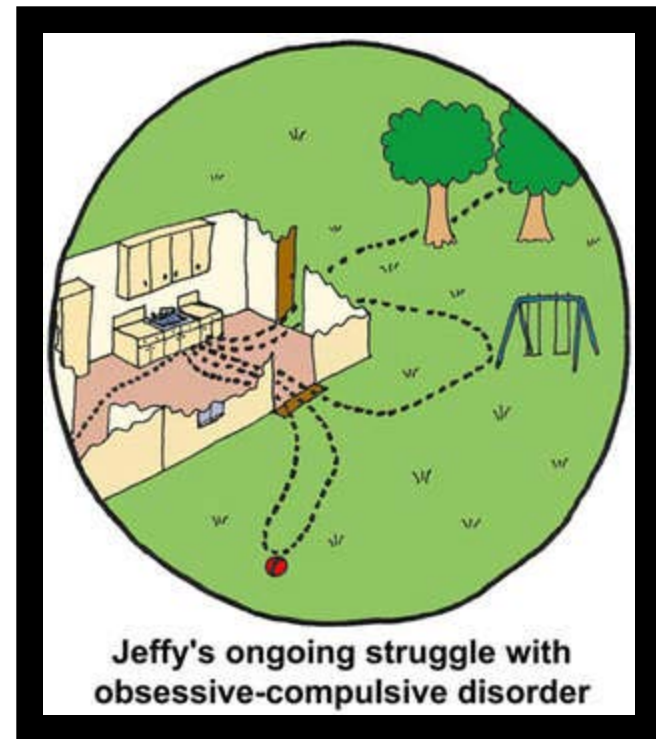
Mentors and Trainees Actually Get Similar Benefits

- Clear communication.

- Realistic expectations.

- Achievement of common goals.

- Flexibility as situations and opportunities change.

- Stress reduction.

- Universal peace and harmony (okay, that's probably stretching it).

What's in It for my Program/Institution?

- Clear and customized training plan for each student.

- Measureable milestones.

- Multiple means of measuring success.

- Lower attrition
  - Each student who leaves after 2-3 years costs the program/institution $60,000+!
    Each student who completes successfully makes it that much easier to get extramural support.

- Reduced dissatisfaction quotient (DQ).
  - DQ = (total number of unhappy students and/or mentors) ÷ (total number of students and mentors).
  - What's your program/institution's current DQ????
  - The higher the DQ, the harder it is to attract the best and brightest to matriculate!!!
    - You may get them to apply because of your name.
    - But today's students find out the DQ very quickly!

TRADITION
JUST BECAUSE YOU'VE ALWAYS DONE IT THAT WAY
DOESN'T MEAN IT'S NOT INCREDIBLY STUPID.
www.despair.com

Take Home Points

- Biomedical sciences students have a huge **range of career options**.

- Mentors and trainees are a **team** working toward **common goals**.

- An IDP spells out a **training map** with assessment, goals and, milestones.

- It is a **win-win** proposition.
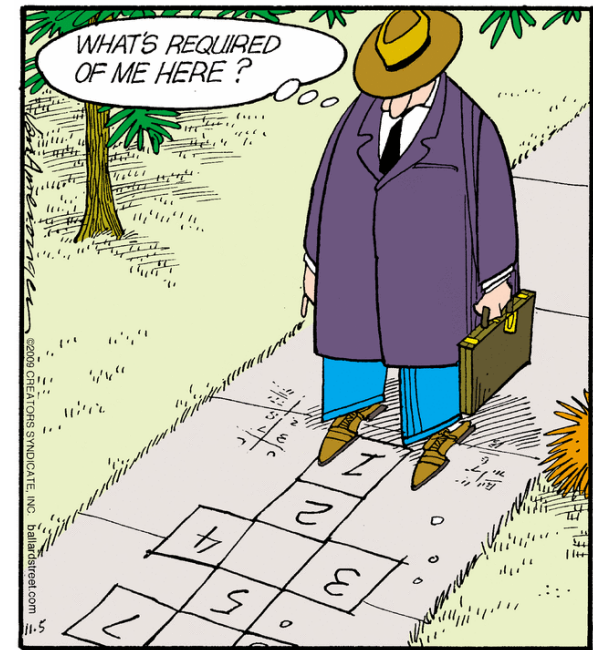
Speaker

Jennifer Stripay
Graduate Student (4th year)
University of Rochester School of Medicine and Dentistry
Member, Trainee Advisory Committee, SfN

Why Are IDPs Important for Trainees?

- Identify Long Term Academic and Career Goals
    - Taking Interests, Skills and Values into Account

- Design an Action Plan for Improvement

- Set Goals for Improving Efficiency and Productivity

- Structure Productive Conversations w/ Mentors

Adapted From:

IDP Components

- *Self Assessment*
  - **Skills**: Technical and Scientific Knowledge
  - **Interests**: Tasks you enjoy doing and wish to incorporate into your career
  - **Values**: What is important to you and what rewards and outcomes do you want?
- *Setting Goals*
  - Career Advancement Goals
  - Skills Goals
  - Project Goals

Adapted From:

IDP Components; Tips

- *Be honest in your self assessment!*

- *Be SMART when setting goals!*
  - **S**pecific
  - **M**easurable
  - **A**ction Oriented
  - **R**ealistic
  - **T**ime-Bound

Adapted From:

Additional IDP Components

- *Career Exploration Resources*

Career Path	
Business of science: Management consultant; business development professional in a biotech company; venture capitalist; market researcher; investment analyst	Read More
Entrepreneurship: Starting your own business	Read More
Sales and marketing of science-related products: Medical science liaison; technical sales representative; marketing specialist	Read More
Science policy: Public affairs/government affairs staff at scientific societies, foundations, government entities, or think tanks	Read More
Intellectual property: Patent agent; patent attorney; technology transfer specialist	Read More

From:

Additional IDP Components

- *Networking*
  - Communication Records
  - Informational Interviews
    - Pros and Cons of a Career Path
    - Transitioning Successfully
    - Effective Job Searching

  http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2013_08_14/caredit.a1300173

- *Mentoring*
  - Expand your Mentor Team!
    - *Academic, Professional, Career*

Adapted From:

IDP; A Dynamic Tool

- **Update Your IDP!**
  - Have you developed a new skill? Have you ruled out (or in) a potential career path? Have you reached a milestone in your program?

- **Discuss your IDP with Mentors…Be Creative!**
  - Utilize annual evaluations, performance reviews
  - Pursue training opportunities
  - Seek guidance on strengths and weaknesses

Adapted From:

IDP Resources

- MyIDP, an online tool to help scientists prepare their own individual development plan (http://myidp.sciencecareers.org)

- National Postdoctoral Association: career planning resources

  - http://www.nationalpostdoc.org/careers-24/career-planning-resources

- NIH Office of Intramural Training and Education: online resources, YouTube videos, videocasts & podcasts of OITE workshops

  - https://www.training.nih.gov/for_trainees_outside_the_nih

- IDP for postdoctoral fellows developed by FASEB

  - http://www.faseb.org/portals/2/pdfs/opa/idp.pdf

Resources Continued

- Columbia University: [Columbia Individual Development Plan (IDP) Program](#) or https://www2.gsas.columbia.edu/idp/

- [You Need a Game Plan](#) *Science Careers*

- [IDPs for Post Docs](#) *NPDA*

- Vanderbilt University: https://medschool.vanderbilt.edu/postdoc/individual-development-plan

Resources continued

- IDP Templates for Mentors: https://mentoringresources.ictr.wisc.edu/MentorIDPTemplates

- Networking and Job Searching: http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2013_08_14/caredit.a1300173

- Stay tuned for SfN's Members Webinar Series, "Preparing for the Future" on SfN.org or contact membership@sfn.org. This webinar series will give practical advice on resume and CV creation, outreach, networking and IDPs.

SOCIETY *for* NEUROSCIENCE

Questions?

Submit a question now to the webinar hosts using the "Questions" feature.
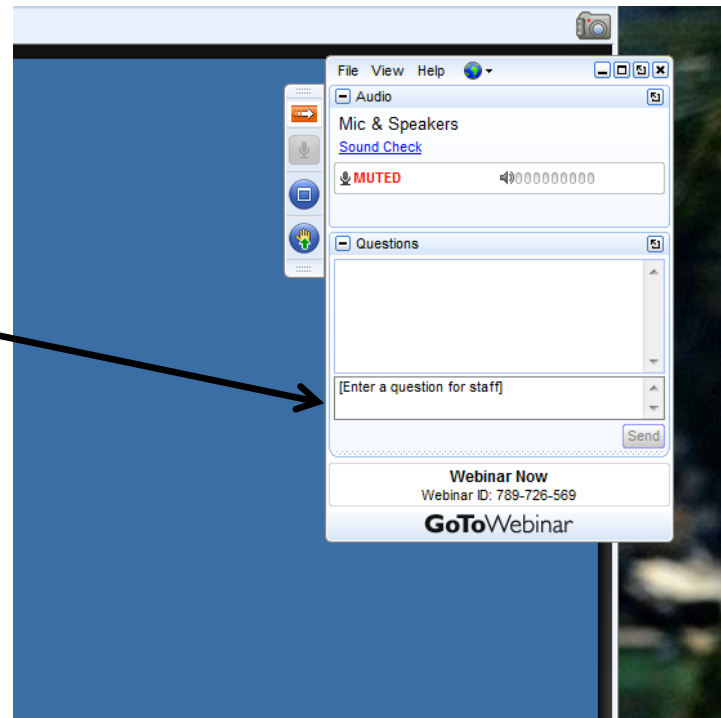
After the webinar, continue the conversation on **neuronline.sfn.org**

NeurOnLine®
fire together wire together

Thank you from SfN's Committee on Neuroscience Departments and Programs (CNDP)

SOCIETY *for* NEUROSCIENCE